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June 15, 2010

VIA U. S. Mail and Electronic Service

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-3
1516 Ninth Street, MS-4
Sacramento, California 95814-5512

Re: CPV Sentinel Energy Project
Expert Testimony of Michael Harris
Docket No. 07-AFC-3

Dear Sir or Madam:

Pursuant to the May 20, 2010, Second Revised - Notice of Prehearing Conference And Evidentiary Hearing on The Limited Issue of Air Quality, California Communities Against Toxics hereby submits the Expert Testimony of Michael Harris.

This filing was filed today via electronic mail in accordance with the May 21, 2010, Proof of Service List in addition to being deposited into the U.S. Mail for delivery to the Dockets Unit.

Sincerely,

Angela Johnson Meszaros
Counsel to Intervenor
California Communities Against Toxics

Energy,
Air Quality,
and Climate Change
from an
Environmental Justice Perspective

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STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

Application for Certification for the **CPV SENTINEL ENERGY PROJECT** By CPV Sentinel, L.L.C.	**Docket No. 07-AFC-03** California Communities Against Toxics Expert Testimony of Michael Harris

I, Michael Harris, declare as follows:

I. BACKGROUND

A. Experience

I am an Assistant Professor of Law and the Director of the Environmental Law Clinic at the University of Denver's Sturm College of Law. My *curriculum vita* is attached as Exhibit A.

I received my J.D. from the University of California at Berkeley in 1995. I have practiced in the field of environmental law since graduation. Since 1998, my primary area of expertise has been in the field of air pollution law. I have over 11 years experience applying the new source permitting requirements under Chapter I, Parts C and D of the Clean Air Act to major stationary sources, including power plants, oil and gas development, cement plants, refineries, and other major stationary sources. I have prepared numerous opinion letters regarding application of new source requirements, including the offset requirement under 42 U.S.C. § 7503(c) and applicable regulations. One particular highlight that should be identified is that for two years as an attorney with McKenna & Cuneo, LLP, I was hired by a major U.S. manufacturer to audit over 20 of its facilities nationwide to evaluate historical compliance with the new source permitting provisions of the Clean Air Act and submit reports to the U.S. Environmental Protection Agency ("EPA") under that EPA's Environmental Auditing Policy.

As a Professor, I continue to teach in the area of environmental law, including the Clean Air Act. As a visiting professor at the Vermont Law School in 2008, I taught a 3-

unit course that exclusively covered the Clean Air Act, with extensive coverage of the new source review permitting program. As the Director of the Environmental Law Clinic at the University of Denver, I supervise students working on environmental cases in the U.S. District Courts, including three Clean Air Act citizen enforcement actions that are currently ongoing against Xcel Energy and the Lamar Utilities Board in Lamar, CO. All three cases involve permitting of power plants.

B. Overview and Summary

The opinions expressed in this report are my own and are based on my knowledge and experience as informed by the facts available to me at the time of writing. Should additional relevant or pertinent information become available, I reserve the right to supplement the discussion and findings in this report.

I have been retained by California Communities Against Toxics ("CCAT") to render my opinion as to whether the emission offset credits issued by the South Coast Air Quality Management District ("SCAQMD") to CPV Sentinel for an 850 megawatt, natural gas-fired electric generating facility located in Riverside County, California, comply with applicable requirements under the federal Clean Air Act. In rendering my opinion, I have reviewed the following material:

- Prehearing Conference Statement of Intervenor California Communities Against Toxics, In re: Application for Certification for the CPV Sentinel Energy Project, Dkt. No. 07-AFC-03 (May 13, 2010);

- Final Staff Assessment, CPV Sentinel Energy project, Application for Certification (07-AFC-3) (Oct. 2008);

- Final Staff Assessment, Air Quality Addendum, CPV Sentinel Energy project, Application for Certification (07-AFC-3) (Apr. 2010);

- Letter From Mohsen Nazemi, Deputy Executive Officer, South Coast AQMD, to John Kessler, Project Manager, California Energy Commission, Re: Revision to the Addendum to the Determination of Compliance (DOC) for CPV Sentinel (CPV) Proposes Power Plant Project (07-AFC-3, Facility ID No. 152707), to be located at 62573 Power Line Rd., Desert Hot Springs, CA 92440, dated May 12, 2010 (with attachment);

- Letter From Mohsen Nazemi, Deputy Executive Officer, South Coast AQMD, to John Kessler, Project Manager, California Energy Commission, Re: Addendum to the Determination of Compliance (DOC) for CPV Sentinel (CPV) Proposes Power Plant Project (07-AFC-3, Facility ID No. 152707), to be located at 62573 Power Line Rd., Desert Hot Springs, CA 92440, dated March 2, 2010 (with attachment);

- PRA Request Form from Angela Johnson Meszaros to South Coast AQMD, dated March 29, 2010;

- California Communities Against Toxics' Supplemental Prehearing Conference Statement, In re: Application for Certification for the CPV Sentinel Energy Project, Dkt. No. 07-AFC-03 (June 1, 2010);

- U.S. EPA, New Source Review Workshop Manual: Prevention of Significant Deterioration and Non-attainment Area Permitting (Draft, October 1990), available at http://www.epa.gov/ttn/nsr/gen/wkshpman.pdf;

- Memorandum from John S. Seitz, Director, EPA Office of Air Quality Planning and Standards (June 14, 1994) at 3-4, available at http://www.epa.gov/region07/air/nsr/nsrmemos/prir2prm.pdf;

- Memorandum from Robert D. Bauman, Chief, EPA Standards Implementation Branch to James T. Wilburn, Chief Air Management Branch, Region IV (Oct. 11, 1985), available at http://www.epa.gov/region07/air/nsr/nsrmemos/esnofst.pdf;

- Memorandum from David G. Hawkins, Asst. Adm. For Air, Noise, and Radiation to Directors, Air and Hazardous Materials Divisions, Regions I-X, Federal Enforceability of Offsets in State Implementation Plan Programs (April. 14, 1980), available at http://www.epa.gov/region07/air/nsr/nsrmemos/offstsip.pdf; and,

- EPA, January 2004 Guidance on Using Locomotive and Truck Idling Emission Reductions for Offsets, available at http://nlquery.epa.gov/epasearch/epasearch.

Based upon my review of this material,[1] applicable provisions of the federal Clean Air Act, applicable provisions of EPA regulations, and based upon my on experience as an air pollution lawyer, I conclude that SCAQMD's Determination of Compliance ("DOC") that the project meets all local, state and federal air pollution control requirements is invalid. This conclusion is made due to the SCAQMD's authorization to allow CPV Sentinel to obtain an allocation of 137,799 lbs/year of PM10 and 25,438 lbs/year of SOx from SCAQMD's internal offset accounts. At this time, SCAQMD's EPA-approved State Implementation Plan ("SIP") provides no provision to authorize such use of the internal offset accounts. Under federal law, therefore, the offset designation is not federally enforceable, and, therefore, is not allowed under the federal Clean Air Act. Accordingly, until such time as the proposed transfer can be made in accordance with a SIP-approved banking rule, the SCAQMD's DOC is invalid.

[1] Each of the materials listed are in the possession of the Commission or readily available on line using the link provided. Should the Commission so desire, I can and will provide the documents in electronic format on a CD and/or as paper copies.

II. PM10 and SO2 Emission Offsets Obtained By CPV from the SCAQMD Internal Offset Accounts Are Unlawful Under Federal Law

A. Regulatory Framework

1. The Federal Clean Air Act New Source Review Program.

The federal Clean Air Act, 42 U.S.C. §§ 7401 *et. seq.*, was adopted by Congress as the primary regulatory process "to protect and enhance the quality of the Nation's air resources so as to promote public health and welfare and the productive capacity of its population . . .." 42 U.S.C. § 4201(b)(1). The Act sets forth a comprehensive regulatory scheme for the reduction and prevention of air pollution by the state and the federal governments. The overarching purpose of the scheme is to achieve and maintain compliance with the "National Ambient Air Quality Standards" ("standards") established by the EPA. These standards are designed to protect public health. 42 U.S.C. § 7409(b). Among others, EPA has established standards for ozone, particulate matter, and oxides of nitrogen.

Under the Act, each state is divided into "air quality control regions." 42 U.S.C. § 7407; 40 C.F.R. Part 81. EPA classifies each region based on whether the region meets the NAAQS. 42 U.S.C. § 7407(d); 40 C.F.R. Part 81, Subpart C. If a region has not achieved the NAAQS for a particular pollutant, EPA designates that region as "nonattainment" for that pollutant. 42 U.S.C. § 7501(2).

While EPA establishes standards and approves designation of air quality control regions, ultimately standards must be achieved and maintained by the states. To accomplish this task, the Clean Air Act requires states that have one or more non-attainment designations to prepare SIPs. Id. at § 7410(a)(1). SIPs contain specific control measures that are designed to achieve compliance with the NAAQS within the designated air quality control regions. The Act sets forth a number of general requirements for the content of SIPs. Id. at § 7410(a)(2). SIPs must contain certain types of control measures including, *inter alia,* emissions limitations, compliance schedules, monitoring requirements, and enforcement mechanisms. Id. Within these general parameters, however, the states have substantial discretion to determine the specific air pollution control strategies set forth in their SIPs. See Alaska Dept. of Environmental Conservation v. EPA, 540 U.S. 461, 470 (2004). Each state is generally free to determine the particular, "mix of emissions limitations" set forth in a SIP, as long as the SIP will achieve and maintain compliance with the NAAQS. Train v. Natural Res. Defense Council, 421 U.S. 60, 79 (1975).

The Act sets forth a detailed process for the preparation, adoption, and revision of SIPs. 42 U.S.C. § 7410. Each state must prepare a proposed SIP and submit it to EPA for review and approval. Id. at § 7410(a). EPA must consider whether the SIP meets all applicable requirements under the Act. Id. § 7410(k)3). Once EPA approves a SIP, the SIP "has the force and effect of federal law." See Safe Air for Everyone v. U.S. EPA,

488 F.3d 1088, 1096-97 (9th Cir.2007). After approval, EPA can require revisions to an existing SIP if EPA determines that the SIP is substantially inadequate to achieve or maintain the NAAQS, or otherwise fails to comply with the Clean Air Act. 42 U.S.C. § 7410(k)(5). EPA requests for SIP revisions are commonly referred to as "SIP calls." See e.g. Sierra Club v. Georgia Power Co., 443 F.3d 1346, 1348 (11th Cir.2006).

With regards to non-attainment areas, the Act sets forth specific control and permitting requirements. Among other control measures, each nonattainment area SIP must contain a permitting program governing the construction and operation of "new and modified major stationary sources." 42 U.S.C. § 7502(c)(5). Each new source review program must set forth pre-construction review requirements that applicants must meet before the permitting agencies may issue permits to construct or operate any equipment that will increase nonattainment emissions. 40 C.F.R. § 51.165(a)(2). Such permit programs are often referred to as "new source review" or "NSR" programs. See U.S. EPA, New Source Review Workshop Manual: Prevention of Significant Deterioration and Non-attainment Area Permitting (Draft, October 1990) (hereinafter, "NSR Workshop Manual) at 1-2.

The Clean Air Act's NSR program provides that each new source review permit program set forth in a nonattainment area SIP must require that emission increases from new and modified major sources be offset by corresponding emissions reductions. Section 7503(a)(1) of the Act states in relevant part as follows:

> The permit program required by section 7502 (b)(6) of this title shall provide that permits to construct and operate may be issued if—
> **(1)** in accordance with regulations issued by the Administrator for the determination of baseline emissions in a manner consistent with the assumptions underlying the applicable implementation plan approved under section 7410 of this title and this part, the permitting agency determines that—
> **(A)** by the time the source is to commence operation, sufficient offsetting emissions reductions have been obtained, such that total allowable emissions from existing sources in the region, from new or modified sources which are not major emitting facilities, and from the proposed source will be sufficiently less than total emissions from existing sources (as determined in accordance with the regulations under this paragraph) prior to the application for such permit to construct or modify so as to represent (when considered together with the plan provisions required under section 7502 of this title) reasonable further progress (as defined in section 7501 of this title) . . ..

An offset is a reduction of nonattainment pollutant emissions in an amount equal to, or somewhat greater than, the emissions increase of the same pollutant from the proposed new or modified stationary source or equipment. 42 U.S.C. § 7503(c)(1). A company may create offsets by reducing certain emissions, for example, by permanently shutting down a permitted piece of emission equipment, curtailing production or

operating hours. Once created, companies may also be able to "bank" offsets, use them at a later time, and/or sell them to other companies.

In general, however, each specific SIP must include and establish an offset requirement to ensure that "[a]ny emission reductions required as a precondition of the issuance of a [NSR] permit . . . ***shall be federally enforceable before such permit may be issued.***" 42 U.S.C. § 7503(a). Among other things, to approve a SIP offset requirement, EPA must find that the SIP provide that: 1) the offsets come from the same geographic area as the new source; 2) the offsets be "in effect and enforceable" by the time that the new source commences operation; and 3) the offsets be "surplus" in the sense that they are not otherwise required by the Clean Air Act. Id. at § 7503(c)(2).

2. The South Coast Air Quality Management District's NSR Program

The South Coast Air Quality Management District ("SCAQMD") is the air pollution control agency for the South Coast Air Basin ("Basin") in California, which comprises portions of Los Angeles, Riverside, and San Bernardino Counties, as well as all of Orange County. The Basin fails to meet several federal clean air standards, including standards for PM10 and ozone. To address ozone, the District must reduce ozone precursors, including VOCs and NOx.

The SCAQMD's NSR program is set forth in the agency's Regulation XIII. A fundamental premise of the SCAQMD program is that facilities must offset new pollution by acquiring credits equal to or greater than the increased (or new) emissions. District Rule 1303. Typically a facility seeking to build a new emission source must acquire sufficient offsets from third parties who have reduced their emission under District rules. This is generally done as a market exchange.

Historically, the SCAQMD has also maintained its own emissions offset account, which is funded by so-called "orphan" reductions. These are reductions from facilities that have ceased operation, but did not apply for offset credits to be used on the open market. See District Rules 1304 and 1309.1. Under the existing EPA-approved SIP applicable to the Basin, the SCAQMD's offset account has limited access, and can only be used in two circumstances. Under Rule 1304, facilities that emit below a certain threshold are exempt from the Regulation XIII offset requirement, and can access the SCAQMD's offset account at no cost *in lieu* of obtaining offsets under federal law on the open market. Under Rule 1309.1, essential public services, like hospitals and fire stations, may access the offset account, specifically the "Priority Reserve" account, at no cost.

With regards to credits contained in the SCAQMD's offset accounts, the agency has the responsibility for ensuring that the credits are legally valid under federal law.

3. The District's Use Of Its Emission Offset Accounts For Electric Generating Units.

On August 3, 2007, the SCAQMD adopted amendments to Regulation XIII, modifying its NSR program. These amendments expand the type of facilities that may access the SCAQMD's internal offset accounts and generate new credits that are placed in the offset accounts for distribution. In particular, these amendments revised Rule 1309.1 to provide access to the Priority Reserve Account to a new source category: power plants. The SCAQMD also added Rule 1315 to Regulation XIII. This new rule generated additional offsets for the internal accounts to be accessed by power plants and essential public services. These amendments to Regulation XIII were challenged in California Superior Court in and for the County of Los Angeles. On July 28, 2008, the Court held that these amendments violated the California Environmental Quality Act and vacated the rules. The SCAQMD subsequently repealed the August 3, 2007 amendments to Regulation XIII.

B. The CPV Sentinel Energy Project

The CPV Sentinel project would be a nominally rated 850-megawatt, natural gas-fired generating facility using General Electric's LMS 100 combustion turbine generators. The Project will consist of a total of 8 combustion turbine generators. The other main Project features will consist of a 37-acre power plant site, 14-acre construction laydown area, 3,250 feet of transmission lines, and 2.6 miles of natural gas pipeline. The power plant, transmission lines, and portions of the gas line and construction laydown area will be located within unincorporated Riverside County. See Final Staff Assessment, CPV Sentinel Energy project, Application for Certification (07-AFC-3) (Oct. 2008) at 1-1.

The project will be constructed within the South Coast Air Quality Basin. As the Commission's staff has correctly observed:

> The [Basin] is designated as severe-17 non-attainment for ozone (the second worst possible classification) [under the federal Clean Air Act], meaning that the South Coast air basin ambient ozone design concentration . . . did not reach attainment [with federal standards] before 2007. Efforts to achieve ozone attainment typically focus on controlling the ozone precursors NOx and VOC. SCAQMD-published state implementation plans (SIP) rely on the CARB to control mobile sources, the U.S. EPA to control emission sources under federal jurisdiction, ***and SCAQMD to control local industrial sources***. Through these control measures, California and the SCAQMD are required to reach attainment of the federal ozone ambient air quality standard by 2021 (2013 in the Coachella Valley).

Final Staff Assessment, Air Quality Addendum, CPV Sentinel Energy project, Application for Certification (07-AFC-3) (Apr. 2010) at 2.1-11 (hereinafter, "Air Quality

Addendum"). In this regard, exceedances of the national ozone ambient air quality standards are known to occur in the region both up wind and downwind of the Project. Id.

The Basin is also partially in violation of the federal standard for PM10. Again, as the Commission's staff observed:

> San Bernardino County (but not the entire South Coast air basin) has been designated a non-attainment area for the federal 24-hour and annual PM10 ambient air quality standards. The SCAQMD has recently taken action to have the Salton Sea Air Basin (SSAB), which includes the project site, redesignated as attainment for PM10. The SCAQMD and CARB Governing Boards have already approved the [Basin's] PM10 Redesignation and Maintenance Plan (RMP) for submittal to EPA for inclusion in the SIP. However, the area is still classified as non-attainment for Federal PM10 standards until EPA approves the SIP, which would likely occur within one to two years. . . . [While t]he data shows some improvement over the period, [] overall the PM10 situation remains a concern.

Air Quality Addendum at 2.1-13 to 2.1-14.

PM-10 is generated from various combustion process, including natural-gas fired electric generating units. Gaseous emissions of pollutants such as NOx, SO2 and VOC from turbines, and ammonia (NH3) from NOx control equipment can form particulate nitrates, sulfates, and organic solids. Air Quality Addendum at 2.1-13.

The basin is also designated as non-attainment for the federal PM2.5 standard. PM2.5 standards were first adopted by EPA in 1997, and were upheld by the United States Supreme Court in 2001. PM2.5, a subset of PM10, consists of particles with an aerodynamic diameter less than or equal to 2.5 microns. Particles within the PM2.5 fraction penetrate more deeply into the lungs, and can be much more damaging by weight than larger particulates. PM2.5 is primarily a product of combustion and includes nitrates, sulfates, organic carbon (ultra fine dust) and elemental carbon (ultra fine soot). The highest concentrations of PM2.5 in the South Coast air basin occur within the counties of San Bernardino and Riverside, the latter being where the Project is proposed for construction. Air Quality Addendum at 2.1-14.

Commission staff has provided information regarding the maximum emission rate for NOx, SO2, VOCs, and PM10 associated with the Project. These rates were based "entirely on vendor data for the GE LMS100 turbine and the data presented in the SCAQMD . . .." Air Quality Addendum at 2.1-21. According to this data, the Project's maximum daily emissions for all 8 CTGs (identified by pounds per day (lb/day)), are: 1,946.0 lb/day of NOx, 121.0 lb/day SO2, 519.9 lb/dy VOX, and 960.0 lb/day PM10. Air Quality Addendum at 2.1-23. The Project's maximum annual emissions (identified in tons per year (tpy)) are: 120.4 tpy NOx, 6.8 tpy SO2, 31.8 tpy VOC, and 56.1 tpy PM10.

Id. These emission rates are above the major source threshold for new sources established by SCAQMD rules. No emission estimates were provided for PM2.5 expressly.

SCAQMD issued a Preliminary Determination of Compliance (PDOC) for this Project on May 7, 2008, and a Final Determination of Compliance (FDOC) on August 9, 2009. Letter From Mohsen Nazemi, Deputy Executive Officer, South Coast AQMD, to John Kessler, Project Manager, California Energy Commission, Re: Revision to the Addendum to the Determination of Compliance (DOC) for CPV Sentinel (CPV) Proposes Power Plant Project (07-AFC-3, Facility ID No. 152707), to be located at 62573 Power Line Rd., Desert Hot Springs, CA 92440, dated May 12, 2010 (with attachment) (hereinafter, "Nazemi May 2010 Letter"); Letter From Mohsen Nazemi, Deputy Executive Officer, South Coast AQMD, to John Kessler, Project Manager, California Energy Commission, Re: Addendum to the Determination of Compliance (DOC) for CPV Sentinel (CPV) Proposes Power Plant Project (07-AFC-3, Facility ID No. 152707), to be located at 62573 Power Line Rd., Desert Hot Springs, CA 92440, dated March 2, 2010 (with attachment) (hereinafter, "Nazemi March 2010 Letter"). In the FDOC, SCAQMD indicated that CPV Project with all applicable air quality rules and regulations except that it had not yet established how it would meet the emissions offset requirements. On March 2, 2010, SCAQMD issued an Addendum to the Determination of Compliance (ADOC) for the proposed Project, finding that:

> CPV has provided additional information regarding the project operations and emission offsets, CPV will provide RECLAIM trading credits (RTCs) and emissions reductions credits (ERCs) acquired in the open market to offset Oxides of Nitrogen (NOx) and Volatile Organic Compound (VOC) emissions, respectively. Emission increases of Particulate Matter <10 microns (PMIO) and Oxides of Sulfur (SOx) from the project will be offset from AQMD's ***internal offset accounts***.

Nazemi March 2010 Letter.

On May 12, 2010, AQMD issued a revision to March 2, 2010 ADOC. The revision consists of changes only to Tables A and B of Attachment I to Appendix N of the ADOC, which reflects the amount of emission offsets provided by the SCAQMD's internal offset account to cover the amount of PM10 and SOx offsets needed by the Project. According to the SCAQMD, the Project required offsets of 137,799 lbs/year of PM10 and 25,438 lbs/year of SOx. According to the SCAQMD, the emission offsets from the internal offset accounts were:

> based on actual emissions reported to AQMD for equipment that has been shutdown and that has had the permits inactivated by AQMD. The actual emissions were reported to AQMD under AQMD's Annual Emissions Reporting program in the most recent one or two year(s) prior to shutdown of the equipment. The emission reductions for both PM10 and SOx have occurred during the calendar years 1999 through 2008.

Nazemi May 2010 Letter.

Based upon the March 2, 2010 and May 12, 2010, SCAQMD determinations, the Commission's' staff prepared an Air Quality Addendum to its Project Assessment Report for the Project. The addendum concluded that the Project complies with all SCAQMD, state and federal air pollution laws. Air Quality Addendum at 1-2.

C. The SCAQMD's FDOC and ADOC Are Invalid Because the PM10 and SOX Offsets Issued From The Agency's Internal Offset Accounts Are Not Federally Enforceable.

As of the date of this report, the SCAQMD's SIP-approved Regulation XIII does not provide for access to the agency's internal offset accounts by power plants generally or the Project specifically. The SCAQMD has not made any determination that the Project is either entitled to access the SCAQMD's account under Rule 1304 because it meets a limited exemption, or that the Project meets the definition of an essential public service under the current SIP-approved Rule 1309.1. The agency, instead, has issued its FDOC and ADOC on the basis that access to the internal accounts is authorized under state law alone. No SIP basis is, or can be, provided.

The Clean Air Act expressly requires that "[a]ny emission reductions required as a precondition of the issuance of a [NSR] permit . . . ***shall be federally enforceable before such permit may be issued.***" 42 U.S.C. § 7503(a). The EPA had actually proposed to delete this requirement in 1983 pursuant to a settlement with industry. Chemical Manufacturers' Ass'n v. EPA, No. 79-1112 (D.C. Cir.); 48 Fed. Reg. 38742 (Aug. 25, 1983). While EPA ultimately rejected the deletion of the federally-enforceable requirement (54 Fed. Reg. 27274 (June 28, 1989)), Congress took no chances when it amended the Clean Air Act in 1990 to make the requirement statutory. See Memorandum from John S. Seitz, Director, EPA Office of Air Quality Planning and Standards (June 14, 1994) at 3-4 (hereinafter, "Seitz Memo").

Moreover, EPA has long held that the federally-enforceability requirement ***is not met where enforceability of reduction credits depends on use of state banking regulations that are not part of the current federally approved SIP.*** See Memorandum from Robert D. Bauman, Chief, EPA Standards Implementation Branch to James T. Wilburn, Chief Air Management Branch, Region IV (Oct. 11, 1985). Indeed, the requirement that the SIP contain a provision to allow banking and use of federally-enforceable offsets is a requirement of SIP approval under EPA's NSR implementation regulations. 40 C.F.R. § 51.165(a)(3)(ii).

The requirement that offsets be federally enforceable and issued under SIP approved banking regulations is based on sound policy. The requirement ensures that the criteria for fully creditable offsets under the Clean Air Act (quantifiable, surplus, permanent) are addressed. Seitz Memo at 4. Moreover, it helps ensure that emission reductions obtained to offset new source emissions in a nonattainment area meet two important objectives: (1) ensure reasonable progress toward attainment of the NAAQS;

and (2) provide a positive net air quality benefit in the area affected by the proposed source. See New Source Review Workshop Manual at G.6; Memorandum from David G. Hawkins, Asst. Adm. For Air, Noise, and Radiation to Directors, Air and Hazardous Materials Divisions, Regions I-X, Federal Enforceability of Offsets in State Implementation Plan Programs at 1; and EPA, January 2004 Guidance on Using Locomotive and Truck Idling Emission Reductions for Offsets at p. 1-2. Thus, while States have latitude in determining what requirements offsets must meet to achieve these program objectives, through the SIP approval process the EPA can make sure that the State's offset provision has set forth minimum considerations 40 CFR 51, Appendix S. Under these requirements, A SIP is approvable only where acceptable offsets also are creditable, quantifiable, federally enforceable, and permanent.

Based upon the lack of a federally approved SIP to allow the transfer of credits from the SCAQMD's internal offset account to the Project, the offsets do not comply with federal law and the SCAQMD's Determination of Compliance is invalid.

D. The Effect Of AB 1318

Subsequent to the overturning of the SCAQMD's Aug. 7, 2007, amendments to the Regulation XIII by the Superior Court, the California legislature adopted AB1318, which was signed into law on October 11, 2009. The intent of this Act was to nullify the Superior Court's decision that the amendments violated CEQA and to require that the SCAQMD issue offsets to certain power plants, including the Project currently at issue before the Commission, from the agency's internal offset accounts.

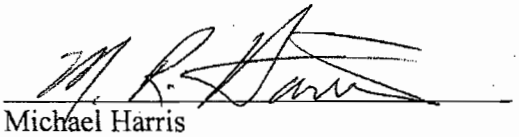
The adoption of AB1318 alone cannot make the credits from the SCAQMD's internal account federally enforceable, and, therefore legal under the federal Clean Air Act. Federal courts have made it clear that "[s]tates may not amend a SIP through the enactment of subsequent state law." Citizens for a Better Environment v. Deukmejian, 731 F.Supp2d 1159, 1455 n.10 (E.D.Cal.2003). The court relied on another decision which held that the "procedure set forth in Clean Air Act for obtaining modification of a SIP is [the] *exclusive* method by which a SIP amendment can be effected." Id. (emphasis in original). Not only does CBE prevent a state from amending a SIP by enacting state law contrary to an EPA-approved SIP after the approval of the SIP, but CBE also prevents a state from amending a ***SIP at all except by following the procedures outlined in the Clean Air Act***.

Moreover, the intent of the SCAQMD to submit a SIP-revision to EPA in the future under its AB1318 authority has no bearing on whether the credits the agency proposes to give to the Project, and which forms the basis of its FDOC, are legally valid under federal law. Congress has made it clear that "[t]he baseline for calculating offsets is the implementation plan in effect at the time of an application for a permit for a new or modified source." H.R.Conf.Rep. 564, 95th Cong., 1st Sess. 157 (1977). In this case, SCAQMD must still undertake a number for procedural requirements before EPA can even consider approval of an amendment. As an initial matter, SCAQMD has itself yet adopted a SIP revision to allow use of the credits for this Project, which can only be done

after reasonable notice and a public hearing. 42 U.S.C. § 7410(a)(2). Once this is done, EPA must determine that the plan meets all requirements of the Clean Air Act, and can take up to 18 months to issue final approval. Id. at § 7410(k).

Moreover, allowing an agency to approve use of offsets before obtaining SIP approval (let alone before a SIP submission has even been made), is putting the cart before the horse. There is simply no basis to assume that EPA will grant the SIP procedure. In the meantime, the offsets fail to be federally enforceable and, therefore, violate federal law.

I declare under penalty of perjury that the forgoing is true and correct. Executed this 15th day of June, 2010 in Denver, Colorado.



Michael Harris

Exhibit A
Curriculum Vita of
Michael Harris

Curriculum Vitae

Michael Ray Harris
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TEACHING AND RESEARCH INTERESTS:

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TEACHING EXPERIENCE:

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Visiting Assistant Professor of Law (Administrative & Air Pollution Law), Vermont Law School, Spring 2008

Adjunct Professor (Environmental Administrative Law), Green Mountain College (Vermont), Spring 2008

Adjunct Lecturer III (Environmental Health Law), California State Univ. at Northridge, 2002 – 2008.

PROFESSIONAL EXPERIENCE:

Director, University of Denver Environmental Law Clinic, Denver, Colorado, 2008 – Present.

Of Counsel, Fredericks, Peebles & Morgan LLP, Louisville, Colorado, 2010 – Present.

Senior Deputy District Counsel, South Coast Air Quality Management District, Diamond Bar, California, 2002 – 2003 and 2005-2007.

Project Attorney, Earthjustice, Denver, Colorado, 2003 – 2005.

Assistant General Counsel, Los Angeles Unified School District, 2001 - 2002.

Associate, McKenna, Long & Aldridge, L.L.P., Los Angeles, California, 1999 – 2001.

Associate, Bingham McCutchen, Los Angeles, California, 1998 – 1999.

Associate, McCormick, Kidman & Behrens, Costa Mesa, California, 1997 – 1998.

Associate, Law Offices of Charles Stevens Crandall, San Diego, California, 1995 – 1998.

Honors Law Clerk, U.S. Department of Justice, Environmental & Natural Resources Division, 1994.

EDUCATION:

Boalt Hall School of Law, University of California, Berkeley
Juris Doctor, May 1995. Activities and achievements included:

- Executive Editor, *Ecology Law Quarterly*, 1994-1995.
- Honors in Evidence, Criminal Procedure, Environment and Culture Law, Professional Responsibility, and Advanced Environmental Law Workshop.

Vermont Law School, South Royalton
Master of Studies in Law (M.S.L.), *magna cum laude,* August 1992.

Pitzer College, Claremont, California
Bachelor of Arts (Environmental and Political Studies), May 1991.

SCHOLARLY WORKS:

Published:

Environmental Deliberative Democracy and the Search for Administrative Legitimacy: A Legal Positivism Approach, 44 U. Mich. J.L. Reform (forthcoming 2010).

Standing in the Way of Judicial Review: Use of The Deliberative Process Privilege in APA Case, 53 Saint Louis L.J. 349 (2009).

Promoting Corporate Self-Compliance: An Examination of the Debate Over the Legal Protection for Environmental Audits, 23 Ecology Law Q. 631 (1996).

In Progress:

Rethinking Copenhagen: An Argument for a Domestic Carbon Regulatory Strategy.

Statutory Interpretation and Agency Deference: What Has 10 Years of Mead *Taught Us?*

OTHER PUBLICATIONS:

A Just West (Blog), High Country News, at http://www.hcn.org/greenjustice/blog (ongoing).

In My Own Words: Calling All Energy Hogs, Pitzer Participant Winter 2007-08.

The Bush Energy Plan in Microcosm, in *The Falcon and the Oilman: Drilling on Wild Public Lands*, The Environmental Forum, May-June 2004 (Vol. 21, No. 3, page 42).

Time to School Indoor Molds, Environmental Protection Online, at *http://www.stevenspublishing.com/stevens/EHSpub.nsf/pubhome/lookup?opendocument* (2004).

When the Lights Go Out: How Power Outages Cause Real Time Environmental Issues and How To Manage Them, Environmental Protection, January 2001 (Vol. 13, No. 1, page 32).

LECTURES AND PRESENTATIONS:

Panelist, *The Clean Air Hammer Falls: Revisions to the National Ambient Air Quality Standards,* at the 28th Public Interest Environmental Law Conference, University of Oregon, February 2010.

Lead Panelist, *Communicating Environmental Issues Across Boarders*, at "Globally Speaking: Voices, Visions, & Viewpoints," University of Denver (The Estlow Center), February 2009.

Panelist, *The Ozone Ambient Air Quality Standards and What They Mean for the American West,* at the 27th Public Interest Environmental Law Conference, University of Oregon, February 2009.

Moderator, *Getting to Know Your Environmental Law Clinic and Student Attorney: How Can We Serve You,* at the 27th Public Interest Environmental Law Conference, University of Oregon, February 2009.

Panelist, *Clinical Education and the Litigation of Biodiversity Issues*, at the North American Commission for Environmental Cooperation Workshop ("Environmental Law Education: A Clinical Approach), Tecnologico de Monterrey, Mexico City, November 2008.

Plenary Speaker, *The Federal Agencies and NEPA*, at the Winter Wildlands Alliance's 2008 Grassroots Advocacy Conference ("Advocacy in a Climate of Change"), October 2008.

Panel Moderator, *Laboratories of Innovation: States Driving The Climate Change Debate*, at the National Association of Environmental Law Societies' Annual Conference, University of Vermont, March 2008.

Panelist, *Endangered Species Act Update*, CLE International, Denver, CO., November 2004.

Panelist, *Legal Careers*, Pitzer College, November 2001.

Panelist, *Environmental Credits and Taxes*, McKenna & Cuneo, December, 2000.

Panelist, *Environmental Careers*, Pitzer College, November 2000.

Panelist, *The Debate over Diesel and Alternative Fuels*, McKenna & Cuneo, September 2000.

Panelist, *The Regulation of Stormwater*, McKenna & Cuneo, March 2000.
Panelist, *Alumni Career Paths*, Pitzer College, February 2000.
Panelist, *The College and University Environmental Workshops*, McKenna & Cuneo, November 1999.
Panelist, *Airing the Issue of New Source Review*, McKenna & Cuneo, September 1999.

PUBLISHED DECISIONS:

Colorado Wild v. Vilsack, 2010 WL 1257988 (D. Colo., March 25, 2010).
WildEarth Guardians v. Public Serv. Co. of Colo., --- F. Supp. 2d --- (D. Colo. 2010).
Friends of Animals v. Salazar, --- F. Supp. 2d --- (D. D.C. 2010).
Friends of Animals v. Salazar, 670 F. Supp. 2d 7 (D. D.C. 2009).
WildEarth Guardians v. Public Serv. Co. of Colo., 2009 WL 3296103 (D. Colo., Oct. 13, 2009).
Pacific Merchant Shipping Ass'n v. Cackette, 2007 WL 2492681 (E.D. Cal., Aug. 30, 2007).
Association of American Railroads v. South Coast Air Quality Management District, 2007 WL 2439499 (C.D. Cal., April 30, 2007).
Center for Biological Diversity v. Morgenweck, 351 F. Supp. 2d 1137 (D. Colo. 2004).
U.S. v. City of San Diego, 18 F. Supp. 2d. 1090 (S.D. Cal. 1998)
NRDC, Inc. v. Southwest Marine, Inc., 945 F. Supp. 1330 (S.D. Cal. 1996).
Chaparral Greens v. City of Chula Vista, 50 Cal. App. 4th 1134 (1996).
Save Our Forests and Ranchlands v. County of San Diego, 50 Cal. App. 4th 1757 (1996).
United States v. City of San Diego, 18 F. Supp. 1090 (S.D. Cal. 1998).

GRANTS & AWARDS:

Internationalization Grant, University of Denver. Project: Environmental Law Clinic – LLM International Environmental Law Project. 2009-2010.
Internationalization Grant, University of Denver. Project: Global Cities & Public Health (in partnership with Sandy Johnson, Korbel School of International Studies). 2009-2010.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES:

Licensed, Supreme Court, State of Colorado (No. 035395), May 2004 – Present.
Admitted, Bar of the U.S. District Court for the Dist. of Columbia (No. CO0049), July 2008 – Present.
Member (Inactive), California State Bar Association (No. 179544), December 1995 – Present.
Vice President for Strategic Planning, Pitzer College Alumni Council, current.
Executive Committee Member, Environmental Law Section, Los Angeles Bar Association, 2003.
Committee Member, Legislation Committee, Environmental Law Section, 1997-1999, 2001.
Career Development Chair, Pitzer College Alumni Council, 2000 – 2002.
Assistant Instructor, Sierra Club Wilderness Travel Course, 2005 – 2006.

DECLARATION OF SERVICE

I, Angela Johnson Meszaros, declare that on, June 15, 2010, I served and filed a copy of the attached Expert Testimony of Michael Harris and a CD titled "Exhibit 400. Attachments of J. May to Expert Testimony." The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/sentinel/index.html]**

The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

For service to all other parties:

__x__ sent electronically to all email addresses on the Proof of Service list;

____ by personal delivery or by depositing in the United States mail at with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

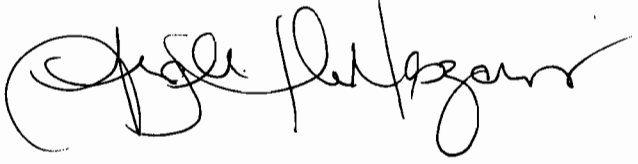
__x__ sending an original paper copy, one CD, and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 07-AFC-3
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.



Angela Johnson Meszaros

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION FOR THE
CPV SENTINEL ENERGY PROJECT
BY THE CPV SENTINEL, L.L.C

DOCKET NO. 07-AFC-3

PROOF OF SERVICE
(Revised 5/21/2010)

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MEMORANDUM

TO: Meghan McGuinness and Meg Victor

FROM: David Sellers

RE: Revised State Acid Rain and EIA Heat Input Totals - 48 States and the District of Columbia

DATE: April 19, 2004

This memorandum documents the data sources and methodologies used by Perrin Quarles Associates, Inc. (PQA) to calculate state-by-state heat input totals from Acid Rain Program monitoring data and Energy Information Administration (EIA) data. A revised electronic spreadsheet file with budget tables (April14 State Heat Input 1999-2002.xls) has been sent separately by electronic mail on April 14, 2004. The spreadsheet worksheet budget tables are described in Table 1.

I. Acid Rain Program Heat Input Data

Acid Rain Program units annual heat input data (million Btus) for the 1999 to 2002 period were provided by EPA. The data set was created by querying EPA's Data and Maps database, and is contained in the Acid Rain Unit HI worksheet. The data are summarized by state in the Acid Rain HI worksheet.

Table 1:
April 14 State Heat Input 1999 - 2002: Worksheet Tables

Worksheet	Description
All EIA Fossil HI	Summarizes by state the 1999-2002 fossil fuel heat input (million Btus) calculated from EIA data for all plants with a generator with a nameplate capacity greater than 25 MW - fossil energy source.
Acid Rain HI	Summarizes by state the Acid Rain unit 1999-2002 heat input (million Btus) calculated from Acid Rain Program monitoring data.
EIA NonAcid Rain HI	Summarizes by state the 1999-2002 heat input (million Btus) calculated from EIA data for plants having a generator with a nameplate capacity greater than 25 MW - fossil energy source, and which did not report Acid Rain program heat input for the specific year.
Combined AR and EIA HI	Summarizes by state the 1999-2002 heat input (million Btus) from Acid Rain units and non-Acid Rain plants. The table combines the heat inputs for Acid Rain units and non-Acid Rain plants reported in the Acid Rain HI and EIA NonAcid Rain HI tables.
Exempt Cogen	Summarizes by state the 1999-2002 heat input (million Btus) from non-Acid Rain FERC qualifying cogeneration plants that may be exempt from an interstate air quality rule. Heat input from these plants are included in the All EIA Fossil HI table, EIA NonAcid Rain HI table, and Combined AR and EIA HI table.
Acid Rain Unit HI	Summarizes annual heat input data (million Btus) and pollutant data for each Acid Rain unit over the 1999-2002 period. Data set was provided by EPA and produced by a February 2004 query of EPA's Data and Maps database.
EIA Plant HI	Summarizes for each plant the 1999-2002 heat input (million Btus) calculated from EIA data for all plants having a generator with a nameplate capacity greater than 25 MW - fossil energy source. Includes Acid Rain program, FERC qualifying cogenerator, and NAICS code information. Plant identifier fields are described in Table 3.

II. EIA Annual Heat Input Data

The EIA annual fossil fuel heat inputs in the spreadsheet tables were calculated on a plant-level basis using fuel use and heat content information provided in various EIA databases and the Federal Energy Regulatory Commission (FERC) 423 database (see Table 2). Heat input was calculated at the plant level for plants having a generator with a nameplate capacity greater than 25 MW - fossil energy source. Plant-level calculations were performed because the EIA data format prevented unit-level calculations for combustion turbines in all years, and for non-utility boilers prior to 2001. Changes in EIA data reporting in 2001, which will be explained in more detail, resulted in different calculation methodologies for 1999 and 2000 heat input compared to 2001 and 2002 heat input. There is a drop-off in EIA heat input from 1999-2000 levels to 2001-2002 levels that may be because of the different methodologies.

A. EIA Heat Input Calculations

For utility units, annual heat inputs were calculated separately for boilers and turbines. The EIA-767 database was used for boilers. The database provides annual fuel quantity along with the corresponding heat content. The EIA-759 and FERC-423 databases were used to calculate heat input for utility combustion turbines. EIA-759 provides annual fuel quantity for all combustion turbines combined at a plant. To calculate heat input, the fuel quantity was matched with the fuel heat content reported for the plant in the FERC-423 database. Average FERC-423 fuel heat contents were used when there were no FERC-423 data for the fuel and plant. The EIA-759 is now called EIA-906.

The calculations for non-utility plants were performed in two different ways because of a change in EIA databases after 2000. The 1999 and 2000 heat inputs were calculated using the EIA-860B data with heat input first calculated by the fuel burned based on reported quantity and heat content, and then totaled for all fossil fuels.

Some plants reported both non-utility and utility data (plants that were sold to a non-utility at some point during the reporting year) in 1999 and 2000. In those cases, the higher of the two calculated plant heat inputs was used, which in most cases was the utility heat input.

The 2001 and 2002 non-utility data were calculated similarly to the utility calculations due to changes in EIA reporting. Combustion turbine heat inputs were calculated at the prime mover level, based on consumption data in the EIA-906 database and fuel heat content data from the 2000 EIA-860B database. The post-2000 EIA-860 database no longer has fuel heat content and consumption information for non-utilities. The data in EIA-906 correspond to the utility EIA-759/900/906 data, and contain the amount of fuel burned by prime mover type, but do not contain fuel heat content information. Therefore, average fuel contents were calculated based on all fuels used and

reported in the prior year 2000 EIA-860B, then applied to the EIA-906 fuel data to calculate heat input.

Non-utility plants began reporting the EIA-767 form for boilers in 2001, so the EIA-767 fuel quantity and heat content data were calculated on a boiler-specific basis for non-utility boilers having a generator with a nameplate capacity greater than 25 MW for 2001 and 2002.

It is important to note that the heat input calculated for all combustion turbine units (and for non-utility boilers prior to 2001) may contain heat input for generators under 25 MW. There was no way to segregate the fuel use for smaller units from the plant or prime mover level data.

The better segregation of non-utility boiler data after 2001 may account for some of the drop-off in EIA plant heat input when comparing 2001-2002 to 1999-2000. It also appears that not all of the non-utility boilers serving an affected generator were represented in the 2001 and 2002 data, but we estimate the magnitude of this missing data at about 1% of the total annual heat input (based on comparisons to the 1999-2000 methodology).

B. Exempt FERC Qualifying Cogenerators

The proposed transport rules contain an exemption for FERC-qualifying cogenerators that do not sell more than 33% of the potential generating capacity to the grid. FERC-qualifying cogenerator plants were identified based on information in the 1999 and 2000 EIA-860B and 2002 EIA-860 databases. Potential exempt facilities were identified by calculating the ratio of annual sales to potential capacity [plant nameplate capacity times 8,760] for FERC-qualifying cogenerators in the 1999 and 2000 EIA-860B databases. Sales data were no longer available with consolidation to a single EIA-860 database after 2000. A plant was flagged as potentially exempt in the EIA Plant HI worksheet if the ratio did not exceed 0.33 in 1999 and 2000, and the plant was not subject to the Acid Rain Program.

Plants identified as FERC-qualifying cogenerators in the 2002 EIA-860 were also flagged in the EIA Plant HI worksheet. Plant-identifying fields in the EIA Plant HI worksheet are described in Table 3.

Table 2:
EIA and FERC Databases Used in EIA Heat Input Calculations

Database	Description
EIA-860 (Utility and Non-utility 2001-2002)	Plant- and generator-level data for power plants owned and operated by electric utilities and non-utilities. Includes generator nameplate, energy source, and FERC cogenerator status. Does not include electricity delivered to a utility by a non-utility plant.
EIA-860A (Utility 1999-2000)	Plant- and generator-level data for electric power plants owned and operated by electric utilities. Includes generator nameplate capacity and energy source.
EIA-860B (Non-utility 1999-2000)	Plant- and generator-level data, including specific information about generators and plant-level fuel usage and heat content, qualifying facility status, and electricity delivered to a utility for non-utility electric power plants.
EIA-759/900/906 (Utility all years and Non-utility 2001-2002)	Monthly and annual data on generation and fuel consumption at the power plant and prime mover level. Non-utility plants began reporting this data in 1999. No heat content data.
EIA-767 (Utility all years and Non-utility 2001-2002)	Monthly and annual steam-electric plant data from organic-fueled or combustible renewable steam-electric plants with a generator nameplate rating of 10 or more megawatts. Non-utilities began reporting EIA-767 beginning in 2001. Includes monthly generator generation and boiler fuel consumption and heat content.
FERC-423 (Utility all years)	Monthly deliveries of fossil fuels to utility, and now non-utility, generating facilities. Included are the specific energy source, quantity of fuel delivered, the Btu content, sulfur content, ash content, coal state and county of origin, coal mine type (surface/underground), as well as the supplier of fuel. Includes facilities with a fossil-fueled nameplate generating capacity of 50 or more megawatts.
Note: Databases were downloaded from EIA's electricity website: http://www.eia.doe.gov/cneaf/electricity/page/data.html	

Table 3:
Plant Identification Fields in the EIA Plant HI Worksheet

Field	Description
ORIS Code	EIA ORIS Code
Acid Rain OBIS	Plant ORIS Code in CAMD database. Some plants have different EIA and CAMD ORIS Codes (e.g., Richard Gorsuch in Ohio).
CAMD Facility ID	Unique plant ID in CAMD database.
Facility Name	Name in CAMD database or EIA database.
Exempt FERC Cogen (H and I $\leq$0.33)	This field flags plants which have a FERC-qualifying cogenerator, and which have a ratio of annual sales to potential generation (nameplate x 8,760) no greater than 0.33 in 1999 or 2000.
2002 860 FERC Cogen	This field flags plants which have a FERC-qualifying cogenerator based on the 2002 EIA-860 database.
1999 FERC Cogen Sales Ratio	Ratio of annual sales to potential generation (nameplate x 8,760) calculated for plants with a FERC-qualifying cogenerator based on the 1999 EIA-860B database.
2000 FERC Cogen Sales Ratio	Ratio of annual sales to potential generation (nameplate x 8,760) calculated for plants with a FERC-qualifying cogenerator based on the 2000 EIA-860B database.
2002 860 NAICS	NAICS code for the plant from the 2002 EIA-860 database.

DBS/jlj

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: SEAGULL SANITATION
Facility ID: 90849
Facility Location: 1 DUMP RD, AVALON, CA 90704
Type of Business: REFUSE DISPOSAL

Offset Credit ID No.:
PM10:
SOx:

Application No. 264307 Equipment Description: INCINERATOR CONTINUOUS-FEED NON-HAZARD

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different): 2001

Is the Equipment Still Shutdown? Yes Inspection Date: 4/30/2010 Inspected By: Christopher Ravenstein

Were any ERCs Issued for the Removal of this Equipment? Yes

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	INCINERATION OF WASTE / 03	FY (00-01)	148897.12	FY (99-00)	142955.10
SOx	INCINERATION OF WASTE / 03	FY (00-01)	20565.90	FY (99-00)	19745.18

Calculated Emissions for INCINERATOR CONTINUOUS-FEED NON-HAZARD

PM10 Reductions: (Year 1 + Year 2)/2 8030 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

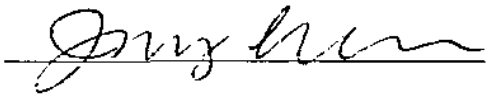
SOx Reductions: (Year 1 + Year 2)/2 13870 lbs/yr

Other Assumptions/ Comments: (See Attached)

The AER reported emissions are not used to calculate the 2-year average reductions in this case because this company had applied for and received ERCs. However, the amount of ERCs issued were reduced by AQMD in the amounts of 22 lbs/day of PM10 (or 22x365 = 8,030 lbs/yr) and 38 lbs/day of SOx (or 38x365 = 13,870 lbs/yr) , which were credited back to the AQMD's federal offset tracking accounts due to the facility's positive NSR account balance. The NSR account positive balance offset paybacks returned to AQMD are now utilized as offsets for this project.

Completed By: Jay Chen, P.E.
Senior Manager

P.E. License No.: M 27752

Signature: 

Date: 5/7/10

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	03. Incineration of waste or reclamation burning	N		8,226.36	5. ton	9.8	80,618.33	0	0.00	3.9	32,082.80	2.5	20,565.90	30	246,790.80	18.1	148,897.12
2	2B. Diesel storage and dispensing	N	462	8.50	2. gallon	0.0028	0.02										
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							80618.35 lbs		0.00 lbs		32082.80 lbs		20565.90 lbs		246790.80 lbs		148897.12 lbs
							40.31 tons		0.00 tons		16.04 tons		10.28 tons		123.40 tons		74.45 tons

Facility Name: SEAGULL SANITATION
Facility ID: 090849

B4 DATA

Facility ID	Company	Year	emittent_id	permitted	emission_factor	annual_usage	units	activity_id	activity_desc	emission
090849	SEAGULL SANITATION	9900	CO	P	30	7898.07	tons	03	Incineration of waste or reclamation burning	236942.1
090849	SEAGULL SANITATION	9900	NOX	P	3.9	7898.07	tons	03	Incineration of waste or reclamation burning	30802.47
090849	SEAGULL SANITATION	9900	ROG	P	9.8	7898.07	tons	03	Incineration of waste or reclamation burning	77401.09
090849	SEAGULL SANITATION	9900	TSP	P	18.1	7898.07	tons	03	Incineration of waste or reclamation burning	142955.1
090849	SEAGULL SANITATION	9900	SOX	P	2.5	7898.07	tons	03	Incineration of waste or reclamation burning	19745.18

B4 DATA LEGEND

Column	Value	Description
Year	9900	Emissions Reporting Year, July 1, 1999 to June 30, 2000
emittent_id	CO, NOX, ROG, TSP, SOX	CO (carbon monoxide), NOX (oxides of nitrogen), ROG (reactive organic gas), TSP (total suspended particulates), SOX (oxides of sulfur)
permitted	P	permitted equipment
emission_factor	as reported	pounds of emittent per million standard cubic feet of gas burned
annual_usage	7898.07	million standard cubic feet of gas burned
units	tons	tons of waste incinerated
activity_desc	as reported	Incineration of waste or reclamation burning
emission	as reported	pounds of emittent

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 90849 SEAGULL SANITATION
Last Inspection: 09/05/2001
SIC: 4953
Inspector: MH01 MICHAL L HAYNES
Inspection Date:
MR: A 6
TS: TS-51 Toxics: Landfills, other
Facility Status: Active
Assignment No. 726918
Disposition:
Contact: FRED DUANE STOUT (310) 5100675
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Facility Team: N
Suspended: N

Location Address: 1 DUMP RD, AVALON 90704 Sector:LK
Mailing Address: P O BOX 295, AVALON 90704 Sector:LK
Instruction: CONFIRM DATE THAT THE COMPANY STOP OPERATING THE INCINERATOR ; COMPANY HAS BEEN GIVEN CREDITS; CHECK IF DEMO COMING; CHECK HOW THRASH IS BEING HANDLED & DISPOSED

RECLAIM: N TITLE V: N SIP: AIR:

	Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
_____	264223	M98589	05/12/1992	INACTIVE	248900	BCAT	STORAGE TANK GASOLINE	03/12/1992	PERMIT TO OPERATE GRANTED
_____	264307	D49940	03/18/1992	INACTIVE	000100	BCAT	INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR	03/11/1992	PERMIT TO OPERATE GRANTED
_____	350251				555003	BCAT	TIERED (1-20 DEVICES) INITIAL TITLE V PERMIT APPI	01/29/1999	APPLICATION CANCELLED, KEEP ALL FEE
_____	380758				666101	BCAT	RULE 1150.1 COMPLIANCE PLAN	02/01/2001	APPLICATION CANCELLED, REFUND ALL F
_____	387479				000100	BCAT	INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR	06/06/2001	BANKING/ PLAN GRANTED
_____	387527	N11272	06/13/2002	ACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	06/13/2001	PERMIT TO OPERATE GRANTED
_____	405664				000993	BCAT	ERC ALTERATION	08/20/2002	BANKING/ PLAN GRANTED
_____	406480				000993	BCAT	ERC ALTERATION	09/04/2002	BANKING/ PLAN GRANTED
_____	406481				000993	BCAT	ERC ALTERATION	09/04/2002	BANKING/ PLAN GRANTED
_____	406487				000993	BCAT	ERC ALTERATION	09/06/2002	BANKING/ PLAN GRANTED
_____	406630				000993	BCAT	ERC ALTERATION	09/17/2002	BANKING/ PLAN GRANTED
_____	406823				000993	BCAT	ERC ALTERATION	09/13/2002	BANKING/ PLAN GRANTED
_____	407078				000993	BCAT	ERC ALTERATION	09/25/2002	BANKING/ PLAN GRANTED
_____	408610				000993	BCAT	ERC ALTERATION	11/07/2002	BANKING/ PLAN GRANTED
_____	409001	F56958	12/12/2002	ACTIVE	041901	BCAT	I C E (50-500 HP) N-EM PORT N-RENT DIESE	11/19/2002	PERMIT TO OPERATE GRANTED
_____	409504				000993	BCAT	ERC ALTERATION	12/04/2002	BANKING/ PLAN GRANTED

Report:

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

NOx	10 tons per year	25 tons per year	100 tons per year
SOx	100 tons per year	100 tons per year	100 tons per year
PM10	70 tons per year	70 tons per year	100 tons per year
CO	50 tons per year	100 tons per year	100 tons per year

[4] The South Coast Air Basin is currently classified by EPA in severe 17 ozone non-attainment status. However, this basin was designated as extreme non-attainment during the reporting periods covered by these determinations of equivalency.

[5] Non-federal sources that do not meet any of the exemption criteria of Rule 1304 and that do not qualify to obtain offsets from the Priority Reserve are also required by AQMD to provide offsets (i.e., ERCs) at a ratio of 1.2-to-1.

[6] SOx is a precursor to PM10 and NOx is a precursor to both PM10 and ozone.

[7] Refer to the Rule 1315 staff report for a more complete description of federal debit accounting.

[8] Refer to Rule 1309(b) for a complete explanation of eligibility requirements.

[9] Refer to rule paragraph (a)(4) of these revisions of Rule 1309.1 for eligibility requirements.

[10] The EGF access to the Priority Reserve established by these revisions applies exclusively to projects with applications for California Energy Commission (CEC) certification or for permit to construct submitted during 2000, 2001, 2002, or 2003. Rule 1309.1 was again amended in September 2006 re-establishing Priority Reserve access to EGFs which submit CEC or AQMD applications in 2005, 2006, 2007, or 2008. However, no Priority Reserve access was granted to EGFs pursuant to the September 2006 amendments during the reporting periods covered by this report.

for the period starting August 2002 and ending December 2007. As can be seen from this table, it is projected that during this reporting period the offset account balances for VOC, NOx, and SOx will *decrease* by about 0.25 to less than 8 tons per day, while offset account balances for CO and PM10 will *increase* by about 4.5 to less than 6.25 tons per day, depending on the pollutant. The projected debits (January 2006 through December 2007) and projected credits (August 2004 through December 2007) are based on the average total annual debits and average total annual credits for the preceding five years, respectively. Therefore, the projected debits include average use of Priority Reserve offsets by EGFs during 2002 through 2005 (refer to Tables 11, 12, and 13).

Table 14
Summary of Actual and Projected Changes in AQMD's Federal Offset Account Balances for August 2002 through December 2007
(tons per day)

DESCRIPTION	VOC	NOx	SOx	CO	PM10
8/2002 Starting Balance	68.70	28.84	10.72	7.84	7.68
Projected 12/2007 Ending Balance	68.46	24.72	2.85	12.29	13.91
Net Change*	-0.24	-4.12	-7.87	+4.45	+6.23

* Net decreases are shown as negative and net increases are shown as positive.

Staff will continue to track credits to and debits from AQMD's offset accounts and will provide annual reports and equivalency determinations to the Board consistent with Rules 1310 and 1315 to ensure that AQMD's NSR program continues to operate in compliance with federal NSR requirements.

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[1] While the RECLAIM program is different than command and control rules for NOx and SOx and it provides greater regulatory flexibility to businesses, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Code.

[2] AQMD's NSR program is deemed to be equivalent to federal offset requirements because AQMD's ending offset account balances remained positive, indicating there were adequate offsets during these reporting periods.

[3] The major source thresholds are as summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 tons per year	25 tons per year	100 tons per year

Table 11
EGF Access to Priority Reserve Offsets
(August 2002 through July 2003)

	PM10	SOx	CO
Priority Reserve Offsets Used (lb/day)	514	0	0
Priority Reserve Offsets Used (ton/day)	0.26	0	0

Table 12
EGF Access to Priority Reserve Offsets
(August 2003 through July 2004)

	PM10	SOx	CO
Priority Reserve Offsets Used (lb/day)	15	0	0
Priority Reserve Offsets Used (ton/day)	0.01	0	0

Table 13
EGF Access to Priority Reserve Offsets
(August 2004 through December 2005)

	PM10	SOx	CO
Priority Reserve Offsets Used (lb/day)	506	0	0
Priority Reserve Offsets Used (ton/day)	0.25	0	0

CONCLUSIONS

The analysis presented in this report demonstrates that AQMD's NSR program provides equivalent offsets to those required by federal NSR requirements and is at least equivalent to the federal requirements on an aggregate basis. This conclusion is based on the fact that the ending offset account balances for all of the reporting periods covered by this report (August 2002 through July 2003, August 2003 through July 2004, and projected August 2004 through December 2007), as shown in Tables 1, 2, and 3, respectively, remained positive or is projected to remain positive for all pollutants. The sums of credits to and debits from AQMD's offset accounts during the August 2002 through July 2003 and August 2003 through July 2004 reporting periods were positive for all pollutants in both years. However, the federal NOx offset account experienced a net decrease for the August 2003 through July 2004 reporting period of 1.06 tons per day. This net decrease occurred because the amount of the NOx surplus at the time of use discount pursuant to Rule 1315(c)(4) for this reporting period (-2.21 tons per day) was larger than the increase due to the sum of credits and debits (1.15 tons per day) for the reporting period.

Table 14 below summarizes AQMD's actual and projected federal offset account balances

Sum of Debits(-)/Credits(+)* (lb/day)	18,256	2,302	1,830	2,113	2,394
Sum of Debits(-)/Credits(+)* (ton/day)	9.13	1.15	0.91	1.06	1.20

* Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate.

Table 10
Debits from AQMD's Federal Offset Accounts
(August 2004 through December 2005)

DISTRICT OFFSETS USED	VOC	NOx	SOx	CO	PM10
Priority Reserve* (lb/day)	145	258	0	1,084	503
Community Bank (lb/day)	11	0	0	0	0
Rule 1304 Exemptions (lb/day)	522	481	0	1,891	263
Sum Total of AQMD Offsets (lb/day)	678	739	0	2,975	766
120% Offset Ratio (lb/day)	136	148	N/A	N/A	N/A
Total Debit to AQMD Account (lb/day)	814	887	0	2,975	766
Total Debit to AQMD Account (ton/day)	0.41	0.44	0.00	1.49	0.38

* Includes electrical generating facilities and other sources accessing the Priority Reserve.

The sum of credits and debits activity from this analysis (the sum may be positive or negative) is added to the starting offset account balance for each pollutant to calculate the offset account ending balance which is then used to determine compliance with federal NSR requirements for each reporting period. Refer to Table 1 for a summary of final starting and ending account balances for the August 2002 through July 2003 reporting period and Table 2 for the August 2003 through July 2004 reporting period. Table 3 presents the final starting account balances and the projected ending account balances for the August 2004 through December 2005 reporting period.

ELECTRICAL GENERATING FACILITY ACCESS TO PRIORITY RESERVE

The April 2001 amendments to Rule 1309.1 - Priority Reserve provide EGFs with access to PM10 offsets from the Priority Reserve[9]. Subsequently, the November 2001 and May 2002 amendments to Rule 1309.1 expanded EGF access to Priority Reserve offsets to include SOx and CO[10]. Table 11 summarizes the Priority Reserve offsets provided to EGFs during the August 2002 through July 2003 reporting period, Table 12 summarizes it for the August 2003 through July 2004 reporting period, and Table 13 summarizes it for the August 2004 through December 2005 reporting period. These priority reserve debits are included in (not in addition to) the debits summarized in Tables 4, 7, and 10.

Sum Total of AQMD Offsets (lb/day)	449	1,342	3	3,521	245
120% Offset Ratio (lb/day)	90	268	N/A	N/A	N/A
Total Debit to AQMD Account (lb/day)	539	1,610	3	3,521	245
Total Debit to AQMD Account (ton/day)	0.27	0.81	0.00	1.76	0.12

* Includes electrical generating facilities and other sources accessing the Priority Reserve.

Table 8
Credits to AQMD's Federal Offset Accounts
(August 2003 through July 2004)

CREDITS RECEIVED	VOC	NOx	SOx	CO	PM10
Major Source Orphan Credits (lb/day)	6,355	841	7	3,749	467
Minor Source Orphan Credits (lb/day)	16,850	3,953	2,259	3,060	2,653
Total Orphan Credits (lb/day)	23,205	4,794	2,266	6,809	3,120
Adjustment to Actual Emissions* (lb/day)	-4,641	-959	-453	-1,362	-624
Discount of ERCs** (lb/day)	7	0	0	0	0
Creditable Minor Source ERC Use (lb/day)	224	77	20	148	139
Creditable Major Source ERC Use (lb/day)	0	0	0	39	4
Total Credit to AQMD Account (lb/day)	18,795	3,912	1,833	5,634	2,639
Total Credit to AQMD Account (ton/day)	9.40	1.96	0.92	2.82	1.32

* Adjustment of orphan shutdown and orphan reduction offset credits deposited in AQMD offset accounts to correct from potential emissions to actual emissions pursuant to Rule 1315(c)(3)(B)(i).
** "Payback" of NSR balance, Community Bank and Priority Reserve allocations, and offset exemptions pursuant to Rule 1315(c)(3)(v) and Rule 1306(c).

Table 9
Sum of Credits/Debits Activity in AQMD's Federal Offset Accounts
(August 2003 through July 2004)

VOC	NOx	SOx	CO	PM10	
Total Debits* (lb/day)	-539	-1,610	-3	-3,521	-245
Total Credits* (lb/day)	18,795	3,912	1,833	5,634	2,639

Major Source Orphan Credits (lb/day)	4,619	4,289	58	3,995	2,879
Minor Source Orphan Credits (lb/day)	11,955	2,998	549	4,690	1,253
Total Orphan Credits (lb/day)	16,574	7,287	607	8,685	4,132
Adjustment to Actual Emissions* (lb/day)	-3,315	-1,457	-121	-1,737	-826
Discount of ERCs** (lb/day)	31	0	38	15	30
Creditable Minor Source ERC Use (lb/day)	225	78	21	147	139
Creditable Major Source ERC Use (lb/day)	0	0	0	39	5
Total Credit to AQMD Account (lb/day)	13,515	5,908	545	7,149	3,480
Total Credit to AQMD Account (ton/day)	6.76	2.95	0.27	3.57	1.74

* Adjustment of orphan shutdown and orphan reduction offset credits deposited in AQMD offset accounts to correct from potential emissions to actual emissions pursuant to Rule 1315(c)(3)(B)(i).
** "Payback" of NSR balance, Community Bank and Priority Reserve allocations, and offset exemptions pursuant to Rule 1315(c)(3)(v) and Rule 1306(c).

Table 6
Sum of Credits/Debits Activity in AQMD's Federal Offset Accounts
(August 2002 through July 2003)

	VOC	NOx	SOx	CO	PM10
Total Debits* (lb/day)	-1,424	-2,066	-135	-4,544	-211
Total Credits* (lb/day)	13,515	5,908	545	7,149	3,480
Sum of Debits(-)/Credits(+)* (lb/day)	**12,091**	**3,842**	**410**	**2,605**	**3,269**
Sum of Debits(-)/Credits(+)* (ton/day)	**6.05**	**1.92**	**0.20**	**1.30**	**1.63**

* Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate.

Table 7
Debits from AQMD's Federal Offset Accounts
(August 2003 through July 2004)

DISTRICT OFFSETS USED	VOC	NOx	SOx	CO	PM10
Priority Reserve* (lb/day)	99	517	0	919	0
Community Bank (lb/day)	0	0	0	0	0
Rule 1304 Exemptions (lb/day)	350	825	3	2,602	245

demonstrates and EPA concurs that the discount amount exceeds the emission reductions that would be required by approved SIP rules and rules scheduled to be approved by the District in the following year's rule cycle.

FINAL AND PRELIMINARY DETERMINATIONS OF EQUIVALENCY WITH FEDERAL OFFSET REQUIREMENTS

Table 4 presents the total emission increases debited from AQMD's offset accounts from August 2002 through July 2003. Credits to AQMD's offset accounts during the same period are summarized in Table 5. Finally, the sums of debit and credit activity are displayed in Table 6. Similarly, Tables 7, 8, and 9 summarize the debits, credits, and net activity, respectively, for August 2003 through July 2004. The debit activity for August 2004 through December 2005 is displayed in Table 10. At this time, only the debit data is available for the August 2004 through December.2005 time period. Therefore, pursuant to Rule 1315(d)(2) and Rule 1315(e), AQMD has made a preliminary compliance determination for the period August 2004 through December 2005, which includes the actual amount of debits and the projected amount of credits for this period. Tables 4 through 10 present the results of the federal FDEs for the 2002-2003 and 2003-2004 reporting periods and the federal PDE for the 2004-2005 reporting period.

Table 4
Debits from AQMD's Federal Offset Accounts
(August 2002 through July 2003)

DISTRICT OFFSETS USED	VOC	NOx	SOx	CO	PM10
Priority Reserve* (lb/day)	383	867	135	2,249	159
Community Bank (lb/day)	0	14	0	0	0
Rule 1304 Exemptions (lb/day)	804	841	0	2,295	52
Sum Total of AQMD Offsets (lb/day)	1,187	1,722	135	4,544	211
120% Offset Ratio (lb/day)	237	344	N/A	N/A	N/A
Total Debit to AQMD Account - (lb/day)	1,424	2,066	135	4,544	211
Total Debit to AQMD Account (ton/day)	0.71	1.03	0.07	2.27	0.11

* Includes electrical generating facilities and other sources accessing the Priority Reserve.

Table 5
Credits to AQMD's Federal Offset Accounts
(August 2002 through July 2003)

CREDITS RECEIVED	VOC	NOx	SOx	CO	PM10

demonstrations only and as specified in Rule 1315, AQMD uses an offset ratio of 1.2-to-1.0 for extreme non-attainment pollutants (currently ozone and ozone precursors, *i.e.* VOC and NOx) and uses 1.0-to-1.0 for all other non-attainment pollutants (non-ozone precursors, *i.e.* SOx, CO, and PM10) to offset any such increases. That is, at this time 1.2 pounds are deducted from AQMD's offset accounts for each pound of maximum allowable permitted potential to emit VOC or NOx increase at a federal source and 1.0 pound for each pound of maximum allowable permitted potential to emit SOx, CO, or PM10 at a federal source[7]. There is another source of debits from AQMD's offset accounts in addition to the permitted emission increases described above. This debit is very infrequent, but it occurs in a situation in which a permit that was previously inactivated due to nonpayment of fees and potentially deemed as an orphan shutdown is reactivated pursuant to the provisions of Rule 313 - Authority to Adjust Fees and Due Dates. If there is such a case, these special reactivations are debited from AQMD's federal accounts at the same ratios as are the other emissions increases identified above. All debits are accounted pursuant to Rule 1315(c)(2). For a more complete description of federal debit accounting, refer to the Rule 1315 staff report.

Credit Accounting

When emissions from a permitted source are permanently reduced (e.g., installation of control equipment, removal of the source) and the emission reduction is not required by rule or law and is not called for by an AQMP control measure that has been assigned a target implementation date[8], the permit holder may apply for ERCs for the pollutants reduced. If the permit holder for the source generating the emission reduction had previously received offsets from AQMD or has a "positive balance" (i.e., pre-1990 net emission increase), the quantity of AQMD credits used or the amount of the positive balance is subtracted from the reduction and "paid back" to AQMD's accounts prior to issuance of an ERC pursuant to Rule 1306. In certain other cases, permit holders do not always submit applications to claim ERCs for their equipment shutdowns or other eligible emission reductions. These unclaimed reductions are referred to as "orphan shutdowns" or "surplus reductions" and are credited to AQMD's offset accounts. ERCs provided as offsets by major sources in excess of the applicable federally-required offset ratio and all ERCs provided as offsets by minor sources are also credited to AQMD's federal offset accounts. Refer to Rule 1315(c)(3)(A)—which explicitly identifies the sources of credits to AQMD's offset accounts—and its staff report for a more complete description of federal credit accounting. The sources of offset credits are summarized below:

- Orphan shutdowns;
- Orphan reductions;
- ERCs provided as emission offsets for sources located at minor facilities;
- ERCs provided as emission offsets at major facilities for non-extreme nonattainment air contaminants and their precursors at an offset ratio beyond 1.0-to-1.0;
- NSR offset debt payback associated with banking new ERCs; and
- BACT discount of newly-banked ERC in cases where the Executive Officer

VOC (as ozone precursors), SOx, PM10, and CO in the three air basins for these reporting periods result in the major source thresholds presented by pollutant and air basin in footnote 3 on the previous page. This report demonstrates compliance with the federal NSR requirements.

OVERVIEW OF ANALYSIS METHODOLOGY

The two most major elements of federal non-attainment NSR requirements are LAER and emission offsetting. AQMD's BACT requirements are at least as stringent as federal LAER for major sources. Furthermore, the NSR emission offset requirements that AQMD implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases in compliance with federal requirements. As a result, these sources each comply with federal offset requirements by providing their own ERCs. However, certain sources are exempt from AQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from AQMD's Community Bank (applications received between October 1, 1990 and February 1, 1996 only) or Priority Reserve, both pursuant to Rule 1309.1. AQMD has determined that providing offset exemptions and the Priority Reserve (as well as the previously-administered Community Bank) is important to the NSR program and the local economy while encouraging installation of best available control equipment. Therefore, AQMD has assumed the responsibility of providing the necessary offsets for exempt sources, the Priority Reserve, and the Community Bank. This report examines credits to and debits from AQMD's emission offset accounts and demonstrates programmatic equivalence on an aggregate basis with federal emission offset requirements for the sources exempt from providing offsets and the sources that receive offsets from the Priority Reserve or the Community Bank.

AQMD's Offset Accounts

For the purposes of this report, federal debit and credit accounting for AQMD's offset accounts was conducted pursuant to the procedures delineated in Rule 1315 and described in the staff report to Rule 1315. Each of the five pollutants subject to offset requirements (VOC, NOx, SOx, CO, and PM10) has its own federal offset account. AQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by federal requirements for each subject pollutant provided the balance of credits left in AQMD's federal offset account for each pollutant remains positive, indicating that there were adequate offsets available.

Debit Accounting

AQMD tracks all emission increases that are offset through the Priority Reserve or the Community Bank, as well as all increases that are exempt from offset requirements pursuant to Rule 1304 - Exemptions. These increases are all debited from AQMD's federal offset accounts when they occur at federal major sources. For federal equivalency

formalize procedures to be followed by the Executive Officer to make annual determinations of equivalency of AQMD's NSR program with federal NSR requirements.

AQMD's NSR program is designed, amongst other things, to offset emission increases in a manner at least equivalent to federal and state statutory NSR requirements. To this end, AQMD's NSR program implements the federal and state statutory requirements for NSR and ensures that construction and operation of new and modified sources does not interfere with progress towards attainment of the National and State Ambient Air Quality Standards. AQMD's computerized emission tracking system is utilized to demonstrate equivalence with federal and state offset requirements on an aggregate basis. Specific NSR requirements of federal law are presented below.

Federal Law

Federal law requires the use of Lowest Achievable Emission Rate (LAER) and offsets for new, modified, and relocated major stationary sources[3]. Effective November 15, 1992, the federal Clean Air Act (CAA) requires a 1.5-to-1 external offset ratio for major stationary sources located in an extreme ozone non-attainment area. For these reporting periods[4], the South Coast Air Basin (SOCAB) is one of only two areas in the nation that has been designated as extreme ozone non-attainment. An extreme ozone non-attainment area may qualify for a 1.2-to-1 offset ratio if it requires implementation of federal Best Available Control Technology (BACT), as defined in CAA Section 169(3) for prevention of Significant Deterioration of Air Quality on all major sources [CAA Section 182(e)(1)]. The federal definition of BACT is roughly equivalent to state Best Available Retrofit Control Technology (BARCT), which AQMD implements through its Regulation XI - Source Specific Standards and other AQMD rules and regulations. AQMD meets this criterion and uses a 1.2-to-1 offset ratio. In addition, AQMD not only requires the 1.2-to-1 offset ratio for all federal sources, but also requires the same offset ratio for non-federal sources[5].

Based on their classification, the SOCAB and Salton Sea Air Basin (SSAB) must comply with the requirements for extreme and severe non-attainment areas, respectively, for ozone precursors (i.e., VOC and NOx). Both the SOCAB and the SSAB must at this time comply with the requirements for serious non-attainment areas for PM10 and its precursors (i.e., VOC, NOx, and SOx). For CO, the SOCAB must comply with the requirements for serious non-attainment areas; however SSAB is considered attainment for CO. SOCAB had one federal CO exceedance in 2002 and has not had any since that time. AQMD has requested EPA to re-designate SOCAB as attainment with federal CO standards and is waiting for EPA's action on that request. Both SOCAB and SSAB are considered attainment for SO_2 and NO_2, however SOx and NOx are precursors to pollutants for which both SOCAB and SSAB are designated as non-attainment[6]. The Mojave Desert Air Basin (MDAB) is currently classified as moderate non-attainment for ozone precursors (i.e., VOC and NOx) and as attainment for NOx, SOx, and CO. The various attainment statuses for NOx and

Projected 1/2007-12/2007 Debits**	-0.74	-0.74	-0.01	-1.68	-0.35
Projected 1/2007-12/2007 Surplus Adjustment	-1.95	-1.20	-0.35	0.00	0.00
Projected 12/2007 Ending Balance**	**68.46**	**24.72**	**2.85**	**12.29**	**13.91**

* Same as "Ending Balance" in Table 2.

** Projected pursuant to Rule 1315(d).

BACKGROUND

AQMD originally adopted its NSR program in 1976. U.S. EPA approved AQMD's NSR program into California's State Implementation Plan (SIP) initially on January 21, 1981 (46FR5965) and again on December 4, 1996 (61FR64291). Most recently, EPA approved AQMD's May 3, 2002 Rule1309.1 amendments into the SIP on June 19, 2006. The original program has evolved into the current version of the Regulation XIII rules in response to federal and state legal requirements and the changing needs of the local environment and economy. Specific amendments to the NSR rules were adopted by AQMD's Governing Board on December 6, 2002 to facilitate and provide additional options for credit generation and use. Most recently, Rule 1315 was adopted and Rule 1309.1 was amended on September 8, 2006. The most notable changes from the post-2000 amendments to Regulation XIII are summarized below:

- Short Term Credits (STC)
  Rules 1303 - Requirements and 1309 - Emission Reduction Credits and Short Term Credits now provide for the generation and use of short term offsets for stationary sources. These credits can be generated by stationary sources (Emission Reduction Credits or ERCs), mobile sources (MSERCs), and area sources (ASERCs).
- Extended ERC Filing Deadline
  Rule 1309 - Emission Reduction Credits and Short Term Credits' deadline to apply to bank an ERC was extended from 90 days after to 180 days after the occurrence of the emission reduction.
- Priority Reserve
  Rule 1309.1 - Priority Reserve was amended in response to the California's electricity crisis and lack of emission offsets, to allow new cleaner and more efficient electric generating facilities (EGFs) access to AQMD's offset bank, under certain circumstances, for purchase of emission credits to offset their emission increases. The mitigation fees collected for EGFs' access to the Priority Reserve are then used by AQMD for funding additional emission reduction projects in the impacted areas.
- Offset Budget
  Rule 1309.2 - Offset Budget creates a "bank of last resort" to provide offsets for sources that are unable to otherwise obtain needed offsets. This rule will not be implemented until it is approved into the SIP.
- NSR Tracking System
  The purpose of Rule 1315 - Federal New Source Review Tracking System is to

Table 2
FDE for August 2003 through July 2004

DESCRIPTION	VOC	NOx	SOx	CO	PM10
Starting Balance* (ton/day)	74.29	30.32	10.92	9.14	9.31
Total Credits** (lb/day)	18,795	3,912	1,833	5,634	2,639
Total Debits** (lb/day)	-539	-1,610	-3	-3,521	-245
Sum of Credits/Debits (lb/day)**	**18,256**	**2,302**	**1,830**	**2,113**	**2,394**
Sum of Credits/Debits (ton/day)**	**9.13**	**1.15**	**0.91**	**1.06**	**1.20**
Surplus Adjustment*** (ton/day)	-0.52	-2.21	-0.59	0.00	0.00
Ending Balance** (ton/day)**	**82.90**	**29.26**	**11.24**	**10.20**	**10.51**

* Same as "Ending Balance" from Table 1.

** Refer to page 10 of this report (consistent with Rule 1315(b) and its staff report) for an explanation of the sources of credits and debits. Credits are shown as positive and Debits as negative, while sum of Credits/Debits and Net Activity are shown as positive or negative, as appropriate.

*** Surplus at the time of use discount pursuant to Rule 1315(b)(4).

**** "Ending Balance" equals the "Starting Balance" plus the sum of credits and debits and plus any surplus adjustments.

Table 3
Projections of AQMD's Federal Offset account Balances for August 2004 through December 2005, January 2006 through December 2006, and January 2007 through December 2007
(Tons per Day)

DESCRIPTION	VOC	NOx	SOx	CO	PM10
8/2004 Starting Balance*	**82.90**	**29.26**	**11.24**	**10.20**	**10.51**
Projected 8/2004-12/2005 Credits**	7.58	2.79	0.67	2.88	1.90
Actual 8/2004-12/2005 Debits	-0.41	-0.44	0.00	-1.49	-0.38
Projected 8/2004-12/2005 Surplus Adjustment	-5.49	-2.43	-1.87	0.00	-0.10
Projected 12/2005 Ending Balance**	**84.58**	**29.18**	**10.04**	**11.59**	**11.93**
Projected Removal of Unused Initial Balances**	-21.52	-4.52	-7.42	0.00	0.00
Projected 1/2006 Starting Balance**	**63.06**	**24.66**	**2.62**	**11.59**	**11.93**
Projected 1/2006-12/2006 Credits**	5.35	1.97	0.47	2.03	1.34
Projected 1/2006-12/2006 Debits**	-0.74	-0.74	-0.01	-1.68	-0.35
Projected 1/2006-12/2006 Surplus Adjustment	-1.87	-1.20	-0.34	0.00	0.00
Projected 12/2007 Starting Balance**	**65.80**	**24.69**	**2.74**	**11.94**	**12.92**
Projected 1/2007-12/2007 Credits**	5.35	1.97	0.47	2.03	1.34

activities for twelve-month periods (with the one-time exception of August 2004 through December 2005). The last FDE submitted to the Board on April 2, 2004 covered the period from August 2001 through July 2002 for both federal and state NSR requirements. Provisional final determinations of federal equivalency for August 2002 through July 2003 and August 2003 through July 2004 were also submitted to the Board along with the staff report for Rule 1315 - Federal New Source Review Tracking System which was adopted by the Board on September 8, 2006. This report presents FDEs covering the same two reporting periods. The PDE presented in this report covers the period August 2004 through December 2005. These reports demonstrate compliance with federal NSR requirements by establishing aggregate equivalence with federal offset requirements for sources which obtained their offsets from AQMD. A final compliance determination for August 2004 through December 2005 will be completed by the end of June 2007.

The FDE for the August 2002 through July 2003 and August 2003 through July 2004 timeframes are summarized below in Tables 1 and 2, respectively. Additionally, the projections of AQMD's offset account balances for the August 2004 through December 2005, the January 2006 through December 2006, and January 2007 through December 2007 timeframes are presented in Table 3. These results demonstrate that there were, and project that there will be, adequate offsets available to mitigate all emission increases during these reporting periods. This report, therefore, demonstrates that AQMD's NSR program continues to meet federal offset requirements and is equivalent to those requirements on an aggregate basis[2].

Table 1
FDE for August 2002 through July 2003

DESCRIPTION	VOC	NOx	SOx	CO	PM10
Starting Balance* (ton/day)	68.70	28.84	10.72	7.84	7.68
Total Credits** (lb/day)	13,515	5,908	545	7,149	3,480
Total Debits** (lb/day)	-1,424	-2,066	-135	-4,544	-211
Sum of Credits/Debits (lb/day)**	**12,091**	**3,842**	**410**	**2,605**	**3,269**
Sum of Credits/Debits (ton/day)**	**6.05**	**1.92**	**0.20**	**1.30**	**1.63**
Surplus Adjustment*** (ton/day)	-0.46	-0.44	0.00	0.00	0.00
Ending Balance** (ton/day)**	**74.29**	**30.32**	**10.92**	**9.14**	**9.31**

* The revised 2002 running balances as shown in the Rule 1315 staff report, Table 5 and Table I-1 of its Appendix I.

** Refer to page 10 of this report (consistent with Rule 1315(b) and its staff report) for an explanation of the sources of credits and debits. Credits are shown as positive and Debits as negative, while sum of Credits/Debits and Net Activity are shown as positive or negative, as appropriate.

*** Surplus at the time of use discount pursuant to Rule 1315(b)(4).

**** "Ending Balance" equals the "Starting Balance" plus the sum of credits and debits and plus any surplus adjustments.

BOARD MEETING DATE: February 2, 2007
AGENDA NO. 37

REPORT:

Status Report on Regulation XIII - New Source Review

SYNOPSIS:

This report presents federal final determinations of equivalency for August 2002 through July 2003 and August 2003 through July 2004, and a preliminary determination of equivalency for August 2004 through December 2005. As such, it provides information regarding the status of Regulation XIII - New Source Review (NSR) in meeting federal NSR requirements and shows that AQMD's NSR program is in final compliance with applicable federal requirements from August 2002 through July 2004 and in preliminary compliance from August 2004 through December 2005. This report satisfies the reporting requirements of subdivision (b) of Rule 1310 - Analysis and Reporting and of subdivisions (d) and (e) of Rule 1315 - Federal New Source Review Tracking System.

COMMITTEE:

Stationary Source, January 26, 2007, Reviewed

RECOMMENDED ACTION:

Receive and file the attached report.

Barry R. Wallerstein, D.Env.
Executive Officer

SUMMARY

AQMD's NSR Rules and Regulations are designed to support efforts to attain and maintain compliance with the federal and state air quality standards and to ensure that emission increases from new and modified sources do not interfere with such efforts, while maintaining economic growth in the South Coast region. Regulation XIII - New Source Review regulates emissions increases and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated sources within AQMD with the exception of NOx and SOx sources subject to Regulation XX - Regional Clean Air Incentives Market (RECLAIM)[1].

The annual reports on the status of Regulation XIII include final determinations of equivalency (FDE) and preliminary determinations of equivalency (PDE) which cover NSR

FAC ID 90849

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector LK

SEAGULL SANITATION	1 DUMP RD.	AVALON, 90704

Last Inspection Date:	TS Code:	Compliance Team	Business Status
9/5/2001	51	Toxics	☒Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name	Title	Ph
Joann Long	Office Manager	(310) 510-0675

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
X	D49940	INCIN CONT-FEED NON HAZARD 0-50LBS/HR		☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership?
		☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

Removed from site

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☒No		☒Removed from site	☐Operated w/o permits
		☐On site, but rendered non-operable	☐Operated under new ID
		☐Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Christopher Ratte	4/30/10		

Attorney work product—prepared at the direction of and for Legal Department

Copy back to NSR

ROUTING RECORD

DATE	FROM	TO	ACTION
6/ 6			
6/28/01	GR01	6R01	Accept - HH
5-17-02	6R01	CT01	Review for ERC
5-21-02	CT01	JC	Recommend ERC Notice
5-29-00	CT01	File	~~Sign~~ Send notices/letters (compl. 30-day pub. comment) PLNTC
7-5-02	GR01	CT01	OK for ERC issuance
7-9-02	CT01	PJ	Approved HH

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCE

DATA ENTRY ENGINEERING

DATA ENTRY

BATCH # 3642

Printed

387479

APPL # 387479
I. D. # 90849

SEAGULL SANITATION
1 DUMP RD
AVALON
EMISSION REDUCTION CREDIT-NW

Date: 06/06/01

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
APPLICATION FOR EMISSION REDUCTION CREDIT (ERC) / CERTIFICATE OF TITLE
FORM 401

ERC APPLICATION TYPE X NEW ____CHANGE OF TITLE ____ALTERATION

INFORMATION REQUIRED FOR A NEW ERC

EMISSION REDUCTION OBTAINED BY ____Equipment Alteration X Equipment Removal ____Mobile Source
____Facility Out of Business ____New APC Device ____Process Change ____Other Explain

EQUIPMENT DESCRIPTION MSW Pit Burner PERMIT/APPLICATION NO 264223
DATE OF REDUCTION (mo/day/year) 08/01/01

INFORMATION FOR CHANGE OF TITLE OR ALTERATION

NAME AS IT APPEARS ON ERC CERTIFICATE N/A

EXISTING ERC CERTIFICATE NO	ROG	NOx	SOx	CO	PM10
EXISTING EMITTANT AMOUNT (lbs/day)	236	94	60	721	435
ALTERED EMITTANT AMOUNT (lbs/day)	N/A	N/A	N/A	N/A	N/A
REMAINING EMITTANT AMOUNT (lbs/day)	236	94	60	721	435

FACILITY INFORMATION

LEGAL NAME OF APPLICANT COMPANY ID NO 090849 X IRS OR ____SOCIAL SECURITY NO
Consolidated Disposal Services, LLC 953556331

EMISSION REDUCTION LOCATION ADDRESS & STREET #1 Dump Road
CITY Avalon STATE CA ZIP CODE 90704

BUSINESS MAILING ADDRESS ADDRESS & STREET 12949 Telegraph Road
CITY Santa Fe Springs STATE CA ZIP CODE 90670

LOCATION WHERE ERC WILL BE USED FOR OFFSET (IF KNOWN) ADDRESS & STREET N/A
CITY STATE CA ZIP CODE

NAME(S) OF OWNER/PRINCIPAL PARTNERS Consolidated Disposal Services, LLC

CONTACT PERSON AND TITLE Ron Krall Vice President TELEPHONE NO (562) 663-3455

DO YOU CLAIM CONFIDENTIALITY OF DATA? ____ YES X NO If Yes state nature of data

I HEREBY CERTIFY UNDER PENALTY OF PERJURY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION ARE TRUE AND CORRECT

SIGNATURE TITLE Vice President

TYPE OR PRINT NAME OF SIGNER Ron Krall TELEPHONE NO (562) 663-3455 DATE 6-7-01

SCAQMD USE ONLY	CO ID NO	BCAT 000100	ENGR	UNIT N/A
		CCAT ____ TYPE (B) C D	SCH/STEP	STATUS

VALIDATION	FILING FEE	DATE 6/13/01 PS	REGISTRATION NO
6/6/01 ad	$2087.74	APPLICATION NO 387479	

FORM 401 CK # 88428 (A) 6/28/01 GCR 10 96

S.C.A.Q.M.D.
ENG. [illegible]

'01 JUN -7 P3:26

[illegible]

'01 JUN -6 [illegible]

Express Processing of Permit Applications

For use only for permit applications that have requested express processing in accordance with Rule 301 (Y).

FACILITY NAME: Seagull Sanitation FACILITY ID: 90849

APPLICATION NO.: 387479

DATE	HOURS SPENT	DESCRIPTION	ENGINEER INITIALS
9-10-01	9 hrs -	Review and complete evaluation	
9-24-01	3 hrs	for ERCs, Records Review, emissions	SCR
		Calculations, Draft PBNTC preparation	
		for Newspaper, EPA, ARB, etc	
10/1 Thru 5/02			
(Misc. Days)	30 hrs.	Internal meetings, BACT determinations,	
(During Regular work week)		Reassessments for ERC credits,	SCR
		evaluations, PBNTC issuance	
Total =	42 Hrs.		
	Additional fee		
		42 Hrs. x $43.70/Hr = $1835.40	
7/5/02	NO	Public Comments received for PBNTC.	
	NO	Comments from EPA or ARB " ".	

PAGE SUBTOTAL		TOTAL HOURS	42

(42) x (43.70) x ( ) = $ 1835.40

OVERTIME HOURS — SMALL BUSINESS DISCOUNT (IF APPLICABLE) — EXPRESS FEE (TO BE BILLED)

SCAQMD [redacted]UTER ASSISTED PERMIT PROCES[redacted]CAPPS)

FEE DATA - SUMMARY SHEET

Application No : 387479 IRS/SS No: 000-00-0000
Previous Permit No: Previous Application No:

Company Name : SEAGULL SANITATION Facility ID: 090849
Equipment Street: 1 DUMP RD, AVALON, CA 90704
Equipment Desc. : INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR

Equipment Type : BASIC ERC Fee Charged by: B-CAT
B-CAT NO. : 000100 C-CAT NO. : 00 Schedule: E
Facility Zone : 4 Deemed Compl. Date: 6/28/2001 PUBLIC NOTICE: NO

APPLICATION FILING FEE (PRIOR TO 7/1/90 & PLANS FEE) ..... $ 0.00
EVALUATION FEE PRE-PAID (POST 7/1/90) ..... $ 2,087.74

Evaluation Type: ~~PERMIT TO OPERATE (PO)~~ Plan Approval Small Business?: NO
Disposition : ~~APPROVE PO~~ P/O NO P/C Penalty?: NO
Reference App. No: Identical Permit Unit?: NO

1. PERMIT PROC. FEE* (APPL FILED PRIOR TO 7/1/90) SUMMARY PERMIT FEE RATES * $ LESS FILING FEE PAID $	$	0.00
2. EIR	$	0.00
3. AIR QUALITY ANALYSIS (TABLE II FEE)	$	0.00
4. HEALTH RISK ASSESSMENT (TABLE II FEE)	$	0.00
5. SIGNIFICANT PROJECT REVIEW /TV PUBLIC NOTICE	$	0.00
6. SOURCE TEST REVIEW: (RULE 306(1) FEE) $224.84 + [NO HRS @ $84.28/HR]	$	0.00
7. CEMS REVIEW (TABLE II FEE)	$	0.00
8. TIME AND MATERIALS	$	0.00
9. PERMIT PROCESSING FEE ADJUSTMENT** ADDITIONAL FEE FEE* $ 8,965.57 LESS EVAL. FEE PAID $ 2,087.74	$	6,877.83
10. OTHER FEES** (INCLUDING CANCELLATION)	$	-4,845.47
TOTAL:	$	2,032.36

7-12-02

COMMENTS: CORRECT FEE, $2087.74, FOR ERC A/N WAS SUBMITTED. ADDITIONAL FEE IS FOR ERC PBNTC ($196.96) PUBLICATION AND R301(Y), 42 HRS @$43.70 = $1835.40. BALANCE DUE ADJUSTED ACCORDINGLY.

Recommended By: GR01 DATE: 7/05/2002 REVIEWING ENG: CDT DATE: 7/9/02

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT, AND P/O NO P/C PENALTY
** ADJUSTED FOR INCORRECT FEE SUBMITTAL, SMALL BUSINESS, IDENTICAL EQUIPMENT, AND P/O NO P/C PENALTY

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • http://www.aqmd.gov

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

August 8, 2002

Ron Krall
Vice President
Consolidated Disposal Services, LLC
12949 Telegraph Road
Santa Fe Springs, CA 90670

Dear Ron:

Enclosed please find the nonnegotiable copies of ERC Certificate numbers AQ004598, AQ004599, AQ004601 and AQ004604 issued to Seagull Sanitation in the amounts of 60 pounds per day of Carbon Monoxide, 52 pounds per day of Oxides of Nitrogen, 82 pounds per day of Reactive Organic Gases, and 14 pounds per day of Oxides of Sulfur, respectively. The Original of these ERC certificates is being retained by the AQMD. The ERC certificates listed, result from the shutdown of the municipal refuse pit-burner operation located in Avalon on the island of Catalina.

Please note that the AQMD must be contacted regarding any future transaction pertaining to any ERC Certificate, such as, applying an ERC Certificate to any future emission increases at the facility or transferring all or part of it to another entity. Transferring all or part of an ERC to another entity will require, at the minimum, submittal of Form 401 - *Application for Emission Reduction Credit*, the corresponding processing fee depending on the type of transaction, the enclosed ERC certificate, written authorization from the owner of the ERC, and any other relevant information as deemed appropriate by the Executive Officer at the time of filing.

Should you have any questions regarding this matter, please feel free to contact me at (909) 396-2409.

Respectfully,

Philip M. Barroca
Air Quality Engineer II

Enclosure

UNITED STATES POSTAL SERVICE

First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Print your name, address, and ZIP Code in this box •

SOUTH COAST
AIR QUALITY MANAGEMENT DISTRICT
21865 COPLEY DR.
DIAMOND BAR, CA 91765-4182

Attn: Phil Barroca
5th Flr

91765/4182

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "*Return Receipt Requested*" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Ron Krall
Vice President
Consolidated Disp. Serv.
12949 Telegraph Road
Santa Fe Springs, CA 90670

4a. Article Number

7001 0360 0003 9896 8835

4b. Service Type

☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery 8/15/02

5. Received By: *(Print Name)* Armando Nunez

8. Addressee's Address *(Only if requested and fee is paid)*

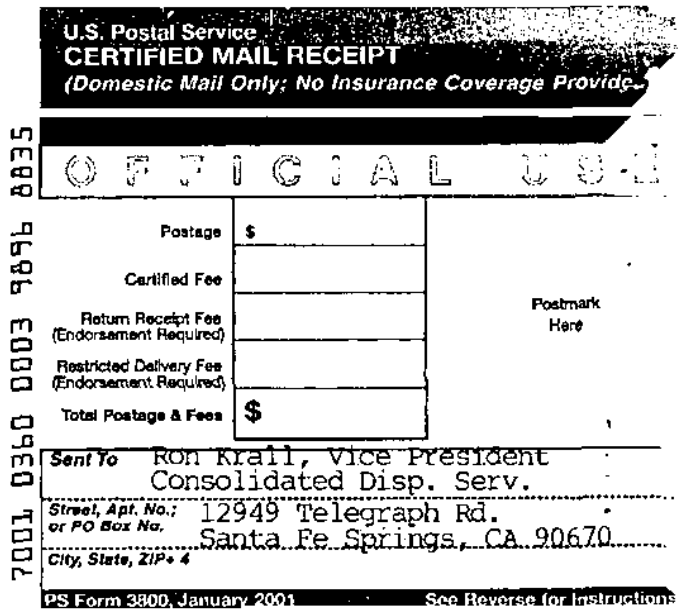
6. Signature: *(Addressee or Agent)*

X Armando Nunez

PS Form **3811**, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

s your RETURN ADDRESS completed on the reverse side?


U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provide
OFFICIAL USE
7001 0360 0003 9896 8835
Postage
$
Certified Fee
Return Receipt Fee (Endorsement Required)
Restricted Delivery Fee (Endorsement Required)
Total Postage & Fees
$
Postmark Here
Sent To
Ron Krail, Vice President
Consolidated Disp. Serv.
Street, Apt. No.; or PO Box No.
12949 Telegraph Rd.
City, State, ZIP+ 4
Santa Fe Springs, CA 90670
PS Form 3800, January 2001
See Reverse for Instructions

ADDENDUM TO ERC APPL. 387479 - SEAGULL SANITATION

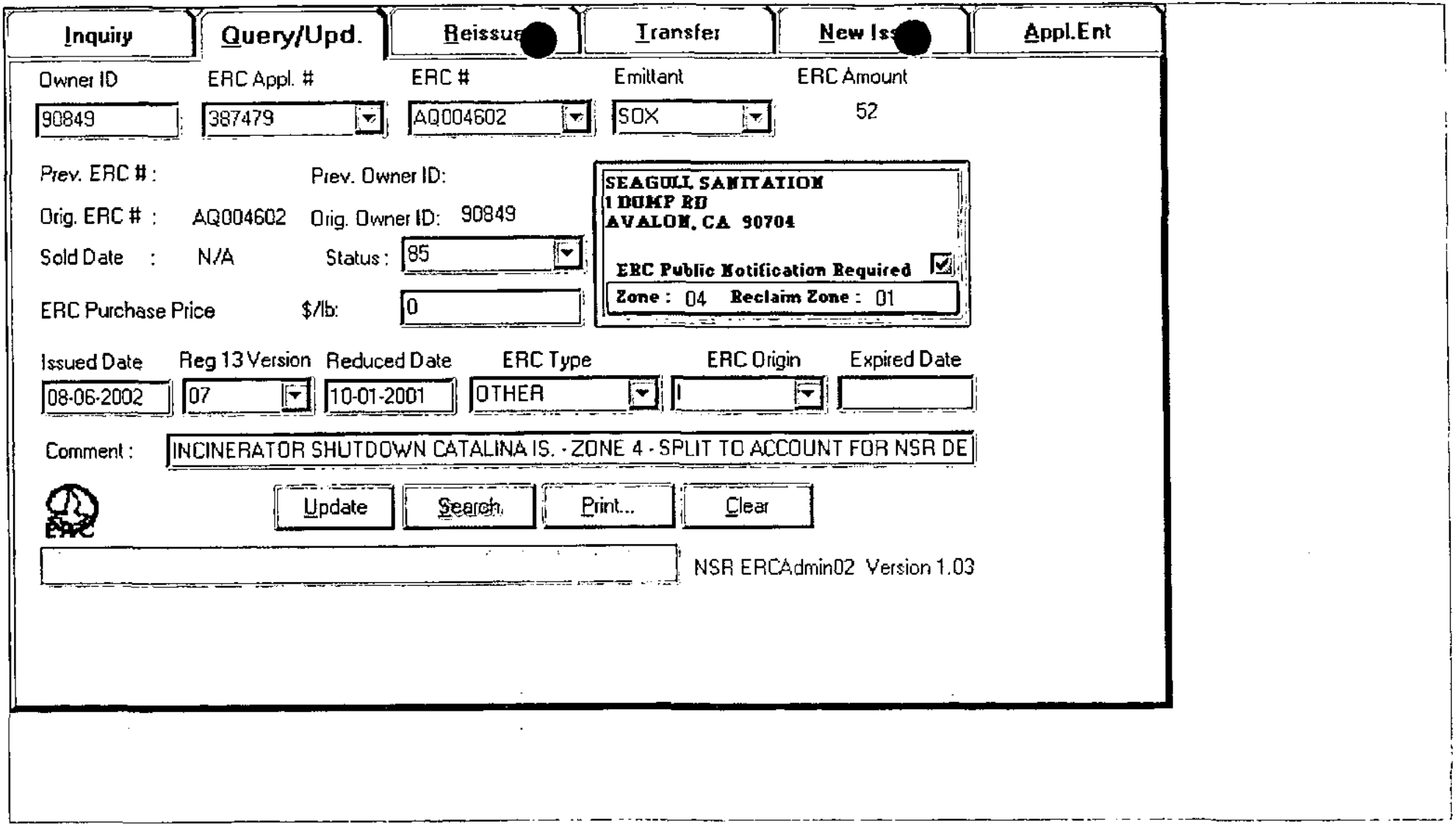
BACT ANALYSIS - QUANTITY OF REDUCTION ATTRIBUTED TO CURRENT BACT

The following quantifies the amount of real emission reductions attributed to current BACT

ERC Application No. 387479

SEAGULL SANITATION

	CO	NOx	PM-10	ROG	SOx
EFB REPORTED EMISSIONS (lbs/day)	618	80	112	202	52
EMISSIONS AFTER BACT (lbs/day)	60	52	22	82	52
EMISSION REDUCTION DUE TO BACT (lbs/day)	558	28	90	120	0
NSR OFFSET DEBT (lbs/day)	0	0	32	0	38
NET RESULTING ERC ISSUANCE (lbs/day)	60	52	0	82	14
ERC CERTIFICATE NUMBER	AQ004598	AQ004599	AQ004600	AQ004601	AQ004604


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
Owner ID
ERC Appl. #
ERC #
Emittant
ERC Amount
90849
387479
AQ004602
SOX
52
Prev. ERC # :
Prev. Owner ID:
Orig. ERC # : AQ004602
Orig. Owner ID: 90849
Sold Date : N/A
Status : 85
ERC Purchase Price
$/lb:
0
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
ERC Public Notification Required
Zone : 04 Reclaim Zone : 01
Issued Date
Reg 13 Version
Reduced Date
ERC Type
ERC Origin
Expired Date
08-06-2002
07
10-01-2001
OTHER
I
Comment :
INCINERATOR SHUTDOWN CATALINA IS. - ZONE 4 - SPLIT TO ACCOUNT FOR NSR DE
Update
Search
Print...
Clear
NSR ERCAdmin02 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

Owner ID	ERC Appl. #	ERC #	Emittant	ERC Amount
90849	405103	AQ004604	SOX	14

Prev. ERC # : AQ004602 Prev. Owner ID: 90849

Orig. ERC # : AQ004602 Orig. Owner ID: 90849

Sold Date : N/A Status : 10

ERC Purchase Price $/lb: 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

ERC Public Notification Required ☐

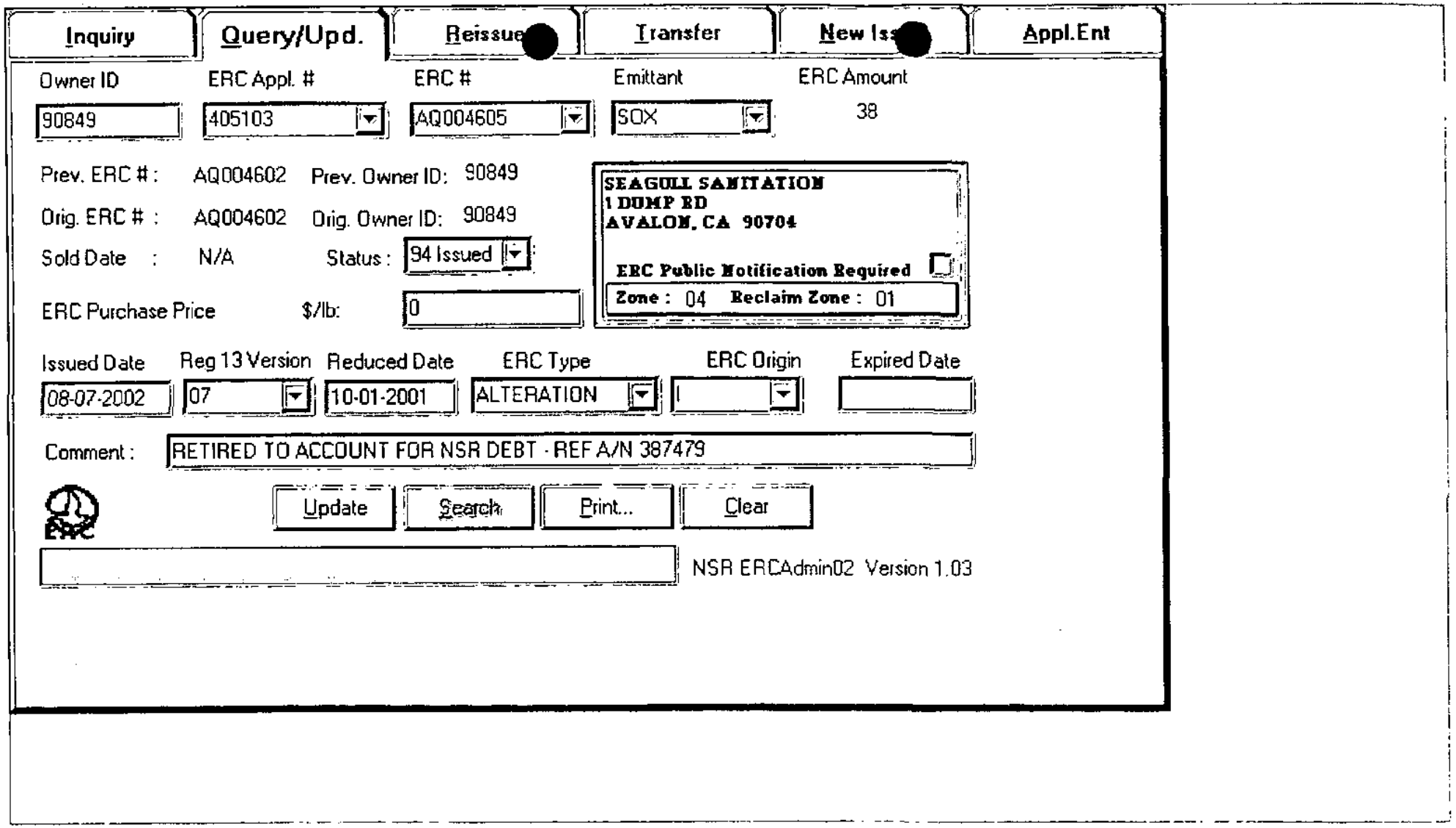
Zone : 04 Reclaim Zone : 01

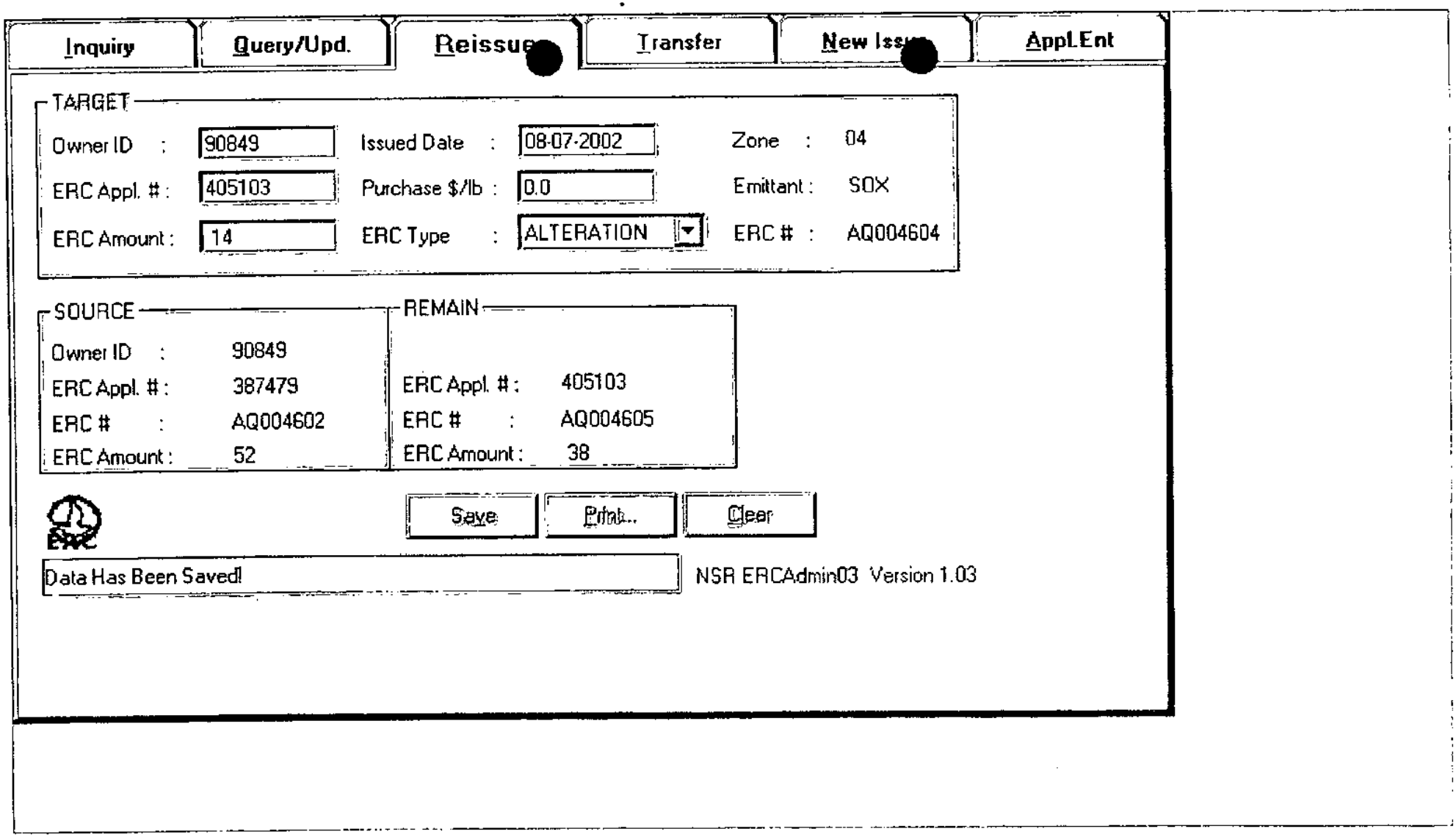
Issued Date	Reg 13 Version	Reduced Date	ERC Type	ERC Origin	Expired Date
08-07-2002	07	10-01-2001	ALTERATION	S	

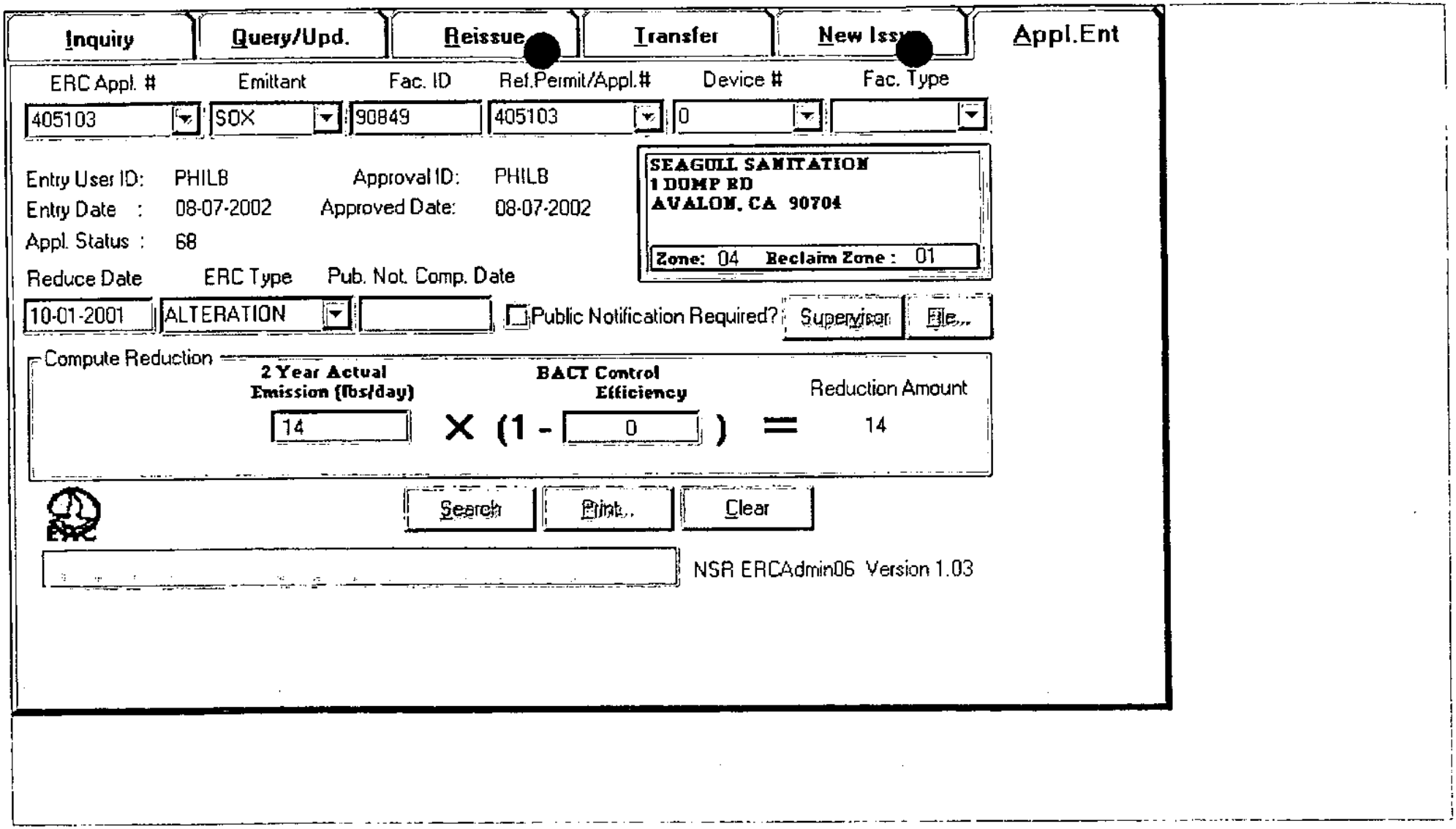
Comment : SHUTDOWN OF INCINERATOR - CATALINA - ZONE 4 - REF A/N 387479

Update | Search | Print... | Clear

NSR ERCAdmin02 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
Owner ID
ERC Appl. #
ERC #
Emittant
ERC Amount
90849
405103
AQ004605
SOX
38
Prev. ERC # : AQ004602 Prev. Owner ID: 90849
Orig. ERC # : AQ004602 Orig. Owner ID: 90849
Sold Date : N/A Status : 94 Issued
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
ERC Public Notification Required
Zone : 04 Reclaim Zone : 01
ERC Purchase Price $/lb: 0
Issued Date
Reg 13 Version
Reduced Date
ERC Type
ERC Origin
Expired Date
08-07-2002
07
10-01-2001
ALTERATION
Comment : RETIRED TO ACCOUNT FOR NSR DEBT - REF A/N 387479
Update
Search
Print...
Clear
NSR ERCAdmin02 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Issue
Appl.Ent
TARGET
Owner ID : 90849
Issued Date : 08-07-2002
Zone : 04
ERC Appl. # : 405103
Purchase $/lb : 0.0
Emittant : SOX
ERC Amount : 14
ERC Type : ALTERATION
ERC # : AQ004604
SOURCE
Owner ID : 90849
ERC Appl. # : 387479
ERC # : AQ004602
ERC Amount : 52
REMAIN
ERC Appl. # : 405103
ERC # : AQ004605
ERC Amount : 38
Save
Print...
Clear
Data Has Been Saved!
NSR ERCAdmin03 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
ERC Appl. #
Emittant
Fac. ID
Ref.Permit/Appl.#
Device #
Fac. Type
405103
SOX
90849
405103
0
Entry User ID: PHILB
Approval ID: PHILB
Entry Date : 08-07-2002
Approved Date: 08-07-2002
Appl. Status : 68
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
Zone: 04 Reclaim Zone : 01
Reduce Date
ERC Type
Pub. Not. Comp. Date
10-01-2001
ALTERATION
Public Notification Required?
Supervisor
File...
Compute Reduction
2 Year Actual Emission (lbs/day)
BACT Control Efficiency
Reduction Amount
14
X (1 -
0
) =
14
Search
Print...
Clear
NSR ERCAdmin06 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

Owner ID	ERC Appl. #	ERC #	Emittant	ERC Amount
90849	387479	AQ004598	CO	60

Prev. ERC # :

Prev. Owner ID:

Orig. ERC # : AQ004598

Orig. Owner ID: 90849

Sold Date : N/A

Status : 10

ERC Purchase Price $/lb: 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

ERC Public Notification Required ☑

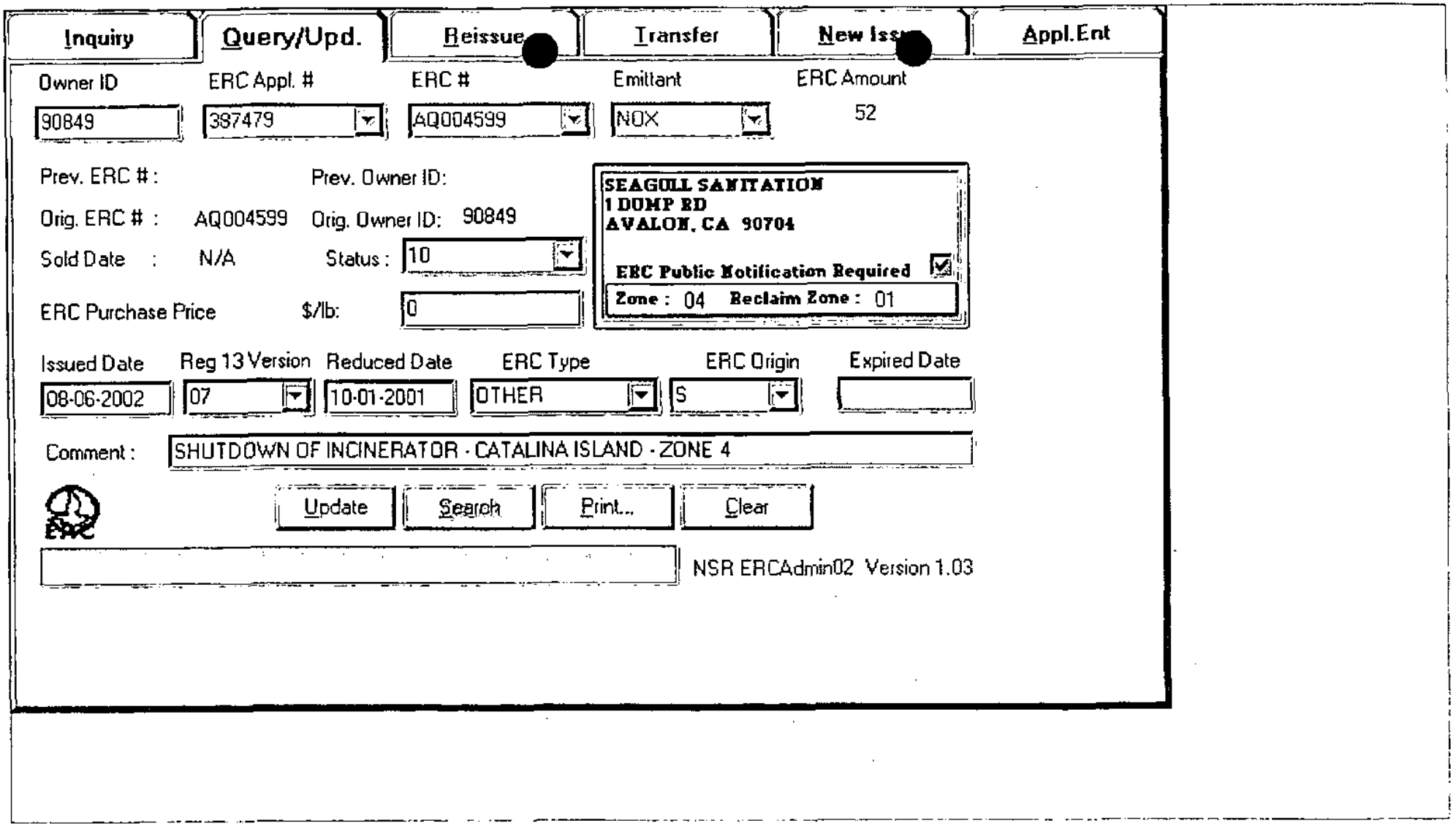
Zone : 04 Reclaim Zone : 01

Issued Date	Reg 13 Version	Reduced Date	ERC Type	ERC Origin	Expired Date
08-06-2002	07	10-01-2001	OTHER	S	

Comment : SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Update | Search | Print... | Clear

NSR ERCAdmin02 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
Owner ID
ERC Appl. #
ERC #
Emittant
ERC Amount
90849
387479
AQ004599
NOX
52
Prev. ERC # :
Prev. Owner ID:
Orig. ERC # : AQ004599
Orig. Owner ID: 90849
Sold Date : N/A
Status : 10
ERC Purchase Price
$/lb:
0
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
ERC Public Notification Required
Zone : 04
Reclaim Zone : 01
Issued Date
Reg 13 Version
Reduced Date
ERC Type
ERC Origin
Expired Date
08-06-2002
07
10-01-2001
OTHER
S
Comment :
SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4
Update
Search
Print...
Clear
NSR ERCAdmin02 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Issue | Appl.Ent

Owner ID	ERC Appl. #	ERC #	Emittant	ERC Amount
90849	387479	AQ004600	PM10	22

Prev. ERC # :

Prev. Owner ID:

Orig. ERC # : AQ004600

Orig. Owner ID: 90849

Sold Date : N/A

Status : 10

ERC Purchase Price $/lb: 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

ERC Public Notification Required ☑

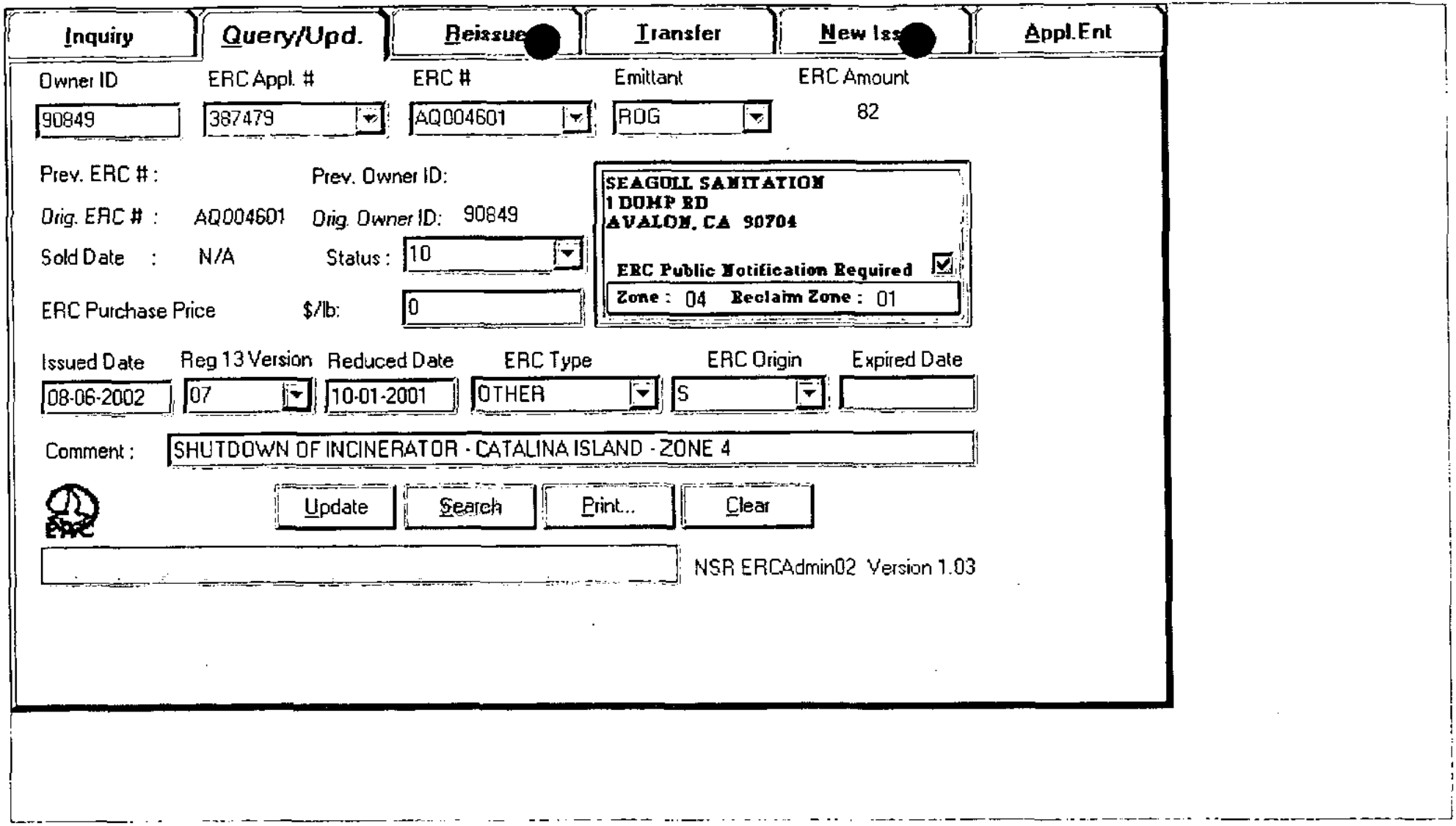
Zone : 04 Reclaim Zone : 01

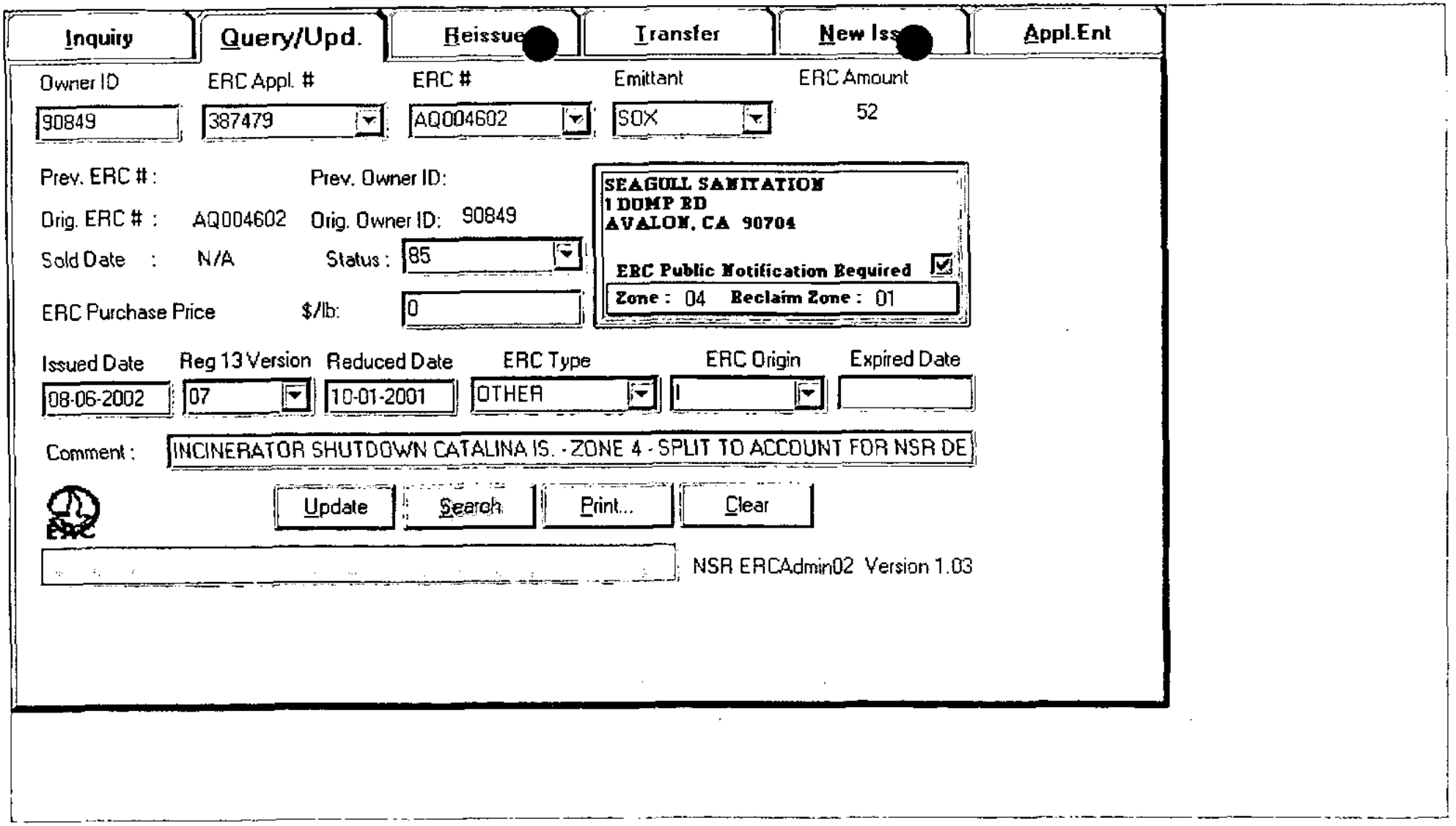
Issued Date	Reg 13 Version	Reduced Date	ERC Type	ERC Origin	Expired Date
08-06-2002	07	10-01-2001	OTHER	S	

Comment : SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Update | Search | Print... | Clear

NSR ERCAdmin02 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
Owner ID
ERC Appl. #
ERC #
Emittant
ERC Amount
90849
387479
AQ004601
ROG
82
Prev. ERC # :
Prev. Owner ID:
Orig. ERC # : AQ004601
Orig. Owner ID: 90849
Sold Date : N/A
Status : 10
ERC Purchase Price
$/lb:
0
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
ERC Public Notification Required
Zone : 04 Reclaim Zone : 01
Issued Date
Reg 13 Version
Reduced Date
ERC Type
ERC Origin
Expired Date
08-06-2002
07
10-01-2001
OTHER
S
Comment :
SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4
Update
Search
Print...
Clear
NSR ERCAdmin02 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
Owner ID
ERC Appl. #
ERC #
Emittant
ERC Amount
90849
387479
AQ004602
SOX
52
Prev. ERC # :
Prev. Owner ID:
Orig. ERC # : AQ004602
Orig. Owner ID: 90849
Sold Date : N/A
Status : 85
ERC Purchase Price
$/lb:
0
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
ERC Public Notification Required
Zone : 04 Reclaim Zone : 01
Issued Date
Reg 13 Version
Reduced Date
ERC Type
ERC Origin
Expired Date
08-06-2002
07
10-01-2001
OTHER
Comment :
INCINERATOR SHUTDOWN CATALINA IS. - ZONE 4 - SPLIT TO ACCOUNT FOR NSR DE
Update
Search
Print...
Clear
NSR ERCAdmin02 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Isq | Appl.Ent

ERC Appl. # 387479

Emittant CO

ERC # : AQ004598

Owner ID : 90849

Status : 65 Final Approved

Application # : 387479

Device # : 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone : 04 Reclaim Zone : 01

Issued Date 08-06-2002

Reg 13 Version 07

Reduced Date 10-01-2001

ERC Type OTHER

Pub.Notice Compl. Date 06-07-2002

Compute ERC AMT

PR : 0 + CB : 0 + POSBAL : 0 = NSR BALANCE: 0

Reduction Amount : 60

— 0

ERC AMT : 60

Comment SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Approve | Print... | Clear

NSR ERCAdmin05 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

ERC Appl. # 387479

Emittant PM10

ERC # : AQ004600

Owner ID : 90849

Status : 65 Final Approved

Application # : 387479

Device # : 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone : 04 Reclaim Zone : 01

Issued Date 08-06-2002

Reg 13 Version 07

Reduced Date 10-01-2001

ERC Type OTHER

Pub.Notice Compl. Date 06-07-2002

Compute ERC AMT

PR : 0 + CB : 0 + POSBAL : 0 = NSR BALANCE: — Reduction Amount : 22

0

ERC AMT : 22

Comment SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Approve.. | Print.. | Clear

NSR ERCAdmin05 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

ERC Appl. # 387479

Emittant ROG

ERC # : AQ004601

Owner ID : 90849

Status : 65 Final Approved

Application # : 387479

Device # : 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone : 04 Reclaim Zone : 01

Issued Date 08-06-2002

Reg 13 Version 07

Reduced Date 10-01-2001

ERC Type OTHER

Pub.Notice Compl. Date 06-07-2002

Compute ERC AMT

PR : 0 + CB : 0 + POSBAL : 0 = NSR BALANCE:

Reduction Amount : 82

NSR BALANCE: 0

ERC AMT : 82

Comment SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Approve | Print... | Clear

NSR ERCAdmin05 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

ERC Appl. # 387479

Emittant SOX

ERC # : AQ004602

Owner ID : 90849

Status : 65 Final Approved

Application # : 387479

Device # : 0

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone : 04 Reclaim Zone : 01

Issued Date 08-06-2002

Reg 13 Version 07

Reduced Date 10-01-2001

ERC Type OTHER

Pub.Notice Compl. Date 06-07-2002

Compute ERC AMT

PR : 0 + CB : 0 + POSBAL : 0 = NSR BALANCE: — Reduction Amount : 52

0

ERC AMT : 52

Comment SHUTDOWN OF INCINERATOR - CATALINA ISLAND - ZONE 4

Approve | Print... | Clear

NSR ERCAdmin05 Version 1.03

Inquiry | Query/Upd. | Reissue | Transfer | New Iss | Appl.Ent

ERC Appl. #	Emittant	Fac. ID	Ref.Permit/Appl.#	Device #	Fac. Type
387479	CO	90849	387479	0	

Entry User ID: PHILB Approval ID: PHILB
Entry Date : 08-06-2002 Approved Date: 08-06-2002
Appl. Status : 65 Final Approved

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone: 04 Reclaim Zone : 01

Reduce Date	ERC Type	Pub. Not. Comp. Date
10-01-2001	OTHER	06-07-2002

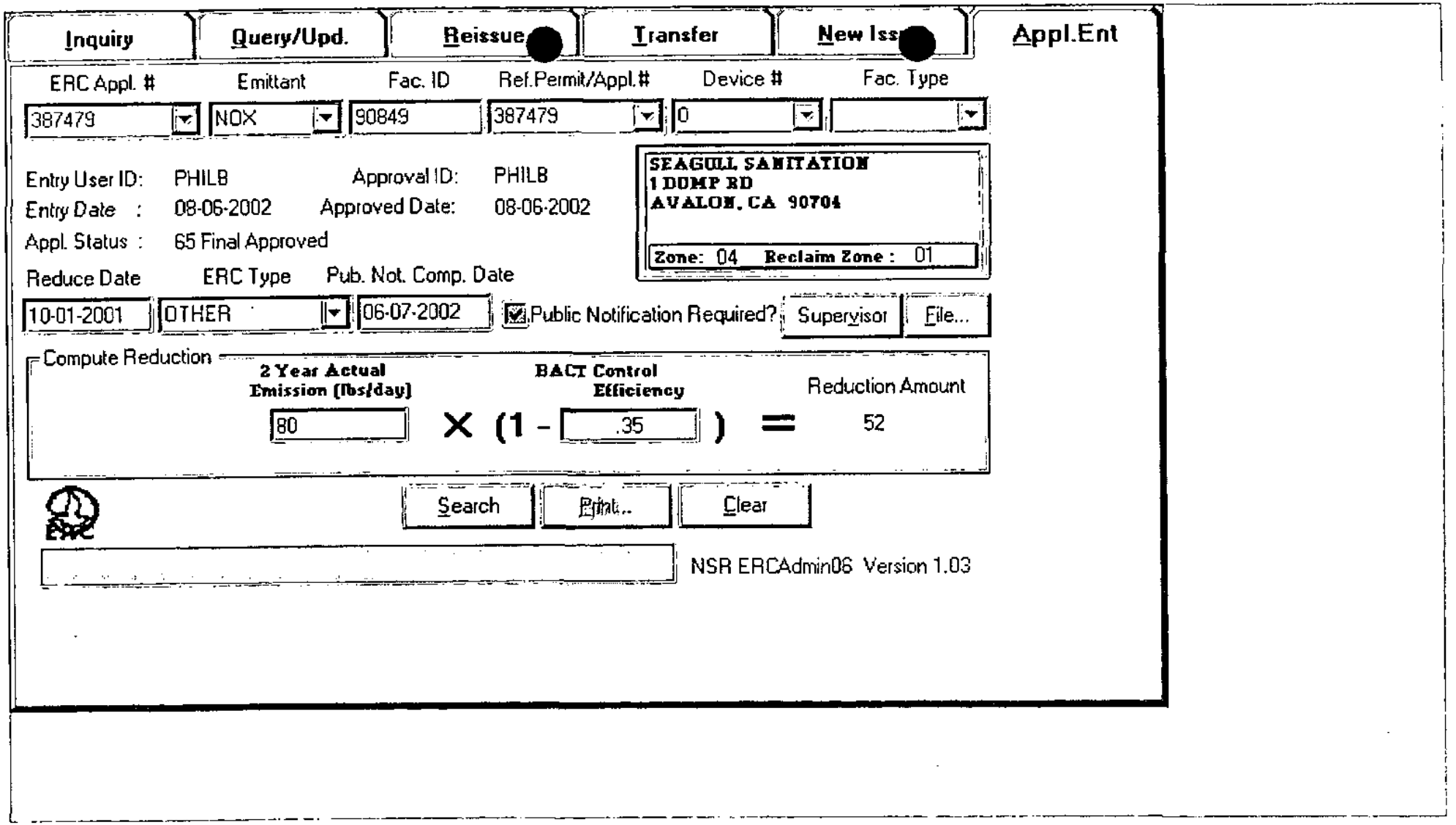
☑ Public Notification Required? Supervisor File...

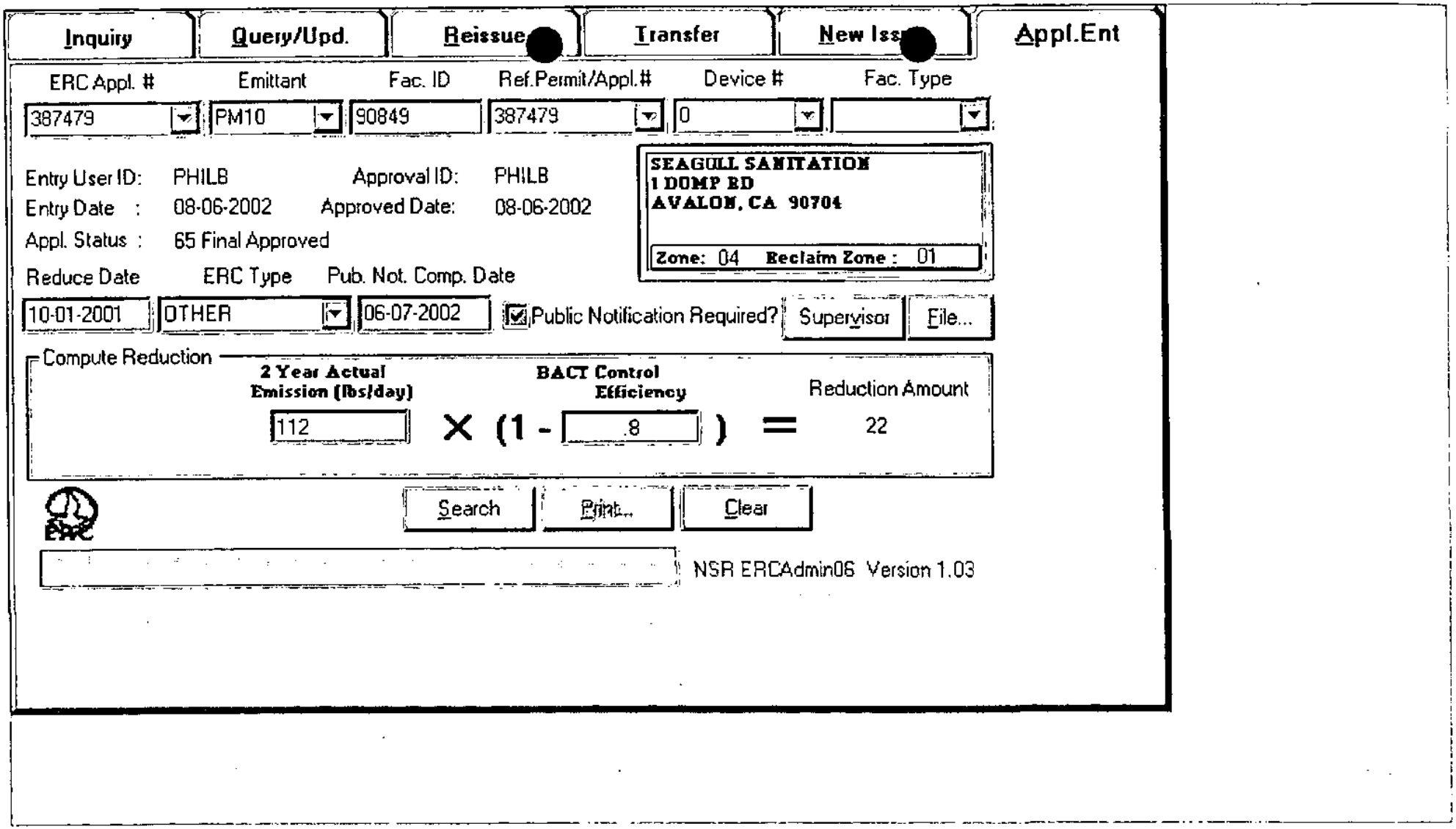
Compute Reduction

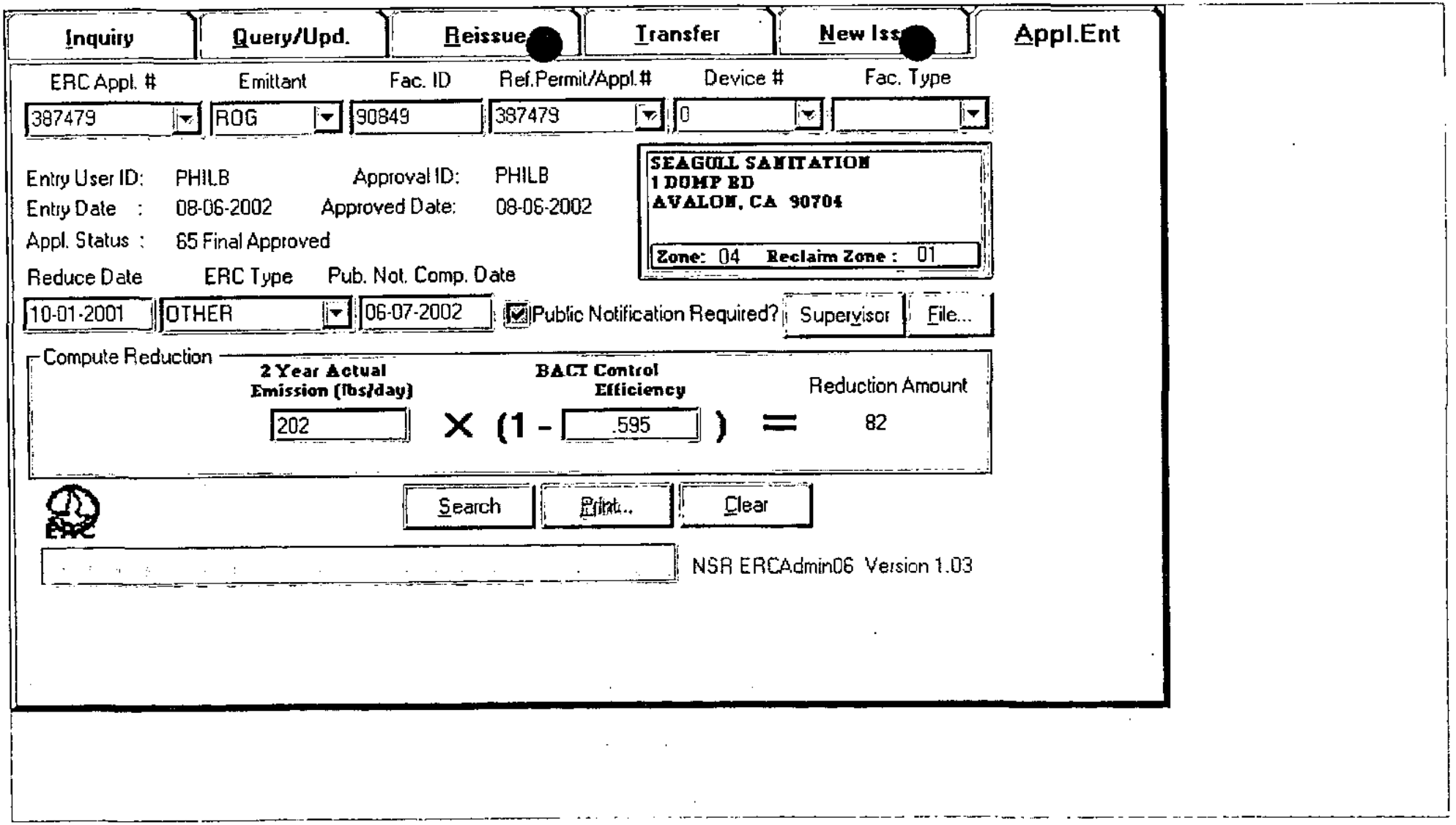
2 Year Actual Emission (lbs/day)		BACT Control Efficiency			Reduction Amount
618	X (1 -	.903	)	=	60

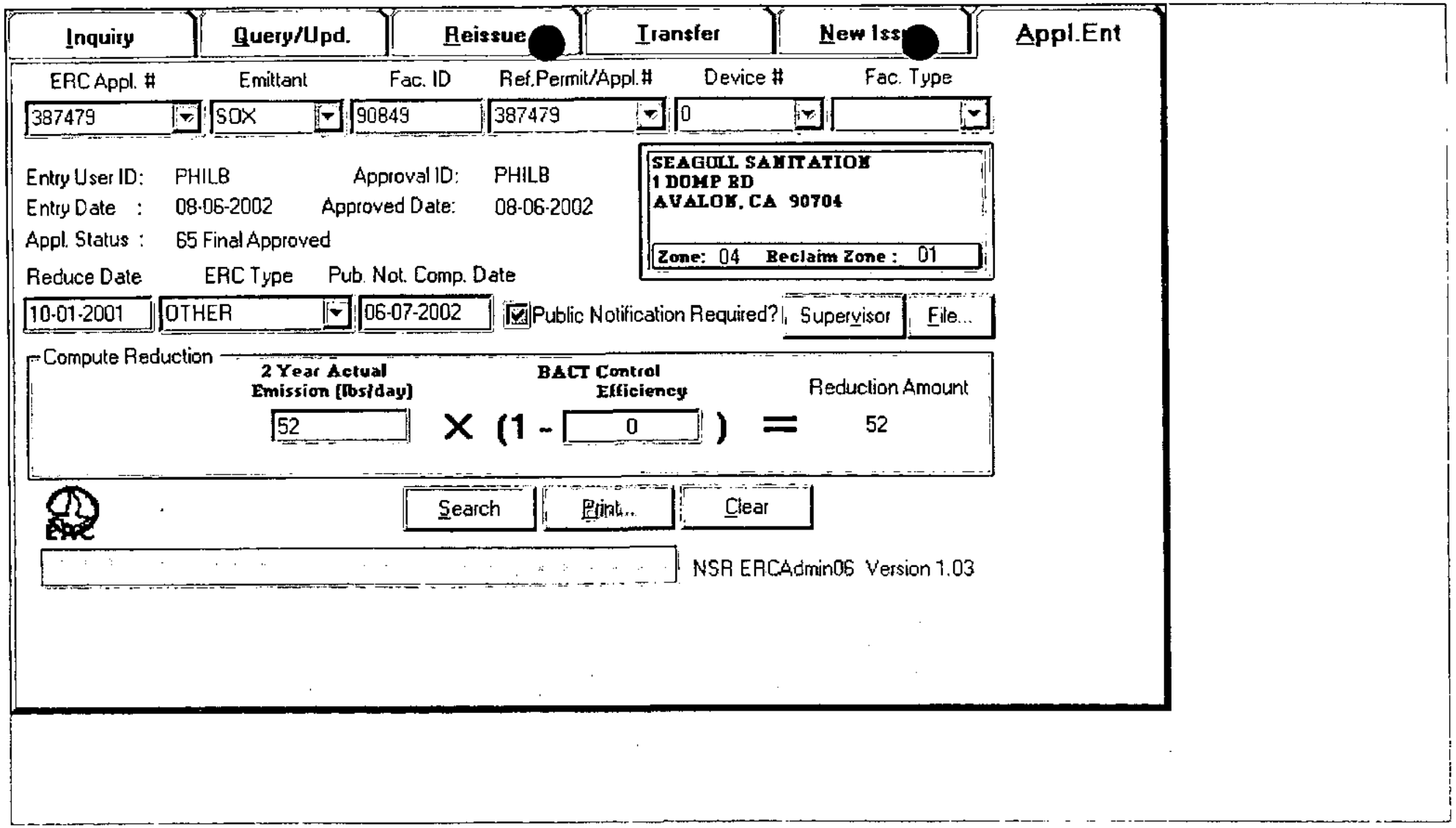
Search | Print... | Clear

NSR ERCAdmin06 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
ERC Appl. #
Emittant
Fac. ID
Ref.Permit/Appl.#
Device #
Fac. Type
387479
NOX
90849
387479
0
Entry User ID: PHILB
Approval ID: PHILB
Entry Date : 08-06-2002
Approved Date: 08-06-2002
Appl. Status : 65 Final Approved
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
Zone: 04 Reclaim Zone : 01
Reduce Date
ERC Type
Pub. Not. Comp. Date
10-01-2001
OTHER
06-07-2002
Public Notification Required?
Supervisor
File...
Compute Reduction
2 Year Actual Emission (lbs/day)
BACT Control Efficiency
Reduction Amount
80
X (1 -
.35
) =
52
Search
Print...
Clear
NSR ERCAdmin06 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
ERC Appl. #
Emittant
Fac. ID
Ref.Permit/Appl.#
Device #
Fac. Type
387479
PM10
90849
387479
0
Entry User ID: PHILB
Approval ID: PHILB
Entry Date : 08-06-2002
Approved Date: 08-06-2002
Appl. Status : 65 Final Approved
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
Zone: 04 Reclaim Zone : 01
Reduce Date
ERC Type
Pub. Not. Comp. Date
10-01-2001
OTHER
06-07-2002
Public Notification Required?
Supervisor
File...
Compute Reduction
2 Year Actual Emission (lbs/day)
BACT Control Efficiency
Reduction Amount
112
X (1 -
.8
) =
22
Search
Print...
Clear
NSR ERCAdmin06 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
ERC Appl. #
Emittant
Fac. ID
Ref.Permit/Appl.#
Device #
Fac. Type
387479
ROG
90849
387479
0
Entry User ID: PHILB
Approval ID: PHILB
Entry Date : 08-06-2002
Approved Date: 08-06-2002
Appl. Status : 65 Final Approved
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
Zone: 04 Reclaim Zone : 01
Reduce Date
ERC Type
Pub. Not. Comp. Date
10-01-2001
OTHER
06-07-2002
Public Notification Required?
Supervisor
File...
Compute Reduction
2 Year Actual Emission (lbs/day)
BACT Control Efficiency
Reduction Amount
202
X (1 -
.595
) =
82
Search
Print...
Clear
NSR ERCAdmin06 Version 1.03


Inquiry
Query/Upd.
Reissue
Transfer
New Iss
Appl.Ent
ERC Appl. #
Emittant
Fac. ID
Ref.Permit/Appl.#
Device #
Fac. Type
387479
SOX
90849
387479
0
Entry User ID: PHILB
Approval ID: PHILB
Entry Date : 08-06-2002
Approved Date: 08-06-2002
Appl. Status : 65 Final Approved
SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704
Zone: 04 Reclaim Zone : 01
Reduce Date
ERC Type
Pub. Not. Comp. Date
10-01-2001
OTHER
06-07-2002
Public Notification Required?
Supervisor
File...
Compute Reduction
2 Year Actual Emission (lbs/day)
BACT Control Efficiency
Reduction Amount
52
X (1 -
0
) =
52
Search
Print...
Clear
NSR ERCAdmin06 Version 1.03

Facility ID: 90849 | Application #: 387479 | Device: .

SEAGULL SANITATION
1 DUMP RD
AVALON, CA 90704

Zone 04
Air Basin SC

(•) Ledger ( ) WkSpace ( ) CAPPS ( ) dBNews

	NSR_I	APPL_N	EMI_I	NSR_TR	EN	NSR_ACCT	NSR_AM	ERC_CER	
1	90849	387479	CO	394147	1	BACT_DISC	558.054	AQ004598	SHUTDOWN
2	90849	387479	CO	394147	2	ERC	60	AQ004598	SHUTDOWN
3	90849	387479	NOX	394148	1	BACT_DISC	28	AQ004599	SHUTDOWN
4	90849	387479	NOX	394148	2	ERC	52	AQ004599	SHUTDOWN
5	90849	387479	PM10	394149	1	BACT_DISC	89.6	AQ004600	SHUTDOWN
6	90849	387479	PM10	394149	2	ERC	22	AQ004600	SHUTDOWN
7	90849	387479	ROG	394150	1	BACT_DISC	120.19	AQ004601	SHUTDOWN
8	90849	387479	ROG	394150	2	ERC	82	AQ004601	SHUTDOWN
9	90849	387479	SOX	394151	1	ERC	52	AQ004602	SHUTDOWN
10									

9 records retrieved.

NSR ATQ Version 1.02

Facility ID
52882

☑ NSR Tables
☐ HP Tables

CATALINA DISPOSAL CO
1 DUMP RD
AVALON, CA 90704-9999

Zone
Air Basin
SC

○ Ledger ○ WkSpace ○ CAPPS ◉ dBNews

	APPL NUMBER	PERMIT	ROG	NOX	SOX	CO	PM	LEAD	TOG
1	144212	INACTIVE			47		88		
2									
3									
4	Tradeoff Total								
5	Exempt Total								
6	TOTAL				47		88		
7									

1 records retrieved.

NSR ATQ Version 1.02

CERTIFICATE OF PROOF
FOR REGISTERED EMISSION REDUCTION CREDIT

AQMD

Facility ID. 90849
Certificate No. AQ004604
Application No. 405103

The South Coast Air Quality Management District hereby registers this Emission Reduction Credit

To: SEAGULL SANITATION

In the Amount of 14 Pounds/Day of Sulfur Dioxides

Type of Emission Reduction: Derived From Shut Down

Description of Reduction: SHUTDOWN OF MUNICIPAL REFUSE PIT-BURNER

Date of Issuance: 8/6/2002 Date of Expiration: N/A

Reduction Created at: 1 DUMP RD
AVALON, CA 90704

Date Reduction Created: 10/1/2001

Zone Number Reduction Created: 04

Original Certificate No.: AQ004602 Previous Certificate No.: AQ004602

Controller

COPY
NOT NEGOTIABLE
Any use or transfer of ownership must be approved by the SCAQMD

CERTIFICATE OF PROOF
FOR REGISTERED EMISSION REDUCTION CREDIT

AQMD

Facility ID. 90849
Certificate No. AQ004599
Application No. 387479

The South Coast Air Quality Management District hereby registers this Emission Reduction Credit

To: SEAGULL SANITATION

In the Amount of 52 Pounds/Day of Nitrogen Oxides

Type of Emission Reduction: Derived From Shut Down

Description of Reduction: SHUTDOWN OF MUNICIPAL REFUSE PIT-BURNER

Date of Issuance: 8/6/2002 Date of Expiration: N/A

Reduction Created at: 1 DUMP RD
AVALON, CA 90704

Date Reduction Created: 10/1/2001

Zone Number Reduction Created: 04

Original Certificate No.: AQ004599 Previous Certificate No.: AQ004599

Controller

COPY
NOT NEGOTIABLE
Any use or transfer of ownership must be approved by the SCAOMD

CERTIFICATE OF PROOF
FOR REGISTERED EMISSION REDUCTION CREDIT

AQMD

Facility ID. 90849
Certificate No. AQ004601
Application No. 387479

The South Coast Air Quality Management District hereby registers this Emission Reduction Credit

To: SEAGULL SANITATION

In the Amount of 82 Pounds/Day of Reactive Organic Gases

Type of Emission Reduction: Derived From Shut Down

Description of Reduction: SHUTDOWN OF MUNICIPAL REFUSE PIT-BURNER

Date of Issuance: 8/6/2002 Date of Expiration: N/A

Reduction Created at: 1 DUMP RD
AVALON, CA 90704

Date Reduction Created: 10/1/2001

Zone Number Reduction Created: 04

Original Certificate No.: AQ004601 Previous Certificate No.: AQ004601

Controller

COPY
NOT NEGOTIABLE
Any use or transfer of ownership must be approved by the SCAQMD

CERTIFICATE OF PROOF
FOR REGISTERED EMISSION REDUCTION CREDIT

Facility ID. 90849
Certificate No. AQ004598
Application No. 387479

The South Coast Air Quality Management District hereby registers this Emission Reduction Credit

To: SEAGULL SANITATION

In the Amount of 60 Pounds/Day of Carbon Monoxide

Type of Emission Reduction: Derived From Shut Down

Description of Reduction: SHUTDOWN OF MUNICIPAL REFUSE PIT-BURNER

Date of Issuance: 8/6/2002 Date of Expiration: N/A

Reduction Created at: 1 DUMP RD
AVALON, CA 90704

Date Reduction Created: 10/1/2001

Zone Number Reduction Created: 04

Original Certificate No.: AQ004598 Previous Certificate No.: AQ004598

Controller

COPY
NOT NEGOTIABLE
Any use or transfer of ownership must be approved by the SCAQMD

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE
MEMORANDUM

DATE: August 6, 2002

TO: Lisa Krebs

FROM: Phil Barroca

SUBJECT: Generation of Application Number to Alter Seagull Sanitation SOx ERC

The attached Form 401 requires an application number to process the alteration of Emission Reduction Credit (ERC) certificate AQ004602 issued to Seagull Sanitation (Facility ID 90849). This application is needed to remove and retire 38 pounds per day of SOx ERC from Seagull Sanitation pursuant to the provisions of Rule 1306(e)(3) – zero NSR balance upon issuance of an ERC. Please issue an application number for the attached Form 401 to Seagull Sanitation, Facility ID 90849. Thank you.

PMB

Attachments

cc: William Thompson
Gary Turner

8/7/02
LR

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
APPLICATION FOR EMISSION REDUCTION CREDIT (ERC) CERTIFICATE OF TITLE
FORM 401

ERC APPLICATION TYPE:

___ NEW ___ CHANGE OF TITLE _X_ ALTERATION ___ INTER-DISTRICT ___ INTERPOLLUTANT

NEW ERCs - EMISSION REDUCTION ACHIEVED BY:

___ Equipment Alteration ___ Equipment Removal ___ Mobile Source ___ Facility Out of Business

___ New APC Device ___ Process Change ___ Other, Explain: _____

EQUIPMENT DESCRIPTION: _____ PERMIT/APPLICATION NO.: 405103

DATE OF REDUCTION (mo/day/year): / /

EXISTING ERC CERTIFICATE INFORMATION

NAME ON EXISTING ERC CERTIFICATE: **SEAGULL SANITATION**

ERC CERTIFICATE NO.: AQ004602	ROG	NOx	SOx	CO	PM10
EXISTING EMITTANT AMOUNT (lbs/day) (All applications)			52		
ALTERED AMOUNT (lbs/day) (For Alterations Only)			38		
REMAINING AMOUNT (lbs/day) (For Alterations Only)			14		

APPLICANT INFORMATION

LEGAL NAME OF APPLICANT: COMPANY ID NO 90849 ____IRS OR ____SOCIAL SECURITY NO.

SEAGULL SANITATION

BUSINESS MAILING ADDRESS: ADDRESS & STREET: 12949 TELEGRAPH ROAD

CITY: SANTA FE SPRINGS STATE: CA ZIP CODE: 90670

NAME(S) OF OWNER/PRINCIPAL PARTNERS:

CONTACT PERSON AND TITLE: TELEPHONE NO.:

-- DISTRICT GENERATED APPLICATION TO ACCOUNT FOR POSITIVE BALANCE DEBT – RULE 1306(e)(3) ------

DO YOU CLAIM CONFIDENTIALITY OF DATA? ___ YES ___ NO If Yes, state nature of data: _____

SENSITIVE ZONE REQUIREMENTS – Rule 1303(b)(3)

WHERE ERC WAS CREATED: ADDRESS & STREET: NO. 1 DUMP ROAD

CITY: AVALON STATE: CA ZIP CODE: 90704

WHERE ERC WILL BE USED: ADDRESS & STREET: _____

CITY: _____ STATE: CA ZIP CODE:

I HEREBY CERTIFY, UNDER PENALTY OF PERJURY, THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION ARE TRUE AND CORRECT.

SIGNATURE: TITLE:

TYPE OR PRINT NAME OF SIGNER: TELEPHONE NO.: DATE:

SCAQMD USE ONLY — CO ID NO.: BCAT: ___ ___ ___ ___ ___ ___ ENGR: _____ UNIT: _____

CCAT: ___ ___ TYPE: B C D SCH/STEP: _____ STATUS: _____

VALIDATION: FILING FEE: DATE: APPLICATION NO.: REGISTRATION NO.:

INSTRUCTIONS (FORM 401)

1. **Form Uses** - The following ERC actions require use of this form (Form 401):
   - a New emission reduction, (**New ERC**) - one application per Permit Unit
   - a **Change of Title** of an existing ERC Certificate
   - an **Alteration** of an existing ERC Certificate (two certificates issued from, and totaling the amount of, the original)
   - an **Inter-District Transfer** request of an existing ERC Certificate (Rule 1309(h))
   - an **Interpollutant Transfer** request of an existing ERC Certificate (Rule 1309(g)).

2. **Fees** - Per District Rule 301(c)(4), every applicant filing an application for affecting emission reductions, banking emissions, obtaining emissions, obtaining emission reduction credits (ERCs), or registering ERCs, shall pay a processing fee in accordance with Schedule I, Rule 301. Additionally, the applicant shall pay a fee for publication of public notice if required by Rule 1310(c). Fees for Inter-basin, Inter-district, or Interpollutant Transfers of Emission Reduction Credits are found in District Rule 301(*i*)(7).

3. **Cancelling the Application –** Cancellation of this application must be done in writing from the Applicant. If an application is canceled prior to commencing processing, the filing fee less the application cancellation fee shall be refunded (see Rule 301 (l)(2)). The cancellation fee shall not apply when the application was filed based on an erroneous District request (see Rule 301(l)(4)).

4. **New ERC** - one complete application and filing fee is required per permit unit or source of emission reduction and shall be submitted **no more than 90 days** after the emission reduction occurs (Rule 1309(b)) and covers all pollutants. ERCs are evaluated pursuant to Rules 1306 and 1309. ERC applications shall include the following information:
   1) how the emission reduction was achieved;
   2) when the reduction occurred;
   3) the amount and method of quantifying each pollutant reduced;
   4) two years of operating records immediately preceding the date of emission reduction for the permit unit;
   5) surrender of the permit responsible for the emission reduction;
   6) the name of the legal owner of the emissions source.

5. **Existing ERC Certificates –** Any action performed on an Existing ERC certificate must be authorized in writing by the owner of the ERC certificate. Any person acting on behalf of the owner of the ERC must provide written authorization to that effect. The Non Negotiable Copy of the ERC certificate must be surrendered to perform an action with that ERC. One application is required per ERC certificate.

   a) **ERC Change of Title** - the Buyer or recipient of an existing ERC shall file as the "Applicant" for a Change of Title. Rule 1309(e) - Transfer of ERCs by Registered Owner requires disclosing the "sale price of such ERCs". Sensitive Zone

   b) **ERC Alteration** - the owner of the existing ERC certificate shall file as the "Applicant."

6. **Sensitive Zone Requirement** – applies to applicants intending to apply the ERC to offset emission increases at their facility. See Rule 1303(b)(3).

7. Make the check payable and send completed application to:

   South Coast AQMD - P.O. Box 4944 - Diamond Bar, CA 91765-0944

8. For assistance in completing Form 401, please call **NSR Implementation** (909) 396-2409.

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LEGAL ADVERTISING **INVOICE**

Invoice Number	Date
B403985	6/17/2002
Customer Account Number 1124126700	
Customer Payment Reference	
Special Project	

Ordered By:

MS. NANCY VALASQUEZ
SCAQMD/ENGINEERING & COMPLIANCE
21865 E COPLEY DR 3RD FLR

DIAMOND BAR CA 917654182

For payment processing, please forward to:

WENDY SHEN
SCAQMD/ENGINEERING & COMPLIANCE
21865 E COPLEY DR 3RD FLR
DIAMOND BAR CA 917654182 USA

Type	Order No	Description	Amount
Invoice	B403985	RULE 1310 REGULATION XIII SEAGULL SANITATION GPN GOVT PUBLIC NOTICE 33140 PRESS TELEGRAM 06/07/2002 LEGAL SECTION SET 1 COLUMN WIDE X MIN. TYPE *8.000 Lines * @Rate $24.62* 196.96	196.96

OFFICE DIVISION: Toxics/E&C
PROGRAM & ACCOUNTING CODE: 50515 - 67502
APPROVAL SIGNATURE:
DATE 6/27/02
RETURN TO ACCOUNTING SECTION, FINANCE DIVISION
FOR ACCOUNTING USE ONLY: VENDOR NO.

PLEASE PROCESS FOR PAYMENT WITHIN 30 DAYS.

Total:	196.96
Payment:	0.00
Please Pay:	196.96

Please detach and return this portion with payment. To ensure proper credit to your account, please write your customer number on your check. If you have any questions about your account, please call 2132295411.

Invoice Date	Invoice Number
6/17/2002	B403985
Customer Number 1124126700	

Government Advertising - Division 1124

Please Pay 196.96

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Attn: Accounts Receivable
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Los Angeles CA 90054-0026

WENDY SHEN
SCAQMD/ENGINEERING & COMPLIANCE
21865 E COPLEY DR 3RD FLR
DIAMOND BAR CA 917654182 USA

(Space below for Filing Stamp only.)

LONG BEACH
PRESS-TELEGRAM

604 Pine Avenue
Long Beach, CA 90844

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA

County of Los Angeles

I am a citizen of the United States, and a resident of the county aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of the Long Beach Press-Telegram, a newspaper of general circulation printed and published daily in the City of Long Beach, County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, on the date of March 21, 1934, Case Number 370512. The notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

June 7, 2002

I declare under penalty of perjury that the foregoing is true and correct.

Executed at Long Beach, LA Co. California
this 7th day of June 20 02

Norma E. Lee
signature

Public Notices 52 | Public Notices 52

403985

In accordance with Rule 1310, Regulation XIII, of the Rules and Regulations of the South Coast Air Quality Management District (AQMD), notice is hereby given that an Emission Reduction Credit (ERC) is proposed for Seagull Sanitation (Consolidated Disposal Services, LLC) located at No. 1 Dump Road, Avalon, CA 90704. The proposed ERC constitutes credits of 82 pounds per day of Reactive Organic Gases (ROG), 52 pounds per day of Nitrogen Oxides (NOx), 14 pounds per day of Sulfur Oxides (SOx), and 60 pounds of Carbon Monoxide (CO). The credits result from the shutdown of the municipal refuse pit burner operation.

In accordance with Rule 1310, documents pertinent to this source and the AQMD's analysis of the emission reduction are available for public inspection at the South Coast Air Quality Management District, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. Any interested person may view the application submitted by Seagull Sanitation and AQMD's analysis by contacting Mr. Gaurang Rawal at (909) 396-2543. It is requested that any comments and suggestions be submitted in writing by July 2, 2002, to:

Jay Chen, P.E.
Senior Engineering Manager
Toxic and Waste Management *Team*
AQMD
21865 E. Copley Drive
Diamond Bar, CA 91765-4182
Pub. June 7, 2002 (11) PT (54371/788378)

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

May 29, 2002

Mr. Gerardo Rios
Chief – Permit Office
U.S. EPA, Region IX
75 Hawthorne St.
San Francisco, CA 94105

Subject: Emission Reduction Credits for Seagull Sanitation

Dear Mr. Rios:

The South Coast Air Quality Management District (AQMD) has completed the review of an application for Emission Reduction Credits (ERCs) submitted by Seagull Sanitation located at No. 1 Dump Road, Avalon, CA 90704. The ERCs requested are for Reactive Organic Gases (ROG), Nitrogen Oxides (NOx), Sulfur Oxides (SOx), Carbon Monoxide (CO) and Particulate Matter (PM10) that result from the shutdown of and removal of the municipal refuse pit-burner operation.

After conducting an evaluation of the shutdown equipment, the AQMD is proposing to grant ERCs to Seagull Sanitation for the following amounts:

ROG	82 lb/day
NOx	52 lb/day
SOx	14 lb/day
CO	60 lb/day

In accordance with the AQMD Regulation XIII, Rule 1310, a 30-day public notice period shall be completed prior to granting of ERCs. Attached please find a copy of the public notice, ERCs analysis and our preliminary decision to grant the ERCs. Please provide us with your comments, if any, in writing no later than July 2, 2002.

If you have questions or need additional information, please contact Mr. Gaurang Rawal, Air Quality Engineer, at (909) 396-2543.

Sincerely,

Jay Chen, P.E.
Senior Engineering Manager
Toxic and Waste Management Team

JC:CDT:GCR
Attachments
cc: Barbara Baird (without attachments)
Mohsen Nazemi

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

May 29, 2002

Mr. Peter Venturini
Stationary Source Division Chief
California Air Resource Board
1001 I Street
Sacramento, CA 95814-2828

Subject: Emission Reduction Credits for Seagull Sanitation

Dear Mr. Venturini:

The South Coast Air Quality Management District (AQMD) has completed the review of an application for Emission Reduction Credits (ERCs) submitted by Seagull Sanitation located at No. 1 Dump Road, Avalon, CA 90704. The ERCs requested are for Reactive Organic Gases (ROG), Nitrogen Oxides (NOx), Sulfur Oxides (SOx), Carbon Monoxide (CO) and Particulate Matter (PM10) that result from the shutdown of and removal of the municipal refuse pit-burner operation.

After conducting an evaluation of the shutdown equipment, the AQMD is proposing to grant ERCs to Seagull Sanitation for the following amounts:

ROG	82 lb/day
NOx	52 lb/day
SOx	14 lb/day
CO	60 lb/day

In accordance with the AQMD Regulation XIII, Rule 1310, a 30-day public notice period shall be completed prior to granting of ERCs. Attached please find a copy of the public notice, ERCs analysis and our preliminary decision to grant the ERCs. Please provide us with your comments, if any, in writing no later than July 1, 2002.

If you have questions or need additional information, please contact Mr. Gaurang Rawal, Air Quality Engineer, at (909) 396-2543.

Sincerely,

Jay Chen, P.E.
Senior Engineering Manager
Toxic and Waste Management Team

JC:CDT:GCR
Attachments
cc: Barbara Baird (without attachments)
Mohsen Nazemi

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 E. COPLEY DRIVE
DIAMOND BAR, CA 91765-4182

ATTN: Gaurang Rawal
TOXICS

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- Print your name and address on the reverse so that we can return the card to you.
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1. Article Addressed to:

MS. GINGER FUERSTINGER
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BUREAU
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LOS ANGELES, CA 90054-0026

Seagull Sanitation

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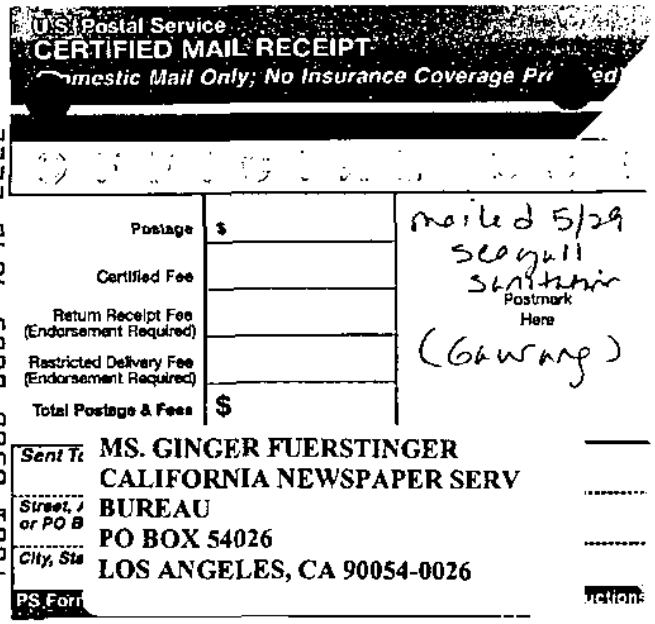
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PS Form

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

May 29, 2002

Ms. Ginger Fuerstinger
California Newspaper Service Bureau, Inc.
P.O. Box 54026
Los Angeles, CA 90054-0026

Dear Ms. Fuerstinger:

Please publish the enclosed public notice once, and as soon as possible, in a daily newspaper of general circulation in the District. Please mail proof of the publication, three copies of the notice as published, and the invoice to the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California 91765-4182, attention Ms. Nancy Valasquez.

If you have any questions, please call Mr. Gaurang Rawal at (909) 396-2543.

Very truly yours,

Jay Chen, P.E.
Senior Engineering Manager
Toxic and Waste Management Team

JC:CDT:GCR
Enclosure
Certified Mail Return Receipt Requested

PUBLIC NOTICE

In accordance with Rule 1310, Regulat
Air Quality Management District (AQ
Credit (ERC) is proposed for Seagull S
at No. 1 Dump Road, Avalon, CA 907
per day of Reactive Organic Gases (R
pounds per day of Sulfur Oxides (SOx),
result from the shutdown of the municipa

In accordance with Rule 1310, documen
the emission reduction are available f
Management District, 21865 E. Copley
person may view the application submi
contacting Mr. Gaurang Rawal at (909)
suggestions be submitted in writing by Jul

6/21/02 ~3:00 pm.
Caytor Fitzgerald, Consultant,
called regarding ERCs available
as he (Josh Margolis - (619) 228-7955,
Ext. 1) is interested in obtaining
ERCs for his client - publicly
PM10 ERCs -
Provided Seagull's Contact -
person's name, #, and Mgt/day
of proposed ERCs based on Pub. Notice.
Status: Under PSD TC
Commenting period - EPA, ARB...

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGES 6	PAGE 1
STATIONARY SOURCE COMPLIANCE DIVISION	APPL NO 387479	DATE 5/29/2002
PERMIT APPLICATION EVALUATION AND CALCULATIONS	PROCESSED BY GCR	CHECKED BY CDT

EMISSION REDUCTION CREDITS (ERCs) - EVALUATION

APPLICANT'S NAME: SEAGULL SANITATION
(CONSOLIDATED DISPOSAL SERVICES, LLC)

MAILING ADDRESS: 12949 TELEGRAPH ROAD
SANTA FE SPRINGS, CA 90670

EQUIPMENT LOCATION: #1 DUMP ROAD
AVALON, CA 90704

EQUIPMENT DESCRIPTION:

REFUSE PIT BURNER, PACTHERM, 20' L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 H.P. AIR BLOWER AND A 20' L. X 0' - 1" W. SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

BACKGROUND:

Consolidated Disposal Services, LLC submitted this A/N 387479 for its' facility, Seagull Sanitation, that operated a municipal solid waste (MSW) pit burner at Avalon, Catalina Island. The pit burner operated since 1986 and shutdown October, 2001.

The facility has submitted this application for Emission Reduction Credit (ERC) certification. On July 16, 2001, company submitted written request to expedite the evaluation for this application by submitting Express Permit Processing Request Form 400-XPP per Rule 301 (y).

Review of the District's records (Liberty System) revealed that on Dec. 7, 1989, originally the equipment (pit burner) was issued a P/O D12778, A/N 144212 for Catalina Disposal Company (ID # 52882). On March 11, 1992, Seagull Sanitation applied for the change of ownership for the pit burner, and a new P/O D49940, under A/N 264307 was granted on 3/18/92.

APPLICATION ELIGIBILITY

Emission reduction eligibility requirement is fulfilled as per Rule 1309 (b) (1), and the application is in compliance of the 90 - day window period. *Application was* submitted on 6/13/01 and equipment shut down was October, 2001.

PROCESS DESCRIPTION:

The MSW pit burner has a rated capacity of 10 tons/hr (Permit to Operate D 49940, A/N 264307 has a throughput limit of 4 tons/hr, not to exceed 25 tons/day). It is equipped with a 40 HP air blower that feeds air at 45 degree angle to form an air curtain above the burner pit. There is also a 5 HP air blower that supplies air to vents at the bottom of the burner pit. The speed of the forced air blowers is not adjustable, there are no air dampers, and burner is not equipped with any auxiliary fuel source. A small amount of waste, used cooking oil and matches are used to ignite the waste in the pit burner. Once the fire is lit, additional waste is added to the pit burner for incineration. The pit burner is lined with refractory brick and exhaust is equipped with screens. The pit burner is not equipped with any water walls, boiler tubes or any other type of heat recovery.

For further details, specifications, copy of the P/O, and photographs of pit burner please refer to the application package provided.

EMISSION CALCULATIONS:

Municipal solid waste throughput Data for the pit burner:

Municipal solid waste (MSW), tons/day, burned in pit burner for the period May 1999 to April 2000, and for the period May 2000 to April 2001 data submitted have been reviewed and summarized below,

May 1999 to April 2000	7,565 tons of MSW combusted, over 365 days.
May 2000 to April 2001	7,435 tons of MSW combusted, over 363 days.

Emission Factors (EF) used for Annual Emissions Report (EFB Reports):

Annual Emissions Reports submitted to the AQMD for the period July 1997 - June 1998 and July 1999 - June 2000 form the basis for the emissions claimed in the application. The emission factors used for the criteria pollutants - CO, NOx, PM, ROG and SOx were actually provided by AQMD in a letter notifying the company that EFB reports were past due. The emissions reported and annual emission fees were paid based on these emission factors:

POLLUTANT	*CO*	*NOx*	*PM*	*ROG*	*SOx*
E.F.(LBS/TON)	30	3.9	18.1	9.8	2.5

Note that Regulation III and the EFB reports indicate emissions of total PM and not PM10. Regulation XIII and ERC's apply to emissions of PM10.

Annual & daily Emissions Reductions Claimed:

May 1999 to April 2000 7,565 tons/day
May 2000 to April 2001 7,435 tons/day

PERIOD	ANNUAL EMISSIONS, LBS/YR.					DAYS PER YR.	AVG. DAILY EMISSION REDUCTION, LBS/DAY				
	CO	NOx	PM	ROG	SOx		CO	NOx	PM*	ROG	SOx
5/99 - 4/00	226,950	29,503	136,926	74,137	18,912	365	622	81	375	203	52
5/00 - 4/01	223,050	28,996	134,573	72,863	18,587	363	614	83	370	201	51
AVERAGE							618	82	372	202	51

BACT Determination and Its' Applicability:

Rule 1309(b)(4)(E) — Emission Reduction Eligibility Requirements state that — the applicant must demonstrate that all stationary and mobile source reductions are not greater than the equipment would have achieved if **operating with current Best Available Control Technology (BACT)**.

SCAQMD's current BACT guidelines (revised 10-20-2000) for Non-Major polluting facilities shows BACT as multiple chamber starved air design and natural gas as auxiliary fuel for "Incinerator -Non-Infectious, Non Hazardous waste" equipment or process category. Combustion of MSW in a pit burner is the same process.

The original application for the pit burner was submitted to alleviate complaints from the previous open burning operation. The permit evaluation considered these factors and determined that municipal refuse burning in a pit burner with an air curtain and screens in exhaust were considered as BACT as compared to an open burning (see previous permit evaluation and records in file).

The applicant provided an in depth BACT analysis (see Part II in application package). Attachment 4 shows the summary of BACT applicability for the EPA RACT-BACT-LAER Clearinghouse (RBLC) for MSW combustion. The information presented reveals that the BACT determinations listed by EPA were for conventional mass burn, refuse-derived fuel or modular-type incinerators. BACT for MSW incinerator includes ammonia injection for NOx control, spray dryers and wet scrubbers for SOx control, and electrostatic precipitators (ESP) and baghouses for particulate controls. These typical *incinerators'* designs are quite different than the pit burner with an air curtain at Avalon. Based on this BACT analysis, applicant suggests that no specific BACT is applicable to the MSW combustor-pit burner-in question, and so the existing pollution controls (air curtain/vent screens) shall be considered as BACT.

For current BACT applicability to the pit burner, Toxics and Waste Management staff considered using emission factors (EF) for the municipal solid waste incineration process or category that are existing in SCAQMD region and considered as achieved in practice, regardless of the type of equipment used. In this case, City of Commerce and South East Resource Recovery Facility (SERRF) were considered, and to use average emission factors from these two facilities. The average EFs were applied to pit burner emissions to adjust to as current BACT emissions. This information was communicated with Sharon Rubalcava, of Weston, Benshoof, Rochefort, Rubalcava & MacCuish LLP, attorney for the client.

On November 16, 2001, Sharon Rubalcava replied with a letter addressing Health & Safety Code 41810, its' interpretation and reasoning to issue ERCs for the full amount of emission reductions set forth in application submittal, less the amount of any positive balance in facility's NSR account. On December 12, 2001 a meeting was conducted at AQMD headquarters (Present were Sharon Rubalcava, Attorney for Seagull Sanitation, and Fred Lettice, Charles Tupac and Gaurang Rawal from AQMD) to discuss the H & S safety code, BACT applicability, NSR positive balance and AQMD's position about BACT discounting.

Subsequent internal staff meeting, and meeting with Management (February 15, 2002 - Mohsen Nazemi, Fred Lettice, Charles Tupac and Gaurang Rawal) were conducted for H & S Code section 41810: language of this section was discussed and its' applicability with respect to BACT discounting. Legal Dept. was consulted about this and it was concluded that this section applies mainly for the applicability of District Rules towards permitting and adoption of new rules, applies to open burning fires. This section is not applicable to Regulation XIII, i.e. Rule 1309, and, therefore, BACT discounting (using current BACT) shall be considered to determine final ERCs. (see e-mail from Bill Wong about H&S Code Section 41810 and BACT discounting applicability).

BACT: Four different sets of emission factors, daily emissions (lbs/day), positive NSR balance and Net ERCs were discussed. Issues were discussions with respect to pit burner, EFB EFs, SERRF/Commerce EFs, Multi-chamber incineration EFs as current BACT and Seagull's proposed ERCs. Finally, it was agreed that current multi-chamber EFs (current BACT) shall be used for the BACT discounting. SOx EF of 2.5 lb/ton (used for EFB Report) shall be used as there shall be no change in SOx emissions for pit burner vs multiple chamber incineration for the given feed. Net ERCs to be determined considering NSR positive balance.

NSR - FACILITY BALANCE:

	CO	NOx	PM_{10}	ROG	SOx
FAC. POS. BALANCE (lbs/ day)	0	0	35	0	38

Facility's positive balance to be adjusted to zero prior to granting ERCs. Thus, positive balance would be subtracted from each pollutant's emission reduction to determine the Net ERCs to be granted.

EMISSION REDUCTION CREDIT (s) TO BE GRANTED: (for reference please refer to Multi chamber BACT, Feb. 14, 2002 spreadsheet, Pg. 6 using Multi-Chamber EF from AP-40, C22 Edition, Pg. 445 & 963). See also Memo dated Jan. 30, 1992, Fred del Rosario, "PM-10 Factors".

For combustion of solid waste:
PM10 EF = PM EF 3.5 lb/ton x 0.30 = 1.05 lb/ton.

	CO	NOx	PM_{10} #	ROG	SOx
ERC (lbs/ day), calc*.	60	52	22	82	52
FAC. POS. BALANCE	0	0	35	0	38
NET ERCs (lbs/day)	**60**	**52**	**0**	**82**	**14**

EVALUATION AND RECOMMENDATION:

Seagull Sanitation has presented all necessary documents and data, which shows decrease in emissions due shutdown of the pit burner in October, 2001. The emission reductions are considered real, verifiable, permanent, and enforceable. Therefore, it is recommended that Seagull Sanitation (Consolidated Disposal Services, LLC) be granted the Emission Reduction Credit Registration for a total of **60 pounds CO/day**, **52 pounds NO_x/day**, **82 pounds ROG/day**, and **14 pounds SOx/day**, under the facility ID # 90849.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGES 6	PAGE 6
STATIONARY SOURCE COMPLIANCE DIVISION	APPL NO 387479	DATE 5/29/2002
PERMIT APPLICATION EVALUATION AND CALCULATIONS	PROCESSED BY GCR	CHECKED BY

SEAGULL SANITATION - ERC A/N 387479						14-Feb-02
AVG. PROCESSING RATE OVER 2-YRS= 20.6 TPD						
	CO	NOx	PM	PM10	ROG	SOx
EFB-REPORT EF: LB/TON	*30*	*3.9*	*18.1*	*18.1 X 0.30=5.43*	*9.8*	*2.5*
EMISSION LBS/DAY	618	80	373	112	202	52
POSITIVE NSR BAL.				35		38
NET ERCs	**618**	**80**	**373**	**77**	**202**	**14**
If Baghouse is considered as an add-on control then PM10 = 373 x (1.0 -0.98) = 7 lbs PM10 with 35 lbs of +ve balance , Net ERC= 0.						
SERRF/COMMERCE-AVG. E.F.	*1.15*	*1.7*		*0.25*	*0.133*	*0.41*
EMISSION LBS/DAY	24	35		5	3	8
POSITIVE NSR BAL.				35		38
NET ERCs	**24**	**35**		**0**	**3**	**0**
MULTI-CHAMBER-BACT	*2.9*	*2.5*	*3.5*	*1.05**	*4*	*2.5*
EMISSION LBS/DAY	60	52	72	22	82	52
POSITIVE NSR BAL.				35		38
NET ERCs	**60**	**52**	**72**	**0**	**82**	**14**
SEAGULL'S ERCs PROPOSAL+	**721**	**94**		**435**	**236**	**60**
+These numbers are not adjusted for PM10 and +ve NSR Balance for the facility.						

NOTE:

1. EFB-Report - E.F. used for 99-00 & 00-01
2. SERRF/COMMERCE- Avg. E.F. for the existing processes
3. Current BACT for Incinerator. E.F. from AP-40, C22 Edition, pg. 445 & 963

*PM to PM10 conversion factor @ 30%

Gaurang Rawal

From: Gaurang Rawal
Sent: Wednesday, May 15, 2002 10:35 AM
To: *Fred Lettice*; Charles Tupac
Subject: Seagull Sanitation-ERCs

The following Net ERCs #s have been reviewed by Charlie and myself and are the best estimates considering multi chamber EFs.
For CO, NOx and PM actual EFs are used withound rounding off numbers.
Avg. processing rate, over 2-yr period, of 20.6 TPD is used.

EMISSION REDUCTION CREDIT (s) ESTIMATION: (for reference please refer to Multi chamber BACT, Feb. 14, 2002 spreadsheet, Pg. 5 using Multi-Chamber EF from AP-40, C22 Edition, Pg. 445 & 963). See also Memo dated Jan. 30, 1992, Fred del Rosario, "PM-10 Factors".

For combustion of solid waste:

PM10 EF = PM EF 3.5 lb/ton x 0.30 = 1.05 lb/ton.

	CO	NOx	PM_{10} #	ROG	SOx
ERC (lbs/ day), calc*.	60	52	22	82	52
FAC. POS. BALANCE	0	0	35	0	38
NET ERCs (lbs/day)	**60**	**52**	**0**	**82**	**14**

SEAGULL'S ERC PROPOSAL*

	721	94	435	236	60

Seagull's proposed #s are not adjusted for PM10 (appears that they have considered PM = PM10) and +ve NSR balance.

WESTON BENSHOOF
ROCHEFORT RUBALCAVA MACCUISH LLP
ATTORNEYS AT LAW

FACSIMILE TRANSMITTAL

FROM: Sharon Rubalcava, Esq. **DATE: May 10, 2002** **NUMBER OF PAGES: 3**

RECIPIENT	FIRM/AGENCY	FAX NUMBER	CONFIRMATION
Fred Lettice	SCAQMD	(909) 396-3819	(909) 396-2576
David A. Barclay, Esq.	Republic Services, Inc.	(954) 769-6421	(954) 769-7217

MESSAGE

Please contact our Duplicating Center at (213) 576-1195, if there are any questions or problems with this transmission.

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WWW.WSCOUNSEL.COM

WESTON BENSHOOF
ROCHEFORT RUBALCAVA MACCUISH LLP
ATTORNEYS AT LAW

arubalcava@wbcounsel.com

May 9, 2002

VIA FACSIMILE

Fred Lettice
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Re: Application for Emission Reduction Credits
Seagull Sanitation

Dear Mr. Lettice:

During our conversation on May 3, 2002, you told me of the District's intention to deny the application for emission reduction credits ("ERCs") filed by Seagull Sanitation for emission reductions resulting from the shutdown of an MSW pit burner on Catalina island. I'm writing this letter to address some of the issues we discussed and to clarify my position.

You stated that Health & Safety Code section 41800 prohibits the use of an open outdoor fire to dispose of wastes and that you believed my client's pit burner fell within this prohibition. As a result, it was your opinion that the pit burner never should have been permitted by the District and that this justified the denial of our ERC application. As we discussed, it is our position that the pit burner is not an open outdoor fire. In support of this, Health & Safety Code section 39044 defines "open outdoor fire" as "any combustion of combustible material of any type outdoors in the open, not in any enclosure, where the products of combustion are not directed through a flue." The pit burner is itself an enclosure and the combustion products are directed through a flue. Pictures of the pit burner are part of the ERC application and demonstrate this fact very clearly. Thus, according to the Health & Safety Code, it is not an open outdoor fire nor is it subject to the prohibition in section 41800. Our references to Health & Safety Code section 41810 in previous correspondence were in reference to the District's reliance on that section in the Engineering Analysis prepared when the permit was issued.

On another issue, since we have not seen your denial letter, we request that it include the District's BACT analysis so that the Hearing Board will have a full administrative record before it in the event the denial is appealed. As we have previously explained, it is clear that a BACT analysis was performed when the pit burner was permitted and it was determined that no controls were required. The BACT analysis that is appropriate at this point in determining the amount of ERCs that may be issued is not a new enclosed combuster instead of the pit burner as has been suggested, but rather a determination based on a retrofit of the existing pit burner. Rule 1309 (b)(4)(E) clearly states that the amount of ERCs that may be granted is based on what "the equipment would have achieved if operating with current Best Available Control Technology (BACT)."

If you have any questions, please feel free to call me.

Very truly yours,

Sharon Rubalcava
WESTON, BENSHOOF,
ROCHEFORT, RUBALCAVA & MacCUISH LLP

SFR/dtc

cc: David Barclay

RON LEM

CALIFORNIA AIR POLLUTION CONTROL LAWS

1999 Edition

California Environmental Protection Agency

Air Resources Board

Office of Legal Affairs
P.O. Box 2815
2020 L Street
Sacramento, CA 95812

Article 2. Nonagricultural Burning
(Article 2 added by Stats. 1975, Ch. 957.)

H&S 41800 No Person Shall Use Fires to Dispose of Waste

41800. Except as otherwise provided in this chapter, no person shall use open outdoor fires for the purpose of disposal or burning of petroleum wastes, demolition debris, tires, tar, trees, wood waste, or other combustible or flammable solid or liquid waste; or for metal salvage or burning of motor vehicle bodies.

(Added by Stats. 1975, Ch. 957.)

H&S 41801. Authority to Set or Permit Fires; Purposes

41801. Nothing in this article shall be construed as limiting the authority granted under other provisions of law to any public officer to set or permit a fire when such fire is, in his or her opinion, necessary for any of the following purposes:

(a) The prevention of a fire hazard which cannot be abated by any other means.

(b) The instruction of public employees in the methods of fighting fire.

(c) The instruction of employees in methods of fighting fire, when such fire is set, pursuant to permit, on property used for industrial purposes.

(d) The setting of backfires necessary to save life or valuable property pursuant to Section 4426 of the Public Resources Code.

(e) The abatement of fire hazards pursuant to Section 13055.

(f) Disease or pest prevention, where there is an immediate need for and no reasonable alternative to burning.

(g) The remediation of an oil spill pursuant to Section 8670.7 of the Government Code.

(Amended by Stats. 1995, Ch. 265, Sec. 5.)

H&S 41802 District May Authorize Burning of Wood Waste

41802. Notwithstanding Section 41800, with respect to wood waste from trees, vines, or bushes on property being developed for commercial or residential purposes, or with respect to the disposal of brush cuttings on the property where the brush was grown when the cuttings resulted from brush clearance done in compliance with local ordinances to reduce fire hazard, a district board may, upon its own motion or the request of any person, authorize the disposal, by open outdoor fires, of such waste, on the property where it was grown, under the conditions specified in Section 41804.

(Added by Stats. 1975, Ch. 957.)

H&S 41803 No Authorization Under §41802 after Jan 1, 1980

41803. No authorization, however, under Section 41802 or 41804.5 shall be granted after such date as the state board may determine, based upon a finding that an alternative method of disposal has been developed which is technologically and economically feasible.

(Amended by Stats. 1979, Ch. 196.)

H&S 41804 Conditions for District Authorization of Burning

41804. Burning may be authorized under Section 41802 only if:

(a) The district board finds that it is more desirable to dispose of such waste by burning than to dispose of it by other available means, such as, but not limited to, by removing it to sanitary fills.

because of sparse population in the geographical area and economic and technical difficulties, the solid waste dump should be so operated.

(Added by Stats. 1975, Ch. 957.)

H&S 41809 Burning Permitted for Disposal of Russian Thistle

41809. *Notwithstanding Sections* 41508 and 41800, open outdoor fires may be used to dispose of Russian thistle (Salsola kali) when authorized by a chief of a fire department or fire protection agency of a city, county, or fire protection district, the Director of Forestry and Fire Protection or his or her duly authorized representative, a county agricultural commissioner, or an air pollution control officer.

(Amended by Stats. 1992, Ch. 427, Sec. 106. Effective January 1, 1993.)

H&S 41810 Exemptions for Islands 15 Miles from Mainland

41810. For islands located 15 or more miles from the mainland coast:

(a) The provisions of Section 41701 shall not apply to smoke from fires set thereon.

(b) No district shall adopt any rule or regulation stricter than those provided by law with respect to open outdoor fires.

(Added by Stats. 1975, Ch. 957.)

H&S 41811 Existing District Rules and Regulations

41811. The provisions of this article shall not supersede any rule or regulation of any district, which rule or regulation was in effect for five or more years prior to September 19, 1970.

(Added by Stats. 1975, Ch. 957.)

H&S 41812 Use of Mechanized Burner Permitted

41812. The air pollution control officer of any district in a county with a population of 6,000,000 or less, upon authorization of the district board, may authorize, by permit, open outdoor fires for the purpose of disposing of agricultural wastes, or wood waste from trees, vines, bushes, or other wood debris free of nonwood materials, in a mechanized burner such that no air contaminant is discharged into the atmosphere for a period or periods aggregating more than 30 minutes in any eight- hour period which is:

(a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, nited States Bureau of Mines, or

ty as to obscure an observer's view to a degree equal to or greater ribed in subdivision (a).

41810 A

ie operation of a mechanized burner, the air pollution control ie permit subject to whatever conditions he determines are to assure conformance with the standards prescribed in this

5, Ch. 957.)

H&S 41813 Solid Waste Dump Burning in San Bernardino County

41813. Notwithstanding any other provision of this division, in the San Bernardino County Air Pollution Control District, Group 2 solid waste, as defined in Section 2521 of Title 23 of the California Administrative Code, for a period not to exceed six months from the effective date of this section, may be disposed of by means of an air curtain destructor. The authority provided by this section applies only to an existing solid waste

F L
4-16-02

Seagull Sanitation ERC Briefing → M. Nazemi

- Catalina Disposal Company submitted application number 144212 on April 29, 1986 for a permit to construct a Pactherm refuse pit burner. A permit to construct was issued to Catalina Disposal Company on August 13, 1986 for the refuse pit burner. A copy of the engineering evaluation is attached.

- The original permit to operate (D12778 – copy attached) for the refuse pit burner was issued to Catalina Disposal Company on December 7, 1989.

- A change of operator occurred and a new permit to operate (D49940 – copy attached) was issued to Seagull Sanitation on March 18, 1992. The conditions on permit to operate D49940 are identical to the conditions on permit to operate D12778).

- The Refuse pit burner was shut down in October 2001. Application number 387479 was submitted for an ERC by Seagull Sanitation on June 13, 2001. Rule 1309(b)(3) requires that a preliminary decision be made regarding the issuance of an ERC no later than 180 days after an ERC application is deemed complete. While no letter requesting additional information was sent within 30 days of the application being filed on June 13, 2001, one could argue that the application could not have been deemed complete until the action generating the potential ERC had occurred. Using this logic, the application could not have been deemed completed until sometime in October 2001 (actual shutdown of the refuse pit burner) making the preliminary decision due sometime in April 2002.

- Seagull Sanitation has been paying annual emission fees for the last several years based on following emission factors that the AQMD provided.
  CO: 30 pounds per ton of refuse burned
  NOx: 3.9 pounds per ton of refuse burned
  PM: 18.1 pounds per ton of refuse burned
  ROG: 9.8 pounds per ton of refuse burned
  SOx: 2.5 pounds per ton of refuse burned

- Health and Safety Code Section 41800 (copy attached) prohibits the use of open outdoor fires to dispose of combustible or flammable solid or liquid wastes. This section would preclude the issuance of any ERC to Seagull Sanitation under Rule 1309(b)(5)(C) since the basic operation (burning of municipal solid waste) violates state law.

- Health and Safety Code Section 41808 (copy attached) allows the State Board to permit a city or county to use open outdoor fires, for a limited time only, in its operation of a solid waste dump if certain findings are made. This section would

preclude the issuance of any ERC to Seagull Sanitation under Rule 1309(b)(5)(C) since state law requires the operation to cease.

- Health and Safety Code Section 41810 (copy attached) provides exemptions for islands 15 or more miles from the mainland coast. None of the exemptions cover *the requirements* of Health and Safety Code Section 41800.

Potential ERC Values

Criteria	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	ROG (lbs/day)	SOx (lbs/day
Applicant's proposal	721	94	435	236	60
Daily emissions based on last two years of throughput and converting PM to PM10	618	80	112	202	52
Daily emissions adjusted for BACT (multi-chambered incinerator)	60	52	22	82	52
NSR Balance	0	??	??	0	??
Potential ERC values <u>if</u> refuse burning is considered to be exempt	60		0	82	

Gaurang Rawal

From: Gaurang Rawal
Sent: Friday, February 15, 2002 3:46 PM
To: William Wong
Cc: Fred Lettice; Charles Tupac
Subject: RE: H & S Code 41810 Vs BACT Applicability

A/N was submitted in June 01 and as such has already exceeded 180 days. Sooner we get the feed back the better it is, and we may
communicate about District's position to Sharon Rubalcava. Thanks.

-----Original Message-----
From: William Wong
Sent: Friday, February 15, 2002 3:27 PM
To: Gaurang Rawal
Cc: Fred Lettice; Charles Tupac; Mohsen Nazemi
Subject: RE: H & S Code 41810 Vs BACT Applicability

What is the time frame for your request?

-----Original Message-----
From: Gaurang Rawal
Sent: Friday, February 15, 2002 2:26 PM
To: William Wong
Cc: Fred Lettice; Charles Tupac; Mohsen Nazemi
Subject: H & S Code 41810 Vs BACT Applicability

This morning we had a meeting with Mohsen Nazemi regarding an ERC application from Seagull Sanitation. Seagull Sanitation was issued a permit to Operate, D49940, (as a result of change of ownership in 1992) for municipal solid waste pit burner at Avalon, Catalina Island. In June 01, Seagull Sanitation applied for ERCs application (38479) for the scheduled shutdown of equipment in 10/01.

During the meeting, Mohsen consulted you regarding the H&S Safety Code 41810 and applicability of current BACT discounting for final ERCs determination. We agreed, however, that H&S Code and Reg. XIII are two different issues with respect to ERC determination.

We seek your assistance and confirmation about this interpretation before we finalize ERCs. Some statement from you that we may be able to include in our evaluation will be very much helpful.

Thank you for your time and consideration to this request.

Gaurang rawal
Ext. 2543.

p.s. I'll bring over for your review a copy of the letter from Seagull Sanitation's attorney, Ms. Sharon Rubalcava.

Gaurang Rawal

From: William Wong
Sent: Tuesday, February 26, 2002 5:15 PM
To: Gaurang Rawal
Subject: RE: H & S Code 41810 Vs BACT Applicability

As I indicated in my conversation with Mohsen, section 41810(b)'s prohibition on adopting rules stricter than those provided by law "with respect to open outdoor fires" does not preempt the general requirement in our Rules for BACT discounting.

-----Original Message-----
From: Gaurang Rawal
Sent: Tuesday, February 26, 2002 11:15 AM
To: Gaurang Rawal; William Wong
Cc: Fred Lettice; Charles Tupac
Subject: RE: H & S Code 41810 Vs BACT Applicability

Bill, any word on this ?

-----Original Message-----
From: *Gaurang Rawal*
Sent: Friday, February 15, 2002 3:46 PM
To: William Wong
Cc: Fred Lettice; Charles Tupac
Subject: RE: H & S Code 41810 Vs BACT Applicability

A/N was submitted in June 01 and as such has already exceeded 180 days. Sooner we get the feed back the better it is, and we may
communicate about District's position to Sharon Rubalcava. Thanks.

-----Original Message-----
From: William Wong
Sent: Friday, February 15, 2002 3:27 PM
To: *Gaurang Rawal*
Cc: Fred Lettice; Charles Tupac; Mohsen Nazemi
Subject: RE: H & S Code 41810 Vs BACT Applicability

What is the time frame for your request?

-----Original Message-----
From: Gaurang Rawal
Sent: Friday, February 15, 2002 2:26 PM
To: William Wong
Cc: Fred Lettice; Charles Tupac; Mohsen Nazemi
Subject: H & S Code 41810 Vs BACT Applicability

This morning we had a meeting with Mohsen Nazemi regarding an ERC application from Seagull Sanitation. Seagull Sanitation was issued a permit to Operate, D49940, (as a result of change of ownership in 1992) for municipal solid waste pit burner at Avalon, Catalina Island. In June 01, Seagull Sanitation applied for ERCs application (38479) for the scheduled shutdown of equipment in 10/01.

During the meeting, Mohsen consulted you regarding the H&S Safety Code 41810 and applicability of current BACT discounting for final ERCs determination. We agreed, however, that H&S Code and Reg. XIII are two different issues with respect to ERC determination.

We seek your assistance and confirmation about this interpretation before we finalize ERCs. Some statement from you that we may be able to include in our evaluation will be very much helpful.

Thank you for your time and consideration to this request.

Gaurang rawal
Ext. 2543.

p.s. I'll bring over for your review a copy of the letter from Seagull Sanitation's attorney, Ms. Sharon

ENGINEERING DIVISION....MEMORANDUM

TO	FROM	DATE
File	GCR	2-15-02
REFERENCE		PERMIT APPL. NO.
Seagull Sanitation		387479

SUBJECT: ERC Applin. for Pit Burner, Avalon

8:30 - 9:30 Meeting

Mohsen Nazemi, Fred Lettice, Charles Tupac, Gaurang Raval

Spreadsheet prepared for E.Fs for different scenarios with daily emissions & Net ERCs were presented and discussed. This included EFB Report E.F, SCRRF/comparable Avg. E.F., NSR tre Balances, and Net ERCs, and Multi-chamber as BACT and Seagull's proposed ERCs.

Discussed language for H&S Code Section 41810 "no district shall adopt any rule or regulation stricter than those provided by law with respect to open outdoors fires".

Bill Wong of legal dept. was consulted for his readings on this with respect to BACT applicability and discounting for final ERCs.

H&S Code Sect. 41810 can be interpreted to apply for equipment operations and permitting evaluation (H&S code exempts fires on islands more than 15 miles from the mainland coast, such as Catalina, from certain regulatory requirements). However, Reg XIII - Rule 1309 is different and has nothing to do with H&S Code. Therefore, BACT discounting shall be considered to determine final ERCs.

BACT Applicability: After some discussions for the MSW incineration and respective BACT, it was agreed that multi-chamber incineration shall be considered as BACT and respective E-Fs. shall be used except for Sox - use E-F. reported by EFB.

16-SOD115-R1

ENGINEERING DIVISION···MEMORANDUM

TO	FROM	DATE
File	GCR	2-15-02
REFERENCE		PERMIT APPL. NO. 387479

SUBJECT: ERC Mtg for Seagull Sanitation

After adjusting for +ve NSR Balance, ERCs shall be;

Multi-chamber - BACT Category - (Net ERCs)

NO_x = 52 lbs/day

PM_{10} = 0 " (thus +VE NSR Bal. = 35).

SO_x = 14 * (based on EFB E.F. of 2.5 #/mm).

* No reductions in SO_x shall be from EFB. Vs. Multi-Chamber operation. Use lower E.F.

CO = 60.

ROG = 82.

-- Check @ Legal - Bill Wong regarding H & S. Code and Reg XIII BACT discounting. This info. may be included in final evaluation.

Fred Lettice will inform Sharon Rubalcava about ~~Lee~~ AQMD's approach and how many #s of ERCs may be considered - based on spreadsheet 2/14/02

Software Submittal Signature Sheet

SUBMITTAL DATE: No later than September 1, 1998

Facility ID Number : 090849
SIC Code : 4953

MAILING INFORMATION

John McNamara
Manager, Environmental & Regulatory Affairs
Consolidated Disposal Service, Inc.
12949 Telegraph Road
Santa Fe Springs, CA 90670-____
Contact Telephone: (714) 238-3343
Contact Fax: (714) 238-3317

EQUIPMENT LOCATION

Facility Name : Seagull Sanitation
Equipment Location : 1 Dump
City : Avalon

BUSINESS OPERATING HOURS

Hours per day : 9
Days per week : 5
Weeks per year: 52

TYPE OF INDUSTRY

Landfill/Refuse Systems

I declare under penalty of perjury that the data submitted truly represents th... ...ons for this reporting period, and that the emission factors represent the best available data for my company in the calcu... ...ission figures.

Authorized Signature _____ Date _____
Authorized Name: John McNamara Title: Manager, Regulatory Affairs
Phone: (714) 238-3343 Fax: (714) 238-3317

Preparer Signature _____ Date 12-21-98
Preparer Name: Tim Nelsen, Environmental Consultant
Preparer Organization:
Preparer Phone: (805) 643-2807

S.C.A.Q.M.D reserves the right to audit the reported emissions. All records and calcul... ...used in completing this summary must be retained a minimum of two years.

Facility ID Number : 090849
Facility Name : Seagull Sanitation

STATUS UPDATES

Shutdown Facility	: not applicable
Change Of Ownership	: not applicable
Change in Equipment Location	: not applicable
Variance/Abatement Case Number	: not applicable
Other Reason for Zero Emissions	: not applicable

REFUND REQUEST

Request refund for overpayment : not applicable

EXEMPTION REQUEST

Reason(s) for exemption : not applicable

AUTHORIZATION

Authorized Signature :
Authorized Name : John McNamara
Title : Manager, Environmental & Regulatory Affairs

	Total Emissions from Form C (tons)	Total Emissions from Form CR (tons)	TOTAL EMISSIONS (Form C + Form CR)	Emission Fee Due Per Pollutant
Organic Gases	34.78		35	10,743.00
Specific Organics	0.00		0	0.00
Nitrogen Oxides	13.84	0.00	14	1,764.40
Sulfur Oxides	8.87	0.00	9	1,170.00
Carbon Monoxide	106.47		106	21.00
Particulate Matter	64.24		64	18,303.70

1. Total Emission Fees For All Criteria Pollutants	: $	32,002.10
2. Toxic Air Contaminents/Ozone Depleter Fees	: $	0.00
3. Total Fees Due (Line 1 + Line 2)	: $	32,002.10
Installments Paid For FY 1997-98		
4. Paid Criteria Pollutants	: $	0.00
5. Paid TAC/ODC	: $	0.00
6. Balance Due (Line 3 - Line 4 - Line 5)	: $	32,002.10
7. LATE FEE	: $	0.00
8. Amount To Be Enclosed	: $	32,002.10
9. PREVIOUS PAYMENT (INSTALLMENT - ATTACHED)	: $	- 2,251.07
10. GRAND TOTAL	: $	29,751.03

Form B4 - Permitted Annual Equipment Emissions From Miscellaneous Sources

Row	Activity	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factors	Organic Gases Emissions	Specific Organics Emission Factors	Specific Organics Emissions	Nitrogen Oxides Emission Factors	Nitrogen Oxides Emissions	Sulfur Oxides Emission Factors	Sulfur Oxides Emissions	Carbon Monoxide Emission Factors	Carbon Monoxide Emissions	Particulate Matter Emission Factors	Particulate Matter Emissions
1	03. Incineration of waste or reclamation burning	7,098.00	tons	9.8000	69,560.40			3.9000	27,682.20	2.5000	17,745.00	30.0000	212,940.00	18.1000	128,473.80
2	2A. Gasoline storage *and* dispensing	995.00	gal	0.0170	16.92										
3	2B. Diesel storage and dispensing	2,119.00	gal	0.0170	36.02										
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
	Total lbs				69,613.34		0.00		27,682.20		17,745.00		212,940.00		128,473.80
	Total tons				34.81		0.00		13.84		8.87		106.47		64.24

Form	Row	Column Name	Message
B4		All	Audit passed for this form.

Please pay attention to any warnings. Any errors must be fixed before a submittal disk can be made.

A.Q.M.D. INFORMATION (per John McNamara) SEAGULL SANITATION

		TONNAGE TO INCINERATOR	ENAMEL GAL.USED	GASOLINE GAL.USED	DIESEL GAL.USED
	Jul-97	757.879		70.6	184
	Aug	746.795		65.1	210
1997	Sep	616.075	10	85.4	206
	Oct	581.577		52.1	163
	Nov	462.585	19	71.1	139
	Dec	486.22		117.5	186
	Jan-98	502.935		142	146
	Feb	478.913		81.4	147
1998	Mar	561.764		58.2	194
	Apr	557.505	10	80.5	175
	May	661.826		64.63	192
	Jun	684.355		106.4	177
	TOTALS	7098.43	39	994.93	2119

UST
gpm

1000 gal pa
year

Form B4

SEP-14-1998 14:29 SEAGULL SANITATION 5251 P.02

TOTAL P.02

Form S

FEES DUE SUMMARY

(This form should be the top page of your return package.)

Annual Emissions Report
July 1999 - June 2000

- Read instructions on the reverse side before completing form.
- Print neatly.

SEAGULL SANITATION
FACILITY NAME

0	9	0	8	4	9

FACILITY I.D. NUMBER

Submittal Date: No later than August 30, 2000	Total Emissions from Form C, Line 7 (tons) (a)	Total Emissions from Form CR (tons) (b)	TOTAL EMISSIONS Add columns (a) and (b) (tons) (c)	Emission Fees Due (from Appendix L) (d)
ORGANIC GASES	38.70	0.00	39	$ 14,537.88
NO FEE FOR METHANE				
SPECIFIC ORGANICS	0.00	0.00	0	$ 0.00
NITROGEN OXIDES	15.40	.	15	$ 2,281.68
SULFUR OXIDES	9.87	.	10	$ 1,578.08
CARBON MONOXIDE	118.47	0.00	~~119~~ 118	$ 20.02 ~~73.91~~ *
PARTICULATE MATTER	71.48	0.00	~~7271~~	$ ~~23992.32~~ ~~24,395.03~~ *

1. TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS (Add all fees in Column (d))		$ ~~42,866.50~~ ~~42459.98~~
2. TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES (Enter the total amount from Form TAC or DC)		$ 0.00
3. TOTAL FEES DUE (Add Line 1 and Line 2)		$ ~~42,866.58~~ ~~42459.98~~
4. INSTALLMENTS PAID FOR FY 1999 - 2000 (If any) -- All criteria pollutants	(See back)	($ 16,786.85)
5. INSTALLMENTS PAID FOR FY 1999 - 2000 (If any) -- Toxic Air Contaminants/Ozone Depleters	(See back)	($ —.—)
6. BALANCE DUE (Line 3 - Line 4 - Line 5)		$ ~~26,079.73~~ ~~25673.13~~
7. LATE FEE (if any)		$ 0.00
8. AMOUNT ENCLOSED (Please write Facility ID#(s) and 1999-2000 AER on the check.) CHECK # 079485		$ 26,079.73

should be 25673.13
#914

FOR DISTRICT USE ONLY

S.C.A.Q.M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

Form X

SIGNATURE SHEET

Annual Emissions Report
July 1999 - June 2000

- Read instructions on the reverse side before completing form.
- Print neatly.

SUBMITTAL DATE: No later than August 30, 2000

0	9	0	8	4	9

FACILITY I.D. NUMBER

MAILING INFORMATION

Contact Person JOHN MCNAMARA

Company Name SEAGULL SANITATION

Mailing Address 12949 TELEGRAPH ROAD

City, State, Zip SANTA FE SPRINGS. CA 90670-

Contact Telephone (714) 238 - 3343 Fax (714) 238-3307

090849

GP

EQUIPMENT LOCATION

Facility Name SEAGULL SANITATION

Equipment Location 1 DUMP RD

City AVALON

4	9	5	3

SIC CODE 4953

BRIEF DESCRIPTION OF OPERATION

REFUSE INCINERATION

MAILING INFORMATION UPDATES (if applicable)

Company Name

Street Address

State Zip

City

Contact Person

Telephone Extension Fax

BUSINESS OPERATING HOURS

Hours per day 08

Days per week 3

Weeks per year 50

I declare under penalty of perjury that the data submitted truly represents throughput and emissions for this reporting period, and that the emission factors represent the best available data for my company in the calculation of annual emissions.

Authorized Signature [signature] Date 8-17-00 Title MANAGER, ENVIRONMENTAL

Name JOHN MCNAMARA Telephone (714) 238-3343 Ext NA Fax (714) 238-3307

Preparer Signature [signature] Date 8-17-00 Title MANAGER, ENVIRONMENTAL

Name JOHN MCNAMARA Name of Organization TAORMINA INDUSTRIES

Telephone (714) 238-3343 Ext N.A. Fax (714) 238-3307

S.C.A.Q.M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

Form C

PERMITTED
ANNUAL EMISSIONS SUMMARY

Annual Emissions Report
July 1999 - June 2000

- Read instructions on the reverse side before completing form.
- Carry all emission calculations to 2 decimal places.
- Print neatly.

SEAGULL SANITATION
FACILITY NAME

0	9	0	8	4	9

FACILITY I.D. NUMBER

	Organic Gases (tons) (a)	Methane (tons) (b)	Specific Organics (tons) (c)	Nitrogen Oxides (tons) (d)	Sulfur Oxides (tons) (e)	Carbon Monoxide (tons) (f)	Particulate Matter (tons) (g)
1. FORM B1, DCB or AB	0.	0.		6.	0.	0.	0.
2. FORM B2	0.	0.		0.	0.	0.	0.
3. FORM B3	0.		0.				
4. FORM B4	38.70 0.		0 ~~0.~~	15.40 ~~0.~~	9.87 ~~0.~~	118.47 ~~0.~~	71.48 ~~0.~~
5. FORM E1	~~38.70~~			~~15.40~~	~~9.87~~	~~118.47~~	~~71.48~~
6. FORM R1	0.	0.		0.	0.	0.	0.
7. Total Emissions (Add Lines 1 through 6)	38.70	0.	0.	15.40	9.87	118.47	71.48

Transfer Line 7 Totals to Form S, Column (a), except for Methane

#58 EOH 412101

S.C.A.Q.M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

Form CU

NON-PERMITTED
ANNUAL EMISSIONS SUMMARY

Annual Emissions Report
July 1999 - June 2000

- Read instructions on the reverse side before completing form.
- Carry all emission calculations to 2 decimal places.
- Print neatly.

SEAGULL SANITATION
FACILITY NAME

0	9	0	8	4	9

FACILITY I.D. NUMBER

	Organic Gases (tons) (a)	Methane (tons) (b)	Specific Organics (tons) (c)	Nitrogen Oxides (tons) (d)	Sulfur Oxides (tons) (e)	Carbon Monoxide (tons) (f)	Particulate Matter (tons) (g)
1. FORM B1U, DCB or AB	.	.		.	.	.	.
2. FORM B2U	.	.		.	.	.	.
3. FORM B3U	.		.				
4. FORM B4U	.		.	.	.	.	.
5. FORM E1U	.			.	.	.	.
6. FORM R1U	.	.		.	.	.	.
7. Total Emissions (Add Lines 1 through 6)	0.	0.	0.	0.	0.	0.	0.

Do Not Transfer Line 7 Totals to Form S

S.C.A.Q.M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

Form B4

PERMITTED
ANNUAL EQUIPMENT EMISSIONS FROM MISCELLANEOUS SOURCES

Annual Emissions Report
July 1999 - June 2000

- Read instructions on the reverse side before completing form.
- Carry all emission calculations to 2 decimal places.
- Print neatly.

SEAGULL SANITATION
FACILITY NAME

0	9	0	8	4	9

FACILITY I.D. NUMBER

Activity Code (a)	Annual Throughput or Operating Hours (b)	Units (c)	Organic Gases (d)	Specific Organics (e)	Nitrogen Oxides (f)	Sulfur Oxides (g)	Carbon Monoxide (h)	Particulate Matter (i)
03	7,898.07	TONS	9.8 77,401.09	— —	3.9 30,802.47	2.5 19,745.18	30 236,942.10	18.1 142,955.07
2B	8.5 8,500.00	1000 GAL	0.028lb/1000 gal 0.24					
	DEGREASING							
1. SUBTOTAL EMISSIONS (lbs)			77,401.33	—	30,802.47	19,745.18	236,942.10	142,955.07
2. SUM OF SUBTOTAL EMISSIONS (lbs) from all B4 forms (including this one)*			77,401.33	—	30,802.47	19,745.18	236,942.10	142,955.07
3. Divide Line 2 by 2000 then transfer to Form C, Line 4 (tons)*			38.70	—	15.40	9.87	118.47	71.48

*If you have more than one page, complete Lines 2 and 3 ONLY ON THE FINAL PAGE.

PAGE # ☐☐ OF ☐☐ TOTAL PAGES IN FORM B4

S C A Q M.D. reserves the right to audit the reported emissions. All records and calculations used in completing this summary are recommended to be retained for a minimum of five years.

SEAGULL SANITATION SYSTEMS
PEBBLY BEACH LANDFILL

	tons to incinerator
July '99	845.106
August '99	851.897
September '99	801.816
October '99	690.403
November '99	556.805
December '99	464.729
January '00	527.85
February '00	533.61
March '00	578.5
April '00	575.19
May '00	701.46
June '00	770.706
yearly total	**7898.072**

FORM 9900FS

Emissions Fee Installment Payment

Fiscal Year 1999-2000

(This form should be at the top of your return packet)

FACILITY ID: 90849

SEAGULL SANITATION
12949 TELEGRAPH ROAD
SANTA FE SPRINGS CA 90670-

FEES DUE MARCH 1, 2000

RECEIVED
JAN 5 - 2000
By

1. **Emission Fees Installment** (from line #7 on attached Summary of Fiscal Year 1998-1999 Reported Emissions) — $16,786.85
2. **Toxic Air Contaminant Fees Installment** (from line #9 on attached Summary of Fiscal Year 1998-1999 Reported Emissions) — $0.00

RECEIVED
DEC - 2 9

Total Fees $16,786.85

POSTED

APPROVED FOR PAYMENT
Date 12/30/99 Initials
Vendor # N.A 30310
GL# 99-99-58050
Comments: AQMD Permit Fees for Seagull Sanitation

MAKE CHECK PAYABLE TO: South Coast AQMD
MAIL PAYMENT TO: File 21621
Los Angeles,CA 90074-1621

RETURN THIS SUMMARY WITH YOUR PAYMENT

NO. 073387

CONSOLIDATED SERVICES
12949 TELEGRAPH ROAD
SANTA FE SPRINGS, CA 90670

(562) 663-3400

NationsBank Of Georgia, N.A.
Atlanta, DeKalb County, Georgia

64-1278
611

Date	Vendor #	Amount
02/02/2000	303110	$**16786.85

PAY Sixteen Thousand Seven Hundred Eighty Six Dollars And 85 Cents

To The Order of
SOUTH COAST AQMD
P.O. BOX 4943
DIAMOND BAR, CA. 91765-0943

NOT NEGOTIABLE

/0000073387/ &061112788&329 991 5050/

CONSOLIDATED SERVICES,12949 TELEGRAPH ROAD,SANTA FE SPRINGS, CA 90670

NO. 073387

Invoice #	Inv Date	Invoice Description	Invoice $$	Discount	Payment
			16786.85		16786.85
SEAGULL	12/30/1999	ID 90849			
			16786.85		16786.85

MAILED

FEB 04 2000

SUMMARY OF FISCAL YEAR 1998-1999 REPORTED EMISSIONS

FACILITY NAME: SEAGULL SANITATION

FACILITY ID: 90849

	Reported Emissions In Tons		Corresponding Fees
1. Organic Gases	36	$	11,443.30
2. Specific Organics	0		0.00
3. Nitrogen Oxides	14		1,848.00
4. Sulfer Oxides	9		1,195.20
5. Carbon Monoxides	108		28.00
6. Particulate Matter	65		19,059.20
	Total	$	**33,573.70**

7. 1/2 Fiscal Year 98-99 Emission Fee as Installment **(See this number on Form 9900FS, line 1)**: $ **16,786.85**

8. Toxic Air Contaminants / Ozone Depleters Fees, per Fiscal Year 98-99 Reported Emissions : $ 0.00

9. 1/2 Toxic Air Contaminants/ Ozone Depleters Fee, per Fiscal Year 98-99 Reported Emissions **(See this number on Form 9900FS, line 2)**: $ **0.00**

Sept. 25, 61

Emission factors for MSW Combustion: (From Permits)

City of Commerce: 550 TPD

	NO_x	PM_{10}	SO_x	CO	ROG
lbs/day	825	123	100	300	58
E.F. #/Ton of Refuse	1.5	0.223	0.18	0.545	0.105

~~SO. EAST RESOURCE RECOVERY Facility - Long Beach.~~

- SERF: 1350 TPD / 3 lines = 450 Ton/line

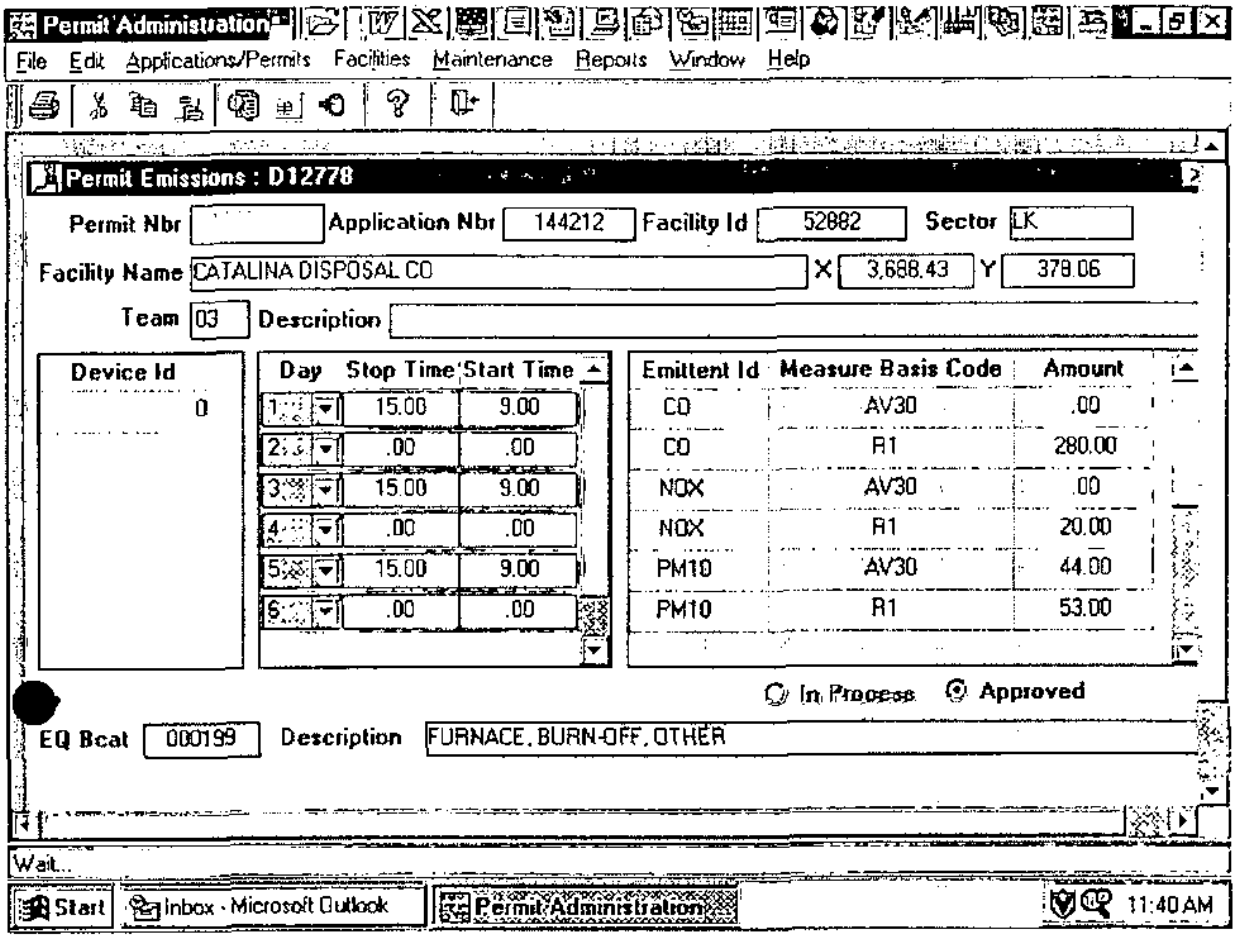
lbs/day	816	120	288	792	72
E.F. #/Ton	1.81	0.267	0.64	1.76	0.16

	NO_x	PM_{10}	SO_x	CO	ROG
Avg. E.F. #/Ton	1.655	0.245	0.41	1.15	0.133

- Seagull Sanitation: MSW processed per day (Avg. TPD) = 20.6 TPD.

	NO_x	PM_{10}	SO_x	CO	ROG
Emissions #/day	34.1	5.0	8.45	23.7	2.74

ERCs Applied for	94	435 (?)	60	721	236



7/23/01

2nd Pg. →

for NSR.

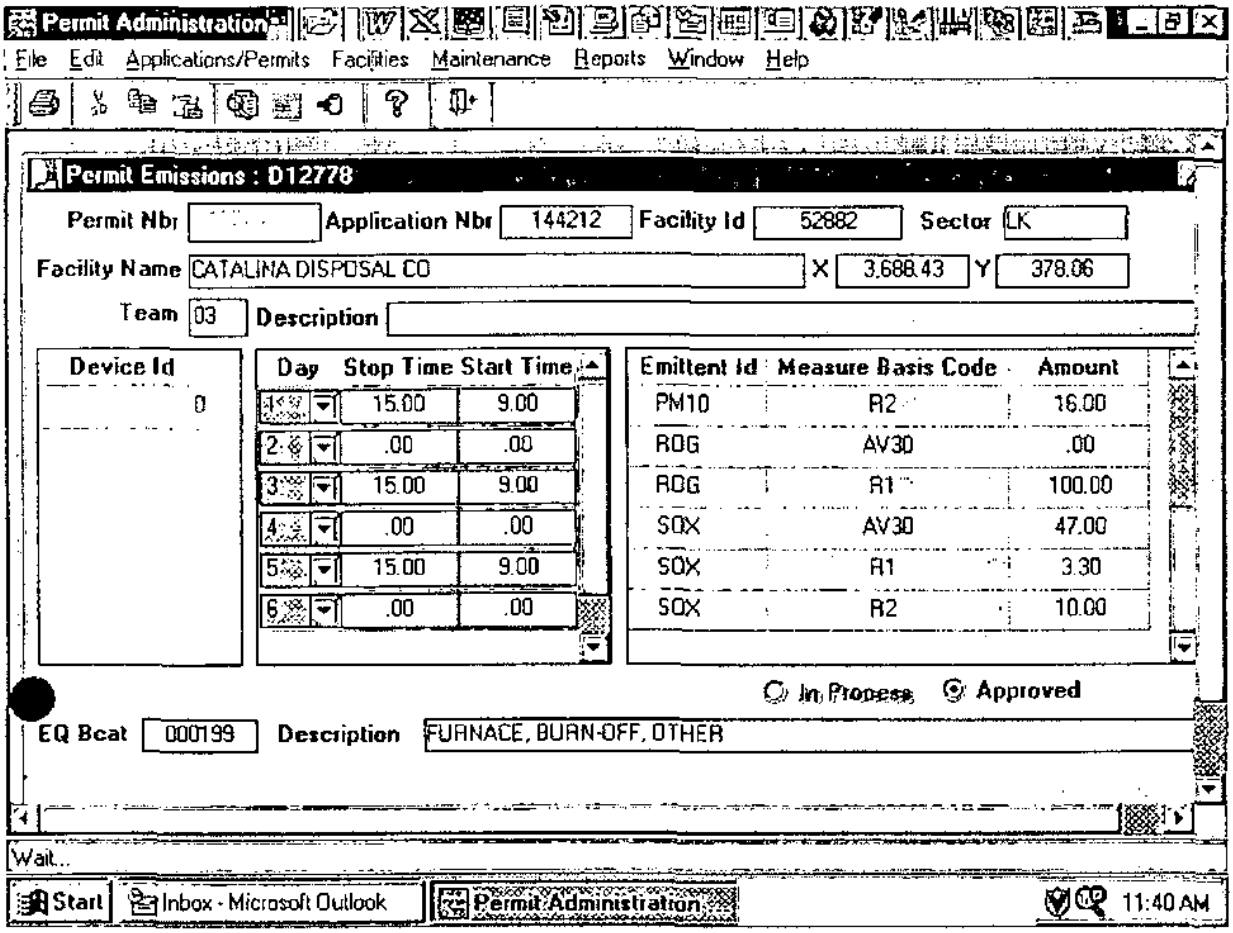
Prev. Permit:

PM_{10} AV30 $44 \times 0.80 = 35.2 = 35$ lbs/day for Rule.

SO_x AV30 $47 \times 0.80 = 37.6 = 38$ " " " "

NOx, CO, ROG } AV30 = 0 ?

7/23/01



PM_{10} = 70% Eff.

SEAGULL SANITATION - ERC A/N 387479					14-Feb-02	
AVG. PROCESSING RATE OVER 2-YRS= 20.6 TPD						
	NOx	PM	PM10	SOx	CO	ROG
EFB-REPORT EF: LB/TON	*3.9*	*18.1*		*2.5*	*30*	*9.8*
EMISSION LBS/DAY	80	373	112, @30% OF PM	52	618	202
POSITIVE NSR BAL.			35	38		
NET ERCs	**80**	**373**	**77**	**14**	**618**	**202**
If Baghouse is considered as an add-on control then PM10 = 373 x (1.0 -0.98) = 7 lbs PM10						
with 35 lbs of +ve balance , Net ERC= 0.						
SERRF/COMMERCE-AVG. E.F.	*1.7*		*0.25*	*0.41*	*1.15*	*0.133*
EMISSION LBS/DAY	35		5	8	24	3
POSITIVE NSR BAL.			35	38		
NET ERCs	**35**		**0**	**0**	**24**	**3**
MULTI-CHAMBER-BACT	*2.5*	*3.5*	*1.05**	*2.8*	*2.9*	*4*
EMISSION LBS/DAY	52	72	22	58	60	82
POSITIVE NSR BAL.			35	38		
NET ERCs	**52**	**72**	**0**	**20**	**60**	**82**
SEAGULL'S ERCs PROPOSAL*	**94**		**435**	**60**	**721**	**236**

* These numbers are not adjusted for PM10 and +ve NSR Balance for the facility.

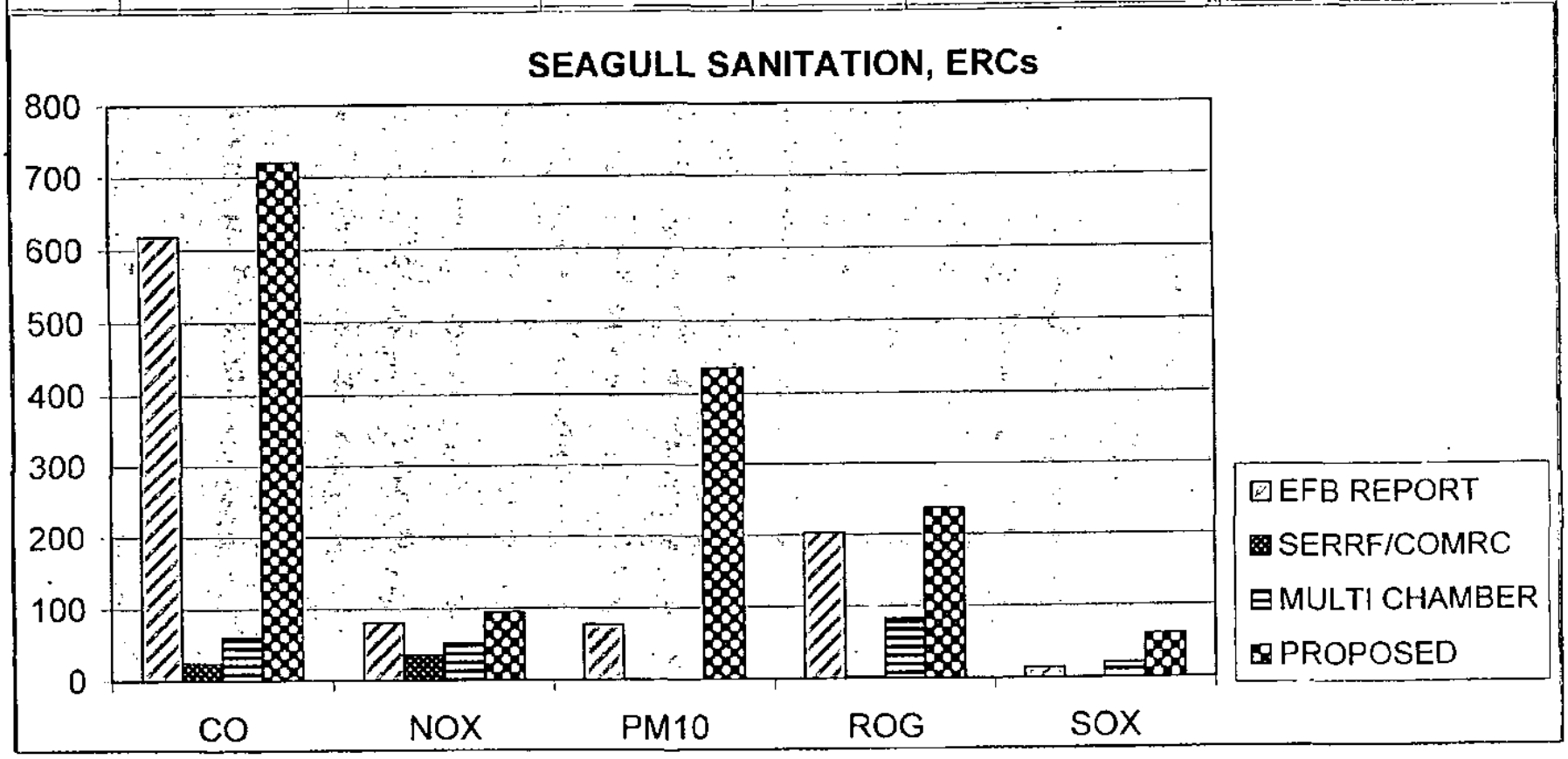
NOTE:

1. EFB-Report - E.F. used for 99-00 & 00-01
2. SERRF/COMMERCE- Avg. E.F. for the existing processes
3. Current BACT for Incinerator. E.F. from AP-40, C22 Edition, pg. 445 & 963

*PM to PM10 conversion factor @ 30%

	EFB REPORT LB/DAY	SERRF/COMRC LB/DAY	MULTI CHAMBER LB/DAY	PROPOSED LB/DAY
CO	618	24	60	721
NOX	80	35	52	94
PM10	77	0	0	435
ROG	202	3	82	236
SOX	14	0	20	60

Date: 2-14-02



	EMI_ID	PTE lbs/day	POSBAL	PARENT_ID
1	CO	0	0	90849
2	NOX	0	0	90849
3	PM10	0	35	90849
4	ROG	0	0	90849
5	SOX	0	38	90849

1.6 COMPANIES WITH POSITIVE NSR BALANCES

1.6.1 Process

In accordance with Rule 1306(g)(1)(A), existing positive NSR balances shall be discounted by twenty (20) percent as of September 30, 1990. With the submittal of the first application subject to the post September 30, 1990, new source review requirements, the applicant will be required to offset the emissions associated with the application as well as any discounted NSR balances for the pollutants that the project will emit. In theory, all applications subject to the pre-October 1, 1990, version of new source review should be processed prior to October 1, 1990, to insure that the appropriate offsets are provided by the company when the first post September 30, 1990, application is processed. However, due to the significant backlog of applications and potential problems associated with the processing of those applications, these guidelines provide a method for processing post September 30, 1990, permit to construct applications prior to the processing of the pre-October 1, 1990, applications when appropriate to meet goals such as the permit streamlining act requirements. Facilities with positive NSR balances will be handled using the following procedures.

A. Company has no pending applications for the facility with the positive NSR balance as of September 30, 1990. An application is only pending if it has been deemed complete.

   1. Verify the NSR balance in accordance with the standard procedures.

   2. Any positive particulate matter emissions in the NSR account shall be converted to PM_{10} emissions by multiplying the particulate matter emissions by 0.5.

   3. The positive NSR balances as of September 30, 1990, are discounted by twenty (20) percent. These discounted balances become the new NSR balances for the company and shall be offset the first time the company proposes any increases for the corresponding pollutants.

Sept. 25, 61

Emission factors for MSW Combustion: (From Permits)

City of Commerce: 550 TPD

	NO_x	PM_{10}	SO_x	CO	ROG
lbs/day	825	123	100	300	58
E.F. #/Ton of Refuse	1.5	0.223	0.18	0.545	0.105

So. East Resource Recovery Fac. – LB.

SERF: 1350 TPD / 3 lines = 450 Ton/line

lbs/day	816	120	288	792	72
E.F. #/Ton	1.81	0.267	0.64	1.76	0.16

	NO_x	PM_{10}	SO_x	CO	ROG
Avg. E.F. #/Ton	1.655	0.245	0.41	1.15	0.133

Seagull Sanitation: MSW processed per day (Avg. TPD) = 20.6 TPD.

	NO_x	PM_{10}	SO_x	CO	ROG
Emissions #/day	34.1	5.0	8.45	23.7	2.74

35# +ve balance 38# +ve

ERCs Applied for	94	435 (?)	60	721	236

10/24. Phone call w/ Sharon. They are processing application for BACT applicability determination. Will send letter. Hold on this application until then.

Add. →

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Best Available Control Technology (BACT) Guidelines for Non-Major Polluting Facilities*

10-20-2000 Rev. 0

Equipment or Process: Incinerator – Non-Infectious, Non-Hazardous Waste

	Criteria Pollutants					
Rating/Size	**VOC**	**NOx**	**SOx**	**CO**	**PM_{10}**	**Inorganic**
≤ 300 lbs/hr	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1600 °F) (1988)	Natural Gas as Auxiliary Fuel (1988)	Natural Gas as Auxiliary Fuel with Wet Scrubber (1988)	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1600 °F) (1988)	Natural Gas as Auxiliary Fuel with Enclosed Automatic Feed and Flyash Removal System (1988)	
> 300 lbs/hr and < 750 lbs/hr	Same as Above	Same as Above	Same as Above	Same as Above	0.04 gr/dscf Corrected to 12% CO_2, with Enclosed Automatic Feed and Ash Removal System (1988)	
≥ 750 lbs/hr	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)	Same as Above	Same as Above	Multiple Chamber Starved Air Design (≥ 0.5 Sec. Retention Time at ≥ 1800 °F) (1988)	Same as Above	

Note: The equipment may also be subject to 40 CFR 60, Subpart CCCC--Standards of Performance for New Stationary Sources: Commercial and Industrial Solid Waste Incineration Units, upon final promulgation of the regulation.

* Means those facilities that are not major polluting facilities as defined by Rule 1302 - Definitions

remainder of this part of the chapter is limited to the design of multiple-chamber incinerators for effective disposal of general refuse with a minimum creation of air pollution.

Table 120. COMPARISON BETWEEN AMOUNTS OF EMISSIONS FROM SINGLE- AND MULTIPLE-CHAMBER INCINERATORS

Item	Multiple chamber	Single chamber
Particulate matter, gr/scf at 12% CO_2	0.11	0.9
Volatile matter, gr/scf at 12% CO_2	0.07	0.5
Total, gr/scf at 12% CO_2	0.19	1.4
Total, lb/ton refuse burned	3.50	23.8
Carbon monoxide, lb/ton of refuse burned	2.90	197 to 991
Ammonia, lb/ton of refuse burned	0	0.9 to 4
Organic acid (acetic), lb/ton of refuse burned	0.22	< 3
Aldehydes (formaldehyde), lb/ton of refuse burned	0.22	5 to 64
Nitrogen oxides, lb/ton of refuse burned	2.50	< 0.1
Hydrocarbons (hexane), lb/ton of refuse burned	< 1	--

DESIGN PROCEDURE

The design factors itemized in Table 119 are the basis for the design of a multiple-chamber incinerator. These factors are used to determine the area of the grate, the average height of the arch, the proportioning of the ignition chamber, the sizing of the gas ports, the cross section of the mixing chamber, the sizes of the inlet air ports, and the other necessary dimensions and proportions. Application of these factors, however, requires that calculations be made to convert the data into usable form. These calculations are illustrated in the problem given at the end of this part of the chapter.

These calculations fall into three general categories: (1) Combustion calculations based upon the refuse composition, assumed air requirements, and estimated heat loss; (2) flow calculations based upon the properties of the products of combustion and assumed gas temperatures; and (3) dimensional calculations based upon simple mensuration and empirical sizing equations. The calculations needed to determine weights, velocities, and average temperatures of the products of combustion are derived from standard calculation procedures for combustion. Average gross heating values and theoretical air quantities are used. Chemical properties and combustion data for the major components of general refuse are given in Table 121. The only omission is shrubbery, which may be safely assumed to have the same composition as average wood.

The average temperature of the combustion products is determined through normal calculations of heat loss. The burning rate and average composition of the refuse are assumed to be constant. When extremes in quality and composition of material are encountered, the most difficult burning condition is assumed. Heat losses due to radiation, refractory heat storage, and residue heat content are assumed to average 20 to 30 percent of the gross heating value of the refuse during the first hour of operation. Readily available furnace data indicate that the losses fall to approximately 10 to 15 percent of the gross heat after 4 to 5 hours of continuous operation.

The calculated overall average gas temperature should be about 1,000°F when calculations are based on 300 percent excess combustion air and the assumption of 20 to 30 percent heat loss given previously. This calculated temperature is not flame temperature and does not indicate the probable maximum temperatures attained in the flame port or mixing chamber. If the calculated temperature is lower than 1,000°F, installation of burners is indicated.

Only volume and temperature data for the products of combustion are required for determining the cross-sectional flow areas of the respective ports and chambers. The temperatures used are approximations of the actual temperature gradient in the incinerator as the products of combustion cool while passing through the various ports and chambers to the stack outlet.

Air ports are sized for admission of theoretical air plus 100 percent excess air. The remaining air enters the incinerator through the open charging door during batch operation and through expansion joints, cracks around doors, and so forth. Indraft velocities in the combustion air ports (overfire, underfire, and secondary) are assumed to be equal, with a velocity pressure of 0.1 inch water column (equivalent to 1,265 fpm). Designing the draft system so that available firebox draft is about 0.1 inch water column, and oversizing the adjustable airports ensure maintenance of proper air induction.

Calculations of draft characteristics follow standard stack design procedures common to all combustion engineering. The stack velocity given for natural draft systems accords with good practice and minimizes flow losses in the stack.

The remainder of the essential calculations needed for designing an incinerator are based upon substitution in the parametric equations and measurement of the incinerator. Recommended grate loading, grate area, and average arch height may be calculated by equation or estimated from Figures 341 and 342. Proper length-to-width ratios may be determined and compared with proposed values.

Supplementary computations are usually required in determining necessary auxiliary gas burner sizes and auxiliary fuel supply line piping. Where the moisture content of the refuse is less than 10 percent by weight, burners are usually not required. Moisture contents of from 10 to 20 percent normal-

Table E1. EMISSION FACTORS

Source	Emission factor units	Emission factors[a] HC	NO_x	Particulates	SO_2	CO
Combustion of fuels						
Fuel oils						
Power plants						
California crude	lb/10^3 equivalent bbl[b]	210	5000	800	11500	N[c]
Indonesia crude	lb/10^3 equivalent bbl	210	1500	50	800	N
Alaskan crude	lb/10^3 equivalent bbl	210	1500	250	1800	N
Refineries	lb/10^3 equivalent bbl	500	3200	821	7000S[d]	N
Other industries	lb/10^3 equivalent bbl	127	3360	839	7000S	6.5
Commercial and domestic	lb/10^3 equivalent bbl	112	3060	593	7000S	N
Natural gas						
Power plants	lb/10^3 equivalent bbl	73	2340	90	N	N
Refineries	lb/10^3 equivalent bbl	102	1009	126	2.5	25
Other industries	lb/10^3 equivalent bbl	42	1285	105	2.5	2.4
Commercial and domestic	lb/10^3 equivalent bbl	N	696	112	2.5	2.4
Petroleum refineries						
Cooling towers	lb/10^6 gal. cooling water	6				
Compressor exhausts	lb/10^3 ft^3 fuel burned	1.2	0.9			N
Pressure relief valves	lb/day/valve	3.5				
Catalytic cracking						
Fluid	lb/10^3 bbl of feed	191	52	49	449	2
Controlled[e]	lb/10^3 bbl of feed	N	52	N	449	N
Thermofor	lb/10^3 bbl of feed	79	6	12	37	18
Valves and flanges	lb/10^3 bbl crude capacity	28				
Pump seals[f]	lb/10^3 bbl crude capacity	125				
Controlled[g]	lb/10^3 bbl crude capacity	20				
Loading racks	lb/10^3 bbl loaded	150				
Controlled[h]	lb/10^3 bbl loaded	2				
Blowdowns, turnarounds, vessel and tank maintenance	lb/10^3 bbl crude capacity	25				
Controlled[h]	lb/10^3 bbl crude capacity	5				
Cracking	lb/10^3 bbl crude capacity	8				
Controlled[h]	lb/10^3 bbl crude capacity	2				
Vacuum jets	lb/10^3 bbl crude capacity	150				
Controlled[i]	lb/10^3 bbl crude capacity	0				
Separators and sewers	lb/10^3 bbl crude capacity	270				
Controlled[j]	lb/10^3 bbl crude capacity	8				
Filling service station tanks	lb/10^3 gal. delivered	11.5				
Controlled[k]	lb/10^3 gal. delivered	7.2				
Filling automobile tanks	lb/10^3 gal. delivered	15.6				
Incineration						
Open burning[l]	lb/ton refuse	45	3.9	16	2.5 2.8	85
Single chamber[m]	lb/ton refuse	22	3.9	22	2.8	30
Multiple chamber[n]	lb/ton refuse	4	3	4	2.8	3
Metallurgical						
Aluminum furnaces						
Crucible	lb/ton metal charged			1.9		
Controlled[o]	lb/ton metal charged			0.2		
Reverberatory	lb/ton metal charged			4.3		
Controlled[o]	lb/ton metal charged			1.3		
Sweating	lb/ton metal charged			32.3		
Controlled[o]	lb/ton metal charged			3.3		
Chlorination	lb/ton chlorine			1000		
Controlled[p]						

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

M E M O R A N D U M

DATE : January 30, 1992

TO : Mechanical Unit Engineers

FROM : Fred del Rosario FDR

SUBJECT: PM-10 Factors

Notwithstanding the work of our PDU on PM-10, we are still in the Dark Ages with respect to PM-10 emission factors and have resorted to using the default factor of 50% for converting TSP values into PM-10.

Here comes some information that is somewhat like a beacon guiding our permit processing ship. We finally have some factors which we could use to realistically estimate PM-10. According to PDU, these factors came from ARB.

Henceforth, you shall use the following factors in estimating uncontrolled PM-10 emissions and use the standard efficiencies for control equipment. Otherwise, if not covered below, continue using the rather uninspiring 50% factor.

PROCESS	PM-10 Factor
IC Engine - Diesel	0.96
Natural Gas Combustion	1.00
Feed & Grain Operations	0.29
Asphalt Concrete Batch Plant	0.40
Concrete Batch Plant/Cement	0.92
Gypsum Calcining	0.88
Clay & Related Products Mfg.	0.56
Mineral Process Loss	0.50
Rock Crushers	0.10
Rock Screening & Handling	0.50
Tire Wear (use for buffing)	0.40

In addition, use the factor 1.0 for TSP emissions from baghouses and filters.

FAR

Attachment

cc: Mike Mills

$\frac{V}{n} = \frac{RT}{P}$

E 1

05/23/90

WEIGHT FRACTION FOR PARTICULATE MATTER CATEGORY
BY SIZE DISTRIBUTION

JDE	PMNAME	< 1 UM	1-2.5 UM	2.5-10 UM	PM10	> 10 UM
	LIQUID MATERIAL COMBUSTION	.9600	.0070	.0090	.9760	.0240
	FUEL COMBUSTION-RESIDUAL	.6600	.1000	.1100	.8700	.1300
	FUEL COMBUSTION-DISTILLATE	.9600	.0070	.0090	.9760	.0240
	UTILITY BOILERS-RESIDUAL	.9400	.0130	.0170	.9700	.0300
	STAT. I.C. ENGINE-LIQUID FUEL	.9600	.0070	.0090	.9760	.0240
	STAT. I.C. ENGINE-GASOLINE	.9880	.0040	.0020	.9940	.0060
	STAT. I.C. ENGINE-DIESEL	.9200	.0170	.0230	.9600	.0400
	VEHICULAR SOURCES-GASOLINE	.9880	.0040	.0020	.9940	.0060
	VEHICULAR SOURCES-DIESEL	.9200	.0170	.0230	.9600	.0400
	MARINE VESSELS-LIQUID FUEL	.9200	.0170	.0230	.9600	.0400
	GASEOUS MATERIAL COMBUSTION	1.0000	.0000	.0000	1.0000	.0000
	RESIDENTIAL-NATURAL GAS	1.0000	.0000	.0000	1.0000	.0000
	STAT. I.C.ENGINE-GAS	.9880	.0040	.0020	.9940	.0060
	PETROLEUM HEATERS-GAS	.9100	.0200	.0200	.9500	.0500
	SOLID MATERIAL COMBUSTION	.7370	.1900	.0700	.9970	.0030
	COAL/COKE COMBUSTION	.0300	.1200	.2500	.4000	.6000
	STAT. I.C. ENGINE-SOLID FUEL	.7370	.1900	.0700	.9970	.0030
	WOOD WASTE COMBUSTION	.7370	.1900	.0700	.9970	.0030
	OTHER WASTE COMBUSTION	.7370	.1900	.0700	.9970	.0030
	PLANNED/UNPLNND FOREST FIRES	.7800	.0700	.0500	.8800	.1200
	AGRICULTURAL BURNING	.7800	.0700	.0500	.8800	.1200
	UNPLANNED STRUCTURAL FIRES	.8000	.1140	.0660	.9800	.0200
	FIREPLACES	.8000	.0700	.0500	.9200	.0800
	AIRCRAFT-JET FUEL	.9600	.0070	.0090	.9760	.0240
	RCHARD HEATERS	.9600	.0070	.0090	.9760	.0240
	CINERATION-LIQUID FUEL	.9600	.0070	.0090	.9760	.0240
	CINERATION-GASEOUS FUEL	1.0000	.0000	.0000	1.0000	.0000
	INCINERATION-SOLID FUEL	.1300	.0700	.1000	.3000	.7000
	EVAPORATION	.9000	.0250	.0350	.9600	.0400
	COATING MATERIAL EVAPORATION	.9000	.0250	.0350	.9600	.0400
	PAINT APPLICATION-OIL BASED	.9000	.0250	.0350	.9600	.0400
	PAINT APPLICATION-WATER BASED	.5800	.0400	.0600	.6800	.3200
	CHEMICAL MANUFACTURING	.8600	.0100	.0100	.9800	.0200
	CHEMICAL FERTILIZER-UREA	.9400	.0100	.0100	.9600	.0400
	AGRICULTURAL TILLAGE DUST	.0500	.0700	.3500	.4500	.5500
	LIVESTOCK DUST	.0500	.0100	.4200	.4800	.5200
	FEED AND GRAIN OPERATIONS	.0000	.0100	.2800	[illegible]	.7100
	GRAIN DRYING	.3000	.1000	.1400	.5400	.4600
	COFFEE ROASTING	.0000	.0100	.0100	.0200	.9800
	COTTON GINNING	.0400	.0400	.5400	.6200	.3800
	PETROLEUM REFINING	.5100	.0450	.0550	.6100	.3900
	ASPHALT ROOFING MANUFACTURE	.9100	.0350	.0350	.9800	.0200
	ASPHALTIC CONCRETE BATCH PLANT	.3000	.0330	.0670	[illegible]	.6000
	CEMENT PROD. CONCRETE BATCHING	.3400	.2800	.3800	[illegible]	.8800
	LIME MANUFACTURING	.0700	.0470	.1830	.3000	.7000
	CALCINATION OF GYPSUM	.2200	.2750	.3850	[illegible]	.8800
	CLAY & CLAY PRODUCTS MFG.	.4800	.0550	.0470	[illegible]	.4400
	GLASS MELTING FURNACE	.9500	.0130	.0170	.9800	.0200
	FIBERGLASS FORMING LINE	.9900	.0020	.0020	.9940	.0060
	STEEL HEAT TREATNG-SALT QUENCH	.7400	.1200	.1800	.9600	.0400
	STEEL SINTER PLANT	.9600	.0100	.0100	.9800	.0200
	STEEL ABRASIVE BLASTING	.7400	.0500	.0700	.8600	.1400
	STEEL OPEN HEARTH FURNACE	.8700	.0600	.0500	.9800	.0200
	BASIC OXYGEN FURNACE-STEEL	.9500	.0500	.0000	1.0000	.0000
	ELECTRIC ARC FURNACE	.4500	.1500	.2300	.8300	.1700
	ALUMINUM FOUNDRY	.8600	.0430	.0470	.9500	.0500
	WOOD OPERATION-SANDING	.8600	.0250	.0350	.9200	.0800
	WOOD OPERATION-RESAWING	.2000	.0830	.1170	.4000	.6000
	PULP AND PAPER MILLS	.4000	.3600	.2400	1.0000	.0000
	MINERAL PROCESS LOSS	.0200	.1260	.3540	.5000	.5000
	ROCK CRUSHERS	.0100	.0200	.0700	[illegible]	.9000
	ROCK SCREENING & HANDLING	.0200	.1260	.3540	[illegible]	.5000
	LANDFILL DUST	.2800	.0980	.1720	.5500	.4500
	ROAD & BLDG. CONSTRUCTION DUST	.2400	.1300	.2780	.6480	.3600
	PAVED ROAD DUST	.0300	.0500	.3800	.4600	.5400
	UNPAVED ROAD DUST	.0500	.0800	.4900	.6100	.3900
	TIRE WEAR	.2000	.1200	.0800	.4000	.6000
	WINDBLOWN DUST-AGRICULTURAL	.0500	.0700	.4000	.5000	.5000
	WINDBLOWN DUST-UNPAVED AREAS	.0600	.0600	.3800	.5000	.5000
	UNSPECIFIED	.2500	.1700	.2800	.7000	.3000

Technical Report:
Proposed Emission Factors for Pebbly Beach Landfill Incinerator
Consolidated Disposal Services
October 12, 1998

EF 1998 Billed 2000

Introduction

At the request of the South Coast AQMD, Consolidated Disposal Services, L.L.C. (CDS) has reviewed the variety of published studies and air emission factors for solid waste burning, including open burning, barrel burning, single-chamber burning, trench burning, and air curtain incinerator burning. In addition, CDS has obtained rule-making and support data from the State of Florida Department of Natural Resources (DNR) and observed operation of the Pebbly Beach Landfill incinerator on Catalina Island.

The Pebbly Beach trench incinerator, manufactured by Pactherm, is equipped with an upper level air curtain and two base-level blowers. Also called a trench combustor (as defined AP-42, Volume 1, Supplement 7, 7/93, Section 2.1.7), "the air curtain is intended to increase combustion efficiency and reduce smoke and PM emission. Underfire air is also used to increase combustion efficiency".

In contrast to data obtained for trench incinerators equipped with air curtains, open burning at ground level (as discussed in AP-42, Volume 1, Supplement E, 10/92, Section 2.4.2) "is effected by many variables, including wind, ambient temperature, composition and moisture content of the debris burned, and compactedness of the pile. In general, the relatively low temperatures associated with open burning increase emissions of particulate matter, carbon monoxide, and hydrocarbons...". Therefore, the application of open burning emission factors by AQMD to the Pebbly Beach incinerator may not be appropriate.

CDS, in calculating particulate emissions for previous annual reports, utilized support documentation from a July 1986 State of Florida DNR (formerly the Department of Environmental Regulation) interoffice memorandum. The memorandum is entitled "Interim Policy on Air Curtain Incinerators." This memorandum was presented to CDS from Crochet Equipment Company, Louisiana, a distributor of air curtain incinerators. A September 18, 1998 phone call placed by Mr. Tim Nelsen, CDS consultant, resulted in discussions with Mr. Claire Fancy and Mr. Bruce Mitchell, Florida DNR. Mr. Mitchell forwarded the rule-making data and discussed the 80-90% particulate emission reduction factor utilized in Florida and other southeastern states. CDS utilized published factors identified in AP-42, Table 2.1-1, (for a trench incinerator), for particulates and sulfur oxides in previous annual emission calculations, in accordance with the guidelines provided by the State of Florida DNR.

A review of the published factors and previous studies for particulates (PM), ROG, NOx, SOx, and CO by the AQMD and CDS verifies a lack of data specific to the Pebbly Beach incinerator. As a result, CDS offers the following site-specific operational data and subsequent refined emission factors for your consideration.

Site Operational Data

CDS implements a solid waste source reduction program within the constraints of AB939. Source segregation occurs at residential and commercial client sites and also at the concrete pad at the landfill site. CDS estimates that the program removes a significant amount, nearly 40% of household HPDE, cardboard, aluminum and precious metals. Household hazardous waste is not accepted at the landfill and when identified through load checks, is removed from the pad, temporarily stored, then removed offsite. Remaining solid waste incinerated includes wood debris (including pallets, yard waste, and commercial clippings), non-recycled cardboard and paper, food waste, other packaging materials, including plastic trash bags. In order to achieve a thorough burn, wood, yard waste and clippings are allowed to dry for up to 2 months prior to use in the incinerator. Wood is stockpiled and used to initiate and sustain high temperature burn rates in the incinerator. Wood waste comprises between 70-80% of the mass of material incinerated.

The incinerator burn pit is 20 feet long, 11 feet wide, and 10 feet deep. The pit is lined on all four sides by clay bricks within slotted metal support bars up to a ten foot level; from the 10-20 feet height there are ceramic-like refractory panels. The air curtain is present at a 10 foot height and spans across the entire 20 foot width of the pit. The flow of air is directed at a 45 degree angle into the burn pit through approximately 30-inch ducts. The actual flow of the air curtain was not established.

With a bed of dry wood and cardboard, and with base level, underfire air blowers on, the incinerator is allowed to generate a slow burn. As the heat intensity of the bed increases, mixed waste and wood are further introduced, by a front-loading, rubber-tired tractor, at the top of the pit at the 10-foot level. With the air curtain on, debris loading is slow and intermittent, to minimize breaching. Feedstock selection and placement into the pit occurs at the discretion of the plant operator. Within 4-5 hours, the feedstock is depleted, and the incinerator burn will last an additional 6-8 hours. Field measurements of bed temperature were obtained on October 1-2, 1998 using a Type K thermocouple with inconel and ceramic casing and an Ogden digital thermometer. A temperature of 1,800 degrees Fahrenheit (F) was measured within 2 hours of burn initiation.

Proposed Emission Calculations

Particulates

Reference the AP-42, Table 2.1-1 factor of 37 #s particulates per ton burned (trench incinerator~~/municipal~~ refuse) and the 80-90% reduction factor approved by the Florida DNR (85% calculated by CDS). Assume 80% wood burned in the incinerator (DNR/manufacturer requirements are 100% wood) and 80% efficiency of the site air curtain, which may be breached during loading and startup.

0.51

*37#s/ton * 1-(60% efficiency of 85% emission factor) = 18.1 #s/ton particulates*

Reactive Organic Gases

Reference the AP-42, Supplement E, Table 2.4-1 nonmethane VOC factor of 30 #s VOCs per ton burned (open ~~burning/~~municipal refuse), 1,400 degree F temperature of burn pit bed (AQMD requirement for thermal oxidation equipment). Assume elevated levels of wood replacing typical municipal refuse in feedstock, temperature of 1,400 degrees F in

the envelope of air above curtain throughout 75% of the 5-hour burn period, and 90% destruction efficiency of VOCs within and above curtain. (Also note the approximate 50% reduction in avid recycler VOCs reported in EPA-600/R-97-134a "Evaluation of Emissions from Open Burning of Household Waste in Barrels", Table 4-1.")

*30 #s/ton * 1-((75% efficiency (of burn time >1,400 degrees F) * (90% destruction efficiency)) = 9.8 #s/ton ROGs*

Carbon Monoxide
AQMD references the AP-42, Supplement E, Table 2.4-1 factor of 85 #s CO per ton burned (open burning/municipal refuse), of municipal waste. CDS references EPA Air Pollution Engineering Manual, PB-225 132, May 1973, Table E1 factor of 30 #s/ton burned (single chamber). Assume appropriate, though not excessive, amount of oxygen introduced into bed area by low level blowers. AP-42 factor assumes open burning, although CDS contends that trench incinerator should behave more like single-chamber burner. Consider that the solid waste source for the 85# value is municipal refuse in Ohio, circa 1967. Further, calculations made by Florida DNR (as described in inter-office memorandum, dated June 11, 1986) state that "CO emissions should not be considered of significance when evaluating air curtain incinerator construction for permitting purposes."

30 #s/ton CO

Nitrogen Oxides
Reference EPA Air Pollution Engineering Manual, PB-225 132, May 1973, Table E1 factor of 3.9 #s/ton open burning and single chamber incinerator.

3.9 #s/ton

Sulfur Oxides
Reference the AP-42, Table 2.1-1 factor of 2.5 #s/ton.

2.5 #s/ton

2.3. Gasoline Bulk Plants at Airports

Gasoline dispensing facilities at airports are actually small bulk plants because gasoline is loaded out of the underground tanks into bobtail trucks and airplane tanks are then loaded from the trucks. All the airport gasoline facilities have underground tanks and all are equipped with Phase I systems. None have vapor recovery systems on the gasoline dispensers.

For calculating annual permitted or actual emissions, the following emission factors should, therefore, be used:

Loading Underground Tank	0.5
Unloading Underground Tank	1.0
Loading Delivery Vessel	5.0
Filling Airplane Tanks	10.0
Spillage During Filling	0.7
	17.2

All emission factors are in units of pounds per thousand gallons of throughput. Thus, you can just use the overall emission factor of 17.2 lbs/1,000 gallons to calculate annual permitted or actual emissions.

Because these sources generally have a relatively low gasoline throughput, assume that maximum hourly emissions occur when the bobtail truck is being loaded. The emission factor is 6.0 lbs/1000 gallons (unloading underground tank and loading delivery vessel). Moreover, assume that 1500 gallons is loaded into the bobtail unless better data is available. Thus, permitted hourly emission will be 9 pounds per hour if no other data is available.

Rule 70.P.1 requires that delivery vessels be loaded through a submerged fill pipe. Bottom loading is assumed to comply with the rule.

kkefab

Gaurang Rawal

From: Gaurang Rawal
Sent: Friday, September 14, 2001 9:33 AM
To: Phil Barroca
Subject: NSR Positive Balance

NSR
Balance

Phil,

I need your expertise and assistance in adjusting +ve NSR balance for,

Company: Catalina Disposal Co. (C/O occurred in 1992)
Co. ID 52882
A/N & P/O: 14212, D12778
+ve balance for new ID 90849 shown: PM10 = 35 lbs and SOx = 38 lbs.

Background: I am working on an ERC application No. 387479 (ID 90849), Seagull Sanitation, for a Municipal Solid Waste pit burner, at Avalon (Catalina Island). The previous Co. was Catalina Disposal as shown above, for which P/O D12778 was granted on DECEMBER 7, 1989. Liberty Records review shows NSR value of 43 lbs SOx and 80 lbs of PM a Part (or PM10 ?).

Aren't these balances brought to zero prior to 1990 or after 1990-NSR ? P/O was issued in 1989. The current P/O D49940 shows AEIS emissions as 0 for all pollutants, whereas corresponding ID 90849 shows +ve balance of 35 lbs for PM10 and 38 lbs for SOx.

I have records for previous permit evaluation and will bring it over for your review and assistance to adjust NSR balance, if needed. This info. is vital to determine final ERC 3s for certification.

Thank you,
Gaurang x-2543.

Gaurang Rawal

From: Gaurang Rawal
Sent: Tuesday, September 11, 2001 8:11 AM
To: Fred Lettice; Charles Tupac
Subject: *Rule 301(y) Report*

Saturday, 9/8/01 -worked 5 hrs. Completed evaluation for SVE - BTEX system for A/N 386073, ARCO Station #1057 including SCREEN 3 modeling analysis. Prepared Rule 212 public notice for the nearby school. A/N submitted for approval.

Monday, 9/10/01- worked 9 hrs. worked on ERC application for the municipal solid waste pit burner for Seagull Sanitation at Avalon, A/N 387479. Most of the time spent reviewing a/n package, previous Liberty records, history, last two years operating data, emissions calculations, EFB reports review for the past two years for Emission Factors used, Facility NSR balance review, BACT determination and its applicability, review of the EPA 40 CFR Part 60 for NSPS and EG document.

Application is about 60%-70% complete. Still pending review of old application evaluation (not on Liberty, on microfiche) for emissions calculations and positive balance (?), final ERC lbs/day determination, public notice, etc.

Gaurang Rawal

From: Sharon Rubalcava [srubalcava@wbcounsel.com]
Sent: Monday, September 10, 2001 4:14 PM
To: 'Gaurang Rawal'
Cc: Dana Camacho
Subject: Catalina refuse burner ERC application

Gaurang:
In answer to your question, my client believes the refuse burner will cease operation on or around October 1, 2001. We will notify District Customer Service when final shutdown occurs.

Sharon
2873-014

****

Sharon Rubalcava
Weston, Benshoof, Rochefort,
Rubalcava & MacCuish LLP
333 S. Hope Street
16th Floor
Los Angeles, CA 90071
Tel: (213) 576-1000
Fax: (213) 576-1100

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OUR DOWNTOWN LOS ANGELES OFFICE
HAS MOVED -- Please note new contact information:
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213-576-1100 fax

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WESTON BENSHOOF
ROCHEFORT RUBALCAVA MACCUISH LLP
ATTORNEYS AT LAW

srubalcava@wbcounsel.com

November 16, 2001

VIA FACSIMILE & FIRST CLASS MAIL

Fred Lettice
Senior Air Quality Engineering Manager
Engineering and Compliance
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 917650-0940

Charles Tupac
Senior Air Quality Engineer
Engineering and Compliance
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 917650-0940

Re: Application for ERCs – Consolidated Disposal Services Seagull Sanitation Facility (I.D. No. 090849)

Dear Messrs. Lettice and Tupac:

In June, 2001, Consolidated Disposal Services filed an application for emission reduction credits ("ERCs") for reductions in emissions from the removal from service of its municipal solid waste pit burner at the Seagull Sanitation facility on Catalina Island. I have been informed by Gurang Rawal, the processing engineer, that the District is proposing to significantly discount the reductions by applying what it considers to be a BACT adjustment for this unit. This letter sets forth Consolidated's objections to the proposed discounting, and why we believe the existing burner is BACT for this application.

While we have not seen the district's preliminary Engineering Evaluation, Mr. Rawal has informed me that the District considers BACT to be a multi chamber, starved air incinerator with related controls. We believe this is not accurate because 1) this technology was available in 1986 when the pit burner was originally permitted and was not determined to be BACT for this unit; 2) there is no add-on pollution control equipment that would constitute BACT for this unit; and 3) there are unusual equipment-specific and site-specific characteristics that warrant a different BACT than set forth in the current BACT guidelines.

Prior to 1986, when the pit burner was initially permitted, MSW on Catalina Island was burned in open pits and the ash was land filled. In an attempt to preserve landfill capacity and reduce visible emissions from the operation, Consolidated submitted an application for a permit to construct for a proposed pit burner. The pit burner has a rated waste burning capacity of 10 tons/hour and is equipped with a 40 hp air blower that feeds air to vents at the bottom of the burner pit. The pit burner is not equipped with any auxiliary fuel source such as natural gas or fuel oil.

While the information in the engineering file is limited, the permit processing evaluation shows that a BACT review was done and that the pit burner was found to constitute BACT. The evaluation is contained in Attachment A and states that:

> In this special case due to the H&S Code [41810] it may be concluded that BACT is considered to be a pit burner compared to open burning. This BACT determination is a special case and is not to set a precedence. Attachment A, page 7.

Health and Safety Code section 41810 exempts fires on islands more than 15 miles from the mainland coast, such as Catalina, from certain regulatory requirements. Section 41810 states that "no district shall adopt any rule or regulation stricter than those provided by law with respect to open outdoor fires." Rule 444 of the District also recognized the requirements of section 41810 when it exempted open outdoor fires "on islands located 15 miles or more from the mainland coast."

Section 41810 was added to the Health and Safety Code in 1975 and has not been amended. Thus, if it prohibited the application of the then current BACT[1] to the pit burner in 1986, and the section has not been amended or rescinded since that time, it must continue to exempt this operation from any new or different BACT requirement. Thus, the pit burner as originally permitted remains BACT for this unit and the purposes of this application. No BACT discount is appropriate.

While we believe the requirements of Health and Safety Code section 41810 fully resolve the BACT issue, Consolidated's application for ERCs included a review of various data bases to see if there were any add-on controls that could be considered to be BACT for the pit burner. Our review showed that there were no comparable units with add- on controls that could be considered BACT. The EPA Clearinghouse showed a number of mass burn incinerators with controls, but none of the units were comparable to the small capacity, batch loaded Seagull Sanitation facility. The controlled facilities were all automatically fed and often used refuse-derived fuel, not the burning of unprocessed MSW in small batches.

---

[1]It is interesting to note that the District has referred to BACT for municipal waste incineration as being established by the SERRF Project. The permit evaluation references the SERRF Project by using the same assumptions about the waste stream composition. Thus, it is clear that independent reviews of these two very different projects resulted in different BACT determinations, even though the two projects were performing the same function.

We recognize that the BACT Guidelines can be read to require more than just add-on controls and may, under certain circumstances, look at the underlying process equipment. However, while this may be appropriate in the permitting of new equipment, it is certainly not required by the rules and is inappropriate when processing applications for ERCs. In such cases, the BACT review is akin to a process modification where the existing equipment does not undergo a new BACT review, only the modification. Even assuming the District was not precluded from regulating the burning operation on Catalina, there should be no BACT discount because there are no add-on controls for this unit and it is inappropriate to hypothesize an entirely new combustion unit that never existed.

The District's current BACT Guidelines also provide the basis for rejecting a finding that a multi chamber starved air incinerator is BACT in this application. The Guidelines provide that "staff may consider unusual equipment-specific and site-specific characteristics of the proposed project that would warrant a reconsideration of the LAER requirement for new equipment." BACT Guidelines, July 2000, Part A., page 18. Among the unusual circumstances that may be considered are the technical infeasibility of the control technology and the unavailability of fuel or electricity which is required for the process. The site of the current refuse burner is not served by a natural gas pipeline. The nearest gas pipeline is approximately a quarter mile away over difficult terrain. In order to have a steady supply of natural gas for an incinerator, a natural gas pipeline would have to be constructed to the site. Given the small amount of trash incinerated, approximately 7.5 tons per year, and the lack of natural gas service, an incinerator cannot be considered feasible in this application.

The application satisfies all the requirements for granting an ERC certificate. The reductions are both *real* and *permanent* because the equipment is being taken out of service and will be demolished, the permit will be surrendered, and no further burning of MSW will occur at the facility. The pit burner is being replaced by a material recovery facility and the recycled material will be barged to the mainland. The remaining waste will be land filled. The reductions are *quantifiable* because Consolidated has duly reported its emissions to the District using emission factors supplied by the District. The reductions are *surplus* because the facility is exempt from most district rules by virtue of Health and Safety Code section 41810 (see Attachment A, page 7) and the AQMP has not targeted this facility or source category for additional reductions. The reductions are *enforceable* because the company will surrender the permit and will be unable to resume burning.

We are further informed that the facility has a positive NSR balance and that those credits must be subtracted from any ERCs issued for the facility. We concur that Regulation XIII requires this discounting.

Accordingly, we request that ERCs be issued for the full amount of emission reductions set forth in Consolidated's application of June 2001, less the amount of any positive balance in the facility's NSR account.

Very truly yours,

Sharon Rubalcava

Sharon Rubalcava
WESTON, BENSHOOF,
ROCHEFORT, RUBALCAVA & MacCUISH LLP

SFR/dtc

cc: David Barclay
Ron Krall
Bill Dennison
Gaurang Rawal

WESTON BENSHOOF
ROCHEFORT RUBALCAVA MACCUISH LLP
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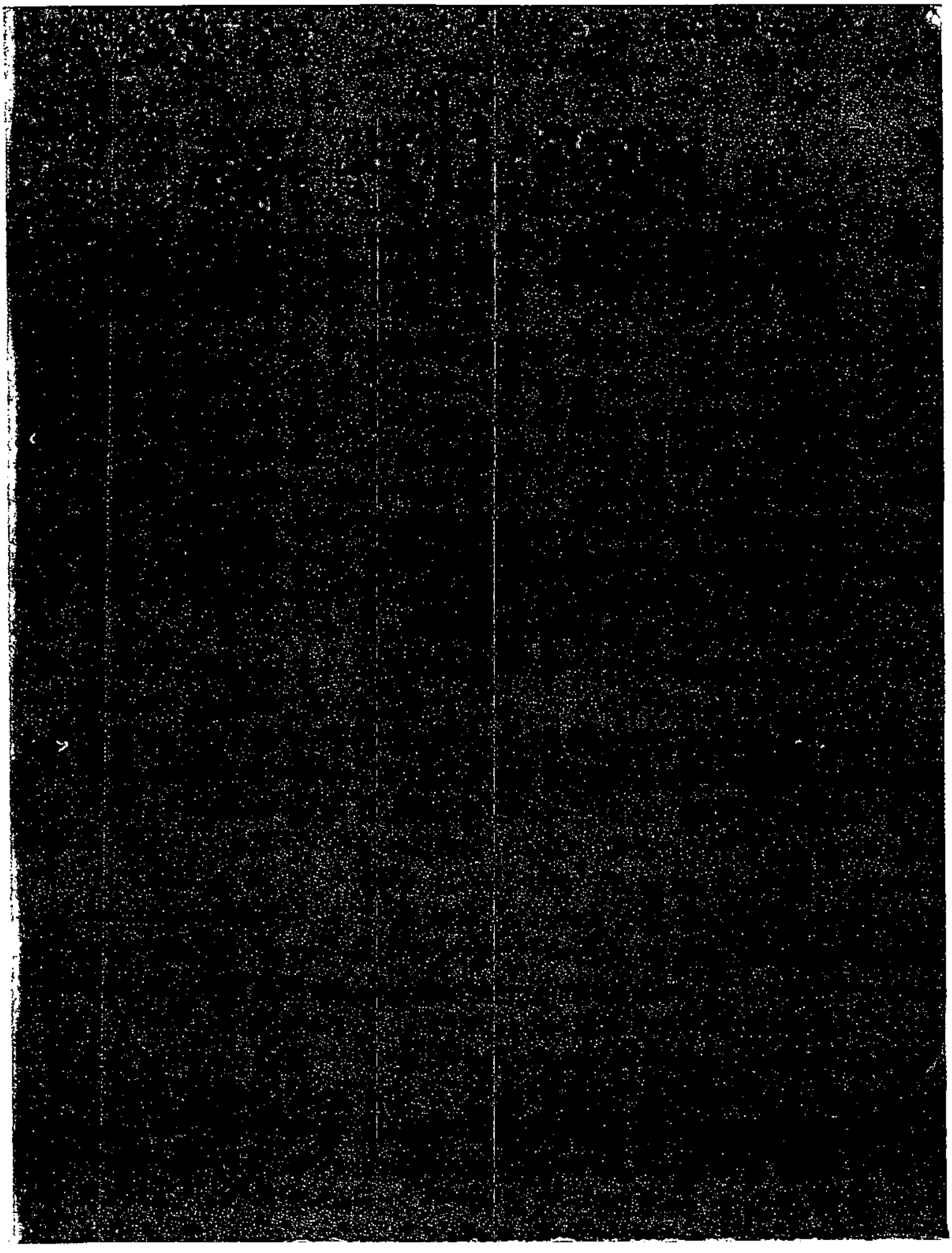
Very truly yours,

Sharon Rubalcava

Sharon Rubalcava
WESTON, BENSHOOF,
ROCHEFORT, RUBALCAVA & MacCUISH LLP

SFR/dtc

cc: David Barclay
Ron Krall
Bill Dennison
Gaurang Rawal



CHAPTER 8

INCINERATION

DESIGN PRINCIPLES FOR MULTIPLE-CHAMBER INCINERATORS

Disposal of combustible refuse and garbage is one of the most perplexing problems facing urban society today. The greater the population density the more disturbing the problem. This refuse is created by all elements of a community — industry, commerce, and the public.

In the past, disposal of combustible wastes was looked upon as a necessary evil to be accomplished as cheaply as possible. Industrial and commercial installations used a box-like, single-chamber incinerator to burn up to several tons a day. Refuse from apartment houses was generally burned in a chute-fed, single-chamber incinerator. In some areas, especially southern California, each homeowner disposed of his combustible refuse in a backyard incinerator.

During the past 15 years almost every large urban area in the world has experienced a drastic increase in the pollution of its atmosphere. As the discomforts of air pollution became more noticeable, public clamor for rigid regulation of air-contaminating processes increased steadily. In Los Angeles County this led to the banning of open fires and single-chamber incinerators in September 1957. Since that date all incinerators constructed and put into operation in the county have had to meet stringent criteria of performance as well as definite minimum design requirements.

The standards presented in this chapter are tools for creating designs for multiple-chamber incinerators that may be expected to burn rubbish with a minimum discharge of air contaminants. Tabular presentations alone are not sufficient for the best application and understanding of the principles of design involved. Also essential is an understanding of the many factors that created the need for a new approach to incineration and the development of the multiple-chamber incinerator. The design recommendations and supplementary discussions provide answers to many of the questions that confront designers and operators of multiple-chamber equipment. Caution is needed, however, in that only those qualified in combustion equipment design and refractory construction should try to apply the standards presented. Adequacy of design, proper methods of construction, and quality of materials are important to the satisfactory completion of an incinerator that will meet air pollution control requirements and have an average service life expectancy.

In this part of the chapter, the two basic types of multiple-chamber incinerators are compared. Moreover, the principles of combustion, the fundamental relationships for incinerator design, and general design factors are discussed. These data are, for the most part, applicable to other parts of this chapter that discuss incinerators for specific uses.

In addition to discussing incinerators for burning of combustible wood, paper refuse, and garbage, this chapter includes the design of incinerators for the reclamation of steel drums and wire and for debonding of brakeshoes.

The configuration of modern multiple-chamber incinerators falls into two general types as shown in Figures 339 and 340. These are the retort type, named for the return flow of gases through the "U" arrangement of component chambers, and the in-line type, so-called because the component chambers follow one after the other in a line.

RETORT TYPE

Essential features that distinguish the retort type of design are as follows.

1. The arrangement of the chambers causes the combustion gases to flow through 90-degree turns in both lateral and vertical directions.

2. The return flow of the gases permits the use of a common wall between the primary and secondary combustion stages.

3. Mixing chambers, flame ports, and curtain wall ports have length-to-width ratios in the range of 1:1 to 2.4:1.

4. Bridge wall thickness under the flame port is a function of dimensional requirements in the mixing and combustion chambers. This results in construction that is somewhat unwieldy in the size range above 500 pounds per hour.

IN-LINE TYPE

Distinguishing features of the in-line-type design are as follows.

1. Flow of the combustion gases is straight through the incinerator with 90-degree turns only in the vertical direction.

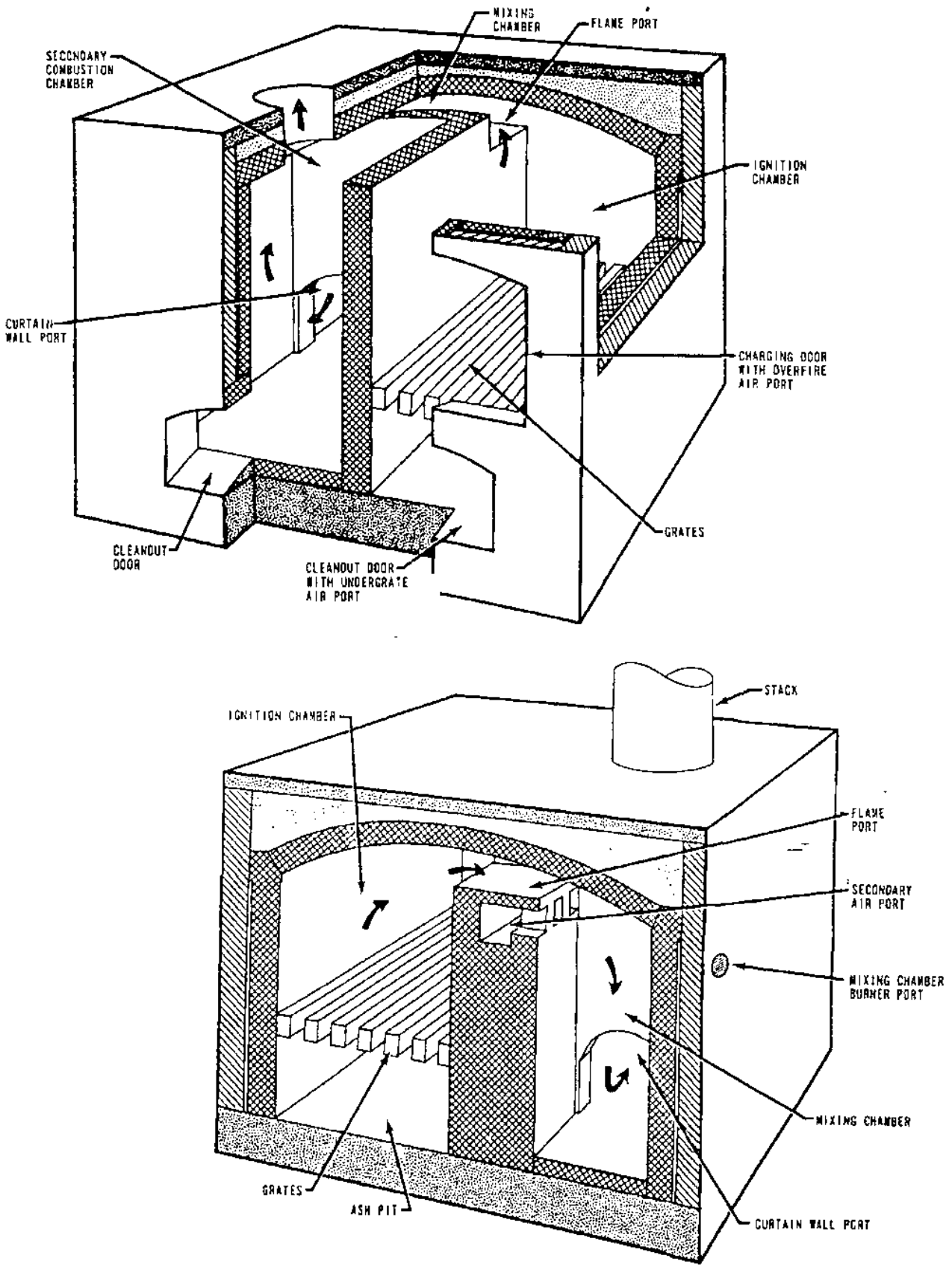


Figure 339. Cutaway of a retort multiple-chamber incinerator.

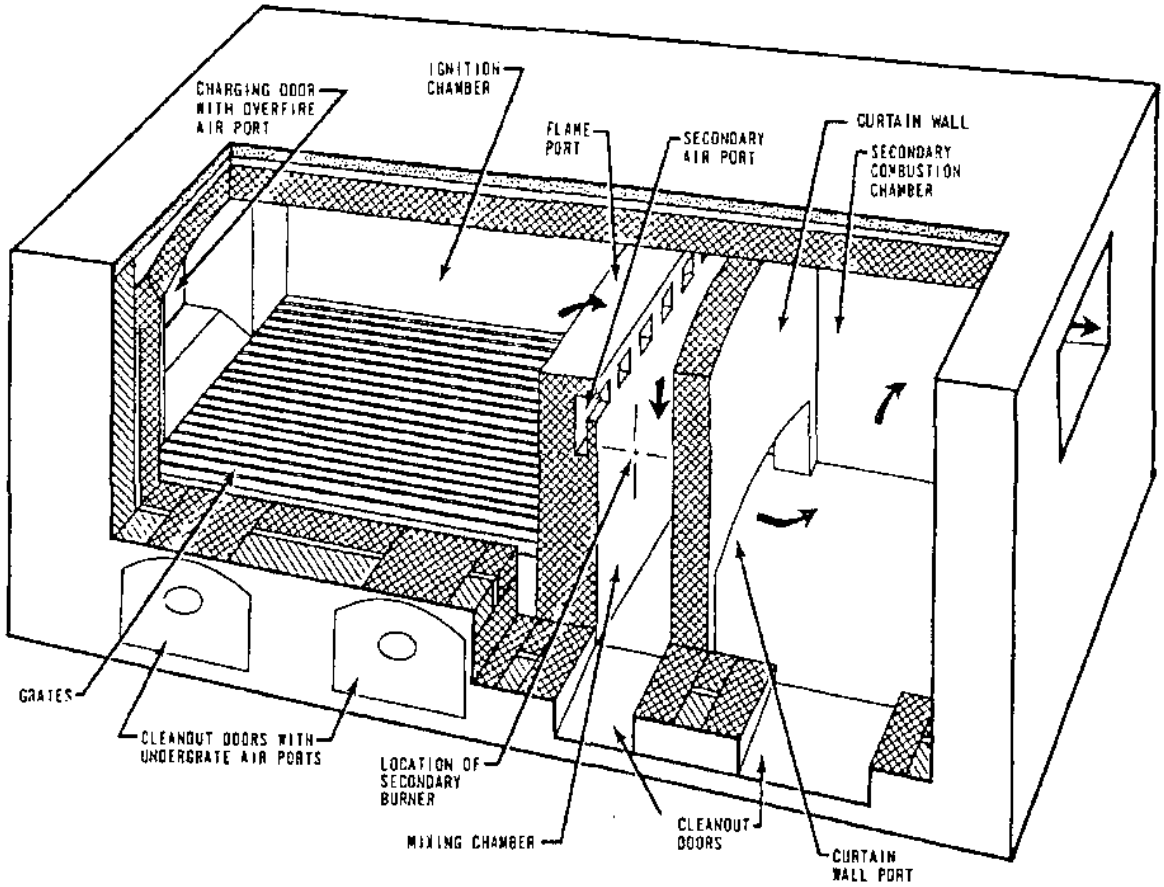


Figure 340. Cutaway of an in-line multiple-chamber incinerator.

2. The in-line arrangement is readily adaptable to installations that require separated spacing of the chambers for operating, maintenance, or other reasons.

3. All ports and chambers extend across the full width of the incinerator and are as wide as the ignition chamber. Length-to-width ratios of the flame port, mixing chamber, and curtain wall port flow cross sections range from 2:1 to 5:1.

DESCRIPTION OF THE PROCESS

The combustion process in a multiple-chamber incinerator proceeds in two stages--primary or solid fuel combustion in the ignition chamber, followed by secondary or gaseous-phase combustion. The secondary combustion zone is composed of two parts, a downdraft or mixing chamber and an uppass expansion or combustion chamber.

The two-stage multiple-chamber incineration process begins in the ignition chamber and includes the drying, ignition, and combustion of the solid refuse. As the burning proceeds, the moisture and volatile components of the fuel are vaporized and partially oxidized in passing from the ignition chamber through the flame port connecting the ignition chamber with the mixing chamber. From the flame port, the volatile components of the refuse and the products of combustion flow down through the mixing chamber into which secondary air is introduced. The combination of adequate temperature and additional air, augmented by mixing chamber or secondary burners as necessary, assists in initiating the second stage of the combustion process. Turbulent mixing, resulting from the restricted flow areas and abrupt changes in flow direction, furthers the gaseous-phase reaction. In passing through the curtain wall port from the mixing chamber to the final combustion chamber, the gases undergo additional changes in direction accompanied by expansion and final oxidation of combustible components. Fly ash and other solid particulate matter are collected in the combustion chamber by wall impingement and simple settling. The gases finally discharge through a stack or a combination of a gas cooler (for example, a water spray chamber) and induced-draft system. Either draft system must limit combustion air to the quantity required at the nominal capacity rating of the incinerator.

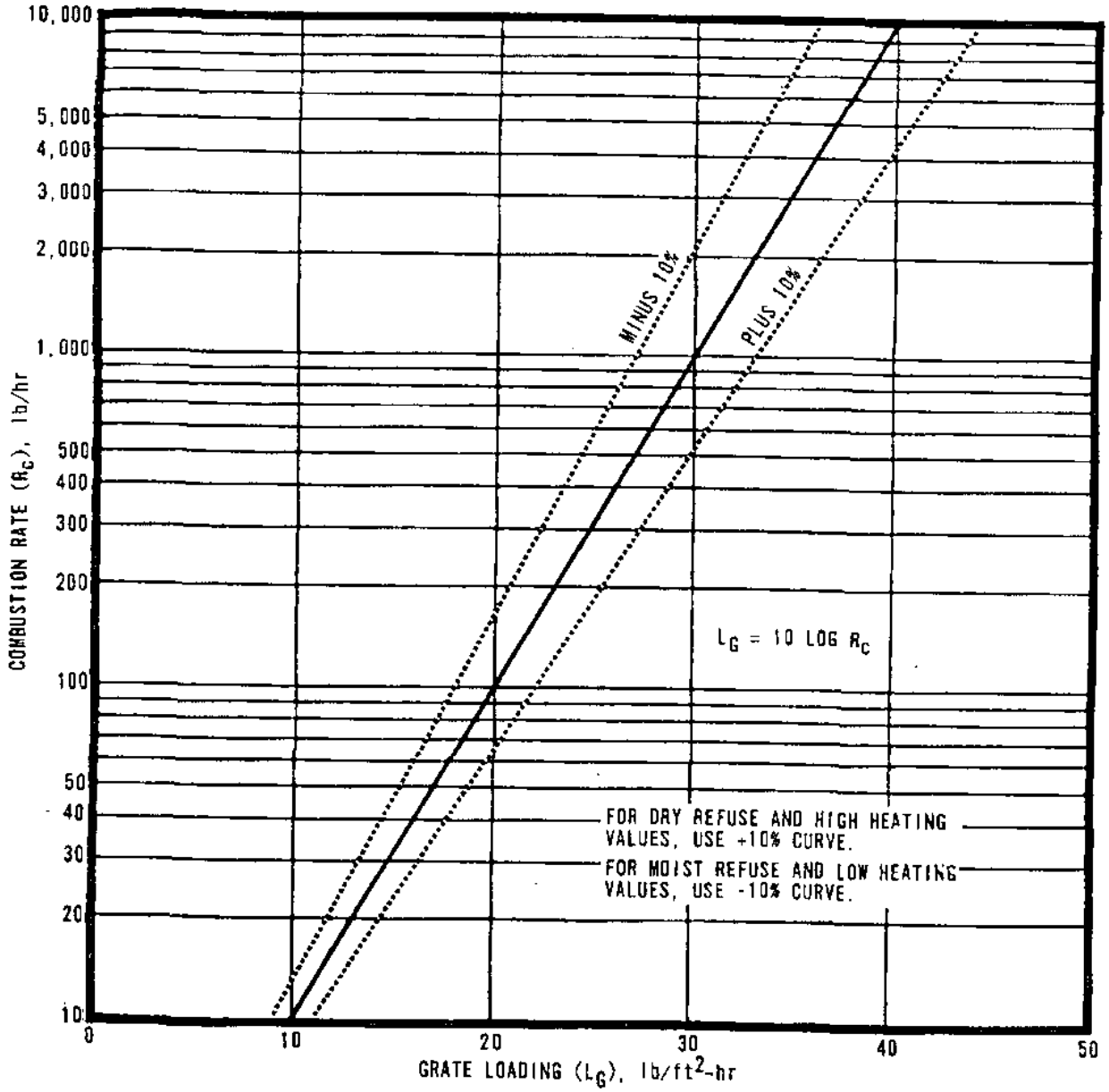


Figure 341. Relationship of grate loading to combustion rate for multiple-chamber incinerators.

stoking can be reduced to that necessary for fuel bed movement before the charging.

Application of the fundamental evaluation precepts combined with admission of secondary air and with trials of various proportions in both chamber and port dimensions established parameters for the mixing and combustion chamber portions of the multiple-chamber incinerator. The primary effect of proper design has been attainment of a higher degree of completion of combustion of volatile and solid combustible effluent components. Designing the combustion chamber as a settling chamber has made possible a reduction in fly ash emissions as well.

GENERAL-REFUSE INCINERATORS

The general refuse incinerators discussed here are used for refuse originating from residences and commercial and industrial establishments. Excluded, however, are the flue-fed, wood-burning, and mobile incinerators, which are discussed individually in other parts of this chapter. General refuse may be defined as combustible refuse such as dry paper or a variable mixture of dry paper and other combustible materials within the following approximate maximum limits (percent of weight): Dry paper (100); wood, scrap (50); shrubbery (30); garbage (30); and sawdust, shavings (10).

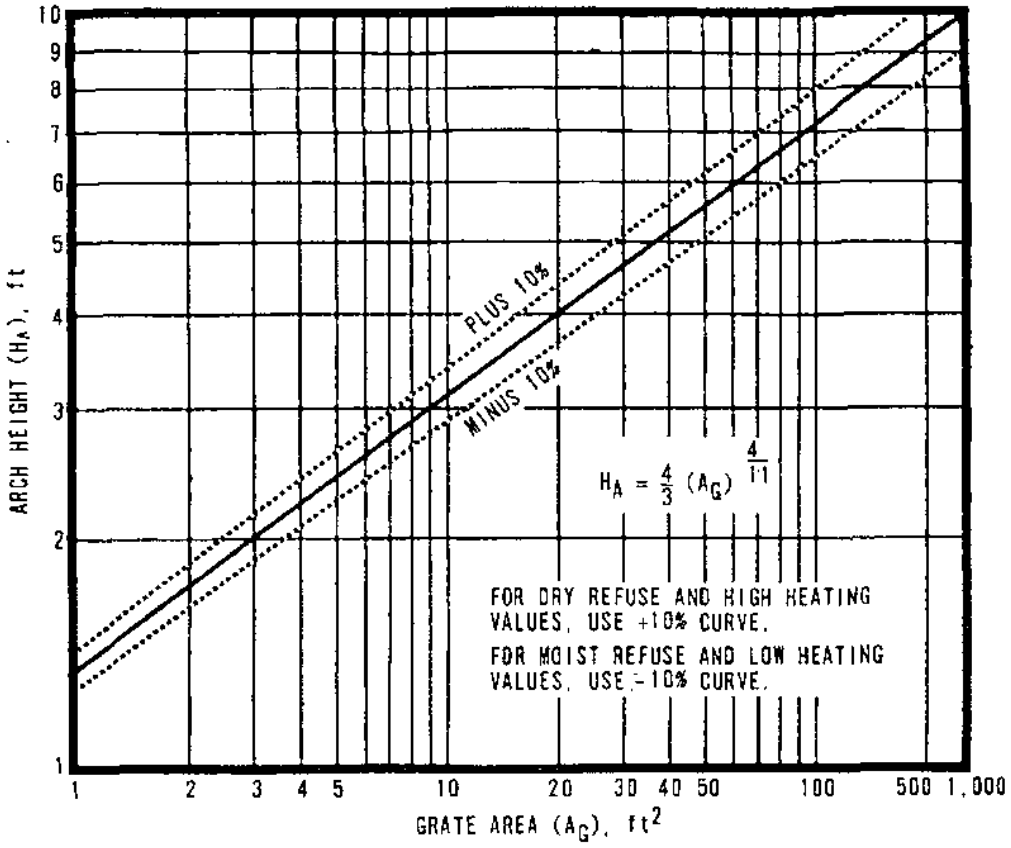


Figure 342. Relationship of arch height to grate area for multiple-chamber incinerators.

Basically, disposal of general refuse may be accomplished by incineration or disposal in a dump. The burning dump that has been used for centuries is rapidly becoming outdated as more and more communities become conscious of air pollution. Other types of incineration range from the use of perforated 55-gallon drums, single-chamber incinerators, and multiple-chamber incinerators to large municipal incinerators. Where land is available, the cut and cover dump represents a more desirable method of waste disposal than municipal incineration from the standpoint both of economics and air pollution control.

THE AIR POLLUTION PROBLEM

The incineration process in general refuse incinerators produces emissions of fly ash, smoke, gases, and odors. Flyash and odors are undesirable primarily because of their nuisance potential to the occupants of neighboring dwellings and businesses. Smoke and gases, which also have a nuisance potential, contribute to overall air pollution through reduction in visibility and through their ability to enter into smog-forming photochemical reactions in the air.

Since single-chamber incinerators offer the advantage of positive control of combustion air distribution and that of concentration of heat by virtue of enclosing the fire within refractory walls, they are believed to be considerably more effective than an open fire. Even so, single-chamber incinerators have been found to have particulate emissions of from 14 to 35 pounds per ton of material burned. By contrast, the particulate discharges from well-designed multiple-chamber incinerators average 4.5 pounds per ton of refuse burned, which is one-tenth to one-fourth the amount of solid and liquid combustion contaminants emitted from single-chamber units. Average amounts of particulate emissions, as well as of the major gaseous contaminants, from single- and multiple-chamber incinerators are given in Table 120.

AIR POLLUTION CONTROL EQUIPMENT

As always, the best methods of air pollution control are prevention of the creation of air pollutants by disposal of the refuse in landfill projects. The next best means of controlling air pollution from the incineration of general refuse is complete combustion in a multiple-chamber incinerator. The

Table E1 (continued). EMISSION FACTORS

Source	Emission factor units	Emission factors[a] HC	NO_x	Particulates	SO_2	CO
Mineral (continued)						
Glass furnaces	lb/ton product			3.4		
Frit furnaces	lb/ton product			9.4		
Controlled	lb/ton product			0.2		

[a]HC = hydrocarbons and other organic gases. NO_x = oxides of nitrogen measured as nitrogen dioxide. SO_2 = oxides of sulfur measured as sulfur dioxide. CO = carbon monoxide.

[b]An equivalent barrel is that amount of fuel equal in heating value to a fuel oil of 10 API gravity weighing 350 pounds per barrel and having a heating value of 6,300,000 Btu. Approximately 6,000 standard cubic feet of natural gas is equal to an equivalent barrel.

[c]N = negligible.

[d]S = percent sulfur by weight.

[e]Catalyst dust was controlled with a precipitator. The HC and CO were controlled with a waste heat boiler.

[f]Pumps were sealed with packed glands.

[g]Mechanical seals were used on pumps in light hydrocarbon service.

[h]Vapor recovery or disposal systems.

[i]Condensation and incineration of noncondensibles.

[j]Separators were either covered or had floating roofs.

[k]Submerged fill tubes.

[l]HC, particulate, and CO based on burning of municipal refuse in Cincinnati, Ohio, prior to 1967 (Gerstle and Kemnitz, 1967).

[m]Burning household refuse in Los Angeles, 1950.

[n]Burning commercial and industrial refuse in Los Angeles, 1964.

[o]Controlled with a baghouse.

[p]Particulates controlled with baghouse, chlorine and hydrogen chloride controlled with packed scrubbers irrigated with caustic solution.

[q]CO controlled with afterburner, particulates with baghouse.

[r]Controlled with electric precipitator.

[s]From Loquercio, 1967.

[t]Controlled with cyclone.

[u]Controlled with scrubbers.

informed as to where the completed questionnaire should be sent and whom to contact in the surveying agency if he has questions about the questionnaire. Since it is rare for all surveyees to respond to questionnaires, the agency conducting the survey must be prepared to follow up the original request for data by additional contacts. In some cases, personal interrogation must be used to supplement the mail type of emission survey.

Treating and Evaluating the Data, Reporting Results, and Recommending Action

Survey data must be evaluated and digested to obtain its meaning and significance. The information must be translated into language useful to those responsible for planning the control program. Treatment of the data includes tabulating,

Sharon Rubalcava

(213) 623-2322.

Re: Seagull Sanitation.

9/26/01 4:09 Called Sharon and left a voicemail

9/28/01 2:35

Called Sharon Rubalcava and left a voice-mail message regarding the BACT applicability for the refuse pit-burner (based on Sept. 25 meeting with FL & CDT). Decision was made that emissions factors & controlled emissions for the existing refuse-MSW burning plant - that are permitted by AQMD, shall be applied for this A/N. If we consider that then daily emissions reductions will be significantly less than what you had proposed. Also, the facility has NSR tve balance for SOx & PM_{10} - that needs to brought to zero. Pl. Call me to discuss this further -

10/2/01 12:05 Sharon called & left a message to call her - (213) 576-1000.

1:35

2:00 TC @ Sharon. Explained how we are considering BACT approach based on existing permitted refuse burning plants - City of Commerce & SERRF.

avg. E.F. # Pollutant/ton of refuse

Fac- tve Balance = 35 lbs PM_{10}, SOx = 38 lbs.

Gave her thresholds for emissions #/day - NOx = 3# 138/day

PM_{10} = 0 (tve balance)

SOx = 0 (")

CO = 24

ROG = 3.

She may talk to FL & C. Tupac.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D49940
A/N 264307
Page 1

This initial permit shall be renewed by 10/16 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.C) is not received by the expiration date, contact the District.

Liberty

Legal Owner Or Operator: SEAGULL SANITATION
12235 LOS NIETOS ROAD
SANTA FE SPRINGS, CA 90670
ATTN: DAVID ESTRADA

ID 90849

Equipment located at: 1 DUMP ROAD, AVALON, CA 90704

Equipment Description:

REFUSE PIT BURNER, PACTHERM, 20'L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 HP COMBUSTION AIR BLOWER AND A 20' -0" L. X 0' -1" W. SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.

4. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT SHALL NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR.

5. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

6. THE RESIDUAL ASH SHALL BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY AND DISPOSED OF AT PROPER LANDFILL WITH ADEQUATE COVER.

7. ASH REMOVED FROM THIS EQUIPMENT SHALL BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.

8. THE QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT SHALL BE RECORDED FOR EACH BURN DAY. THE RECORDS SHALL INCLUDE TONS PER HOUR AND TONS PER DAY BURNED AND SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

FILE COPY

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/ltv
3/18/92

FILE COPY

APPLICATION FOR PERMIT TO OPERATE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
9150 Flair Drive, El Monte, CA 91731

FORM 400A

NC/NOV NUMBER _____
INSPECTOR _____ SECTOR _____
ISSUE DATE _____

COMPANY INFORMATION

LEGAL NAME OF APPLICANT: Seagull Sanitation — D4944C
☐ IRS OR ☐ S.S. NUMBER: 330486579

PERMIT TO BE ISSUED TO: (SEE INSTRUCTIONS)
Seagull Sanitation

BUSINESS MAILING ADDRESS
12235 Los Nietos Road Santa Fe Springs, California 90670 — 10/16

TYPE OF ORGANIZATION
☒ CORPORATION ☐ LIMITED PARTNERSHIP ☐ GOVERNMENT ENTITY
☐ INDIVIDUAL ☐ GENERAL PARTNERSHIP ☐ OTHER _____

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS) ☐ YES ☒ NO
AVERAGE ANNUAL GROSS RECEIPTS: $643,820.00
NUMBER OF EMPLOYEES: 8
IS YOUR BUSINESS 51 PERCENT OR MORE WOMAN/MINORITY OWNED? (OPTIONAL) ☐ YES ☐ NO

ARE ALL FACILITIES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL AIR POLLUTION CONTROL RULES? ☒ YES ☐ NO

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ YES ☐ NO
☒ IRS OR ☐ S.S. NUMBER OF THE OWNER: 330486579
IF NO, ENTER LEGAL NAME OF OWNER

FACILITY INFORMATION

EQUIPMENT ADDRESS LOCATION
#1 Dump road (NUMBER / STREET)
Avalon (CITY OR COMMUNITY) CA 90704 (ZIP CODE)

FACILITY NAME: Seagull Sanitation
FACILITY ID NUMBER (SEE INSTRUCTIONS): 090849
TC 3-12-92

CONTACT PERSON AND TITLE: David Estrada Resident Supervisor
CONTACT TELEPHONE NUMBER: (310) 510-0675
NUMBER OF EMPLOYEES AT THIS FACILITY: 8

TYPE OF BUSINESS AT THIS FACILITY: Refuse
BUSINESS TYPE CODE (SEE INSTRUCTIONS): 4953
IS THERE A SCHOOL WITHIN 1,000 FEET OF YOUR PROPERTY? YES ☐ NO ☒

EQUIPMENT INFORMATION

EQUIPMENT DESCRIPTION (SEE INSTRUCTIONS)
Refuse burner (incinerator)

DISPOSITION 3/18/92

APPLICATION FOR: (SEE INSTRUCTIONS)
☐ NEW CONSTRUCTION ☐ MODIFICATION ☐ CHANGE OF LOCATION
☐ EXISTING EQUIPMENT OPERATING WITHOUT PERMIT ☒ CHANGE OF PERMITTEE ☐ CHANGE OF PERMIT CONDITION
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE? ☐ YES ☒ NO

HAVE YOU BEEN ISSUED A NOTICE TO COMPLY (NC) OR A NOTICE OF VIOLATION (NOV) FOR THIS EQUIPMENT? ☒ YES ☐ NO
NC NUMBER: C28234 NOV NUMBER: NOTICE ISSUE DATE:
NUMBER OF EMPLOYEES NEEDED TO OPERATE THIS EQUIPMENT: 1

IF THE EQUIPMENT HAS A PREVIOUS WRITTEN PERMIT, STATE NAME OF PERMITTEE: Catalina Disposal
PREVIOUS PERMIT NUMBER: D12778 (MM/DD/YY)

FOR NEW CONSTRUCTION OR MODIFICATION, ENTER ESTIMATED COST OF:
BASIC EQUIPMENT $ AIR POLLUTION CONTROL EQUIPMENT $

FOR NEW CONSTRUCTION OR MODIFICATION, ENTER ESTIMATED START DATE: ESTIMATED COMPLETION DATE:

FOR CHANGE OF PERMITTEE, LOCATION OR CONDITION, ENTER DATE OF OCCURRENCE: 2-27-92
FOR EXISTING EQUIPMENT IN OPERATION WITHOUT PRIOR PERMIT, ENTER INITIAL OPERATION DATE:

FOR THIS PROJECT, HAS A CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) DOCUMENT BEEN REQUIRED BY ANOTHER GOVERNMENTAL AGENCY? ☐ YES ☒ NO
IF YES, ENTER NAME: AND SUBMIT A COPY IF APPROVED
DO YOU CLAIM CONFIDENTIALITY OF DATA? (SEE INSTRUCTIONS) ☐ YES ☒ NO

I HEREBY CERTIFY, UNDER PENALTY OF PERJURY, THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION ARE TRUE AND CORRECT

SIGNATURE: E. Vazquez
OFFICIAL TITLE OF SIGNER: President
TYPE OR PRINT NAME OF SIGNER: Enrique Vazquez
TELEPHONE NUMBER: 310 946-6441
DATE: 3-2-92

SCAQMD USE ONLY

APPLICATION NUMBER	TYPE	EQUIPMENT CATEGORY NUMBER	ASSIGNMENT	CLASS	ENF. SECT.
264307	B C D	002 [illegible]	UNIT 3 ENGINEER	I II IV	

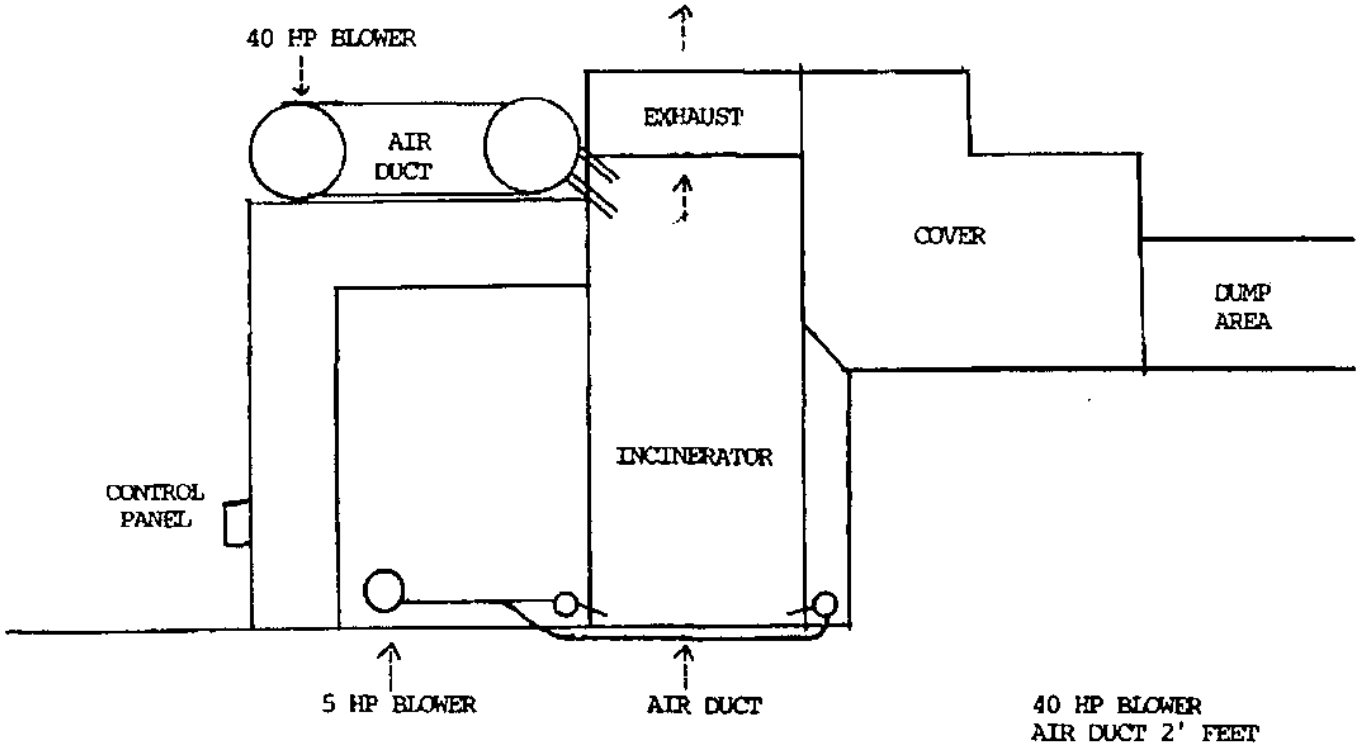
ENGR. R DATE INITIAL	ENGR. A R DATE INITIAL	FEE SCHEDULE $	VALIDATION	CHECK OR MONEY ORDER NUMBER	AMOUNT
		(E) 900	3-11-92	1076	900

DISTRIBUTION - WHITE - ENGINEERING - CANARY - ENFORCEMENT - PINK - APPLICANT

'92 MAR 10 P3:54

S.C.A.Q.M.D.
PERMIT PROCESSING

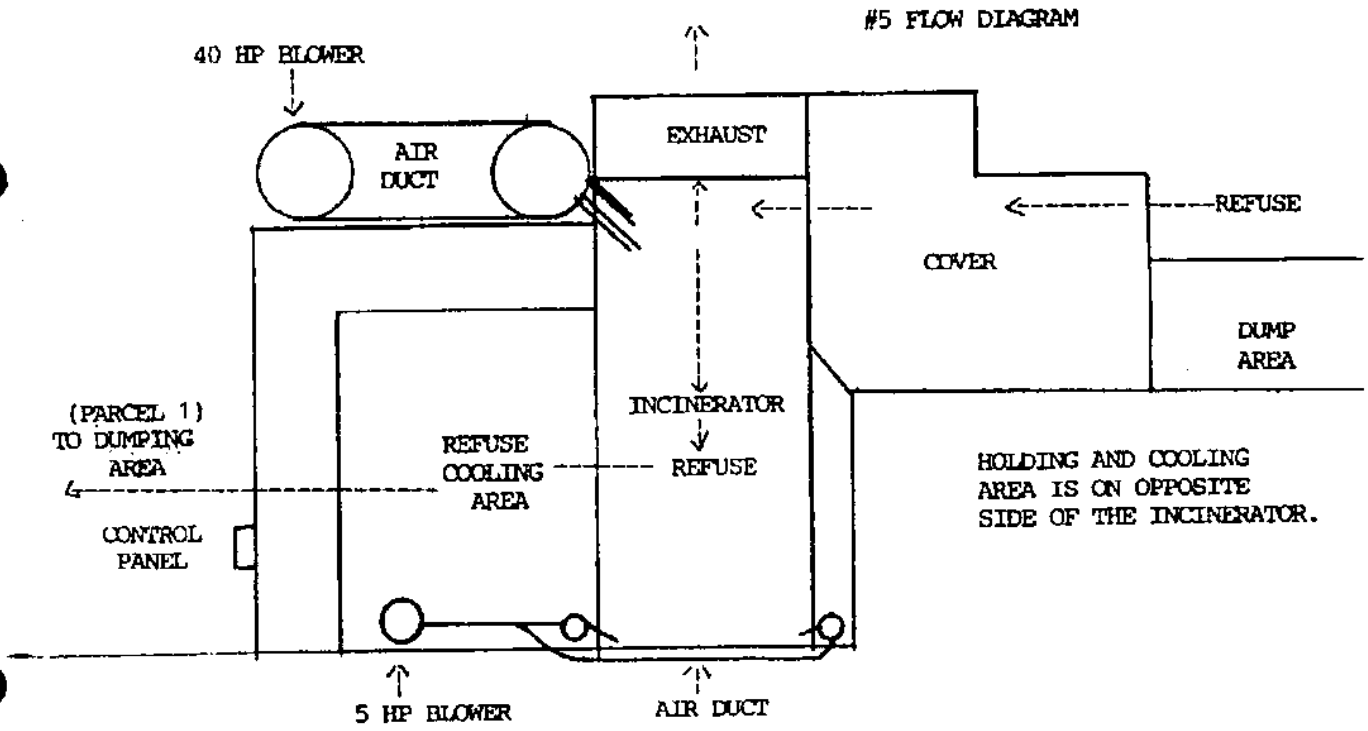
SKETCH OF INCINERATOR



40 HP BLOWER
AIR DUCT 2' FEET
DIAMETER INTO
6" INCH PIPE.

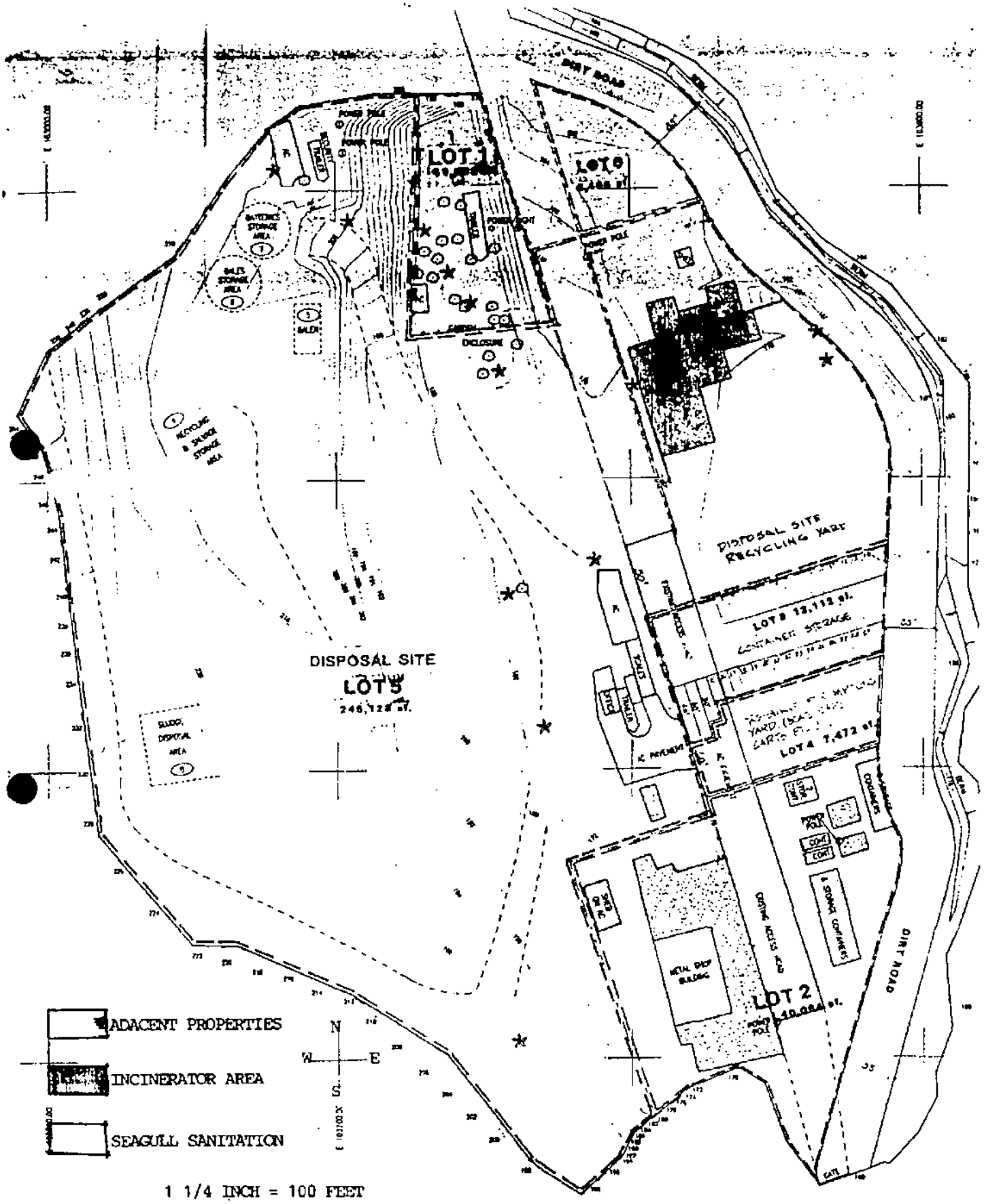
5 HP BLOWER
AIR DUCT 8" INCHES
IN DIAMETER TO
8" INCH DIAMETER
AIR DUCT TO 4
INCH PIPE.

SKETCH OF INCINERATOR



1. The incinerator is in operation approximately five to seven days a week, eight to ten hours a day.

2. Approximately two tons of material is processed per hour. Approximately fifteen tons per eight hours a day, six days a week.


LOT 1
LOT 6
DISPOSAL SITE
LOT 5
DISPOSAL SITE
RECYCLING YARD
LOT 2
DIRT ROAD
ADACENT PROPERTIES
INCINERATOR AREA
SEAGULL SANITATION
N
W
E
S
1 1/4 INCH = 100 FEET

PRE-SCREENING FEE ASSESSMENT SHEET

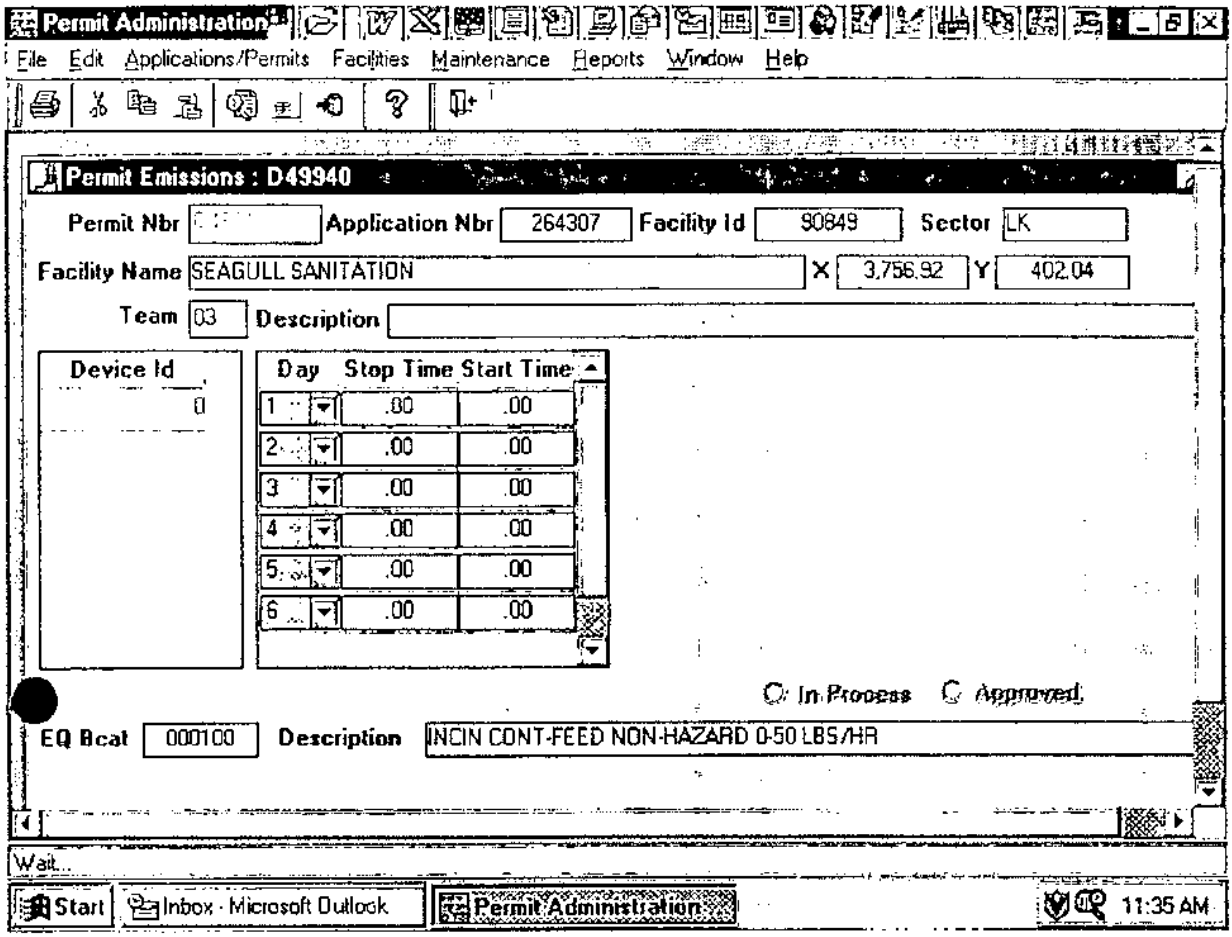
Company Name : SEAGULL SANITATION Small Business ? ____ Yes ✓ No

	Unit No.	Equipment Description (BCAT or CCAT) 000100	Appl Type	Mult Equip (✓)	50% Penal (✓)	Fee	Comment
1	3	REFUSE BURNER (000188)	40			#900	change of ownership
2							
3							
4							
5							
6							
7							
8							
9							
10							
					TOTAL		

Application Type :		50% Penalty Fee
10	P/C (New Construction)	No
15	Banking (ERC)	No
20	P/O (Equip did not need P/C)	No
25	Plan	No
30	P/O no P/C	Yes
40	Change of Ownership	No
50	Alter/Mod - Class I	No
	Class III	Yes
60	Change of Condition	No

REVIEWED BY: [signature] UNIT #: 3
Date Reviewed: 3/12/14 Ext #: x584

CO12


Permit Administration
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Permit Emissions : D49940
Permit Nbr
Application Nbr 264307
Facility Id 90849
Sector LK
Facility Name SEAGULL SANITATION
X 3,756.92
Y 402.04
Team 03
Description
Device Id
0
Day Stop Time Start Time
1 .00 .00
2 .00 .00
3 .00 .00
4 .00 .00
5 .00 .00
6 .00 .00
In Process
Approved
EQ Bcat 000100
Description INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR
Wait...
Start
Inbox - Microsoft Outlook
Permit Administration
11:35 AM

commencement of this vital phase of maintenance such as weather conditions and the necessary completion of other phases of the ongoing bridge maintenance frustrate scheduling that far in advance.

In accordance with 33 CFR 117.35(c), this work will be performed with all due speed in order to return the bridge to normal operation as soon as possible. This deviation from the operating regulations is authorized under 33 CFR 117.35.

Dated: March 16, 2001.

G.N. Naccara,

Rear Admiral, U.S. Coast Guard, Commander, First Coast Guard District.

[FR Doc. 01–7512 Filed 3–26–01; 8:45 am]

BILLING CODE 4910–15–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 60

[AD–FRL–6939–9]

RIN 2060–AF91

Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; correction.

SUMMARY: Final standards and guidelines for new commercial and industrial solid waste incineration units were promulgated on December 1, 2000 (65 FR 75338). Table 1 to Subpart CCCC—Emission Limitations (65 FR 75360) inadvertently omitted two emission limits (cadmium and carbon monoxide). As a result, we are republishing Table 1.

EFFECTIVE DATE: March 27, 2001.

Docket. Docket No. A–94–63 contains the supporting information used in developing the final standards and guidelines and is available for public inspection and copying between 8 a.m. and 5:30 p.m., Monday through Friday, at the Air and Radiation Docket and Information Center, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, telephone (202) 260–7548, fax (202) 260–4000. The docket is available at the above address in Room M–1500, Waterside Mall (ground floor, central mall). A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT: Fred Porter, Combustion Group, Emission Standards Division (MD–13), U.S. EPA, Research Triangle Park, North Carolina 27711, (919) 541–5251, e-mail: *porter.fred@epa.gov.*

SUPPLEMENTARY INFORMATION:

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a "significant regulatory action" and is, therefore, not subject to review by the Office of Management and Budget. Because we have made a "good cause" finding that this action is not subject to notice-and-comment requirements under the Administrative Procedure Act or any other statute, it is not subject to the regulatory flexibility provisions of the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*), or to sections 202 and 205 of the Unfunded Mandates Reform Act of 1995 (UMRA) (Public Law 104–4). In addition, this action does not significantly or uniquely affect small governments or impose a significant intergovernmental mandate, as described in sections 203 and 204 of UMRA. This action also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). On January 1, 2001, Executive Order 13084 was superseded by Executive Order 13175; however, this rule was developed during the period when Executive Order 13084 was still in force, and so tribal considerations were addressed under Executive Order 13084. This action will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

This action does not involve technical standards; thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This action also does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). In taking this action, we have taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct, as required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996). We have complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of this action rule in accordance with the "Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings" issued under the executive order. This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). The EPA's compliance with these statutes and Executive Orders for the underlying standards and guidelines is discussed in the December 1, 2000, **Federal Register** notice promulgating the final standards and guidelines (65 FR 75338).

The Congressional Review Act (5 U.S.C. 801 *et seq.*), as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. Section 808 allows the issuing agency to make a rule effective sooner than otherwise provided by the Congressional Review Act if the agency makes a good cause finding that notice and public procedure is impracticable, unnecessary or contrary to the public interest. This determination must be supported by a brief statement (5 U.S.C. 808(2)). As stated previously, we have made such a good cause finding, including the reasons therefore. The EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rules in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(a).

List of Subjects in 40 CFR Part 60

Environmental protection, Air pollution control, Carbon monoxide, Metals, Nitrogen dioxide, Particulate matter, Sulfur oxides, Waste treatment and disposal.

Dated: January 19, 2001.

Robert Perciasepe,

Assistant Administrator for Air and Radiation.

For the reasons stated in the preamble, title 40, chapter I, part 60 of the Code of Federal Regulations is amended as follows:

PART 60—[AMENDED]

1. The authority citation for part 60 continues to read as follows:

Authority: 42 U.S.C. 7401, 7411, 7414, 7416, 7429, and 7601.

E. What Are the Requirements for Air Curtain Incinerators?

The NSPS and EG establish opacity limitations for air curtain CISWI units burning:

- 100 percent wood wastes,
- 100 percent clean lumber, or
- 100 percent mixture of only wood waste, clean lumber, and/or yard waste.

The opacity limitation is 10 percent, except 35 percent opacity is allowed during startup periods that are within the first 30 minutes of operation.

III. Significant Issues and Changes

A total of 95 comments letters were received during the public comment period for the proposed CISWI rule, which ended on January 31, 2000. Among the comments received, the most significant issues addressed applicability, the definition of solid waste, and the MACT floor approach and emission limitations. The issues are addressed below, and other issues raised in the comments are addressed in a comment and response document contained in the docket.

A. Are very small municipal waste combustion units covered?

Commenters questioned whether very small municipal waste combustion (MWC) units (*i.e.*, units that combust less than 35 tons (31.8 megragrams (Mg)) of municipal solid waste per day) are covered by the proposed NSPS and EG. We did not intend to cover very small MWC units, and the final NSPS and EG have been clarified to ensure they are not covered.

The intent of the NSPS and EG for CISWI units is to cover incinerators burning commercial and industrial solid waste, not combustors burning municipal solid waste.

B. Are cyclonic barrel burners covered?

Several commenters questioned whether cyclonic barrel burners are covered by the proposed NSPS and EG. We did not intend to cover cyclonic barrel burners, and the final NSPS and EG have been clarified to ensure they are not covered.

A cyclonic barrel burner is a portable device for burning materials that can be attached to a 55 gallon, open-head drum. The device consists of a lid that fits onto the drum and is connected to a blower that feeds combustion air to the drum in a cyclonic or swirling manner to enhance the combustion of the material. We were not aware of the small combustion devices when developing the proposed regulations, and, as a result, had no information on the devices. Information on cyclonic barrel burners is currently being gathered, and the devices will be evaluated separately from the CISWI category.

C. Has the Definition of a CISWI Unit or Solid Waste Changed?

Section 129(g)(1) and (6) create a specialized definition of "solid waste incineration unit" that depends in part on the definition of "solid waste" contained in section 1004(27) of the Resource Conservation and Recovery Act (RCRA). The overall intent of the CAA provisions is that section 129 rules are to apply to devices conventionally regarded as incinerators, that is, devices burning wastes in order to destroy the wastes. For purposes of promulgating regulations applicable to commercial and industrial solid waste incinerators, it is particularly important to distinguish between units that will be regulated as boilers as well as other devices whose primary purpose is energy recovery (such as process heaters), and devices that will be regulated as incinerators under section 129 of the CAA. The distinction is necessary to avoid dual regulation of the many combustion units in use at commercial and industrial facilities that function as energy recovery devices and may be subject to regulation under other sections of the CAA.

Our proposed definitions of solid waste and CISWI unit reflected this broad principle of distinguishing boilers and other energy recovery devices from incinerators. However, as explained below, our proposed definitions proved inadequate to distinguish boilers from incinerators within the category of sources. Therefore, in the final NSPS and EG, we have modified our definitions of solid waste and CISWI unit.

For purposes of this rule, we are adopting a revised definition of solid waste that reflects the definition in the Solid Waste Disposal Act (SWDA) and which is reiterated in the regulation promulgated by the Administrator pursuant to the SWDA. We emphasize that the definition is adopted solely for purposes of section 129 in order to implement the principles of that section. We note that the RCRA regulatory definition of solid waste, which effectively determines the scope of the regulatory program for hazardous wastes (since hazardous wastes are a subset of solid wastes (see RCRA section 1004(5)), defines secondary materials burned for energy recovery as solid wastes (40 CFR 261.2(c)(2)). The classification implements both an explicit directive in RCRA to regulate wastes burned for energy recovery (RCRA sections 3004(q), (r) and (s)), as well as the RCRA statutory definition of solid waste. See also *Horsehead Resource Development Corp. v. Browner*, 16 F. 3d 1246 (D.C. Cir. 1994) (upholding the rules implementing RCRA section 3004(q)). We reemphasize that the final CISWI NSPS and EG in no way affect those existing (and long-standing) RCRA provisions or reflect any type of Agency decision about the permissible scope of the RCRA statutory definition of solid waste. Our purpose here is only to adapt that definition to reflect the regulatory purpose of CAA section 129.

Many commenters stated that the definitions of solid waste and CISWI unit in the proposed NSPS and EG were too broad, and, therefore, would inappropriately cover some boilers, process heaters, and possibly other units that recover energy from the burning of fuels. The commenters stated their belief that commercial and industrial combustion units that recover energy were intended to be regulated under section 112 of the CAA, and that only incinerators that burn wastes for destruction alone were intended to be regulated as CISWI units.

The comments pointed to two primary reasons why the proposed NSPS and EG for CISWI units would inadvertently cover some units that recover energy, such as boilers and process heaters. First, many legitimate energy recovery units are physically separated from their associated energy recovery systems. The units would not meet the requirement that heat recovery must be part of a unit's "integral" design for it not to be considered a CISWI unit. Second, the universe of materials burned for energy recovery is much broader than those defined as "fuels." For example, several of today's combustion technologies and some new emerging technologies can burn materials for energy recovery having heat values less than the proposed 5,000 British thermal units per pound (Btu/lb) threshold for considering a material a fuel.

As a result, the commenters suggested that the NSPS and EG for CISWI units be changed so that units that recover energy not be considered incinerators. Without such a change, units could be regulated both as CISWI units under section 129 and as boilers, for example, under section 112. Such a potential overlap in regulations could create confusion as well as inconsistent and conflicting regulatory requirements, according to some commenters.

We agree that units physically separated from their associated energy recovery systems may be legitimate energy recovery devices. Therefore, we

...blic docket and publish ...e Federal Register. If, at a ...n existing CISWI unit is ...our State, the Federal plan ...nting the emission guidelines ...ed in this subpart would ...tically apply to that CISWI unit ...your State plan is approved.

...2535 What compliance schedule must ...clude in my State plan?

(a) Your State plan must include compliance schedules that require *CISWI units to achieve* final compliance as expeditiously as practicable after approval of the State plan but not later than the earlier of the two dates specified in paragraphs (a)(1) and (2) of this section.

(1) December 1, 2005.

(2) Three years after the effective date of State plan approval.

(b) For compliance schedules more than 1 year following the effective date ...tate plan approval, State plans must ...lude dates for enforceable increments of progress as specified in § 60.2580.

§ 60.2540 Are there any State plan requirements for this subpart that apply instead of the requirements specified in subpart B?

Yes. Subpart B establishes general requirements for developing and processing section 111(d) plans. This subpart applies instead of the requirements in subpart B of this part for paragraphs (a) and (b) of this section:

(a) State plans developed to implement this subpart must be as *protective as the emission* guidelines contained in this subpart. State plans must require all CISWI units to comply by December 1, 2005 or 3 years after the ...fective date of State plan approval, ...whichever is sooner. This applies instead of the option for case-by-case less stringent emission standards and longer compliance schedules in § 60.24(f).

(b) State plans developed to implement this subpart are required to include two increments of progress for *the affected* CISWI units. These two minimum increments are the final control plan submittal date and final compliance date in § 60.21(h)(1) and (5). This applies instead of the requirement of § 60.24(e)(1) that would require a State plan to include all five increments of progress for all CISWI units.

§ 60.2545 Does this subpart directly affect CISWI unit owners and operators in my State?

(a) No. This subpart does not directly affect CISWI unit owners and operators in your State. However, *CISWI unit* owners and operators must comply with the State plan you develop to implement the emission guidelines contained in this subpart. States may choose to incorporate the model rule text directly in their State plan.

(b) If you do not submit an approvable plan to implement and enforce the guidelines contained in this subpart by December 2, 2002, the EPA will implement and enforce a Federal plan, as provided in § 60.2525, to ensure that each unit within your State reaches compliance with all the provisions of this subpart by December 1, 2005.

Applicability of *State Plans*

§ 60.2550 What CISWI units must I address in my State plan?

(a) Your State plan must address incineration units that meet all three criteria described in paragraphs (a)(1) through (3) of this section.

(1) Incineration units in your State that commenced construction on or before November 30, 1999.

(2) Incineration units that meet the definition of a CISWI unit as defined in § 60.2875.

(3) Incineration units not exempt under § 60.2555.

(b) If the owner or operator of a CISWI unit makes changes that meet the definition of modification or reconstruction on or after June 1, 2001, the CISWI unit becomes subject to subpart CCCC of this part and the State plan no longer applies to that unit.

(c) If the owner or operator of a CISWI unit makes physical or operational changes to an existing CISWI unit primarily to comply with your State plan, subpart CCCC of this part *does not* apply to that unit. Such changes do not qualify as modifications or reconstructions under subpart CCCC of this part.

§ 60.2555 What combustion units are exempt from my State plan?

This subpart exempts fifteen types of units described in paragraphs (a) through (o) of this section.

(a) *Pathological waste incineration units.* Incineration units burning 90 *percent or more* by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste as defined in § 60.2875 are not subject to this subpart if you meet the two requirements specified in paragraphs (a)(1) and (2) of this section.

(1) Notify the Administrator that the unit meets these criteria.

(2) Keep records on a calendar quarter basis of the weight of pathological waste, low-level radioactive waste, and/or chemotherapeutic waste burned, and the weight of all other fuels and wastes burned *in the unit.*

(b) *Agricultural waste incineration units.* Incineration units burning 90 percent or more by weight (on a calendar quarter basis and excluding the weight of auxiliary fuel and combustion air) of agricultural wastes as defined in § 60.2875 are not subject to this subpart if you meet the two requirements specified in paragraphs (b)(1) and (2) of this section.

(1) Notify the Administrator that the unit meets these criteria.

(2) *Keep records on* a calendar quarter basis of the weight of agricultural waste burned, and the weight of all other fuels and wastes burned in the unit.

(c) *Municipal waste combustion units.* Incineration units that meet either of the two criteria specified in paragraphs (c)(1) or (2) of this section.

(1) Are regulated under subpart Ea of this part (Standards of Performance for Municipal Waste Combustors); subpart Eb of this part (Standards of Performance for Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994); subpart Cb of this part (Emission Guidelines and Compliance Time for Large Municipal Combustors that are Constructed on or Before September 20, 1994); subpart AAAA of this part (Standards of Performance for New Stationary Sources: Small Municipal Waste Combustion Units); or subpart BBBB of this part (Emission Guidelines for Existing Stationary Sources: Small Municipal Waste Combustion Units).

(2) Burn greater than 30 percent municipal solid waste or refuse-derived fuel, as defined in subpart Ea, subpart Eb, subpart AAAA, and subpart BBBB, and that have the capacity to burn less than 35 tons (32 megagrams) per day of municipal solid waste or refuse-derived fuel, if you meet the two requirements in paragraphs (c)(2)(i) and (ii) of this section.

(i) Notify the Administrator that the unit meets these criteria.

(ii) Keep records on a calendar quarter basis of the weight of municipal solid waste burned, and the weight *of all* other fuels and wastes burned in the unit.

(d) *Medical waste incineration units.* Incineration units regulated under subpart Ec of this part (Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996) or subpart Ce of this part (Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators).

(e) *Small power production facilities.* Units that meet the three requirements

B. Subcategorization of the Small MWC Unit Population
C. Pollutants Regulated by the Emission Guidelines
D. Format of the Emission Limits
E. Summary of the Emission Guidelines
III. Changes to the Emission Guidelines
IV. Impacts of the Emission Guidelines
A. Air Impacts
B. Cost and Economic Impacts
V. Companion Rule for New Small MWC Units
VI. Amendments to 40 CFR Part 60, Subpart B
VII. Administrative Requirements
A. Executive Order 12866: Regulatory Planning and Review
B. Executive Order 13132: Federalism
C. Executive Order 13084: Consultation and Coordination with Indian Tribal Governments
D. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks
E. Unfunded Mandates Reform Act
F. Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 *et seq.*
C. Paperwork Reduction Act
H. National Technology Transfer and Advancement Act
I. Congressional Review Act

Abbreviations and Acronyms Used in This Document

ASME American Society of Mechanical Engineers
CFR Code of Federal Regulations
EIA Economic Impact Analysis
EPA U.S. Environmental Protection Agency
FR Federal Register
ICR Information Collection Request
kg/year Kilograms per year
MACT Maximum achievable control technology
Mg/year Megagrams per year
MSW Municipal solid waste
MWC Municipal waste combustion
NAICS North American Industrial Classification System
NSPS New source performance standards
NTTAA National Technology Transfer and Advancement Act
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
OP Office of Policy
Pub. L. Public Law
RFA Regulatory Flexibility Act
SBREFA Small Business Regulatory Enforcement Fairness Act
SIC Standard Industrial Classification
TTN Technology Transfer Network
UMRA Unfunded Mandates Reform Act
U.S. United States
U.S.C. United States Code

I. Background Information

On December 19, 1995, EPA promulgated emission guidelines for large and small MWC units under 40 CFR part 60, subpart Cb. The emission guidelines covered existing MWC units located at plants with an aggregate plant combustion capacity greater than 35 megagrams per day of municipal solid waste (MSW) (approximately 39 tons per day of MSW). The 1995 emission guidelines divided the MWC unit population into MWC units located at large MWC plants and MWC units located at small MWC plants. Plant size was based on the total aggregate capacity of all individual MWC units at a MWC plant.

Litigation followed the promulgation of the 1995 emission guidelines. In 1997, the U.S. Court of Appeals for the District of Columbia Circuit ruled that EPA must develop regulations for small MWC units (units with an individual MWC capacity of 250 tons per day or less) separately from regulations for large MWC units (units with an individual MWC unit capacity greater than 250 tons per day), indicating that the 1995 emission guidelines were not consistent with section 129 of the CAA. The court directed EPA to revise the 1995 emission guidelines so that they applied only to large MWC units, and the court vacated the 1995 emission guidelines as they applied to small MWC units. In response to the court ruling, EPA amended the 1995 emission guidelines on August 25, 1997 so that they applied only to existing large MWC units. Then, on August 30, 1999, EPA proposed emission guidelines for small MWC units with an individual unit capacity of 35 to 250 tons per day.

Today's final rule reestablishes emission guidelines for existing small MWC units with capacities of 35 to 250 tons per day of MSW under 40 CFR part 60, subpart BBBB.

II. Summary of the Emission Guidelines

The following summarizes the final emission guidelines for small MWC units, including identification of the subcategories used in the final emission guidelines. Overall, the emission guidelines for small MWC units are equivalent to the 1995 emission guidelines for small MWC units.

A. Sources Regulated by the Emission Guidelines

Today's emission guidelines do not directly regulate any MWC units, but they require States to develop plans to limit air emissions from existing small MWC units. In subpart BBBB and in associated State plans, the emission limits and requirements will apply to each existing small MWC unit that has a design combustion capacity of 35 to 250 tons per day of MSW and commenced construction on or before August 30, 1999. Small MWC units that commenced construction after August 30, 1999 are not covered under the emission guidelines (subpart BBBB). Those units will be subject to the NSPS for new small MWC units (subpart AAAA) which are published separately in today's Federal Register.

B. Subcategorization of the Small MWC Unit Population

Within the emission guidelines, the small MWC unit population is subcategorized based on aggregate capacity of the plant where the individual small MWC unit is located. The resulting subcategories are as follows: Class I units are small MWC units located at plants with an aggregate plant capacity greater than 250 tons per day of MSW; Class II units are small MWC units located at plants with an aggregate plant capacity less than or equal to 250 tons per day of MSW.

C. Pollutants Regulated by the Emission Guidelines

Section 129 of the CAA requires EPA to establish numerical emission limits for dioxins/furans, cadmium, lead, mercury, particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, and carbon monoxide. Section 129 specifies that EPA may also:

> * * * promulgate numerical emission limitations or provide for the monitoring of post-combustion concentrations of surrogate substances, parameters, or periods of residence times in excess of stated temperatures with respect to pollutants other than those listed [above] * * *.

Therefore, in addition to emission limits, EPA is establishing requirements for MWC unit operating load, flue gas temperature at the particulate matter control device inlet, and carbon feed rate as part of the good combustion practice requirements. The EPA is also establishing requirements for the control of fugitive ash emissions. All of those requirements were contained in the 1995 emission guidelines.

D. Format of the Emission Limits

The format of the emission limits is identical to the format of the emission limits in the 1995 emission guidelines: emission limits based on pollutant concentration. Alternative percentage reduction requirements are provided for mercury, sulfur dioxide, and hydrogen chloride. Opacity and fugitive ash requirements are the same as the 1995 emission guidelines. In addition to controlling stack emissions, the emission guidelines incorporate good combustion practice requirements (*i.e.*, operator training, operator certification, and MWC unit operating requirements).

Gaurang Rawal

From: Charles Tupac
Sent: Friday, September 07, 2001 11:21 AM
To: Gaurang Rawal; Fred Lettice
Subject: RE: Request for R301(y) O/T Approval

ok

-----Original Message-----
From: Gaurang Rawal
Sent: Friday, September 07, 2001 11:12 AM
To: Fred Lettice
Cc: Charles Tupac
Subject: Request for R301(y) O/T Approval

Fred,

Your approval is requested for the Rule 301(y) overtime for the Saturday 9/8/01 and Monday 9/10/01 to work on,

Saturday, 9/8/01- Plan to work about 5 hrs. on A/N 386703, an SVE system for ARCO Products Co. The consultant has repeatedly requested to expedite permit. Part of the permit was completed, however, due to revised vapor concentrations and modeling analysis, it needs to be revisited to finalize. Application is subject to Rule 212 public notice.

Monday, 9/10/01- Plan to work about 7 hrs. on A/N 387479, Seagull Sanitation. This is an ERC application for refuse pit burner.

Thanks,
Gaurang Rawal

WESTON BENSHOOF
ROCHEFORT RUBALCAVA MACCUISH LLP
ATTORNEYS AT LAW

srubalcava@wbcounsel.com

July 16, 2001

VIA UPS NEXT DAY

Gorang Rawal
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Re: Consolidated Disposal Services, LLC
Application for Emission Reduction Credits, Certificate of Title
Permit/Application No. 264223 → 387479

Dear Mr. Rawal

As we discussed, we are requesting expedited processing of the above-referenced application for emission reduction credits. Enclosed is a copy of Express Permit Processing Request Form 400 - XPP.

Please call me if you need any additional information.

Very truly yours,

Sharon Rubalcava

Sharon Rubalcava
WESTON, BENSHOOF,
ROCHEFORT, RUBALCAVA & MacCUISH LLP

SFR/dtc
Enclosure

cc: David Barclay (w/enclosure)

444 SOUTH FLOWER STREET, FORTY-THIRD FLOOR • LOS ANGELES, CA 90071 • TEL 213 623 2322 • FAX 213 623 0824
ONE BOARDWALK, SUITE 102 • THOUSAND OAKS, CA 91360 • TEL 805 497 9474 • FAX 805 497 8804
www.wbcounsel.com

South Coast Air Quality Management District
P. O. Box 4944
Diamond Bar, CA 91765
(909) 396-2000

Form 400-A and one or more 400-E-xx form(s) must accompany all submittals.

EXPRESS PERMIT PROCESSING REQUEST FORM
FORM 400 - XPP

Section I - Facility/Application Information

1. Business Name: **Consolidated Disposal Services, LLC** Facility ID: **090849**
2. The requested application is for a(n): *Date of Occurrence:*
   - a. New Construction
   - b. Change of Location
   - c. Modification of Equipment/Process
   - d. Existing Equipment with Expired Permit
   - e. Existing Equipment Operating without a Permit; Initial Operation Date:
   - f. Change of Condition(s); Specify the change of condition(s) requested:
   - g. Change of Operator; List previous name of operator and Facility ID #:
   - X **Application for ERC Certificate.**
3. I hereby request Express Permit Processing for this application.
4. I understand that this request will incur additional fees.
5. This request is not cancelable once engineering review has been initiated.
6. Express Permit Processing neither guarantees action by any specific date nor does I guarantee permit approval.

Section II - Equipment Information

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: [signature]

TITLE OF RESPONSIBLE OFFICIAL OF FIRM: Senior Vice President & General Counsel

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:	RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER	DATE SIGNED:
David A. Barclay	(954) 769-7217	7/12/01

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF PREPARER:

TITLE OF PREPARER:

TYPE OR PRINT NAME OF PREPARER:	PREPARER'S TELEPHONE NUMBER	DATE SIGNED:

AQMD USE ONLY	APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE: $	VALIDATION
ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

.oc

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SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM:

TITLE OF RESPONSIBLE OFFICIAL OF FIRM: SR. VICE PRESIDENT and General Counsel

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:	RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER	DATE SIGNED:
David A. Barclay	(954) 769-7217	7/12/01

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF PREPARER:

TITLE OF PREPARER:

TYPE OR PRINT NAME OF PREPARER:	PREPARER'S TELEPHONE NUMBER	DATE SIGNED:

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	SR. VICE PRESIDENT and General Counsel	
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David A. Barclay	(954) 769-7217	7/12/01

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF PREPARER:	TITLE OF PREPARER:	
TYPE OR PRINT NAME OF PREPARER:	PREPARER'S TELEPHONE NUMBER	DATE SIGNED:

AQMD USE ONLY	APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE: $	VALIDATION
ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

oc

Ship Another

DANA CAMACHO
2136232322
WESTON BENSHOOF
444 S. FLOWER ST.
LOS ANGELES CA 90071

LTR 1 OF 1

SHIP TO:
GORANG RAWAL
9093962000
SOUTH COAST AQMD
21865 E. COPLEY DRIVE
DIAMOND BAR CA 91765

CA 916 9-04

UPS NEXT DAY AIR **1**

TRACKING #: 1Z 913 676 01 9832 7595

BILLING: P/P

Reference No.1: 2873-014
Reference No.2: Republic

TM

XML 10000 WNTE501 LRC11 11/2000

ERC APN 387479 ID 90849
Submitted 6/13/01.

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 · http://www.aqmd.gov

6/28/01

Ron Krall, Vice President
Consolidated Disposal Services, LLC
Seagull Sanitation
12949 Telegraph Road
Santa Fe Springs, CA 90670

Facility ID: 90849 (Seagull Sanitation Facility)
Located at: # 1 Dump Road, Avalon, CA 90704

Thank you for filing your permit application(s) with the South Coast Air Quality Management District (AQMD).

The application number(s) assigned by AQMD to your application package(s) is/are on Page 2 of this letter. Please refer to the information on Page 2 when contacting AQMD for assistance. The information you submitted with your application(s) or in your latest submittal is complete to the extent that allows us to begin processing of your application(s), however some clarifying data may still be needed. The acceptance of your application(s) does not imply that permit(s) has/have been approved. The engineer assigned to process your application(s), as indicated below, may contact you if additional information is required.

If you have any questions or need additional information about your application(s), please contact the engineer listed below:

Engineer: Gaurang Rawal **Telephone:** (909) 396-2543

For general information about AQMD's permitting process, please call (909) 396-2468.

cc: Application file(s)

AQMD PERMIT APPLICATION INFORMATION

(Please refer to this information when contacting AQMD for Assistance)

6/28/01

Facility ID: 90849

Application Number(s)	Equipment Description
387479 *	INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR

* ERC Application.

Run Date : 06/27/2001 03:43 PM

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 90849 SEAGULL SANITATION
Last Inspection: 09/28/2000
SIC: 4953
Inspector: GJ01 GALE L JONES
Inspection Date: 09/28/2000
Location Address: 1 DUMP RD, AVALON 90704 Sector:LK
Mailing Address: 12949 E TELEGRAPH RD, SANTA FE SPRINGS 90670-4009 Sector:RM
Instruction:

MR: 1407
TS: TS53 - POTW, Public Owned Tr
Facility Status: Active
Assignment No. 637126
Disposition: Operating in Compliance at time of inspection

Contact: DAVID ATSRADA (310) 5100675
Quarter: 0010 - inspect in 3rd quarter, every year
On Hold:
Suspended:
Facility Team: K0

RECLAIM: N TITLE V: Y SIP: AIR:

	Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
_____	264223	M98589	05/12/1992	ACTIVE	248900	BCAT	STORAGE TANK GASOLINE	03/12/1992	PERMIT TO OPERATE GRANTED
_____	264307	D49940	03/18/1992	ACTIVE	000100	BCAT	INCIN CONT-FEED NON-HAZARD 0-50 LBS/HR	03/11/1992	PERMIT TO OPERATE GRANTED
_____	350251				555003	BCAT	TIERED (1-20 DEVICES) INITIAL TITLE V PERMIT APP	01/29/1999	ASSIGNED TO ENGINEER - CLASS III
_____	380758				666101	BCAT	RULE 1150.1 COMPLIANCE PLAN	02/01/2001	ASSIGNED TO ENGINEER - CLASS III
_____	387527				248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	06/12/2001	ASSIGNED TO ENGINEER - CLASS I

Report:

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

APPLICATION TO THE
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

for

EMISSION REDUCTION CREDITS FROM THE SHUTDOWN OF AN MSW PIT BURNER

at the

CONSOLIDATED DISPOSAL SERVICES, LLC
SEAGULL SANITATION FACILITY

Submitted by:

Consolidated Disposal Services, LLC
12949 Telegraph Road
Santa Fe Springs, CA 90670

June 2001

SUMMARY

Consolidated Disposal Services, LLC operates a municipal solid waste (MSW) pit burner at its Seagull Sanitation facility on Catalina Island. Consolidated Disposal Services is planning on shutting down the pit burner this summer and is applying for emission reduction credits (ERCs) available from the shutdown of the pit burner. The air pollution control system installed and operational on the pit burner consists of an air blanket system and exhaust vent screens for ash suppression.

The shutdown of the pit burner will result in reductions in emissions of oxides of nitrogen (NOx), carbon monoxide (CO), fine particulate matter (PM_{10}), volatile organic compounds (VOC), and oxides of sulfur (SOx). This application seeks ERCs for these emission reductions in accordance with District Rule 1306. Rule 1306 requires that ERCs be surplus of any emission reductions required for the pit burner to meet current BACT requirements. Based on a review of District, CARB, and EPA BACT/LAER determinations, there are no BACT/LAER determinations applicable to an MSW pit burner. Therefore, the existing air blanket system and screens constitute BACT for this pit burner and no additional BACT adjustments were made to the two-year baseline emission levels for the pit burner when calculating ERCs.

APPLICATION FOR
EMISSION REDUCTION CREDITS FROM THE
SHUTDOWN OF AN MSW PIT BURNER
AT
CONSOLIDATED DISPOSAL SERVICES, LLC
SEAGULL SANITATION FACILITY

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Attachment 3 - Detailed Emission Calculations

Attachment 4 – EPA BACT Determinations

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APPLICATION FOR
EMISSION REDUCTION CREDITS FROM THE
SHUTDOWN OF AN MSW PIT BURNER
AT
CONSOLIDATED DISPOSAL SERVICES, LLC
SEAGULL SANITATION FACILITY

PART I. PROJECT DESCRIPTION

A. Applicant's Name and Business Description

Name of Applicant:	Consolidated Disposal Services, LLC
Address:	12949 Telegraph Road Santa Fe Springs, CA 90670
General Business:	Municipal Solid Waste Processing and Disposal Operations
Submitting Officer:	Ron Krall Vice President
Type of Use Entitlement:	Consolidated Disposal Services, LLC owns and operates burner described in this application.

B. Type of Application

This document is an application for emission reduction credits (ERCs) from the shutdown of an MSW pit burner at the Seagull Sanitation facility (SCAQMD I.D. Number 090849).

C. Description of Facility

1. Site Location

The Consolidated Disposal Services' pit burner is located at the Seagull Sanitation facility on Catalina Island. Figure 1 shows the location of the facility.

2. General Purpose

The purpose of this application is to obtain ERCs in accordance with District Rule 1306 for emission reductions associated with the shutdown of the pit burner.

D. Process Description

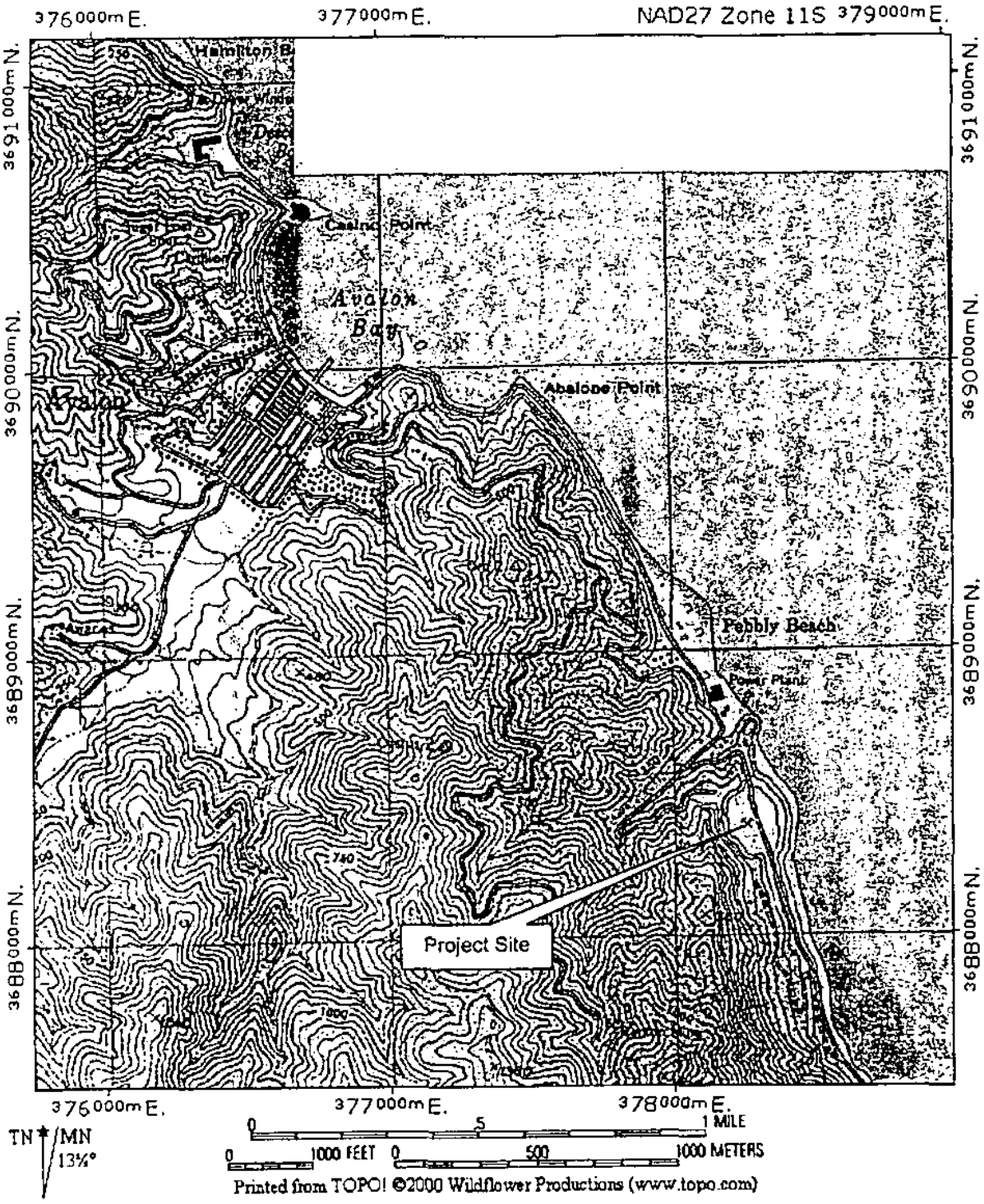
1. General Description

The pit burner was first installed in 1986 and is scheduled to be shut down this summer. The pit burner has a rated waste burning capacity of 10 tons/hr and is equipped with a 40 hp air blower that feeds air to an air curtain located above the burner pit and a 5 hp air blower that feeds air to vents at the bottom of the burner pit. Other than the 40 hp and 5 hp forced air blowers, the pit burner is not equipped with any other type of forced or induced draft fan system. The operating speed of the forced air blowers is not adjustable and there are no air dampeners of any kind on the air curtain or underfire air vents. The pit burner is not equipped with any auxiliary fuel source such as natural gas or fuel oil

burners. A small amount of waste, used cooking oil, and matches are used to ignite the waste in the pit burner. Once the fire is lit, additional waste is added to the pit burner for incineration. The burner pit is lined with refractory brick to protect the walls of the pit from heat.

Figure 1

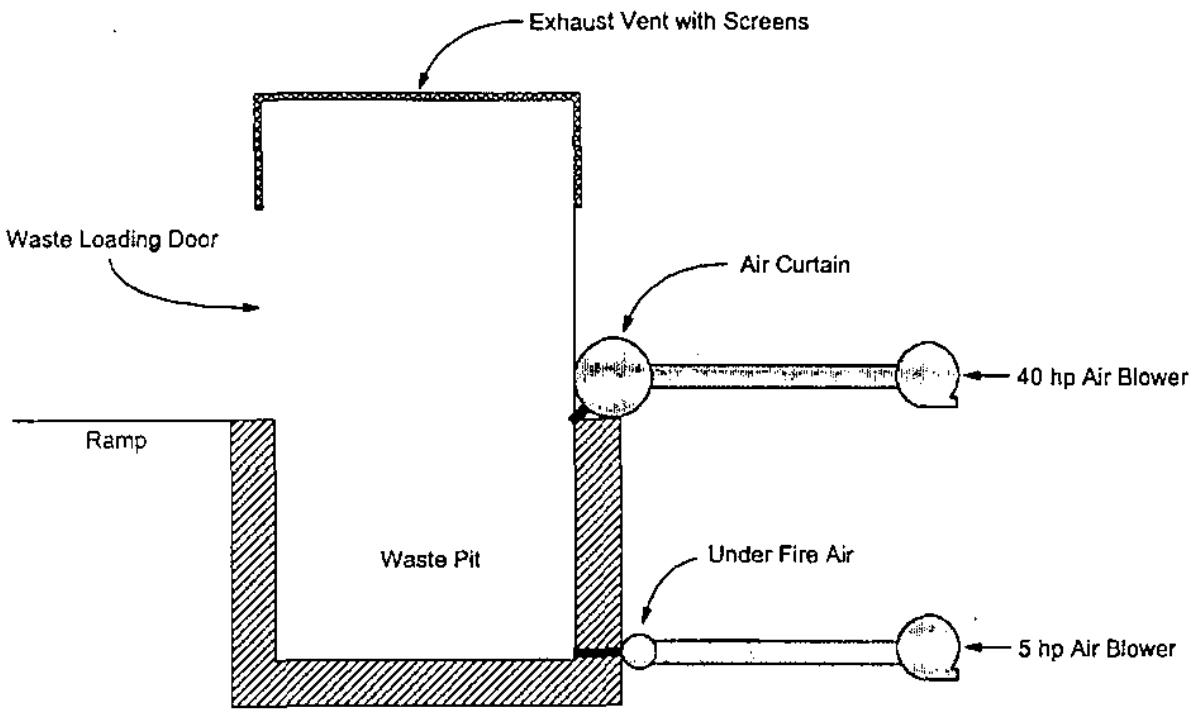
Location of Seagull Sanitation Facility



The pit burner is not equipped with waterwalls, boiler tubes, or any other type of heat recovery system. Exhaust from the pit burner is vented via natural draft to a 15-foot-high, 4-foot by 8-foot rectangular stack. Figure 2 shows a diagram of the pit burner and photographs of the pit burner are included as Attachment 1.

Figure 2

Equipment Diagram



2. Operating Schedule

Over the past 2 years, the pit burner operated an average of 312 days per year. During the high and mid tourist season on the Island from June 1 to December 31, the pit burner is operated 6 to 7 days per week. During the slow tourist season from January 1 to May 31, the pit burner is operated 5 to 6 days per week.

3. Pit Burner Equipment Description

Manufacturer:	Pactherm
Model:	N/A
Design Rating:	10 tons/hr
Permitted Rating:	4 tons/hr
Pit Dimensions	20 ft long, 8 ft wide, 12 ft deep

Included as Attachment 2 is a copy of the District's permit to operate for the pit burner.

E. Determination of Available ERCs

District Rule 1306 sets out the methodology for calculating ERCs from equipment shutdowns. Section c of this rule states that ERCs are calculated based on the actual emissions during the two-year period immediately preceding the date of a permit application. Under this regulation, actual emissions may be determined from Rule 301 annual emission reports. Because the District's annual emission reports are for the period from July 1 to June 30 of the following year, the 2000 – 2001 annual emission report will not be prepared for the pit burner until sometime after June 30, 2001. Therefore, the emission reductions in this ERC application are based on actual tons/day of waste burner

during the period from May 1, 1999, to April 30, 2001. Since no source tests have been performed on the pit burner, the emission factors in the last two Rule 301 annual emission reports for the facility were used to calculate the emission reductions for the shutdown of the pit burner.

Rule 1306 also requires that actual emission reductions be reduced to the amount of emissions that would be actual if current BACT were applied. A detailed BACT analysis for this project is included in Section II. As discussed in this analysis, no BACT determinations were found that are applicable to an MSW pit burner. Consequently, no additional BACT adjustments have been made to the actual emission reductions calculated in this application.

According to Rule 1306, BACT-adjusted annual emissions must be divided by the total number of actual operating days in each of the two years of operation to calculate daily emission reductions. The calculated daily emissions for each year must be multiplied by the following use factors:

- 1.0, when operated 180 days or more;
- 0.5, when operated 30 to 179 days; and
- 0.0, when operated less than 30 days.

As discussed above, the pit burner has been operated an average of 312 days per year during the past 2 years; therefore a use factor of 1.0 was used to calculate the amount of ERCs in this application. After corrections using the above use factors, the daily emission reductions for each year are averaged to determine the resulting daily ERC amounts.

Attachment 3 contains detailed emissions calculations for each operating month during the last two years of pit burner operation. Table 1 summarizes ERCs available from the shutdown of the pit burner.

Table 1
Emission Reduction Credits Available from the Shutdown of the Seagull Sanitation Pit Burner

	NOx (lbs/day)	CO (lbs/day)	VOC (lbs/day)	SOx (lbs/day)	PM_{10} (lbs/day)
2-Year Baseline	94	721	236	60	435
Amount of ERCs	94	721	236	60	435

A detailed discussion of the BACT review performed for the project is included in Section II of this application.

PART II. BACT ANALYSIS

Rule 1309 addresses the application, eligibility, registration, use, and transfer of ERCs. The Rule requires that an application for ERCs be submitted within 90 days after the emission reduction occurs. The Seagull Sanitation pit burner is scheduled for shutdown at the end of this summer. The Rule also sets out the eligibility requirements for ERCs. In general, the rule requires that the emission reductions applied toward ERCs be in excess of reductions that would have been required if the equipment were operating with current BACT. The emission reductions for the pit burner are not greater than the equipment would have achieved if operating with current BACT because the following BACT analysis shows that there are no BACT determinations applicable to a pit burner. Therefore, the existing pollution controls on the pit burner represent current BACT for this type of equipment.

To evaluate the current level of BACT that is applicable to the pit burner, we reviewed the SCAQMD BACT guideline for waste incinerators. This review found no SCAQMD BACT determinations for waste incinerators, furnaces, or combustors.

The ARB's BACT Clearinghouse Database was also reviewed for recent BACT decisions regarding waste incinerator projects in California. The only BACT determination found for waste incinerators was for a waste-gas incinerator at a tertiary oil recover operation located in the San Joaquin Valley. Since this BACT determination is not relevant to an MSW combustion device, it is not listed in this analysis.

The EPA RACT-BACT-LAER Clearinghouse (RBLC) was also consulted to review EPA BACT decisions for MSW combustion pit burners. A summary of these determinations is included as Attachment 4. As shown by these determinations, BACT for MSW incinerators includes ammonia injection for NOx control, spray dryers and wet scrubbers for SOx control, and electrostatic precipitators and baghouses for particulate controls. All

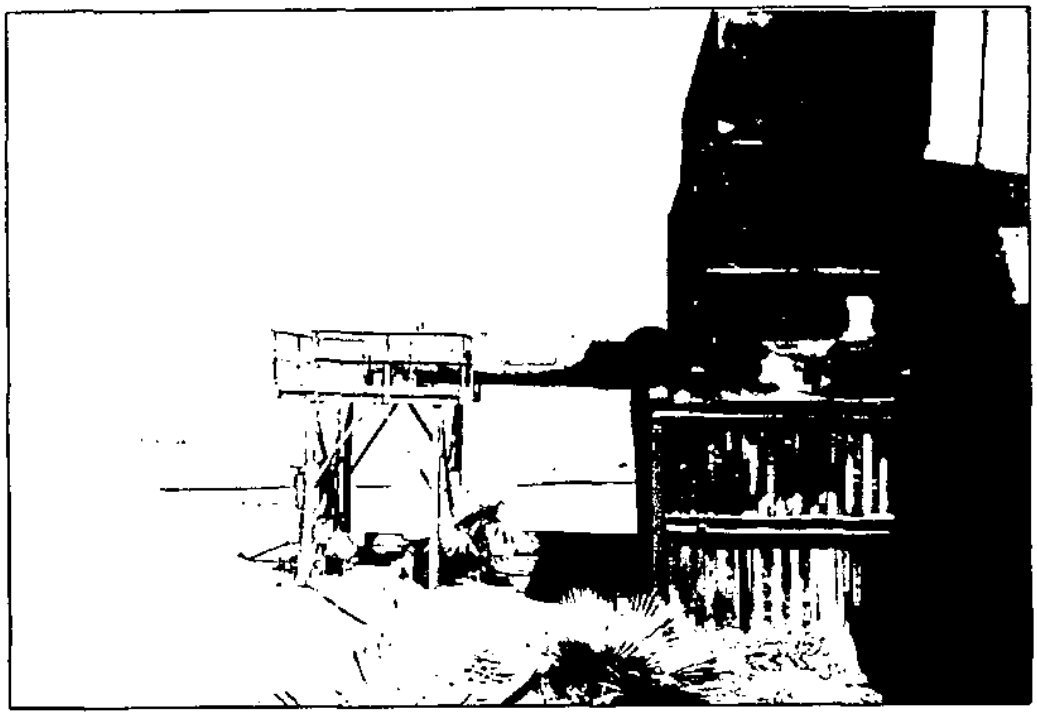
of the equipment descriptions were reviewed to identify which BACT determinations were for equipment similar to a pit burner. This review concluded that all of the BACT determinations listed by EPA were for conventional mass burn, refuse-derived fuel, or modular-type incinerators.

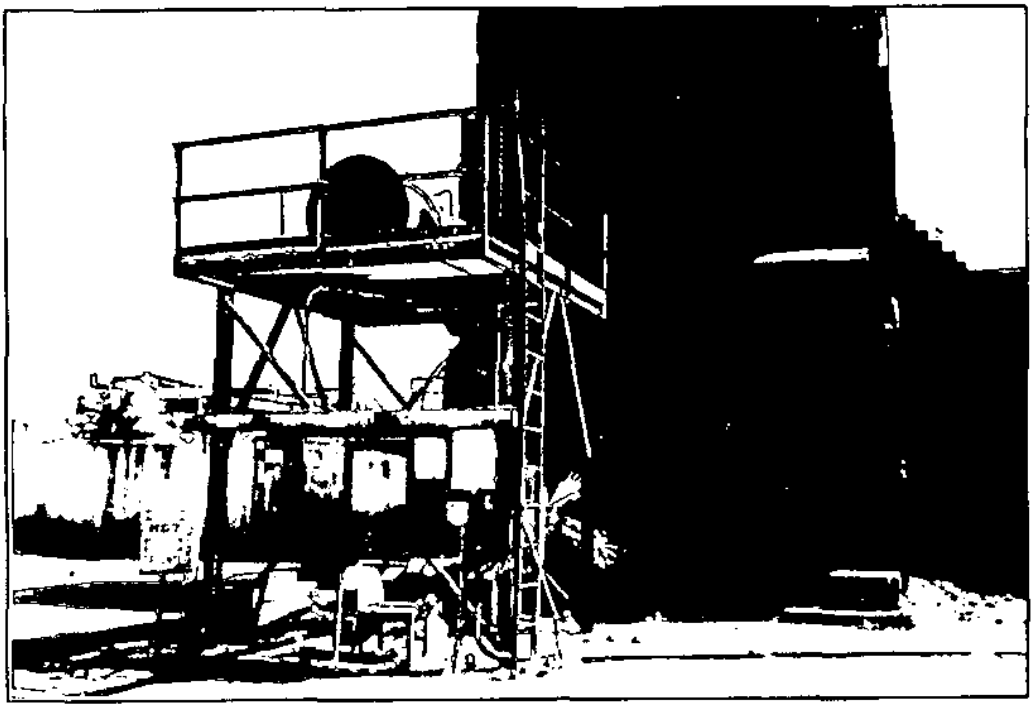
For mass burn incinerators, waste is placed on a moving grate in the combustor. This type of design allows for exact control of underfire and overfire combustion air. In addition to moving grate type incinerators, mass burn incinerators can include rotary kiln-type combustors where waste is burned in a rotating combustor barrel. Refuse-derived fuel incinerators burn pre-processed MSW that is mixed with other types of fuel including pulverized coal. Refuse-derived fuel incinerators typically include spreader stoker and fluidized bed type combustors. Modular incinerators are typically ram feed multi-chamber-type incinerators where the primary combustion chamber is operated at sub-stoichiometric levels. The exhaust from the primary chamber is routed to a second combustion chamber where additional air is added and combustion is completed. None of the BACT determinations listed in the EPA clearinghouse for mass burn, refuse-derived, and modular incinerators are applicable to a pit burner.

As discussed above, no BACT determinations found in the SCAQMD, ARB, or EPA BACT clearinghouses were applicable to an MSW pit burner. Consequently, the existing pollution controls on the Seagull Sanitation pit burner (i.e., air curtain/vent screens) are current BACT for this type of equipment.

Attachment 1

Photographs of Pit Burner

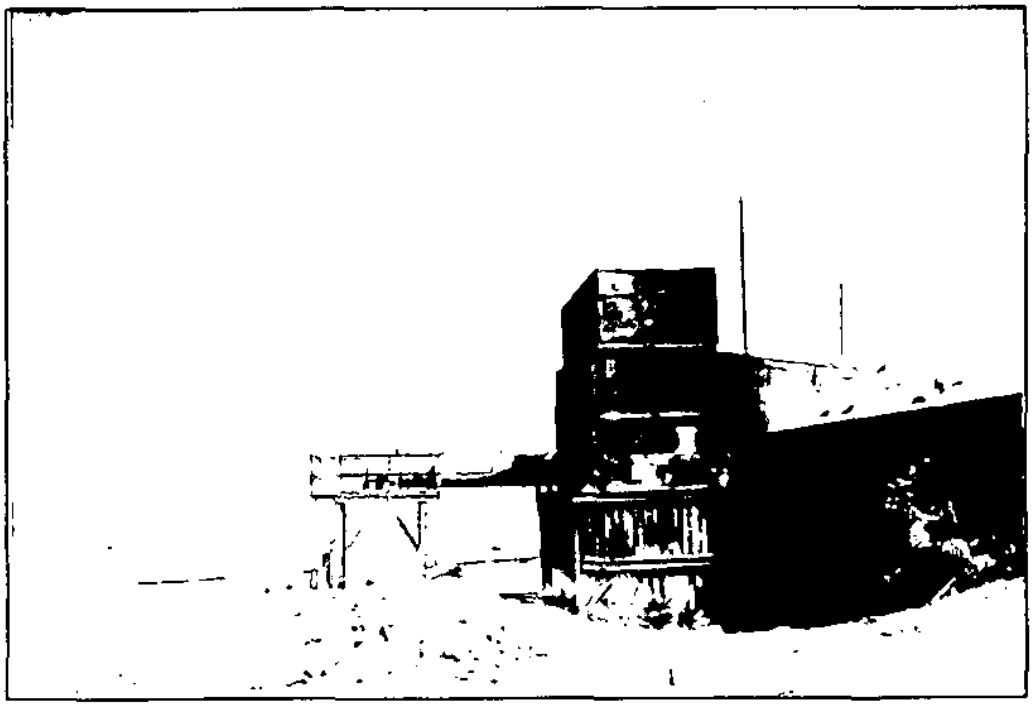


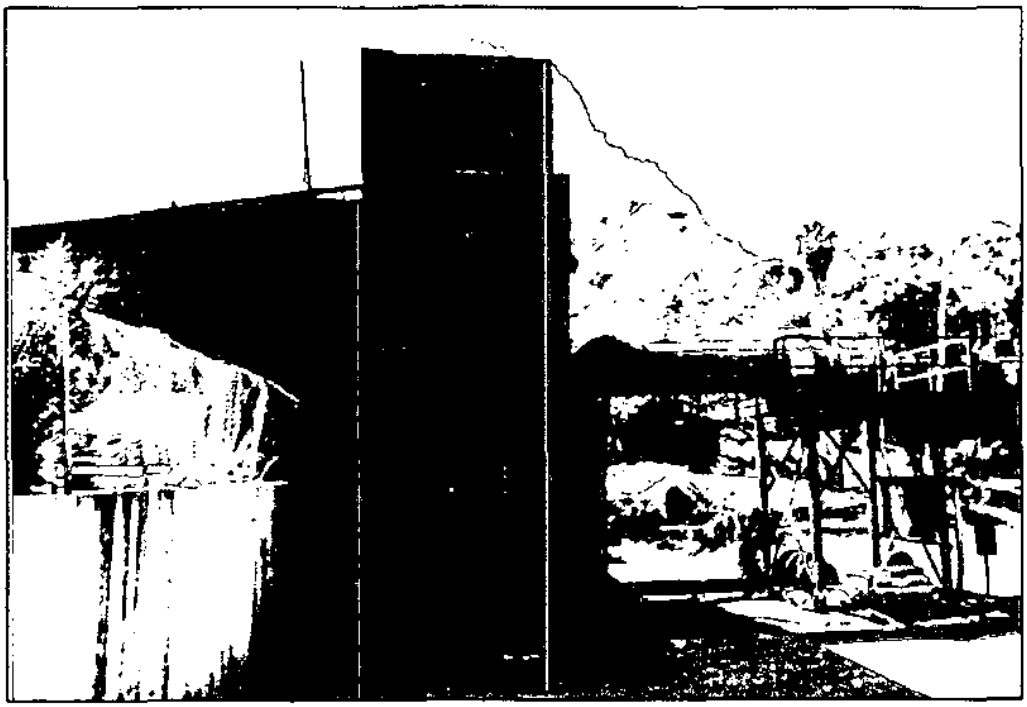












Attachment 2

District Permit For Pit Burner

21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

CC USR 264307

M98589 A/N 264223 Page 1

Storage Nr Reactive AQMD Records

D49940 A/N 264307

Legal Owner Or Operator: ID 190849

SEAGULL SANITATION
12235 LOS NIETOS ROAD
SANTA FE SPRINGS, CALIFORNIA 90670
ATTN: DAVID ESTRADA, RESIDENT SUPERVISOR

Equipment located at: #1 DUMP ROAD, AVALON, CALIFORNIA 90704

Equipment Description:

REFUSE PIT BURNER, PACTHERM, 20' L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 H.P. COMBUSTION AIR BLOWER AND A 20'-0" L. X-0'-1"-W. SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.

4. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT SHALL NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR. ?

5. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

6. THE RESIDUAL ASH SHALL BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY AND DISPOSED OF AT PROPER LANDFILL WITH ADEQUATE COVER.

7. ASH REMOVED FROM THIS EQUIPMENT SHALL BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.

8. THE QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT SHALL BE RECORDED FOR EACH BURN DAY. THE RECORDS SHALL INCLUDE TONS PER HOUR AND TONS PER DAY BURNED AND SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

A/N 264223
Page 2

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/mb
May 12, 1992

ORIGINAL

Attachment 3

Detailed Emission Calculations

Average Daily Emission Reductions During 2-Year Baseline Period
Seagull Sanitation MSW Pit Burner

12-Month Period	Waste Burned (tons)	Emission Factors(1) NOx (lbs/ton)	CO (lbs/ton)	VOC (lbs/ton)	SOx (lbs/ton)	PM10 (lbs/ton)	NOx (lbs/year)	CO (lbs/year)	VOC (lbs/year)	SOx (lbs/year)	PM10 (lbs/year)
May 1999 - April 2000	7,565	3.90	30.00	9.80	2.50	18.10	29,502	226,935	74,132	18,911	136,918
May 2000 - April 2001	7,435	3.90	30.00	9.80	2.50	18.10	28,995	223,035	72,858	18,586	134,565

12-Month Period	Annual Emissions NOx (lbs/year)	CO (lbs/year)	VOC (lbs/year)	SOx (lbs/year)	PM10 (lbs/year)	Operating Days (days/year)	Average Daily Emission Reductions NOx (lbs/day)	CO (lbs/day)	VOC (lbs/day)	SOx (lbs/day)	PM10 (lbs/day)
May 1999 - April 2000	29,502	226,935	74,132	18,911	136,918	312	95	727	238	61	439
May 2000 - April 2001	28,995	223,035	72,858	18,586	134,565	312	93	715	234	60	431
						Average =	94	721	236	60	435

Notes:
(1) From 1998 - 1999 and 1999 - 2000 SCAQMD emission fee reports for Seagull Sanitation.

Seagull Sanitation MSW Pit Burner
Operating Data
May 1999 to April 2000

Month	Year	Waste Burned(1) (tons)
May	1999	625.99
June	1999	709.01
July	1999	775.00
August	1999	775.00
September	1999	750.00
October	1999	693.40
November	1999	556.81
December	1999	464.15
January	2000	527.85
February	2000	516.19
March	2000	575.89
April	2000	595.22
Total =		7,564.51

Seagull Sanitation MSW Pit Burner
Operating Data
May 2000 to April 2001

Month	Year	Waste Burned(1) (tons)
May	2000	691.44
June	2000	740.77
July	2000	775.00
August	2000	775.00
September	2000	750.00
October	2000	677.48
November	2000	505.44
December	2000	444.83
January	2001	482.07
February	2001	410.72
March	2001	576.25
April	2001	605.51
Total =		7,434.50

444.93

363 days.

Notes:
(1) See operating records enclosed as Attachment 5.

Attachment 4

EPA BACT Determinations

RELCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	PM	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	SO2	DRY SCRUBBER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	NOX	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	CO	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	HG	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	H2SO4	DRY SCRUBBER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	BE	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	PM	
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	SO2	FUEL SPEC: LOW S FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	NOX	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	CO	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	H2SO4	FUEL SPEC: LOW S FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	HG	FUEL SPEC: LOW HG CONTENT OF FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	BE	FUEL SPEC: LOW BE CONTENT OF FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	PM	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	SO2	DRY SCRUBBER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	NOX	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	CO	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	HG	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	H2SO4	DRY SCRUBBER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, RDF, 2 EA	BE	FABRIC FILTER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	PM	
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	SO2	FUEL SPEC: LOW S FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	NOX	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	CO	COMBUSTION DESIGN
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	H2SO4	FUEL SPEC: LOW S FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	HG	FUEL SPEC: LOW HG CONTENT OF FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	BE	FUEL SPEC: LOW BE CONTENT OF FUEL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	SOX	SPRAY DRYER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	NOX	THERMAL DENOX & COMBUSTION MOD
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	PM	BAGHOUSE, COMBUSTION CONTROL
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	SOX	SPRAY DRYER
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	NOX	THERMAL DENOX & COMBUSTION MOD
AL-0029	HUNTSVILLE SOLID WASTE AUTHORITY	BOILER, PACKAGE, 4 EA	PM	BAGHOUSE, COMBUSTION CONTROL
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	SO2	DRY SCRUBBER
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	NOX	FLUE GAS RECIRCULATION, STAGED COMBUSTION
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	PM	BAGHOUSE
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	HG	BAGHOUSE
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	SO2	DRY SCRUBBER
CA-0107	COMMERCE REFUSE-TO-ENERGY	INCINERATOR, MASS BURN, WATER WALL	NOX	FLUE GAS RECIRCULATION, STAGED COMBUSTION
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	PM	BAGHOUSE
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	HG	BAGHOUSE
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	NOX	STAGED COMBUSTION, DESIGN
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	SO2	DRY SCRUBBER, BAGHOUSE
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	PM	BAGHOUSE
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	FSP	BAGHOUSE (STANDARD FOR PARTICLES < 2 MICRONS)
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	CO	COMBUSTION DESIGN, NOTE #3
CA-0130	KAISER ENGINEERS CORP.	COMBUSTION TRAIN, 2 STAGE, W/HEAT RECOVERY	VOC	COMBUSTION DESIGN, NOTE #3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HCL	DRY SCRUBBER, BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HF	DRY SCRUBBER, BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HG	
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PB	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	SB	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	AS	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	BE	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	CD	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	CR	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	CU	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	MN	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	MO	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	NI	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	SE	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	SN	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	V	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	ZN	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PAH	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PCB	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PCDD	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PCDF	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	ODOR	ENCLOSED TIPPING AREA, VENT TO BOILER
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	VE	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	NOX	STAGED COMBUSTION, DESIGN
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	SO2	DRY SCRUBBER, BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PM	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	FSP	BAGHOUSE (STANDARD FOR PARTICLES < 2 MICRONS)
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	CO	COMBUSTION DESIGN, NOTE #3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	VOC	COMBUSTION DESIGN, NOTE #3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HCL	DRY SCRUBBER, BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HF	DRY SCRUBBER, BAGHOUSE

RSLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	HG	
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	PB	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	SB	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	AS	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	BE	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	CD	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	CR	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	CU	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	MN	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	MO	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	NI	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	SE	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	AG	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	V	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	ZN	BAGHOUSE
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	PAH	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	PCB	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	PCDD	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER, SEE NOTE #1	PCDF	COMBUSTION DESIGN, NOTE#3
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	ODOR	ENCLOSED TIPPING AREA, VENT TO BOILER
CA-0132	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER, SEE NOTE #1	VE	BAGHOUSE
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER	SO2	DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER	NOX	BOILER DESIGN & OVER/UNDERFIRE AIR
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER	PB	BAGHOUSE, DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC	BOILER	HG	BAGHOUSE & DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	HF	DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	SO2	DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	NOX	BOILER DESIGN & OVER/UNDERFIRE AIR
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	PB	BAGHOUSE, DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	HG	BAGHOUSE & DRY SCRUBBER
CA-0132 A	NORTH COUNTY RESOURCE RECOVERY ASSOC.	BOILER	HF	DRY SCRUBBER
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	PM	DRY SCRUBBER, BAGHOUSE
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	SOA	DRY SCRUBBING
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	NOX	FLUE GAS RECIRCULATION, COMBUSTION MODIFICATION
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	CO	COMBUSTION MODIFICATION
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	VOC	COMBUSTION MODIFICATION
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	PM	DRY SCRUBBER, BAGHOUSE
CA 0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	SOX	DRY SCRUBBING
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	NOX	FLUE GAS RECIRCULATION, COMBUSTION MODIFICATION
CA-0154	TRI-CITIES RESOURCE RECOVERY	FACILITY, MUNICIPAL SOLID WASTE-TO-ENERGY	CO	COMBUSTION MODIFICATION
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	VOC	COMBUSTION MODIFICATION
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	SO2	BAGHOUSE & DRY SCRUBBER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	PB	BAGHOUSE, SPRAY DRYER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	HG	BAGHOUSE, SPRAY DRYER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	HF	DRY SCRUBBER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	SO2	BAGHOUSE & DRY SCRUBBER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	PB	BAGHOUSE, SPRAY DRYER
CA-0183	CITY OF LONG BEACH	BOILER, WATER WALL, 3 EA	HG	BAGHOUSE, SPRAY DRYER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	HF	DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	SO2	DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	HG	BAGHOUSE, DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	PB	BAGHOUSE, DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	HF	DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	SO2	DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	HG	BAGHOUSE, DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	PB	BAGHOUSE, DRY SCRUBBER
CA-0184	ENERCAN RESOURCES, INC	BOILER, WATER WALL, 4 EA	HF	DRY SCRUBBER
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	SO2	DRY SCRUBBER, LIME SLURRY
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	NOX	AMMONIA INJECTION
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	CO	COMBUSTION CONTROLS
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	HG	BAGHOUSE & DRY SCRUBBER
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	PM	BAGHOUSE
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	SO2	DRY SCRUBBER, LIME SLURRY
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	NOX	AMMONIA INJECTION
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	CO	COMBUSTION CONTROLS
CA-0186	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	HG	BAGHOUSE & DRY SCRUBBER
CA-0185	STANISLAUS WASTE ENERGY CO	BOILER, WATER WALL, 2 EA	PM	BAGHOUSE
CA-0284	OGDEN MARTIN SYSTEMS OF SAN BERNARDINO	INCINERATOR, MASS BURN, 3 EA	SO2	DRY SCRUBBER, LIME SLURRY
CA-0284	OGDEN MARTIN SYSTEMS OF SAN BERNARDINO	INCINERATOR, MASS BURN, 3 EA	PM10	BAGHOUSE
CA-0284	OGDEN MARTIN SYSTEMS OF SAN BERNARDINO	INCINERATOR, MASS BURN, 3 EA	HG	DRY SCRUBBER/BAGHOUSE
CA-0284	OGDEN MARTIN SYSTEMS OF SAN BERNARDINO	INCINERATOR, MASS BURN, 3 EA	SO2	DRY SCRUBBER, LIME SLURRY
CA-0284	OGDEN MARTIN SYSTEMS OF SAN BERNARDINO	INCINERATOR, MASS BURN, 3 EA	PM10	BAGHOUSE
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	HG	DRY SCRUBBER/BAGHOUSE
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	PM	DRY GAS SCRUBBER, BAGHOUSE
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	SOX	DRY GAS SCRUBBER
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	VOC	GOOD COMBUSTION PRACTICES
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	NOX	GOOD COMBUSTION PRACTICES
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	HCL	DRY GAS SCRUBBER
			CO	GOOD COMBUSTION PRACTICES

RBLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	VE	
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	PM	DRY GAS SCRUBBER, BAGHOUSE
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	SOX	DRY GAS SCRUBBER
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	VOC	GOOD COMBUSTION PRACTICES
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	NOX	GOOD COMBUSTION PRACTICES
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	HCL	DRY GAS SCRUBBER
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	CO	GOOD COMBUSTION PRACTICES
CT-0002	MID-CONNECTICUT RESOURCE RECOVERY FACILITY	FURNACE/BOILER, RDF/COAL-FIRED, 3 EA	VE	
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	PM	DRY GAS SCRUBBER, BAGHOUSE
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	SOX	DRY GAS SCRUBBER
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	NOX	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	VOC	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	CO	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	HCL	DRY GAS SCRUBBER
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	VE	
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	PM	DRY GAS SCRUBBER, BAGHOUSE
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	SOX	DRY GAS SCRUBBER
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	NOX	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	VOC	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	CO	GOOD COMBUSTION PRACTICES
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	HCL	DRY GAS SCRUBBER
CT-0004	OGDEN MARTIN SYSTEMS OF BRISTOL	FURNACE/BOILER, MSW FIRED, 2 EA	VE	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	PM	FABRIC FILTER
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	SO2	DRY GAS SCRUBBING
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	NOX	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	VOC	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	CO	COMBUSTION CONTROLS
CT-0005	CONN. RESOURCE RECOVERY AUTHORITY	INCINERATOR, RDF, BITUMIOUS COAL FIRED	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R.R. ASSOC. L.P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	

RBLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
CT-0008	WALLINGFORD R R ASSOC, L P	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PM	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	SO2	DRY GAS SCRUBBER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	NOX	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	VOC	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	CO	COMBUSTION CONTROLS
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PB	FABRIC FILTER
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	HAZARDOUS POLLUTANT,	
CT-0008	WALLINGFORD R R ASSOC, L P.	INCINERATOR, MSW	PM	FABRIC FILTER BAGHOUSE
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	SO2	DRY GAS SCRUBBER
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	NO2	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	VOC	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	CO	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	PB	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	H2SO4	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	HCL	DRY GAS SCRUBBER
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	HG	
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	PM	FABRIC FILTER BAGHOUSE
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	SO2	DRY GAS SCRUBBER
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	NO2	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	VOC	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	CO	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	PB	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	H2SO4	GOOD COMBUSTION PRACTICES
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	HCL	DRY GAS SCRUBBER
CT-0008	OGDEN MARTIN	INCINERATOR, SOLID WASTE	HG	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	CO	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	PB	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	HAZARDOUS POLLUTANT,	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	CO	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	PB	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	HAZARDOUS POLLUTANT,	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	CO	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	PB	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	HAZARDOUS POLLUTANT,	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	CO	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	PB	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #1	HAZARDOUS POLLUTANT,	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	CO	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	PB	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #2	HAZARDOUS POLLUTANT,	
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	PM	FABRIC FILTER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	SO2	DRY GAS SCRUBBER
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	NOX	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	VOC	GOOD COMBUSTION PRACTICES
CT-0010	BRIDGEPORT RESOURCE RECOVERY FACILITY	INCINERATOR, SOLID WASTE, #3	CO	GOOD COMBUSTION PRACTICES

RBLCID	FACILITY
CT-0016	BRIDGEPORT RESOURCE RECOVERY FACILITY
CT-0016	BRIDGEPORT RESOURCE RECOVERY FACILITY
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
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CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
CT-0023	AMERICAN REF FUEL OF SE CONNECTICUT
DE-0007	MMRAWALLACE
DE-0007	MMRAWALLACE
DE-0007	MMRAWALLACE
DE-0007	MMRAWALLACE
DE-0007	MMRAWALLACE
DE-0007	MMRAWALLACE
FL-0007	REDDY CREEK IMPROVEMENT DIST
FL-0007	REDDY CREEK IMPROVEMENT DIST
FL-0030	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0030 A	MCKAY BAY REFUSE-TO-ENERGY PROJECT
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0033	PUBLIC WORKS & UTILITIES
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
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FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC

PROCESS
INCINERATOR, SOLID WASTE, #3
INCINERATOR, SOLID WASTE, #3
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
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INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, MSW FIRED
INCINERATOR, 6 EA
INCINERATOR, 5 EA
INCINERATOR, 5 EA
INCINERATOR, 5 EA
INCINERATOR, 5 EA
INCINERATOR, 5 EA
INCINERATOR, SLAGGING PYROLYSIS
INCINERATOR, SLAGGING PYROLYSIS
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
FURNACE, MASS BURN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
COMBUSTION SYS, MASS BURN, MARTIN
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2
INCINERATOR, 2

POLLUTANT	CTRL DESC
PB	GOOD COMBUSTION PRACTICES
HAZARDOUS POLLUTANT,	
PM10	FABRIC FILTER
SO2	DRY GAS SCRUBBER
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
PB	DRY GAS SCRUBBER/FABRIC FILTER
PM10	FABRIC FILTER
SO2	DRY GAS SCRUBBER
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
PB	DRY GAS SCRUBBER/FABRIC FILTER
PM10	FABRIC FILTER
SO2	DRY GAS SCRUBBER
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
PB	DRY GAS SCRUBBER/FABRIC FILTER
PM10	FABRIC FILTER
SO2	DRY GAS SCRUBBER
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
PB	DRY GAS SCRUBBER/FABRIC FILTER
PM	ESP
VE	ESP
CO	GOOD COMBUSTION PRACTICES
PM	ESP
VE	ESP
CO	GOOD COMBUSTION PRACTICES
CO	FLUE GAS MONITORING
CO	FLUE GAS MONITORING
PM	ESP
VE	CONTINUOUS OPACITY MONITOR
PM	ESP
VE	CONTINUOUS OPACITY MONITOR
SO2	FUEL SPEC LOW SULFUR FUEL
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
PB	ESP
F	
HG	ESP
BE	ESP
SO2	FUEL SPEC LOW SULFUR FUEL
NOX	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
PB	ESP
F	
HG	ESP
BE	ESP
PM	ESP
SO2	FUEL SPEC MSW SULFUR CONTENT
NOX	DESIGN
CO	DESIGN
PB	ESP
VE	
PM	ESP
SO2	FUEL SPEC MSW SULFUR CONTENT
NOX	DESIGN
CO	DESIGN
PB	ESP
VE	
PM	ESP
SO2	ADDITION OF LIMESTONE TO RDF FUEL
NOX	OPERATION
CO	OPERATION
PB	ESP
F	ADDITION OF LIMESTONE TO RDF FUEL
BE	ESP
HG	ESP
ACID MIST	ADDITION OF LIMESTONE TO RDF FUEL
VE	
VOC	OPERATION
PM	ESP
SO2	ADDITION OF LIMESTONE TO RDF FUEL
NOX	OPERATION
CO	OPERATION

RELCD	FACILITY	PROCESS#			POLLUTANT	CTRLDESC
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC.	INCINERATOR,	2		PB	ESP
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC.	INCINERATOR,	2		F	ADDITION OF LIMESTONE TO RDF FUEL
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC	INCINERATOR,	2		BE	ESP
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC	INCINERATOR,	2		HG	ESP
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC	INCINERATOR,	2		ACID MIST	ADDITION OF LIMESTONE TO RDF FUEL
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC	INCINERATOR,	2		VE	
FL-0036	WEST PALM BEACH SOLID WASTE RESOURCE RECOVERY FAC.	INCINERATOR,	2		VOC	OPERATION
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		PM	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		SO2	SCRUBBER
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		NOx	OPERATION
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		CO	OPERATION
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		PB	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		F	SCRUBBER
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		BE	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		HG	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		VE	
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		PM	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		SO2	SCRUBBER
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		NOX	OPERATION
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		CO	OPERATION
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC	INCINERATOR,	3		PB	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		F	SCRUBBER
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		BE	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		HG	ESP
FL-0037	SOUTH BROWARD COUNTY RESOURCE RECOVERY FAC.	INCINERATOR,	3		VE	
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		PM	DRY SCRUBBER & ESP, PARTICULATE CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		SO2	DRY SCRUBBER & ESP, ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		NOX	
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		CO	COMBUSTION CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		VOC	COMBUSTION CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		PB	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		F	ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		BE	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		HG	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		VE	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		PM	DRY SCRUBBER & ESP, PARTICULATE CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		SO2	DRY SCRUBBER & ESP, ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		NOX	
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		CO	COMBUSTION CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		VOC	COMBUSTION CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		PB	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		F	ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		BE	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		HG	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		VE	PARTICULATE CONTROL & ACID GAS CONTROL
FL-0038	NRG RECOVERY GROUP	INCINERATOR,	REFUSE, 2 EA		PM	BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		SO2	DRY SCRUBBER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		NOX	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		CO	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VOC	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		PB	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		F	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		BE	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		HG	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VE	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		PM	BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		SO2	DRY SCRUBBER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		NOX	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		CO	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VOC	COMBUSTION CONTROL
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		PB	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		F	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		BE	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		HG	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VE	DRY SCRUBBER/BAGHOUSE
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		SO2	DRY SCRUBBER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		NOX	SNCR
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		CO	GOOD COMBUSTION
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VOC	GOOD COMBUSTION
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		H2SO4	DRY SCRUBBER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		HG	CARBON INJECTION
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		F	FABRIC FILTER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		FLUORIDES	SPRAY DRYER (LIME DRY SCRUBBER)/FABRIC FILTER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		PB	FABRIC FILTER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		BE	FABRIC FILTER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		SO2	DRY SCRUBBER
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		NOX	SNCR
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		CO	GOOD COMBUSTION
FL-0039	PASCO COUNTY	INCINERATOR,	REFUSE		VOC	GOOD COMBUSTION
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY	BOILER,	MUNICIPAL WASTE INCINERATION, 3			

RBLCID	FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
FL-0067	LEE COUNTY ENERGY RECOVERY FACILITY
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
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GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
GA-0017	RESOURCE RECOVERY DEVELOPMENT AUTHORITY - SAVANNAH
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
HI-0004	CITY & COUNTY OF HONOLULU, H-POWER
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IL-0049	ROBBINS RESOURCE RECOVERY
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
IN-0026	OGDEN MARTIN SYSTEMS OF INDIANAPOLIS
MA-0001	REFUSE FUELS, INC.
MA-0001	REFUSE FUELS, INC.
MA-0001	REFUSE FUELS, INC.
MA-0001	REFUSE FUELS, INC
MA-0001	REFUSE FUELS, INC
MA-0001	REFUSE FUELS, INC
MA-0002	ENERGY ANSWERS CORP.

PROCESS	
BOILER,	MUNICIPAL WASTE INCINERATION, 3
BOILER,	MUNICIPAL WASTE INCINERATION, 3
BOILER,	MUNICIPAL WASTE INCINERATION, 3
BOILER,	MUNICIPAL WASTE INCINERATION, 3
BOILER,	MUNICIPAL WASTE INCINERATION, 3
BOILER,	MUNICIPAL WASTE INCINERATION, 3
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
INCINERATOR, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
BOILER, RDF FIRED, 2	EA
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATORS (2	FLUIDIZED BED COMBUSTORS)
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
INCINERATOR, MASS BURN, 3	EA
FURNACE, WATER WALL,	BALANCED DRAFT
FURNACE, WATER WALL,	BALANCED DRAFT
FURNACE, WATER WALL,	BALANCED DRAFT
FURNACE, WATER WALL,	BALANCED DRAFT
FURNACE, WATER WALL,	BALANCED DRAFT
BOILER, WATER COOLED, 3	EA

POLLUTANT	CTRLDESC
H2SO4	DRY SCRUBBER
HG	CARBON INJECTION
F	FABRIC FILTER
FLUORIDES	SPRAY DRYER (LIME DRY SCRUBBER)/FABRIC FILTER
PB	FABRIC FILTER
BE	FABRIC FILTER
PM	ESP
SO2	
NOX	FURNACE DESIGN, GOOD COMBUSTION PRACTICES
CO	FURNACE DESIGN, GOOD COMBUSTION PRACTICES
PB	ESP
HG	ESP
HF	
PM	ESP
SO2	
NOX	FURNACE DESIGN, GOOD COMBUSTION PRACTICES
CO	FURNACE DESIGN, GOOD COMBUSTION PRACTICES
PB	ESP
HG	ESP
HF	
VE	ESP
PM	ESP
SO2	DRY SCRUBBER & ESP
NOX	COMBUSTION CONTROL
CO	COMBUSTION CONTROL
VOC	COMBUSTION CONTROL
PB	DRY SCRUBBER & ESP
HG	DRY SCRUBBER & ESP, 140 DEG C MAX INLET TEMP TO ESP
F	DRY SCRUBBER & ESP
BE	DRY SCRUBBER & ESP
VE	ESP
PM	ESP
SO2	DRY SCRUBBER & ESP
NOX	COMBUSTION CONTROL
CO	COMBUSTION CONTROL
VOC	COMBUSTION CONTROL
PB	DRY SCRUBBER & ESP
HG	DRY SCRUBBER & ESP, 140 DEG C MAX INLET TEMP TO ESP
F	DRY SCRUBBER & ESP
BE	DRY SCRUBBER & ESP
PM	SPRAY DRYER/FABRIC FILTER FIRING OF REFUSE DERIVED FUEL
CO	GOOD COMBUSTION PRACTICE
VOC	GOOD COMBUSTION PRACTICE
NOX	THERMAL DENOX, FLUIDIZED BED COMBUSTION
SO2	SPRAY DRYER/FABRIC FILTER FLUIDIZED BED COMBUSTOR
HCL	SPRAY DRYER/FABRIC FILTER
PM	SPRAY DRYER/FABRIC FILTER FIRING OF REFUSE DERIVED FUEL
CO	GOOD COMBUSTION PRACTICE
VOC	GOOD COMBUSTION PRACTICE
NOX	THERMAL DENOX, FLUIDIZED BED COMBUSTION
SO2	SPRAY DRYER/FABRIC FILTER FLUIDIZED BED COMBUSTOR
HCL	SPRAY DRYER/FABRIC FILTER
PM	BAGHOUSE
SO2	DRY SCRUBBER/BAGHOUSE
NOX	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
HG	DRY SCRUBBER/BAGHOUSE
PB	BAGHOUSE
VOC	
VE	
HCL	DRY SCRUBBER/BAGHOUSE
DIOXINS	DRY SCRUBBER, BAGHOUSE, TEMPERATURE
PM	BAGHOUSE
SO2	DRY SCRUBBER/BAGHOUSE
NOX	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
HG	DRY SCRUBBER/BAGHOUSE
PB	BAGHOUSE
VOC	
VE	
HCL	DRY SCRUBBER/BAGHOUSE
DIOXINS	DRY SCRUBBER, BAGHOUSE, TEMPERATURE
PM	ESP - 5 FIELD, IN SERIES
S	FUEL SPEC LOW S #6 OIL/LOW S RDF
NOX	BOILER DESIGN
PM	ESP - 5 FIELD, IN SERIES
S	FUEL SPEC LOW S #6 OIL/LOW S RDF
NOX	BOILER DESIGN
PM	ESP - 3 STAGE

RBLCID	FACILITY
MA-0002	ENERGY ANSWERS CORP
MA-0002	ENERGY ANSWERS CORP.
MA-0002	ENERGY ANSWERS CORP
MA-0002	ENERGY ANSWERS CORP.
MA-0002	ENERGY ANSWERS CORP.
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0004	NESWC RESOURCE RECOVERY FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0008	MONTACHUSETT REGIONAL RECYCLING FACILITY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MA-0013	SEAMASS WASTE TO ENERGY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0002	MUNICIPAL INCINERATOR PULASKI HWY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0005	N E. MARYLAND WASTE DISPOSAL AUTHORITY
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MD-0020	MONTGOMERY COUNTY & NW MARYLAND WASTE DISPOSAL AUT
MI-0039	CE - RESOURCE RECOVERY SYSTEMS
MI-0039	CE - RESOURCE RECOVERY SYSTEMS
MI-0039	CE - RESOURCE RECOVERY SYSTEMS
MI-0039	CE - RESOURCE RECOVERY SYSTEMS

PROCESS
BOILER, WATER COOLED, 3 EA
BOILER, WATER COOLED, 3 EA
BOILER, WATER COOLED, 3 EA
BOILER, WATER COOLED, 3 EA
BOILER, WATER COOLED, 3 EA
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
GENERATING UNIT, STEAM/INCINERATOR, MASS BURNING,
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
BOILER, AUXILIARY
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATORS,MUNIC WASTE,2(121 STPD, 55 7MMBTU/HR)
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
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INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, WASTE 41 67 TPHR
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, MUNICIPAL
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATER WALL, 3 EA
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
INCINERATOR, WATERWALL MUNICIPAL SOLID WASTE
BOILER, WATER WALL, 3
BOILER, WATER WALL, 3
BOILER, WATER WALL, 3
BOILER, WATER WALL, 3

POLLUTANT	CTRLDESC
SO2	FUEL SPEC: LOW S #2 FUEL OIL/LOW S RDF
NOX	BOILER DESIGN
PM	ESP - 3 STAGE
SO2	FUEL SPEC: LOW S #2 FUEL OIL/LOW S RDF
NOX	BOILER DESIGN
PM	ESP
SO2	FUEL SPEC: LOW S FUEL - 0.3% S #2 OIL
NOX	INCINERATOR DESIGN
CO	INCINERATOR DESIGN
SOX	INCINERATOR DESIGN
NOX	BOILER DESIGN
CO	BOILER DESIGN
SOX	BOILER DESIGN
PM	
SO2	FUEL SPEC: LOW S FUEL - 0.3% S #2 OIL
PM	ESP
SO2	FUEL SPEC: LOW S FUEL - 0.3% S #2 OIL
NOX	INCINERATOR DESIGN
CO	INCINERATOR DESIGN
SOX	INCINERATOR DESIGN
NOX	BOILER DESIGN
CO	BOILER DESIGN
SOX	BOILER DESIGN
PM	
SO2	FUEL SPEC: LOW S FUEL - 0.3% S #2 OIL
SO2	LIME SPRAY DRYER SCRUBBER
NOX	COMBUSTION CONTROLS, SCR (IF CONTROLS DO NOT WORK)
PM	BAGHOUSE
SO2	LIME SPRAY DRYER SCRUBBER
NOX	COMBUSTION CONTROLS, SCR (IF CONTROLS DO NOT WORK)
PM	BAGHOUSE
PB	ESP
HCL	CAOH SPRAY DRYER
HG	
FLUORIDE	CAOH SPRAY DRYER
PM	ESP
NOx	
CO	GOOD COMBUSTION PRACTICES
SO2	CAOH SPRAY DRYER
PB	ESP
HCL	CAOH SPRAY DRYER
HG	
FLUORIDE	CAOH SPRAY DRYER
PM	ESP
NOX	
CO	GOOD COMBUSTION PRACTICES
SO2	CAOH SPRAY DRYER
PM	ESP
SO2	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
NOX	GOOD COMBUSTION PRACTICES
PM	ESP
SO2	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES
VOC	GOOD COMBUSTION PRACTICES
NOX	GOOD COMBUSTION PRACTICES
SO2	
CO	
NOX	
F	
SO2	
CO	
NOX	
F	
PM10	FABRIC FILTER
SO2	SPRAY DRYER (WET/DRY SCRUBBING) W/FABRIC FILTER, LIME INJECTION
NOX	SNCR
CO	INCINERATOR DESIGN AND COMBUSTION CONTROLS
HCL	SPRAY DRYER ABSORBER (WET/DRY SCRUBBER), LIME INJECTION
PM10	FABRIC FILTER
SO2	SPRAY DRYER (WET/DRY SCRUBBING) W/FABRIC FILTER, LIME INJECTION
NOX	SNCR
CO	INCINERATOR DESIGN AND COMBUSTION CONTROLS
HCL	SPRAY DRYER ABSORBER (WET/DRY SCRUBBER), LIME INJECTION
PM	ESP
SO2	
NOX	GOOD COMBUSTION PRACTICES
CO	GOOD COMBUSTION PRACTICES

RBLCID	FACILITY			PROCESS			POLLUTANT	CTRLDESC
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		VOC	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		VE	FUEL SPEC: CONTROLLED BY USE OF AUX. FUEL
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		PB	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		HCL	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		HG	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CD	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CHROMIUM III	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CHROMIUM IV	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		DIOXINS & FURANS	SEE NOTE 5
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		F	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		PM	ESP
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		SO2	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		NOX	GOOD COMBUSTION PRACTICES
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CO	GOOD COMBUSTION PRACTICES
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		VOC	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		VE	FUEL SPEC: CONTROLLED BY USE OF AUX. FUEL
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		PB	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		HCL	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		HG	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CD	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CHROMIUM III	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CHROMIUM IV	SEE NOTE 4
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		DIOXINS & FURANS	SEE NOTE 6
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		F	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		PM	DRY SCRUBBER, BAGHOUSE
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		SO2	DRY SCRUBBER, BAGHOUSE
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		NOX	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		HCL	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CO	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CD	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		CR	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		AS	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		DIOXINS	
MI-0039	CE - RESOURCE RECOVERY	SYSTEMS		BOILER, WATER WALL,	3		FURANS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	PM	DRY SCRUBBER, BAGHOUSE
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	SO2	DRY SCRUBBER, BAGHOUSE
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	NOX	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	HCL	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CO	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CD	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CR	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	AS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	DIOXINS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	FURANS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	PM	DRY SCRUBBER, BAGHOUSE
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	SO2	DRY SCRUBBER, BAGHOUSE
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	NOX	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	HCL	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CO	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CD	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	CR	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	AS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	DIOXINS	
MI-0056	JACKSON COUNTY BOARD OF PUBLIC	WORKS		INCINERATOR, MASS BURN,	2	TOTAL	FURANS	
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PM	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	SO2	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	NOX	COMBUSTION MODIFICATION TECHNIQUES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CO	COMBUSTION MODIFICATION TECHNIQUES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	HCL	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	FLUORIDES	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	VOC	GOOD COMBUSTION PRACTICES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PB	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	HG	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	H2SO4	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	AR	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	BE	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CD	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CR6	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PCDD/PCDF	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	VE	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PM	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	SO2	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	NOX	COMBUSTION MODIFICATION TECHNIQUES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CO	COMBUSTION MODIFICATION TECHNIQUES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	HCL	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	FLUORIDES	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	VOC	GOOD COMBUSTION PRACTICES
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PB	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	HG	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	H2SO4	DRY SCRUBBER
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	AR	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	BE	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CD	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	CR6	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	PCDD/PCDF	DRY SCRUBBER/BAGHOUSE
MI-0060	KENT COUNTY DEPT. OF PUBLIC WORKS			BOILER, SOLID WASTE,	2	EA	VE	DRY SCRUBBER/BAGHOUSE
MN-0009	HENNEPIN ENERGY RESOURCE	CO		INCINERATOR,	MSW		PM	SEE NOTE#7 SEE NOTE#1
MN-0009	HENNEPIN ENERGY RESOURCE	CO		INCINERATOR,	MSW		SO2	SEE NOTE#7 SEE NOTE#1
MN-0009	HENNEPIN ENERGY RESOURCE	CO		INCINERATOR,	MSW		NOX	SEE NOTE #2

RELCID	FACILITY	
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
MN-0009	HENNEPIN ENERGY RESOURCE	CO
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NC-0053	GASTON COUNTY MSW DISPOSAL FACILITY	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0001	VICON RECOVERY SYSTEMS	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NH-0002	SIGNAL ENVIRONMENTAL SERVICES	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	

PROCESS			
INCINERATOR,	MSW		
INCINERATOR,	MSW		
INCINERATOR,	MSW		
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INCINERATOR,	MSW		
INCINERATOR,	MSW		
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
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INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 4	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS	BURNING, 2	EA	
INCINERATOR, MASS BURN,	3		
INCINERATOR, MASS BURN,	3		
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INCINERATOR, MASS BURN,	3		
INCINERATOR, MASS BURN,	3		
INCINERATOR, MASS BURN,	3		

POLLUTANT	CTRLDESC
VOC	SEE NOTE#3
CO	SEE NOTE#7 SEE NOTE#4
PB	SEE NOTE#7 SEE NOTE#4
PCDD/PCDF	SEE NOTE#7 SEE NOTE#5
HG	SEE NOTE#7 SEE NOTE#4
HCL	SEE NOTE#7 SEE NOTE#6
PM	SEE NOTE#7 SEE NOTE#1
SO2	SEE NOTE#7 SEE NOTE#1
NOX	SEE NOTE #2
VOC	SEE NOTE#3
CO	SEE NOTE#7 SEE NOTE#4
PB	SEE NOTE#7 SEE NOTE#4
PCDD/PCDF	SEE NOTE#7 SEE NOTE#5
HG	SEE NOTE#7 SEE NOTE#4
HCL	SEE NOTE#7 SEE NOTE#6
PM/PM10	BAG FILTER
SO2	WET/DRY ACID GAS SCRUBBER
VE	BAG FILTER
NOX	WESTINGHOUSE COMBUSTOR TECHNOLOGY
HG	BAG FILTER
H2SO4	WET/DRY ACID GAS SCRUBBER
AS	BAG FILTER
PM/PM10	BAG FILTER
SO2	WET/DRY ACID GAS SCRUBBER
VE	BAG FILTER
NOX	WESTINGHOUSE COMBUSTOR TECHNOLOGY
HG	BAG FILTER
H2SO4	WET/DRY ACID GAS SCRUBBER
AS	BAG FILTER
SO2	DRY LIME INJECTION SYSTEM
NOX	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
PB	BAGHOUSE
PM	BAGHOUSE
HCL	
TCDD	
TCDF	
SO2	DRY LIME INJECTION SYSTEM
NOX	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
PB	BAGHOUSE
PM	BAGHOUSE
HCL	
TCDD	
TCDF	
PM	BAGHOUSE
SO2	DRY LIME INJECTION SYSTEM
NOX	COMBUSTION CONTROL
CO	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
PB	
HCL	DRY LIME INJECTION
PM	BAGHOUSE
SO2	DRY LIME INJECTION SYSTEM
NOX	COMBUSTION CONTROL
CO	COMBUSTION CONTROLS
CO	COMBUSTION CONTROLS
PB	
HCL	DRY LIME INJECTION
PM FILTERABLE	DRY SCRUBBER & ESP
PM, TOTAL TRAIN	
VE	
SO2	DRY SCRUBBER & ESP
HCL	DRY SCRUBBER & ESP
HF	DRY SCRUBBER & ESP
CO	FUEL SPEC: AUX BURNERS FIRING #2 OIL AUTOMATIC AIR/FUEL CONTROL
CO	FUEL SPEC AUX BURNERS FIRING #2 OIL AUTOMATIC AIR/FUEL CONTROL
NOX	
H2SO4	DRY SCRUBBER & ESP
PB	DRY SCRUBBER & ESP
HG	DRY SCRUBBER & ESP
AS	DRY SCRUBBER & ESP
BE	DRY SCRUBBER & ESP
CD	DRY SCRUBBER & ESP
CR	DRY SCRUBBER & ESP
NI	DRY SCRUBBER & ESP
NMHC	FUEL SPEC AUX BURNERS FIRING #2 OIL (SEE NOTE#8) AIR/FUEL CONTROLS TEMP MONITOR
TCDD	FUEL SPEC AUX BURNERS FIRING #2 OIL (SEE NOTE#8) AIR/FUEL CONTROLS TEMP MONITOR
PAH	FUEL SPEC AUX BURNERS FIRING #2 OIL (SEE NOTE#8) AIR/FUEL CONTROLS TEMP MONITOR

RELCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	SILO, LIME, 4 EA	PM	BAGHOUSE
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	PM FILTERABLE	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	PM, TOTAL TRAIN	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	VE	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	SO2	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	HCL	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	HF	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	CO	FUEL SPEC AUX BURNERS FIRING #2 OIL, AUTOMATIC AIR/FUEL CONTROL
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	CO	FUEL SPEC AUX BURNERS FIRING #2 OIL, AUTOMATIC AIR/FUEL CONTROL
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	NOX	
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	H2SO4	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	PB	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	HG	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	AS	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	BE	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	CD	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	CR	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	NI	DRY SCRUBBER & ESP
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	NMHC	FUEL SPEC AUX BURNERS FIRING #2 OIL (SEE NOTE#9), AIR/FUEL CONTROLS, TEMP MONITOR
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	TCDD	FUEL SPEC: AUX BURNERS FIRING #2 OIL (SEE NOTE#9) AIR/FUEL CONTROLS, TEMP MONITOR
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	INCINERATOR, MASS BURN, 3	PAH	FUEL SPEC: AUX BURNERS FIRING #2 OIL (SEE NOTE#9) AIR/FUEL CONTROLS, TEMP MONITOR
NJ-0007	AMERICAN REF-FUEL OF ESSEX COUNTY	SILO, LIME, 4 EA	PM	BAGHOUSE
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	PM	ESP
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	SO2	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HCL	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	H2SO4	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HF	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	CO	COMBUSTION CONTROL
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	NO2	SNCR
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HG	ACTIVATED CARBON INJECTION
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	NH3	NONE
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	VOC	COMBUSTION CONTROL
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	PM	ESP
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	SO2	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HCL	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	H2SO4	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HF	SCRUBBER
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	CO	COMBUSTION CONTROL
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	NO2	SNCR
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	HG	ACTIVATED CARBON INJECTION
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	NH3	NONE
NJ-0018	AMERICAN REF-FUEL COMPANY OF ESSEX COUNTY	INCINERATION, WITH FERROUS SHREDDING (3 UNITS)	VOC	COMBUSTION CONTROL
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	TSP	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	PM10	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	SO2	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NO2	SNCR
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CO	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	VOC	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NH3	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	FLUORIDES	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	H2SO4	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	HCL	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	AS	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	BE	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CD	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CR	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	PB	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NI	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	POLYAROMATIC HC	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	DIOXINS & FURANS	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	HG	CARBON INJECTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	TSP	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	PM10	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	SO2	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NO2	SNCR
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CO	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	VOC	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NH3	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	FLUORIDES	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	H2SO4	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	HCL	SPRAY DRYER ABSORBER
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	AS	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	BE	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CD	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	CR	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	PB	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	NI	BAGHOUSE
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	POLYAROMATIC HC	GOOD COMBUSTION
NJ-0020	MERCER & ATLANTIC CO RESOURCE RECOVERY FACILITY	MUNICIPAL WASTE COMBUSTOR (MWC)	DIOXINS & FURANS	SPRAY DRYER ABSORBER

REL.CID	FACILITY
NJ-0020	MERCER & ATLANTIC CO. RESOURCE RECOVERY FACILITY
NJ-0028	AMERICAN REF FUEL OF ESSEX COUNTY
NJ-0028	AMERICAN REF FUEL OF ESSEX COUNTY
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0002	HOOKER ENERGY CORP.
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0008	WESTCHESTER COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0012	DUTCHESS COUNTY RESOURCE RECOVERY
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0017	REFUSE INCINERATION
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0018	AMERICAN REFFUEL
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0019	ISLIP RESOURCE RECOVERY AGENCY
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN
NY-0020	SIGNAL BROOKLYN

PROCESS			
MUNICIPAL WASTE	COMBUSTOR (MWC)		
SOLID WASTE	COMBUSTION,	MUNICIPAL	
SOLID WASTE	COMBUSTION,	MUNICIPAL	
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
BOILER, RDF/COAL	FIRED		
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3 EA		
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3 EA		
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
INCINERATOR, WATER WALL,	REFUSE FIRED, 3	EA	
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
COMBUSTOR, ROTARY, 2,	TOTAL		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 2	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
INCINERATOR, MASS BURN, 3	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
COMBUSTOR, ROTARY, 2	EA		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		
INCINERATION,	REFUSE		

POLLUTANT	CTRLDESC
HG	CARBON INJECTION
NOX	SNCR FOR NOX CONTROL
NOX	SNCR FOR NOX CONTROL
SO2	FUEL SPEC S CONTENT
NOX	TEMP & EXCESS AIR
PM	
PM	
VE	
VE	
SO2	FUEL SPEC S CONTENT
NOX	TEMP & EXCESS AIR
PM	
PM	
VE	
VE	
PM	ESP AT 12% CO
CO	DESIGN, HIGH EXCESS AIR, GOOD COMBUSTION PRACTICES
NOX	DESIGN, PROPER OPERATION
SO2	
PB	ESP AT 12% CO
HG	ESP AT 12% CO
BE	ESP AT 12% CO
ASBESTOS	ESP AT 12% CO
PM	ESP AT 12% CO
CO	DESIGN, HIGH EXCESS AIR, GOOD COMBUSTION PRACTICES
NOX	DESIGN, PROPER OPERATION
SO2	
PB	ESP AT 12% CO
HG	ESP AT 12% CO
BE	ESP AT 12% CO
ASBESTOS	ESP AT 12% CO
PM	FABRIC FILTER
SO2	FUEL SPEC LOW S FUEL
NOX	PROPER BOILER DESIGN
CO	GOOD COMBUSTION PRACTICES
HCL	DRY VENTURI, INJECTION LIME COATING FOR BAGHOUSE
PM	FABRIC FILTER
SO2	FUEL SPEC. LOW S FUEL
NOX	PROPER BOILER DESIGN
CO	GOOD COMBUSTION PRACTICES
HCL	DRY VENTURI, INJECTION LIME COATING FOR BAGHOUSE
PM	BAGHOUSE
SO2	DRY SCRUBBER
CO	COMBUSTION CONTROL
NOX	FURNACE DESIGN
PM	BAGHOUSE
SO2	DRY SCRUBBER
CO	COMBUSTION CONTROL
NOX	FURNACE DESIGN
PM	BAGHOUSE
NOX	FURNACE DESIGN
SO2	DRY SCRUBBER
CO	FURNACE DESIGN
VOC	FURNACE DESIGN
PM	BAGHOUSE
NOX	FURNACE DESIGN
SO2	DRY SCRUBBER
CO	FURNACE DESIGN
VOC	FURNACE DESIGN
PM	BAGHOUSE
SO2	FUEL SPEC LOW SULFUR FUEL
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
VOC	COMBUSTION CONTROL
PM	BAGHOUSE
SO2	FUEL SPEC LOW SULFUR FUEL
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
VOC	COMBUSTION CONTROL
NOX	SNCR, SEE NOTE
SO2	SPRAY DRYER, ADSORBER, BAGHOUSE
FLUORIDES	SPRAY DRYER, ADSORBER, BAGHOUSE
HEAVY METALS	SPRAY DRYER, ADSORBER, BAGHOUSE
PM10	SPRAY DRYER, ADSORBER, BAGHOUSE
DIOXINS & FURANS	COMBUSTION CONTROL
VE	BAGHOUSE
NOX	SNCR, SEE NOTE
SO2	SPRAY DRYER, ADSORBER, BAGHOUSE
FLUORIDES	SPRAY DRYER, ADSORBER, BAGHOUSE

RELCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
NY-0020	SIGNAL BROOKLYN	INCINERATION, REFUSE	HEAVY METALS	SPRAY DRYER, ADSORBER, BAGHOUSE
NY-0020	SIGNAL BROOKLYN	INCINERATION, REFUSE	PM10	SPRAY DRYER, ADSORBER, BAGHOUSE
NY-0020	SIGNAL BROOKLYN	INCINERATION, REFUSE	DIOXINS & FURANS	COMBUSTION CONTROL
NY-0020	SIGNAL BROOKLYN	INCINERATION, REFUSE	VE	BAGHOUSE
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	NOX	
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	CO	
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	PM	FABRIC FILTER
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	NOX	
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	CO	
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	PM	FABRIC FILTER
NY-0041	BABYLON RRF	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	NOX	SNCR
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	CO	
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	PM	FABRIC FILTER
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	NOX	SNCR
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	CO	
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	PM	FABRIC FILTER
NY-0042	HUNTINGTON RRF	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	NOX	
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	CO	
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	PM	ELECTROSTATIC PRECIPITATORS (ESP)
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	SO2	DRY SCRUBBER
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	NOX	
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	CO	
NY-0043	ADIRONDACK RRF CORP.	INCINERATOR, 2 UNITS	PM	ELECTROSTATIC PRECIPITATORS (ESP)
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	PM	CYCLONE, ESP
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	SO2	LIMESTONE IN COMBUSTION BED
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	NOX	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	CO	DESIGN & OPERATING PRACTICES
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	VOC	DESIGN & OPERATING PRACTICES
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	BE	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	HG	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	HCL	LIMESTONE COMBUSTION BED
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	PB	CYCLONE, ESP
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	PM	CYCLONE, ESP
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	SO2	LIMESTONE IN COMBUSTION BED
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	NOX	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	CO	DESIGN & OPERATING PRACTICES
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	VOC	DESIGN & OPERATING PRACTICES
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	BE	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	HG	
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	HCL	LIMESTONE COMBUSTION BED
OH-0074	ALTERNATIVE FUELS INDUSTRIES	INCINERATOR	PB	CYCLONE, ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	PM	ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	SO2	
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	VOC	SEE NOTE #1
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	NOX	SEE NOTE #2
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	CO	SEE NOTE #2
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	PB	ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	VE	ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	PM	ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	SO2	
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	VOC	SEE NOTE #1
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	NOX	SEE NOTE #2
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	CO	SEE NOTE #2
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	PB	ESP
OH-0080	MONTGOMERY CNTY NORTH & SOUTH REDUCTION PLTS	INCINERATOR, ROTARY KILN, 2	VE	ESP
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	PM	ESP - 4 FIELD
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	SO2	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	NOX	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	VOC	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	CO	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	HG	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	VE	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	PM	ESP - 4 FIELD (2)
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 3 EA	SO2	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	NOX	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	VOC	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	CO	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	HG	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	VE	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	PM	ESP - 4 FIELD
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	SO2	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	NOX	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	VOC	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	CO	

ABLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	HG	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, SEE NOTE 2	VE	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	PM	ESP - 4 FIELD (2)
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	SO2	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	NOX	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	VOC	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	CO	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	HG	
OK-0021	OGDEN MARTIN SYSTEMS OF TULSA, INC	INCINERATOR, SOLID WASTE, 2 EA	VE	
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	PM	BAGHOUSE
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	NOX	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	HCL	DRY SCRUBBER
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	SO2	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	VE	
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	CO	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	HG	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	VOC	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	PB	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	FLUORIDES	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	BE	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	TCDD	TEMPERATURE CONTROL
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	PM	BAGHOUSE
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	NOX	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	HCL	DRY SCRUBBER
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	SO2	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	VE	
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	CO	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	HG	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	VOC	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	PB	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	FLUORIDES	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	BE	EQUIPMENT DESIGN & OPERATION
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, SOLID WASTE, 2 EA	TCDD	TEMPERATURE CONTROL
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, MASS BURN, 3	PM	FABRIC FILTER
OR-0004	OGDEN MARTIN SYSTEMS OF MARION, INC	INCINERATOR, MASS BURN, 3	HCL	SPRAY DRYER
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	SO2	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	CO	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	PCDD/PCDF	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	VE	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	PM	FABRIC FILTER
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	HCL	SPRAY DRYER
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	SO2	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	CO	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	PCDD/PCDF	
PA-0032	YORK COUNTY SOLID WASTE & REFUSE AUTHORITY	INCINERATOR, MASS BURN, 3	VE	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	PM	FABRIC FILTER
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	HCL	LIMESTONE INJECTION
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	SO2	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	CO	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	PCDD/PCDF	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	VE	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	PM	FABRIC FILTER
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	HCL	LIMESTONE INJECTION
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	SO2	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	CO	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	PCDD/PCDF	
PA-0033	ERIE ENERGY RESOURCE, INC.	INCINERATOR, CFB, 2	VE	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	PM	ESP
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	HCL	SPRAY DRYER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	SO2	SPRAY DRYER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	NOX	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	CO	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	PCDD	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	HEAVY METALS	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	PM	ESP
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	HCL	SPRAY DRYER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	SO2	SPRAY DRYER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	NOX	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	CO	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	PCDD	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	HEAVY METALS	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	PM	FABRIC FILTER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	HCL	DRY SCRUBBER
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	SO2	
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	CO	COMBUSTION CONTROL
PA-0037	DRAVO ENERGY RESOURCES	INCINERATOR, 2 EA	NOX	COMBUSTION CONTROL
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA	PCDD/PCDF	
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA	PM	FABRIC FILTER
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA	HCL	DRY SCRUBBER
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA		
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA		
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA		
PA-0066	CHESTER SOLID WASTE ASSOCIATES	INCINERATOR, MASS BURN/ROTARY, 6 EA		

RBLCID	FACILITY
PA-0056	CHESTER SOLID WASTE ASSOCIATES
PA-0056	CHESTER SOLID WASTE ASSOCIATES
PA-0056	CHESTER SOLID WASTE ASSOCIATES
PA-0056	CHESTER SOLID WASTE ASSOCIATES
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
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PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0056	LANCASTER COUNTY SOLID WASTE MANAGEMENT AUTHORITY
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0070	GLENDON ENERGY CO
PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA 0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
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PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA-0074	TECHNOCHEM ENVIRONMENTAL SYSTEMS, INC
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
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PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO
PA-0085	GLENDON ENERGY CO.
PA-0088	WHEELABRATOR FALLS, INC.
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
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PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PA-0088	WHEELABRATOR FALLS, INC
PR-0001	SAN JUAN RESOURCE RECOVERY FACILITY
PR-0001	SAN JUAN RESOURCE RECOVERY FACILITY
PR-0001	SAN JUAN RESOURCE RECOVERY FACILITY
PR-0001	SAN JUAN RESOURCE RECOVERY FACILITY
PR-0001	SAN JUAN RESOURCE RECOVERY FACILITY

PROCESS
INCINERATOR, MASS BURN/ROTARY, 6 EA
INCINERATOR, MASS BURN/ROTARY, 6 EA
INCINERATOR, MASS BURN/ROTARY, 6 EA
INCINERATOR, MASS BURN/ROTARY, 6 EA
INCINERATOR, MASS BURN, 3 EA
INCINERATOR, MASS BURN, 3 EA
INCINERATOR, MASS BURN, 3 EA
INCINERATOR, MASS BURN, 3 EA
INCINERATOR, MASS BURN, 3 EA
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INCINERATOR, MASSBURN, 2 EA
INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
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INCINERATORS, ROTARY, 2
MATERIAL HANDLING
INCINERATORS, ROTARY, 2
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INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
INCINERATORS, ROTARY, 2
MATERIAL HANDLING
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
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INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, 2, MASSBURN MUNIC WASTE
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
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INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
INCINERATORS, MUNICIPAL WASTE (2)
COMBUSTOR, MASS BURN, 3
COMBUSTOR, MASS BURN, 3
COMBUSTOR, MASS BURN, 3
COMBUSTOR, MASS BURN, 3

POLLUTANT	CTRLDESC
SO2	
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
PCDD/PCDF	
PM	FABRIC COLLECTOR
PM10	FABRIC COLLECTOR
SO2	LIME INJECTION, DRY SCRUBBER
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
HCL	LIME INJECTION, DRY SCRUBBER
PCDD/PCDF	COMBUSTION CONTROL
PM	FABRIC COLLECTOR
PM10	FABRIC COLLECTOR
SO2	LIME INJECTION, DRY SCRUBBER
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
HCL	LIME INJECTION, DRY SCRUBBER
PCDD/PCDF	COMBUSTION CONTROL
PM10	FABRIC COLLECTOR
SO2	SPRAY DRYER
CO	COMBUSTION CONTROL
NOX	SNCR
HCL	SPRAY DRYER
PCDD/PCDF	COMBUSTION CONTROL
PM10	FABRIC COLLECTOR
SO2	SPRAY DRYER
CO	COMBUSTION CONTROL
NOX	SNCR
HCL	SPRAY DRYER
PCDD/PCDF	COMBUSTION CONTROL
PM10	FABRIC COLLECTOR
SO2	SODIUM BICARB INJ
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL, SODIUM BICARB INJ
HCL	SODIUM BICARB INJ
PCDD/PCDF	COMBUSTION CONTROL
VE	FABRIC COLLECTOR
PM	FABRIC COLLECTOR
PM10	FABRIC COLLECTOR
SO2	SODIUM BICARB INJ
CO	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL, SODIUM BICARB INJ
HCL	SODIUM BICARB INJ
PCDD/PCDF	COMBUSTION CONTROL
VE	FABRIC COLLECTOR
PM	FABRIC COLLECTOR
PM10	FABRIC COLLECTOR
SO2	SPRAY DRYER
CO	COMBUSTION CONTROL
NOX	SNCR/THERMAL DENOX
HCL	SPRAY DRYER
PCDD/PCDF	COMBUSTION CONTROL
HG	ACTIVATED CARBON INJECTION OR NA2S INJECTION (SEE NOTES)
PM10	FABRIC COLLECTOR
SO2	SPRAY DRYER
CO	COMBUSTION CONTROL
NOX	SNCR/THERMAL DENOX
HCL	SPRAY DRYER
PCDD/PCDF	COMBUSTION CONTROL
HG	ACTIVATED CARBON INJECTION OR NA2S INJECTION (SEE NOTES)
PM10	FABRIC FILTER
SO2	SPRAY DRY ABSORBER
CO	COMBUSTION CONTROL
NOX	SNCR
HG	ACTIVATED CARBON
PCDD/PCDF	COMBUSTION CONTROL
HCL	SPRAY DRY ABSORBER
PM10	FABRIC FILTER
SO2	SPRAY DRY ABSORBER
CO	COMBUSTION CONTROL
NOX	SNCR
HG	ACTIVATED CARBON
PCDD/PCDF	COMBUSTION CONTROL
HCL	SPRAY DRY ABSORBER
NOX	COMBUSTION CONTROL
NOX	COMBUSTION CONTROL
SO2	DRY SCRUBBER
PM	FABRIC FILTER
PM10	FABRIC FILTER

FACILITY	PROCESS	POLLUTANT	CTRLDESC
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CO	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CO	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HG	TEMPERATURE OPTIMIZATION TO FABRIC FILTER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	PB	
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	BE	
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	AS	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CD	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	NI	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CR	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	H2SO4	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HCL	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HF	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	VOC	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	TCDD	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	VE	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	NOX	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	NOX	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	SO2	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	PM	FABRIC FILTER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	PM10	FABRIC FILTER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CO	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CO	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HG	TEMPERATURE OPTIMIZATION TO FABRIC FILTER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	PB	
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	BE	
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	AS	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CD	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	NI	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	CR	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	H2SO4	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HCL	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	HF	DRY SCRUBBER
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	VOC	COMBUSTION CONTROL
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	TCDD	DRY SCRUBBER/BAGHOUSE
SAN JUAN RESOURCE RECOVERY FACILITY	COMBUSTOR, MASS BURN, 3	VE	DRY SCRUBBER/BAGHOUSE
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	PM	FABRIC FILTER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	HCL	DRY SCRUBBER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	SO2	DRY SCRUBBER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	NOX	COMBUSTION CONTROL
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	CO	COMBUSTION CONTROL
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	PM	FABRIC FILTER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	HCL	DRY SCRUBBER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	SO2	DRY SCRUBBER
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	NOX	COMBUSTION CONTROL
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	CO	COMBUSTION CONTROL
QUONSET POINT RESOURCE RECOVERY FACILITY	INCINERATOR, MASS BURN, 2 EA	PM	SCRUB & FABRIC FILTERS
RESOURCES AUTHORITY	BOILER, MUNICIPAL REFUSE FIRED, 2	PM	SCRUB & FABRIC FILTERS
RESOURCES AUTHORITY	BOILER, MUNICIPAL REFUSE FIRED, 2	PM	ESP
CITY OF CLEBURNE	INCINERATOR, 3 EA	NOX	
CITY OF CLEBURNE	INCINERATOR, 3 EA	CO	
CITY OF CLEBURNE	INCINERATOR, 3 EA	SO2	
CITY OF CLEBURNE	INCINERATOR, 3 EA	HCL	
CITY OF CLEBURNE	INCINERATOR, 3 EA	PB	
CITY OF CLEBURNE	INCINERATOR, 3 EA	VOC	
CITY OF CLEBURNE	INCINERATOR, 3 EA	PM	ESP
CITY OF CLEBURNE	INCINERATOR, 3 EA	NOX	
CITY OF CLEBURNE	INCINERATOR, 3 EA	CO	
CITY OF CLEBURNE	INCINERATOR, 3 EA	SO2	
CITY OF CLEBURNE	INCINERATOR, 3 EA	HCL	
CITY OF CLEBURNE	INCINERATOR, 3 EA	PB	
CITY OF CLEBURNE	INCINERATOR, 3 EA	VOC	
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	PM	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	NOX	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	CO	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	HCL	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	VE	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	PM	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	NOX	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	CO	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	HCL	SEE NOTES
PREFERRED REDUCTION SERVICES, INC	INCINERATOR, GAS FIRED	VE	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	PM	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	PM10	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	SO2	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	NOX	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	HCL	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	CO	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	VE	SEE NOTES
CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	PM	SEE NOTES

RBLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	PM10	SEE NOTES
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	SO2	SEE NOTES
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	NOX	SEE NOTES
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	HCL	SEE NOTES
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	CO	SEE NOTES
UT-0037	CONTINENTAL THERMAL DESTRUCTION	INCINERATOR, GAS FIRED, 2 EA	VE	SEE NOTES
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	PM	ESP
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	VE	
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	SO2	FUEL SPEC: #6 FUEL OIL AS AN AUX. FUEL
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	VOC	NOTE #1
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	CO	NOTE #1
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	NOX	NOTE #2
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	PB	ESP
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	PM	ESP
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	VE	
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	SO2	FUEL SPEC: #6 FUEL OIL AS AN AUX. FUEL
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	VOC	NOTE #1
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	CO	NOTE #1
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	NOX	NOTE #2
VA-0024	ARLINGTON/ALEXANDRIA WASTE-TO-ENERGY PLT	INCINERATOR, 3	PB	ESP
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	PM	BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	SO2	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	VOC	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	NOX	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	CO	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	PB	BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HCL	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HBR	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	CD	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	SB	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	AS	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HG	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	BE	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HF	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	DIOXINS (US EPA TOXI	COMBUSTION CONTROLS, DESIGN
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	H2SO4	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	PM	BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	SO2	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	VOC	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	NOX	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	CO	COMBUSTION CONTROLS
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	PB	BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HCL	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HBR	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	CD	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	SB	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	AS	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HG	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	BE	PARTIAL CONTROL BY BAGHOUSE
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	HF	DRY SCRUBBER
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	DIOXINS (US EPA TOXI	COMBUSTION CONTROLS, DESIGN
VA-0055	OGDEN MARTIN SYSTEMS OF FAIRFAX, INC	INCINERATOR, 4 EA	H2SO4	DRY SCRUBBER
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	PM	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	SO2	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	VOC	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	NOX	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	CO	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	PB	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HCL	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HBR	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	CD	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	SB	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	AS	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HG	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	BE	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HF	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	DIOXINS	COMBUSTION CONTROLS, INCINERATOR RESIDENCE TIME
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	PM	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	SO2	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	VOC	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	NOX	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	CO	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	PB	COMBUSTION CONTROL
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HCL	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HBR	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	CD	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	SB	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	AS	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HG	ESP

RBLCID	FACILITY	PROCESS	POLLUTANT	CTRLDESC
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	BE	ESP
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	HF	ACID GAS CONTROL DEVICE
VA-0140	OGDEN/MARTIN SYSTEMS OF ALEXANDRIA	INCINERATOR, MSW	DIOXINS	COMBUSTION CONTROLS, INCINERATOR RESIDENCE TIME
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PM	BAGHOUSE
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	SO2	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	NO2	LOW EXCESS AIR, OVERFIRED AIR, WATERWALL
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CO	SYSTEM DESIGN
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PB	BAGHOUSE
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	ACID MIST	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HCL	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HF	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HBR	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	AS	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	BE	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CR	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	NI	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HG	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	COBALT	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	TCDD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	TCDF	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PCDD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PCDF	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	BAP	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PM	BAGHOUSE
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	SO2	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	NO2	LOW EXCESS AIR, OVERFIRED AIR, WATERWALL
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CO	SYSTEM DESIGN
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PB	BAGHOUSE
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	ACID MIST	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HCL	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HF	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HBR	NOTE 2
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	AS	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	BE	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	CR	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	NI	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	HG	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	COBALT	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	TCDD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	TCDF	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PCDD	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	PCDF	PERMIT LIMITS
VA-0151	ENERGY RESOURCES OF HENRICO, INC	BOILER, 2 EA	BAP	PERMIT LIMITS
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	PM	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	PB	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	BE	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	ASBESTOS	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	HCL	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	SO2	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	NOX	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	HG	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	PM	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	PB	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	BE	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	ASBESTOS	ESP
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	HCL	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	SO2	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	NOX	
VT-0003	VICON RECOVERY SYSTEMS	INCINERATOR, MUNICIPLE SOLID WASTE	HG	
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	CO	FIRING EQUIPMENT DESIGN, COMBUSTION AIR CONTROL
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	PM	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	DIOXINS & FURANS	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	HCL	PACKED TOWER ABSORBER/SCRUBBER
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	SO2	PACKED TOWER ABSORBER/SCRUBBER
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	NOX	COMBUSTION MODIFICATION
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	PB	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	F	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	HG	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	BE	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	CO	FIRING EQUIPMENT DESIGN, COMBUSTION AIR CONTROL
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	PM	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	DIOXINS & FURANS	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	HCL	PACKED TOWER ABSORBER/SCRUBBER
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	SO2	PACKED TOWER ABSORBER/SCRUBBER
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	NOX	COMBUSTION MODIFICATION
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	PB	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 2 EA	F	ESP

RBLCID	FACILITY	PROCESS		POLLUTANT	CTRLDESC
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 7	EA	HCl	ESP
VT-0003 A	VICON RECOVERY SYSTEMS	INCINERATOR, MSW, 7	EA	BE	ESP

Attachment 5

Pit Burner Operating Data

PEBBLY BEACH LANDFILL

MAY 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	555 TRUCKS	PVT VEH	CITY VEH	SC VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	9.125	0	0	0		9.125	9.125	5.31			5.31	
2	8.925	0	0	0		8.925	8.925		19.475		19.475	
3	19.675	7.245	2.545	1.025		30.49	25		12.95	0.14	13.09	
4	17	2.58	0.753	0.05		20.383	25		23.475	0.315	23.79	
5	8.95	6.595	0.8	0.05		16.395	17.268	5.47		0.405	5.875	
6	16.775	2.985	0.5	1.6		21.86	21.86				0	
7	17.975	5	1.245	0.525	1.47	26.215	25	5.53			5.53	
8	10.775	0	0	0		10.775	11.99				0	
9	10	0	0	0		10	10				0	
10	20.15	4.94	0.55	0.85		26.49	26.49			0.16	0.16	
11	20.15	2.505	0	0.8		23.455	24.945				0	
12	9.025	2.47	1.65	0.25		13.395	13.395		17.925	0.505	18.43	
13	16.075	2.595	0.5	1.075		20.245	20.245			0.15	0.15	
14	18.3	4.475	0.5	1.765		25.04	25			0.29	0.29	
15	13.075	0	0.5	0		13.575	13.615				0	
16	12.5	0	0	0		12.5	12.5		11.45		11.45	
17	22.625	5.645	0.99	1.31		30.57	25		15.68		15.68	
18	22.625	4.107	0.45	0.725		27.907	25		15.975		15.975	
19	9.6	3.705	0.845	1.175		15.325	22.302		27.025		27.025	
20	14.425	3.18	0.55	0.525		18.68	18.68				0	
21	19.025	3.57	0.4	0.775		23.77	23.77				0	
22	10.8	0	0	0		10.8	10.8				0	
23	10.075	0	0	0		10.075	10.075				0	
24	19.425	14.735	1.3	0		35.46	25			0.5	0.5	1
25	20.525	20.17	4.425	0.855		45.975	25				0	0.895
26	10.8	14.39	0.4	0	3.65	29.24	25				0	
27	18.225	8.84	0.83	0.45		28.345	25				0	9.03
28	22.675	5.66	0.35	0.9	4.745	34.33	25			0.51	0.51	
29	14.05	0	1.25	0		15.3	25				0	
30	13.775	0	1.5	0		15.275	25				0	
31	23.55	0	1.65	0		25.2	25				0	
TOTAL TONS	480.675	125.39	24.483	14.705	9.865	655.12	625.985	16.31	143.955	2.975	163.24	10.925

WHITE GOODS TOTALS	
WATER HEATER	18
REFRIGERATOR	8
WASHER	8
DRYER	6
COMPACTOR	2
STOVE/RANGE	5
DISHWASHER	
MICROWAVE	
AIR CONDITIONER	1
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	3
SINK	3
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

JUNE 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH.	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	23.625	9.405	1.1	0.5	4.6	39.23	25		15.075		15.075	
2	10.875	4.105	0.25	0.705	2.07	18.030	25		29.375	0.205	29.58	
3	19.05	1.835	2.1	0.825		23.81	25		18.675	0.385	19.06	7.92
4	21.375	4.055	1.3	0.425	1.415	28.57	25				0	10.805
5	16.65	0	1.35	0		18	25				-- 0	--
6	10.725	0	0.8	0		11.525	25				0	
7	19.725	2.625	2.365	0.5		25.215	25			1.505	1.505	7.035
8	21.05	2.1	1.74	1.64		26.53	25				0	1.785
9	10.475	3.16	0.675	0.3		14.61	25		15.32	0.65	15.97	1.625
10	17.375	2.285	0.855	0.75		21.265	25		14.95		14.95	18.05
11	20.475	7.97	2.15	0.75		31.345	25				0	8.378
12	12.9	0	1.45	0		14.35	25				0	
13	13.275	0	0.9	0		14.175	15.855				0	
14	19.475	4.141	0.9	0.2		24.716	24.716			0.386	0.386	
15	16.65	4.214	0.2	1.575		22.639	22.639			0.29	0.29	
16	11.225	3.118	0.875	0	2.625	17.843	17.843	5.91			5.91	
17	19.05	2.586	0.95	1.225		23.811	23.811		14.4	0.599	14.999	
18	21.225	4.545	1.15	0		26.92	25		13.125		13.125	
19	14.2	0	0.6	0		14.8	16.72				0	
20	13.225	0	1.25	0		14.475	14.475				0	
21	21.725	2.665	2.3	0.2		26.89	25		16		16	
22	22.9	3.56	1.35	0		27.81	25		20.3		20.3	
23	12.375	2.705	0	0.325	2.85	18.255	22.955		12.575		12.575	
24	22.875	2.685	1.85	0	5.97	33.38	25			7.055	7.055	
25	21.575	9.125	5.85	0.465	4.01	41.025	25				0	
26	14.475	0	0.75	0		15.225	25				0	
27	14.075	0	0.925	0		15	25				0	
28	22.15	3.64	1.375	0.475	3.855	31.495	25				0	
29	26.375	2.995	1.35	0.25		30.97	25			0.12	0.12	
30	10.075	5.5	0.625	0.675	2.8	19.675	25				0	
31	NA	NA	NA	NA	NA	0		NA	NA	NA	0	NA
					left from May	29.135						
TOTAL TONS	521.225	89.019	39.335	11.875	30.195	720.784	1709.014	5.91	169.8	11.195	186.9	55.598

WHITE GOODS TOTALS	
WATER HEATER	12
REFRIGERATOR	7
WASHER	9
DRYER	2
COMPACTOR	
STOVE/RANGE	2
DISHWASHER	1
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	5
SINK	1
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

JULY 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	23.65	4.915	1.625	0.585	5.755	36.53	25		12.125	0.655	12.78	32.145
2	24.35	4.535	1.55	0.4	10.015	40.85	25		0.025		6.525	17.65
3	17.875	0	1.35	0	4.945	24.17	25		19.975		19.975	
4	16.325	0	2.2	0		18.525	25		25.05		25.05	
5	28.525	0.26	2.15	0.575		31.51	25	5.635	8.075		13.71	
6	32	3.86	1.35	0.35		37.56	25	11.43			11.43	
7	13.025	6.535	0	0.68		20.24	25	17.785		6.1	23.885	
8	22.525	8.68	1.4	0.325		32.93	25	10.17			10.17	
9	22.85	5.452	1.75	0.2		30.252	25				0	
10	17.075	0	1.8	0		18.875	25				0	
11	13.85	0	1.05	0		14.9	25				0	
12	24.825	2.82	3	0.175		30.82	25		13.65		13.65	
13	24.25	7.815	1.825	0	5.865	39.755	25		6.425		6.425	
14	14.5	10.12	0.95	2.325		27.895	25		18.5		18.5	
15	22.3	7.012	1.55	0		30.862	25		14.275		14.275	
16	23.725	1.52	1	0.975	4.425	31.645	25				0	
17	15.75	0	1.25	0		17	25				0	
18	14.6	0	1.05	0		15.65	25				0	
19	25.275	2.925	1.875	0.275		30.35	25				0	
20	24.15	4.81	2.25	0.6		31.81	25				0	
21	14.9	5.19	0	0.525		20.615	25			0.09	0.09	
22	22.2	3.092	1.7	0.725		27.717	25		18.5		18.5	
23	22.375	1.25	2.2	0.81	1.475	28.11	25		20.8		20.8	5.33
24	16.5	0	1	0		17.5	25		6.4		6.4	
25	15.05	0	1	0		16.05	25				0	
26	26.075	6.015	2.575	1.1		35.765	25				0	
27	24.825	6.89	1.325	1.955		34.995	25				0	
28	14.35	0.935	2.75	0.475		18.51	25			0.49	0.49	
29	22.7	2.53	1.9	0.34		27.47	25			0.25	0.25	
30	23.075	1.045	1.9	0	1.06	27.1	25				0	
31	16.425	0	0.95	0		17.375	25				0	
					from Jun	11.77						
TOTAL TONS	639.9	98.206	48.275	13.395	33.56	845.106	775	45.02	170.4	7.535	223.005	49.075

55.305

WHITE GOODS TOTALS	
WATER HEATER	21
REFRIGERATOR	16
WASHER	9
DRYER	8
COMPACTOR	1
STOVE/RANGE	5
DISHWASHER	4
MICROWAVE	3
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	4
SINK	7
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

AUGUST 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	11.925	0	1.925	0		13.85	25	30.065			30.065	
2	28.2	2.145	1	1.4	0.795	31.54	25		13.775		13.775	
3	25.8	5.535	2.15	0.94		34.525	25		6.375	1.345	7.72	
4	14.6	3.095	2.8	0.275		20.77	25		20.825	2	22.825	
5	22.95	1.805	0.75	1.27		26.775	25			0.185	0.185	
6	22.825	1.44	1.9	0.75		26.715	25			1.175	1.175	
7	17.125	0	1.05	0		18.175	25				0	
8	14.4	0	2.1	0		16.5	25				0	
9	31.225	2	1.975	1.35		36.55	25			0.145	0.145	
10	26.2	1.54	1.6	1.575		30.915	25				0	
11	15.5	5.555	2.075	0.5		23.64	25		23.175		23.175	
12	23.35	4.035	2.075	2.44		31.9	25		15.075		15.075	
13	23.35	6.11	1.9	0.66	2.37	34.71	25		6.975		6.975	
14	17.05	0	1.95	0		19	25				0	
15	12.925	0	2.2	0		15.125	25				0	
16	27.075	3.685	1.85	0.575		33.185	25				0	
17	25.525	0.76	1.825	0		28.11	25			0.595	0.595	
18	14.6	1.28	1.7	0.35		17.93	25		20.85		20.85	
19	22.95	4.18	1.925	0.325		29.38	25			0.2	0.2	0.67
20	22.45	2.82	1.95	0.4		27.62	25			1.44	1.44	
21	17.45	0	1.1	0		18.55	25				0	
22	15.55	0	1.1	0		16.65	25				0	
23	29.3	1.135	2.615	0.835		34.085	25			0.955	0.955	
24	24.425	4.12	1.625	1.22		31.39	25				0	
25	15.05	2.355	1.85	0.3		19.555	25				0	
26	22.05	2.6	1.6	0.275		26.525	25				0	
27	18.25	2.06	1.75	0.93	2.52	25.51	25				0	
28	14.5	0	1	0		15.5	25				0	
29	19.975	0	1	0		20.975	25				0	
30	24.925	3.006	1.775	0.62		30.326	25			5.25	5.25	
31	23.3	1.86	0.75	0		25.91	25				0	
					from Jul	70.106						
TOTAL TONS	643	83.231	52.865	17.01	5.685	851.897	775	30.065	107.05	13.29	150.405	0.67

WHITE GOODS TOTALS	
WATER HEATER	15
REFRIGERATOR	9
WASHER	5
DRYER	1
COMPACTOR	3
STOVE/RANGE	2
DISHWASHER	2
MICROWAVE	
AIR CONDITIONER	2
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	3
SINK	2
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

SEPTEMBER 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	10.775	2.886	2.8	1.35	2.625	20.435	25				0	
2	21.775	3.9	1.3	0.3	2.755	30.03	25		13.4		13.4	
3	20.375	2.665	1.55	0.1	2.375	27.065	25		14.775	0.675	15.45	
4	12.775	0	1.1	0		13.875	25		20.45		20.45	
5	14.975	0	2.35	0		17.325	25				0	
6	30.35	0	2.45	0		32.8	25		13.75		13.75	
7	25.775	1.87	1.64	0.325	0.75	29.86	25		14.4		14.4	
8	11.9	0.765	1.5	0		14.165	25		28.2		28.2	
9	21.45	4.125	1.525	0		27.1	25			0.25	0.25	
10	12.875	0.305	1.375	0.9	1.635	24.69	25			1.05	1.05	
11	13.325	0	0.65	0		13.975	25				0	
12	15.1	0	0.65	0		15.75	25		15.35		15.35	
13	20.75	5.239	1.25	0.225		28.464	25		16.025	0.485	16.51	
14	21.5	12.04	0.7	0.625	5.2	40.065	25			0.725	0.725	
15	18.35	9.91	1.375	0		21.635	25				0	
16	17.5	9.235	0.8	1.15		28.685	25				0	
17	17.2	7.99	1.5	0		26.69	25			0.33	0.33	
18	12.025	0	0	0		12.025	25				0	
19	12.375	0	0	0		12.375	25				0	
20	22.15	12.13	1.35	1.295		36.925	25				0	
21	20.45	19.7	1.35	0.33		41.83	25			0.88	0.88	
22	10.6	13.725	0.4	0.265		24.99	25		23.95		23.95	
23	18.275	8.49	1.425	0.6	1.79	30.58	25		15.5		15.5	
24	17.175	4.13	1.25	1.175	4.675	28.405	25		16.45		16.45	
25	11.5	0	0	0		11.5	25				0	
26	12.925	0	0	0		12.925	25				0	
27	22.375	7.465	2.1	1.265	1.375	34.58	25		5.475		5.475	
28	21.675	2.85	1.3	0.675		26.5	25				0	
29	10.5	5.42	0.8	0.485		17.305	25			0.53	0.53	1.1
30	17.025	4.145	0.1	1.1		22.37	25				0	
31	na	na	na	na	na	na	na				0	
						from Aug	76.897					
TOTAL TONS	514.3	140.58	34.69	12.165	23.18	801.816	750	0	197.725	4.935	202.66	1.1
							724.919	this month				

WHITE GOODS TOTALS	
WATER HEATER	14
REFRIGERATOR	15
WASHER	5
DRYER	4
COMPACTOR	
STOVE/RANGE	8
DISHWASHER	3
MICROWAVE	3
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	3
SINK	5
TUB	2
SHOWER	

PEBBLY BEACH LANDFILL

OCTOBER 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	16.1	4.18	2.15	0.885		25.315	25	16.855			16.855	
2	11.4	0	0	0		11.4	25				0	
3	10.825	0	0	0		10.825	25				0	
4	18.225	2.15	2.465	0.175		23.015	25	19.27			19.27	
5	19.15	5.805	1.235	0.325		26.515	25				0	
6	10.15	3.985	0.68	0.9		15.715	25				0	
7	16.175	2.46	1.65	0.73		21.015	25				0	
8	18.55	4.43	1.05	0.525	7.31	31.865	25				0	
9	10.975	0	0	0		10.975	25				0	
10	12.55	0	0	0		12.55	16.006				0	
11	21.7	5.185	1.925	0.7		29.51	25				0	
12	20.65	7.615	0.9	0.5		29.665	25				0	
13	9.675	4.65	0	0		14.325	23.5				0	
14	15.925	4.4	0.05	0.905		21.28	21.28			4.775	4.775	11
15	17.9	16.255	1.4	0.35		35.905	25			0.205	0.205	
16	11.05	0	0.9	0		11.95	22.855				0	
17	11.475	0	0	0		11.475	11.475				0	
18	21.75	12.44	0.55	1.1		35.84	25				0	
19	19.6	11.835	1.1	0.85		33.385	25			1.7	1.7	7.85
20	9.325	5.84	0.55	0.56		16.275	25		13.375	7	20.375	11.525
21	14.925	7.44	1.675	0.575		24.615	25			4.35	4.35	8.47
22	15.75	7.625	1.175	0.375	3.3	28.225	25				0	
23	10.625	0	0	0		10.625	23.965				0	
24	10.05	0	1.398	0		11.448	11.448				0	
25	19.975	4.2	1.768	1.3		27.243	25				0	4.38
26	18.65	2.09	2.268	1.575		24.603	25			11.98	11.98	
27	8.8	5.02	1.335	0		15.155	17.001				0	
28	16.475	8.378	0.6	0.7		26.153	25				0	
29	17.9	2.645	0	0.3		20.845	21.998				0	
30	9.625	0	0.95	0		10.575	10.575				0	
31	9.275	0	1.025	0		10.3	10.3				0	
					from Sept	51.816						
TOTAL TONS	457.2	128.63	28.819	13.33	10.61	690.403	690.403	36.125	13.375	30.01	79.51	43.225

WHITE GOODS TOTALS	
WATER HEATER	9
REFRIGERATOR	13
WASHER	5
DRYER	4
COMPACTOR	
STOVE/RANGE	4
DISHWASHER	1
MICROWAVE	1
AIR CONDITIONER	5
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	19
SINK	8
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

NOVEMBER 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	DIRT
1	19.4	7.64	0.85	0.71		28.6	25		17.05		17.05	
2	18.4	3.34	1.505	0.48		23.725	25		20		20	
3	8.825	16.845	0.6	0.75		27.02	25		9.375		9.375	
4	16.2	14.345	1	0.845		32.39	25			0.85	0.85	
5	15.325	4.26	1.15	0.475		21.21	25	21.695			21.695	
6	10.05	0	1.05	0		11.1	19.045				0	
7	9.425	0	0.85	0		10.275	10.275				0	
8	19.8	3.08	1.125	1.15		25.155	25		14.5	0.285	14.785	0.665
9	19.225	6.725	1.2	2.55		29.7	25		12.55		12.55	
10	8.5	3.72	0	1.125		13.345	18.2		20.725		20.725	
11	13.6	0.91	0.175	1.48		16.165	16.165				0	
12	17.3	3.81	1.25	2.975		25.335	25				0	
13	9.625	0	0.75	0		10.375	10.71				0	
14	8.95	0	0	0		8.95	8.95				0	
15	17.5	2.32	1.438	1.375		22.633	22.633		24.6		24.6	
16	19.4	2.295	1.25	1.625		24.57	24.57		24.225		24.225	135.935
17	8.5	5.61	0.7	1.55		16.36	16.36			1.595	1.595	80.11
18	14.825	1.205	1.275	1.46		18.765	18.765		5.625	0.495	6.12	105.965
19	14.975	4.71	1.05	0.81		21.545	21.545				0	
20	9.35	0	0.75	0		10.1	10.1				0	
21	7.175	0	0	0		7.175	7.175				0	
22	17.125	0.575	0.05	0.825		18.575	18.575				0	
23	16.34	9.027	1.35	1.15		27.867	25				0	
24	7.275	2.71	0	0.835		10.82	13.687		29.05	3.375	32.425	36
25	15.35	0	0	0		15.35	15.35				0	
26	13.225	0.925	1.525	0		15.675	15.675				0	
27	10.75	0	0	0		10.75	10.75				0	
28	8.95	0	0	0		8.95	8.95				0	
29	19.05	0.905	0.6	1.85		22.405	22.405		20.325		20.325	
30	17.425	2.82	0.85	0.825		21.92	21.92		14.675		14.675	
31	NA	NA	NA	NA	NA	0	0	NA	NA	NA	0	NA
TOTAL TONS	411.84	97.777	22.343	24.845	0	556.805	556.805	21.695	212.7	6.6	240.995	358.675

WHITE GOODS TOTALS	
WATER HEATER	11
REFRIGERATOR	5
WASHER	3
DRYER	4
COMPACTOR	
STOVE/RANGE	5
DISHWASHER	1
MICROWAVE	
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	2
SINK	1
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

DECEMBER 1999 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED/OT		
AY	SSS TRUCKS	PVT VEH	CITY VEH	SO VEH	ROLL OFFS	TOTAL TONS	TONS BURNED	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	METAL	APPL	RECYC
1	9.225	3.485	0	0.735		12.445	12.445			0.965	0.965	0.255	0.18	
2	12.95	3.49	1.065	1.26		18.765	18.765			0.8	0.8		0.12	
3	14.475	6.415	0.65	1.025	3.26	25.825	25				0	0.04	0.1	
4	7.45	0	0	0		7.45	8.275				0			
5	5.925	0	0	0		5.925	5.925				0			
6	16.05	0.585	0.475	0.89		18	18		30.6		30.6	0.04	0.05	
7	16.475	1.52	1.025	2.5		21.52	21.52			0.85	0.85	0.075	0.063	
8	6.525	2.27	0.25	2.575		11.62	11.62				0	0.025	0.126	
9	12.125	1.525	0.325	1.925		15.9	15.9				0	0.333		
10	16.625	1.205	1.75	2.375		21.955	21.955				0	0.12	0.102	
11	6.45	0	0.95	0		7.4	7.4				0			
12	5.475	0	0	0		5.475	5.475				0			
13	15.3	2.965	0	0.225		18.49	18.49		23.1		23.1	0.48		
14	14.425	3.799	0.45	0.4		19.074	19.074				0			
15	5.575	2.825	0.75	0.725		9.875	9.875				0	0.015		
16	13.4	5.54	0.825	0		19.765	19.765			0.4	0.4		0.163	
17	15.1	4.49	0	0.325	4.05	23.965	23.965				0	0.3		
18	5.95	0	0	0		5.95	5.95				0			
19	5	0	0	0		5	5				0			
20	14	2.87	0	1.28	4.005	22.155	22.155		21.33		21.325	0.375	0.375	
21	16.125	2.025	1.46	0.745		20.355	20.355				0	0.11	0.082	
22	6.6	4.565	0.25	0.315	2.7	14.43	14.43				0	3.28	0.278	
23	13.525	1.625	0.375	0.3		15.825	15.825				0	0.13		
24	14.15	0	0.575	0		14.725	14.15				0			
25	5.225	0	0	0		5.225	5.225				0			
26	4.025	0	0	0		4.025	4.025				0			
27	18.45	1.76	0.61	1		21.82	21.82				0	0.001		
28	18.425	1.15	1.195	0		20.77	20.77				0	0.115	0.09	
29	8.475	2.275	0.95	0.725		12.425	12.425			0.6	0.6		0.063	
30	15.9	1.875	0.9	0.7		19.375	19.375				0	0.345	0.311	
31	18.925	0.275	0	0		19.2	19.2				0	0.08		
AL														
TS	357.325	58.534	14.83	20.03	14.02	464.729	464.154	0	75.03	3.515	78.54	6.119	2.103	0

WHITE GOODS TOTALS*see appl. above	
ATER HEATER	14
EFRIGERATOR	4
ASHER	4
RYER	
OMPACTOR	
TOVE/RANGE	5
SHWASHER	
CROWAVE	
R CONDITIONER	1
NDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	7
SINK	8
TUB	1
SHOWER	

PEBBLY BEACH LANDFILL

JANUARY 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TOTAL INCIN	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	SHIPPED OT METAL	SHIPPED OT APPL	SHIPPED OT RECYC	other JOB	cover DIRT
1	12.275	0	0.24	0		12.515	12.515				0					
2	9.35	0	0	0		9.35	9.35				0					
3	21.725	3.88	0.14	0.87		26.605	25		16.43		16.425	0.405	0.05	0.353		
4	22.825	2.215	0.78	0.09		25.905	25		21.1	0.365	21.465			0.31		
5	6.925	3.145	0.33	0		10.395	12.905		22.25		22.25	0.795	0.05			
6	16.45	2.46	0	0.94		19.85	19.85	20.57			20.57					
7	13.975	2.89	0.99	0.17		18.018	18.018				0	0.59				
8	5.4	0	0	0		5.4	5.4				0					
9	4.75	0	0.07	0		4.815	4.815				0					
10	16.3	2.822	1.08	0.35		20.547	20.547		21.85	0.08	21.93	1.66	0.21	0.275		
11	16	4.345	1.65	0		22.195	22.195		25.2	1.075	26.275	0.215	0.05	0.326		
12	5.35	1.785	0.12	0.22		7.475	7.475			0.985	0.985	0.28	0.51			
13	10.85	5.885	1.67	0.82		19.225	19.225			1.58	1.58	1.225				
14	13.75	28.06	0.4	0.11		42.32	25			0.075	0.075	1.105	0.28			
15	5.275	0	0	0		5.275	22.595				0					
16	6.15	0	0	0		6.15	6.15				0					
17	15.1	3.34	0.25	0.48	4.35	23.523	23.523				0	0.44	0.05	0.135		
18	12.95	3.765	2.73	0.82		20.255	20.255				0	0.76	0.08	0.475		
19	6.6	5.25	2.9	0.9		15.65	15.65			1.43	1.43	0.5				
20	14.025	3.045	1.16	0.8		19.03	19.03			0.21	0.21	0.11				2.95
21	13.3	5.3	5.4	0	3.88	27.875	25				0	0.865	0.1			36.005
22	5.95	0	0	0		5.95	8.825				0					
23	6	0	0	0		6	6				0					
24	14.85	1.82	4.5	0.48		21.645	21.645				0	0.765		0.29		
25	16.7	3.085	3.02	0.55		23.35	23.35				0			0.315		
26	7.5	3.715	5.17	0.88		17.255	17.255				0	0.285	0.25			
27	11.325	10.01	3.49	0.78		25.595	25		19.71		19.71	0.32				
28	14.775	7.286	5.05	1.18	2.09	30.371	25			1.25	1.25	0.175	0.08			
29	6.175	0.15	0	0		6.325	12.291				0					
30	6.65	0	0	0		6.65	6.65				0					
31	16.325	3.47	2.17	0.38		22.34	22.34				0	1.195		0.2		
TOTALS	355.58	107.7	43.5	10.8	10.3	527.854	527.85	20.57	126.5	7.05	154.155	11.60	1.69	2.681	0	38.955

100% diu = 55.016

WHITE GOODS TOTALS	
WATER HEATER	4
REFRIGERATOR	2
WASHER	4
DRYER	2
COMPACTOR	
STOVE/RANGE	
DISHWASHER	
MICROWAVE	
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	4
SINK	7
TUB	
SHOWER	

PEBBLY BEACH LANDFILL

FEBRUARY 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	SSS	PVT	CITY	SCI	ROLL	TOTAL	TONS	SEWER			TOTAL TO	SHIPPED OT			other	cover
DAY	TRUCKS	VEH	VEH	VEH	OFFS	TONS	INCIN	SLDGE	ASH	OTHER	LANDFILL	METAL	APPL	RECYC	JOR	DIRT
1	15.125	8.37	2.295	0.55	5.215	31.555	25				0	0.23	0.138	0.81		
2	7.675	5.03	2.39	0.3		15.395	21.95		24.88	4.645	29.52	0.02	0.063			
3	14.675	3.33	1.44	0.55	7.2	27.195	25		15.38	0.88	16.255	0.195	0.05			
4	16.9	2.47	2.093	0.425		21.888	24.083			1.27	1.27	0.185	0.075			
5	5.325	0.125	0	0		5.45	5.45				0					
6	7.15	0.145	0	0		7.295	7.295				0					
7	15.775	3.73	4.12	0.125	6.025	29.775	25			0.31	0.31	1.59	0.125	0.305		
8	15.275	3.013	0.3	1		19.588	24.363			0.5	0.5	1.545	0.138	0.265		
9	7.25	4.565	0.45	0.8	5.845	18.91	18.91			1.175	1.175	0.335	0.113			
10	15.025	4.545	0.355	0.235	4.15	24.31	24.31			0.77	0.77	0.155	0.188			
11	15.15	4.165	0	0.72		20.035	20.035			0.255	0.255	0.405	0.038			
12	7	0.04	0	0		7.04	7.04				0					
13	8.125	0.04	0	0		8.165	8.165				0					
14	16.975	2.94	0.425	0.99		21.23	21.23			0.435	0.435	0.055	0.075	0.175		
15	17.675	3.82	0.425	0.65	5.455	28.025	25			1.34	1.34	0.33		0.485		
16	7.725	1.69	0.46	1.355	4.97	16.2	19.225			0.685	0.685					
17	13.9	2.48	0	1.825		18.205	18.205				0	0.255	0.188			
18	16.75	2.995	0.98	1.1		21.825	21.825			0.26	0.26	0.05			0.64	
19	6.475	0.125	0	0		6.6	6.6				0					
20	8.25	0.31	0	0		8.56	8.56				0					
21	19.275	0.185	0	0.3		19.76	19.76				0			0.41		
22	19.1	4.58	0.4	0.475		24.555	24.555			0.165	0.165	1.315		0.25		
23	7.45	0.34	1.05	0.77		9.61	9.61				0	0.07	0.05	0.075		
24	14.55	1.715	0	0.45		16.715	16.715				0	0.18		0.125		
25	16.2	6.165	0.88	1.085		24.33	24.33				0	0.825		0.122		
26	7.15	0	0	0		7.15	7.15				0					
27	6.825	0	0	0		6.825	6.825		10.33		10.325					
28	16.325	26.93	0.715	0.845		44.81	25			1.5	1.5	1.24	0.35	0.21		
29	16.8	5.345	0.265	0.2		22.61	25		17.16		17.162	0.475	0.138	0.2	3.875	
30	na					NA	0				NA					
31	na					NA	0				NA					
	361.78	99.18	19.04	14.75	38.86	533.61	510.181	0	67.74	14.19	81.927	9.465	1.720	3.382	4.515	0

100% DIVERTED TOTAL=122.846

WHITE GOODS TOTALS

WATER HEATER	8
REFRIGERATOR	6
WASHER	5
DRYER	1
COMPACTOR	1
STOVE/RANGE	6
DISHWASHER	2
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	1

PLUMBING GOODS TOTALS

TOILET	2
SINK	3
TUB	
SHOWER	

CITY OF AVALON/storm debris

rock	mud	
61.540	5.550	
div	div	landfill cover/barrier

CITY OF AVALON/non-diverted

rock	concrt	asphlt	dirt
	35.665		
	div	landfill barrier	

PEBBLY BEACH LANDFILL

MARCH ~~1999~~ 2000 TONNAGE REPORT

	WASTE TO INCINERATOR						WASTE TO LANDFILL					DIVERTED				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	SHIPPED OT METAL	APPL	RECYC	OTHER JOB	COVER DIRT
1	6.85	3.495	0.61	0.715		11.67	25			0.675	0.675	0.46	0.23			
2	14.9	2.662	0.71	1.2		19.47	23.562			0.128	0.128	0.17				
3	16.8	7.535	0.53	0.3		25.16	25		15.100		15.1	2.69	0.075			
4	6	0	0.13	0		6.125	6.285				0					
5	7.95	0	0.13	0		8.075	8.075				0					
6	15.35	8.355	1.15	1.065		25.92	25				0	0.17	0.125	0.15		
7	17.025	2.475	0	0.3		19.8	20.72		16.775		16.775	0.135	0.888	0.15		
8	8	0.34	0.6	0.93	3.55	13.42	13.415		17.025		17.025	0.03	0.05			
9	15.625	3.79	0.28	0.65	0.85	21.19	21.19			0.2	0.2	0.33	0.705			
10	17	2.675	0.13	1.51	0	21.31	21.31			0.2	0.2	0.138	0.11			
11	7	0	0.16	0	0	7.155	7.155				0					
12	7.675	0	0.15	0.95	0	8.775	8.775		27.250		27.25					
13	16.6	2.18	2.36	0.475		21.61	21.61			0.2	0.2	0.1	0.41	0.155		
14	16.7	5.9	0	0.5	2.125	25.23	25				0	0.51		0.3		
15	8.125	5.26	1.2	0		14.59	14.61				0	0.07	0.075		41.45	
16	15.475	3.22	0.08	0.175		18.95	18.945				0	0.22			50.03	
17	15.01	5.27	0.35	0	4.07	24.7	24.7			0.845	0.845	0.21	0.075		2.045	
18	7.75	0	0.28	0		8.025	8.025				0					
19	11.9	0	0.23	0		12.13	12.125				0					
20	19.65	1.365	2.08	0.875		23.97	23.97			0.92	0.92	0.18	0.063	0.125		
21	18.275	3.17	0	0	1.835	23.28	23.29			0.36	0.36			0.175		
22	7.025	3.38	0.73	0.575	3.85	15.66	15.655			6.75	6.75	0.08	0.138			
23	14.95	4.455	0.62	0.625	1.615	22.46	22.46				0	0.495	0.075			
24	16.65	6.35	0.49	0.2	2.36	26.05	25				0					
25	7.6	0	0.28	0		7.875	8.92				0					
26	11.075	0	0.13	0		11.2	11.2				0					
27	16.1	4.068	1.05	0.1		21.32	21.318			0.28	0.28		0.45	0.15	8.635	
28	19.875	6.65	0.87	0	2.215	29.61	25				0	0.935	0.113	0.2		
29	9.875	3.015	0.89	0		13.78	18.385		29.225		29.225	0.21	0.1			
30	15.875	9.08	0.68	0		25.63	25		9.875	2.505	12.38	0.165	0.075			
31	17.525	26.29	0.58	0		44.39	25			2.44	2.44					
					from Fel	17.42										
TOTAL tons	406.21	121	17.4	11.45	22.47	578.5	575.69	0	115.250	15.5	130.75	7.298	3.757	1.405	102.2	0

100% DIVERTED TOTAL=244.675

WHITE GOODS TOTALS	
WATER HEATER	15
REFRIGERATOR	9
WASHER	2
DRYER	1
COMPACTOR	
STOVE/RANGE	6
DISHWASHER	2
MICROWAVE	8
AIR CONDITIONER	
VENDING/COMMERCIAL	1

PLUMBING GOODS TOTALS	
TOILET	7
SINK	4
TUB	
SHOWER	

CITY OF AVALON/storm debris

rock	mud	
6.28	15	
div	div	landfill cover

CITY OF AVALON/construction-demo

rock	concrt	asphalt	dirt
	108.725		
	div	landfill barrier	

PEBBLY BEACH LANDFILL

APRIL 2000 TONNAGE REPORT

	WASTE TO INCINERATOR						WASTE TO LANDFILL					DIVERTED				
DAY	SS TRUCKS	P/T VEH	QTY VEH	SO VEH	ROLL OFFS	TOTAL TONS	TONS /HOUR	SEWER SLUDGE	ASH	OTHER	TOTAL LANDFILL	METAL	SHIPPED OFF APPL	RECYC	OTHER ADMIN	COVER DIRT
1	9.325	0	0.25	0		9.575	25				0					
2	12.075	0	0.5	0		12.575	17.18				0					
3	18.81	7.115	0.75	0.2		26.875	25			1.54	1.54	0.71	0.225	0.175		
4	18.46	3.265	0.525	0.75		22.99	24.865			3.46	3.46	1.05	0.28	0.25	24.96	22.43
5	9.8	3.405	0.6	0		13.805	13.805			1.135	1.135	0.43	0.213			2.65
6	17.4	7.323	0.7	0.925		26.348	25			0.385	0.385	0.48	0.84			2.26
7	18.295	6.555	1.045	0.295		26.19	25			0.07	0.07	0.24	0.165			
8	10.025	0	0.215	0		10.24	12.778				0					
9	11.5	0	0.175	0		11.675	11.675				0					
10	17.225	5.115	0.6	0.85	1.02	24.81	24.81				0	0.19	0.125			
11	19.05	3.605	0.5	0		23.155	23.155				0	0.06	0.35	0.3		4.97
12	9.725	3.54	0.775	0		14.04	14.04			0.995	0.995	1.05	0.063		25.98	
13	17.55	4.52	1.1	0.4	1.42	24.99	24.99			0.1	0.1	0.34	0.36		48.06	
14	17.325	5.399	0.71	0.67		24.104	24.104			0.1	0.1	0.35	0.825		1.46	
15	9.525	0	0.2	0		9.725	9.725				0					
16	11.475	0	0.2	0		11.675	11.675				0					
17	20.725	6.095	1.14	0.94		28.9	25		15.45	0.4	15.85	0.43	0.2	0.325		
18	20.425	1.765	1.325	0		23.515	25		22.03		22.025	0.11		0.425	1.125	
19	10.35	2.89	0.775	0.375		14.39	16.805		28.98	4.5	33.475	0.23				
20	18.45	1.625	1.775	0.675		22.525	22.525		17.15	0.01	17.16	0.14	0.285			
21	19.4	3.895	1.425	0		24.72	24.72		19.5	0.625	20.125	0.33	0.265			
22	10.85	0	0.35	0		11.2	11.2				0					
23	12	0	0.1	0		12.1	12.1				0					
24	20.05	2.695	1.845	1.315	1.6	27.505	25			0.12	0.12	3.17				
25	21.9	2.21	1.855	0.935	0.545	27.445	25			0.365	0.365	0.31	0.063	0.35		
26	11.375	6.178	2.5	0.255		20.308	25				0	0.19	2.19			
27	18.475	2.395	1.115	0		21.975	22.233			1.225	1.225	0.57	0.12			43.89
28	19.75	1.52	1.88	0.1		23.25	23.25				0		0.06			82.8
29	10.975	0	0.15	0		11.125	11.125				0					
30	13.2	0	0.26	0		13.46	13.46				0					
31	na	na	na	na	na	0	0	na	na	na	0					na
TOTAL TONS	455.46	81.1	25.34	8.685	4.585	575.19	595.22	0	103.1	15.03	118.13	10.3	6.649	1.825	101.6	159

Base Hx/2000

100% DIVERTED TOTAL = 309.154

CITY OF AVALON - does this include

CITY OF AVALON contractor/dump

29.78

WHITE GOODS TOTALS	
WATER HEATER	16
REFRIGERATOR	8
WASHER	7
DRYER	9
COMPACTOR	
STOVE/RANGE	9
DISHWASHER	5
MICROWAVE	6
AIR CONDITIONER	5
VENDING/COMMERCIAL	3

PLUMBING GOODS TOTALS	
TOILET	7
SINK	5
TUB	1
SHOWER	

2nd yr

PEBBLY BEACH LANDFILL

MAY 1999 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLUDGE	ASH	OTHER	TOTAL LANDFILL	SHIPPED OT METAL	SHIPPED OT ASPH	RECYC	OTHER ACFD	DIVRT
1	20.635	5.62	1.735	1.05		29.02	25		17.575		17.575	0.02	0.15			42.12
2	18.515	6.111	3	0.25		27.886	25		15.025		15.025	0.53				6.29
3	10.475	5.085	1.065	0		16.575	23.751			0.165	0.165	2.82	0.052			41.285
4	17.2	4.59	2.205	0.94		24.925	24.925			4.555	4.555	0.253	0.15			15.995
5	19.975	1.76	1.29	0		22.145	22.145				0	0.19	0.062			39.45
6	11.2	0	0.975	0		12.175	12.175				0					
7	14.335	0	0.805	0		15.16	15.16				0					
8	21.7	4.429	0	0.625		26.554	25		0.7		0.7	0.155		0.35	1.62	35.415
9	21.4	3.93	1.75	1.85	4.445	33.375	25		20.25	2.63	22.93	1.94	0.075	0.5		
10	10.135	1.91	0.2	0.51		12.745	23.074		12.425		12.425				0.025	6.7
11	16.315	3.675	0.85	0.105	3.1	24.095	24.095			0.245	0.245					45.165
12	21.65	1.53	1.225	0.5		24.905	24.905			0.35	0.35	0.05	0.075			19.005
13	12.7	0	0.425	1.75		14.875	14.875				0					
14	14.55	0	1.225	0		15.775	15.775				0					
15	17.636	2.25	1.53	0.15		21.566	21.566			4.355	4.355	0.125	0.15	0.465		
16	22.515	4.717	1.665	0		28.957	25			0.8	0.8	1.63	2.62	0.225		
17	11.15	2.355	0.4	0.15		14.055	18.802			0.4	0.4		0.212			
18	19.7	3.18	1.655	0		24.535	24.535				0	0.22	0.15			
19	20.5	6.855	1.5	1.225		30.08	25				0		0.05		15.715	
20	12.55	0	0.1	0		13.75	18.83				0					
21	13.65	0	1.475	0		15.125	15.125				0					
22	17.7	2.285	0.75	0.65		26.565	25		31.8	0.69	32.49	0.92		0.23		
23	22.875	4.803	0.65	0.635		29.143	25		26.2	0.072	26.272	0.63	0.375	0.125		
24	11.225	4.44	0.575	0.19		16.53	22.258		15.975	1.51	17.485	0.255	0.275			
25	17.3	4.535	0.675	0.525		23.035	23.035				0	0.075				
26	24.45	4.12	0.95	1.325	3.135	33.98	25			0.05	0.05	0.545	0.15			
27	17.525	0	0.85	0		18.375	25				0					
28	19.25	0	1.35	0		20.6	21.955				0					
29	32.725	0	2	0		34.725	25				0			0.45		
30	15.4	3.9	0.4		2.635	22.335	25	17.02			17.02	0.245	0.225	1.095		
31	12.125	4.599	1.25	0		17.964	25	14.91	5.95	1.41	22.29	0.35	0.45			
												10.02	5.04	3.42	15.34	
TOTAL TONS	552.2	87.23	36.15	12.56	13.32	701.46	691.44	31.93	151.9	17.32	201.15					250.4

10,024 carry over

WHITE GOODS TOTALS	
WATER HEATER	16
REFRIGERATOR	13
WASHER	11
DRYER	6
COMPACTOR	1
STOVE/RANGE	5
DISHWASHER	3
MICROWAVE	5
AIR CONDITIONER	1
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	4
SINK	4
TUB	
SHOWER	

CITY OF AVALON - storm debris
rock mud

diverted-landfill cover

CITY OF AVALON - construct/demo
rock concrete asphalt dirt

diverted-landfill barrier

PEBBLY BEACH LANDFILL

JUNE 2000 TONNAGE REPORT

from May 10,024

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	SDS	PVT	CITY	SCI	ROLL	TOTAL	TOTAL	SEWER			TOTAL TO	SHIPPED OT			other	cover
	TRUCKS	VEH	VEH	VEH	OFFS	TONS	INCIN	SLUDGE	ASH	OTHER	LANDFILL	METAL	APPL	RECYC	JOB	DIRT
1	20.125	4.725	1.03	0		25.875	25				0	0.35	0.9			31.235
2	23.775	7.695	1.02	0.53	3.15	36.155	25			0.605	0.605	0.24			3.895	179.49
3	15.1	0	0.92	0		16.015	25				0					
4	15	0	1.05	0		16.05	25				0					
5	20.075	4.675	0.29	0.5		25.535	25		29.45	0.42	29.87	0.06		0.425	5.915	20.665
6	21.925	3.91	0.75	0.28		26.86	25		12.6	1.01	13.61	0.165	0.29	0.325		145.15
7	12.675	2.121	1.06	0.28		16.13	22.644		7.975	3.97	11.945	0.11	0.07			179.01
8	20.05	3.41	0.72	0	3.05	32.225	25		6.275	1.08	7.355	0.075			6.8	42.255
9	24.25	3.035	0.76	1.7	1.75	31.49	25			0.02	0.02	0.345				
10	13.675	0	0.51	0		14.085	25				0					
11	15.475	0	0.57	0		16.045	16.845				0					
12	22.35	3.18	0.85	0.72		27.1	25				0	0.215	0.31	0.4		125.74
13	22.9	6.49	1.42	0.41	2.97	34.18	25			2.225	2.225	0.75		0.2		163.59
14	13.2	7.36	1.23	0.815	3.87	26.475	25				0	0.375				229.57
15	19.5	8.81	0.65	0.56	1.0	29.42	25				0	0.65	0.06			
16	25.3	2.37	0.25	0.31		28.23	25				0	0.21	0.39			
17	15.125	0	0.3	0		15.425	25				0					
18	17.775	0	0.89	0		18.665	25		18.58		18.575					
19	22.825	5.305	0.62	0.5		29.245	25		44.08	0.45	44.525	1.415	0.14	0.425		
20	23.35	5.545	0.38	0.2		30.07	25			0.405	0.405	0.135		0.475		
21	14.325	4.477	0.66	0		19.477	25				0	2.05	0.05			6.74
22	21.825	3.62	1.03	0.74		27.21	25			0.835	0.835	0.02	0.2			
23	23.25	4.885	0.85	0.9		29.885	25			1.98	1.98	0.302	0.21			
24	16.2	0	0.13	0		16.325	25				0					
25	17.4	0	0.18	0		17.575	24.28				0					
26	25.7	8.015	0.53	1.23		35.465	25			0.705	0.705	0.02		0.275		
27	24.05	8.565	0.53	1.9		35.04	25			1.39	1.39	0.02	0.15	0.25		
28	17.75	2.625	0.42	0.25		21.035	25			2.18	2.18	2.28	0.08	0.175		
29	19.925	6.89	1.33	0.7		27.845	25			0.93	0.93	1.275	0.63			
30	27.175	3.56	0.65	0.4	3.6	35.55	25			1.095	1.095	0.6				
	na	na	na	na	na	0		na	na	na	0					
	591.55	114.2	21.7	12.9	20.3	770.706	740.77	0	119	19.2	138.15	11.56	3.47	2.35	16.31	1143.5

WHITE GOODS TOTALS

WATER HEATER	12
REFRIGERATOR	9
WASHER	6
DRYER	2
COMPACTOR	
STOVE/RANGE	4
DISHWASHER	6
MICROWAVE	2
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS

TOILET	12
SINK	2
TUB	1
SHOWER	

CITY OF AVALON-storm debris

rock	mud

CITY OF AVALON-construction

rock	concrete	asphalt	dirt
			8,315

Tonnage for May 10,024 not carried on Reports/760.682

PEBBLY BEACH LANDFILL

JULY 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLDGE	ASH	OTHER	TOTAL TO LANDFILL	SHIPPED OT METAL	SHIPPED OT APPL	SHIPPED OT RECYC	other JOB	cover DIRT
1	16.675	0	0.75	0		17.425	25				0					
2	18.525	0	0.93	0		19.455	25				0					
3	30.675	3.755	1.9	0.825		37.155	25				0		0.27	0.56		
4	32.975	0	2.42	0		35.395	25				0		0	0.275		
5	19.65	2.18	2.05	0.96	1.715	26.555	25			0.295	0.295	0.07	0.06			
6	24.275	1.913	1.235	0.225	4.525	32.173	25				0	0.185	0.075			
7	27.65	4.142	2.22	0.4	0	34.412	25		50.95	0.275	51.225	0.14	0.075			
8	15.15	0	1.92	0		17.07	25				0					
9	17.425	0	1.81	0		19.235	25				0					
10	26.225	3.825	1.465	0.575	10.81	42.9	25				0		0.15	0.425		
11	25.075	6.66	1.025	0.005		32.485	25			1.655	1.655	0.585		0.375		
12	13.025	4.265	1.6	0		18.89	25			0.195	0.195	0.02	0.015			
13	21.675	2.4	4.532	0		28.607	25				0	0.255	0.215			
14	27.175	5.135	2.61	0		34.92	25			0.23	0.23	0.1	0.213			
15	11.1	0	2.385	0		13.485	25				0					
16	16.475	0	2.475	0		18.95	25				0					
17	24.1	3.94	2.035	0.175		30.25	25				0	0.09	0.545	0.505		
18	22.15	0.655	0.55	1.2		24.555	25				0	0.12	0.175	0.495		
19	11.625	2.76	1.95	0	3.215	19.55	25				0		0.15			
20	21.125	4.677	1.4	0.72		27.922	25		68.48		68.475	0.53	0.15		3.64	
21	26.975	4.975	1.21	0.555		33.715	25		21.24		21.235					
22	15.325	0	2.01	0		17.335	25				0					
23	18.3	0	1.35	0		19.65	25				0					
24	24.725	6.96	1.65	0.8		34.135	25				0	0.38	0.135	0.39		
25	28.325	4.025	1.71	0.3		34.36	25			0.19	0.19	0.18	0.075	0.275		
26	16.4	1.74	0.85	0		18.99	25				0	0.115	0.05			
27	19.95	2.465	1.225	1.175		24.815	25			0.38	0.38	0.455	0.075			
28	27.25	5.025	2.615	0.875		35.765	25				0	0.4	0.075			
29	17.075	0	1.875	0		18.95	25				0					
30	18.675	0	2.025	0		20.7	25				NA					
31	25.3	6.25	0.845	0.1		32.495	25			0.060	NA	0.330	0.120	0.225		
TOTAL	661.05	77.47	54.63	8.89	20.27	822.3	775	0	140.7	3.28	143.88	3.955	2.623	3.525	3.64	0

from june 29.935

100% DIVERTED TOTAL=

WHITE GOODS TOTALS

WATER HEATER	12
REFRIGERATOR	8
WASHER	6
DRYER	4
COMPACTOR	1
STOVE/RANGE	4
DISHWASHER	4
MICROWAVE	2
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS

TOILET	2
SINK	8
TUB	
SHOWER	

CITY OF AVALON/storm debris

rock mud

div div landfill cover/barrier

CITY OF AVALON/non-diverted

rock concrt asphlt dirt

div landfill barrier

PEBBLY BEACH LANDFILL

AUGUST 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	SSS	PVT	CITY	SCI	ROLL	TOTAL	TONS	SEWER			TOTAL TO	SHIPPED OT			other	cover
DAY	TRUCKS	VEH	VEH	VEH	OFFS	TONS	INCIN	SLDGE	ASH	OTHER	LANDFILL	METAL	APPL	RECYC	JOB	DIRT
1	28.25	2.585	2.5	1.225		34.57	25				0	0.13	0.225	0.175		
2	17.2	2.485	1.275	0.7		21.66	25				0		0.15	0.275		
3	21.65	4.015	1.7	1.3		28.665	25		6.65	3.25	9.9	0.125	0.162			
4	26.1	3.79	2.375	0.975		33.24	25				0		0.125			1.075
5	16.025	0	1.84	0		17.865	25				0					
6	14.975	0	2.325	0		17.3	25				0					
7	24	2.185	0.68	0.775	4.275	31.915	25	10.29			10.285			0.3		
8	26.225	3.245	1.715	0.175		31.36	25	10.2		0.845	11.045	0.04	0.2	0.3		4.3
9	19.975	4.705	1.97	0.56		27.21	25	22.84		0.77	23.61	0.09	0.2			
10	13.975	3.145	2.04	0.15		19.31	25	6.265	43.65		49.915		0.11			
11	25.275	3.89	2.08	0		31.245	25			0.82	0.82	0.06	0.34			2.725
12	17.075	0	1.98	0		19.055	25				0					
13	15.3	0	1.735	0		17.035	25				0					
14	23.35	2.19	1.45	0.875		27.865	25				0		0.15	0.4		
15	28.025	2.13	1.78	0.61		32.545	25		22.64		22.64			0.45		
16	15.675	4.28	3.065	0.71		23.93	25			0.295	0.295		0.518			
17	18.1	1.495	1.89	0.325		21.81	25			0.15	0.15	0.045	0.385			
18	25.6	4.481	2.6	0		33.681	25			0.065	0.065	0.04	0.285			
19	17.4	0	1.925	0		19.325	25				0					
20	16.05	0	2.055	0		18.105	25				0					
21	26.1	4.568	1.405	0.35		32.423	25				0		0.075			
22	26.7	2.175	2.235	0		31.11	25			0.25	0.25		0.545			
23	15.55	1.49	2.035	0		19.075	25		34.55	10.36	44.905	0.4	0.23			
24	20.7	3.445	1.65	0		25.795	25			4.29	4.29	0.39	0.5			
25	22.725	3.04	2.725	0.183		28.673	25		74.85		74.85		0.075			
26	16.225	0	1.73	0		17.955	25				0					
27	15.025	0	1.975	0		17	25				0					
28	25.65	4.81	2.7	0.55		33.71	25			5.245	5.245	0.74	2.125	0.3		
29	25.95	5.045	2.395	0.325		33.715	25			1.92	1.92	0.27	0.05	0.325		1.48
30	14.7	4.805	1.56	0	2.35	23.415	25				0.000	0.060	0.310		13.650	
	19.3	3.9	0.475	0.4		24.075	25			0.705		0.220	0.225		#####	7.285
TOTAL																
TONS	640.05	77.91	59.87	10.19	6.625	794.64	775	149.59	182.3	28.96	260.185	2.61	6.985	2.525	34.20	18.865

from july 77.23

100% DIVERTED TOTAL=

WHITE GOODS TOTALS	
WATER HEATER	26
REFRIGERATOR	16
WASHER	13
DRYER	1
COMPACTOR	1
STOVE/RANGE	8
DISHWASHER	3
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	5
SINK	10
TUB	
SHOWER	1

CITY OF AVALON/storm debris

rock	mud

div	div	landfill cover/barrier

CITY OF AVALON/non-diverted

rock	concrt	asphlt	dirt

div	landfill barrier

PEBBLY BEACH LANDFILL

SEPTEMBER 2000 TONNAGE REPORT

from station 82.967

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	3GS TONS	PVT VEH	CITY VEH	SO VEH	ROLL OFFS	TOTAL TONS	TOTAL INCIN	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	SHIPPED OT METAL	APPL	RECYC	other JOB	cover DIRT
1	23.075	7.68	2.85	0.725		33.330	25				0	0.030	0.05			
2	13.25	0	1.88	0		17.125	25				0					
3	15.65	0	2.25	0		17.900	25				0					
4	27.75	0	2.06	0		29.810	25				0			0.35		
5	24.88	7.058	4.45	0.25		36.701	25				0	0.88	0.29	0.25		
6	8.35	0.145	1.24	0.9		14.630	25				0	1.095	0.16			
7	15.6	.625	1.78	0.255		19.465	25				0	0.845	0.07			
8	15.55	5.73	2.43	0.145		23.850	25			0.19	0.19	0.11	0.1			
9	12	0	1.74	0		13.735	25				0					
10	13.25	0	2.15	0		14.395	25				0					
11	15.4	1.293	1.88	2.075		30.648	25	15.07	19.9	0.865	35.835	0.101	0.75	0.325		
12	19.45	#####	1.66	0.25		35.285	25	15.31	13.25		31.56	0.045	0.29	0.2	31.17	
13	10.45	#####	3.05	0		27.345	25		30	3.47	33.47	1.245			11.1	
14	15.725	1.065	1.76	0		22.48	25				0	0.39	0.26		1.365	
15	9.925	4.685	5.4	0	8.175	36.135	25			0.195	0.195	0.68	0.16		4.345	
16	15.775	0	0.25	0		14.026	25				0					
17	13.6	0	1.69	0		15.290	25				0					
18	20.2	3.76	10.445	0.1		34.505	25				0	0.02	0.01	0.25	16.14	
19	30.05	3.175	7.2	0.35		33.775	25				0	0.11	0.14	0.175	4.175	
20	10.05	1.045	13.945	0.9		36.040	25				0	0.07	0.02		17.05	
21	15.2	3.63	0.14	0		18.965	25			3.23	3.23	0.165	0.14		12.88	2.69
22	18.15	5.16	1.43	0		24.755	25				0	0.045	0.25		7.255	
23	11.3	0	1.120	0		12.420	25				0					
24	13	0	1.600	0		14.600	25				0					
25	19.425	5.995	0.950	0.2		26.570	25				0	1.055		0.275	4.6	
26	18.475	5.200	1.840	0		25.515	25				0	0.13		0.225	5.666	
27	10.40	3.865	1.140	0		18.425	25		48.8		48.8	0.85	0.14		82.375	0.605
28	15.625	1.575	1.325	0.33		21.356	25				0	0.755	0.15			
29	20.40	1.650	1.235	0	1.940	29.225	25			1.82	1.82	0.04	0.16			2.65
30	8.200	0.600	1.335	0		9.635	25				0					
	na	na	na	na	na	0		na	na	na	0					
TOTAL																
AVG	483.80	24.9	89.5	5.88	5.12	709.300	750	36.38	112	9.77	158.1	7.816	3.49	2.05	198.4	8.145

WHITE GOODS TOTALS	
WATER HEATER	11
REFRIGERATOR	13
WASHER	9
DRYER	5
COMPACTOR	
STOVE/RANGE	10
DISHWASHER	6
MICROWAVE	2
AIR CONDITIONER	
OTHER/COMMERCIAL	3

PLUMBING GOODS TOTALS	
TOILET	5
SINK	3
TUB	
SHOWER	1

CITY OF AVALON-storm debris

rock mud

CITY OF AVALON-construction

rock concrete asphalt dirt

PEBBLY BEACH LANDFILL

OCTOBER 2000 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	1/2 TRUCK	PAT VEH	CITY VEH	ACI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	SHIPPED OT METAL	APPL	RECYC	CONC	cover DIRT
1	13.463	0	1.035	0		19.06	25				0					
2	20.35	12.69	1.05	0.175		34.46	25				0	1.615	0.122	0.35	11.5	5.53
3	18.775	3.775	0.67	0.755		23.975	25				0	0.035	0.166	0.15	20.77	3.85
4	0.975	5.722	2.36	0		17.957	25		16		16	0.8			3.815	
5	12.3	3.56	1.375	0		18.235	25			0.685	0.685	0.79	0.06			
6	18.65	6.405	0.7	0.875		33.63	25			0.205	0.205	0.205	0.35			
7	12.25	0	1.275	0	1.635	15.15	25				0					
8	12.475	0	1.05	0		13.525	25				0					
9	17.875	4.725	1.425	1.613		25.588	25		15.9	0.2	16.1	0.51	0.09	0.4		
10	19.725	5.19	1.91	0		26.825	25				0	0.605	0.12	0.375	13.74	
11	8.75	2.85	1.185	0.425		13.31	25			0.65	0.65	0.39	0.116			
12	14.075	5.57	2.505	0		22.15	25				0	0.695	0.05		26.83	
13	16.75	15.75	1.465	0	2.055	35.045	25			0.365	0.365	0.3	0.113			
14	9.675	0	0.925	0		10.6	25				0					
15	13.625	0	1.235	0		13.86	16.347				0					
16	13.25	8.55	1.205	0.8		25.805	25			3.51	3.51	1.095		0.35	29.91	
17	20.9	1.155	0.425	0.225		22.335	25				0	0.63		0.525		
18	9.7	3.335	1.815	0.83		15.7	16.84			0.665	0.665	0.03	0.05			
19	13.775	4.13	0.15	1.15		19.205	19.205				0	0.094	0.005			
20	16.175	3.605	2.68	0		22.46	22.46				0	0.282	0.15			
21	10.975	0	0.825	0		11.8	11.8				0					
22	10.65	0	1	0		11.65	11.65				0					
23	17.2	12.23	0.65	1.825		31.9	25				0	0.925	0.1	0.25		
24	19.225	8.975	0.38	0		28.58	25				0		0.083	0.25		
25	9.05	2.835	1.42	0.775		14.08	24.99				0	0.33	0.15			
26	12.45	8.935	0.88	0.95		23.215	23.215		23.5	0.305	23.805	0.15	0.1			3.54
27	15.22	2.72	0.475	0.12	3.275	22.81	22.81				0	1.775	0.175			
28	6.75	0	1.145	0		7.895	7.895				0					
29	8.45	0	0.79	0		9.24	9.24				0					
30	16.825	1.05	0.425	0		18.3	18.3			2.636	0.000	0.060				
31	16.34	3.575	2.13	1.06		28.155	28.155			4.955		0.060	0.100			
TOTAL	465.01	126.5	37.23	11.48	8.095	625.21	677.477	0	55.4	14.36	61.065	10.01	2.124	2.95	116.3	12.02

from Sep 62.267

100% DIVERTED TOTAL=

WHITE GOODS TOTALS

WATER HEATER	15
REFRIGERATOR	4
FREEZER	6
DRYER	2
COMPACTOR	
STOVE/RANGE	4
DISHWASHER	2
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS

TOILET	9
SINK	7
TUB	3
SHOWER	1

CITY OF AVALON/storm debris

rock mud

div div landfill cover/barrier

CITY OF AVALON/non-diverted

rock concr asphlt dirt

4.000

div landfill barrier

PEBBLY BEACH LANDFILL

NOVEMBER 2000 TONNAGE REPORT

	WASTE TO INCINERATOR						WASTE TO LANDFILL					DIVERTED				
	966 TONS	PVT VEH	CITY VEH	SOI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	SHREDD'T METAL	SHREDD'T APPL	SHREDD'T RECYC	OTHER JOB	COVER DIRT
1	9.225	4.02	1.17	2.23		16.65	16.65	22.34	25.650	2.385	50.295	0.2			27.69	
2	11.325	1.505	0.15	0		15.68	15.68	12.35	34.460		46.835	0.55	0.05			
3	14.9	2.503	1	0		18.4	18.399				0	0.02	0.1			
4	8.05	0	0.66	0		8.71	8.71				0					
5	8.525	0	0.69	0		9.21	9.21				0					
6	18.425	6.155	0.88	0.25		25.71	25.705				0	0.185	0.1	0.2		
7	17.46	1.535	0.37	0.65		20.01	20.005			0.3	0.3	0.075	0.065	0.275		
8	7.385	4.415	0.4	0		12.19	12.19				0	0.08	0.19		1.505	
9	16.305	7.014	1.17	0		22.53	22.59				0	0.45	0.225			
10	16.29	3.495	1.29	0		21.26	21.26			1.555	1.555	0.02	0.19			0.05
11	9.57	0	0.71	0		10.28	10.28				0					
12	8.02	0	1.02	0		9.1	9.1				0					
13	16.65	4.336	1.22	1.15	3.55	25.94	25			0.62	0.62	0.495	0.185	0.45	8.51	
14	13.613	6.245	0.4	0.415		21.67	22.609			0.13	0.13	0.179	0.212	0.35		
15	5.723	2.86	2.73	0		12.31	12.319			0.175	0.175	0.46				
16	11.34	5.03	1.15	0		17.51	17.51			0.375	0.375					
17	13.453	3.175	4.64	0		21.27	21.209		35.750	0.275	36.025	0.03	0.75			
18	7.425	0	0.55	0		7.975	7.975				0					
19	7.237	0	0.43	0		7.467	7.467				0					
20	13.375	8.115	1.83	0.05	3.625	29.5	25				0	0.55	0.15	0.4		
21	15.162	1.965	2.37	0		21.49	25			0.19	0.19	0.46	0.46	0.2		
22	7.16	5.115	0.4	1.275		13.95	14.937				0	0.37	0.05			
23	13.2	0	0.1	0		13.3	13.391				0					
24	13.327	0.55	0.05	0		13.96	13.957				0					
25	7.975	0	0.8	0		8.375	8.375				0					
26	8.5	0	0.95	0		9.45	9.45				0					
27	16.525	4.995	0.39	0		22.21	22.21				0	0.05		0.26		21.45
28	16.677	3.54	4.55	1.7	6.24	32.7	25			0.805	0.805	1.345		0.425		
29	8.175	0.63	4.75	0.17	5.74	17.46	25				0	0.155				
30	9.337	2.97	0.58	0	7.505	20.99	21.15				0	0.15				69.42
						0					0					
TOTAL	353.41	80.11	37.3	7.91	26.66	505.4	503.44	34.69	95.885	6.93	137.51	5.664	2.727	2.56	77.36	89.93

100% DIVERTED TOTAL=244.575

WHITE GOODS TOTALS	
WATER HEATER	7
REFRIGERATOR	9
WASHER	13
DRYER	7
COMPACTOR	3
STOVE/RANGE	12
DISHWASHER	
MICROWAVE	2
AIR CONDITIONER	1
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	5
SINK	5
TUB	
SHOWER	

CITY OF AVALON/storm debris.
rock mud

div div landfill cover
CITY OF AVALON/construction items
rock concr asphalt dirt

div landfill barrier

PEBBLY BEACH LANDFILL

DECEMBER 2000 TONNAGE REPORT

	WASTE TO INCINERATOR						WASTE TO LANDFILL					DIVERTED				
DAY	SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	SEWER SLDGE	ASH	OTHER	TOTAL LNDFLL	SHIPPED OT METAL	APPL	RECYC	OTHER JORD	COVER DIRT
1	14.4	2.58	3.45	0	4.605	25.035	25			1.8	1.8	0.1	0.45			3.515
2	5.925	0	0.275	0		6.2	6.235				0					
3	5.5	0	0.665	0		6.165	6.165				0					
4	11.625	12.115	0.805	0.175		24.72	24.72				0	0.06	0.112	0.3		
5	10.662	2.945	0.507	0.49	6.035	20.639	20.639			0.05	0.05	0.305	0.05	0.4	21.91	16.640
6	5.925	1.56	0.485	0.515	4.175	12.66	12.66			1.32	1.32		0.075		6.435	17.230
7	11.412	2.515	0.437	0	4.115	18.479	18.479			1.065	1.065	0.145	0.1			
8	12.525	11.57	0.2	0		24.295	24.295			0.49	0.49	0.02				
9	5.55	0	0.535	0		6.085	6.085				0					
10	5.277	0	0.2	0		5.477	5.477				0					
11	13.075	3.725	0.615	0.3		17.715	17.715			0.835	0.835	0.785	0.29	0.325		
12	12.1	4.015	0	0		16.115	16.115		70.88	0.51	71.385	0.33	0.075	0.45		
13	6.025	3.76	0.865	0		10.65	10.65			0.65	0.65	0.05	0.13			
14	10.275	1.83	0.2	0.43		12.735	12.735			0.685	0.685	0.32	0.05			
15	13.388	3.73	0.57	0		17.688	17.688				0	0.6	0.075			
16	6.475	0	0.15	0		6.625	6.625				0					
17	5.3	0	0.67	0		5.87	5.87				0					
18	11.738	17.14	0	0.6		29.478	25			0.4	0.4	0.065	0.175	0.275		
19	14.475	25.955	1.55	0		41.98	25				0	1.87	0.05	0.385		
20	5.025	2.5	1.055	0		8.58	25			0.465	0.465	0.02				
21	9.725	2.135	0.125	0.2		12.185	17.223			5.855	5.855		0.063			
22	12.663	3.075	0.895	0		16.633	16.633			0.59	0.59	0.325				
23	5.275	0	0.15	0		5.425	5.425				0					
24	4.95	0	0.48	0		5.43	5.43				0					
25	0	0	0	0		0	0				0					
26	15.625	0.305	0.4	0.325		16.655	16.655				0		0.15	0.3		
27	12.013	3.705	0.9	0		16.618	16.618			1.005	1.005	0.02		0.125		
28	11.688	1.6	0.675	0.24		14.203	14.203			3.405	3.405	0.03	0.125			
29	14.9	1.55	0.885		2.765	20	20			1.36	1.36	0.39			7.035	
30	10.1	0	0.66			10.76	10.76				0					
31	8.8	0	1.025			9.825	9.825				0					
TOTAL TONS	292.216	108.31	19.43	3.275	21.7	444.93	444.925	0	70.88	20.49	91.36	5.435	1.97	2.56	35.38	37.385

100% DIVERTED TOTAL=

WHITE GOODS TOTALS

WATER HEATER	10
REFRIGERATOR	6
WASHER	2
DRYER	5
COMPACTOR	
STOVE/RANGE	10
DISHWASHER	1
MICROWAVE	4
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS

TOILET	3
SINK	4
TUB	
SHOWER	

CITY OF AVALON - storm debris

rock mud

div div landfill cover

CITY OF AVALON-construction/demo

rock concr asphalt dirt

42.3 23.16

div landfill barrier

Bird Park Project

PEBBLY BEACH LANDFILL

FEBRUARY 2001 TONNAGE REPORT

DAY	WASTE TO INCINERATOR: SSS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ACLL OFFS	TOTAL TONS	TONS INCIN	WASTE TO LANDFILL: SEWER SLUDGE	ASH	OTHER	TOTAL TO LANDFILL	DIVERTED: SHIPPED OT METAL	APPL	RECYC	other JOB	cover DEBT
1	10.65	5.64	1.3	1.225	1.6	20.415	20.415				0	0.26	0.15			
2	13.6	4.497	1.65	0.77	1.2	21.717	21.717				0	0.4				
3	5.9	0	0.285	0.15		6.335	6.335				0					
4	7.025	0	0.52			7.545	7.545				0					
5	13.9	2.9	0.525	1		18.325	18.325				0	0.015	0.15	0.215		
6	13.6	3.555	0.2	0.35	1.475	19.18	19.18				0	0.518	0.375	0.275		
7	5.275	3.015	0.275	0.775		9.34	9.34			0.625	0.625	0.16	0.25			
8	9.95	2.73	0.27	0.875	2.725	16.55	16.55				0	2.015	0.075			
9	12.925	3.51	0.075	0.425		16.935	16.935			0.34	0.34	0.18	0.075			
10	5.15	0	0	0.15		5.3	5.3				0					
	6.25	0	0	0		6.25	6.25				0					
12	14.2	3.53	0	0.05		17.78	17.78			2.29	2.29	0.72		0.25		
13	12.45	5.895	0.975	1.66		20.97	20.97			0.885	0.885	0.36	0.05	0.3		
14	11.225	0.255	1.44	0.375	3.135	16.43	16.43		14.28	1.575	15.85	0.175				
15	12.1	2.112	1.13	0.75		16.092	16.092		13.93		13.925					
16	12.925	3.965	0.45	0.325	5.81	25.475	25				0	0.88	0.05			
17	7.45	0	1.325	0		8.775	9.25				0					
18	8.6	0	0.53	0		9.13	9.13				0					
19	15.75	2.065	0.56	0.375		18.75	18.75			0.855	0.855					
20	18	2.9	0.275	0.5		21.575	21.675				0			0.2		
21	7.025	0.295	0.73	2.15		10.2	10.2		38.5	0.195	38.695		0.15	0.225	20.39	
22	11.975	1.855	0	1.03		14.86	14.86				0	0.1	0.1		9.005	
23	13.7	2.745	0.485	0.535		17.465	17.465				0	0.45	0.125			
24	8.45	0	0	0		8.45	8.45				0					
25	7.75	0	0	0		7.75	7.75				0					
26	14.25	0.915	0	0.975		16.14	16.14				0					
27	18.9	0.245	1.43	0.45		21.025	21.025				0			0.15		
28	6.8	1.375	0.2	1.15	1.335	10.86	10.86				0		0.1	0.175		
29	0	0	0	0	0	0					0					
30	0	0	0	0	0	0					0.000					
31	0	0	0	0	0	0										
TOTAL TONS	306.78	56	14.53	16.04	17.28	410.72	410.78	0	86.7	6.765	73.465	8.233	1.65	1.79	29.39	0

100% DIVERTED TOTAL = 43.048

WHITE GOODS TOTALS

WATER HEATER	7
REFRIGERATOR	
WASHER	5
DRYER	5
COMPACTOR	1
STOVE/RANGE	2
DISHWASHER	1
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCAL	

PLUMBING GOODS TOTALS

TOILET	11
SINK	8
TUB	1
SHOWER	

CITY OF AVALON/storm debris
rock mud

div div landfill cover/barrier

CITY OF AVALON/non-diverted
rock concr asphlt dirt
4,000
div landfill barrier

PEBBLY BEACH LANDFILL

JANUARY 2001 TONNAGE REPORT

	WASTE TO INCINERATOR							WASTE TO LANDFILL				DIVERTED				
	SSS	PVT	CITY	SCI	ROLL	TOTAL	TOTAL	SEWER			TOTAL TO	SHIPPED OT			other	cover
DAY	TRUCKS	VEH	VEH	VEH	OFFS	TONS	INCIN	SLUDGE	ASH	OTHER	LANDFILL	METAL	APPL	RECYC	JOB	DIRT
1	0	0	0	0.000		0	0				0					
2	29.15	4.28	0.84	0.18		34.445	25				0	0.25	0.1	0.35		
3	24.175	1.38	0.73	0.45		26.73	25			10.74	10.74	0.05	0.3	0.45		
4	8.975	2.18	0.65			11.8	22.975			1	1	0.04				
5	12.225	2.77	0	0.33	4.250	19.57	19.57			1.535	1.535	0.235	0.15			
6	5.625	0	0.56			6.385	6.385				0					
7	5.588	0	0.53			6.113	6.113				0					
8	14.2	2.29	0.79	1.475	2.800	21.55	21.55			0.97	0.97			0.225		
9	16.925	5.795	0		8.470	31.19	25			2	2	4.072	0.18	0.425		
10	8.175	4.005	0.55		3.090	13.82	20.01			1.165	1.165	1.31	0.1			
11	9.875	1.595	0.64	2.125	2.275	16.508	16.508				0	0.485				
12	17.075	2.420	0.18	0.5		20.17	20.17			1.585	1.585	0.19	0.15			
13	5.35	0.000	1.51	0.25		7.11	7.11				0					
14	5.6	0	0.48			6.075	6.075				0					
15	14.375	1.365	5.13	0.96		21.88	21.88		52.85	0.435	53.285	0.27	0.18	0.213		
16	14.55	4.565		2.68		21.81	21.81			2.23	2.23	0.05	0.26	0.43		
17	4.5	3.51	3.58	4.28		15.865	15.865			0.2	0.2	0.605				
18	11.1	2.252	1.480	0.45		15.282	15.282			0.265	0.265	0.05	0.05			
19	13	7.490	1.012	1.68		23.177	23.177			2.585	2.685		0.39			
20	5.525	0.000				5.525	5.525				0					
21	4.7	0	0.9			5.595	5.595				0					
22	12.9	1.32	0.75	0.63		15.605	15.605			0.595	0.595		0.08	0.2		
23	13.312	1.78	0.450	2.55	4.390	22.982	22.982			0.08	0.08	0.085		0.425		
24	5.450	2.435	2.057	0.810		10.752	10.752			0.3	0.3	0.035	0.2			
25	10.425	2.095	0.350	0.150		13.02	13.02				0	0.28	0.05			
26	12.700	1.960	0.300	0.200		15.16	15.16				0	0.09	0.05			
27	5.800	0.000	0.505	0.125		6.43	6.43				0					
28	5.375	0.000	0.000	0.000		5.375	5.375				0					
29	13.475	12.355	1.005	0.575		27.91	25				0	0.24	0.1	0.35		8.54
30	14.100	11.055	0.125	0.350		25.63	25				0	0.03	0.27	0.35		10.4
31	5.625	2.040	0.945	0.000		8.61	12.15		15.86	0.145	16				3.94	
TOTALS	329.55	81.49	26.1	20.7	25.3	482.074	482.07	0	68.71	26.03	94.735	8.467	2.59	3.418	3.94	18.94

WHITE GOODS TOTALS	
WATER HEATER	13
REFRIGERATOR	9
WASHER	8
DRYER	5
COMPACTOR	1
STOVE/RANGE	5
DISHWASHER	4
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	3
SINK	2
TUB	
SHOWER	

CITY OF AVALON-storm debris

rock mud

CITY OF AVALON-construction

rock	concrete	asphalt	dirt
26.51			

to landfill barrier/reuse

PEBBLY BEACH LANDFILL

MARCH 2001 TONNAGE REPORT

cc: GSR
TWA

	WASTE TO INCINERATOR						WASTE TO LANDFILL					DIVERTED				
	SSS	PVT	CITY	SCI	ROLL	TOTAL	TONS	SEWER			TOTAL TO	SHIPPED OT			OTHER	COVER
DAY	TRUCKS	VEH	VEH	VEH	OFFS	TONS	INCIN	SLUDGE	ASH	OTHER	LANDFILL	METAL	APPL	RECYC	JOB	DIRT
1	12.025	1.55	1.59	0.375		15.54	15.535				0					
2	14.175	3.79	0	0.775		18.74	18.74				0	0.34	0.05			
3	7.925	0	0.51	0		8.435	8.435				0					
4	8.45	0	0	0		8.45	8.45				0					
5	13.65	8.882	0.68	0.2		23.41	23.412				0	1.07		0.175		
6	19.4	1.827	1.53	0.25		23	23.002				0	0.05	0.25	0.18		
7	8.7	1.625	0	0.225		8.55	8.55				0	0.1				
8	13.225	3.195	1.45	0.425		18.3	18.295				0		0.3			
9	13	4.85	0	0		17.85	17.86				0	0.845				
10	7.675	0	1.53	0		9.2	9.2				0					
11	6.5	0	0			6.5	6.5				0					
12	12.52	4.39	0.45	0.65		17.99	17.98				0	0.975	0.05	0.2		
13	16.75	6.51	0	0.6	4.475	28.34	25				0	0.213	0.08	0.15	1.65	
14	6.35	6.35	0.88	0.15		13.73	17.06				0					
15	14.1	3.325	0.65	0.3	8.35	26.73	25			0.8	0.8	1.67				
16	16.55	6.17	0	0		22.72	24.446				0					
17	11.025	0	1.05	0		12.08	12.075				0					
18	10.975	0	1.11	0.05		12.13	12.135				0					
19	17.25	11.06	0.83	0.225		29.36	25				0	0.41	0.05	0.225		
20	16.725	7.255	0.61	0.7		25.09	25			0.08	0.08	0.68	0.1	0.275		
21	7.625	6.72	0.99	0.95		16.27	20.715				0	0.535				
22	13.175	0.34	0.68	1.075		15.27	15.285		27.475		27.475	0.15	0.1			
23	10.375	8.32	0.5	0.85		20.05	20.045			1.45	1.45	0.47				
24	8.325	0	0	0		8.325	8.325				0					
25	10.225	0	0.98	0		11.2	11.2				0					
26	16.875	6.345	0.33	0.05		23.6	28.585			2.175	2.175	0.78	0.05	0.2		101.5
27	18.15	10.58	1.54	1.535		34.8	25		32.775	0.875	33.65	0.486	0.08			
28	7.6	7.915	0.67	0		16.19	25			1.42	1.42	1.27	0.125			
29	14.325	15.65	0.86	0	1.95	32.8	25				0	0.45	0.063			
30	17.65	15.38	0.88	0	9.63	43.54	25				0	0.32	0.05			
31	10.135	0	0	0		10.13	25				0					
							12.445 to April									
	377.42	144.3	20.2	9.385	24.41	576.2	578.249	0	60.250	6.84	67.09	10.82	1.348	1.405	1.85	101.5

100% DIVERTED TOTAL=

WHITE GOODS TOTALS	
WATER HEATER	7
REFRIGERATOR	1
WASHER	7
DRYER	2
COMPACTOR	
STOVE/RANGE	3
DISHWASHER	2
MICROWAVE	1
AIR CONDITIONER	
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	14
SINK	3
TUB	2
SHOWER	

CITY OF AVALON/storm debris
rock mud

div div landfill cover

CITY OF AVALON/~~construction items~~
rock concrt asphalt dirt

div landfill barrier

PEBBLY BEACH LANDFILL

APRIL 2001 TONNAGE REPORT

from March 12.445

DAY	WASTE TO INCINERATOR: SBS TRUCKS	PVT VEH	CITY VEH	SCI VEH	ROLL OFFS	TOTAL TONS	TONS INCIN	WASTE TO LANDFILL: SEWER SLUDGE	ASH	OTHER	TOTAL LNDFL	DIVERTED: SHIPPED GT METAL	APPL	RECYC	OTHER JORD	COVER DIRT
1	9.35	0	2.295	0.7		12.755	25				0					
2	17.225	9.38	1.9	0.1		28.605	25			4.95	4.95	0.07		0.025		
3	17.775	7.53	0.665	0	1.125	27.195	25			3.64	3.64	0.68	0.075	0.275		
4	8.35	5.435	1.05	0.9		15.735	21.785				0	0.58	0.05			
5	10.75	3.725	1.15	0		15.625	15.625			16.04	16.04	0.165	0.075			
6	17.275	5.747	1.53	0		24.952	24.852			13.52	13.52	2.102	0.125			
7	11.6	0	0.2	0		11.8	11.8				0					
8	8.463	0	2.025	0		10.488	10.488				0					
9	16.65	6.895	0.25	0.25		24.245	24.245		12.5	0.065	12.565	0.165	0.075	0.2		
10	18.075	9.05	4.225	0.45		31.9	25				0	0.51	0.05	0.425		
11	7.55	9.683	2.8	0		20.033	25				0	0.095				
12	14.925	8.11	2.25	0		26.285	25			0.645	0.645	0.2	0.05			
13	18.112	2.235	1.5	0		21.847	25				0					
14	10.825	0	0.2	0		11.025	11.09				0					
15	10.482	0	1.02	0		13.482	11.482				0					
16	17.25	4.037	0.1	0.45	2.595	24.432	24.432			0.5	0.5	1.76	0.1	0.476		
17	18.35	6.875	1.73	0.35		25.045	25			1.05	1.05	0.88	0.05	0.15		
18	9.82	5.435	1.85	0	4.23	21.315	21.285			0.235	0.235	0.735	0.2			
19	15.55	5.225	0.15	1.175	3.77	25.87	25			1.79	1.79	0.82				
20	17.525	6.07	3.635	0		27.23	25			2.22	2.22		0.115			
21	10.4	0	0	0		10.4	13.5				0					
22	9.575	0	1.235	0		10.81	10.81				0					
23	18.775	1.99	1.175	1.225		28.165	29.195			8.04	8.04	0.09	0.197	0.1		
24	18.25	1.435	0	1.975		22.26	22.26			2.54	2.54	0.05		0.15	2.495	
25	10.625	9.178	1.5	0		21.303	21.303			3.37	3.37	2.385	1.987			1.185
26	16.55	1.37	1	0		18.92	19.92		6.375	1.65	8.025					
27	18	6.5	0	0		22.4	22.5			0.3	0.3	0.03				
28	10	0	0.905	0		10.905	10.905				0					
29	8.5	0	1.74	0		10.24	10.24				0					
30	17.2	3.19	5.495	1.3		27.185	25				0	1.235			3.55	
31	n/a	n/a	n/a	n/a	n/a	0					0					
TOTAL	412.0321	118.94	43.69	8.875	11.72	595.25	605.51	0	18.88	60.56	79.43	10.102	3.159	2.1	8.045	1.185

2.185 in May

100% DIVERTED TOTAL=

WHITE GOODS TOTALS	
WATER HEATER	13
REFRIGERATOR	1
WASHER	10
DRYER	5
COMPACTOR	2
STOVE/RANGE	6
DISHWASHER	2
MICROWAVE	8
AIR CONDITIONER/heater	4
VENDING/COMMERCIAL	

PLUMBING GOODS TOTALS	
TOILET	6
SINK	2
TUB	
SHOWER	

CITY OF AVALON – storm debris

rock mud

div div landfill cover

CITY OF AVALON-construction/demo

rock concr asphalt dirt

div landfill berrier

Bird Park Project

CONSOLIDATED DISPOSAL SERVICE
A Subsidiary of REPUBLIC SERVICES, Inc.

MEMO

12949 Telegraph Road
Santa Fe Springs, CA 90670
Telephone (562) 663-3400
Facsimile (562) 906-0251

DATE: June 6, 2001

TO: South Coast AQMD

FROM: Ronald R. Krall

RE: Shut Down of Seagull Sanitation Systems Pit Burner

Please find enclosed the application for the shut down of Seagull Sanitation Systems pit burner along with a check in the amount of $2087.74 to cover the application processing fee.

Should you have any questions please do not hesitate to call me at 562-663-3455.

PRINTED ON RECYCLED PAPER

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000

Date: 06/06/01 04:33 PM **Receipt Nbr:** C21169

Facility: 90849 CONSOLIDATED DISPOSAL SERVICES LLC

Location Address: #1 DUMP RD

City: AVALON **State:** CA **Zip:** 90704 —

Check nbr.	Amount	Check Nbr.	Amount
88428	$2,087.74		$.00
	$.00		$.00
	$.00		$.00
	$.00		$.00
	$.00		$.00

Cash: $.00

Total: $2,087.74

Comments: (1) ERC
NEW

Received By: AQMD Cashier

Cashier Signature: _____

Duplicate Copy

CONSOLIDATED SERVICES, 12949 TELEGRAPH ROAD, SANTA FE SPRINGS, CA 90670

NO. 088428

Invoice #	Inv Date	Invoice Description	Invoice $$	Discount	Payment
FEE	05/31/2001	FILING FOR APPLICATION	2087.74		2087.74
			2087.74		2087.74

REORDER FT-801 U.S. PATENT NO. 5538290:5575508:5841183

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D12778
A/N 144212
Page 1

This initial permit must be renewed by 10/16 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: CATALINA DISPOSAL COMPANY
P. O. BOX 295
AVALON, CA 90704
ATTN: THOMAS H. JORDAHL

ID 52882

Equipment located at: 1 DUMP ROAD, AVALON, CALIFORNIA

Equipment Description:

REFUSE PIT BURNER, PACTHERM, 20' L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 HP.P. COMBUSTION AIR BLOWER AND A 20' -0" L. X 0' -1" W. SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.

4. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR.

5. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

6. THE RESIDUAL ASH MUST BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY AND DISPOSED OF AT PROPER LANDFILL WITH ADEQUATE COVER.

7. ASH REMOVED FROM THIS EQUIPMENT MUST BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.

8. THE QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST BE RECORDED FOR EACH BURN DAY. THE RECORDS SHALL INCLUDE TONS PER HOUR AND TONS PER DAY BURNED AND SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

FILE COPY

PERMI... O OPERATE

...50 FLAIR DRIVE ... ONTE, CALIFORNIA 91731

Permit No.
D12778
A/N 144212
Page 2

C... TINUATIO... ...ERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS O... THE EQUIP...

THIS PERMIT DOES NOT AUTHORIZE ... EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE R...ES OF THE ... QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDE...D AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STAT...TES OF OTHE... GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/b
December 7, 1989

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
9150 Flair Drive El Monte, CA 91731

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE AND EXCAVATE AND
FOR PLANS REQUIRED BY THE EXECUTIVE OFFICER
FOR FEE INFORMATION AND SMALL BUSINESS EXEMPTION
SEE REVERSE SIDE

35/00

PLEASE TYPE OR PRINT

SCAQMD USE: WD | SEC | TS | 52552 ID NUMBER

1A PERMIT TO BE ISSUED TO
CATALINA DISPOSAL CO.,
BUSINESS LICENSE NAME OF ORGANIZATION THAT IS TO RECEIVE PERMIT

1B
Thomas H., Jordahl
NAME (OR NAMES) OF OWNER OR PRINCIPAL PARTNERS DOING BUSINESS AS (DBA) ABOVE ORGANIZATION

2A MAILING ADDRESS
P.O., Box 295 Avalon, Calif., 9070[illegible]
NUMBER STREET CITY OR COMMUNITY STATE

2B
90704
ZIP CODE

3A EQUIPMENT LOCATION (IF SAME ENTER SAME)
1 Dump Rd., Avalon, Ca., 90704
NUMBER STREET CITY OR COMMUNITY ZIP

3B
Pebbly Rd.,
NEAREST INTERSECTING STREET

4A CONTACT PERSON (INITIALS & NAME)
Thomas H., Jordahl

4B CONTACT PHONE NO (AREA & NO.)
213 510-0675

5 EQUIPMENT APPLICATION IS HEREBY MADE FOR PERMIT TO OPERATE THE FOLLOWING EQUIPMENT
Pactherm Pit Burner

6 IF THIS EQUIPMENT HAD A PREVIOUS WRITTEN PERMIT, STATE NAME OF CORPORATION, COMPANY OR INDIVIDUAL OWNER THAT OPERATED THIS EQUIPMENT AND STATE PREVIOUS AIR POLLUTION CONTROL DISTRICT PERMIT NUMBER
NAME PREVIOUS PERMIT NUMBER

7 PERMIT APPLICATION FOR EQUIPMENT
- NEW CONSTRUCTION [X]
- ALTERATION [ ]
- CHANGE OF LOCATION [ ]
- CHANGE OF OWNERSHIP [ ] EXISTING EQUIPMENT IN OPERATION
- WITHOUT PRIOR PERMIT [ ]
- CHANGE OF CONDITIONS [ ]

8 TYPE OF ORGANIZATION
- CORPORATION [X]
- PARTNERSHIP [ ]
- INDIVIDUAL OWNER [ ]
- LOCAL GOV'T AGENCY [ ]
- STATE AGENCY [ ]
- FEDERAL AGENCY [ ]
- UTILITY [ ]

9 ESTIMATED COST OF EQUIPMENT OR ALTERATION
BASIC EQUIPMENT $ _____ AIR POLLUTION CONTROL EQUIPMENT $ $ 89,700.00

10 FOR THE NEW CONSTRUCTION, ALTERATION, TRANSFER OF OWNERSHIP OR LOCATION, WHAT IS
ESTIMATED STARTING DATE? June 1, 1986 ESTIMATED COMPLETION DATE? July 1, 1986

11 GENERAL NATURE OF BUSINESS
Disposal Company

12 PRINCIPAL PRODUCT
N.A.,

13 DO YOU CLAIM CONFIDENTIALITY OF DATA?
YES [ ] NO [X]
IF YES STATE NATURE OF DATA ON SEPARATE SHEET

14 NORMAL OPERATING HOURS OF SUBJECT EQUIPMENT
HOURS/DAY 6
DAYS/WEEK 3
WEEKS/YEAR 52

15 HAS A CEQA DOCUMENT BEEN PREPARED FOR THIS PROJECT? YES [X] NO [ ]

15a ARE ALL COMPANIES FACILITIES IN CALIFORNIA IN COMPLIANCE WITH AIR POLLUTION RULES?
YES [ ] NO [ ]

16 SIGNATURE OF RESPONSIBLE MEMBER OF ORGANIZATION
Thomas H Jordahl

17 OFFICIAL TITLE OF SIGNER
Owner

18 TYPED OR PRINTED NAME OF SIGNER
Thomas H., Jordahl

19 PHONE NO
213 510-0675

20 DATE
4/28/86

SCAQMD USE

SIC NO		EQUIP CAT NO. 019 /			SCH SEP	
APPLICATION NO. 11-4-2107	PERMIT NO	TYPE B OR C	WORK UNITS A C P O	ASSIGNMENT 3 UNIT ENGR	CLASS 0	
VALIDATION 4/29/86		FILING FEE 160.00	CHECK OR MONEY ORDER NO. 905			

Form 400A - REVISED 8/85 PRIOR VERSIONS NOT VALID

(Continued on reverse)

C 1

SEE REVERSE FOR FEES REQUIRED UPON FILING

A E I S . S H E E T

NAME OF FIRM CATALINA DISPOSAL CO COMPANY I.D. 0 0 1 2 8 2

LOCATION ADDRESS 1 DUMP RD. AVALON CA 90704

REASON FOR INACTIVATION: 1. ALTERATION 2. CHANGE OF OPERATOR 3. MOVED 4. REMOVED 5. OUT OF BUSINESS 6. BANKING ISSUED 7. OTHER

SUBS. APPLICATION NO. _ _ _ _ _ _

INACTIVATION DATE _ _/_ _/_ _

10/16

ACTION CODE A C D A = ADD DATA C = CHANGE DATA D = DELETE DATA

*PERMIT NUMBER 0 1 2 7 7 8

APPLICATION NUMBER 0 1 4 4 2 1 2

*ISSUE DATE 12/07/89

**INSTALLATION DATE _ _/_ _/_ _

**EQUIPMENT B CAT. 0 0 0 1 9 9

**EQUIPMENT C CAT. _ _

**DESCRIPTION Parthenon Pit Burner

PERMIT TYPE (B, C, or D) ~~D~~ B

SCHEDULE/STEP 5/ C

*SECTION _ _

*SECTOR _ _

EMISSIONS	R1	R2
rHC	1 0 3	0 0 0
tHC	1 0 3	0 0 0
NO_x	2 0 2	0 0 0
SO_2	3 3 1	1 0 2
CO	2 8 3	0 0 0
Part	5 3 2	6 6 2
Other 1 _ _ _	_ _ _	_ _ _
Other 2 _ _ _	_ _ _	_ _ _
Other 3 _ _ _	_ _ _	_ _ _

Weeks Operated Per Year 5 2

	Mon	Tues	Weds	Thurs	Fri	Sat	Sun
Daily Start Time	0 9	0 0	0 9	0 0	0 9	0 0	0 0
Daily Stop Time	1 5	0 0	1 5	0 0	1 5	0 0	0 0
*UTM Coordinates X	_ _	_ _	_ _	_ _	_ _	_ _	_ _

*Not to be completed by the engineer.
**Fill out only if different from application.

Engineer Jay Chen Date 7/6/89

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MEMORANDUM

DATE: 12-6-89

TO: Jay Chen

FROM: Data Entry/Permit Processing

SUBJECT: Company Name and/or Address Verification

RE: Appl. No.(s) 144212

I.D. No. 52882

We have found discrepancies in information for this company regarding the above-referenced application(s).

Please verify the following information:

☑ Company Name Information--

AEIS: _____

APPL.: _____

☑ Company Address Information--

AEIS: Between Alameda & Jellyfish

APPL.: 1 Dump Rd

Please complete the following:

☐ Correct Company Name is:

Catalina Disposal Co

☐ Correct Company Address is:

1 Dump Rd. Avalon, CA 90704

Please return this completed form to ~~Annie DeJesus~~ Mark, Data Entry/Permit Processing, Extension ~~6181~~ 3549

Engineer's Name Jay Chen Unit 3 Date 12/7/89

INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION NO. 14212

NEED EIR? ☐ YES ☒ NO

DISPOSITION:
- ☒ APPROVED
- ☐ DENIED
- ☐ CANCELED — DON'T REFUND FILING FEE
- ☐ CANCELED — REFUND FILING FEE

SEE COMMENTS

PERMIT UNIT WORDING:
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☐ ON PAGE _____ OF PROCESS SHEETS
- ☒ ON Attached P/C dated

CONDITIONS:
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☒ AS ON ~~attached~~ sheet dated 7/27/89

PREVIOUS PERMIT NO.

PERMIT UNIT WORDING & CONDITIONS: _____

( ) P/C (X) P/O ( ) P/O NO P/C ( ) NOTICE TO APPLY WRITTEN

- ☐ CHANGE OF OWNERSHIP, large business
- ☐ CHANGE OF OWNERSHIP, small business
- ☐ CHANGE OF CONDITIONS
- ☐ ALTERATION
- ☐ FEDERAL GOVERNMENT
- ☐ GOVERNMENT (other)
- ☐ TIME & MATERIALS

SCHEDULE	(1) H.P.	(2) 1000s BTU	(3) KVA	(4) SQ. FT.	(5) GALLONS	(6) GASOLINE FUELING	(7) EXCEPTIONS
RATING							
FEE							

DISPOSITIONED

1. PERMIT EVALUATION FEE — RULE 301.1(b)(1)
   - A. SCHEDULE _____ STEP _____ x FEE $ _____
   - B. TIME & MATERIALS (T & M) HOURS _____ X $50/HOUR x FEE $ _____
   - C. CHANGE OF OWNERSHIP, large business or ALTERATION — EXCEPT T & M
     SCHEDULE _____ STEP _____ x FEE _____ X 50% x FEE $ _____
   - D. ADDITIONAL FEE FOR NO P/C. ABOVE FEE _____ X 50% x FEE $ _____
2. EIR/MODELING FEE — RULE 301.1(g). HOURS _____ X $50/HOUR x FEE $ _____
3. 301(d)(1)(C) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION

_____ ADJUSTED FEE $ _____

COMMENTS: ① Fast tracked per KM's memo of 5/10/89 attached.
② See Stacey Chinn's memo of 5/24/89 for inspection report

TOTAL FEE [illegible]

REFUND [illegible]

WORK UNITS ( )

RECOMMENDED BY Gary Chinn DATE 7/6/89 REVIEWING ENGINEER [signature] DATE 7/27/89

PAGE _____ OF _____ PAGES

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 ☐ P/C 2 ☒ P/O 3 ☐ C/O

COMPANY ID# 52582
APPLICATION # 100212

COMPANY NAME CATALINA DISPOSAL CO. DATE 7/6/89

EQUIPMENT LOCATION 1 DUMP ROAD, AVALON, CA 90704

APPLICABLE NEW SOURCE RULE: (equip. installed or Class I applc'n rec'd...)

1 ☐ None (before 10-8-76)
2 ☐ Rule 213 (before 7-1-79 and on or after 10-8-76)
3 ☐ Original Reg XIII (before 1-1-83 and on or after 7-1-79)
4 ☐ 1st Revision Reg XIII (before 7-12-85 and on or after 1-1-83)
5 ☒ 2nd Revision Reg XIII (on or after 7-12-85)

SPECIAL CASES:

1 ☐ Banking Ref Applc'n #_____
2 ☐ Reg 13 Exempt
3 ☐ Mitigations 4 ☐ Tradeoffs
5 ☐ Toxic Materials
6 ☐ Banking Cert./Reg. Used
7 ☐ Rule 219 Exemptions
8 ☐ Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): ☒ 1.1 factor used for Max

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	UnRHC
Max #/day	0	0	+47	0	+88	0	0
Actual w/internal BACT #/day	0	0	+43	0	+56	0	0
Actual w/o BACT #/day	0	0	+43	0	+80	0	0

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")

Exempt by Rule 1304 (____) (____) or Rule 213(f) (____) (____)

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	UnRHC
Max #/day							
Actual #/day							

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

APPLIC'N NUMBER	RHC #/day	NOx #/day	SO_x #/day	CO #/day	Part #/day	Lead #/day	UnRHC #/day

Engineer Gary Chen Date 7/6/89 Reviewing Engineer M. Hy Date 7/17/89

Revised 9/85

SCAQMD

NSR REG. XIII DATA SHEET

cont'd

TRADEOFFS: Emissions previously credited to: CO. ID # _____

COMPANY NAME _____ APPLC'N # _____

EQUIPMENT LOCATION _____

CONTAMINANT	RHC	NO_x	SO_x	CO	PART	LEAD	
#/DAY							

TOXIC MATERIALS: Emission increase or decrease from this permit unit credited to this location (specify contaminant code number)

CONTAMINANT					
Max #/day					
Actual w/internal BACT #/day					
Actual w/o BACT #/day					

BANKING USED: [] Registration

CONTAMINANT	RHC	NO_x	SO_x	CO	PART	LEAD	_____
#/day used							

[] Certificate

Cert Number	RHC #/day	NO_x #/day	SO_x #/day	CO #/day	Part #/day	Lead #/day	_____ #/day

RULE 219 EXEMPT EQUIPMENT: Enter emissions from equipment exempt from permit by Rule 219 (Indicate "+" or "-")

Identifying number _____ Equipment category # _____

Exempt by Rule 219 (___) (___) (___) Date installed _____

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	
Max #/day							
Act #/day							

---Toxic materials from this exempt equipment:

CONTAMINANT						

South Coast
AIR QUALITY MANAGEMENT DISTRICT
9150 Flair Drive, El Monte, CA 91731

APPLICATION NUMBER: 144212

PERMIT TO CONSTRUCT

GRANTED AS OF 02/13/86

LEGAL OWNER OR OPERATOR: CATALINA DISPOSAL COMPANY
P.O. BOX 295
AVALON, CA 90704

ATTENTION: MR. THOMAS H. JORDAHL

The equipment described below and as shown on the approved plans and specifications and subject to the special condition, or conditions listed.

EQUIPMENT LOCATED AT: 1 DUMP ROAD, AVALON, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS: REFUSE PIT BURNER, PACTHERM, 20' L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 H.P. COMBUSTION AIR BLOWER AND A 20'-0" L. X 0'-1" W. SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

-CONDITIONS- (SEE NEXT PAGE)

1. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR.
2. THE RESIDUAL ASH MUST BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY OR PRIOR TO THE START OF A NEW BURN.
3. ASH REMOVED FROM THIS EQUIPMENT MUST BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.
4. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

Approval or denial of this application for permit to operate the above equipment will be made after an inspection to determine if the equipment has been constructed in accordance with the approved plans and specifications and if the equipment can be operated in compliance with all Rules of the South Coast Air Quality Management District.

Please notify M. DAZELL at 572-6145 when construction of equipment is completed.

This Authority to Construct is based on the plans, specifications, and data submitted as it pertains to the release of air contaminants and control measures to reduce air contaminants. No approval or opinion concerning safety and other factors in design, construction or operation of the equipment is expressed or imp

This Permit to Construct shall serve as a temporary Permit to Operate provided the Executive Officer is given prior notice of such intent to operate.

This Permit to Construct will become invalid if the Permit to Operate is denied or if the application is cancelled. THIS PERMIT TO CONSTRUCT SHALL EXPIRE TWO YEARS FROM THE DATE OF FILING OF APPLICATION unless an extension is granted by the Executive Officer.

J. A. Stuart, Executive Officer

RP:amj

BY R. PUERTA
RECORDS SECTION

30D343 Rev 1/84

CONDITIONS

2/27/89.

MW

1. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.

2. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR.

3. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

4. THE RESIDUAL ASH MUST BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY ~~OR [illegible]~~ AND DISPOSED OF AT PROPER LANDFILL WITH ADEQUATE COVER.

5. ASH REMOVED FROM THIS EQUIPMENT MUST BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.

6. THE QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST BE RECORDED FOR EACH BURN DAY. THE RECORDS SHALL INCLUDE TONS PER HOUR AND TONS PER DAY BURNED AND SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING DIVISION

DATE: May 24, 1989

TO: Mohsen Nazemi

FROM: Stacey M.K. Ebiner

SUBJECT: Field Inspection-Pebbly Beach & Two Harbors Landfills

On April 21, 1989, Gene Fisher, Intergovernmental Affairs Officer and I took the ferry to Catalina Island and landed in Avalon. We were met by several city officials including the mayor and city manager of Avalon, Greg Hardy, Administrative Assistant to Assemblyman Dennis Brown, Tom Jordahl (operator of the Pebbly Beach incinerator and landfill) and Doug Bombard (operator of Two Harbors landfill). We discussed the requirements of Calderon (AB-3374) with respect to the two landfills on Catalina Island. A bill passed several years ago allows islands over 15 miles off the coast can burn. They feel that both landfills will not cause any emissions to the atmosphere. For the water SWAT, the company Groundwater Technology Inc. sampled an existing well (cost $10,000). No significant contaminants were found. This satisfied the Regional Water Quality Control Board requirements. They estimate it will cost $20,000 per well to drill if gas samples are required. Furthermore, the ash at Pebbly Beach has been analyzed and deemed non-hazardous.

We then went to the Pebbly Beach incinerator and landfill just outside of Avalon. Photographs were taken of the incinerator permitted under P/C application no. 144212, trash, ash, and landfill. Tom Jordahl indicated that he had recently purchased a metal baler to handle all the metal. He has separated out a lot of th metal and will bale it and ship it back to the mainland after he cleans and paints the baler. Wood wastes are also separated. Trash is burned every few days depending on the amount of trash collected. (It depends a lot on tourism, more trash is generated on weekends and summer due to increased tourists.) The trash was very dry and had only a very slight odor. There were no flies or birds around.

As can be seen in the photographs, the lower incinerator walls and doors have been repaired due to the high temperatures deteriorating them. Trash from the City of Avalon is deposited on the pad up above the incinerator. A scraper drops it into the incinerator. When the trash is burned, a scraper goes in one door of the incinerator and pushes it out through the other door.

It is later transported up to the landfill and buried. The ash had no odor, and did not create any fugitive dust.
At the landfill (about 50 feet away from the incinerator area) there was a pile of wood pallets separated out. This area is an old quarry - the rock wall borders one side of the landfill, and the incinerator with the ocean beyond borders the other side. It is quite secluded from the City. There is also a wastewater treatment plant between the City and the landrill. One of the photographs shows some unburned grasses in the landfill on top of some ash. Mr. Jordahl said that this was not supposed to be there.

Mr. Bombard then drove us over to the isthmus to Two Harbors. When we arrived there was a truck dumping a couple of barrels of trash from one of the nearby campgrounds. The landfill is very secluded. In the photograph overlooking Two Harbors, you can see the road coming from the base of the mountains on the left side and going up to the landfill. There are no visible emissions from the town of Two Harbors. This landfill accepts only trash generated by Two Harbors, with a population of approximately 200. Trash is also collected from the boats anchored in the harbor (to eliminate the trash that inevitably gets thrown overboard). The trash appeared to be predominantly metal (many aluminum cans) and glass. Both landfill operators have been looking into starting a recycling program or purchasing the "reverse vending machines" giving 1-2 cents per can deposited.

At the Two Harbors landfill a long trench is dug about 10 feet deep. Trash is deposited and burned almost every day. (By the end of the day all trash is burned, maybe some smoldering.) There was some visible smoke coming off the trench but it dissipated quickly. On days when the winds blow towards the populated area, they do not burn. When a trench is filled a final cover is placed over the fill and the area is graded. (Looking over the landfill it is difficult to tell where there are filled trenches.) There was one recently dug trench where active burning was taking place. One photograph shows the old trench that will be filled shortly.

Conclusions

Odors and visible emissions were minimal at both sites. Trash is burned at both sites and only ash is deposited in the landfills. Based on the previous field inspection by Bijan Ataian which showed insignificant surface emissions and the above observations, I recommend that no further testing be required at these two landfills and that the Calderon Health & Safety Code Section 41805.5 requirements are fulfilled.

SMKE

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ENGINEERING DIVISION MEMORANDUM

DATE: May 10, 1989

TO: Supervising Engineers, Permit Processing Section #1

FROM: Robert R. Pease, Sr. Engineering Manager RRP

SUBJECT: Processing of Aged Applications

One of the areas that we have focused on in the past two years is the "cleaning out" of aged applications. Through your efforts, this program has gotten out several of the "dogs" and materially contributed to reducing our backlog. This effort also allows us to focus our time on new and modified sources and controlling future emission increases.

In order to continue with this program, we need to more fully dispose of aged applications. All pending ready-for-final applications (Class III) which have been issued permits to construct and were originally submitted to the District prior to January 1, 1987 shall be fast-tracked. Prior to issuing permits to operate for these applications, the following procedure should be followed:

) phone applicant and verify equipment description and operation

) update conditions including New Source Review limits

) complete permit wording and Regulation XIII, fee, and data forms

For those applications which cannot be fast-tracked - source test is outstanding, equipment not constructed, operational problems, NOV's issued - please fill out an exception report explaining the reason(s) for holding the application and forward these to me by June 30, 1989. All other applications should be processed by July 31, 1989.

Once we have completed this program, our work loads should be considerably more manageable. This will also provide us with sufficient flexibility to continue to develop innovative procedures and the time required to devote to our more challenging applications and special projects. Please see me if there are any questions in implementing this program.

RRP:pc

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MEMORANDUM

DATE: July 25, 1988

TO: File

FROM: M. Nazemi

SUBJECT: Catalina Disposal Co. (A/N 144212)

Mr. Wayne Morgan of Northern Sierra NOMD called and inquired info. about this incinerator. I explained to him that they were permitted with exemption from certain District Rules and Regs under H&S C Section 41.810. He requested a copy of P/C which was mailed to him today.

2/4/88

Mohsen

Mr. John Plog from State of Colorado called inquiring information about an Air Curtain Destructor (Open Pit Burner) for municipal waste incineration on Catalina Island.

He would like to know the operating conditions, and toxic concerns etc.

I wonder if you or someone familiar with this can return his call.

Mr. Plog's phone number is (303) 331-8588.

Thanks.

Jay

TENNESSEE DEPARTMENT OF HEALTH AND ENVIRONMENT
CUSTOMS HOUSE
701 BROADWAY
NASHVILLE, TENNESSEE 37219-5403

January 2, 1987

Mr. Mohsen Nazemi
SCAQMD
9150 Flair Drive
El Monte, CA

Dear Mr. Nazemi:

Thank you for the information you gave me about the incinerator operated by Catalina Disposal.

As I told you, I plan to attend a workshop in Los Angeles on January 15-17., I will contact you before then to see if you have visited the Catalina Disposal site. If you have not, perhaps we could visit the incinerator site together on the afternoon of January 14. I am scheduled to arrive at the Los Angeles airport late morning on January 14.

Sincerely,

John D. Patton

John D. Patton
Division of Air Pollution Control

JDP/cw APC D-6

ENGINEERING DIVISION···MEMORANDUM

TO	FROM	DATE
File	M. Nazemi	10-16-86
REFERENCE: Catalina Disposal Co.		PERMIT APPL. NO.

SUBJECT T/C

Tom Jordhall of Catalina Disposal called and indicated that the refuse pit burner was completed and has been in operation since 9-15-86. He also indicated that presently they operate 3 days/wk., but instead of the restrictions of 4 TPH and 25 TPD imposed on condition No. 1 of P/C dated 8-13-86, they run the unit at a rate of 8 TPH and 50 TPD. The avg. operation is at refuse burning rate of 7½ TPH.

The reason for the increase in the burning rate is due to the smoke generated from the burn rate of 4 TPH, since by the time the unit warms up to the temps. the refuse is all consumed. So they operate @ 8 TPH rate.

In response to my questions he provided me with the following: a) All the ash is wetted in the pit and the pit is cleaned the day after each burn. The wet ash is taken to the landfill.

b) Weight and Vol. reduction of the refuse in the pit is 90 and 98 %, respectively.

c) The overfire air blower remains on for 3 hrs after they stop feeding the system. The underfire air blower remains on all night.

I told him that their P/C acts as a temp. permit and that I will probably schedule an inspection to observe the 4 and 8 TPH burn rate for the possible modification of their Permit Condition.

South Coast
AIR QUALITY MANAGEMENT DISTRICT
9150 Flair Drive, El Monte, CA 91731

APPLICATION NUMBER:
144212

PERMIT TO CONSTRUCT

GRANTED AS OF 08/13/86

LEGAL OWNER OR OPERATOR
CATALINA DISPOSAL COMPANY
P.O. BOX 295
AVALON, CA 90704

ATTENTION: MR. THOMAS H. JORDAHL

The equipment described below and as shown on the approved plans and specifications and subject to the special condition, or conditions listed.

EQUIPMENT LOCATED AT 1 DUMP ROAD, AVALON, CALIFORNIA

EQUIPMENT DESCRIPTION AND CONDITIONS:
REFUSE PIT BURNER, PACTHERM, 20' L. X 8' W. X 12' H., 10 TONS PER HOUR CAPACITY, WITH A 40 H.P. COMBUSTION AIR BLOWER AND A 20'-0" L. X 0'-1" W. SLOT OPENING NOZZLE COMBUSITON AIR DUCT.

-CONDITIONS-

1. TOTAL QUANTITY OF REFUSE BURNED IN THIS EQUIPMENT MUST NOT EXCEED 25 TONS IN ANY ONE DAY OR 4 TONS IN ANY ONE HOUR.
2. THE RESIDUAL ASH MUST BE REMOVED FROM THIS EQUIPMENT AT THE END OF EACH BURN DAY, OR PRIOR TO THE START OF A NEW BURN.
3. ASH REMOVED FROM THIS EQUIPMENT MUST BE HANDLED IN A MANNER TO MINIMIZE FUGITIVE DUST EMISSIONS.
4. THIS EQUIPMENT SHALL ONLY BE USED FOR BURNING OF MUNICIPAL REFUSE GENERATED ON SANTA CATALINA ISLAND.

Approval or denial of this application for permit to operate the above equipment will be made after an inspection to determine if the equipment has been constructed in accordance with the approved plans and specifications and if the equipment can be operated in compliance with all Rules of the South Coast Air Quality Management District.

Please notify M. NAZEMI at 572-6145 when construction of equipment is completed.

This Authority to Construct is based on the plans, specifications, and data submitted as it pertains to the release of air contaminants and control measures to reduce air contaminants. No approval or opinion concerning safety and other factors in design, construction or operation of the equipment is expressed or implied.

This Permit to Construct shall serve as a temporary Permit to Operate provided the Executive Officer is given prior notice of such intent to operate.

This Permit to Construct will become invalid if the Permit to Operate is denied or if the application is cancelled. THIS PERMIT TO CONSTRUCT SHALL EXPIRE TWO YEARS FROM THE DATE OF FILING OF APPLICATION unless an extension is granted by the Executive Officer.

J. A. Stuart, Executive Officer

RP:amj

By K. PUERTA
RECORDS SECTION

2003A44 Rev 1/86

FILE COPY

INSTRUCTIONS FOR PERMIT WORDING & FEE DATA

APPLICATION No. 144212

NEED EIR? ☐ YES ☒ NO

DISPOSITION
- ☒ APPROVED
- ☐ DENIED
- ☐ CANCELED – DON'T REFUND FILING FEE
- ☐ CANCELED – REFUND FILING FEE
  SEE COMMENTS

PERMIT UNIT WORDING
- ☐ BELOW
- ☐ ON FIELD REPORT DATED _____
- ☒ ON PAGE 2 OF PROCESS SHEETS
  Ltrd 6-27-86
- ☐ ON _____

CONDITIONS
- ☐ NONE
- ☐ NUMBERS LISTED _____
- ☐ SPECIAL (SEE PERMIT UNIT WORDING & CONDITIONS)
- ☒ AS ON Pg. 1 of the Process Sheets
  Ltrd 6-27-86 for Items 4

PREVIOUS PERMIT NO. None

PERMIT UNIT WORDING & CONDITIONS:

(X) P/C ( ) P/O

☐ CHANGE OF OWNERSHIP ☐ CHANGE OF CONDITION ☐ ALTERATION ☐ FEDERAL GOVERNMENT ☐ GOVERNMENT (OTHER)

SCHEDULE	① H.P.	② 1000s BTU	③ KVA	④ SQ. FT.	⑤ GALLONS	⑥ GASOLINE FUELING	⑦ EXCEPTIONS
RATING	40				14,365		
FEE	$332				$365		

1. 301.1 (b) and 301.2 (a) ENGINEERING EVALUATION FEE SCHED. 5 STEP C FEE $ 365.00
2. 301.1 (b) (5) MODELING FEE _____ HRS X $50.00 FEE _____
3. 301.1 (c) (4) CREDIT OR DIFFERENCE DUE TO INCORRECT INFORMATION
   _____ FEE _____

Comments: _____

TOTAL FEE $ 365.00 ✓

REFUND 0

WORK UNITS 25

RECOMMENDED BY M. Nazemi DATE 6-27-86 7-8-86

REVIEWING ENGINEER _____ DATE 7/8/86

PAGE _____ OF _____ PAGES

GENERAL STANDARD CONDITIONS

3 This equipment must not be operated unless (it)(the) _____ _____ (is)(are) vented only to air pollution control equipment which is in full use and which has been issued (an operating permit) (a permit to construct) by the Executive Officer.

4. a Fuel oil supplied at the burner must be No. _____ or lighter grade as described by the latest ASTM specifications and must have a sulfur content of not more than 0. _____ % by weight.
b No. _____ fuel oil supplied at the burner must be at a temperature of _____ °F or greater.

5. A temperature of not less than _____ °F must be maintained in the (afterburner) (combustion chamber) when the equipment it serves is in operation.

6. Not less than _____ gallons per minute of (water)(scrubbing solution) at a pressure of _____ to _____ psig must be supplied to the scrubber(_____) when the equipment it serves is in operation.

7 This oven must not be operated at temperatures above _____ °F.

8 Steam atomization only must be employed during the entire period of fuel oil burning.

9 This equipment must not discharge to the atmosphere radioactive materials in excess of the permissible limits established by existing authorities.

10 Whenever air contaminants are vented to the boiler firebox, all burners must be continously operated either with natural gas at a burner pressure of not less than _____ (psig) (inches water column) or with fuel oil at an equivalent heat input.

MECHANICAL UNIT

11. Circulating water to the _____ must be maintained at pH _____ or (higher) (lower).

13. This equipment must not be used to vent more than _____ at any one time.

27. The (incinerator) (equipment) must be operated by personnel properly trained in its operation.

29. The (mixing chamber burner(s)) (afterburner) (and water spray chamber) must be used throughout the burning period.

36. (Aggregate)(Material) charged, and (aggregate) (material) in process must be kept sufficiently moist to prevent dust emissions.

58. This furnace may be used only to process _____.

61. The cloth bags in the silo filter vent(s) must be thoroughly cleaned immediately after each load of material is received.

71. Plastics or materials containing plastics must not be charged into this (incinerator) (furnace).

74. A mechanical gauge must be installed so as to indicate, in inches water column, the static pressure differential across the bags.

75. A flowmeter, indicating G.P.M. (and a pressure gauge indicating in P.S.I.), must be installed in the water supply line to the scrubber.

84. Dust collected in the baghouse must be discharged only into closed containers.

85. This incinerator may be used only to cremate human or animal anatomical parts.

86. Slide dampers must be installed in each branch duct of the exhaust system.

SCAQMD
ENGINEERING DIVISION
NEW SOURCE REVIEW REGULATION XIII DATA SHEET

1 [X] P/C 2 [ ] P/O 3 [ ] C/O

COMPANY ID# 52882
APPLICATION # 144212

COMPANY NAME CATALINA DISPOSAL CO. DATE 06-27-86

EQUIPMENT LOCATION 1/ DUMP ROAD AVALON, CA 90704

APPLICABLE NEW SOURCE RULE: (equipmt. installed or Class I applc'n rec'd...)
1 [ ] None (before 10-8-76)
2 [ ] Rule 213 (before 7-1-79 and on or after 10-8-76)
3 [ ] Original Reg. XIII (before 1-1-83 and on or after 7-1-79)
4 [X] Revised Reg. XIII (on or after 1-1-83)

SPECIAL CASES:
1 [ ] Banking Ref. Applc'n #_____
2 [ ] Reg 13 Exempt
3 [ ] Mitigations 4 [ ] Tradeoffs
5 [ ] Toxic Materials
6 [ ] Banking Cert./Reg. Used
7 [ ] Rule 219 Exemptions
8 [ ] Alter.-Prev. App. #_____

EMISSION INCREASE OR DECREASE FROM THIS PERMIT UNIT CREDITED TO THIS LOCATION (Indicate "+" or "-"): [X] 1.1 factor used for Max

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	UnRHC
Max #/day	0	0	+47	0	+88	0	0
Actual w/internal BACT #/day	0	0	+43	0	+80	0	0
Actual w/o BACT #/day	0	0	+43	0	+80	0	0

REGULATION XIII EXEMPT EMISSIONS (Indicate "+" or "-")
Exempt by Rule 1304 (____)(____)

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	UnRHC
Max #/day							
Actual #/day							

MITIGATIONS ACHIEVED CONCURRENT WITH THIS APPLC'N (Indicate "+" or "-")

APPLIC'N NUMBER	RHC #/day	NOx #/day	SO_x #/day	CO #/day	Part #/day	Lead #/day	UnRHC #/day

Engineer M. Nazemi Date 6-27-86 Reviewing Engineer N Date 7/8/86

Revised 10/83

SCAQMD

NSR REG. XIII DATA SHEET
cont'd

TRADEOFFS: Emissions previously credited to: CO. ID #_____

COMPANY NAME _____ APPLC'N #_____

EQUIPMENT LOCATION _____

CONTAMINANT	RHC	NO_x	SO_x	CO	PART	LEAD	
#/DAY							

TOXIC MATERIALS: []Emission increase or decrease from this permit unit credited to this location (specify contaminant code number)

CONTAMINANT					
Max #/day					
Actual w/internal BACT #/day					
Actual w/o BACT #/day					

BANKING USED: []Registration

CONTAMINANT	RHC	NO_x	SO_x	CO	PART	LEAD	_____
#/day used							

[]Certificate

Cert Number	RHC #/day	NO_x #/day	SO_x #/day	CO #/day	Part #/day	Lead #/day	#/day

RULE 219 EXEMPT EQUIPMENT: Enter emissions from equipment exempt from permit by Rule 219 (Indicate "+" or "-")

Identifying number_____ Equipment category #_____

Exempt by Rule 219 (___)(___)(___) Date installed_____

CONTAMINANT	RHC	NO_x	SO_x	CO	Part	Lead	
Max #/day							
Act #/day							

---Toxic materials from this exempt equipment:

CONTAMINANT						

SCAQMD ENGINEERING DIVISION

Time and Materials Charges Summary Application Sheet

P/C [X] P/O [ ]
T & M Charges Apply
Yes [ ] No [ ]

APPL # 144212
I.D. # 052882

CATALINA DISPOSAL CO
1 DUMP RD
AVALON

DATA ENTRY ENGINEERING

Contact: _____ Previous Permit No.: _____

Application:

Engineer's Initials MN Date Assigned 5/20/86

Date Application Deemed Complete..... __/__/__

Verify Date Estimated for Completion of Construction __/__/__

Estimated Date to Completion of Evaluation..... __/__/__

Estimated Hours to Completion 2.5

EVALUATION	DATE COMPLETED	TOTAL HOURS*	COMMENTS
A/I	5/29/86 (6/10/86)	3 (2)	A/I Letter
FIELD EVALUATION	(6/10/86)	(2)	
	__/__/__		
SOURCE TEST	__/__/__		
ENG. EVAL.	Mm 6/27/86 (7/8/86)	15	A/C Evaluation

Engineer M. Nazemi DATE: 6/27/86

Reviewing and Processing:

Supervisory Review and Approvals Completed: N 7/8/86

Permit Typing Completed and Permit Mailed: _____ __/__/__

* List Total Hours Spent for Each Category of Work Over For Example on Back

NTM 11-27-84

Example: Additional Information (A/I) - If you had spent six different days at 15 minutes per day to obtain A/I, show 1 1/2 hours on this form and the last date information was taken. However, record each days activity on the T & M Work Sheet. Do the same for the other three categories.



T & M RECORD

Application No. 144212 Engineer: M. Nazem

Company Catalina Disposal

Date		S/T	A/I	E/E	F/E	Total HOURS SE
5-29-86	A/I Letter & T/C		3			3
6-10-86	" "		2			5
6-20-86	Meeting w/ K.R.R.C & SMW		2			7
6-25-86	P/C Evaluation			5		12
6-26-86	" "			3		15
6-24-86	" "			1		16
6-23-86	" "			2		18
6-27-86	" "			2		20
7-8-86	" " Em. Factors			2		22
P/O						
10-16-86	T/C & Memo			1		1

SCAQMD ENGINEERING DIVISION

Time and Materials Charges
Summary Application Sheet

P/C [ ] P/O [X]
T & M Charges Apply
Yes [ ] No [ ]

APPL # 144212
I.D. # 052882

CATALINA DISPOSAL CO
1 DUMP RD
AVALON

Contact: _____ Previous Permit No.: _____

Application:

Engineer's Initials MN Date Assigned 5/20/86

Date Application Deemed Complete..... __/__/__

Verify Date Estimated for Completion of Construction __/__/__

Estimated Date to Completion of Evaluation..... __/__/__

Estimated Hours to Completion 20

EVALUATION	DATE COMPLETED	TOTAL HOURS*	COMMENTS
A/I	__/__/__		
FIELD EVALUATION	__/__/__		
SOURCE TEST	__/__/__		
ENG. EVAL.	__/__/__		

Engineer _____ DATE: __/__/__

Reviewing and Processing:

Supervisory Review and Approvals Completed : _____ __/__/__

Permit Typing Completed and Permit Mailed : _____ __/__/__

* List Total Hours Spent for Each Category of Work
Over For Example on Back

NTM 11-27-84

Example: Additional Information (A/I) - If you had spent six different days at 15 minutes per day to obtain A/I, show 1 1/2 hours on this form and the last date information was taken. However, record each days activity on the T & M Work Sheet. Do the same for the other three categories.

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ENGINEERING DIVISION
APPLICATION PROCESSING AND CALCULATIONS

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Permit Conditions

1. Total quantity of refuse burned in this equipment must not exceed 25 Tons in any one day or 4 tons in any one hour.

2. The residual ash must be removed from this equipment at the end of each burn day or prior to the start of a new burn.

3. ~~Adequate measures must be taken in order to prevent fugitive dust emissions during the removal of the ash from this equipment.~~

4. This equipment shall only be used for burning of municipal refuse generated on Santa Catalina Island.

(3) Ash removed from this equipment must be handled in a manner to minimize fugitive dust emission

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Review for a Permit to Construct

Catalina Disposal Co.
P.O. Box 295
Avalon, CA 90701

Equipment Location: 1 Dump Road, Avalon, CA 90704.

Equipment Description:

APPLICATION NO. 144212

REFUSE PIT BURNER, PACTHERM, 20'L X 8'W X 12'H., 10 TONS PER HOUR CAPACITY, WITH A 40 H.P. COMBUSTION AIR BLOWER AND A 20'-0"L X 0'-1"W SLOT OPENING NOZZLE COMBUSTION AIR DUCT.

Background:

This application has been submitted for a P/C a refuse pit burner in the city of Avalon in Santa Catalina Island located ∝ 20 miles off the coast of California. The city of Avalon generates about 7,000 tons of refuse per year, which consists of municipal and construction waste. All the generated island waste is presently being open burned and smolders 24 hrs/day at a land fill located at the same site proposed for the above-described pit burner.

Since Santa Catalina is an island located more than 15 miles from the mainland coast, open burning is permitted under Section 41810 of the California State Health and Safety Code, and Rule 444 does not apply.

The estimated volume reduction of the waste is about 80%. All the remaining ashes from the combustion in the pit will be deposited in the landfill, extending the remaining life of the landfill from 4.5 years and 6 years with no burn and open burn, respectively to 23 years with the pit burner (see Fig. A in the suppl.). Due to the special underfire air system, the ashes will be cooled enough to unload daily, if needed. No auxiliary fuel will be used once the fire has started.

Avg. burning rate is 20 TPD and max. is 25 TPD. The composition of the waste is assumed to be the same as the composition taken from the SCRRF project. The collected waste will be dumped on a concrete slab, adjacent to the pit burner. The waste is then screened for large items and then loaded into the pit burner from the top. The walls at each end of the pit burner are hinged so that they can be opened to clean out the burned waste. The landfill site existingly receives class II waste and is zoned M-3 (unclassified) per Conditional Use Permit Case No. 2469-(4) dated Aug. 28 and Sept. 24, 1984 (Copy in the file). Conditions of this permit allows landfill accomodations of Groups II and III waste only and no infectious waste is allowed to be deposited in the landfill. (Conditions No. 11 & 12). Condition No. 15 requires the Conditional Use Permit to expire 15 yrs and 6 yrs from the date of grant (Sept. 1984) depending on whether the burner system is or is not installed, respectively.

Refuse pit burners similar to this unit are in operation throughout the state of Louisiana. The existing practice of open burning in Avalon has resulted in numerous complaints from the citizens and tourists, therefore the Mayor and the City Council are in support of the proposed pit burner (per Applicant's letter dated 4-28-86).

Equipment Operation:

The proposed pit burner is designed for burning refuse at a rate of 10 TPH; however the applicant intends to burn no more than 4 TPH and 25 TPD at peak seasons. The pit burner will not be operated more than 6 hrs/day for 3 days/wk and 52 wks/yr. The pit burner is equipped with a 40 H.P. blower with 17,000 CFM air flow. The combustion air is provided through a 1"W x 20'L. slot opening nozzle on top of the pit which creates and maintains a uniform curtain of air across the top of the burning pit. The over 100 mph* air curtain swirls into the pit increasing combustion efficiency and burning rate. This may tend to confine any resultant smoke under the air curtain until it's consumed by the high temperatures.

* Per letter dated 6-9-86 and Pactherm Pit Burner Brochure:
10,000 Ft/min = 113.6 mph

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Emission Estimates:

Assumptions:

1. Max. burning rate is 4 Tons/hr and 25 Tons/day. Avg. burning rate is 20 Tons/day.
2. Emission factors are per AP-42, Table 2.1-1 p. 2.1-2 for trench industrial/commercial incinerators burning municipal refuse (copy attached).
3. Eqt. Operation is 6 hrs/day, 3 days/wk and 52 wks/yr.
4. Emission factors for open burning are per AP-42, Table 2.4-1, P. 2.4-1 for municipal refuse (copy attached).
5. Open burning is presently conducted at a rate of 20 TPD, 24 hrs/day at the site.

Proposed Emissions:

HC = Negligible

NO_x = Negligible

$SO_x = (25 \text{ Tons/day})(2.5 \text{ lb/Ton}) = 62.5 \text{ lbs/day} \Rightarrow 10 \text{ lbs/hr}$

CO = Negligible

$PM = (25 \text{ Tons/day})(16 \text{ lb/Ton}^*) = 400 \text{ lbs/day} \Rightarrow 66.7 \frac{\text{lbs}}{\text{hr}}$

*AP-42 provides 37 lbs/Ton. This appears to be an overestimation. Based on previous observations of Pit Burners in operation at China Lake, they operate smokeless, except during the short start up period. At worst the PM emiss. are equal to open burning and most likely less than that.

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Existing Emissions:

HC = (20 Tons/day X 30 lb/Ton) = 600 lbs/day /6 = 100 lbs/hr

NO_x = (" " ")(6 ") = 120 " /6 = 20 "

SO_x = (" " ")(1 ") = 20 " /6 = 3.3 "

CO = (" " ")(85 ") = 1,700 " /6 = 283 "

PM = (" " ")(16 ") = 320 " /6 = 53 "

NSR Summary:

$HC = (1.1)(Neg.) = Neg. \cong 0$

NO_x = " " = " $\cong 0$

$SO_x = (1.1)(6.2.5\ \frac{lbs}{day}) - (20\ \frac{lbs}{day}) = 49$ lbs/day
per 7/12/85 NSR (62.5 lbs/day)(1.1) = 47 lb/day NP

$CO = (1.1)(Neg.) = Neg. \cong 0$

$PM = (1.1)(400\ \frac{lbs}{day}) - (320\ \frac{lbs}{day}) = 120$ lbs/day
per 7/12/85 NSR increase = (400-320)(1.1) = 88 lb/day NP

Note: No negative credits can be banked for HC, NO_x and CO. However, credits may be granted for SO_x and PM due to the reductions achieved by ceasing open fires.

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Rule Evaluations:

Rules 401, 404, 405, 407, 409 and specially 473 will not apply to this equipment accord. to Section 41810 of the California State Health & Safety code.

Reg. XIII:

The proposed is considered as a modification to an existing source, and although the emission calculations show an increase in the emissions, but due to the conservation in the emission factors and the fact that pit burner is considered to be a more efficient burn and the exemption in H&S code Sect. 41810, we may conclude that eqt. complies with Reg. XIII, although it shows an increase in NOx and PM emissions. In this special case due to the H&S code exemption it may be concluded that BACT is considered to be a pit burner compared to open burning. This BACT determination is a special case and is not to set a precedence.

Recommendations:

Issuance of a Conditional P/C is recommended. Also it is recommended to observe the open fire and pit burner in operation to be able to evaluate and confirm the improvements in the opacity & particulate emissions.

2.1 REFUSE INCINERATION

2.1.1 Process Description[1-4]

The most common types of incinerators consist of a refractory-lined chamber with a grate upon which refuse is burned. In some newer incinerators water-walled furnaces are used. Combustion products are formed by heating and burning of refuse on the grate. In most cases, since insufficient underfire (undergrate) air is provided to enable complete combustion, additional over-fire air is admitted above the burning waste to promote complete gas-phase combustion. In multiple-chamber incinerators, gases from the primary chamber flow to a small secondary mixing chamber where more air is admitted, and more complete oxidation occurs. As much as 300 percent excess air may be supplied in order to promote oxidation of combustibles. Auxiliary burners are sometimes installed in the mixing chamber to increase the combustion temperature. Many small-size incinerators are single-chamber units in which gases are vented from the primary combustion chamber directly into the exhaust stack. Single-chamber incinerators of this type do not meet modern air pollution codes.

2.1.2 Definitions of Incinerator Categories[1]

No exact definitions of incinerator size categories exist, but for this report the following general categories and descriptions have been selected:

1. *Municipal incinerators* — Multiple-chamber units often have capacities greater than 50 tons (45.3 MT) per day and are usually equipped with automatic charging mechanisms, temperature controls, and movable grate systems. Municipal incinerators are also usually equipped with some type of particulate control device, such as a spray chamber or electrostatic precipitator.

2. *Industrial/commercial incinerators* — The capacities of these units cover a wide range, generally between 50 and 4,000 pounds (22.7 and 1,800 kilograms) per hour. Of either single- or multiple-chamber design, these units are often manually charged and intermittently operated. Some industrial incinerators are similar to municipal incinerators in size and design. Better designed emission control systems include gas-fired afterburners or scrubbing, or both.

3. *Trench incinerators* — A trench incinerator is designed for the combustion of wastes having relatively high heat content and low ash content. The design of the unit is simple: a U-shaped combustion chamber is formed by the sides and bottom of the pit and air is supplied from nozzles along the top of the pit. The nozzles are directed at an angle below the horizontal to provide a curtain of air across the top of the pit and to provide air for combustion in the pit. The trench incinerator is not as efficient for burning wastes as the municipal multiple-chamber unit, except where careful precautions are taken to use it for disposal of low-ash, high-heat-content refuse, and where special attention is paid to proper operation. Low construction and operating costs have resulted in the use of this incinerator to dispose of materials other than those for which it was originally designed. Emission factors for trench incinerators used to burn three such materials[2] are included in Table 2.1-1.

4. *Domestic incinerators* — This category includes incinerators marketed for residential use. Fairly simple in design, they may have single or multiple chambers and usually are equipped with an auxiliary burner to aid combustion.

5. *Flue-fed incinerators* — These units, commonly found in large apartment houses, are characterized by the charging method of dropping refuse down the incinerator flue and into the combustion chamber. Modified flue-fed incinerators utilize afterburners and draft controls to improve combustion efficiency and reduce emissions.

Table 2.1-1. EMISSION FACTORS FOR REFUSE INCINERATORS WITHOUT CONTROLS[a]
EMISSION FACTOR RATING: A

Incinerator type	Particulates		Sulfur oxides[b]		Carbon monoxide		Organics[c]		Nitrogen oxides[d]	
	lb/ton	kg/MT	lb/ton	kg/MT	lb/ton	kg/MT	lb/ton	kg/MT	lb/ton	kg/MT
Municipal[e]										
Multiple chamber, uncontrolled	30	15	2.5	1.25	35	17.5	1.5	0.75	3	1.5
With settling chamber and water spray system[f]	14	7	2.5	1.25	35	17.5	1.5	0.75	3	1.5
Industrial/commercial										
Multiple chamber[g]	7	3.5	2.5[h]	1.25	10	5	3	1.5	3	1.5
Single chamber[i]	15	7.5	2.5[h]	1.25	20	10	15	7.5	2	1
Trench[j]										
Wood	13	6.5	0.1[k]	0.05	NA[l]	NA	NA	NA	4	2
Rubber tires	138	69	NA	NA	NA	NA	NA	NA	NA	NA
Municipal refuse	37	18.5	2.5[h]	1.25	NA	NA	NA	NA	NA	NA
Controlled air[m]	1.4	0.7	1.5	0.75	Neg	Neg	Neg	Neg	10	5
Flue-fed single chamber[n]	30	15	0.5	0.25	20	10	15	7.5	3	1.5
Flue-fed (modified)[o,p]	6	3	0.5	0.25	10	5	3	1.5	10	5
Domestic single chamber										
Without primary burner[q]	35	17.5	0.5	0.25	300	150	100	50	1	0.5
With primary burner[r]	7	3.5	0.5	0.25	Neg	Neg	2	1	2	1
Pathological[s]	8	4	Neg	Neg	Neg	Neg	Neg	Neg	3	1.5

[a] Average factors given based on EPA procedures for incinerator stack testing.
[b] Expressed as sulfur dioxide.
[c] Expressed as methane.
[d] Expressed as nitrogen dioxide.
[e] References 5 and 8 through 14.
[f] Most municipal incinerators are equipped with at least this much control: see Table 2.1-2 for appropriate efficiencies for other controls.
[g] References 3, 5, 10, 13, and 15.
[h] Based on municipal incinerator data.
[i] References 3, 5, 10, and 15.
[j] Reference 7.
[k] Based on data for wood combustion in conical burners.
[l] Not available.
[m] Reference 9.
[n] References 3, 10, 11, 13, 15, and 16.
[o] With afterburners and draft controls.
[p] References 3, 11, and 15.
[q] References 5 and 10.
[r] Reference 5.
[s] References 3 and 9.

6. *Pathological incinerators* — These are incinerators used to dispose of animal remains and other organic material of high moisture content. Generally, these units are in a size range of 50 to 100 pounds (22.7 to 45.4 kilograms) per hour. Wastes are burned on the hearth in the combustion chamber. The units are equipped with combustion controls and afterburners to ensure good combustion and minimal emissions.

7. *Controlled air incinerators* — These units operate on a controlled combustion principle in which the waste is burned in the absence of sufficient oxygen for complete combustion in the main chamber. This process generates a highly combustible gas mixture that is then burned with excess air in a secondary chamber, resulting in efficient combustion. These units are usually equipped with automatic charging mechanisms and are characterized by the high effluent temperatures reached at the exit of the incinerators.

2.1.3 Emissions and Controls[1]

Operating conditions, refuse composition, and basic incinerator design have a pronounced effect on emissions. The manner in which air is supplied to the combustion chamber or chambers has, among all the parameters, the greatest effect on the quantity of particulate emissions. Air may be introduced from beneath the chamber, from the side, or from the top of the combustion area. As underfire air is increased, and increase in fly-ash emissions occurs. Erratic refuse charging causes a disruption of the combustion bed and a subsequent release of large quantities of particulates. Large quantities of uncombusted particulate matter and carbon monoxide are also emitted for an extended period after charging of batch-fed units because of interruptions in the combustion process. In continuously fed units, furnace particulate emissions are strongly dependent upon grate type. The use of rotary kiln and reciprocating grates results in higher particulate emissions than the use of rocking or traveling grates.[14] Emissions of oxides of sulfur are dependent on the sulfur content of the refuse. Carbon monoxide and unburned hydrocarbon emissions may be significant and are caused by poor combustion resulting from improper incinerator design or operating conditions. Nitrogen oxide emissions increase with an increase in the temperature of the combustion zone, an increase in the residence time in the combustion zone before quenching, and an increase in the excess air rates to the point where dilution cooling overcomes the effect of increased oxygen concentration.[14]

Hydrochloric acid emissions were found to approximate 1.0 lb/ton of feed in early work[14] and 1.8 lb/ton in more recent work.[23] The level can be sharply increased in areas where large quantities of plastics are consumed. Methane levels found in recent work[22] range from 0.04 to 0.4 lb/ton of feed.

Table 2.1-2 lists the relative collection efficiencies of particulate control equipment used for municipal incinerators. This control equipment has little effect on gaseous emissions. Table 2.1-1 summarizes the uncontrolled emission factors for the various types of incinerators previously discussed.

Table 2.1-2. COLLECTION EFFICIENCIES FOR VARIOUS TYPES OF MUNICIPAL INCINERATION PARTICULATE CONTROL SYSTEMS[a]

Type of system	Efficiency, %
Settling chamber	0 to 30
Settling chamber and water spray	30 to 60
Wetted baffles	60
Mechanical collector	30 to 80
Scrubber	80 to 95
Electrostatic precipitator	90 to 96
Fabric filter	97 to 99

[a]References 3, 5, 6, and 17 through 21

References for Section 2.1

1. Air Pollutant Emission Factors. Final Report. Resources Research Incorporated, Reston, Virginia. Prepared for National Air Pollution Control Administration, Durham, N.C., under Contract Number CPA-22-69-119. April 1970.

2. Control Techniques for Carbon Monoxide Emissions from Stationary Sources. U.S. DHEW, PHS, EHS, National Air Pollution Control Administration. Washington, D.C. Publication Number AP-65. March 1970.

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4. De Marco, J. et al. Incinerator Guidelines 1969. U.S. DHEW, Public Health Service. Cincinnati, Ohio. SW. 13TS. 1969. p. 176.

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7. Burkle, J.O., J.A. Dorsey, and B. T. Riley. The Effects of Operating Variables and Refuse Types on Emissions from a Pilot-Scale Trench Incinerator. Proceedings of the 1968 Incinerator Conference. American Society of Mechanical Engineers. New York. May 1968. p. 34-41.

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14. Nissen, Walter R. Systems Study of Air Pollution from Municipal Incineration. Arthur D. Little, Inc. Cambridge, Mass. Prepared for National Air Pollution Control Administration, Durham, N.C., under the Contract Number CPA-22-69-23. March 1970.

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16. Communication between Resources Research, Incorporated, Reston, Virginia, and Marvland State Department of Health, Division of Air Quality Control, Baltimore, Md. 1969.

17. Rehm, F. R. Incinerator Testing and Test Results. J. Air Pol. Control Assoc. 6:199-204. February 1957.

18. Stenburg, R. L. et al. Field Evaluation of Combustion Air Effects on Atmospheric Emissions from Municipal Incinerations. J. Air Pol. Control Assoc. *12*:83-89. February 1962.

19. Smauder, E. E. Problems of Municipal Incineration. (Presented at First Meeting of Air Pollution Control Association, West Coast Section, Los Angeles, California. March 1957.)

20. Gerstle, R. W. Unpublished data: revision of emission factors based on recent stack tests. U.S. DHEW, PHS, National Center for Air Pollution Control. Cincinnati, Ohio. 1967.

21. A Field Study of Performance of Three Municipal Incinerators. University of California, Berkeley, Technical Bulletin. 6:41, November 1957.

22. Driscol, J. et al. Evaluation of Monitoring Methods and Instrumation for Hydrocarbons and Carbon Monoxide in Stationary Source Emissions. Publication No. EPA-R2-72-106. November 1977.

23. Jahnke, J. A., J. L. Chaney, R. Rollins, and C. R. Fortune. A Reasearch Study of Gaseous Emissions from a Municipal Incinerator. J. Air Pollut. Contr. Assoc. *27*:747-753, August 1977.

2.4 OPEN BURNING

2.4.1 General[1]

Revised by Tom Lahre and Pan Canova

Open burning can be done in open drums or baskets, in fields and yards, and in large open dumps or pits. Materials commonly disposed of in this manner are municipal waste, auto body components, landscape refuse, agricultural field refuse, wood refuse, bulky industrial refuse, and leaves.

2.4.2 Emissions[1-19]

Ground-level open burning is affected by many variables including wind, ambient temperature, composition and moisture content of the debris burned, and compactness of the pile. In general, the relatively low temperatures associated with open burning increase the emission of particulates, carbon monoxide, and hydrocarbons and suppress the emission of nitrogen oxides. Sulfur oxide emissions are a direct function of the sulfur content of the refuse. Emission factors are presented in Table 2.4-1 for the open burning of municipal refuse and automobile components.

Table 2.4-1. EMISSION FACTORS FOR OPEN BURNING OF NONAGRICULTURAL MATERIAL
EMISSION FACTOR RATING: B

	Particulates	Sulfur oxides	Carbon monoxide	Organics (CH_4)	Nitrogen oxides
Municipal refuse[a]					
lb/ton	16	1	85	30	6
kg/MT	8	0.5	42	15	3
Automobile components[b,c]					
lb/ton	100	Neg.	125	30	4
kg/MT	50	Neg.	62	15	2

[a]References 2 through 6.
[b]Upholstery, belts, hoses, and tires burned in common.
[c]Reference 2.

Emissions from agricultural refuse burning are dependent mainly on the moisture content of the refuse and, in the case of the field crops, on whether the refuse is burned in a headfire or a backfire. (Headfires are started at the upwind side of a field and allowed to progress in the direction of the wind, whereas backfires are started at the downwind edge and forced to progress in a direction opposing the wind.) Other variables such as fuel loading (how much refuse material is burned per unit of land area) and how the refuse is arranged (that is, in piles, rows, or spread out) are also important in certain instances. Emission factors for open agricultural burning are presented in Table 2.4-2 as a function of refuse type and also, in certain instances, as a function of burning techniques and/or moisture content when these variables are known to significantly affect emissions. Table 2.4-2 also presents typical fuel loading values associated with each type of refuse. These values can be used, along with the corresponding emission factors, to estimate emissions from certain categories of agricultural burning when the specific fuel loadings for a given area are not known.

Emissions from leaf burning are dependent upon the moisture content, density, and ignition location of the leaf piles. Increasing the moisture content of the leaves generally increases the amount of carbon monoxide,

hydrocarbon, and particulate emissions. Increasing the density of the piles increases the amount of hydrocarbon and particulate emissions, but has a variable effect on carbon monoxide emissions. Arranging the leaves in conical piles and igniting around the periphery of the bottom proves to the least desirable method of burning. Igniting a single spot on the top of the pile decreases the hydrocarbon and particulate emissions. Carbon monoxide emissions with top ignition decreases if moisture content is high but increases if moisture content is low. Particulate, hydrocarbon, and carbon monoxide emissions from windrow ignition (piling the leaves into a long row and igniting one end, allowing it to burn toward the other end) are intermediate between top and bottom ignition. Emission factors for leaf burning are presented in Table 2.4-3.

For more detailed information on this subject, the reader should consult the references cited at the end of this section.

Table 2.4-3. EMISSION FACTORS FOR LEAF BURNING[18,19]
EMISSION FACTOR RATING: B

Leaf species	Particulate[a,b]		Carbon monoxide[a]		Organics[a,c]	
	lb/ton	kg/MT	lb/ton	kg/MT	lb/ton	kg/MT
Black Ash	36	18	127	63.5	41	20.5
Modesto Ash	32	16	163	81.5	25	12.5
White Ash	43	21.5	113	57	21	10.5
Catalpa	17	8.5	89	44.5	15	7.5
Horse Chestnut	54	27	147	73.5	39	19.5
Cottonwood	38	19	90	45	32	16
American Elm	26	13	119	59.5	29	14.5
Eucalyptus	36	18	90	45	26	13
Sweet Gum	33	16.5	140	70	27	13.5
Black Locust	70	35	130	65	62	31
Magnolia	13	6.5	55	27.5	10	5
Silver Maple	66	33	102	51	25	12.5
American Sycamore	15	7.5	115	57.5	8	4
California Sycamore	10	5	104	52	5	2.5
Tulip	20	10	77	38.5	16	8
Red Oak	92	46	137	68.5	34	17
Sugar Maple	53	26.5	108	54	27	13.5
Unspecified	38	19	112	56	26	13

[a] These factors are an arithmetic average of the results obtained by burning high- and low-moisture content conical piles ignited either at the top or around the periphery of the bottom. The windrow arrangement was only tested on Modesto Ash, Catalpa, American Elm, Sweet Gum, Silver Maple, and Tulip, and the results are included in the averages for these species.

[b] The majority of particulates are submicron in size.

[c] Tests indicate organics consist, on the average, of 42% olefins, 32% methane, 8% acetylene, and 13% other saturates.

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

MEMORANDUM

DATE: June 20, 1986

TO: James M. Lents, Ph.D., Acting Executive Officer

FROM: Mohsen Nazemi, Sr. Engineer MN

SUBJECT: Catalina Disposal Company

Catalina Disposal Co. has submitted an Application for Permit to Construct (A/N 144212) on April 29, 1986 for a Pactherm Pit Burner in Avalon, Santa Catalina Island. The equipment will be used for burning of up to 25 tons per day of refuse. All the island waste is presently being open burned and smolders 24 hours/day at a landfill in Avalon.

The city of Avalon generates 7,000 tons of refuse per year, which consists of municipal and construction wastes. Open burning is not allowed in the District pursuant to Rule 444. However, due to the geographical location of Avalon, it is exempt from the above provisions, and thus open burning is allowed in Catalina (Section 41810 of the Health & Safety Code).

Rule 473 does not allow burning of combustible refuse in any device except a multiple-chamber incinerator or in equipment found by the Executive Officer to be equally effective for the purpose of air pollution control. Since the pit burner is considered to be a more effective device for the combustion of refuse than open burning, we may conclude that Rule 473 does not apply for the above case (per Mr. Weiss' decision).

Final action on the application is expected by July 7, 1986.

MN:caz

ENGINEERING DIVISION---MEMORANDUM

TO	FROM	DATE
File	M. Nazemi	6-20-86
REFERENCE: Catalina Disposal Co.		PERMIT APPL. NO. 144212

SUBJECT: Inter-office Meeting

Present: Sanford M. Weiss, Dir. of Engr.
William Dennison, Sr. Engr. Mgr.
Robert Pease, Supv. Engr.
Malisen Nazemi, Sr. Engr.

The subject of the proposed Pacthern Pit Burner at the Santa Catalina Island was discussed with respect to the applicability of Rules 444 and 473. Presently open burning is permitted in Catalina and all the generated waste (14 to 27 tons per day) is burned and smoldered in a landfill in Avalon. Rule 473 requires a multiple-chamber incinerator or an equally effective equipment be used for the incineration of waste. Mr. Weiss decided that since the purpose of Rule 473 was to control combustion of refuse in a more effective way, and since open burning is allowed in Catalina island, therefore Rule 473 does not apply to this special case since the pit burner is a more effective way of controlling emissions than open burning.

I was also requested to prepare a briefing on this project for Dr. Lents.

16-50D115-R1

telephone (213) 510-0675

CATALINA DISPOSAL Co.
Post Office Box 295
Avalon, California 90704
SANTA CATALINA ISLAND

JUNE 9, 1986

South Coast
AIR QUALITY MANAGEMENT DISTRICT
9150 Flair Drive
El Monte, Ca., 91731

Attention Mr. Mohsen Nazemi, P.E.,

Mr., Nazemi:

This is to confirm our telephone conversation on 6/5/86.,

(1) The blower is a 40 h.p., Nozzel air velocity of 10,000 ft., per min., & air flow of 17,000 C.F.M.,

(2) The average waste to be burned in one day, at peak season, would be about 25 ton at 4 ton per hour.,

(3) This will be fed with a loader and have controlled air system to regulate heat.,

(4) At present, all tras brought into brought into the disposal site is burned daily.,

(5-6) The only test data we have is the one I sent you, done by the U.S., Government, and we have never done any tests on the open burning at the site.,

(7) We will be separating and recycling all metals we can, which we can, by hand.,

(8) We do not have any manufacturing concerns on Catalina Island., All trash to be burned will be Municipal and construction wastes

Very Truly Yours,

Thomas H., Jordahl ec
Owner

Telephone (213) 510-0675

CATALINA DISPOSAL Co.
Post Office Box 295
Avalon, California 90704
SANTA CATALINA ISLAND

JUNE 9, 1986

Mr., Nazemi:

Our disposal site burns and smolders 24 hrs., a day., We need this incinerator in order to control the smoke and do away with a REAL fire hazard on Catalina Island.,

Your prompt attention would be greatly appreciated.,

Thank You

Thomas Jordahl ec

South Coast
AIR QUALITY MANAGEMENT DISTRICT
9150 FLAIR DRIVE, EL MONTE, CA 91731 (818) 572-6200

May 29, 1986

Catalina Disposal Co.
P.O. Box 295
Avalon, CA 90704

Attention: Mr. Thomas H. Jordahl

Gentlemen:

A/N 144212

REFUSE PIT BURNER, PACTHERM, 20' L. x 8' W. x 12' H., 10 TONS PER HOUR CAPACITY, WITH A COMBUSTION AIR BLOWER.

TO BE LOCATED AT 1 DUMP ROAD, AVALON, CA 90704.

Reference is made to your application for Permit to Construct and Operate the above-described equipment.

Additional information is required concerning the pit burner and its operation before your application can be deemed complete. The required information consists of the following:

1. Specifications of the blower including the hp and capacity.

2. Maximum and average quantities of waste to be burned in the pit burner in any one day and any one hour.

3. The total burn cycle required for a specified batch load of waste.

4. Present maximum and average quantities of waste open-burned in any one day and any one hour.

5. Provide all available test data or other material to substantiate the mass emission rate of each pollutant resulted from the burning of the waste in the proposed pit burner and during the present open burning.

6. The information submitted along with your application indicates CO emissions of 140 ppm (Form #981). These emissions are later on considered as negligible. Please clarify this by providing actual or estimated mass emission rates for each pollutant.

7. Describe any separation or screening of the waste prior to combustion in the pit burner.

8. Define what percents of the waste proposed to be burned in the pit are commercial and residential.

Please provide the above-requested information by June 16, 1986.

If you have any questions, please call the undersigned at (818) 572-6145.

Very truly yours,

Sanford M. Weiss
Director of Engineering

Mohsen Nazemi, P.E.
Sr. Engineer

MN:caz

2.1 Refuse Combustion

Refuse combustion involves the burning of garbage and other nonhazardous solids, commonly called municipal solid waste (MSW). Types of combustion devices used to burn refuse include single chamber units, multiple chamber units, and trench incinerators.

2.1.1 General[1-3]

As of January 1992, there were over 160 municipal waste combustor (MWC) plants operating in the United States with capacities greater than 36 megagrams per day (Mg/day) (40 tons per day [tpd]), with a total capacity of approximately 100,000 Mg/day (110,000 tpd of MSW).[1] It is projected that by 1997, the total MWC capacity will approach 150,000 Mg/day (165,000 tpd), which represents approximately 28 percent of the estimated total amount of MSW generated in the United States by the year 2000.

Federal regulations for MWCs are currently under 3 subparts of 40 CFR Part 60. Subpart E covers MWC units that began construction after 1971 and have capacities to combust over 45 Mg/day (50 tpd) of MSW. Subpart Ea establishes new source performance standards (NSPS) for MWC units which began construction or modification after December 20, 1989 and have capacities over 225 Mg/day (250 tpd). An emission guideline (EG) was established under Subpart Ca covering MWC units which began construction or modification prior to December 20, 1989 and have capacities of greater than 225 Mg/day (250 tpd). The Subpart Ea and Ca regulations were promulgated on February 11, 1991.

Subpart E includes a standard for particulate matter (PM). Subparts Ca and Ea currently establish standards for PM, tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans (CDD/CDF), hydrogen chloride (HCl), sulfur dioxide (SO_2), nitrogen oxides (NO_x) (Subpart Ea only), and carbon monoxide (CO). Additionally, standards for mercury (Hg), lead (Pb), cadmium (Cd), and NO_x (for Subpart Ca) are currently being considered for new and existing facilities, as required by Section 129 of the Clean Air Act Amendments (CAAA) of 1990.

In addition to requiring revisions of the Subpart Ca and Ea regulations to include these additional pollutants, Section 129 also requires the EPA to review the standards and guidelines for the pollutants currently covered under these subparts. It is likely that the revised regulations will be more stringent. The regulations are also being expanded to cover new and existing MWC facilities with capacities of 225 Mg/day (250 tpd) or less. The revised regulations will likely cover facilities with capacities as low as 18 to 45 Mg/day (20 to 50 tpd). These facilities are currently subject only to State regulations.

2.1.1.1 Combustor Technology -

There are 3 main classes of technologies used to combust MSW: mass burn, refuse-derived fuel (RDF), and modular combustors. This section provides a general description of these 3 classes of combustors. Section 2.1.2 provides more details regarding design and operation of each combustor class.

With mass burn units, the MSW is combusted without any preprocessing other than removal of items too large to go through the feed system. In a typical mass burn combustor, refuse is placed on a grate that moves through the combustor. Combustion air in excess of stoichiometric amounts is supplied both below (underfire air) and above (overfire air) the grate. Mass burn combustors are usually erected at the site (as opposed to being prefabricated at another location), and range in size from 46 to 900 Mg/day (50 to 1,000 tpd) of MSW throughput per unit. The mass burn combustor category can be divided into mass burn waterwall (MB/WW), mass burn rotary waterwall combustor (MB/RC), and mass burn refractory wall (MB/REF) designs. Mass burn waterwall designs have water-filled tubes in the furnace walls that are used to recover heat for production of steam and/or electricity. Mass burn rotary

waterwall combustors use a rotary combustion chamber constructed of water-filled tubes followed by a waterwall furnace. Mass burn refractory designs are older and typically do not include any heat recovery. Process diagrams for a typical MB/WW combustor, a MB/RC combustor, and one type of MB/REF combustor are presented in Figure 2.1-1, Figure 2.1-2, and Figure 2.1-3, respectively.

Refuse-derived fuel combustors burn processed waste that varies from shredded waste to finely divided fuel suitable for co-firing with pulverized coal. Combustor sizes range from 290 to 1,300 Mg/day (320 to 1,400 tpd). A process diagram for a typical RDF combustor is shown in Figure 2.1-4. Waste processing usually consists of removing noncombustibles and shredding, which generally raises the heating value and provides a more uniform fuel. The type of RDF used depends on the boiler design. Most boilers designed to burn RDF use spreader stokers and fire fluff RDF in a semi-suspension mode. A subset of the RDF technology is fluidized bed combustors (FBC).

Modular combustors are similar to mass burn combustors in that they burn waste that has not been pre-processed, but they are typically shop fabricated and generally range in size from 4 to 130 Mg/day (5 to 140 tpd) of MSW throughput. One of the most common types of modular combustors is the starved air or controlled air type, which incorporates two combustion chambers. A process diagram of a typical modular starved-air (MOD/SA) combustor is presented in Figure 2.1-5. Air is supplied to the primary chamber at sub-stoichiometric levels. The incomplete combustion products (CO and organic compounds) pass into the secondary combustion chamber where additional air is added and combustion is completed. Another type of modular combustor design is the modular excess air (MOD/EA) combustor which consists of 2 chambers as with MOD/SA units, but is functionally similar to mass burn units in that it uses excess air in the primary chamber.

2.1.2 Process Description[4]

Types of combustors described in this section include:

- Mass burn waterwall,
- Mass burn rotary waterwall,
- Mass burn refractory wall,
- Refuse-derived fuel-fired,
- Fluidized bed,
- Modular starved air, and
- Modular excess air.

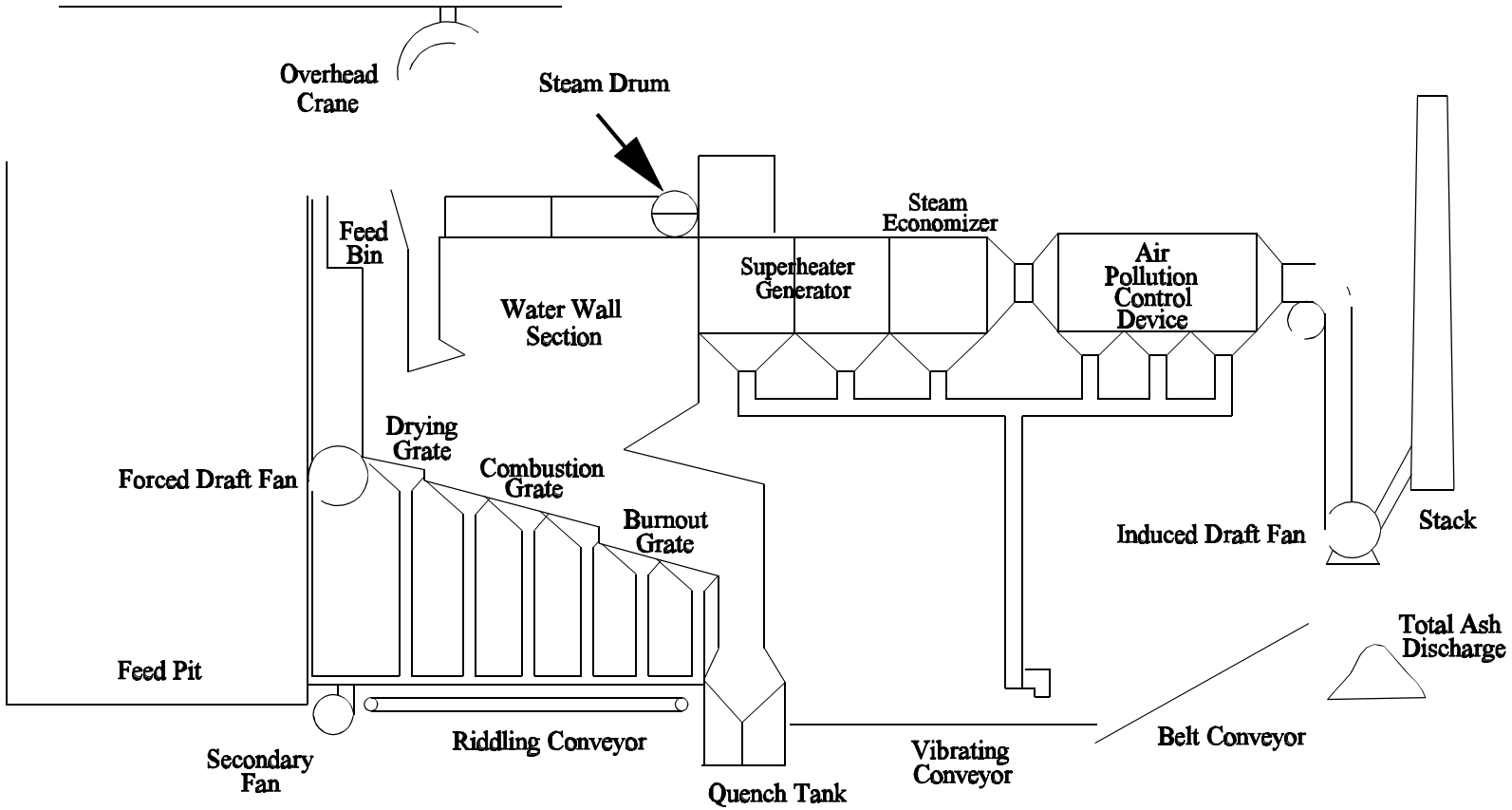


Figure 2.1-1. Typical mass burn waterfall combustor.

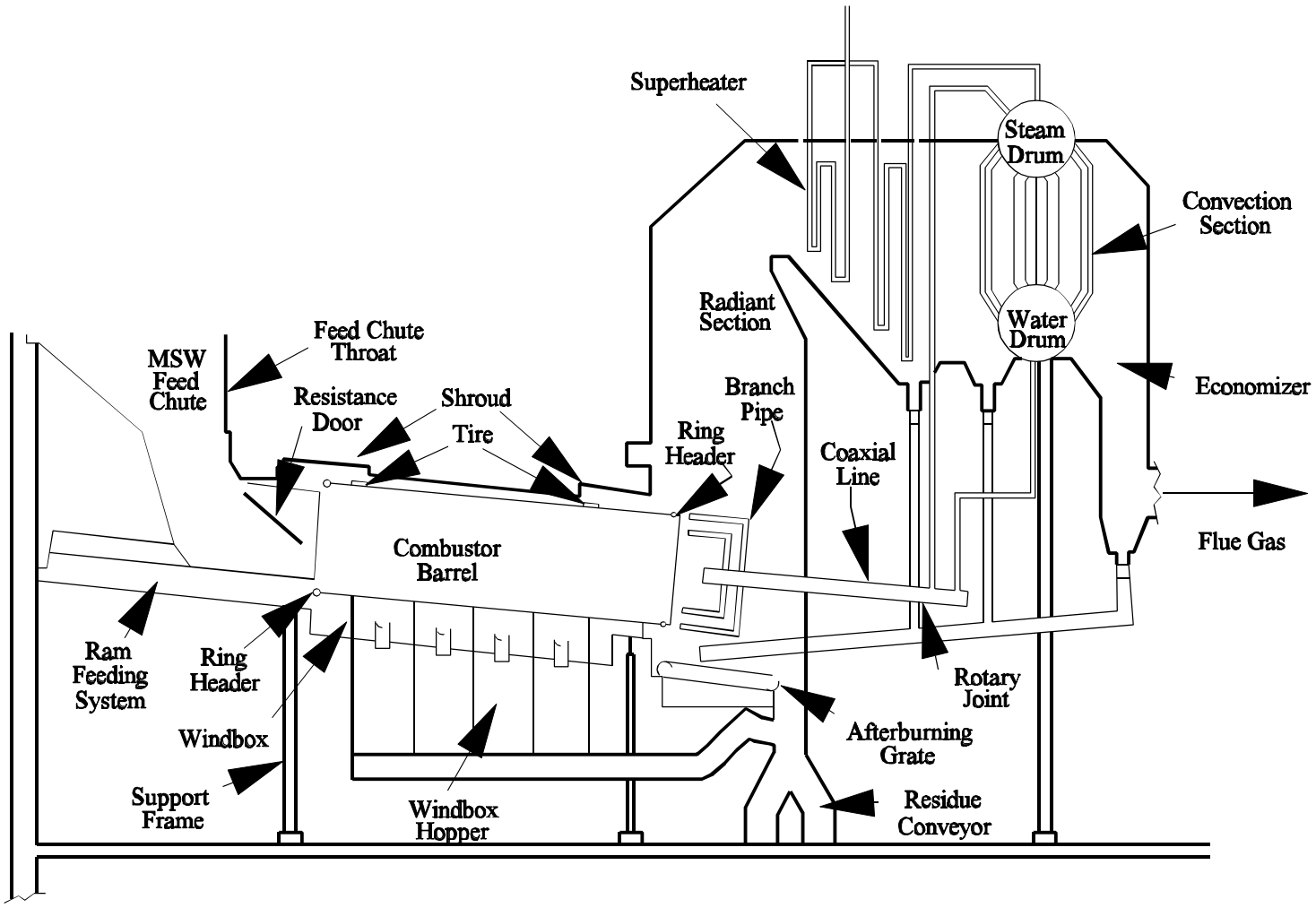


Figure 2.1-2. Simplified process flow diagram for a rotary waterwall combustor.

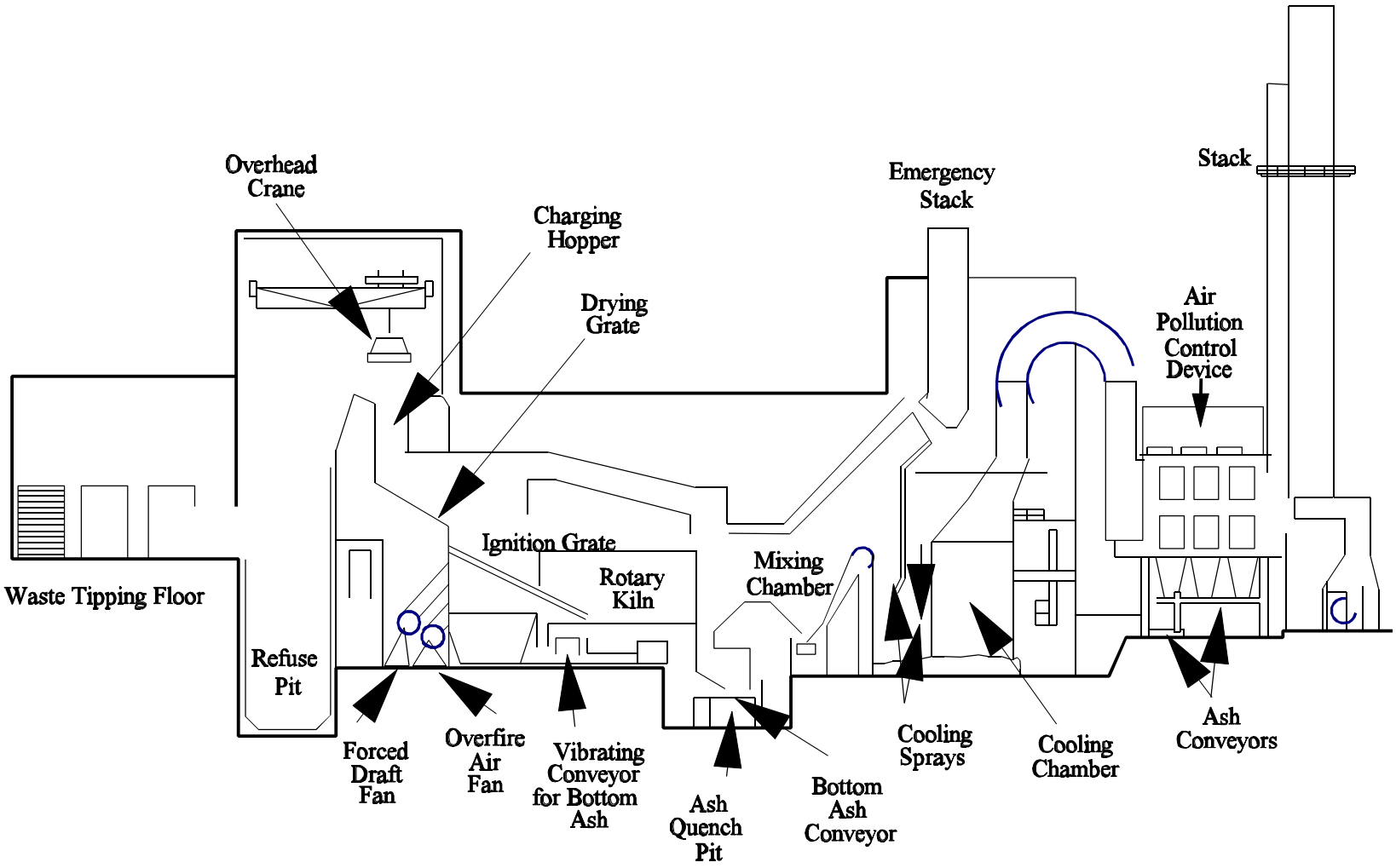


Figure 2.1-3. Mass burn refractory wall combustor with grate/rotary kiln.

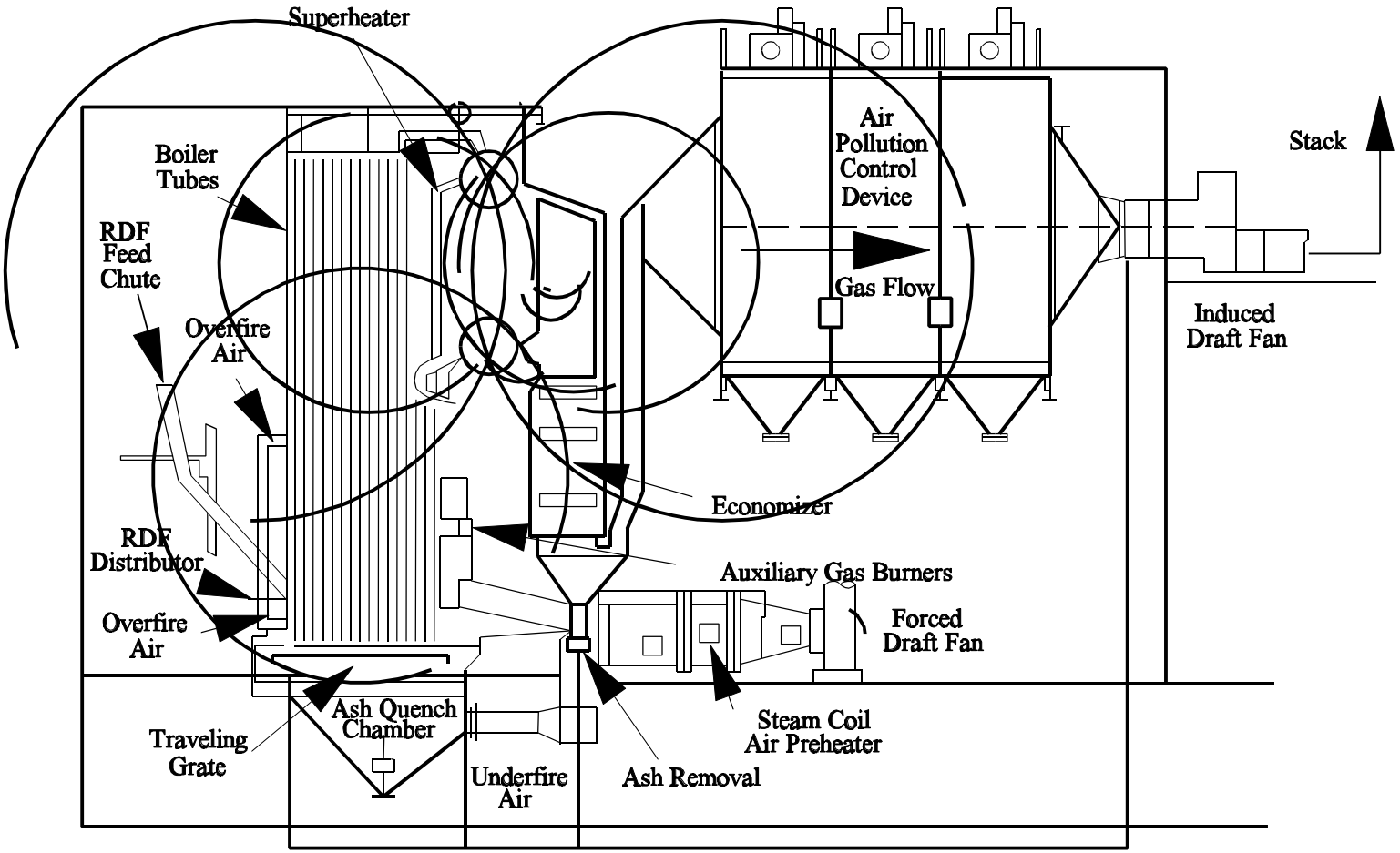


Figure 2.1-4. Typical RDF-fired spreader stoker boiler.

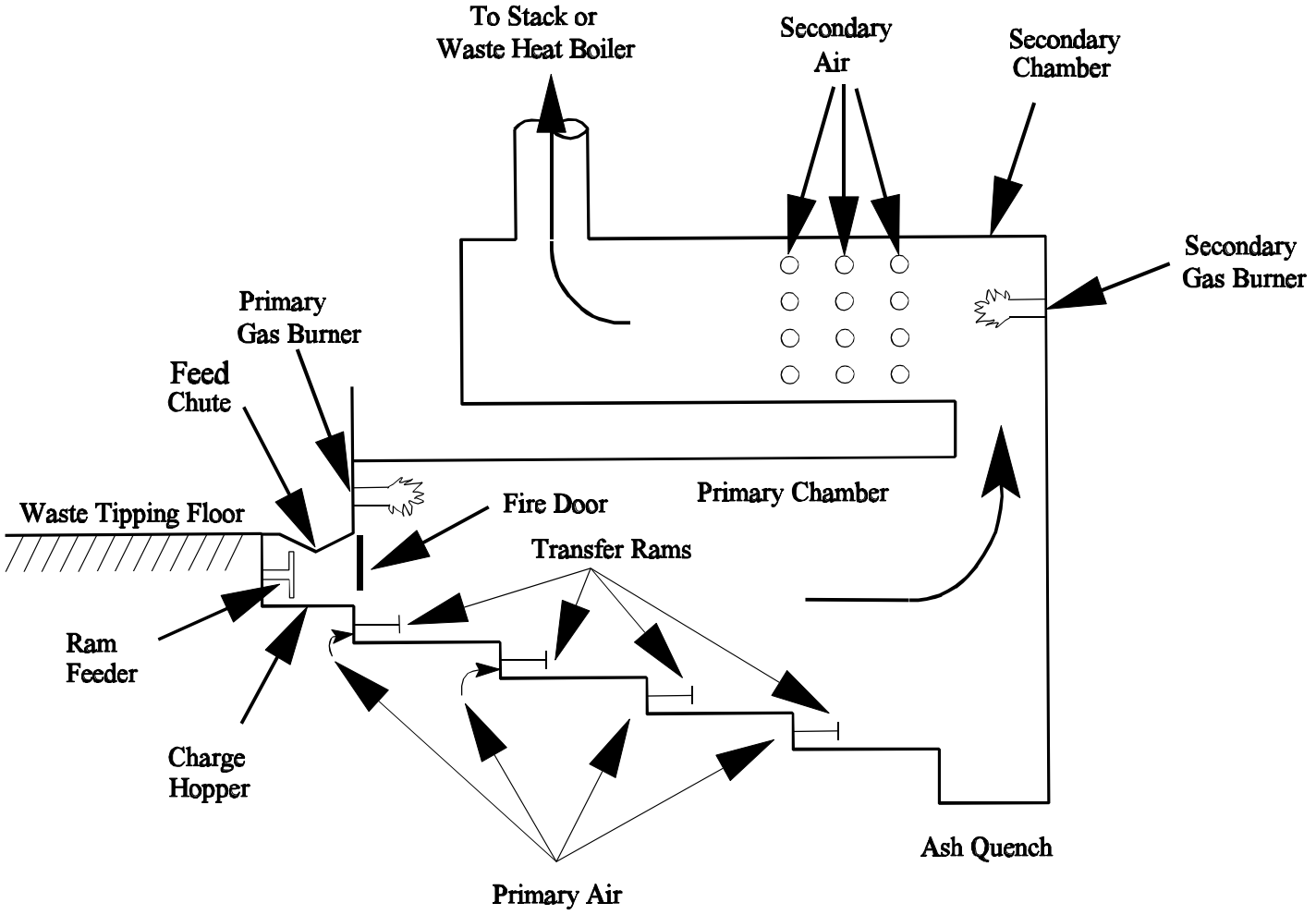


Figure 2.1-5. Typical modular starved-air combustor with transfer rams.

2.1.2.1 Mass Burn Waterwall Combustors -

The MB/WW design represents the predominant technology in the existing population of large MWCs, and it is expected that over 50 percent of new units will be MB/WW designs. In MB/WW units, the combustor walls are constructed of metal tubes that contain circulating pressurized water used to recover heat from the combustion chamber. In the lower actively burning region of the chamber where corrosive conditions may exist, the walls are generally lined with castable refractory. Heat is also recovered in the convective sections (i. e., superheater, economizer) of the combustor.

With this type of system, unprocessed waste (after removal of large, bulky items) is delivered by an overhead crane to a feed hopper, which conveys the waste into the combustion chamber. Earlier MB/WW designs utilized gravity feeders, but it is now more typical to feed by means of single or dual hydraulic rams.

Nearly all modern MB/WW facilities utilize reciprocating grates or roller grates to move the waste through the combustion chamber. The grates typically include 3 sections. On the initial grate section, referred to as the drying grate, the moisture content of the waste is reduced prior to ignition. The second grate section, referred to as the burning grate, is where the majority of active burning takes place. The third grate section, referred to as the burnout or finishing grate, is where remaining combustibles in the waste are burned. Smaller units may have only 2 individual grate sections. Bottom ash is discharged from the finishing grate into a water-filled ash quench pit or ram discharger. From there, the moist ash is discharged to a conveyor system and transported to an ash load-out or storage area prior to disposal. Dry ash systems have been used in some designs, but their use is not widespread.

Combustion air is added from beneath the grate by way of underfire air plenums. The majority of MB/WW systems supply underfire air to the individual grate sections through multiple plenums, which enhance the ability to control burning and heat release from the waste bed. Overfire air is injected through rows of high-pressure nozzles located in the side walls of the combustor to oxidize fuel-rich gases evolved from the bed and complete the combustion process. Properly designed and operated overfire air systems are essential for good mixing and burnout of organics in the flue gas. Typically, MB/WW MWCs are operated with 80 to 100 percent excess air.

The flue gas exits the combustor and passes through additional heat recovery sections to one or more air pollution control devices (APCD). The types of APCDs that may be used are discussed in Section 2.1.4.

2.1.2.2 Mass Burn Rotary Waterwall Combustors -

A more unique mass burn design is the MB/RC. Plants of this design range in size from 180 to 2,400 Mg/day (200 to 2,700 tpd), with typically 2 or 3 units per plant. This type of system uses a rotary combustion chamber. Following pre-sorting of objects too large to fit in the combustor, the waste is ram fed to the inclined rotary combustion chamber, which rotates slowly, causing the waste to advance and tumble as it burns. Underfire air is injected through the waste bed, and overfire air is provided above the waste bed. Bottom ash is discharged from the rotary combustor to an afterburner grate and then into a wet quench pit. From there, the moist ash is conveyed to an ash load-out or storage area prior to disposal.

Approximately 80 percent of the combustion air is provided along the rotary combustion chamber length, with most of the air provided in the first half of the chamber. The rest of the combustion air is supplied to the afterburner grate and above the rotary combustor outlet in the boiler. The MB/RC operates at about 50 percent excess air, compared with 80 to 100 percent for typical MB/WW firing systems. Water flowing through the tubes in the rotary chamber recovers heat from combustion. Additional heat recovery occurs in the boiler waterwall, superheater, and economizer. From the economizer, the flue gas is

typically routed to APCDs.

2.1.2.3 Mass Burn Refractory Wall Combustors -

Prior to 1970 there were numerous MB/REF MWCs in operation. The purpose of these plants was to achieve waste reduction; energy recovery was generally not incorporated in their design. Most of the roughly 25 MB/REF plants that still operate or that were built in the 1970s and 1980s use electrostatic precipitators (ESPs) to reduce PM emissions, and several have heat recovery boilers. Most MB/REF combustors have unit sizes of 90 to 270 Mg/day (100 to 300 tpd). It is not expected that additional plants of this design will be built in the United States.

The MB/REF combustors comprise several designs. One design involves a batch-fed upright combustor, which may be cylindrical or rectangular in shape. A second design is based on a rectangular combustion chamber with a traveling, rocking, or reciprocating grate. This type of combustor is continuously fed and operates in an excess air mode. If the waste is moved on a traveling grate, it is not sufficiently aerated as it advances through the combustor. As a result, waste burnout or complete combustion is inhibited by fuel bed thickness, and there is considerable potential for unburned waste to be discharged into the bottom ash pit. Rocking and reciprocating grate systems stir and aerate the waste bed as it advances through the combustion chamber, thereby improving contact between the waste and combustion air and increasing the burnout of combustibles. The system generally discharges the ash at the end of the grate to a water quench pit for collection and disposal in a landfill.

Because MB/REF combustors do not contain a heat transfer medium (such as the waterwalls that are present in modern energy recovery units), they typically operate at higher excess air rates (150 to 300 percent) than MB/WW combustors (80 to 100 percent). The higher excess air levels are required to prevent excessive temperatures, which can result in refractory damage, slagging, fouling, and corrosion problems. One adverse effect of higher excess air levels is the potential for increased carryover of PM from the combustion chamber and, ultimately, increased stack emission rates. High PM carryover may also contribute to increased CDD/CDF emissions by providing increased surface area for downstream catalytic formation to take place. A second problem is the potential for high excess air levels to quench (cool) the combustion reactions, preventing thermal destruction of organic species.

An alternate, newer MB/REF combustor is the Volund design (Figure 2.1-3 presents this MB/REF design). This design minimizes some of the problems of other MB/REF systems. A refractory arch is installed above the combustion zone to reduce radiant heat losses and improve solids burnout. The refractory arch also routes part of the rising gases from the drying and combustion grates through a gas by-pass duct to the mixing chamber. There the gas is mixed with gas from the burnout grate or kiln. Bottom ash is conveyed to an ash quench pit. Volund MB/REF combustors operate with 80 to 120 percent excess air, which is more in line with excess air levels in the MB/WW designs. As a result, lower CO levels and better organics destruction are achievable, as compared to other MB/REF combustors.

2.1.2.4 Refuse-derived Fuel Combustors -

Refuse-derived fuel combustors burn MSW that has been processed to varying degrees, from simple removal of bulky and noncombustible items accompanied by shredding, to extensive processing to produce a finely divided fuel suitable for co-firing in pulverized coal-fired boilers. Processing MSW to RDF generally raises the heating value of the waste because many of the noncombustible items are removed.

A set of standards for classifying RDF types has been established by the American Society for Testing and Materials. The type of RDF used is dependent on the boiler design. Boilers that are designed to burn RDF as the primary fuel usually utilize spreader stokers and fire fluff RDF in a semi-suspension

mode. This mode of feeding is accomplished by using an air swept distributor, which allows a portion of the RDF to burn in suspension and the remainder to be burned out after falling on a horizontal traveling grate. The number of RDF distributors in a single unit varies directly with unit capacity. The distributors are normally adjustable so that the trajectory of the waste feed can be varied. Because the traveling grate moves from the rear to the front of the furnace, distributor settings are adjusted so that most of the waste lands on the rear two-thirds of the grate. This allows more time for combustion to be completed on the grate. Bottom ash drops into a water-filled quench chamber. Some traveling grates operate at a single speed, but most can be manually adjusted to accommodate variations in burning conditions. Underfire air is normally preheated and introduced beneath the grate by a single plenum. Overfire air is injected through rows of high-pressure nozzles, providing a zone for mixing and completion of the combustion process. These combustors typically operate at 80 to 100 percent excess air.

Due to the basic design of the semi-suspension feeding systems, PM levels at the inlet to the pollution control device are typically double those of mass burn systems and more than an order of magnitude higher than MOD/SA combustors. The higher particulate loadings may contribute to the catalytic formation of CDD/CDF. However, controlled Hg emissions from these plants are considerably lower than from mass burn plants as a result of the higher levels of carbon present in the PM carryover, as Hg adsorbs onto the carbon and can be subsequently captured by the PM control device.

Pulverized coal (PC)-fired boilers can co-fire fluff RDF or powdered RDF. In a PC-fired boiler that co-fires fluff with pulverized coal, the RDF is introduced into the combustor by air transport injectors that are located above or even with the coal nozzles. Due to its high moisture content and large particle size, RDF requires a longer burnout time than coal. A significant portion of the larger, partially burned particles disengage from the gas flow and fall onto stationary drop grates at the bottom of the furnace where combustion is completed. Ash that accumulates on the grate is periodically dumped into the ash hopper below the grate. Refuse-derived fuel can also be co-fired with coal in stoker-fired boilers.

2.1.2.5 Fluidized Bed Combustors -

In an FBC, fluff or pelletized RDF is combusted on a turbulent bed of noncombustible material such as limestone, sand, or silica. In its simplest form, an FBC consists of a combustor vessel equipped with a gas distribution plate and underfire air windbox at the bottom. The combustion bed overlies the gas distribution plate. The combustion bed is suspended or "fluidized" through the introduction of underfire air at a high flow rate. The RDF may be injected into or above the bed through ports in the combustor wall. Other wastes and supplemental fuel may be blended with the RDF outside the combustor or added into the combustor through separate openings. Overfire air is used to complete the combustion process.

There are 2 basic types of FBC systems: bubbling bed and circulating bed. With bubbling bed combustors, most of the fluidized solids are maintained near the bottom of the combustor by using relatively low air fluidization velocities. This helps reduce the entrainment of solids from the bed into the flue gas, minimizing recirculation or reinjection of bed particles. In contrast, circulating bed combustors operate at relatively high fluidization velocities to promote carryover of solids into the upper section of the combustor. Combustion occurs in both the bed and upper section of the combustor. By design, a fraction of the bed material is entrained in the combustion gas and enters a

cyclone separator which recycles unburned waste and inert particles to the lower bed. Some of the ash is removed from the cyclone with the solids from the bed.

Good mixing is inherent in the FBC design. Fluidized bed combustors have very uniform gas temperatures and mass compositions in both the bed and in the upper region of the combustor. This allows the FBCs to operate at lower excess air and temperature levels than conventional combustion systems. Waste-fired FBCs typically operate at excess air levels between 30 and 100 percent and at bed temperatures around 815°C (1,500°F). Low temperatures are necessary for waste-firing FBCs because higher temperatures lead to bed agglomeration.

2.1.2.6 Modular Starved-air (Controlled-air) Combustors -

In terms of number of facilities, MOD/SA combustors represent a large segment of the existing MWC population. However, because of their small sizes, they account for only a small percent of the total capacity. The basic design of a MOD/SA combustor consists of 2 separate combustion chambers, referred to as the "primary" and "secondary" chambers. Waste is batch-fed to the primary chamber by a hydraulically activated ram. The charging bin is filled by a front end loader or other means. Waste is fed automatically on a set frequency, with generally 6 to 10 minutes between charges.

Waste is moved through the primary combustion chamber by either hydraulic transfer rams or reciprocating grates. Combustors using transfer rams have individual hearths upon which combustion takes place. Grate systems generally include 2 separate grate sections. In either case, waste retention times in the primary chamber are long, lasting up to 12 hours. Bottom ash is usually discharged to a wet quench pit.

The quantity of air introduced into the primary chamber defines the rate at which waste burns. Combustion air is introduced in the primary chamber at sub-stoichiometric levels, resulting in a flue gas rich in unburned hydrocarbons. The combustion air flow rate to the primary chamber is controlled to maintain an exhaust gas temperature set point, generally 650 to 980°C (1,200 to 1,800°F), which corresponds to about 40 to 60 percent theoretical air.

As the hot, fuel-rich flue gases flow to the secondary chamber, they are mixed with additional air to complete the burning process. Because the temperature of the exhaust gases from the primary chamber is above the autoignition point, completing combustion is simply a matter of introducing air into the fuel-rich gases. The amount of air added to the secondary chamber is controlled to maintain a desired flue gas exit temperature, typically 980 to 1,200°C (1,800 to 2,200°F). Approximately 80 percent of the total combustion air is introduced as secondary air. Typical excess air levels vary from 80 to 150 percent.

The walls of both combustion chambers are refractory lined. Early MOD/SA combustors did not include energy recovery, but a waste heat boiler is common in newer installations, with 2 or more combustion modules manifolded to a single boiler. Combustors with energy recovery capabilities also maintain dump stacks for use in an emergency, or when the boiler and/or air pollution control equipment are not in operation.

Most MOD/SA MWCs are equipped with auxiliary fuel burners located in both the primary and secondary combustion chambers. Auxiliary fuel can be used during startup (many modular units do not operate continuously) or when problems are experienced maintaining desired combustion temperatures. In general, the combustion process is self-sustaining through control of air flow and feed rate, so that continuous co-firing of auxiliary fuel is normally not necessary.

The high combustion temperatures and proper mixing of flue gas with air in the secondary

combustion chamber provide good combustion, resulting in relatively low CO and trace organic emissions. Because of the limited amount of combustion air introduced through the primary chamber, gas velocities in the primary chamber and the amount of entrained PM are low. As a result, PM emissions of air pollutants from MOD/SA MWCs are relatively low. Many existing modular systems do not have air pollution controls. This is especially true of the smaller starved-air facilities. A few of the newer MOD/SA MWCs have acid gas/PM controls.

2.1.2.7 Modular Excess Air Combustors -

There are fewer MOD/EA MWCs than MOD/SA MWCs. The design of MOD/EA units is similar to that of MOD/SA units, including the presence of primary and secondary combustion chambers. Waste is batch-fed to the primary chamber, which is refractory-lined. The waste is moved through the primary chamber by hydraulic transfer rams, oscillating grates, or a revolving hearth. Bottom ash is discharged to a wet quench pit. Additional flue gas residence time for fuel/carbon burnout is provided in the secondary chamber, which is also refractory-lined. Energy is typically recovered in a waste heat boiler. Facilities with multiple combustors may have a tertiary chamber where flue gases from each combustor are mixed prior to entering the energy recovery boiler.

Unlike the MOD/SA combustors but similar to MB/REF units, a MOD/EA combustor typically operates at about 100 percent excess air in the primary chamber, but may vary between 50 and 250 percent excess air. The MOD/EA combustors also use recirculated flue gas for combustion air to maintain desired temperatures in the primary and secondary chambers. Due to higher air velocities, PM emissions from MOD/EA combustors are higher than those from MOD/SA combustors and are more similar in concentration to PM emissions from mass burn units. However, NO_x emissions from MOD/EA combustors appear to be lower than from either MOD/SA or mass burn units.

2.1.3 Emissions[4-7]

Depending on the characteristics of the MSW and combustion conditions in the MWC, the following pollutants can be emitted:

- PM,
- Metals (in solid form on PM, except for Hg),
- Acid gases (HCl, SO_2),
- CO,
- NO_x, and
- Toxic organics (most notably CDD/CDF).

A brief discussion on each of the pollutants is provided below, along with discussions on controls used to reduce emissions of these pollutants to the atmosphere.

2.1.3.1 Particulate Matter -

The amount of PM exiting the furnace of an MWC depends on the waste characteristics, the physical nature of the combustor design, and the combustor's operation. Under normal combustion conditions, solid fly ash particulates formed from inorganic, noncombustible constituents in MSW are released into the flue gas. Most of this particulate is captured by the facility's APCD and are not emitted to

the atmosphere.

Particulate matter can vary greatly in size with diameters ranging from less than 1 micrometer to hundreds of micrometers (μm). Fine particulates, having diameters less than 10μm (known as PM-10), are of increased concern because a greater potential for inhalation and passage into the pulmonary region exists. Further, acid gases, metals, and toxic organics may preferentially adsorb onto particulates in this size range. The NSPS and EG for MWCs regulate total PM, while PM-10 is of interest for State Implementation Plans and when dealing with ambient PM concentrations. In this chapter, "PM" refers to total PM as measured by EPA Reference Method 5.

The level of PM emissions at the inlet of the APCD will vary according the combustor design, air distribution, and waste characteristics. For example, facilities that operate with high underfire/overfire air ratios or relatively high excess air levels may entrain greater quantities of PM and have high PM levels at the APCD inlet. For combustors with multiple-pass boilers that change the direction of the flue gas flow, part of the PM may be removed prior to the APCD. Lastly, the physical properties of the waste being fed and the method of feeding influences PM levels in the flue gas. Typically, RDF units have higher PM carryover from the furnace due to the suspension-feeding of the RDF. However, controlled PM emissions from RDF plants do not vary substantially from other MWCs (i. e., MB/WW), because the PM is efficiently collected in the APCD.

2.1.3.2 Metals -

Metals are present in a variety of MSW streams, including paper, newsprint, yard wastes, wood, batteries, and metal cans. The metals present in MSW are emitted from MWCs in association with PM (e. g., arsenic [As], Cd, chromium [Cr], and Pb) and as vapors, such as Hg. Due to the variability in MSW composition, metal concentrations are highly variable and are essentially independent of combustor type. If the vapor pressure of a metal is such that condensation onto particulates in the flue gas is possible, the metal can be effectively removed by the PM control device. With the exception of Hg, most metals have sufficiently low vapor pressures to result in almost all of the metals being condensed. Therefore, removal in the PM control device for these metals is generally greater than 98 percent. Mercury, on the other hand, has a high vapor pressure at typical APCD operating temperatures, and capture by the PM control device is highly variable. The level of carbon in the fly ash appears to affect the level of Hg control. A high level of carbon in the fly ash can enhance Hg adsorption onto particles removed by the PM control device.

2.1.3.3 Acid Gases -

The chief acid gases of concern from the combustion of MSW are HCl and SO_2. Hydrogen fluoride (HF), hydrogen bromide (HBr), and sulfur trioxide (SO_3) are also generally present, but at much lower concentrations. Concentrations of HCl and SO_2 in MWC flue gases directly relate to the chlorine and sulfur content in the waste. The chlorine and sulfur content vary considerably based on seasonal and local waste variations. Emissions of SO_2 and HCl from MWCs depend on the chemical form of sulfur and chlorine in the waste, the availability of alkali materials in combustion-generated fly ash that act as sorbents, and the type of emission control system used. Acid gas concentrations are considered to be independent of combustion conditions. The major sources of chlorine in MSW are paper and plastics. Sulfur is contained in many constituents of MSW, such as asphalt shingles, gypsum wallboard, and tires. Because RDF processing does not generally impact the distribution of combustible materials in the waste fuel, HCl and SO_2 concentrations for mass burn and RDF units are similar.

2.1.3.4 Carbon Monoxide -

Carbon monoxide emissions result when all of the carbon in the waste is not oxidized to carbon dioxide (CO_2). High levels of CO indicate that the combustion gases were not held at a sufficiently high

temperature in the presence of oxygen (O_2) for a long enough time to convert CO to CO_2. As waste burns in a fuel bed, it releases CO, hydrogen (H_2), and unburned hydrocarbons. Additional air then reacts with the gases escaping from the fuel bed to convert CO and H_2 to CO_2 and H_2O. Adding too much air to the combustion zone will lower the local gas temperature and quench (retard) the oxidation reactions. If too little air is added, the probability of incomplete mixing increases, allowing greater quantities of unburned hydrocarbons to escape the furnace. Both of the conditions would result in increased emissions of CO.

Because O_2 levels and air distributions vary among combustor types, CO levels also vary among combustor types. For example, semi-suspension-fired RDF units generally have higher CO levels than mass burn units, due to the effects of carryover of incompletely combusted materials into low temperature portions of the combustor, and, in some cases, due to instabilities that result from fuel feed characteristics.

Carbon monoxide concentration is a good indicator of combustion efficiency, and is an important criterion for indicating instabilities and nonuniformities in the combustion process. It is during unstable combustion conditions that more carbonaceous material is available and higher CDD/CDF and organic hazardous air pollutant levels occur. The relationship between emissions of CDD/CDF and CO indicates that high levels of CO (several hundred parts per million by volume [ppmv]), corresponding to poor combustion conditions, frequently correlate with high CDD/CDF emissions. When CO levels are low, however, correlations between CO and CDDs/CDFs are not well defined (due to the fact that many mechanisms may contribute to CDD/CDF formation), but CDD/CDF emissions are generally lower.

2.1.3.5 Nitrogen Oxides -

Nitrogen oxides are products of all fuel/air combustion processes. Nitric oxide (NO) is the primary component of NO_x; however, nitrogen dioxide (NO_2) and nitrous oxide (N_2O) are also formed in smaller amounts. The combination of the compounds is referred to as NO_x. Nitrogen oxides are formed during combustion through (1) oxidation of nitrogen in the waste, and (2) fixation of atmospheric nitrogen. Conversion of nitrogen in the waste occurs at relatively low temperatures (less than 1,090°C [2,000°F]), while fixation of atmospheric nitrogen occurs at higher temperatures. Because of the relatively low temperatures at which MWC furnaces operate, 70 to 80 percent of NO_x formed in MWCs is associated with nitrogen in the waste.

2.1.3.6 Organic Compounds -

A variety of organic compounds, including CDDs/CDFs, chlorobenzene (CB), polychlorinated biphenyls (PCBs), chlorophenols (CPs), and polyaromatic hydrocarbons (PAHs), are present in MSW or can be formed during the combustion and post-combination processes. Organics in the flue gas can exist in the vapor phase or can be condensed or absorbed on fine particulates. Control of organics is accomplished through proper design and operation of both the combustor and the APCDs.

Based on potential health effects, CDD/CDF has been a focus of many research and regulatory activities. Due to toxicity levels, attention is most often placed on levels of CDDs/CDFs in the tetra- through octa- homolog groups and specific isomers within those groups that have chlorine substituted in the 2, 3, 7, and 8 positions. As noted earlier, the NSPS and EG for MWCs regulate the total tetra- through octa-CDDs/CDFs.

2.1.4 Controls[8-10]

A wide variety of control technologies are used to control emissions from MWCs. The control of PM, along with metals that have adsorbed onto the PM, is most frequently accomplished through the use of an ESP or fabric filter (FF). Although other PM control technologies (e. g., cyclones, electrified gravel beds, and venturi scrubbers) are available, they are seldom used on existing systems, and it is anticipated

that they will not be frequently used in future MWC systems. The control of acid gas emissions (i. e., SO_2 and HCl) is most frequently accomplished through the application of acid gas control technologies such as spray drying or dry sorbent injection, followed by a high-efficiency PM control device. Some facilities use a wet scrubber to control acid gases. It is anticipated that dry systems (spray drying and dry sorbent injection) will be more widely used than wet scrubbers on future U. S. MWC systems. Each of these technologies is discussed in more detail below.

2.1.4.1 Electrostatic Precipitators -

Electrostatic precipitators consist of a series of high-voltage (20 to 100 kilojoules per coulomb [20 to 100 kilovolts]) discharge electrodes and grounded metal plates through which PM-laden flue gas flows. Negatively charged ions formed by this high-voltage field (known as a "corona") attach to PM in the flue gas, causing the charged particles to migrate toward, and be collected on, the grounded plates. The most common types of ESPs used by MWCs are (1) plate wire units in which the discharge electrode is a bottom weighted or rigid wire, and (2) flat plate units which use flat plates rather than wires as the discharge electrode.

As a general rule, the greater the amount of collection plate area, the greater the ESP's PM collection efficiency. Once the charged particles are collected on the grounded plates, the resulting dust layer is removed from the plates by rapping, washing, or some other method and collected in a hopper. When the dust layer is removed, some of the collected PM becomes re-entrained in the flue gas. To ensure good PM collection efficiency during plate cleaning and electrical upsets, ESPs have several fields located in series along the direction of flue gas flow that can be energized and cleaned independently. Particles re-entrained when the dust layer is removed from one field can be recollected in a downstream field. Because of this phenomena, increasing the number of fields generally improves PM removal efficiency.

Small particles generally have lower migration velocities than large particles and are therefore more difficult to collect. This factor is especially important to MWCs because of the large amount of total fly ash smaller than 1 µm. As compared to pulverized coal fired combustors, in which only 1 to 3 percent of the fly ash is generally smaller than 1 µm, 20 to 70 percent of the fly ash at the inlet of the PM control device for MWCs is reported to be smaller than 1 µm. As a result, effective collection of PM from MWCs requires greater collection areas and lower flue gas velocities than many other combustion types.

As an approximate indicator of collection efficiency, the specific collection area (SCA) of an ESP is frequently used. The SCA is calculated by dividing the collecting electrode plate area by the flue gas flow rate and is expressed as square meters per 304.8 cubic meters per minute (square feet per 1000 cubic feet per minute) of flue gas. In general, the higher the SCA, the higher the collection efficiency. Most ESPs at newer MWCs have SCAs in the range of 400 to 600. When estimating emissions from ESP-equipped MWCs, the SCA of the ESP should be taken into consideration. Not all ESPs are designed equally and performance of different ESPs will vary.

2.1.4.2 Fabric Filters -

Fabric filters are also used for PM and metals control, particularly in combination with acid gas control and flue gas cooling. Fabric filters (also known as "baghouses") remove PM by passing flue gas through a porous fabric that has been sewn into a cylindrical bag. Multiple individual filter bags are mounted in an arranged compartment. A complete FF, in turn, consists of 4 to 16 individual compartments that can be independently operated.

As the flue gas flows through the filter bags, particulate is collected on the filter surface, mainly through inertial impaction. The collected particulate builds up on the bag, forming a filter cake. As the thickness of the filter cake increases, the pressure drop across the bag also increases. Once pressure drop across the bags in a given compartment becomes excessive, that compartment is generally taken off-line, mechanically cleaned, and then placed back on-line.

Fabric filters are generally differentiated by cleaning mechanisms. Two main filter cleaning mechanisms are used: reverse-air and pulse-jet. In a reverse-air FF, flue gas flows through unsupported filter bags, leaving the particulate on the inside of the bags. The particulate builds up to form a particulate filter cake. Once excessive pressure drop across the filter cake is reached, air is blown through the filter in the opposite direction, the filter bag collapses, and the filter cake falls off and is collected. In a pulse-jet FF, flue gas flows through supported filter bags leaving particulate on the outside of the bags. To remove the particulate filter cake, compressed air is pulsed through the inside of the filter bag, the filter bag expands and collapses to its pre-pulsed shape, and the filter cake falls off and is collected.

2.1.4.3 Spray Drying -

Spray dryers (SD) are the most frequently used acid gas control technology for MWCs in the United States. When used in combination with an ESP or FF, the system can control CDD/CDF, PM (and metals), SO_2, and HCl emissions from MWCs. Spray dryer/fabric filter systems are more common than SD/ESP systems and are used mostly on new, large MWCs. In the spray drying process, lime slurry is injected into the SD through either a rotary atomizer or dual-fluid nozzles. The water in the slurry evaporates to cool the flue gas, and the lime reacts with acid gases to form calcium salts that can be removed by a PM control device. The SD is designed to provide sufficient contact and residence time to produce a dry product before leaving the SD adsorber vessel. The residence time in the adsorber vessel is typically 10 to 15 seconds. The particulate leaving the SD contains fly ash plus calcium salts, water, and unreacted hydrated lime.

The key design and operating parameters that significantly affect SD performance are SD outlet temperature and lime-to-acid gas stoichiometric ratio. The SD outlet approach to saturation temperature is controlled by the amount of water in the slurry. More effective acid gas removal occurs at lower approach to saturation temperatures, but the temperature must be high enough to ensure the slurry and reaction products are adequately dried prior to collection in the PM control device. For MWC flue gas containing significant chlorine, a minimum SD outlet temperature of around 115°C (240°F) is required to control agglomeration of PM and sorbent by calcium chloride. Outlet gas temperature from the SD is usually around 140°C (285°F).

The stoichiometric ratio is the molar ratio of calcium in the lime slurry fed to the SD divided by the theoretical amount of calcium required to completely react with the inlet HCl and SO_2 in the flue gas. At a ratio of 1.0, the moles of calcium are equal to the moles of incoming HCl and SO_2. However, because of mass transfer limitations, incomplete mixing, and differing rates of reaction (SO_2 reacts more slowly than HCl), more than the theoretical amount of lime is generally fed to the SD. The stoichiometric ratio used in SD systems varies depending on the level of acid gas reduction required, the temperature of the flue gas at the SD exit, and the type of PM control device used. Lime is fed in quantities sufficient to react with the

peak acid gas concentrations expected without severely decreasing performance. The lime content in the slurry is generally about 10 percent by weight, but cannot exceed approximately 30 percent by weight without clogging of the lime slurry feed system and spray nozzles.

2.1.4.4 Dry Sorbent Injection -

This type of technology has been developed primarily to control acid gas emissions. However, when combined with flue gas cooling and either an ESP or FF, sorbent injection processes may also control CDD/CDF and PM emissions from MWCs. Two primary subsets of dry sorbent injection technologies exist. The more widely used of these approaches, referred to as duct sorbent injection (DSI), involves injecting dry alkali sorbents into flue gas downstream of the combustor outlet and upstream of the PM control device. The second approach, referred to as furnace sorbent injection (FSI), injects sorbent directly into the combustor.

In DSI, powdered sorbent is pneumatically injected into either a separate reaction vessel or a section of flue gas duct located downstream of the combustor economizer or quench tower. Alkali in the sorbent (generally calcium or sodium) reacts with HCl, HF, and SO_2 to form alkali salts (e. g., calcium chloride [$CaCl_2$], calcium fluoride [CaF_2], and calcium sulfite [$CaSO_3$]). By lowering the acid content of the flue gas, downstream equipment can be operated at reduced temperatures while minimizing the potential for acid corrosion of equipment. Solid reaction products, fly ash, and unreacted sorbent are collected with either an ESP or FF.

Acid gas removal efficiency with DSI depends on the method of sorbent injection, flue gas temperature, sorbent type and feed rate, and the extent of sorbent mixing with the flue gas. Not all DSI systems are of the same design, and performance of the systems will vary. Flue gas temperature at the point of sorbent injection can range from about 150 to 320°C (300 to 600°F) depending on the sorbent being used and the design of the process. Sorbents that have been successfully tested include hydrated lime ($Ca[OH]_2$), soda ash (Na_2CO_3), and sodium bicarbonate ($NaHCO_3$). Based on published data for hydrated lime, some DSI systems can achieve removal efficiencies comparable to SD systems; however, performance is generally lower.

By combining flue gas cooling with DSI, it may be possible to increase CDD/CDF removal through a combination of vapor condensation and adsorption onto the sorbent surface. Cooling may also benefit PM control by decreasing the effective flue gas flow rate (i. e., cubic meters per minute) and reducing the resistivity of individual particles.

Furnace sorbent injection involves the injection of powdered alkali sorbent (either lime or limestone) into the furnace section of a combustor. This can be accomplished by addition of sorbent to the overfire air, injection through separate ports, or mixing with the waste prior to feeding to the combustor. As with DSI, reaction products, fly ash, and unreacted sorbent are collected using an ESP or FF.

The basic chemistry of FSI is similar to DSI. Both use a reaction of sorbent with acid gases to form alkali salts. However, several key differences exist in these 2 approaches. First, by injecting sorbent directly into the furnace (at temperatures of 870 to 1,200°C [1,600 to 2,200°F]) limestone can be calcined in the combustor to form more reactive lime, thereby allowing use of less expensive limestone as a sorbent. Second, at these temperatures, SO_2 and lime react in the combustor, thus providing a mechanism for effective removal of SO_2 at relatively low sorbent feed rates. Third, by injecting sorbent into the furnace rather than into a downstream duct, additional time is available for mixing and reaction between the sorbent and acid gases. Fourth, if a significant portion of the HCl is removed before the flue gas exits the combustor, it may be possible to reduce the formation of CDD/CDF in latter sections of the flue gas ducting. However, HCl and lime do not react with each other at temperatures above 760°C (1,400°F).

This is the flue gas temperature that exists in the convective sections of the combustor. Therefore, HCl removal may be lower than with DSI. Potential disadvantages of FSI include fouling and erosion of convective heat transfer surfaces by the injected sorbent.

2.1.4.5 Wet Scrubbers -

Many types of wet scrubbers have been used for controlling acid gas emissions from MWCs. These include spray towers, centrifugal scrubbers, and venturi scrubbers. Wet scrubbing technology has primarily been used in Japan and Europe. Currently, it is not anticipated that many new MWCs being built in the United States will use this type of acid gas control system. Wet scrubbing normally involves passing the flue gas through an ESP to reduce PM, followed by a 1- or 2-stage absorber system. With single-stage scrubbers, the flue gas reacts with an alkaline scrubber liquid to simultaneously remove HCl and SO_2. With two-stage scrubbers, a low-pH water scrubber for HCl removal is installed upstream of the alkaline SO_2 scrubber. The alkaline solution, typically containing calcium hydroxide ($Ca[OH]_2$), reacts with the acid gas to form salts, which are generally insoluble and may be removed by sequential clarifying, thickening, and vacuum filtering. The dewatered salts or sludges are then disposed.

2.1.4.6 Nitrogen Oxides Control Techniques -

The control of NO_x emissions can be accomplished through either combustion controls or add-on controls. Combustion controls include staged combustion, low excess air (LEA), and flue gas recirculation (FGR). Add-on controls which have been tested on MWCs include selective noncatalytic reduction (SNCR), selective catalytic reduction (SCR), and natural gas reburning.

Combustion controls involve the control of temperature or O_2 to reduce NO_x formation. With LEA, less air is supplied, which lowers the supply of O_2 that is available to react with N_2 in the combustion air. In staged combustion, the amount of underfire air is reduced, which generates a starved-air region. In FGR, cooled flue gas and ambient air are mixed to become the combustion air. This mixing reduces the O_2 content of the combustion air supply and lowers combustion temperatures. Due to the lower combustion temperatures present in MWCs, most NO_x is produced from the oxidation of nitrogen present in the fuel. As a result, combustion modifications at MWCs have generally shown small to moderate reductions in NO_x emissions as compared to higher temperature combustion devices (i. e., fossil fuel-fired boilers).

With SNCR, ammonia (NH_3) or urea is injected into the furnace along with chemical additives to reduce NO_x to N_2 without the use of catalysts. Based on analyses of data from U. S. MWCs equipped with SNCR, NO_x reductions of 45 percent are achievable.

With SCR, NH_3 is injected into the flue gas downstream of the boiler where it mixes with NO_x in the flue gas and passes through a catalyst bed, where NO_x is reduced to N_2 by a reaction with NH_3. This technique has not been applied to U. S. MWCs, but has been used on MWCs in Japan and Germany. Reductions of up to 80 percent have been observed, but problems with catalyst poisoning and deactivation may reduce performance over time.

Natural gas reburning involves limiting combustion air to produce an LEA zone. Recirculated flue gas and natural gas are then added to this LEA zone to produce a fuel-rich zone that inhibits NO_x formation and promotes reduction of NO_x to N_2. Natural gas reburning has been evaluated on both pilot- and full-scale applications and achieved NO_x reductions of 50 to 60 percent.

2.1.5 Mercury Controls[11-14]

Unlike other metals, Hg exists in vapor form at typical APCD operating temperatures. As a result, collection of Hg in the APCD is highly variable. Factors that affect Hg control are good PM control, low temperatures in the APCD system, and a sufficient level of carbon in the fly ash. Higher levels of carbon in the fly ash enhance Hg adsorption onto the PM, which is removed by the PM control device. To keep the Hg from volatilizing, it is important to operate the control systems at low temperatures, generally less than about 300 to 400°F.

Several mercury control technologies have been used on waste combustors in the United States, Canada, Europe, and Japan. These control technologies include the injection of activated carbon or sodium sulfide (Na_2S) into the flue gas prior to the DSI- or SD-based acid gas control system, or the use of activated carbon filters.

With activated carbon injection, Hg is adsorbed onto the carbon particle, which is then captured in the PM control device. Test programs using activated carbon injection on MWCs in the United States have shown Hg removal efficiencies of 50 to over 95 percent, depending on the carbon feed rate.

Sodium sulfide injection involves spraying Na_2S solution into cooled flue gas prior to the acid gas control device. Solid mercuric sulfide is precipitated from the reaction of Na_2S and Hg and can be collected in the PM control device. Results from tests on European and Canadian MWCs have shown removal efficiencies of 50 to over 90 percent. Testings on a U. S. MWC, however, raised questions on the effectiveness of this technology due to possible oversights in the analytical procedure used in Europe and Canada.

Fixed bed activated carbon filters are another Hg control technology being used in Europe. With this technology, the flue gas is passed through a fixed bed of granular activated carbon where the Hg is adsorbed. Segments of the bed are periodically replaced as system pressure drop increases.

2.1.6 Emissions[15-121]

Tables 2.1-1, 2.1-2, 2.1-3, 2.1-4, 2.1-5, 2.1-6, 2.1-7, 2.1-8, and 2.1-9 present emission factors for MWCs. The tables are for distinct combustor types (i. e., MB/WW, RDF), and include emission factors for uncontrolled (prior to any pollution control device) levels and for controlled levels based on various APCD types (i. e., ESP, SD/FF). There is a large amount of data available for this source category and, as a result of this, many of the emission factors have high quality ratings. However, for some categories there were only limited data, and the ratings are low. In these cases, one should refer to the EPA Background Information Documents (BIDs) developed for the NSPS and EG, which more thoroughly analyze the data than does AP-42, as well as discuss performance capabilities of the control technologies and expected emission levels. Also, when using the MWC emission factors, it should be kept in mind that these are average values, and emissions from MWCs are greatly affected by the composition of the waste and may vary for different facilities due to seasonal and regional differences. The AP-42 background report for this section includes data for individual facilities that represent the range for a combustor/control technology category.

Table 2.1-1 (Metric Units). PARTICULATE MATTER, METALS, AND ACID GAS EMISSION FACTORS FOR MASS BURN AND MODULAR EXCESS AIR COMBUSTORS[a,b]

	Uncontrolled		ESP[c]		DSI/ESP[d]		SD/ESP[e]		DSI/FF[f]		SD/FF[g]	
Pollutant	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING
PM[h]	1.26 E+01	A	1.05 E-01	A	2.95 E-02	E	3.52 E-02	A	8.95 E-02	A	3.11 E-02	A
As[j]	2.14 E-03	A	1.09 E-05	A	ND[k]	E	6.85 E-06	A	5.15 E-06	C	2.12 E-05	A
Cd[j]	5.45 E-03	A	3.23 E-04	B	4.44 E-05	E	3.76 E-06	A	1.17 E-05	C	1.36 E-05	A
Cr[j]	4.49 E-03	A	5.65 E-05	B	1.55 E-05	E	1.30 E-04	A	1.00 E-04	C	1.50 E-05	A
Hg[j]	2.8 E-03	A	2.8 E-03	A	1.98 E-03	E	1.63 E-03	A	1.10 E-03	C	1.10 E-03	A
Ni[j]	3.93 E-03	A	5.60 E-05	B	1.61 E-03	E	1.35 E-04	A	7.15 E-05	C	2.58 E-05	A
Pb[j]	1.07 E-01	A	1.50 E-03	A	1.45 E-03	E	4.58 E-04	A	1.49 E-04	C	1.31 E-04	A
SO_2	1.73 E+00	A	ND	NA	4.76 E-01	C	3.27 E-01[m]	A	7.15 E-01	C	2.77 E-01[m]	A
HCl[j]	3.20 E+00	A	ND	NA	1.39 E-01	C	7.90 E-02[m]	A	3.19 E-01	C	1.06 E-01[m]	A

[a] All factors in kg/Mg refuse combusted. Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/joule (J) and a heating value of 10,466 J/g. Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g. Source Classification Codes 5-01-001-04, 5-01-001-05, 5-01-001-06, 5-01-001-07, 5-03-001-11, 5-03-001-12, 5-03-001-13, 5-03-001-15. ND = no data. NA = not applicable.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., SO_2).

[c] ESP = Electrostatic Precipitator

[d] DSI/ESP = Duct Sorbent Injection/Electrostatic Precipitator

[e] SD/ESP = Spray Dryer/Electrostatic Precipitator

[f] DSI/FF = Duct Sorbent Injection/Fabric Filter

[g] SD/FF = Spray Dryer/Fabric Filter

[h] PM = Filterable particulate matter, as measured with EPA Reference Method 5.

[j] Hazardous air pollutants listed in the *Clean Air Act*.

[k] No data available at levels greater than detection limits.

[m] Acid gas emissions from SD/ESP- and SD/FF-equipped MWCs are essentially the same. Any differences are due to scatter in the data.

Table 2.1-2 (English Units). PARTICULATE MATTER, METALS, AND ACID GAS EMISSION FACTORS FOR MASS BURN AND MODULAR EXCESS AIR COMBUSTORS[a,b]

	Uncontrolled		ESP[c]		DSI/ESP[d]		SD/ESP[e]		DSI/FF[f]		SD/FF[g]	
Pollutant	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING
PM[h]	2.51 E+01	A	2.10 E-01	A	5.90 E-02	E	7.03 E-02	A	1.79 E-01	A	6.20 E-02	A
As[j]	4.37 E-03	A	2.17 E-05	A	ND[k]	E	1.37 E-05	A	1.03 E-05	C	4.23 E-06	A
Cd[j]	1.09 E-02	A	6.46 E-04	B	8.87 E-05	E	7.51 E-05	A	2.34 E-05	C	2.71 E-05	A
Cr[j]	8.97 E-03	A	1.13 E-04	B	3.09 E-05	E	2.59 E-04	A	2.00 E-04	C	3.00 E-05	A
Hg[j]	5.6 E-03	A	5.6 E-03	A	3.96 E-03	E	3.26 E-03	A	2.20 E-03	C	2.20 E-03	A
Ni[j]	7.85 E-03	A	1.12 E-04	B	3.22 E-05	E	2.70 E-04	A	1.43 E-04	C	5.16 E-05	A
Pb[j]	2.13 E-01	A	3.00 E-03	A	2.90 E-03	E	9.15 E-04	A	2.97 E-04	C	2.61 E-04	A
SO_2	3.46 E+00	A	ND	NA	9.51 E-01	C	6.53 E-01[m]	A	1.43 E-00	C	5.54 E-01[m]	A
HCl[j]	6.40 E+00	A	ND	NA	2.78 E-01	C	4.58 E-01[m]	A	6.36 E-01	C	2.11 E-01[m]	A

[a] All factors in lb/ton refuse combusted. Emission factors were calculated from concentrations using an F-factor of 9,570 dscf/MBtu and a heating value of 4,500 Btu/lb. Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 4,500 Btu/lb. Source Classification Codes 5-01-001-04, 5-01-001-05, 5-01-001-06, 5-01-001-07, 5-03-001-11, 5-03-001-12, 5-03-001-13, 5-03-001-15. ND = no data. NA = not applicable.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., SO_2).

[c] ESP = Electrostatic Precipitator

[d] DSI/ESP = Duct Sorbent Injection/Electrostatic Precipitator

[e] SD/ESP = Spray Dryer/Electrostatic Precipitator

[f] DSI/FF = Duct Sorbent Injection/Fabric Filter

[g] SD/FF = Spray Dryer/Fabric Filter

[h] PM = Filterable particulate matter, as measured with EPA Reference Method 5.

[j] Hazardous air pollutants listed in the *Clean Air Act*.

[k] No data available at levels greater than detection limits.

[m] Acid gas emissions from SD/ESP- and SD/FF-equipped MWCs are essentially the same. Any differences are due to scatter in the data.

Table 2.1-3 (Metric Units). ORGANIC, NITROGEN OXIDES, CARBON MONOXIDE, AND CARBON DIOXIDE EMISSION FACTORS FOR MASS BURN WATERWALL COMBUSTORS[a,b]

	Uncontrolled		ESP[c]		SD/ESP[d]		DSI/FF[e]		SD/FF[f]	
Pollutant	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING	kg/Mg	EMISSION FACTOR RATING
CDD/CDF[g]	8.35 E-07	A	5.85 E-07	A	3.11 E-07	A	8.0 E-08	C	3.31 E-08	A
NO_x[h]	1.83 E+00	A	*		*		*		*	
CO[h]	2.32 E-01	A	*		*		*		*	
CO2[j]	9.85 E+02	D	*		*		*		*	

[a] All factors in kg/Mg refuse combusted. Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J and a heating value of 10,466 J/g. Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g. Source Classification Codes 5-01-001-05, 5-03-001-12. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] SD/ESP = Spray Dryer/Electrostatic Precipitator

[e] DSI/FF = Duct Sorbent Injection/Fabric Filter

[f] SD/FF = Spray Dryer/Fabric Filter

[g] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in 1990 *Clean Air Act*.

[h] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[j] Calculated assuming a dry carbon content of 26.8% for feed refuse.[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

Table 2.1-4 (English Units). ORGANIC, NITROGEN OXIDES, CARBON MONOXIDE, AND CARBON DIOXIDE EMISSION FACTORS FOR MASS BURN WATERWALL COMBUSTORS[a,b]

	Uncontrolled		ESP[c]		SD/ESP[d]		DSI/FF[e]		SD/FF[f]	
Pollutant	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING	lb/ton	EMISSION FACTOR RATING
CDD/CDF[g]	1.67 E-06	A	1.17 E-06	A	6.21 E-07	A	1.60 E-07	C	6.61 E-08	A
NO_x[h]	3.56 E+00	A	*		*		*		*	
CO[h]	4.63 E-01	A	*		*		*		*	
CO_2[j]	1.97 E+03	D	*		*		*		*	

[a] All factors in lb/ton refuse combusted. Emission factors were calculated from concentrations using an F-factor of 9,570 dscf/MBtu and a heating value of 4,500 Btu/lb. Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 4,500 Btu/lb. Source Classification Codes 5-01-001-05, 5-03-001-12. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] SD/ESP = Spray Dryer/Electrostatic Precipitator

[e] DSI/FF = Duct Sorbent Injection/Fabric Filter

[f] SD/FF = Spray Dryer/Fabric Filter

[g] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the 1990 *Clean Air Act*.

[h] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[j] Calculated assuming a dry carbon content of 26.8% for feed refuse.[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

Table 2.1-5 (Metric And English Units). ORGANIC, NITROGEN OXIDES, CARBON MONOXIDE, AND CARBON DIOXIDE EMISSION FACTORS FOR MASS BURN ROTARY WATERWALL COMBUSTORS[a,b]

	Uncontrolled			ESP[c]			DSI/FF[d]			SD/FF[e]		
Pollutant	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING
CDD/CDF[f]	ND	ND	NA	ND	ND	NA	4.58 E-08	9.16 E-08	D	2.66 E-08	5.31E-08	B
NO_x[g]	1.13 E+00	2.25 E+00	E	*	*		*	*		*	*	
CO[g]	3.83 E-01	7.66 E-01	C	*	*		*	*		*	*	
CO_2[h]	9.85 E+02	1.97 E+03	D	*	*		*	*		*	*	

[a] Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J (9,570 dscf/MBtu) and a heating value of 10,466 J/g (4,500 Btu/lb). Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g (4,500 Btu/lb). Source Classification Codes 5-01-001-06, 5-03-001-13. ND = no data. NA = not applicable. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] DSI/FF = Duct Sorbent Injection/Fabric Filter

[e] SD/FF = Spray Dryer/Fabric Filter

[f] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the *Clean Air Act*.

[g] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[h] Calculated assuming a dry carbon content of 26.8% for feed refuse.[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

Table 2.1-6 (Metric And English Units). ORGANIC, NITROGEN OXIDES, CARBON MONOXIDE, AND CARBON DIOXIDE EMISSION FACTORS FOR MASS BURN REFRACTORY WALL COMBUSTORS[a,b]

	Uncontrolled			ESP[c]			DSI/ESP[d]		
Pollutant	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING
CDD/CDF[e]	7.50 E-06	1.50 E-05	D	3.63 E-05	7.25 E-05	D	2.31 E-07	4.61 E-07	E
NO_x[f]	1.23 E+00	2.46 E+00	A	*	*		*	*	
CO[f]	6.85 E-01	1.37 E+00	C	*	*		*	*	
CO_2[g]	9.85 E+02	1.97 E+03	D	*	*		*	*	

[a] Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J (9,570 dscf/MBtu) and a heating value of 10,466 J/g (4,500 Btu/lb). Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g (4,500 Btu/lb). Source Classification Codes 5-01-001-04, 5-03-001-11. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] DSI/ESP = Duct Sorbent Injection/Electrostatic Precipitator

[e] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the *Clean Air Act*.

[f] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[g] Calculated assuming a dry carbon content of 26.8% for feed refuse.[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

Table 2.1-7 (Metric And English Units). ORGANIC, NITROGEN OXIDES, CARBON MONOXIDE, AND CARBON DIOXIDE EMISSION FACTORS FOR MODULAR EXCESS AIR COMBUSTORS[a,b]

	Uncontrolled			ESP[c]			DSI/FF[d]		
Pollutant	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING
CDD/CDF[e]	ND	ND	NA	1.11 E-06	2.22 E-06	C	3.12 E-08	6.23 E-08	E
NO_x[f]	1.24 E+00	2.47 E+00	A	*	*		*	*	
CO[f]	ND	ND	NA	*	*		*	*	
CO_2[g]	9.85 E+02	1.97 E+03	D	*	*		*	*	

[a] Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J (9,570 dscf/MBtu) and a heating value of 10,466 J/g (4,500 Btu/lb). Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g (4,500 Btu/lb). Source Classification Codes 5-01-001-07, 5-03-001-15. ND = no data. NA = not applicable. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] DSI/FF = Duct Sorbent Injection/Fabric Filter

[e] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the *Clean Air Act*.

[f] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[g] Calculated assuming a dry carbon content of 26.8% for feed refuse[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

Table 2.1-8 (Metric And English Units). EMISSION FACTORS FOR REFUSE-DERIVED FUEL-FIRED COMBUSTORS[a,b]

Pollutant	Uncontrolled			ESP[c]			SD/ESP[d]			SD/FF[e]		
	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING
PM[f]	3.48 E+01	6.96 E+01	A	5.17 E-01	1.04 E+00	A	4.82 E-02	9.65 E-02	B	6.64 E-02	1.33 E-01	B
As[g]	2.97 E-03	5.94 E-03	B	6.70 E-05	1.34 E-04	D	5.41 E-06	1.08 E-05	D	2.59 E-06[h]	5.17 E-06[h]	A
Cd[g]	4.37 E-03	8.75 E-03	C	1.10 E-04	2.20 E-04	C	4.18 E-05	8.37 E-05	D	1.66 E-05[h]	3.32 E-05[h]	A
Cr[g]	6.99 E-03	1.40 E-02	B	2.34 E-04	4.68 E-04	D	5.44 E-05	1.09 E-04	D	2.04 E-05	4.07 E-05	D
Hg[g]	2.8 E-03	5.5 E-03	D	2.8 E-03	5.5 E-03	D	2.10 E-04	4.20 E-04	B	1.46 E-04	2.92 E-04	D
Ni[g]	2.18 E-03	4.36 E-03	C	9.05 E-03	1.81 E-02	D	9.64 E-05	1.93 E-04	D	3.15 E-05[j]	6.30 E-05[j]	A
Pb[g]	1.00 E-01	2.01 E-01	C	1.84 E-03[h]	3.66 E-03[h]	A	5.77 E-04	1.16 E-03	B	5.19 E-04	1.04 E-03	D
SO_2	1.95 E+00	3.90 E+00	C	ND	ND	NA	7.99 E-01	1.60E+00	D	2.21 E-01	4.41 E-01	D
HCl[g]	3.49 E+00	6.97 E+00	E	*	*		ND	ND	NA	2.64 E-02	5.28 E-02	C
NO_x[k]	2.51 E+00	5.02 E+00	A	*	*		*	*		*	*	
CO[k]	9.60 E-01	1.92 E+00	A	*	*		*	*		*	*	
CO_2[m]	1.34 E+03	2.68 E+03	E	*	*		*	*		*	*	
CDD/CDF[n]	4.73 E-06	9.47 E-06	D	8.46 E-06	1.69 E-05	B	5.31 E-08	1.06 E-07	D	1.22 E-08	2.44 E-08	E

[a] Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J (9,570 dscf/MBtu) and a heating value of 12,792 J/g (5,500 Btu/lb). Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 12,792 J/g (5,500 Btu/lb). Source Classification Code 5-01-001-03. ND = no data. NA = not applicable. * = Same as uncontrolled for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (SO_2, NO_x, CO).

[c] ESP = Electrostatic Precipitator

[d] SD/ESP = Spray Dryer/Electrostatic Precipitator

[e] SD/FF = Spray Dryer/Fabric Filter

[f] PM = total particulate matter, as measured with EPA Reference Method 5.

[g] Hazardous air pollutants listed in the *Clean Air Act*.

[h] Levels were measured at non-detect levels, where the detection limit was higher than levels measured at other similarly equipped MWCs. Emission factors shown are based on emission levels from similarly equipped mass burn and MOD/EA combustors.

[j] No data available. Values shown are based on emission levels from SD/FF-equipped mass burn combustors.

[k] Control of NO_X and CO is not tied to traditional acid gas/PM control devices.

[m] Based on source tests from a single facility.[120] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

[n] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the *Clean Air Act*.

Table 2.1-9 (Metric And English Units). EMISSION FACTORS FOR MODULAR STARVED-AIR COMBUSTORS[a,b]

Pollutant	Uncontrolled			ESP[c]		
	kg/Mg	lb/ton	EMISSION FACTOR RATING	kg/Mg	lb/ton	EMISSION FACTOR RATING
PM[d]	1.72 E+00	3.43 E+00	B	1.74 E-01	3.48 E-01	B
As[e]	3.34 E-04	6.69 E-04	C	5.25 E-05	1.05 E-04	D
Cd[e]	1.20 E-03	2.41 E-03	D	2.30 E-04	4.59 E-04	D
Cr[e]	1.65 E-03	3.31 E-03	C	3.08 E-04	6.16 E-04	D
Hg[e,f]	2.8 E-03	5.6 E-03	A	2.8 E-03	5.6 E-03	A
Ni[e]	2.76 E-03	5.52 E-03	D	5.04 E-04	1.01 E-03	E
Pb[e]	ND	ND	NA	1.41 E-03	2.82 E-03	C
SO_2	1.61 E+00	3.23 E+00	E	*	*	
HCl[e]	1.08 E+00	2.15 E+00	D	*	*	
NO_x[g]	1.58 E+00	3.16 E+00	B	*	*	
CO[g]	1.50 E-01	2.99 E-01	B	*	*	
CO_2[h]	9.85 E+02	1.97 E+03	D	*	*	
CDD/CDF[j]	1.47 E-06	2.94 E-06	D	1.88 E-06	3.76 E-06	C

[a] Emission factors were calculated from concentrations using an F-factor of 0.26 dscm/J (9,570 dscf/MBtu) and a heating value of 10,466 J/g (4,500 Btu/lb). Other heating values can be substituted by multiplying the emission factor by the new heating value and dividing by 10,466 J/g (4,500 Btu/lb). Source Classification Codes 5-01-001-01, 5-03-001-14. ND = no data. NA = not applicable. * = Same as "uncontrolled" for these pollutants.

[b] Emission factors should be used for estimating long-term, not short-term, emission levels. This particularly applies to pollutants measured with a continuous emission monitoring system (e. g., CO, NO_x).

[c] ESP = Electrostatic Precipitator

[d] PM = total particulate matter, as measured with EPA Reference Method 5.

[e] Hazardous air pollutants listed in the *Clean Air Act*.

[f] Mercury levels based on emission levels measured at mass burn, MOD/EA, and MOD/SA combustors.

[g] Control of NO_x and CO is not tied to traditional acid gas/PM control devices.

[h] Calculated assuming a dry carbon content of 26.8% for feed refuse.[126,135] CO_2 emitted from this source may not increase total atmospheric CO_2 because emissions may be offset by the uptake of CO_2 by regrowing biomass.

[j] CDD/CDF = total tetra- through octa- chlorinated dibenzo-p-dioxin/chlorinated dibenzofurans, 2,3,7,8-tetrachlorodibenzo-p-dioxin, and dibenzofurans are hazardous air pollutants listed in the *Clean Air Act.*

Another point to keep in mind when using emission factors is that certain control technologies, specifically ESPs and DSI systems, are not all designed with equal performance capabilities. The ESP and DSI-based emission factors are based on data from a variety of facilities and represent average emission levels for MWCs equipped with these control technologies. To estimate emissions for a specific ESP or DSI system, refer to either the AP-42 background report for this section or the NSPS and EG BIDs to obtain actual emissions data for these facilities. These documents should also be used when conducting risk assessments, as well as for determining removal efficiencies. Since the AP-42 emission factors represent averages from numerous facilities, the uncontrolled and controlled levels frequently do not correspond to simultaneous testing and should not be used to calculate removal efficiencies.

Emission factors for MWCs were calculated from flue gas concentrations using an F-factor of 0.26 dry standard cubic meters per joule (dscm/J) (9,570 dry standard cubic feet per million British thermal units [Btu]) and an assumed heating value of the waste of 10,466 J/g (4,500 Btu per pound [Btu/lb]) for all combustors except RDF, for which a 12,792 J/g (5,500 Btu/lb) heating value was assumed. These are average values for MWCs; however, a particular facility may have a different heating value for the waste. In such a case, the emission factors shown in the tables can be adjusted by multiplying the emission factor by the actual facility heating value and dividing by the assumed heating value (4,500 or 5,500 Btu/lb, depending on the combustor type). Also, conversion factors to obtain concentrations, which can be used for developing more specific emission factors or making comparisons to regulatory limits, are provided in Tables 2.1-10 and 2.1-11 for all combustor types (except RDF) and RDF combustors, respectively.

Also note that the values shown in the tables for PM are for total PM, and the CDD/CDF data represent total tetra- through octa-CDD/CDF. For SO_2, NO_x, and CO, the data presented in the tables represent long-term averages, and should not be used to estimate short-term emissions. Refer to the EPA BIDs which discuss achievable emission levels of SO_2, NO_x, and CO for different averaging times based on analysis of continuous emission monitoring data. Lastly, for PM and metals, levels for MB/WW, MB/RC, MB/REF, and MOD/EA were combined to determine the emission factors, since these emissions should be the same for these types of combustors. For controlled levels, data were combined within each control technology type (e. g., SD/FF data, ESP data). For Hg, MOD/SA data were also combined with the mass burn and MOD/EA data.

2.1.7 Other Types Of Combustors[122-134]

2.1.7.1 Industrial/Commercial Combustors -

The capacities of these units cover a wide range, generally between 23 and 1,800 kilograms (50 and 4,000 pounds) per hour. Of either single- or multiple-chamber design, these units are often manually charged and intermittently operated. Some industrial combustors are similar to municipal combustors in size and design. Emission control systems include gas-fired afterburners, scrubbers, or both. Under Section 129 of the CAAA, these types of combustors will be required to meet emission limits for the same list of pollutants as for MWCs. The EPA has not yet established these limits.

2.1.7.2 Trench Combustors -

Trench combustors, also called air curtain incinerators, forcefully project a curtain of air across a pit in which open burning occurs. The air curtain is intended to increase combustion efficiency and reduce smoke and PM emissions. Underfire air is also used to increase combustion efficiency.

Table 2.1-10. CONVERSION FACTORS FOR ALL COMBUSTOR TYPES EXCEPT RDF

Divide	By	To Obtain[a]
For As, Cd, Cr, Hg, Ni, Pb, and CDD/CDF:		
kg/Mg refuse	4.03×10^{-6}	µg/dscm
lb/ton refuse	8.06×10^{-6}	
For PM:		
kg/Mg refuse	4.03×10^{-3}	mg/dscm
lb/ton refuse	8.06×10^{-3}	
For HCl:		
kg/Mg refuse	6.15×10^{-3}	ppmv
lb/ton refuse	1.23×10^{-2}	
For SO^2:		
kg/Mg refuse	1.07×10^{-2}	ppmv
lb/ton refuse	2.15×10^{-2}	
For NO_X:		
kg/Mg refuse	7.70×10^{-3}	ppmv
lb/ton refuse	1.54×10^{-2}	
For CO:		
kg/Mg refuse	4.69×10^{-3}	ppmv
lb/ton refuse	9.4×10^{-3}	
For CO_2:		
kg/Mg refuse	7.35×10^{-3}	ppmv
lb/ton refuse	1.47×10^{-2}	

[a] At 7% O_2.

Table 2.1-11. CONVERSION FACTORS FOR REFUSE-DERIVED FUEL COMBUSTORS

Divide	By	To Obtain[a]
For As, Cd, Cr, Hg, Ni, Pb, and CDD/CDF:		
kg/Mg refuse	4.92×10^{-6}	µg/dscm
lb/ton refuse	9.85×10^{-6}	
For PM:		
kg/Mg refuse	4.92×10^{-3}	mg/dscm
lb/ton refuse	9.85×10^{-3}	
For HCl:		
kg/Mg refuse	7.5×10^{-3}	ppmv
lb/ton refuse	1.5×10^{-2}	
For SO_2:		
kg/Mg refuse	1.31×10^{-2}	ppmv
lb/ton refuse	2.62×10^{-2}	
For NO_X:		
kg/Mg refuse	9.45×10^{-3}	ppmv
lb/ton refuse	1.89×10^{-2}	
For CO:		
kg/Mg refuse	5.75×10^{-3}	ppmv
lb/ton refuse	1.15×10^{-2}	
For CO_2:		
kg/Mg refuse	9.05×10^{-3}	ppmv
lb/ton refuse	1.81×10^{-2}	

[a] At 7% O_2.

Trench combustors can be built either above- or below-ground. They have refractory walls and floors and are normally 8-feet wide and 10-feet deep. Length varies from 8 to 16 feet. Some units have mesh screens to contain larger particles of fly ash, but other add-on pollution controls are normally not used.

Trench combustors burning wood wastes, yard wastes, and clean lumber are exempt from Section 129, provided they comply with opacity limitations established by the Administrator. The primary use of air curtain incinerators is the disposal of these types of wastes; however, some of these combustors are used to burn MSW or construction and demolition debris.

In some states, trench combustors are often viewed as a version of open burning and the use of these types of units has been discontinued in some States.

2.1.7.3 Domestic Combustors -

This category includes combustors marketed for residential use. These types of units are typically located at apartment complexes, residential buildings, or other multiple family dwellings, and are generally found in urban areas. Fairly simple in design, they may have single or multiple refractory-lined chambers and usually are equipped with an auxiliary burner to aid combustion. Due to their small size, these types of units are not currently covered by the MWC regulations.

2.1.7.4 Flue-fed Combustors -

These units, commonly found in large apartment houses or other multiple family dwellings, are characterized by the charging method of dropping refuse down the combustor flue and into the combustion chamber. Modified flue-fed incinerators utilize afterburners and draft controls to improve combustion efficiency and reduce emissions. Due to their small size, these types of units are not currently covered by the MWC regulations.

Emission factors for industrial/commercial, trench, domestic, and flue-fed combustors are presented in Table 2.1-12.

Table 2.1-12 (Metric And English Units). UNCONTROLLED EMISSION FACTORS FOR REFUSE COMBUSTORS OTHER THAN MUNICIPAL WASTE[a]

EMISSION FACTOR RATING: D

Combustor Type	PM		SO_2		CO		Total Organic Compounds[b]		NO_x	
	kg/Mg	lb/ton	kg/Mg	lb/ton	kg/Mg	lb/ton	kg/Mg	lb/ton	kg/Mg	lb/ton
Industrial/commercial										
Multiple chamber	3.50 E+00	7.00 E+00	1.25 E+00	2.50 E+00	5.00 E+00	1.00 E+01	1.50 E+00	3.00 E+00	1.50 E+00	3.00 E+00
Single chamber	7.50 E+00	1.50 E+01	1.25 E+00	2.50 E+00	1.00 E+01	2.00 E+01	7.50 E+01	1.50 E+01	1.00 E+00	2.00 E+00
Trench										
Wood (SCC 5-01-005-10, 5-03-001-06)	6.50 E+00	1.30 E+01	5.00 E-02	1.00 E-01	ND	ND	ND	ND	2.00 E+00	4.00 E+00
Rubber tires (SCC 5-01-005-11, 5-03-001-07)	6.90 E+01	1.38 E+02	ND	ND	ND	ND	ND	ND	ND	ND
Municipal refuse (SCC 5-01-005-12, 5-03-001-09)	1.85 E+01	3.70 E+01	1.25 E+00	2.50 E+00	ND	ND	ND	ND	ND	ND
Flue-fed single chamber	1.50 E+01	3.00 E+01	2.50 E-01	5.00 E-01	1.00 E+01	2.00 E+01	7.50 E+00	1.50 E+01	1.50 E+00	3.00 E+00
Flue-fed (modified)	3.00 E+00	6.00 E+00	2.50 E-01	5.00 E-01	5.00 E+00	1.00 E+01	1.50 E+00	3.00 E+00	5.00 E+00	1.00 E+01
Domestic single chamber (no SCC)										
Without primary burner	1.75 E+01	3.50 E+01	2.50 E-01	5.00 E-01	1.50 E+02	3.00 E+02	5.00 E+01	1.00 E+02	5.00 E-01	1.00 E+00
With primary burner	3.50 E+00	7.00 E+00	2.50 E-01	5.00 E-01	Neg	Neg	1.00 E+00	2.00 E+00	1.00 E+00	2.00 E+00

[a] References 116-123. ND = no data. SCC = Source Classification Code. Neg = negligible.

[b] Expressed as methane.

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OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338893 Equipment Description: UTILITY BOILER - NATURAL GAS/OIL BOILER #1

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different): 2002

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Boiler (Natural Gas)	FY (01-02)	6053.00	FY (00-01)	27062.00
SOx	Boiler (Natural Gas)	FY (01-02)	478.00	FY (00-01)	2136.00

Calculated Emissions for UTILITY BOILER - NATURAL GAS/OIL BOILER #1

PM10 Reductions: (Year 1 + Year 2)/2 16558 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)
SOx Reductions: (Year 1 + Year 2)/2 1307 lbs/yr

Other Assumptions/ Comments: (See Attached)
Emissions calculated using EPA Acid Rain Heat Input dates and AER.

Completed By: William Thompson, P.E.
Senior Manager
P.E. License No.: M 25818

Signature: Will Thompson
Date: 05/06/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338894 Equipment Description: UTILITY BOILER - NATURAL GAS/OIL BOILER #2

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different): 2002

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Boiler (Natural Gas)	FY (01-02)	7614.00	FY (00-01)	34752.00
SOx	Boiler (Natural Gas)	FY (01-02)	601.00	FY (00-01)	2744.00

Calculated Emissions for UTILITY BOILER - NATURAL GAS/OIL BOILER #2

PM10 Reductions: (Year 1 + Year 2)/2 21183 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

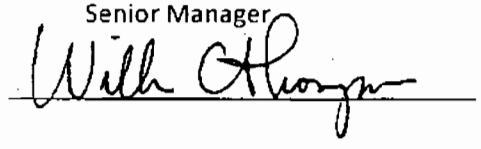
SOx Reductions: (Year 1 + Year 2)/2 1673 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions calculated using EPA Acid Rain Heat Input dates and AER.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: 

Date: 05/06/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338886 Equipment Description: TURBINE ENGINE - NATURAL GAS/OIL

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Boiler (Natural Gas)	FY (02-03)	436.00	FY (01-02)	1356.00
SOx	Boiler (Natural Gas)	FY (02-03)	38.00	FY (01-02)	117.00

Calculated Emissions for TURBINE ENGINE - NATURAL GAS/OIL

PM10 Reductions: (Year 1 + Year 2)/2 896 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 78 lbs/yr

Other Assumptions/ Comments: (See Attached)

Four identical sets of turbines. Assume all operated the same. Divide total AER for Turbines by four.

Completed By: William Thompson, P.E. Senior Manager P.E. License No.: M 25818

Signature: Wm Thompson Date: 05/06/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338888 Equipment Description: TURBINE ENGINE - NATURAL GAS/OIL

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Turbine (Natural Gas)	FY (02-03)	436.00	FY (01-02)	1356.00
SOx	Turbine (Natural Gas)	FY (02-03)	38.00	FY (01-02)	117.00

Calculated Emissions for TURBINE ENGINE - NATURAL GAS/OIL

PM10 Reductions: (Year 1 + Year 2)/2 896 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 78 lbs/yr

Other Assumptions/ Comments: (See Attached)

Four identical sets of turbines. Assume all operated the same. Divide total AER for Turbines by four.

Completed By: William Thompson, P.E. Senior Manager P.E. License No.: M 25818

Signature: Will Thompson Date: 05/06/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338890 Equipment Description: TURBINE ENGINE - NATURAL GAS/OIL

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Turbine (Natural Gas)	FY (02-03)	436.00	FY (01-02)	1356.00
SOx	Turbine (Natural Gas)	FY (02-03)	38.00	FY (01-02)	117.00

Calculated Emissions for TURBINE ENGINE - NATURAL GAS/OIL

PM10 Reductions: (Year 1 + Year 2)/2 896 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 78 lbs/yr

Other Assumptions/ Comments: (See Attached)

Four identical sets of turbines. Assume all operated the same. Divide total AER for Turbines by four.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: Will Thompson

Date: 05/06/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: RRI ENERGY ETIWANDA, INC. (Formerly RRI RELIANT ENERGY ETIWANDA LLC.)
Facility ID: 115315
Facility Location: 8996 ETIWANDA AVE, ETIWANDA, CA 91739
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 338891 Equipment Description: TURBINE ENGINE - NATURAL GAS/OIL

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/8/2010 Inspected By: Joseph Liaw

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Turbine (Natural Gas)	FY (02-03)	436.00	FY (01-02)	1356.00
SOx	Turbine (Natural Gas)	FY (02-03)	38.00	FY (01-02)	117.00

Calculated Emissions for TURBINE ENGINE - NATURAL GAS/OIL

PM10 Reductions: (Year 1 + Year 2)/2 896 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 78 lbs/yr

Other Assumptions/ Comments: (See Attached)

Four identical sets of turbines. Assume all operated the same. Divide total AER for Turbines by four.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William C Thompson

Date: 05/06/10

→ good agreement w/ ACE -0.04%

Year/Quarter	Heat Input for Etiwanda Units: 1	2	3	4	Total	Heat Input for Mountainview Units: 1	2	Total	Heat In Riverside C 1	2
Q3-2000	1,427,886	1,493,767	4,647,163	5,007,280	12,576,097	869,389	709,533	1,578,922	33,798	44,825
Q4-2000	656,389	604,811	1,868,747	2,917,558	6,047,505	36,812	8,782	45,594	13,158	12,111
Q1-2001	758,546	1,711,869	5,156,009	1,547,796	9,174,220	193,898	93,648	287,546		
Q2-2001	896,559	990,228	67,946	1,213,682	3,168,416					
Fiscal Yr 2000-01	3,739,381	4,800,675	11,739,865	10,686,316	30,966,237	1,100,099	811,963	1,912,062	46,956	56,936
Q3-2001	447,637	608,640	2,168,882	3,381,036	6,606,195	83,759	46,198	129,956		
Q4-2001			1,436,872	851,942	2,288,814	84		84		
Q1-2002	296,664	312,917	2,449,501	754,256	3,813,339					
Q2-2002	99,834	140,508	519,783	571,351	1,331,477					
Fiscal Yr 2001-02	844,135	1,062,065	6,575,039	5,558,586	14,039,825	83,843	46,198	130,040	0	0
Q3-2002	386,444	252,671	2,500,984	1,466,874	4,606,972					
Q4-2002	136	160	499,291	227,228	726,814					
Q1-2003			152,341	249,068	401,410					
Q2-2003			199,328	162,826	362,154					
Fiscal Yr 2002-03	386,580	252,830	3,351,944	2,105,997	6,097,351	0	0	0	0	0
Q3-2003			1,459,890	1,052,682	2,512,572					
Q4-2003			94,406	97,737	192,143					
Q1-2004										
Q2-2004										
Fiscal Yr 2003	0	0	1,554,296	1,150,419	2,704,715	0	0	0	0	0
Grand Total	4,970,096	6,115,570	23,221,145	19,501,318	53,808,128	1,183,942	858,160	2,042,102	46,956	56,936

2000-01
- Boiler #1: $\frac{3,739,381}{30966237} = 12.07\%$
- Boiler #2: $\frac{4800675}{30966237} = 15.5\%$

2001-02: $\frac{844135}{14039825} = 6.01\%$ Boiler 1

$\frac{1062065}{14039825} = 7.56\%$ Boiler 2

put for anal Units: 3	4	Total
77,587	46,153	202,362
34,678	15,347	75,294
112,265	61,499	277,656
0	0	0
0	0	0
0	0	0
112,265	61,499	277,656

Fees Due Summary

	Submittal Date: No later than August 30,2001	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	92.53	0.00		93	$49,519.36	$24,925.60
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	0.00	0.00	1,215.28	1,215	$557,747.86	$557,747.86
4	SULFUR OXIDES	9.29	0.00	0.00	9	$1,402.68	$1,402.68
5	CARBON MONOXIDE	1,500.82	0.00		1,501	$5,646.03	$806.00
6	PARTICULATE MATTER	117.23	0.00		117	$52,811.48	$2,319.57

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$667,127.41	$587,201.71
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$204.26	$204.26
3	TOTAL FEES DUE	$667,331.67	$587,405.97
4	Installments Paid For FY 2000-2001 (if any) -- All Criteria Pollutants	$166,793.77	$166,793.77
5	Installments Paid For FY 2000-2001 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$500,537.90	$420,612.20
7	Late Fee (if any)	$0.00	$0.00
8	Amount Due (Line 6 + Line 7)	$500,537.90	
9	Amount Enclosed (please write Facility ID#(s) and FY 2000-2001 AER on the check)		$420,612.20

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/ODC
1	B3U-1	Material 112-Rust-Oleum Corporation - Heat Resista...	N
2	B4-1	Activity -Gasoline storage and dispensing	N
3	B4U-1	Activity -Asbestos Remediation	Y
4	E1-1	Boiler,Natural Gas (mmcf)	Y
5	E1-2	Turbine,Natural Gas (mmcf)	Y
6	E1-3	Stationary I.C. Engines,Gasoline (10 RVP, 1000 gals)	Y

Permitted Annual Emissions from Power Generating Facilities

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Boiler	1. Natural Gas (mmcf)	29,501.00	5.50	162,255.50	0.00	0.00	0.60	17,700.60	84.00	2,478,084.00	7.60	224,207.60
2	12. Turbine	1. Natural Gas (mmcf)	1,478.88	15.40	22,774.75	0.00	0.00	0.60	887.33	354.00	523,523.52	6.93	10,248.64
3	999. Stationary I.C. Engines	4. Gasoline (10 RVP, 1000 gals)	0.01	2.06	0.02	0.00	0.00	5.30	0.05	3,940.00	39.40	6.50	0.07
4													
5													
6													
7													
8													
9													
10													
TOTAL													
					185030.27 lbs		0.00 lbs		18587.98 lbs		3001646.92 lbs		234456.31 lbs
					92.52 tons		0.00 tons		9.29 tons		1500.82 tons		117.23 tons

Factors ok wet

Boiler #1 = 12.07% from EPA Acid Rain data.
Boiler #2 = 15.5

Turbines = PM_{10} = 10248.64/4
= 2562.16 per set

SO_x = 887.33/4 = 221.8 per set

Boiler #1 PM_{10} = .1207 · 224207.6
= 27061.9 lbs/yr

SO_x = .1207 · 17700.6
= .2136.46
= 2136

Boiler #2 PM_{10} = 15.5% · 224207.6
= 34752.2
= 34,752

SO_x = 15.5% · 17700.6 = 2743.6 = 2744

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1							
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4	0.01						
8	Form E1	92.52			0.00	9.29	1500.82	117.23
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	Total Permitted Emissions	92.53	0	0	0	9.29	1500.82	117.23

Reported Totals

1	Form B1, DCB or AB							
2	Form B2							
3	B3 - W	0.00						
4	Form B4	0.01		0.00	0.00	0.00	0.00	0.00
5	Form E1	57.36			0.00	9.29	299.65	12.47
6	Form R1							
7	Total Permitted Emissions	57.37		0.00	0.00	9.29	299.65	12.47

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.16						
6	Form WU	0.00						
7	Form B4U	0.00		0.00	0.00	0.00	0.00	0.00
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0.16	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU	0.16		0.00				
4	Form B4U	0.00		0.00	0.00	0.00	0.00	0.00
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.16		0.00	0.00	0.00	0.00	0.00
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 0.00)	0.00		0.00	0.00	0.00	0.00	0.00

Non-Permitted Annual Emissions from the Use of Organics

Row	Material Code	Activity Code	Material Description	Contains Organic TAC/ODC	Rule	Annual Usage	Units (lbs or gal)	Emission Factor	Use Default Emission Factor	Overall Control Efficiency	Organic Gases Emission	Specific Organics Emission
1	112. Enamel	5. Metal Coating	Rust-Oleum Corporation - Heat Resista...	N	1113	111.00	2. gallon	2.8		0	310.80	
2												
3												
4												
5												
6												
7												
8												
9												
10												
TOTAL												
											310.80 lbs	0.00 lbs
											0.16 tons	0.00 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	2A. Gasoline storage and dispensing	N	461	1.83	4. 1000 gallons	12.75	23.33										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							23.33 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs
							0.01 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons

Non-Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Asbestos Remediation	Y	1403	17,850.00	1. pound	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.0003	5.36
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		5.36 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons

Fees Due Summary

	Submittal Date: No later than August 30,2002	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	42.47	0.02		42	$17,135.47	$9,283.01
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	0.00	0.00	361.11	361	$158,779.42	$158,779.42
4	SULFUR OXIDES	4.21	0.00	0.00	4	$239.62	$239.62
5	CARBON MONOXIDE	695.13	0.00		695	$2,457.35	$169.33
6	PARTICULATE MATTER	53.07	0.00		53	$17,797.14	$1,320.85

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$196,409.00	$169,792.23
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$217.24	$235.34
3	TOTAL FEES DUE	$196,626.24	$170,027.57
4	Installments Paid For FY 2001-2002 (if any) -- All Criteria Pollutants	$293,094.97	$293,094.97
5	Installments Paid For FY 2001-2002 (if any) -- Toxic Air Contaminants/Ozone Depleters	$102.13	$102.13
6	Balance Due (Line 3 - Line 4 - Line 5)	-$96,570.86	-$123,169.53
7	Late Fee (if any)	$0.00	$0.00
8	Amount Due (Line 6 + Line 7)	$0.00	
9	Amount Enclosed (please write Facility ID#(s) and FY 2001-2002 AER on the check)		$0.00

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/ODC
1	B1U-1	Heater,Natural Gas (mmcf)	Y
2	B3U-1	Material 112-Uniprime II 4600	N
3	B3U-2	Material 340-SW Lacquer Reducer	N
4	B3U-3	Material 112-Protec Gloss	N
5	B3U-4	Material 112-Series 61 Tnene-liner Paint	N
6	B3U-5	Material 112-63-1500	N
7	B4U-1	Activity -Gasoline storage and dispensing	N
8	B4U-2	Activity -Asbestos Abatement	Y
9	E1-1	Boiler,Natural Gas (mmcf)	Y
10	E1-2	Turbine,Natural Gas (mmcf)	Y
11	E1-3	Stationary I.C. Engines,Gasoline (10 RVP, 1000 gals)	Y

Permitted Annual Emissions from Power Generating Facilities

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Boiler	1. Natural Gas (mmcf)	13,251.68	5.50	72,884.24	0.00	0.00	0.60	7,951.01	84.00	1,113,141.12	7.60	100,712.77
2	12. Turbine	1. Natural Gas (mmcf)	782.71	15.40	12,053.73	0.00	0.00	0.60	469.63	354.00	277,079.34	6.93	5,424.18
3	999. Stationary I.C. Engines	4. Gasoline (10 RVP, 1000 gals)	0.01	2.06	0.02	0.00	0.00	5.30	0.05	3,940.00	39.40	6.50	0.07
4													
5													
6													
7													
8													
9													
10													
TOTAL													
					84937.99 lbs		0.00 lbs		8420.69 lbs		1390259.86 lbs		106137.02 lbs
					42.47 tons		0.00 tons		4.21 tons		695.13 tons		53.07 tons

Should be 7.6

Some test?

Boiler 1 = 12.07%
Boiler #2 = 15.5% from CEA Acid Rain data

Factors OK wet

Boiler #1 PM_{10} = .0601 · 100712.77
= 6052.83 = 6053

SO_x = .0601 · 7951
= 477.85 = 478

Turbines SO_x = 117.4 = 117 ✓

PM_{10} = 7.60 · 782.71
= 5948.6 / 4 turbine sets
= 1487 per set

94824.18 / 4
= 1356 lbs/yr per set ✓

Boiler #2 PM_{10} = .0756 · 100712.77
= 7613.9 = 7614

SO_x = .0756 · 7951
= 601.1 = 601

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1							
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4							
8	Form E1	42.47			0.00	4.21	695.13	53.07
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	Total Permitted Emissions	42.47	0	0	0	4.21	695.13	53.07

Reported Totals

1	Form B1, DCB or AB							
2	Form B2							
3	B3 - W	0.00						
4	Form B4							
5	Form E1	28.24			0.00	4.21	140.53	5.66
6	Form R1							
7	Total Permitted Emissions	28.24			0.00	4.21	140.53	5.66

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U	0.00	0.00		0.01	0.00	0.00	0.00
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.06						
6	Form WU	0.00						
7	Form B4U	0.01						0.00
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0.07	0	0	0.01	0	0	0

Reported Totals

1	Form B1U, DCB or AB	0.00	0.00		0.01	0.00	0.00	0.00
2	Form B2U							
3	B3U - WU	0.06		0.00				
4	Form B4U	0.01		0.00	0.00	0.00	0.00	8.25
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.07	0.00	0.00	0.01	0.00	0.00	8.25
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 0.33)	0.02		0.00	0.00	0.00	0.00	2.72

Non-Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Heater	1. Natural Gas (mmcf)	0.12	7.00	0.84	2.30	0.28	130.00	15.60	0.83	0.10	35.00	4.20	7.50	0.90	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					0.84 lbs		0.28 lbs		15.60 lbs		0.10 lbs		4.20 lbs		0.90 lbs	
					0.00 tons		0.00 tons		0.01 tons		0.00 tons		0.00 tons		0.00 tons	

Non-Permitted Annual Emissions from the Use of Organics

Row	Material Code	Activity Code	Material Description	Contains Organic TAC/ODC	Rule	Annual Usage	Units (lbs or gal)	Emission Factor	Use Default Emission Factor	Overall Control Efficiency	Organic Gases Emission	Specific Organics Emission
1	112. Enamel	5. Metal Coating	Uniprime II 4600	N	1113	5.00	2. gallon	0.68		0	3.40	
2	340. Mineral Spirits	1. Thinning	SW Lacquer Reducer	N	1113	7.00	2. gallon	7.05		0	49.35	
3	112. Enamel	5. Metal Coating	Protec Gloss	N	1113	10.00	2. gallon	3.48		0	34.80	
4	112. Enamel	5. Metal Coating	Series 61 Thene-liner Paint	N	1113	20.00	2. gallon	1.44		0	28.80	
5	112. Enamel	5. Metal Coating	63-1500	N	1113	6.00	2. gallon	0.07		0	0.42	
6												
7												
8												
9												
10												
TOTAL												
											116.77 lbs	0.00 lbs
											0.06 tons	0.00 tons

Non-Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	2A. Gasoline storage and dispensing	N	461	2.00	4. 1000 gallons	12.75	25.50										
2	44. Asbestos Abatement	Y	1403	8.25	5. ton											0.006	0.05
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							25.50 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.05 lbs
							0.01 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons

Permitted Annual Emissions from Power Generating Facilities

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Boiler	1. Natural Gas (mmcf)	368.17	5.50	2,024.94	0.00	0.00	0.60	220.90	1.06	390.26	7.60	2,798.09
2	999. Boiler	1. Natural Gas (mmcf)	240.79	5.50	1,324.35	0.00	0.00	0.60	144.47	4.24	1,020.95	7.60	1,830.00
3	999. Boiler	1. Natural Gas (mmcf)	3,192.33	1.92	6,129.27	0.00	0.00	0.96	3,064.64	30.00	95,769.90	1.43	4,565.03
4	999. Boiler	1. Natural Gas (mmcf)	2,005.71	1.36	2,727.77	0.00	0.00	0.60	1,203.43	67.08	134,543.03	13.27	26,615.77
5	12. Turbine	1. Natural Gas (mmcf)	251.45	15.40	3,872.33	0.00	0.00	0.60	150.87	354.00	89,013.30	6.93	1,742.55
6													
7													
8													
9													
10													
TOTAL													
					16078.66 lbs		0.00 lbs		4784.31 lbs		320737.44 lbs		37551.44 lbs
					8.04 tons		0.00 tons		2.39 tons		160.37 tons		18.78 tons

7.66

Turbines SO_x $150.87 \div 4 = 38$

Use standard emission factor, don't have copy of permit but other info.

PM_{10} $\frac{7.66}{6.93} \cdot 1742.55 = 1911.0$ / 4 turbine sets

$= 477.76 = 478$ per set wet

$1742.55/4$

$= 435.64$

$= 436$

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoing Unit	Emissions * And Requirements	Conditions
Process 1 : CONSUMER FLEET REFUELING					
FUEL DISPENSING NOZZLE, BALANCE TYPE PHASE II CONTROL, GASOLINE A/N: 139968	D1				23-1, 110-1
STORAGE TANK, UNDERGROUND, GASOLINE, 550 GALS, WITH VAPOR LOCK BALANCE RECOVERY SYSTEM A/N: 139968	D2				23-1, 109-1
Process 2 : INTERNAL COMBUSTION					
System 1 : INDUSTRIAL					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, LIQUIFIED PETROLEUM GAS, HERCULES, MODEL HXLE, 79 HP, 4 CYCLE, 6 CYLINDERS, NATURALLY ASPIRATED A/N: 198285	D3		NOX: PROCESS UNIT**	NOX: 139 LBS/1000 GAL LPG (1) [*RULE 2012, 7-12-1996*]	23-3, 135-1
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, GASOLINE, HERCULES, MODEL HXE, 227 HP, 4 CYCLE, 6 CYLINDERS, NATURALLY ASPIRATED A/N: 198308	D4		NOX: PROCESS UNIT**	NOX: 102 LBS/1000 GAL GASOLINE (1) [*RULE 2012, 7-12-1996*]	23-3, 135-1
System 2 : ELECTRIC GENERATION					
TURBINE, PEAKING UNIT, UNIT 5A1, IP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: 11203B	D5		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407, 4-2-1982*] ; NOX: 67.8 LBS/1000 GAL *IP5 (1) [RULE 2012, 7-12-1996]* ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012, 7-12-1996*]	23-4

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
GENERATOR, 126 MW, COMMON TO TURBINES 5B, 5C, 5D				PM: 0.1 GRAINS/SCF (5) [*RULE 409, 8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407, 4-2-1982*]	
TURBINE, PEAKING UNIT, UNIT 5A2, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR A/N:	D41		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407, 4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012, 7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012, 7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409, 8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407, 4-2-1982*]	23-4
TURBINE, PEAKING UNIT, UNIT 5B1, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: 11204B	D6		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407, 4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012, 7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012, 7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409, 8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407, 4-2-1982*]	23-4

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5C, 5D					
TURBINE, PEAKING UNIT, UNIT 5B2, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5C, 5D	D43		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012,7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012,7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407,4-2-1982*]	23-4
TURBINE, PEAKING UNIT, UNIT 5C1, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: 11205B GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5B, 5D	D7		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012,7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012,7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407,4-2-1982*]	23-4

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes *air toxic control* rule limit
(7) Denotes additional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
TURBINE, PEAKING UNIT, UNIT 5C2, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5B, 5D	D45		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012,7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012,7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407,4-2-1982*]	23-4
TURBINE, PEAKING UNIT, UNIT 5D1, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: 11206B GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5B, 5C	D8		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012,7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012,7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407,4-2-1982*]	23-4

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : INTERNAL COMBUSTION					
TURBINE, PEAKING UNIT, UNIT 5D2, JP-5, NATURAL GAS, PRATT AND WHITNEY, 420 MMBTU/HR WITH A/N: GENERATOR, 126 MW, COMMON TO TURBINES 5A, 5B, 5C	D47		NOX: PROCESS UNIT**	CO: 2000 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 67.8 LBS/1000 GAL JP5 (1) [*RULE 2012,7-12-1996*] ; NOX: 283.48 LBS/MMCF NATURAL GAS (1) [*RULE 2012,7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV JP5 (5) [*RULE 407,4-2-1982*]	23-4
Process 3 : PETROLEUM STORAGE					
STORAGE TANK, FIXED ROOF, INTERNAL FLOATING ROOF, JET FUEL (JP-5), 903000 GALS WITH A/N: 11207B FLOATING ROOF	D9				23-5, 166-2
STORAGE TANK, FIXED ROOF, DISPLACEMENT OIL, 1.0668E+06 GALS A/N: 11215B	D10				23-5, 166-1
STORAGE TANK, FIXED ROOF, DISPLACEMENT OIL, 600600 GALS A/N: 11214B	D11				23-5, 166-1

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3 : PETROLEUM STORAGE					
STORAGE TANK, FIXED ROOF, NO. NW, FUEL OIL, 5.376E+06 GALS A/N: 11208B	D12				23-5, 166-1
STORAGE TANK, FIXED ROOF, NO. NE, FUEL OIL, 5.376E+06 GALS A/N: 11209B	D13				23-5, 166-1
STORAGE TANK, FIXED ROOF, NO. WC, FUEL OIL, 5.376E+06 GALS A/N: 11210B	D14				23-5, 166-1
STORAGE TANK, FIXED ROOF, NO. EC, FUEL OIL, 5.376E+06 GALS A/N: 11211B	D15				23-5, 166-1
STORAGE TANK, FIXED ROOF, NO. SW, FUEL OIL, 1.331E+07 GALS A/N: 11212B	D16				23-5, 166-1
STORAGE TANK, FIXED ROOF, NO. SE, FUEL OIL, 1.327E+07 GALS A/N: 11213B	D17				23-5, 166-1
Process 4 : EXTERNAL COMBUSTION, ELECTRIC GENERATION					
BOILER, NO. 1, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 1200 MMBTU/HR, TANGENTIALLY FIRED, WITH STAGED COMBUSTION, OXYGEN CONTENT CONTROL WITH A/N: ~~246285~~ 329139	D18		NOX: MAJOR SOURCE**	CO: 500 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 10.75 LBS/1000 GAL FUEL OIL (1) [*RULE 2012, 7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV FUEL OIL (5) [*RULE 407,4-2-1982*]	23-6, 195-1

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes additional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 4 : EXTERNAL COMBUSTION, ELECTRIC GENERATION					
BURNER, TWENTY FOUR, FUEL OIL, NATURAL GAS, PEABODY, 1200 MMBTU/HR, WITH STAGED COMBUSTION 329139 ✓ GENERATOR, 132 MW 329139 ✓					
BOILER, NO. 2, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 1200 MMBTU/HR, TANGENTIALLY FIRED, WITH STAGED COMBUSTION, OXYGEN CONTENT CONTROL WITH A/N: ~~248386~~ 329137 ✓ BURNER, TWENTY FOUR, FUEL OIL, NATURAL GAS, PEABODY, 1200 MMBTU/HR, WITH STAGED COMBUSTION 329137 ✓ GENERATOR, 132 MW 329137 ✓	D20		NOX: MAJOR SOURCE**	CO: 500 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 10.75 LBS/1000 GAL FUEL OIL (1) [*RULE 2012, 7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409,8-7-1981*] ; SOX: 500 PPMV FUEL OIL (5) [*RULE 407,4-2-1982*]	23-6, 195-1
BOILER, NO. 3, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 2900 MMBTU/HR, TANGENTIALLY FIRED, WITH STAGED COMBUSTION, FLUE GAS RECIRCULATION, OXYGEN CONTENT CONTROL WITH A/N: 319556	D22		NOX: MAJOR SOURCE**	CO: 500 PPMV (5) [*RULE 407,4-2-1982*] ; NOX: 10.75 LBS/1000 GAL FUEL OIL (1) [*RULE 2012, 7-12-1996*]	23-2, 23-6, 195-1

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SO CAL EDISON CO (EIS USE)

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	Reclaim Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 4 : EXTERNAL COMBUSTION, ELECTRIC GENERATION					
BURNER, TWENTY FOUR, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 2900 MMBTU/HR, WITH STAGED COMBUSTION GENERATOR, 320 MW				PM: 0.1 GRAINS/SCF (5) [*RULE 409, 8-7-1981*] ; SOX: 500 PPMV FUEL OIL (5) [*RULE 407, 4-2-1982*]	
BOILER, NO. 4, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 2900 MMBTU/HR, TANGENTIALLY FIRED, WITH STAGED COMBUSTION, FLUE GAS RECIRCULATION, OXYGEN CONTENT CONTROL WITH A/N: 319554 BURNER, TWENTY FOUR, FUEL OIL, NATURAL GAS, COMBUSTION ENGINEERING, 2900 MMBTU/HR, WITH STAGED COMBUSTION GENERATOR, 320 MW	D24		NOX: MAJOR SOURCE**	CO: 500 PPMV (5) [*RULE 407, 4-2-1982*] ; NOX: 10.75 LBS/1000 GAL FUEL OIL (1) [*RULE 2012, 7-12-1996*] PM: 0.1 GRAINS/SCF (5) [*RULE 409, 8-7-1981*] ; SOX: 500 PPMV FUEL OIL (5) [*RULE 407, 4-2-1982*]	23-6, 195-1

* (1) Denotes RECLAIM emission factor
(2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes addditional command and control emission limit
(8) NSPS
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 115315 RRI ENERGY ETIWANDA, INC.
Last Inspection: 02/26/2010
SIC: 4911
Inspector: JL01 JOHN LEVY
Inspection Date: 02/26/2010
Location Address: 8996 ETIWANDA AVE, ETIWANDA 91739 Sector:SF
Mailing Address: 7251 AMIGO ST, LAS VEGAS 89119
Instruction: Verify inactivity of Equipment (Permit # F15163 and F15034)

MR: E
TS: TS-02 Cycle II RECLAIM/Title V
Facility Status: Active
Assignment No. 1146858
Disposition: Operating in Compliance at time of inspection

Contact: BRIAN C MC QUOWN (702) 4074861
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Suspended: N
Facility Team: C

RECLAIM: Y TITLE V: Y SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
503707				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	11/13/2009	BANKING/ PLAN GRANTED
500160				000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	07/01/2009	APPLICATION CANCELLED, KEEP ALL FEE
500161				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	07/01/2009	APPLICATION CANCELLED, KEEP ALL FEE
469521				555008	BCAT	TITLE V PERMIT ADMIN-AMENDMENT	05/23/2007	BANKING/ PLAN GRANTED
469522				555008	BCAT	TITLE V PERMIT ADMIN-AMENDMENT	05/23/2007	BANKING/ PLAN GRANTED
469526				010009	BCAT	BOILER UTILITY (>50 MW)	05/23/2007	APPLICATION CANCELLED, KEEP ALL FEE
469526				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2007	APPLICATION CANCELLED, KEEP ALL FEE
469527				010009	BCAT	BOILER UTILITY (>50 MW)	05/23/2007	APPLICATION CANCELLED, KEEP ALL FEE
469527				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2007	APPLICATION CANCELLED, KEEP ALL FEE
469524				248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	05/23/2007	APPLICATION REJECTED
468529				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	05/01/2007	ASSIGNED TO ENGINEER - CLASS III
468530				013009	BCAT	TURBINE ENGINE (>50 MW) NAT GAS ONLY	05/01/2007	APPLICATION DENIED
468531				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/01/2007	APPLICATION DENIED
468533				013009	BCAT	TURBINE ENGINE (>50 MW) NAT GAS ONLY	05/01/2007	APPLICATION DENIED
468534				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/01/2007	APPLICATION DENIED
468535				011005	BCAT	BOILER (>50 MMBTU/HR) NAT GAS ONLY	05/01/2007	APPLICATION DENIED
468536				210900	BCAT	STORAGE TANK AMMONIA	05/01/2007	APPLICATION DENIED
431109				555012	BCAT	TV/RECLAIM REVISION-NOEVAL	06/03/2004	BANKING/ PLAN GRANTED
426650				555002	BCAT	TITLE V PERMIT RENEWAL APPLICATION	02/24/2004	BANKING/ PLAN GRANTED
426651				555008	BCAT	TITLE V PERMIT ADMIN-AMENDMENT	02/24/2004	BANKING/ PLAN GRANTED
422331				555008	BCAT	TITLE V PERMIT ADMIN-AMENDMENT	10/21/2003	BANKING/ PLAN GRANTED
422332				666207	BCAT	R2009-POWER FAC PLANS	10/21/2003	BANKING/ PLAN GRANTED
416889				81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/24/2003	APPLICATION CANCELLED, KEEP ALL FEE
416890				81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/24/2003	APPLICATION CANCELLED, KEEP ALL FEE
416891				81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/24/2003	APPLICATION CANCELLED, KEEP ALL FEE
415897				012008	BCAT	TURBINE ENGINE (<=50 MW) EL PEAK NG ONLY	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEE
415897				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEE

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 115315 RRI ENERGY ETIWANDA, INC.
Last Inspection: 02/26/2010
SIC: 4911
Inspector: JL01 JOHN LEVY
Inspection Date: 02/26/2010
Location Address: 8996 ETIWANDA AVE, ETIWANDA 91739 Sector:SF
Mailing Address: 7251 AMIGO ST, LAS VEGAS 89119
Instruction: Verify inactivity of Equipment (Permit # F15163 and F15034)

MR: E
TS: TS-02 Cycle II RECLAIM/Title V
Facility Status:
Assignment No. 1146858
Disposition:

Contact: BRIAN C MC QUOWN (702) 4074861
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Suspended: N
Facility Team: C

RECLAIM: Y TITLE V: Y SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
415898				012008	BCAT	TURBINE ENGINE (<=50 MW) EL PEAK NG ONLY	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415898				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415899				012008	BCAT	TURBINE ENGINE (<=50 MW) EL PEAK NG ONLY	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415899				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415900				012008	BCAT	TURBINE ENGINE (<=50 MW) EL PEAK NG ONLY	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415900				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415901				210902	BCAT	STORAGE TANK FX RF W/CTL AMMONIA	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415902				81	CCAT	SELECTIVE CATALYTIC REDUCTION	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
415903				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	05/23/2003	APPLICATION CANCELLED, KEEP ALL FEI
413397				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	03/26/2003	BANKING/ PLAN GRANTED
413409				010009	BCAT	BOILER UTILITY (>50 MW)	03/26/2003	APPLICATION CANCELLED, KEEP ALL FEI
413409				81	CCAT	SELECTIVE CATALYTIC REDUCTION	03/26/2003	APPLICATION CANCELLED, KEEP ALL FEI
413410				010009	BCAT	BOILER UTILITY (>50 MW)	03/26/2003	APPLICATION CANCELLED, KEEP ALL FEI
413410				81	CCAT	SELECTIVE CATALYTIC REDUCTION	03/26/2003	APPLICATION CANCELLED, KEEP ALL FEI
408936				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	11/21/2002	BANKING/ PLAN GRANTED
408937				010009	BCAT	BOILER UTILITY (>50 MW)	11/21/2002	APPLICATION CANCELLED, KEEP ALL FEI
408938				010009	BCAT	BOILER UTILITY (>50 MW)	11/21/2002	APPLICATION CANCELLED, KEEP ALL FEI
403974				555009	BCAT	FACILITY PERMIT AMEND-RECLAIM/TITLE V	07/12/2002	BANKING/ PLAN GRANTED
403975				81	CCAT	SELECTIVE CATALYTIC REDUCTION	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403976				81	CCAT	SELECTIVE CATALYTIC REDUCTION	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403977				010209	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/DIST.FUEL	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403977				81	CCAT	SELECTIVE CATALYTIC REDUCTION	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403978				010209	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/DIST.FUEL	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403978				81	CCAT	SELECTIVE CATALYTIC REDUCTION	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
403979				210902	BCAT	STORAGE TANK FX RF W/CTL AMMONIA	07/12/2002	APPLICATION CANCELLED, KEEP ALL FEI
397047				666207	BCAT	R2009-POWER FAC PLANS	02/05/2002	BANKING/ PLAN GRANTED
390729				666207	BCAT	R2009-POWER FAC PLANS	09/06/2001	APPLICATION DENIED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 115315 RRI ENERGY ETIWANDA, INC.
Last Inspection: 02/26/2010
SIC: 4911
Inspector: JL01 JOHN LEVY
Inspection Date: 02/26/2010
Location Address: 8996 ETIWANDA AVE, ETIWANDA 91739 Sector:SF
Mailing Address: 7251 AMIGO ST, LAS VEGAS 89119
Instruction: Verify inactivity of Equipment (Permit # F15163 and F15034)

MR: E
TS: TS-02 Cycle II RECLAIM/Title V
Facility Status:
Assignment No. 1146858
Disposition:

Contact: BRIAN C MC QUOWN (702) 4074861
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Suspended: N
Facility Team: C

RECLAIM: Y TITLE V: Y SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
380499				555007	BCAT	Title V Permit Revision	01/25/2001	BANKING/ PLAN GRANTED
380419				010209	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/DIST.FUEL	01/24/2001	APPLICATION CANCELLED, KEEP ALL FEE
380420				010209	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/DIST.FUEL	01/24/2001	APPLICATION CANCELLED, KEEP ALL FEE
376937				555007	BCAT	Title V Permit Revision	11/16/2000	BANKING/ PLAN GRANTED
375849				81	CCAT	SELECTIVE CATALYTIC REDUCTION	10/17/2000	APPLICATION CHANGED FROM CLASS I -
375850				81	CCAT	SELECTIVE CATALYTIC REDUCTION	10/17/2000	APPLICATION CHANGED FROM CLASS I -
375847				010009	BCAT	BOILER UTILITY (>50 MW)	10/17/2000	APPLICATION CANCELLED, KEEP ALL FEE
375848				010009	BCAT	BOILER UTILITY (>50 MW)	10/17/2000	APPLICATION CANCELLED, KEEP ALL FEE
348649				666108	BCAT	COOLING TOWERS-HEX CHROME COMPLIANCE	11/06/1998	BANKING/ PLAN GRANTED
343082				555001	BCAT	INITIAL TITLE V PERMIT APPLICATION	07/21/1998	BANKING/ PLAN GRANTED
503709	G7574	03/09/2010	ACTIVE	044901	BCAT	I C E (50-500 HP) EM FIRE FGHT-DIESEL	11/13/2009	PERMIT TO OPERATE GRANTED
431106	G1545	02/18/2009	ACTIVE	010009	BCAT	BOILER UTILITY (>50 MW)	06/03/2004	PERMIT TO OPERATE GRANTED
431106	G1545	02/18/2009	ACTIVE	81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/03/2004	PERMIT TO OPERATE GRANTED
431107	G1546	02/18/2009	ACTIVE	010009	BCAT	BOILER UTILITY (>50 MW)	06/03/2004	PERMIT TO OPERATE GRANTED
431107	G1546	02/18/2009	ACTIVE	81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/03/2004	PERMIT TO OPERATE GRANTED
431108	G1542	02/18/2009	ACTIVE	81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/03/2004	PERMIT TO OPERATE GRANTED
431124	G1541	02/18/2009	ACTIVE	81	CCAT	SELECTIVE CATALYTIC REDUCTION	06/03/2004	PERMIT TO OPERATE GRANTED
376914	G1543	02/18/2009	ACTIVE	210901	BCAT	STORAGE TANK W/ VAPOR CONTROL AMMONIA	11/16/2000	PERMIT TO OPERATE GRANTED
375852	G1544	02/18/2009	ACTIVE	210901	BCAT	STORAGE TANK W/ VAPOR CONTROL AMMONIA	10/17/2000	PERMIT TO OPERATE GRANTED
409111	F57282	12/20/2002	ACTIVE	044501	BCAT	I C E (50-500 HP) EM FIRE FGHT-NG & LPG	11/21/2002	PERMIT TO OPERATE GRANTED
409114	F57281	12/20/2002	ACTIVE	044401	BCAT	I C E (50-500 HP) EM FIRE FGHT-GASOLINE	11/21/2002	PERMIT TO OPERATE GRANTED
338885	F15544	08/20/1998	INACTIVE	044401	BCAT	I C E (50-500 HP) EM FIRE FGHT-GASOLINE	03/31/1998	PERMIT TO OPERATE GRANTED
338895	F15545	08/20/1998	INACTIVE	010309	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	03/31/1998	PERMIT TO OPERATE GRANTED
338896	F15546	08/20/1998	INACTIVE	010309	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	03/31/1998	PERMIT TO OPERATE GRANTED
338888	F15186	07/30/1998	INACTIVE	012309	BCAT	TURBINE ENGINE (>50 MW) ELE PEAK GAS-RES	03/31/1998	PERMIT TO OPERATE GRANTED
338886	F15162	07/29/1998	INACTIVE	012309	BCAT	TURBINE ENGINE (>50 MW) ELE PEAK GAS-RES	03/31/1998	PERMIT TO OPERATE GRANTED
338890	F15167	07/29/1998	INACTIVE	012309	BCAT	TURBINE ENGINE (>50 MW) ELE PEAK GAS-RES	03/31/1998	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 115315 RRI ENERGY ETIWANDA, INC.
Last Inspection: 02/26/2010
SIC: 4911
Inspector: JL01 JOHN LEVY
Inspection Date: 02/26/2010
Location Address: 8996 ETIWANDA AVE, ETIWANDA 91739 Sector:SF
Mailing Address: 7251 AMIGO ST, LAS VEGAS 89119
Instruction: Verify inactivity of Equipment (Permit # F15163 and F15034)

MR: E
TS: TS-02 Cycle II RECLAIM/Title V
Facility Status:
Assignment No. 1146858
Disposition:

Contact: BRIAN C MC QUOWN (702) 4074861
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Suspended: N
Facility Team: C

RECLAIM: Y TITLE V: Y SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
338891	F15161	07/29/1998	INACTIVE	012309	BCAT	TURBINE ENGINE (>50 MW) ELE PEAK GAS-RES	03/31/1998	PERMIT TO OPERATE GRANTED
338892	F15157	07/29/1998	INACTIVE	300900	BCAT	STORAGE TANK PETROLEUM MIDDLE DISTILLATE	03/31/1998	PERMIT TO OPERATE GRANTED
338893	F15163	07/29/1998	INACTIVE	010309	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	03/31/1998	PERMIT TO OPERATE GRANTED
338883	F15036	07/24/1998	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	03/31/1998	PERMIT TO OPERATE GRANTED
338884	F15035	07/24/1998	INACTIVE	044501	BCAT	I C E (50-500 HP) EM FIRE FGHT-NG & LPG	03/31/1998	PERMIT TO OPERATE GRANTED
338894	F15034	07/24/1998	INACTIVE	010309	BCAT	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	03/31/1998	PERMIT TO OPERATE GRANTED
340465	F14540	06/23/1998	ACTIVE	000581	BCAT	SUMP, CONTAINMENT	05/07/1998	PERMIT TO OPERATE GRANTED

Report: On 2/26/10, I researched the current status of some equipment at RRI Energy Etiwanda, Inc.. The units involved were two Utility Boilers D18 (Permit #F15163) and D20 (Permit #15034). Based on my observations during inspections of the facility, inspection reports filed by Inspector Martha Thomas, and a phone conversation I had on 2/26 with Facility Manager Lee Moore, I determined that both of these Boilers are still at the site but have been rendered inoperable since 2003 by the removal of fuel meters and fuel lines.

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

FAC ID **115315** **INSPECTION OF FACILITIES WITH INACTIVE PERMITS** Sector **SF**

RELIANT ENERGY ETIWANDA INC.			8996 Etiwanda Ave., Etiwanda CA 91739
Last Inspection Date: **02/26/2010**	TS Code: **2**	Compliance Team **Refinery/Energy**	Business Status: ☒Active ☐Unknown ☐New Owner ☐Out of Business
Contact Name: **Brian McQuown**		Title: **Senior Air Quality Specialist**	Ph: (702) 407-4861

Eq. #	Applic. #	Equipment Description	Comment	On premises? (UTO Unable to Confirm)	In operation? (UTO Unable to Confirm)
1	338886	Turbine Engine (>50MW) Ele Peak	Permanently shut down 12/31/03	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
2	338888	Turbine Engine (>50MW) Ele Peak	Permanently shut down 12/31/03	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
3	338890	Turbine Engine (>50MW) Ele Peak	Permanently shut down 12/31/03	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
4	338891	Turbine Engine (>50MW) Ele Peak	Permanently shut down 12/31/03	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
5				☐Yes ☐No ☐UTC	☐Yes ☐No ☐UTC
6				☐Yes ☐No ☐UTC	☐Yes ☐No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No
Contact:	Title:	Phone:

Equipment permitted? ☐Yes ☐No	Equipment #					
	1	2	3	4	5	6
Permit #						

Comments: * Explain all "Unable to confirm" "(U)" entries in this section

Conclusions/Recommendations

Follow up recommended? ☐Yes ☒No	Conclusion: Equipment... (Parts and fuel lines removed)	☐ Removed from site ☒ On site, but rendered non-operable ☐ Operable, but not operated	☐Operated w/o permits ☐Operated under new ID ☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
John Levy	4/22/10	Rafael Reynoso	4/22/10

Attorney work product—prepared at the direction of and for Legal Department

FAC ID 115315

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector SF

RRI ENERGY ETIWANDA, INC.	8996 ETIWANDA AVE	ETIWANDA , 91739

Last Inspection Date:	TS Code:	Compliance Team	Business Status
6/20/2007	2	Ref/Energy	☒Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name	Title	Ph.
Lee Moore	Facility Manager	(909) 899 - 7241

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
	F15034	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OI	EQUIP REM'D PER E-MAIL DATED 12/10/04 (PO)	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
	F15163	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OI	EQUIPMENT REMOVED PER E-MAIL DATED 12/10/04 (P	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership?
		☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

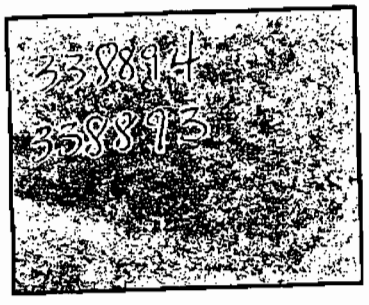
Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☒No		☐ Removed from site	☐Operated w/o permits
		☒ On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
John Low	2-26-10		2/26/10

Attorney work product—prepared at the direction of and for Legal Department



FAC ID 115315

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector SF

RRI ENERGY ETIWANDA, INC.	8996 ETIWANDA AVE	ETIWANDA , 91739

Last Inspection Date:	TS Code:	Compliance Team	Business Status
6/20/2007	2	Ref/Energy	☑Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name:	Title	Ph
Brian McBrown	Senior Engineer	(702) 407-4861

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation?
1	F15157	STORAGE TANK PETROLEUM MIDDLE DISTIL	INACT. PER C. PERRI 7/6/07 EQ. WS RMVD6	☑Yes ☐No ☐UTC	☐Yes ☑No ☐UTC
2	F15036	SERV STAT STORAGE & DISPENSING GASOLI	INACT. PER C. PERRI 7/6/07 EQ. WS RMVD	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☑No	☑Removed from site F15036	☐Operated w/o permits	
	☑On site, but rendered non-operable F15157	☐Operated under new ID	
	☐Operable, but not operated	☐Other	

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Joseph Liaw	1/8/10	Rafael Reynosa	1-13-10

Attorney work product—prepared at the direction of and for Legal Department

EPA Acid Rain data

Year/Quarter	Heat Input for Etiwanda Units: 1	2	3	4	Total	Heat Input for Mountainview Units: 1	2	Total	Heat In Riverside C 1	2
Q3-2000	1,427,886	1,493,767	4,647,163	5,007,280	12,576,097	869,389	709,533	1,578,922	33,798	44,825
Q4-2000	656,389	604,811	1,868,747	2,917,558	6,047,505	36,812	8,782	45,594	13,158	12,111
Q1-2001	758,546	1,711,869	5,156,009	1,547,796	9,174,220	193,898	93,648	287,546		
Q2-2001	896,559	990,228	67,946	1,213,682	3,168,416	57.5%	42.5%			
Fiscal Yr 2000	3,739,381	4,800,675	11,739,865	10,686,316	30,966,237	1,100,099	811,963	1,912,062	46,956	56,936
Q3-2001	447,637	608,640	2,168,882	3,381,036	6,606,195	83,759	46,198	129,956		
Q4-2001			1,436,872	851,942	2,288,814	84		84		
Q1-2002	296,664	312,917	2,449,501	754,256	3,813,339					
Q2-2002	99,834	140,508	519,783	571,351	1,331,477	64.5%	35.5%			
Fiscal Yr 2001	844,135	1,062,065	6,575,039	5,558,586	14,039,825	83,843	46,198	130,040	0	0
Q3-2002	386,444	252,671	2,500,984	1,466,874	4,606,972					
Q4-2002	136	160	499,291	227,228	726,814					
Q1-2003			152,341	249,068	401,410					
Q2-2003			199,328	162,826	362,154					
Fiscal Yr 2002	386,580	252,830	3,351,944	2,105,997	6,097,351	0	0	0	0	0
Q3-2003			1,459,890	1,052,682	2,512,572					
Q4-2003			94,406	97,737	192,143					
Q1-2004										
Q2-2004										
Fiscal Yr 2003	0	0	1,554,296	1,150,419	2,704,715	0	0	0	0	0
Grand Total	4,970,096	6,115,570	23,221,145	19,501,318	53,808,128	1,183,942	858,160	2,042,102	46,956	56,936

→ good agreement (-2.7%) w/ AER @ 1050 BTU/CF

(+1.3%) → good agreement w/ AER @ 1050 BTU/CF

put for anal Units: 3	4	Total
77,587	46,153	202,362
34,678	15,347	75,294
112,265	61,499	277,656
0	0	0
0	0	0
0	0	0
112,265	61,499	277,656

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: MOUNTAINVIEW GENERATING STATION
Facility ID: 121737
Facility Location: 2492 W SAN BERNARDINO AVE, REDLANDS, CA 92374
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 368334 Equipment Description: BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL BOILER #2

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different): 2001

Is the Equipment Still Shutdown? Yes Inspection Date: 4/22/2010 Inspected By: C. Aviles

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Boiler (Natural Gas)	FY (01-02)	329.80	FY (00-01)	5721.80
SOx	Boiler (Natural Gas)	FY (01-02)	26.00	FY (00-01)	450.65

Calculated Emissions for BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL BOILER #2

PM10 Reductions: (Year 1 + Year 2)/2 3026 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 238 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions calculated from Acid Rain reported heat input and AER. Mountainview purchased plant from SCE in 1998. Mountainview operated the plant from ~1999-2000, which is about two years prior to ceasing operations of the boilers in late 2001.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William A Thompson

Date: 05/07/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: MOUNTAINVIEW GENERATING STATION
Facility ID: 121737
Facility Location: 2492 W SAN BERNARDINO AVE, REDLANDS, CA 92374
Type of Business: POWER PLANT

Offset Credit ID No.:
PM10:
SOx:

Application No. 368336 Equipment Description: BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL BOILER #1

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different): 2002

Is the Equipment Still Shutdown? Yes Inspection Date: 4/22/2010 Inspected By: C. Aviles

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	Boiler (Natural Gas)	FY (01-02)	599.22	FY (00-01)	7741.20
SOx	Boiler (Natural Gas)	FY (01-02)	47.00	FY (00-01)	611.15

Calculated Emissions for BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL BOILER #1

PM10 Reductions: (Year 1 + Year 2)/2 4170 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 329 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions calculated from Acid Rain reported heat input and AER. Mountainview purchased plant from SCE in 1998. Mountainview operated the plant from ~1999-2000, which is about two years prior to ceasing operations of the boilers in late 2001.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William A Thompson

Date: 05/07/10

FAC ID **121737**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **SC**

Mountainview Generating Station			2492 W. San Bernardino Ave. Redlands, CA 92374
Last Inspection Date: **01/08/2010**	TS Code: **90**	Compliance Team: **Energy**	Business Status: ☒Active ☐Unknown ☐New Owner ☐Out of Business
Contact Name: **Kim Brown**		Title: **Safety & Environmental Spec.**	Ph: **909-478-1721**

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTO Unable to Confirm)	In operation? (UTO Unable to Confirm)
1	F31535	Boiler Utility (>50MW) Nat. Gas/Resid. Oil	Boiler Out of Service 05/2001, Made Inactive on Permit 12/31/02	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC
2	F31536	Boiler Utility (>50MW) Nat. Gas/Resid. Oil	Boiler Out of Service 05/2001, Made Inactive on Permit 12/31/02	☒Yes ☐No ☐UTC	☐Yes ☒No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No
Contact:	Title:	Phone:

Equipment permitted? ☐Yes ☐No	Equipment #					
	1	2	3	4	5	6
Permit #						

Comments:* **Explain all "Unable to confirm" "(U)" entries in this section**

Both boilers currently in the process of being removed from the site.

Conclusions/Recommendations

Follow up recommended? ☐Yes ☒No	Conclusion: Equipment...	☐ Removed from site ☒ On site, but rendered non-operable ☐ Operable, but not operated	☐Operated w/o permits ☐Operated under new ID ☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Christian Aviles	4-22-10	Rafael Reynoso	2/23/10

Attorney work product—prepared at the direction of and for Legal Department

Permitted Annual Emissions from Power Generating Facilities

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Boiler	1. Natural Gas (mmcf)	1,014.65	5.50	5,580.58			0.60	608.79	24.00	24,351.60	7.60	7,711.34
2	999. Boiler	1. Natural Gas (mmcf)	756.80	5.50	4,162.40			0.60	454.08	24.00	18,163.20	7.60	5,751.68
3													
4													
5													
6													
7													
8													
9													
10													
TOTAL													
			1771.45		9742.98 lbs		0.00 lbs		1062.87 lbs		42514.80 lbs		13463.02 lbs
					4.87 tons		0.00 tons		0.53 tons		21.26 tons		6.73 tons

PM10 = PMP = (7711.34 + 5751.68)/2 = 6733/Boiler

SOx = (608.79 + 454.08)/2 = 531/Boiler

using Acid Rain data.

PM10 Boiler #1 57.5% · 13463.02 = 7741.2

Boiler #2 42.5 · 13463.02 = 5721.8

SOx Boiler #1 57.5% · 1062.87 = 611.15

42.4% · 1062.87 = 450.65

Permitted Annual Emissions from Power Generating Facilities

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Boiler	1. Natural Gas (mmcf)	80.99	5.50	445.45			0.60	48.59	84.00	6,803.16	7.60	615.52
2	999. Boiler	1. Natural Gas (mmcf)	41.25	5.50	226.88			0.60	24.75	84.00	3,465.00	7.60	313.50
3													
4													
5													
6													
7													
8													
9													
10													
TOTAL													
			122.24		672.33 lbs		0.00 lbs		73.34 lbs		10268.16 lbs		929.02 lbs
					0.34 tons		0.00 tons		0.04 tons		5.13 tons		0.46 tons

OK

= 128,352 MM BTU

PM_{10}

Boiler #2 .355 · 929.02 = 329.80

Boiler #1 .645 · 929.02 = 599.22

SO_x

Boiler #2 .355 · 73.34 = 26

Boiler #1 .645 · 73.34 = 47

South Coast Air Quality Management District
P. O. Box 4944
Diamond Bar, CA 91765
(909) 396-2000

APPLICATION FOR PERMIT TO CONSTRUCT AND PERMIT TO OPERATE
FORM 400 - A

Non-Title V Facilities: This form must be accompanied by one or more 400-E-xx series form(s). Complete this side of form only.
Title V Facilities: Complete both sides of this form. Include additional forms as necessary.

NC/NOV NUMBER:
INSPECTOR **SECTOR**
ISSUE DATE

Section I - Company Information

LEGAL NAME OF OPERATOR
Mountainview Power Company, LLC

☒ IRS OR ☐ S. S. NUMBER
0 4 3 3 9 7 5 1 3

PERMIT TO BE ISSUED TO (SEE INSTRUCTIONS) Same as above

BUSINESS MAILING ADDRESS
25770 San Bernardino Ave, San Bernardino, CA 92408

PERMIT MAILING ADDRESS, IF DIFFERENT FROM BUSINESS MAILING ADDRESS
Same as above

TYPE OF ORGANIZATION
☒ Corporation ☐ Limited Partnership ☐ Government Entity
☐ Individual ☐ General Partnership ☐ Other (Fill in):

ARE YOU A SMALL BUSINESS? (SEE INSTRUCTIONS)
☐ Yes ☒ No

AVERAGE ANNUAL GROSS RECEIPTS $

NUMBER OF EMPLOYEES 33

IS YOUR BUSINESS 51 % OR MORE WOMAN/MINORITY OWNED?
☐ Yes ☒ No

THIS SECTION IS REQUIRED FOR ALL APPLICATIONS FOR NEW CONSTRUCTION OR MAJOR MODIFICATIONS.

ARE ALL MAJOR SOURCES UNDER SAME OWNERSHIP IN CALIFORNIA IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AIR POLLUTION CONTROL RULES? ☒ Yes ☐ No

ARE YOU THE OWNER OF THE EQUIPMENT UNDER THIS APPLICATION? ☒ Yes ☐ No ☐ IRS OR ☐ S. S. NUMBER OF OWNER

IF NO, ENTER THE LEGAL NAME OF OWNER

Section II - Facility Information

EQUIPMENT ADDRESS/LOCATION
25770 San Bernardino Ave
NUMBER/STREET
San Bernardino CA, 92408
CITY OR COMMUNITY ZIP CODE

FACILITY NAME
Mountainview Power Company, LLC

FACILITY ID NUMBER
115778

PRINT NAME OF CONTACT PERSON
George Hall

TITLE OF CONTACT PERSON
Plant Manager

TYPE OF BUSINESS AT THIS FACILITY
Power Plant

PRIMARY SIC CODE FOR THIS FACILITY
4911

NUMBER OF EMPLOYEES AT THIS FACILITY 33

CONTACT PERSON'S TELEPHONE NUMBER
(909) 478 - 7941

CONTACT PERSON'S FAX NUMBER
(909) 478 - 7910

CONTACT PERSON'S E-MAIL ADDRESS
Ghall@thermoecotek.com

4/N 340936

Section III - Application Type

DESCRIPTION OF EQUIPMENT: Existing Natural Gas-Fired Boiler (Device Number D1)

PREVIOUS PERMIT #(S): N/A F14766

APPLICATION FOR (SEE INSTRUCTIONS):
☐ NEW CONSTRUCTION ☐ MODIFICATION ☐ CHANGE OF LOCATION
☐ EXISTING EQUIPMENT WITHOUT PERMIT ☐ CHANGE OF PERMITTEE ☒ CHANGE OF PERMIT CONDITION
☐ EXISTING EQUIPMENT WITH EXPIRED PERMIT

ARE YOU SUBMITTING MULTIPLE APPLICATIONS FOR EQUIPMENT IDENTICAL TO THAT DESCRIBED ABOVE?
☒ Yes ☐ No

☐ **APPLICATION FOR NON-TITLE V EQUIPMENT PERMIT. CHECK THE SUPPLEMENTAL SERIES 400-E-xx FORM(S) SUBMITTED WITH THIS 400-A FORM:**

____ 400-E-1	• PARTICULATE MATTER (PM_{10}) CONTROL EQUIPMENT	____ 400-E-13	• INTERNAL COMBUSTION EQUIPMENT
____ 400-E-2	• VOLATILE ORGANIC COMPOUND (VOC) CONTROL EQUIPMENT	____ 400-E-14	• OPEN PROCESS TANK
____ 400-E-3	• SCRUBBER	____ 400-E-14a	• OPEN PROCESS TANK; PROCESS LINE
____ 400-E-4	• ABRASIVE BLASTING EQUIPMENT	____ 400-E-15	• PRINTING EQUIPMENT
____ 400-E-6	• DEGREASER	____ 400-E-16	• SOLID MATERIALS STORAGE EQUIPMENT
____ 400-E-7	• DRY CLEANING EQUIPMENT	____ 400-E-17	• SPRAY BOOTH/OPEN SPRAY
____ 400-E-8	• ETHYLENE OXIDE STERILIZER	____ 400-E-17a	• POWDER SPRAY BOOTH
____ 400-E-9	• EXTERNAL COMBUSTION EQUIPMENT	____ 400-E-18	• STORAGE TANK (LIQUID & GASEOUS MATL)
____ 400-E-10	• FOOD BROILER/FRYER	____ 400-E-19	• WAVE SOLDER MACHINE
____ 400-E-11	• FUEL DISPENSING AND STORAGE EQUIPMENT	____ 400-E-20	• ASBESTOS REMOVAL EQUIPMENT
____ 400-E-12	• GAS TURBINE	____	NONE • ADDITIONAL INFORMATION SUBMITTED AS REQUESTED ON FORM 400-E-GI

☒ **APPLICATION FOR TITLE V FACILITY PERMIT. PROVIDE INFORMATION REQUESTED ON REVERSE SIDE OF THIS FORM.**

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.
SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM:

TITLE OF RESPONSIBLE OFFICIAL OF FIRM:
PLANT MANAGER

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:
GEORGE HALL

RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER
(909) 478 - 7941

DATE SIGNED:
8/30/00

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.
SIGNATURE OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:

TITLE OF PREPARER:
SENIOR ENGINEER

TYPE OR PRINT NAME OF PREPARER, IF PREPARED BY PERSON OTHER THAN RESPONSIBLE OFFICIAL OF FIRM:
TOM ANDREWS (SIERRA RESEARCH)

PREPARER'S TELEPHONE NUMBER
(916) 444 - 6666

DATE SIGNED:

TITLE V FACILITIES ONLY: COMPLETE OTHER SIDE

AQMD USE ONLY	APPLICATION TRACKING #	PROCESS #	TYPE	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE:	VALIDATION
	396336	4	4/28/00	010309	$	

ENG.	ENG. A	CLASS	ASSIGNMENT	ENF.	CHECK/MONEY ORDER	AMOUNT
DATE 5-9-00	DATE 2238		UNIT EMPLOYEE	SECT.		

FORM 400-A, Rev. 10/97

2/N

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

Title Page	
Facility I.D.#:	121737
Revision #:	0
Date:	June 23, 2000

FACILITY PERMIT TO OPERATE

MOUNTAINVIEW POWER COMPANY LLC
25770 SAN BERNARDINO AVE
SAN BERNARDINO, CA 92408

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By _____
Carol Coy
Deputy Executive Officer
Engineering & Compliance

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

Table of Content
Facility I.D.#: 121737
Revision #: 0
Date: June 23, 2000

FACILITY PERMIT TO OPERATE
MOUNTAINVIEW POWER COMPANY LLC

TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	0	06/23/2000
B	RECLAIM Annual Emission Allocation	0	06/23/2000
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	0	06/23/2000
E	Administrative Conditions	0	06/23/2000
F	RECLAIM Monitoring and Source Testing Requirements	0	06/23/2000
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	0	06/23/2000
H	Permit To Construct and Temporary Permit to Operate	0	06/23/2000
I	Compliance Plans & Schedules	0	06/23/2000
J	Air Toxics	0	06/23/2000
K	Title V Administration	0	06/23/2000

Appendix

A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	0	06/23/2000
B	Rule Emission Limits	0	06/23/2000

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT	PAGES 12	PAGE 1
ENGINEERING DIVISION	APPL. NO. 368336	DATE 06/08/00
APPLICATION PROCESSING AND CALCULATIONS	PROCESSED BY CGP	CHECKED BY

PERMIT TO CONSTRUCT/OPERATE

COMPANY NAME AND ADDRESS:

Mountainview Power Company, LLC
25770 San Bernardino Ave.,
San Bernardino, CA 92408
SCAQMD ID#

Contact: George Hall, (909) 478-7941

EQUIPMENT DESCRIPTION:

Section D of the Mountainview Facility Permit, ID# 121737

Equipment	ID No.	Connected To	Source Type/ Monitoring Unit	Emissions	Conditions
Process 1: EXTERNAL COMBUSTION, POWER GENERATION					
BOILER #1, NATURAL GAS, COMBUSTION ENGINEERING, EIGHT BURNERS, PEABODY, ~~540~~ **680** MMBTU/HR WITH A/N ~~340936 364686~~ **368336** GENERATOR, 63 MW	D1		NOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.01 GR/SCF (5) [RULE 409, 8-7-1981]; SO2: (9) [40 CFR 72 – Acid Rain Provisions, 11-24-1997]	
BOILER 32, NATURAL GAS, COMBUSTION ENGINEERING, EIGHT BURNERS, PEABODY, ~~540~~ **680** MMBTU/HR WITH A/N: ~~340937 364669~~ **368334** GENERATOR, 63 MW	D2		NOX: MAJOR SOURCE	CO: 2000 PPMV (5) [RULE 407, 4-2-1982]; PM: 0.01 GR/SCF (5) [RULE 409, 8-7-1981]; SO2: (9) [40 CFR 72 – Acid Rain Provisions, 11-24-1997]	

FACILITY PERMIT TO OPERATE
MOUNTAINVIEW POWER COMPANY LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 1 : EXTERNAL COMBUSTION, POWER GENERATION					
BOILER, #1, NATURAL GAS, COMBUSTION ENGINEERING, EIGHT BURNERS, PEABODY, 680 MMBTU/HR WITH A/N: 368336 GENERATOR, 63 MW	D1		NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997]	
BOILER, #2, NATURAL GAS, COMBUSTION ENGINEERING, EIGHT BURNERS, PEABODY, 680 MMBTU/HR WITH A/N: 368334 GENERATOR, 63 MW	D2		NOX: MAJOR SOURCE**	CO: 2000 PPMV (5) [RULE 407,4-2-1982] ; PM: 0.1 GRAINS/SCF (5) [RULE 409,8-7-1981] ; SO2: (9) [40CFR 72 - Acid Rain Provisions,11-24-1997]	
Process 3 : CONSUMER FLEET REFUELING					
STORAGE TANK, UNDERGROUND, GASOLINE, WITH VAPOR LOCK BALANCE RECOVERY SYSTEM, 2000 GALS A/N: 364670	D7				23-1, 109-1, 330-1
FUEL DISPENSING NOZZLE, BALANCE TYPE PHASE II CONTROL, GASOLINE A/N: 364670	D8				23-1, 110-1, 330-1

* (1) Denotes RECLAIM emission factor (2) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS,etc.)
(9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

TITLE V APPLICATION CERTIFICATION

- TO BE COMPLETED BY TITLE V FACILITIES ONLY -

Section IV - Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: ____/____/____
   c. ☒ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☒ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific Form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

Section V - Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

1	500-A2	_____	500-F1
_____	500-B	_____	500-F2
1	500-C1	_____	500-F3
_____	500-C2	_____	500-F4
_____	500-D	_____	Other (specify): _____

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year _____
   d ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

AQMD USE ONLY	APPLICATION TYPE	30 DAY PUBLIC NOTICE START DATE	30 DAY PUBLIC NOTICE END DATE	PUBLIC HEARING DATE	45-DAY EPA REVIEW START DATE	45-DAY EPA REVIEW END DATE
	INITIAL, RENEWAL & SIGNIFICANT					
	MINOR & DEMINIMUS					
	ESTABLISH GENERAL PERMIT					

USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:

APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE:	VALIDATION
____ ____ ____ ____ ____ ____			____ ____ ____ ____ ____ ____ / ____ ____	$	

ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

FORM 400-A, Rev. 10/97

South Coast Air Quality Management District
P. O. Box 4944
Diamond Bar, CA 91765
(909) 396-2000

Form 400-A must accompany all submittals.

EXTERNAL COMBUSTION EQUIPMENT
FORM 400 - E - 9

For:	Change of location, equipment w/expired permit, or change of operator:	ALL other application types: Submit all other information requested and:
Title V Facilities	Complete Sections I, IV, & V	Complete Sections I, II, III, IV, & V
All Other Facilities	Complete Sections I & IV	Complete Sections I, II, III, & IV

Section I - Facility/Application Information

1. Business Name: Mountainview Power Company LLC Facility ID: 121737
2. The requested application is for a(n): Date of Occurrence: 04/01/00
   a. ☐ New Construction b. ☐ Change of Location
   c. ☐ Modification of Equipment/Process d. ☐ Existing Equipment with Expired Permit
   e. ☐ Existing Equipment Operating without a Permit; Initial Operation Date: ___/___/___
   f. ☒ Change of Condition(s); Specify the change of condition(s) requested: Equipment rating
   g. ☐ Change of Operator; List previous name of operator and Facility ID #:
3. If equipment has previous written permit, list Permit Number or Device Number(s): Device Number D1
   a. Write Rule 301 description of this equipment/process: Boiler, Other Fuel, > 50 MMBtu/hr
4. Are multiple applications being submitted for similar equipment (as defined in Rule 301) described below?
   ☐ No ☒ Yes; If Yes, Number of Multiple Units: 2
5. Have you been issued a Notice to Comply (NTC) or Notice of Violation (NOV) for this equipment?
   ☒ No ☐ Yes; NTC #: _____ NOV #: _____ Issue Date: ___/___/___
6. For New Construction, Modification, or Change of Location:
   Estimated Construction Start Date: 06/01/00 Estimated Completion Date: 06/01/00
7. For this project, has a California Environmental Quality Act (CEQA) document been required by another governmental agency? ☒ No ☐ Yes, for agency (Provide name):
   a. Are you required by another governmental agency to have a permit? ☒ No ☐ Yes, for agency (Provide name) See AFC filed with CEC
   b. Are any of these permits discretionary? ☒ No ☐ Yes; list:
8. Do you claim confidentiality of data? ☒ No ☐ Yes (attach explanation)
9. Is the equipment located within 1,000 feet from the outer boundary of a school? ☒ No ☐ Yes
   (If Yes, complete a. for all public or private school, grade K-12, within a 1/4 mile radius of facility property)
   a. School Name(s): N/A Telephone No(s): N/A
   School Address(s): N/A

Section II.A - General Equipment Information (Complete all items in Section II.A and ...)

1. Equipment Type (check only one, a separate Form 400-E-9 must be submitted for each equipment type. If your equipment is not listed, use Form 400-E-GI):
   a. ☒ Boiler d. ☐ Heater
   b. ☐ Dryer (Complete Section II.B) e. ☐ Kiln
   c. ☐ Furnace (Complete Section II.C) f. ☐ Oven (Complete Section II. D)
2. Equipment Manufacturer: Combustion Engineering Inc Model No.: N/A Serial No.: N/A
3. Max. Heat Input Rating (Based on Higher Heating Value): 680 MM BTU per hour or KW (circle units)
4. Burner Manufacturer, Model No.: Peabody
   Number of Burners: 8; Max. Rating Per Burner 85 MM BTU per hour or KW (circle units)
5. Fuels to be Burned in the Equipment (check the primary fuel and check all the secondary fuels burned):

	Primary	Secondary		Primary	Secondary
a.	☒	☒ Natural Gas	e.	☐	☐ LPG
b.	☐	☐ Digester Gas*	f.	☐	☐ Refinery Gas*
c.	☐	☐ Fuel Oil (Specify Grade):	g.	☐	☐ Other* (Specify):
d.	☐	☐ Landfill Gas*			

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

AQMD USE ONLY	APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE: ___/___	FEE SCHEDULE: $	VALIDATION
ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

6. Type of Controls (check all that apply):
   a. ☐ Low NOx Burner
   b. ☐ Flue Gas Recirculation
   c. ☐ Selective Catalytic Reduction (SCR) [1]
   d. ☐ CO Catalyst
   e. ☐ Oxygen Trim
   f. ☐ Thermal DeNOx (Non-Selective Catalytic Reduction, NSCR)[1]
   g. ☒ Other (specify): Burners Out of Service

[1] A separate permit is required, please see Form 400-E-GI for instructions.

Section II.B - Dryer Information (Complete only if equipment type is a dryer)

7. Dryer Type:
   a. ☐ Centrifugal
   b. ☐ Chip
   c. ☐ Fluidized Bed
   d. ☐ Rotary
   e. ☐ Spray
   f. ☐ Other: _____

Section II.C - Furnace Information (Complete only if equipment type is a furnace)

8. Furnace Type:
   a. ☐ Annealing
   b. ☐ Burnoff
   c. ☐ Calcining
   d. ☐ Crucible
   e. ☐ Cupola
   f. ☐ Diffusion
   g. ☐ Electric
   h. ☐ Forge
   i. ☐ Holding
   j. ☐ Heat Treating
   k. ☐ Melting
   l. ☐ Reverbatory
   m. ☐ Pot
   n. ☐ Rotary
   o. ☐ Sweating
   p. ☐ Oxide Growth
9. For burnoff furnace, is there an integral afterburner connected? ☐ No ☐ Yes
   If yes, specify afterburner rating with units: _____ Fuel: _____
10. Metal Melting Process Rates:
    a. Demagging: _____ lbs/hr b. Degassing: _____ lbs/hr c. Chlorination: _____ lbs/hr

Section II.D - Oven Information (Complete only if equipment is an oven)

11. Oven Type:
    a. ☐ Bakery
    b. ☐ Baking
    c. ☐ Curing
    d. ☐ Drying
    e. ☐ Fluidized Bed
    f. ☐ Stripping
    g. ☐ Solder Reflow
    h. ☐ Roasting (specify type): _____
12. Method of Heating: a. ☐ Direct Fired b. ☐ Indirect Fired (specify): _____
13. Bakery Ovens: Yeast Percentage: _____%; Fermentation Time: _____ hours
14. Types of coatings/inks applied to articles dried (Attach Material Safety Data Sheets):
    a. Enamel: _____ gals/day
    b. Lacquer: _____ gals/day
    c. Powder: _____ lbs/day
    d. Other: _____ gals/day
    Coating/Printing Equipment Permit or Device #: _____

Section III - Operation Information (Complete all items)

1. Provide emissions information with data to substantiate, if available.
2. Operating Temperature (N/A to Boilers and Heaters): Normal: N/A °F Maximum: N/A °F
3. Average Load : _____ % or Average Firing Rate: 680 MM Btu/hr
4. List all materials, metals, alloys, or feedstock which are processed, burned, or dried in equipment:

Material, Metal, Alloy, or Feedstock (e.g. aluminum, glass, dough)	Weight or Volume (%)	Process (PR), Pull (PL), or Charge (C) Rate Specify rate type (lbs/hr)
N/A	N/A	N/A

5. Operating Schedule: weeks/year 52 days/week 7
   Max. Hrs. 24 Average Hrs. 24

Section IV - Applicant Certification Statement

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: | TITLE OF RESPONSIBLE OFFICIAL OF FIRM: PLANT MANAGER

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:	RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER	DATE SIGNED:
GEORGE GALL	(909) 478-7900	/ /

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF PREPARER: | TITLE OF PREPARER: SENIOR ENGINEER

TYPE OR PRINT NAME OF PREPARER:	PREPARER'S TELEPHONE NUMBER	DATE SIGNED:
TOM ANDREWS	(916) 444 - 6666	/ /

Section V - Title V Information: *Fill out if AQMD has identified your facility as a Title V facility*

The requested application involves a(n): (check all that apply)

a. ☐ Minor Permit Revision
   ☐ Group Processing (check only if applicable)
b. ☐ DeMinimis Significant Permit Revision
c. ☐ Significant Permit Revision
d. ☐ Non-Title V Permit Processing (Available until initial Title V permit is issued)
e. ☐ Permit Shield (complete Form 500-D)
f. ☐ Streamlined Permit Conditions
g. ☐ Alternative Operating Scenario (AOS)
h. ☐ Other (specify): _____

TITLE V APPLICATION CERTIFICATION

- TO BE COMPLETED BY TITLE V FACILITIES ONLY -

Section IV - Title V Application

1. This is an application for a(n) (Check all applicable boxes and provide the requested information as appropriate):
   a. ☐ Initial Title V Permit
   b. ☐ Permit Renewal: Provide current permit expiration date: ____/____/____
   c. ☒ Administrative Permit Revision (Check all that apply)
      ☐ Change of Ownership. (Complete and attach equipment-specific Form 400-E-xx series forms)
      ☒ Change of Facility Information
      ☐ Other, Please specify: _____
   d. ☐ Other (Complete and attach equipment specific Form 400-E-XX series form(s) to this form if your application involves permit action for new construction, change of location, non-administrative permit revision, alternative operating scenario (AOS), permit shield, streamlined permit conditions, or temporary source permit.)
2. Is this facility required to prepare a Risk Management Plan (RMP) for another agency? ☐ Yes ☐ No

Section V - Title V Submittal Checklist

1. Enter the quantity of each type form submitted in the space provided:

1	500-A2	_____	500-F1
_____	500-B	_____	500-F2
1	500-C1	_____	500-F3
_____	500-C2	_____	500-F4
_____	500-D	_____	Other (specify): _____

2. Additional information referenced in this application submitted (Check **ALL** that apply):
   a. ☐ Existing Facility Permit
   b. ☐ Preliminary Facility Permit
   c. ☐ EFB Report for Year _____
   d ☐ None
   e. ☐ Other (Specify): _____
3. Supplemental information included with this application submittal (Check **ALL** that apply):
   a. ☐ Facility Plot Plan
   b. ☐ MSDS Sheet(s)
   c. ☐ None
   d. ☐ Other (Specify): _____

AQMD USE ONLY	APPLICATION TYPE	30 DAY PUBLIC NOTICE START DATE	30 DAY PUBLIC NOTICE END DATE	PUBLIC HEARING DATE	45-DAY EPA REVIEW START DATE	45-DAY EPA REVIEW END DATE
	INITIAL, RENEWAL & SIGNIFICANT					
	MINOR & DEMINIMUS					
	ESTABLISH GENERAL PERMIT					

USE THE SECTIONS BELOW FOR TITLE V INITIAL AND RENEWAL APPLICATIONS ONLY:

APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE:	VALIDATION
— — — — — — — —			— — — — — — — / — —	$	

ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

FORM 400-A, Rev. 10/97

South Coast Air Quality Management District
P. O. Box 4944
Diamond Bar, CA 91765
(909) 396-2000

Form 400-A must accompany all submittals.

EXTERNAL COMBUSTION EQUIPMENT
FORM 400 - E - 9

For:	Change of location, equipment w/expired permit, or change of operator:	ALL other application types: Submit all other information requested and:
Title V Facilities	Complete Sections I, IV, & V	Complete Sections I, II, III, IV, & V
All Other Facilities	Complete Sections I & IV	Complete Sections I, II, III, & IV

Section I - Facility/Application Information

1. Business Name: Mountainview Power Company LLC Facility ID: 121737
2. The requested application is for a(n): Date of Occurrence: 04/01/00
   a. ☐ New Construction b. ☐ Change of Location
   c. ☐ Modification of Equipment/Process d. ☐ Existing Equipment with Expired Permit
   e. ☐ Existing Equipment Operating without a Permit; Initial Operation Date: ___/___/___
   f. ☒ Change of Condition(s); Specify the change of condition(s) requested: Equipment rating
   g. ☐ Change of Operator; List previous name of operator and Facility ID #:
3. If equipment has previous written permit, list Permit Number or Device Number(s): Device Number D2
   a. Write Rule 301 description of this equipment/process: Boiler, Other Fuel, > 50 MMBtu/hr
4. Are multiple applications being submitted for similar equipment (as defined in Rule 301) described below?
   ☐ No ☒ Yes; If Yes, Number of Multiple Units: 2
5. Have you been issued a Notice to Comply (NTC) or Notice of Violation (NOV) for this equipment?
   ☒ No ☐ Yes; NTC #: _____ NOV #: _____ Issue Date: ___/___/___
6. For New Construction, Modification, or Change of Location:
   Estimated Construction Start Date: 06/01/00 Estimated Completion Date: 06/01/00
7. For this project, has a California Environmental Quality Act (CEQA) document been required by another governmental agency? ☒ No ☐ Yes, for agency (Provide name):
   a. Are you required by another governmental agency to have a permit? ☒ No ☐ Yes, for agency (Provide name) See AFC filed with CEC
   b. Are any of these permits discretionary? ☒ No ☐ Yes; list:
8. Do you claim confidentiality of data? ☒ No ☐ Yes (attach explanation)
9. Is the equipment located within 1,000 feet from the outer boundary of a school? ☒ No ☐ Yes
   (If Yes, complete a. for all public or private school, grade K-12, within a 1/4 mile radius of facility property)
   a. School Name(s): N/A Telephone No(s): N/A
   School Address(s): N/A

Section II.A - General Equipment Information (Complete all items in Section II.A and ...)

1. Equipment Type (check only one, a separate Form 400-E-9 must be submitted for each equipment type. If your equipment is not listed, use Form 400-E-GI):
   a. ☒ Boiler d. ☐ Heater
   b. ☐ Dryer (Complete Section II.B) e. ☐ Kiln
   c. ☐ Furnace (Complete Section II.C) f. ☐ Oven (Complete Section II. D)
2. Equipment Manufacturer: Combustion Engineering Inc Model No.: N/A Serial No.: N/A
3. Max. Heat Input Rating (Based on Higher Heating Value): 680 MM BTU per hour or KW (circle units)
4. Burner Manufacturer, Model No.: Peabody
   Number of Burners: 8; Max. Rating Per Burner 85 MM BTU per hour or KW (circle units)
5. Fuels to be Burned in the Equipment (check the primary fuel and check all the secondary fuels burned):

	Primary	Secondary		Primary	Secondary
a.	☒	☒ Natural Gas	e.	☐	☐ LPG
b.	☐	☐ Digester Gas*	f.	☐	☐ Refinery Gas*
c.	☐	☐ Fuel Oil (Specify Grade):	g.	☐	☐ Other* (Specify):
d.	☐	☐ Landfill Gas*			

* (If Digester Gas, Landfill Gas, Refinery Gas, and/or Other are checked, attach fuel analysis indicating higher heating value and sulfur content).

AQMD USE ONLY	APPLICATION/TRACKING #	PROJECT #	TYPE B C D	EQUIPMENT CATEGORY CODE:	FEE SCHEDULE:	VALIDATION
					$	

ENG. A R DATE	ENG. A R DATE	CLASS I III IV	ASSIGNMENT UNIT ENGINEER	ENF. SECT.	CHECK/MONEY ORDER #	AMOUNT $

6. Type of Controls (check all that apply):
   a. ☐ Low NOx Burner
   b. ☐ Flue Gas Recirculation
   c. ☐ Selective Catalytic Reduction (SCR) [1]
   d. ☐ CO Catalyst
   e. ☐ Oxygen Trim
   f. ☐ Thermal DeNOx (Non-Selective Catalytic Reduction, NSCR)[1]
   g. ☒ Other (specify): Burners Out of Service

[1] A separate permit is required, please see Form 400-E-GI for instructions.

Section II.B - Dryer Information (Complete only if equipment type is a dryer)

7. Dryer Type:
   a. ☐ Centrifugal
   b. ☐ Chip
   c. ☐ Fluidized Bed
   d. ☐ Rotary
   e. ☐ Spray
   f. ☐ Other: _____

Section II.C - Furnace Information (Complete only if equipment type is a furnace)

8. Furnace Type:
   a. ☐ Annealing
   b. ☐ Burnoff
   c. ☐ Calcining
   d. ☐ Crucible
   e. ☐ Cupola
   f. ☐ Diffusion
   g. ☐ Electric
   h. ☐ Forge
   i. ☐ Holding
   j. ☐ Heat Treating
   k. ☐ Melting
   l. ☐ Reverbatory
   m. ☐ Pot
   n. ☐ Rotary
   o. ☐ Sweating
   p. ☐ Oxide Growth
9. For burnoff furnace, is there an integral afterburner connected? ☐ No ☐ Yes
   If yes, specify afterburner rating with units: _____ Fuel: _____
10. Metal Melting Process Rates:
    a. Demagging: _____ lbs/hr b. Degassing: _____ lbs/hr c. Chlorination: _____ lbs/hr

Section II.D - Oven Information (Complete only if equipment is an oven)

11. Oven Type:
    a. ☐ Bakery
    b. ☐ Baking
    c. ☐ Curing
    d. ☐ Drying
    e. ☐ Fluidized Bed
    f. ☐ Stripping
    g. ☐ Solder Reflow
    h. ☐ Roasting (specify type): _____
12. Method of Heating: a. ☐ Direct Fired b. ☐ Indirect Fired (specify): _____
13. Bakery Ovens: Yeast Percentage: _____%; Fermentation Time: _____ hours
14. Types of coatings/inks applied to articles dried (Attach Material Safety Data Sheets):
    a. Enamel: _____ gals/day
    b. Lacquer: _____ gals/day
    c. Powder: _____ lbs/day
    d. Other: _____ gals/day
    Coating/Printing Equipment Permit or Device #: _____

Section III - Operation Information (Complete all items)

1. Provide emissions information with data to substantiate, if available.
2. Operating Temperature (N/A to Boilers and Heaters): Normal: N/A °F Maximum: N/A °F
3. Average Load : _____ % or Average Firing Rate: 680 MM Btu/hr
4. List all materials, metals, alloys, or feedstock which are processed, burned, or dried in equipment:

Material, Metal, Alloy, or Feedstock (e.g. aluminum, glass, dough)	Weight or Volume (%)	Process (PR), Pull (PL), or Charge (C) Rate Specify rate type (lbs/hr)
N/A	N/A	N/A

5. Operating Schedule: weeks/year 52 days/week 7
   Max. Hrs. 24 Average Hrs. 24

Section IV - Applicant Certification Statement

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF RESPONSIBLE OFFICIAL OF FIRM: TITLE OF RESPONSIBLE OFFICIAL OF FIRM: PLANT MANAGER

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL OF FIRM:	RESPONSIBLE OFFICIAL'S TELEPHONE NUMBER	DATE SIGNED:
GEORGE GALL	(909) 478-7900	/ /

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT.

SIGNATURE OF PREPARER: TITLE OF PREPARER: SENIOR ENGINEER

TYPE OR PRINT NAME OF PREPARER:	PREPARER'S TELEPHONE NUMBER	DATE SIGNED:
TOM ANDREWS	(916) 444 - 6666	/ /

Section V - Title V Information: *Fill out if AQMD has identified your facility as a Title V facility*

The requested application involves a(n): (check all that apply)

a. ☐ Minor Permit Revision
   ☐ Group Processing (check only if applicable)
b. ☐ DeMinimis Significant Permit Revision
c. ☐ Significant Permit Revision
d. ☐ Non-Title V Permit Processing (Available until initial Title V permit is issued)
e. ☐ Permit Shield (complete Form 500-D)
f. ☐ Streamlined Permit Conditions
g. ☐ Alternative Operating Scenario (AOS)
h. ☐ Other (specify): _____

SCAQMD COMPUTER ASSISTED PERMIT PROCESSING (CAPPS)

FEE DATA - SUMMARY SHEET

Application No : 368336 IRS/SS No: 000-00-0000
Previous Permit No: F14766 Previous Application No: 340936

Company Name : MOUNTAINVIEW POWER COMPANY LLC Facility ID: 121737
Equipment Street: 25770 SAN BERNARDINO AVE, SAN BERNARDINO, CA 92408
Equipment Desc. : BOILER UTILITY (>50 MW) NG/RESIDUAL OIL

Equipment Type : BASIC Fee Charged by: B-CAT
B-CAT NO. : 010309 C-CAT NO. : 00 Schedule: H
Facility Zone : 34 Deemed Compl. Date: 5/24/2000 PUBLIC NOTICE: NO

APPLICATION FILING FEE (PRIOR TO 7/1/90 & PLANS FEE) ..... $ 0.00
EVALUATION FEE PRE-PAID (POST 7/1/90) ..... $ 5,072.55

Evaluation Type: ALTERATION/MODIFICATION (PC/PO) Small Business?: NO
Disposition : APPROVE PC/PO P/O NO P/C Penalty?: NO
Reference App. No: 368334 Identical Permit Unit?: YES

1. PERMIT PROC. FEE* (APPL FILED PRIOR TO 7/1/90) SUMMARY PERMIT FEE RATES * $ LESS FILING FEE PAID $	$	0.00
2. EIR	$	0.00
3. AIR QUALITY ANALYSIS (TABLE II FEE)	$	0.00
4. HEALTH RISK ASSESSMENT (TABLE II FEE)	$	0.00
5. SIGNIFICANT PROJECT REVIEW (TABLE II FEE)	$	0.00
6. SOURCE TEST REVIEW: (RULE 306(i) FEE) $437.1 + [NO HRS @ $81.9/HR]	$	0.00
7. CEMS REVIEW (TABLE II FEE)	$	0.00
8. TIME AND MATERIALS (FOR PLAN APPLICATIONS ONLY) 0.00 HRS @ $ 81.90/HR	$	0.00
9. PERMIT PROCESSING FEE ADJUSTMENT** ADDITIONAL FEE TABLE I FEE* $ 5,072.55 LESS EVAL. FEE PAID $ 5,072.55 ...	$	0.00
10. OTHER FEES** (INCLUDING CANCELLATION)	$	0.00
TOTAL:	$	0.00

COMMENTS:

Recommended By: CP01 DATE: 5/24/2000 REVIEWING ENG: JL DATE: JUN 0 8 2000

F31692

* ADJUSTED FOR SMALL BUSINESS, IDENTICAL EQUIPMENT, AND P/O NO P/C PENALTY
** ADJUSTED FOR INCORRECT FEE SUBMITTAL, SMALL BUSINESS, IDENTICAL EQUIPMENT, AND P/O NO P/C PENALTY

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • http://www.aqmd.gov

June 23, 2000

Mr. George Hall
Mountainview Power Company, LLC
25770 San Bernardino Avenue
San Bernardino, CA 92408

Subject: RECLAIM/Title V Facility Permit – ID# 121737

Dear Mr. Hall:

Please find attached the revised version of your Facility Permit, for equipment located at 25770 San Bernardino Ave., San Bernardino 92408. The revised permit reflects the Change of Ownership from Mountainview Power Company to Mountainview Power Company, LLC. Additionally, the permit reflects the modification to Boilers 1 and 2, approved for Permit to Operate. The corresponding application numbers are summarized in the table below:

Application #	Description	Device ID	Process ID
364668	Boiler #1 Change of Ownership	D1	1
364669	Boiler #2 Change of Ownership	D2	1
364670	Gasoline Dispensing Change of Ownership	D7, D8	3
368334	Boiler #2 Heat Input Modification	D2	1
368336	Boiler #1 Heat Input Modification	D1	1
366164	Title V Administrative Revision	n/a	n/a

Please review the permit carefully. Insert the enclosed section into your Facility Permit and discard the earlier version. Questions concerning changes to your permit should be directed to Mr. Chris Perri at (909) 396-2696.

Sincerely,

Pang Mueller
Senior Manager
Refinery, Energy, & RECLAIM Administration Team
Engineering and Compliance

CM:JTY:cgp

MVPC cover

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
STATIONARY SOURCE COMPLIANCE

FACILITY PERMIT REVIEW RECORD

FACILITY ID#: 121737 NAME: Mountainview Power, LLC

CEQA Review: [X]N/A [ ]NOE or Addendum* [ ]EIR*
* Permits require AQACS's review/approval.

Sections Issued	Revision No.	Revision Date
D		

Application No.:	364668, 364669, 364670	Change of Ownership
	368334, 368336	Boilers 1 and 2 Heat Rate Mod
	366164	Title V Administrative Revision

PERMIT ENGINEER: Chris Perri DATE: June 8, 2000

SR. ENGR REVIEW: JPy DATE: 623-00 Final Print

AQACS APPROVAL: _____ DATE: _____

SR. MGR APPROVAL: _____
DATE: 6/8/00

Forwarded to P/S OR Reproduction/Distribution

By: _____ Date: _____ Completed by: _____ Date: 6/28/00

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by: _____ Date: 6/28/00

JC:facrevfm
11/6/97

(HCN(C:\RECLAIM\RECLAIM COVERS\11197HAR3.DOC)

EQUIPMENT LOCATION:

25770 San Bernardino Avenue
San Bernardino, CA 92408

BACKGROUND:

Mountainview Power currently operates Boilers #1 and #2 under P/O's F14766 and F14767 respectively. These permits were issued as a Change of Ownership when Mountainview bought the facility from SCE in 1998. The boilers are listed as Devices 1 and 2 in the Mountainview facility permit. Since the original Change of Ownership from SCE (ID# 1026) to Mountainview, there has been another ownership change – from Mountainview Power Company (facility ID# 115778) to Mountainview Power Company, LLC (ID# 121737). The change of ownership occurred when Mountainview Power formed a limited liability corporation, and transferred equipment to that new corporation.

The application numbers for the latest C/O are 364668 (boiler #1) and 364669 (boiler #2). The C/O applications will be processed prior to this rating change modification so that the reissued facility permit will reflect the new ID# 121737.

Mountainview has submitted these 2 change of condition applications to have the boiler ratings changed. Their claim is that the rating change is not due to a physical modification, nor to decreased efficiency of the boilers, but rather the existing rating listed on the permit has been incorrect from the time the original permits were issued. They have presented historical data to support their claim.

Discussion of Submitted Data

The following data was submitted by Mountainview, and is included in the file:

- Old Fuel Meter Specification Sheets

These 2 fuel meter spec sheets for the old meters date back to 1956.

- Operator Log Sheets

These sheets show meter readings taken by the operator using the old fuel meters, and readings off the pulse meter showing MW output. The dates for which data is presented are June 6 and 10, and July 11, 12, and 13 of 1999 for each unit. These dates correspond to the submitted CEMS system printout data.

- CEMS System Printouts

These are the CEMS system printouts showing hourly fuel use using the new fuel meters, stack flow, NOx and O2 for the same dates as above.

- Performance/Source Test Reports

Data from 6 performance tests conducted by SCE on various dates from the late 70's to mid 80's. These tests show boiler operating parameters during maximum firing conditions including gross and net load in MW and fuel flow. Also included are results from 4 AQMD source tests performed in 1983 and 1984. All of these tests were done prior to the new fuel meters being installed.

- Natural Gas Analysis

Shows fuel composition and HHV for gas supplied to Mountainview during February and March 1999.

Mountainview used the old source tests and performance test data to show the historical maximum fuel use as measured by the old fuel meters. They then used the CEMS printouts and operator log sheets to show that the old fuel meters are biased low compared to the new fuel meters which were installed as part of the Reclaim CEMS in 1993 (the old fuel meters were installed in the 1950's and are orifice plate type. The newer meters are shredding vortex type).

Using the above data, Mountainview determined that Boiler #1's old fuel meter underestimates fuel use by an average of 11%. While Boiler #2's old meter underestimates fuel use by about 21%. They believe the underestimation is due to the older meters' inherent inaccuracy. They further believe that the difference between the underestimation percentages of the 2 older meters is due to Boiler #2's meter having "slipped", allowing some gas to pass by unmetered.

Both the old and new meters are currently on the fuel line. The new meters have been in use since around 1993. i.e doesn't effect 00-01 AER.

Below is a summary of the 4 source tests performed by AQMD personnel:

Table 1 - Summary of AQMD Source Tests

Boiler No.	S/T Number	S/T Date	NOx	Net Load	Fuel Flow Rate (old meters)	Calculated heat input (1)
			Ppm	MW	Scfh	mmbtu/hr
1	84-559M	11/28/84	82	64	609,000	612.0
1	C-84-368M	7/5/84	91.8	63	614,240	617.3
1	83172M	4/22/83	90	20	145,700	146.4
2	C-84-369M	7/5/84	91	64.9	618,420	621.5
2	83171M	4/22/83	98	21.6	123,800	124.4

(1) using HHV of 1,005 btu/scf

Table 2 shows the comparison of the old fuel meter reading from the operator logs vs. the new fuel meter readings from the CEMS data.

Table 2 – Fuel Meter Comparison

Boiler No.	Date	Hours	Old Meter – Average Reading	New Meter – Average Reading	New Meter/Old Meter Ratio	Pulse Meter – Avg Net Power
			kscf/hr	kscf/hr		MW
1	7/06/99	1300-1900	600.7	657.8	1.10	61.22
1	7/10/99	1300-1800	590.0	652.8	1.11	60.94
1	7/11/99	1300-2200	607.3	669.3	1.10	61.62
1	7/12/99	1000-2200	610.4	661.3	1.08	62.47
1	7/13/99	1000-2100	592.4	670.6	1.13	61.68
				Average Ratio	1.11	
2	7/06/99	1300-1700	547.8	656.4	1.20	59.89
2	7/10/99	1300-1900	538.9	645.6	1.20	59.33
2	7/11/99	1300-2200	543.1	658.4	1.21	60.07
2	7/12/99	900-2100	578.2	673.0	1.16	61.89
2	7/13/99	900-2100	545.6	669.7	1.23	61.68
				Average Ratio	1.21	

Using the above data, heat input rates corrected for the new meters can be calculated as follows.

Table 3 - Calculated Heat Input Using Source Test Data and Meter Corrections

Boiler No.	Fuel Flow Rate	Old Meters Calculated Heat Input(1)	Meter Correction	New Meters Final Calculated Input
	scfh	mmbtu/hr		Mmbtu/hr
1	609,000	612.0	1.11	679.3
1	614,240	617.3	1.11	685.2
1	145,700	146.4	1.11	162.5
2	618,420	621.5	1.21	752.0
2	123,800	124.4	1.21	150.5

(1) using HHV of 1,005 btu/scf

Following is a summary of the presented CEMS data.

Table 4 – CEMS Data Summary

Boiler No.	Date	Fuel Use(1)	Net Load(2)	Calculated Heat Input(3)
		scfh	MW	mmbtu/hr
1	7/6/99	657.8	61.22	661.1
1	7/10/99	652.8	60.94	656.1
1	7/11/99	669.3	61.62	672.6
1	7/12/99	661.3	62.47	664.6
1	7/13/99	670.6	61.68	674.0
2	7/6/99	656.4	59.89	659.7
2	7/10/99	645.6	59.33	648.8
2	7/11/99	658.4	60.07	661.7
2	7/12/99	673.0	61.89	676.4
2	7/13/99	669.7	61.68	673.0

(1) As recorded by the new fuel meters. Average for loads above 59 MW

(2) The load data is taken from the pulse meter readings and corresponds to the date and time of the fuel use data recorded by the CEMS.

(3) *Using a HHV of 1,005 btu/scf*

PROCESS DESCRIPTION:

Boilers 1 and 2 are identical combustion engineering units each rated at 63 MW net electrical power output. It should be noted that MVPC is not disputing the power output rating on the permit. However, it is their contention that the listed output cannot be achieved with the listed heat input rating (540 mmbtu/hr).

Both boilers are fired on natural gas exclusively. Maximum fuel consumption is 0.677 mmcf/hr. Maximum exhaust flow is estimated at 5.923 mmcf/hr.

EMISSIONS:

Emissions are estimated using Form B-1 factors for all pollutants except NOx, which is estimated using a factor of 74.86 lbs/mmcf. This is the old Reclaim emission factor and the basis for the RTC determination for the units. Following is a summary. Reference Appendix A for the calculations.

Pollutant	Maximum Uncontrolled and Controlled		30-Day Average	Annual
	lbs/hr	lbs/day	lbs/day	lbs/yr
NOx	50.68	1,216	1,216	443,840
CO	23.70	569	569	207,685
ROG	4.74	114	114	41,610
SOx	~~0.466~~ 0.562	~~11~~ 13	~~11~~ 13	~~4,015~~ 4745
PM10	5.08	122	122	44,530

EVALUATION:

Rule 212 – Standards for Approving Permits

Since there is no physical modification associated with this application, and therefore no increase in emissions, the daily maximum thresholds of Rule 212(g) do not apply. The facility is not within 1000 feet of a school, and there is no increase in cancer risk associated with this application. Therefore, the project is not defined as significant under this rule, and no public notice is required.

Rule 401 – Visible Emissions
Visible emissions are not expected under normal operating conditions.

Rule 402 - Nuisance
Nuisance problems are not expected under normal operating conditions.

Rule 407 – Liquid and Gaseous Air Contaminants
This rule limits CO emissions to 2,000 ppm and SO2 emissions to 500 ppm, unless the equipment is subject to Rule 431.1. Since the boilers are subject to 431.1, the only limit that applies is the 2000 ppm CO limit. Compliance is expected based on prior source tests and experience with similar equipment.

Rule 409 – Combustion Contaminants
This rule limits particulate emissions to 0.1 gr/scf. Typically, natural gas fired boilers can easily meet this limit. Appendix B shows compliance is expected based on calculations using standard factors.

Rule 431.1 – Sulfur Content of Gaseous Fuels
This rule requires that natural gas burned in any permitted equipment not exceed 40 ppm total sulfur as H2S based on a 4 hour average. The pipeline quality natural gas which will be burned in the boilers is expected to meet this requirement.

Regulation XIII – New Source Review
Since there is no physical modification to the boilers, there is no increase in emissions that would be subject to New Source Review. Therefore, modeling, offsets, and BACT are not required. Furthermore, the boilers were originally permitted in the late 50's to early 60's, prior to the original NSR date of 1974. Since that time, there have been no modifications to the boilers subject to NSR. SCE received their original permits for the boilers (A/Ns 10121B and 10122B) in 1976 due to a change in ownership from California Electric Power Company. There were no applications for the boilers since then until A/N's 259592 and 259593 were submitted in 1991. Those applications were submitted to simply add lb/netMW limits to the permits for 1135 purposes, and there were no associated modifications. Corresponding permits D92187 and D92188 were issued in 1995.

Rule 1401 – Carcinogenic Air Contaminants
Since there is no physical modification, and no increase in emissions, the applications are exempt from Rule 1401 by paragraph (g)(1)(B).

Rule 2005 – NSR for Reclaim

As mentioned above, there is no physical modification, and therefore no increase in emissions subject to NSR. BACT, modeling, and offsets are not required.

Rule 2012 – MRR's for Reclaim

The Mountainview facility is subject to the Reclaim monitoring, reporting, and recordkeeping requirements. The boilers are classified as major sources, and as such are required to have certified CEMS and fuel meters, and to report daily emissions through their RTU. Currently, they are in compliance, and continued compliance is anticipated.

Regulation XXX – Title V

The Mountainview facility is subject to Title V, and the final "initial" Title V permit was issued in August of 1999. The boiler rating change will be considered an administrative revision in accordance with the definition of such in Rule 3000(b)(1). The Title V permit will be reissued under A/N 366164 along with the C/O from Mountainview Power to Mountainview Power, LLC.

DISCUSSION:

The data submitted by Mountainview supports their claim that the heat input rate of the permit is incorrect. As mentioned previously, they have claimed that a net output of 63 MW cannot be achieved with the listed heat input of 540 mmbtu/hr. This, of course is fully dependent on the efficiency of the system. Typically a utility boiler such as this runs at an overall efficiency rate somewhere between 30-35%. Or, the approximate heat rate for a typical boiler is about 10,000-12,000 btu/kW. Therefore, in order to achieve a 63 MW output, it is estimated these boilers would need an approximate heat input of:

10,000-12,000 btu/kW X 63,000 kW = 630 – 756 mmbtu/hr

OR

Output/efficiency = required input

$$\text{Output} = \frac{63MW}{0.2931 watts/btu/hr} = 214.944 \text{ mmbtu/hr}$$

$$\frac{214.944 X 106}{0.30 to 0.35} = 614.1 - 716.5 \text{ mmbtu/hr}$$

These calculations of heat input are in-line with Mountainview's estimation of 680 mmbtu/hr. Furthermore, at a heat input of 540 mmbtu/hr and an output of 63 MW, the overall approximate efficiency would be about 40%. This is considered very high for a boiler this size.

RECOMMENDATION:

It is recommended that a Permit to Operate be issued will the revised heat input rating of 680 mmbtu/hr. There will be no new conditions. Following is a listing of the current conditions on the Reclaim permit applicable to these boilers.

CONDITIONS:

Facility Conditions

Acid Rain SO2 Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
D1	Boiler No. 1	SO2	117
D2	Boiler No. 2	SO2	17

a.) The allowance allocations shall apply to calendar years 2000 through 2009.

b.) The number of allowances allocated to Phase II affected units by US EPA may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by US EPA. Neither the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40CFR72.84)

[40CFR 73 Subpart B, 1-11-1993]

Appendix A

Criteria Pollutant Emission Calculations

Following are emission estimates for both units (they are identical). Emissions were estimated in the previous applications based on a maximum rating of 540 mmbtu/hr. These emissions will be compared to emission estimates using the new rating of 680 mmbtu/hr.

A. Fuel use is estimated as follows:

Old rating:	Natural Gas	540 mmbtu/hr / 1050 btu/scf	=	0.514 mmcf/hr
New rating:	Natural Gas	680 mmbtu/hr / 1005 btu/cf	=	0.677 mmcf/hr

Note:
The heating value of natural gas for the new rating is derived from data Mountainview submitted in a fax dated April 3, 2000.

B. Emission Factors Used in Calculations (both old and new ratings)

Natural Gas

Pollutant	Emission Factor lbs/mmcf	Source
NOx	74.86	RECLAIM Permit
CO	35	Form B-1
ROG	7.0	Form B-1
SOx	0.83	Form B-1
PM10	7.5	Form B-1

Note:
Historical source testing on the unit shows NOx emissions typically range from 80 to 100 ppm at maximum load. This corresponds to about 10-12 lbs/mmcf.

98 - 122 lbs/mm cf

$\frac{lbs}{hr} = \frac{\frac{CF}{hr}_{EXHAUST} \times ppm \times MW}{394 \times 10^6}$

$\frac{CF}{hr}_{EXHAUST} = 8710\left(\frac{20.9 - O_2}{20.9 - \%}\right)\frac{CF}{mmBTU} \times \frac{mmBTU}{hr}$

$\frac{CF}{hr}_{EXHAUST} = 10,190.7 \times \frac{mmBTU}{hr}$

$\frac{lbs}{hr} = \frac{10,190.7 \times \frac{mmBTU}{hr} \times 50 \times 46}{394 \times 10^6}$ $\Rightarrow$ $\frac{LBS}{mmBTU} = \frac{10,190.7 \times 50 \times 46}{394 \times 10^6} = 0.098\ LBS/mmBTU$

C. Emission Summaries

Old Rating

Pollutant	Maximum Uncontrolled		Maximum Controlled		Annual
	lbs/hr	lbs/day	lbs/hr	lbs/day	lbs/yr
NOx	38.5	924	38.5	924	337,260
CO	18.0	432	18.0	432	157,680
ROG	3.6	86	3.6	86	31,390
SOx	0.43	10	0.43	10	3,650
PM10	3.9	94	3.9	94	34,310

New Rating

Pollutant	Maximum Uncontrolled		Maximum Controlled		Annual
	lbs/hr	lbs/day	lbs/hr	lbs/day	lbs/yr
NOx	50.68	1,216	50.68	1,216	443,840
CO	23.70	569	23.70	569	207,685
ROG	4.74	114	4.74	114	41,610
SOx	0.562	13	0.562	13	4,745
PM10	5.08	122	5.08	122	44,530

Emission Comparison

Pollutant	Old Rating	New Rating	Difference	Fuel Oil	Previous CAPPS
	lbs/day	lbs/day	lbs/day	lbs/day	30 Day Avg
NOx	924	1,216	292	1010	1010
CO	432	569	137	470	470
ROG	86	114	28	19	86
SOx	10	13	3	667	667
PM10	94	122	28	190	190

@ HHV = 1,005 $\frac{Btu}{CF}$ 1 mmBtu = 995 CF fuel use

$\frac{lbs}{mmcf}$ fuel use = 0.098 × 995 = 97. $\frac{lbs}{mmcf}$ fuel use @ 80ppm

Appendix B

Rule 409 Calculations

Emissions of particulate matter are estimated at 5.08 lbs/hr. Converting to grains:

5.08 lbs/hr X 7,000 grains/lb = 35,560 gr/hr

Flue gas rate is estimated using the dry F-factor of 8,710 scf/mmbtu as follows:

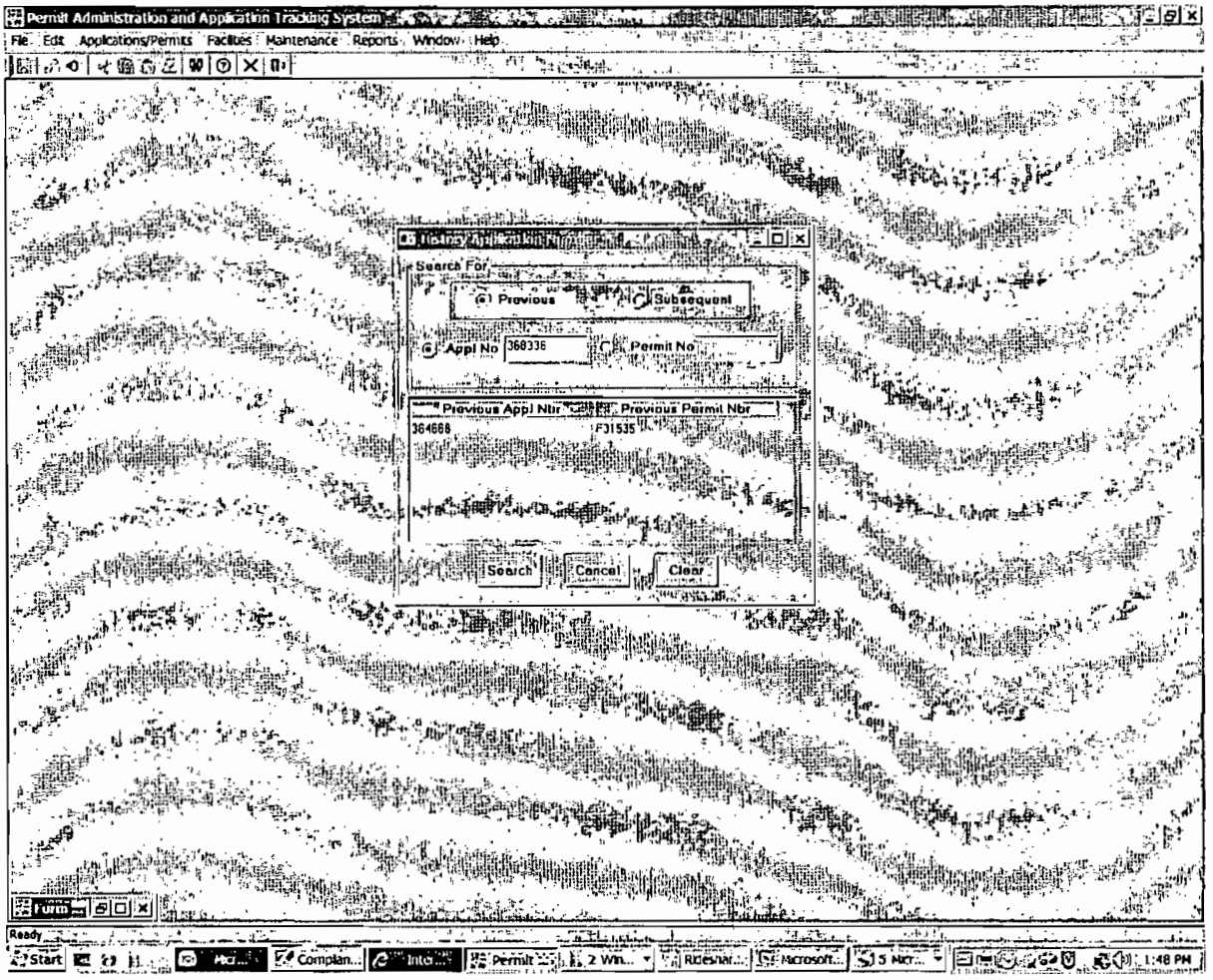
8710 X 680 mmbtu = 5.923 mmcf/hr

Estimated grain loading is then:

$$\frac{35{,}560 gr/hr}{5.923 E6 cf/hr} = 0.006 \text{ gr/scf}$$

PREVIEW TRANSACTIONS FROM WORKSPACE
Fac. 121737 Appl. 368336 Dev. 0 Type 50 Disp. 31

	appl nbr	device id	nsr id	emi id	nsr acct type	nsr emt	workspace comment
1	368336	0	121737	CO	INSTALL	569	Current emission from FacID#121737, Appl#368336, Dev#0
2	364668	0	121737	CO	INSTALL	-569	Previous emission from FacID#121737, Appl#364668, Dev#0
3	368336	0	121737	NOX	INSTALL	1216	Current emission from FacID#121737, Appl#368336, Dev#0
4	364668	0	121737	NOX	INSTALL	-1216	Previous emission from FacID#121737, Appl#364668, Dev#0
5	368336	0	121737	PM10	INSTALL	122	Current emission from FacID#121737, Appl#368336, Dev#0
6	364668	0	121737	PM10	INSTALL	-122	Previous emission from FacID#121737, Appl#364668, Dev#0
7	368336	0	121737	ROG	INSTALL	114	Current emission from FacID#121737, Appl#368336, Dev#0
8	364668	0	121737	ROG	INSTALL	-114	Previous emission from FacID#121737, Appl#364668, Dev#0
9	368336	0	121737	SOX	INSTALL	13	Current emission from FacID#121737, Appl#368336, Dev#0
10	364668	0	121737	SOX	INSTALL	-13	Previous emission from FacID#121737, Appl#364668, Dev#0


Permit Administration and Application Tracking System
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Search For
Previous
Subsequent
Appl No
368338
Permit No
Previous Appl Nbr
Previous Permit Nbr
364668
F31535
Search
Cancel
Clear
Ready
Start
1:48 PM

calendar year

Device ID	1999	2000	2001	2002
1	16416.59	88787.11	13858.86	
			7726.77	0
Total	16416.59	88787.11	21585.63	0
2	28692.62	91556.66	8571.36	
			6038.45	0
Total	28692.62	91556.66	14609.81	0

NOR

Device ID	Fiscl Year	Total
1 GN368336	1999 - 2000	26351
	2000 - 2001	90862
	2001 - 2002	7727
2 368334	1999 - 2000	32471
	2000 - 2001	88810
	2001 - 2002	6038

ROUTING RECORD

DATE	FROM	TO	ACTION
5-2-00	JTY	CGP	Precision III
5-24-00	CGP	P/S	P/O

20 → 31

REFERENCE TO OTHER APCD RECORDS INCLUDING VARIANCES

Boiler #1
680 mm Btu/HR

APPL # 368336
I.D. # 121737

MOUNTAINVIEW POWER COMPANY, LLC
25770 SAN BERNARDINO AVE.
SAN BERNARDINO

Date: 04/11/00

RECL.

P O

DATA ENTRY

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: MATTHEWS INTERNATIONAL CORP

Facility ID: 11417

Facility Location: 28261 HIGHWAY 74, ROMOLAND, CA 92585

Type of Business: BRASS FOUNDRY

Offset Credit ID No.:

PM10:

SOx:

Application No. 232610 Equipment Description: FOUNDRY SAND RECLAIMATION

Is the Permit Inactivated? Yes Inactivation Year: 2006 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Shawn Bennage

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	SAND SYSTEM BAGHOUSE	FY (05-06)	3679.08	FY (04-05)	6307
SOx					

Calculated Emissions for FOUNDRY SAND RECLAIMATION

PM10 Reductions: (Year 1 + Year 2)/2 2497 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions from the 3 sand handling systems were controlled by baghouses. The AER calculated emissions from the baghouses venting the 3 sand handling systems.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: Will Thompson

Date: 05/07/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: MATTHEWS INTERNATIONAL CORP
Facility ID: 11417
Facility Location: 28261 HIGHWAY 74, ROMOLAND, CA 92585
Type of Business: BRASS FOUNDRY

Offset Credit ID No.:
PM10:
SOx:

Application No. 240990 Equipment Description: SAND HANDLING EQUIPMENT FOUNDRY

Is the Permit Inactivated? Yes Inactivation Year: 2006 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Shawn Bennage

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	SAND SYSTEM BAGHOUSE	FY (05-06)	3679.08	FY (04-05)	6307
SOx					

Calculated Emissions for SAND HANDLING EQUIPMENT FOUNDRY

PM10 Reductions: (Year 1 + Year 2)/2 2497 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions from the 3 sand handling systems were controlled by baghouses. The AER calculated emissions from the baghouses venting the 3 sand handling systems.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: Will Thompson

Date: 05/07/10

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	20. Metal processing (non-combustion)	Y		1,190.00	17. hours per year	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.053	63.07
2	37. Baghouse - Particulate emissions (not reported elsewhere)	N		1,190.00	17. hours per year	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	9.275	11,037.25
3	37. Baghouse - Particulate emissions (not reported elsewhere)	N		1,190.00	17. hours per year	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.195	232.05
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		11332.37 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		5.67 tons

11,037.25/3 = 3679.08 16 PM/yr

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	20. Metal processing (non-combustion)	Y		2,040.00	17. hours per year											0.053	108.12
2	999. SAND SYSTEM BAGHOUSE	N		2,040.00	17. hours per year											9.275	18,921.00
3	999. METAL FINISHING BAGHOUSE	N		2,040.00	17. hours per year											0.195	397.80
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		19426.92 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		9.71 tons

$18921/3 = 6307$

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: MATTHEWS INTERNATIONAL CORP
Facility ID: 11417
Facility Location: 28261 HIGHWAY 74, ROMOLAND, CA 92585
Type of Business: BRASS FOUNDRY

Offset Credit ID No.:
PM10:
SOx:

Application No. 03693R Equipment Description: SAND HANDLING EQUIPMENT FOUNDRY

Is the Permit Inactivated? Yes Inactivation Year: 2006 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Shawn Bennage

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	SAND SYSTEM BAGHOUSE	FY (05-06)	3679.08	FY (04-05)	6307
SOx					

Calculated Emissions for SAND HANDLING EQUIPMENT FOUNDRY

PM10 Reductions: (Year 1 + Year 2)/2 2497 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Emissions from the 3 sand handling systems were controlled by baghouses. The AER calculated emissions from the baghouses venting the 3 sand handling systems.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: Will Thompson

Date: 05/07/10

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 11417 MATTHEWS INTERNATIONAL CORP
Last Inspection: 10/03/2008
SIC: 3366
Inspector: SK11 STAN KOSZELAK
Inspection Date: 10/03/2008
Location Address: 28261 HIGHWAY 74, ROMOLAND 92585-8986 Sector:SR
Mailing Address: P O BOX 460, SUN CITY 92586-0460 Sector:SB
Instruction:

MR: 0503
TS: TS-12 Industrial Sources - Out of
Facility Status: Active
Assignment No. 1072938
Disposition: Out of Business

Contact: EDWARD A. DVORAK (951) 9281974
Quarter: none - do not inspect
On Hold:
Suspended:
Facility Team: Q1

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
~~00715R~~	00793R	06/18/1965	INACTIVE	001020	BCAT	FURNACE CRUCIBLE BRASS-OTH BRONZE COPPER	01/01/1900	PERMIT TO OPERATE GRANTED
~~00795R~~	00795R	06/18/1965	INACTIVE	40	CCAT	SCRUBBER, OTHER VENTING S.S.	01/01/1990	PERMIT TO OPERATE GRANTED
~~00795R~~	00795R	06/18/1965	INACTIVE	000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	01/01/1990	PERMIT TO OPERATE GRANTED
~~00796R~~	00796R	06/18/1965	INACTIVE	40	CCAT	SCRUBBER, OTHER VENTING S.S.	01/01/1990	PERMIT TO OPERATE GRANTED
~~00796R~~	00796R	06/18/1965	INACTIVE	000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	01/01/1990	PERMIT TO OPERATE GRANTED
~~00797R~~	00797R	06/18/1965	INACTIVE	000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	01/01/1900	PERMIT TO OPERATE GRANTED
~~00797R~~	00797R	06/18/1965	INACTIVE	40	CCAT	SCRUBBER, OTHER VENTING S.S.	01/01/1900	PERMIT TO OPERATE GRANTED
~~00798R~~	00794R	06/18/1965	INACTIVE	001020	BCAT	FURNACE CRUCIBLE BRASS-OTH BRONZE COPPER	01/01/1900	PERMIT TO OPERATE GRANTED
~~00799R~~	00798R	06/18/1965	INACTIVE	000264	BCAT	OVEN, BAKING	01/01/1900	PERMIT TO OPERATE GRANTED
~~00949R~~	00860R	06/17/1966	INACTIVE	000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	01/01/1990	PERMIT TO OPERATE GRANTED
~~01953R~~	01637R	04/07/1972	INACTIVE	000202	BCAT	SPRAY EQUIPMENT OPEN	01/01/1990	PERMIT TO OPERATE GRANTED
~~01953R~~	01637R	04/07/1972	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	01/01/1990	PERMIT TO OPERATE GRANTED
~~01954R~~	01638R	04/07/1972	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	01/01/1900	PERMIT TO OPERATE GRANTED
~~01954R~~	01638R	04/07/1972	INACTIVE	000202	BCAT	SPRAY EQUIPMENT OPEN	01/01/1900	PERMIT TO OPERATE GRANTED
~~01955R~~	01640R	04/07/1972	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	01/01/1900	PERMIT TO OPERATE GRANTED
01955R	01640R	04/07/1972	INACTIVE	000202	BCAT	SPRAY EQUIPMENT OPEN	01/01/1900	PERMIT TO OPERATE GRANTED
~~01956R~~	01639R	04/07/1972	INACTIVE	000202	BCAT	SPRAY EQUIPMENT OPEN	01/01/1900	PERMIT TO OPERATE GRANTED
~~01956R~~	01639R	04/07/1972	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	01/01/1900	PERMIT TO OPERATE GRANTED
03451R	E0261R	02/07/1978	INACTIVE	000297	BCAT	SAND HANDLING EQUIPMENT FOUNDRY	01/01/1990	PERMIT TO OPERATE GRANTED
~~03451R~~	E0261R	02/07/1978	INACTIVE	21	CCAT	BAGHOUSE	01/01/1990	PERMIT TO OPERATE GRANTED
~~03476R~~	E0262R	02/07/1978	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/01/1990	PERMIT TO OPERATE GRANTED
03476R	E0262R	02/07/1978	INACTIVE	000297	BCAT	SAND HANDLING EQUIPMENT FOUNDRY	01/01/1990	PERMIT TO OPERATE GRANTED
~~03693R~~	E0272R	02/24/1978	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/01/1990	PERMIT TO OPERATE GRANTED
03693R	E0272R	02/24/1978	INACTIVE	000297	BCAT	SAND HANDLING EQUIPMENT FOUNDRY	01/01/1990	PERMIT TO OPERATE GRANTED
~~112045~~	M33388	10/04/1983	INACTIVE	000265	BCAT	OVEN, DRYING	07/06/1983	PERMIT TO OPERATE GRANTED
~~124454~~	M41449	11/21/1984	INACTIVE	001020	BCAT	FURNACE CRUCIBLE BRASS-OTH BRONZE COPPER	07/26/1984	PERMIT TO OPERATE GRANTED
~~152864~~	M56227	04/15/1987	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	02/04/1987	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 11417 MATTHEWS INTERNATIONAL CORP
Last Inspection: 10/03/2008
SIC: 3366
Inspector: SK11 STAN KOSZELAK
Inspection Date: 10/03/2008
Location Address: 28261 HIGHWAY 74, ROMOLAND 92585-8986 Sector:SR
Mailing Address: P O BOX 460, SUN CITY 92586-0460 Sector:SB
Instruction:

MR: 0503
TS: TS-12 Industrial Sources - Out of
Facility Status: Active
Assignment No. 1072938
Disposition: Out of Business

Contact: EDWARD A. DVORAK (951) 9281974
Quarter: none - do not inspect
On Hold:
Facility Team: Q1
Suspended:

Shutdown Previous to most recent 5 yr.

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
~~152852~~	M56228	04/15/1987	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	02/04/1987	PERMIT TO OPERATE GRANTED
~~173329~~	D07394	04/25/1989	INACTIVE	001320	BCAT	FURNACE ELECT IND & RES BRASS-OTH/BZ/CU	08/16/1988	PERMIT TO OPERATE GRANTED
~~173330~~	D07393	04/25/1989	INACTIVE	20	CCAT	DRY FILTER (>500 SQ FT)	08/16/1988	PERMIT TO OPERATE GRANTED
~~226563~~	D34736	12/17/1990	INACTIVE	000265	BCAT	OVEN, DRYING	04/12/1990	PERMIT TO OPERATE GRANTED
~~232610~~	D59309	07/27/1992	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	07/03/1990	PERMIT TO OPERATE GRANTED
232610	D59309	07/27/1992	INACTIVE	108620	BCAT	FOUNDRY SAND RECLAIMATION	07/03/1990	PERMIT TO OPERATE GRANTED
~~232611~~	D59310	07/27/1992	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	07/03/1990	PERMIT TO OPERATE GRANTED
232611	D59310	07/27/1992	INACTIVE	108900	BCAT	STORAGE TANK FOUNDRY SAND	07/03/1990	PERMIT TO OPERATE GRANTED
~~232612~~	D59308	07/27/1992	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	07/03/1990	PERMIT TO OPERATE GRANTED
232612	D59308	07/27/1992	INACTIVE	108620	BCAT	FOUNDRY SAND RECLAIMATION	07/03/1990	PERMIT TO OPERATE GRANTED
~~240990~~	D59307	07/27/1992	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	11/09/1990	PERMIT TO OPERATE GRANTED
240990	D59307	07/27/1992	INACTIVE	000297	BCAT	SAND HANDLING EQUIPMENT FOUNDRY	11/09/1990	PERMIT TO OPERATE GRANTED
~~249576~~	D59306	07/27/1992	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	05/16/1991	PERMIT TO OPERATE GRANTED
~~249677~~	D59305	07/27/1992	INACTIVE	000284	BCAT	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	05/16/1991	PERMIT TO OPERATE GRANTED
~~281797~~	F55590	10/09/2002	INACTIVE	001020	BCAT	FURNACE CRUCIBLE BRASS-OTH BRONZE COPPER	05/26/1993	PERMIT TO OPERATE GRANTED
~~281798~~				38	CCAT	BAGHOUSE, HOT	05/26/1993	APPLICATION CANCELLED, KEEP ALL FEI
~~287114~~				666420	BCAT	PLAN, RULE 1420 LEAD COMPLIANCE	11/16/1993	APPLICATION CANCELLED, KEEP FILING I
~~308502~~				22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	10/25/1995	APPLICATION CANCELLED, KEEP ALL FEI
~~308503~~	F55301	10/01/2002	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	10/25/1995	PERMIT TO OPERATE GRANTED
~~308504~~	F55300	10/01/2002	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	10/25/1995	PERMIT TO OPERATE GRANTED
~~312441~~	D98530	04/30/1996	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	02/28/1996	PERMIT TO OPERATE GRANTED
~~312508~~				666407	BCAT	Plan, Non-Ferrous Metal Melting Control	03/06/1996	BANKING/ PLAN GRANTED
~~406283~~	F55591	10/09/2002	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	09/05/2002	PERMIT TO OPERATE GRANTED
~~C43998~~	M31548	06/17/1983	INACTIVE	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	06/23/1982	PERMIT TO OPERATE GRANTED
~~C43999~~	M40513	10/08/1984	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	06/23/1982	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 11417 MATTHEWS INTERNATIONAL CORP
Last Inspection: 10/03/2008
SIC: 3366
Inspector: SK11 STAN KOSZELAK
Inspection Date: 10/03/2008
Location Address: 28261 HIGHWAY 74, ROMOLAND 92585-8986 Sector:SR
Mailing Address: P O BOX 460, SUN CITY 92586-0460 Sector:SB
Instruction:

MR: 0503
TS: TS-12 Industrial Sources - Out of
Facility Status: Active
Assignment No. 1072938
Disposition: Out of Business

Contact: EDWARD A. DVORAK (951) 9281974
Quarter: none - do not inspect
On Hold:
Suspended:
Facility Team: Q1

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category	BCAT/CCAT Description	Application Date	Application Status

Report: On 10-3-08 at 08:32 hours I arrived at the former location of Mathews International Corporation at 28261 Highway 74 in the City of Romoland. The facility is out of business. The building is now occupied by Ace Hardware / Ahern Rentals (FID 155180).

I left the site at approximately 08:38 hours.

10/28/08
Report reviewed by Rick Gluck.

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

FAC ID **11417**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **SR**

MATTHEWS INTERNATIONAL CORP	28261 HIGHWAY 74	ROMOLAND , 92585

Last Inspection Date:	TS Code:	Compliance Team	Business Status:
10/3/2008	12	Industrial	☐Active ☐Unknown ☐New Owner ☑Out of Business

Contact Name:	Title:	Ph:
David McKee (Ahern)	Service Manager	(951) 712-1545

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
	D59310	STORAGE TANK FOUNDRY SAND	O/BUSINESS /INACTV LTR 12/7/06 MH	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC
	E0272R	SAND HANDLING EQUIPMENT FOUNDRY	O/BUSINESS /INACTV LTR 12/7/06 MH	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

The facility is now an Ahern Rentals. The equipment has been removed from the facility.

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☑No	☑Removed from site	☐Operated w/o permits	
	☐On site, but rendered non-operable	☐Operated under new ID	
	☐Operable, but not operated	☐Other	

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Shawn Bennage	2/22/10		3/25/10

Attorney work product—prepared at the direction of and for Legal Department

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D59309
A/N 232610
Page 1

[redacted]

Legal Owner **ID 11417**
Or Operator: MATTHEWS INTERNATIONAL CORPORATION
P. O. BOX N
SUN CITY, CALIFORNIA 92381
ATTN: ROCKY THORNTON

Equipment
located at: 28261 HIGHWAY 74, ROMOLAND, CALIFORNIA 92380

Equipment Description:

FOUNDRY SAND RECLAMATION SYSTEM CONSISTING OF:

1. COOLING LINE CONVEYOR WITH TWO 1/2 H.P. MOTORS.
2. SHAKEOUT STATION.
3. INCLINE BELT CONVEYOR, CLEATED, 24" W. X 15' L., 3 H.P.
4. SAND RECLAIMER, SIMPLICITY, VIBRA CLASS, MODEL HD-10, SERIAL NO. V-402, WITH A 7.5 AND A 1.5 H.P. MOTOR.
5. BUCKET ELEVATOR, RECLAIM SAND, 1.5 H.P. MOTOR.
6. SURGE HOPPER, 40 CUBIC FEET.
7. KLOSTER COOLER/CLASSIFIER WITH A 7.5 H.P. BLOWER.
8. DYNAMIC AIR CONVEYING SYSTEM, TO TRANSFER SAND TO STORAGE SILO.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

5. THE OPERATOR SHALL MAINTAIN RECORDS TO VERIFY THE AMOUNT OF SAND AND BINDER MIXED DAILY.

6. THE TRANSPORTER SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL BAGHOUSE.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
July 27, 1992

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

3. THIS SYSTEM SHALL NOT BE OPERATED UNLESS THE SHAKEOUT STATION, THE BUCKET ELEVATOR, THE SCREEN AND THE COOLER ARE VENTED TO A BAGHOUSE.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
July 27, 1992

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D59307
A/N 240990
Page 1

This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: **ID 11417**
MATTHEWS INTERNATIONAL CORPORATION
P. O. BOX N
SUN CITY, CALIFORNIA 92381
ATTN: ROCKY THORNTON

Equipment located at: 28261 HIGHWAY 74, ROMOLAND, CALIFORNIA 92380

Equipment Description:

FOUNDRY SAND MIXING SYSTEM CONSISTING OF:

1. PNEUMATIC AIR CONVEYING SYSTEM, 3" DIA., TRANSPORTER TRANSFERS SAND FROM SAND SILOS TO SAND HOPPER.
2. SAND HOPPERS, 40 CUBIC FEET CAPACITY.
3. MIXER, NATIONAL MODEL "JR" PRO-MIX, 300 POUNDS PER MINUTE CAPACITY, 10 H.P.
4. DUST FILTER, CARTRIDGE TYPE, DYNAMIC MODEL 343-200, WITH TWO CARTRIDGES, 12" DIA. X 3'1., (200 SQ. FT. FILTER AREA) WITH PULSE JET CLEANING MECHANISM VENTING THE SAND HOPPER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE AMOUNT OF SAND MIXED IN THIS SYSTEM SHALL NOT EXCEED 6 TONS AN HOUR, 51 TONS A DAY.
4. THE BINDER MATERIAL THAT IS ADDED SHALL BE CHEM REZ 275 (ASHLAND CHEMICAL CO) AND THE USAGE OF THIS MATERIAL SHALL NOT EXCEED ONE 1,000 POUNDS (110 GALLONS) IN ANY ONE DAY.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

EASTERN ZONE

E 00272
R

Operation under this permit must be conducted in compliance with all information included with the initial application and the initial permit conditions. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 206, this Permit to Operate or copy must be posted on or within 8 meters of equipment.

LEGAL OWNER OR OPERATOR: Matthews International

EQUIPMENT LOCATED AT: 28261 Highway 74, Romoland, California

EQUIPMENT DESCRIPTION AND CONDITIONS:

Sand Handling System, Consisting of: Two Outside Sand Tanks with Gravity Feed Pipes to Two 1/2 HP Elevators, Each Feeding an Inside Sand Bin. Gravity Feed From Each Bin to Common Strong-Scott Mold Feed Hopper Equipped with 5 HP Motor.

Condition: This equipment must not be operated unless it is vented to air pollution control equipment operating under a valid permit issued by the Air Pollution Control Officer.

FILE COPY

This initial permit must be renewed by **February 24, 1979** or an earlier date if equipment is moved, altered, or changes ownership. If billing for annual renewal fee (Rule 301.f) not received by expiration date, contact Zone office above.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

8 B6 8 002 50000a 8248

VOID UNLESS VALIDATED

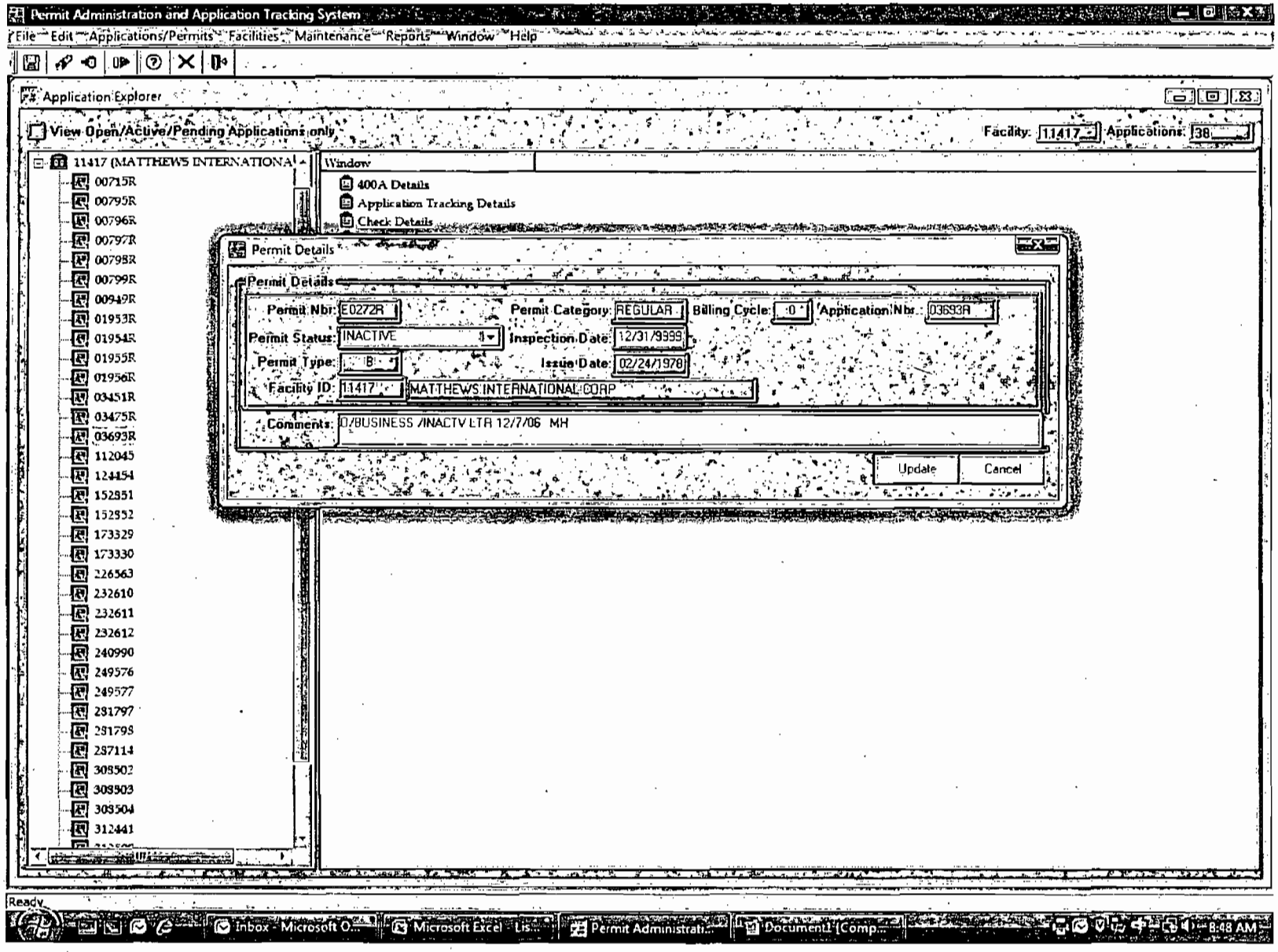
AIR POLLUTION CONTROL OFFICER

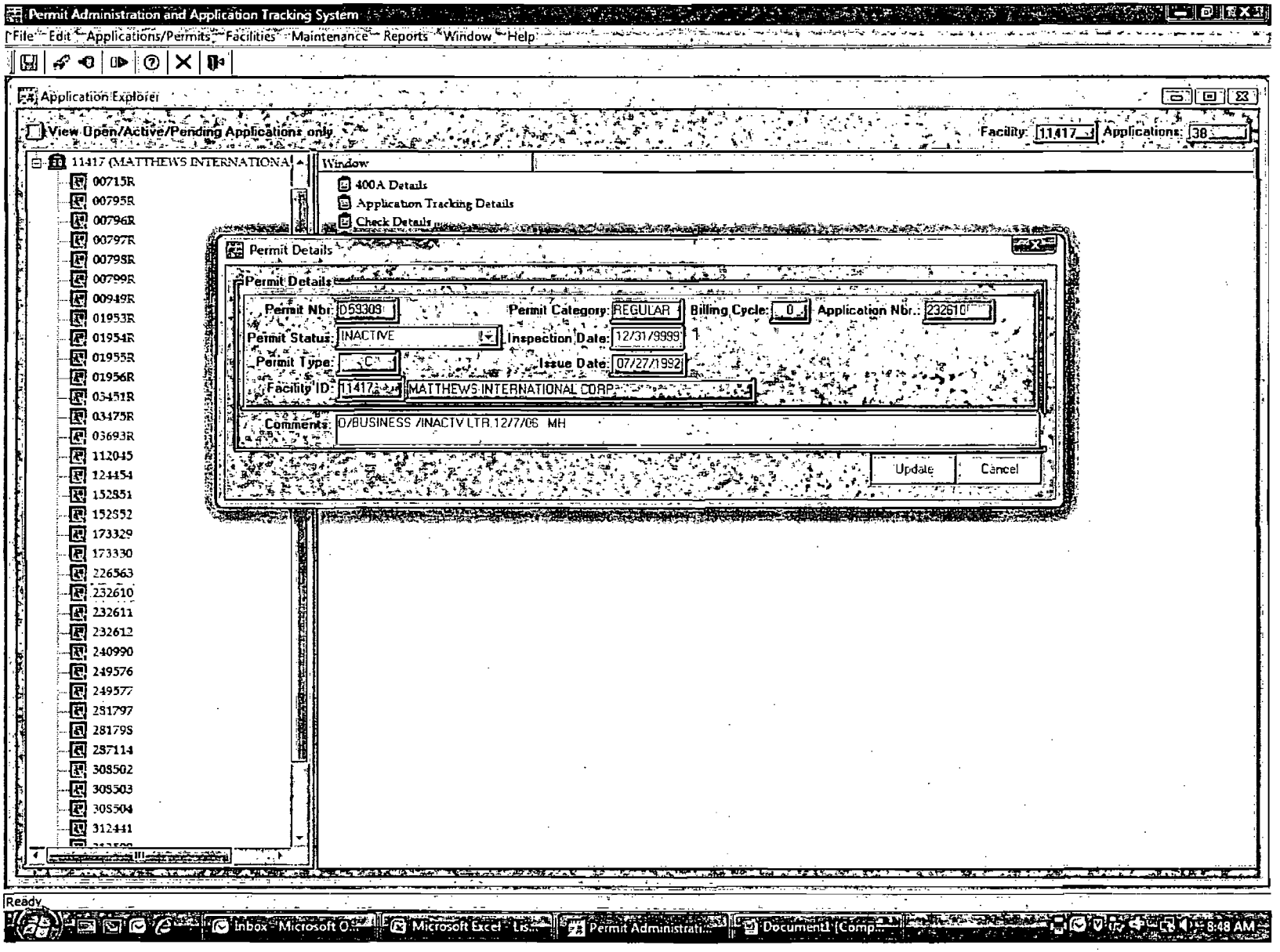
BY Howard W. Lange

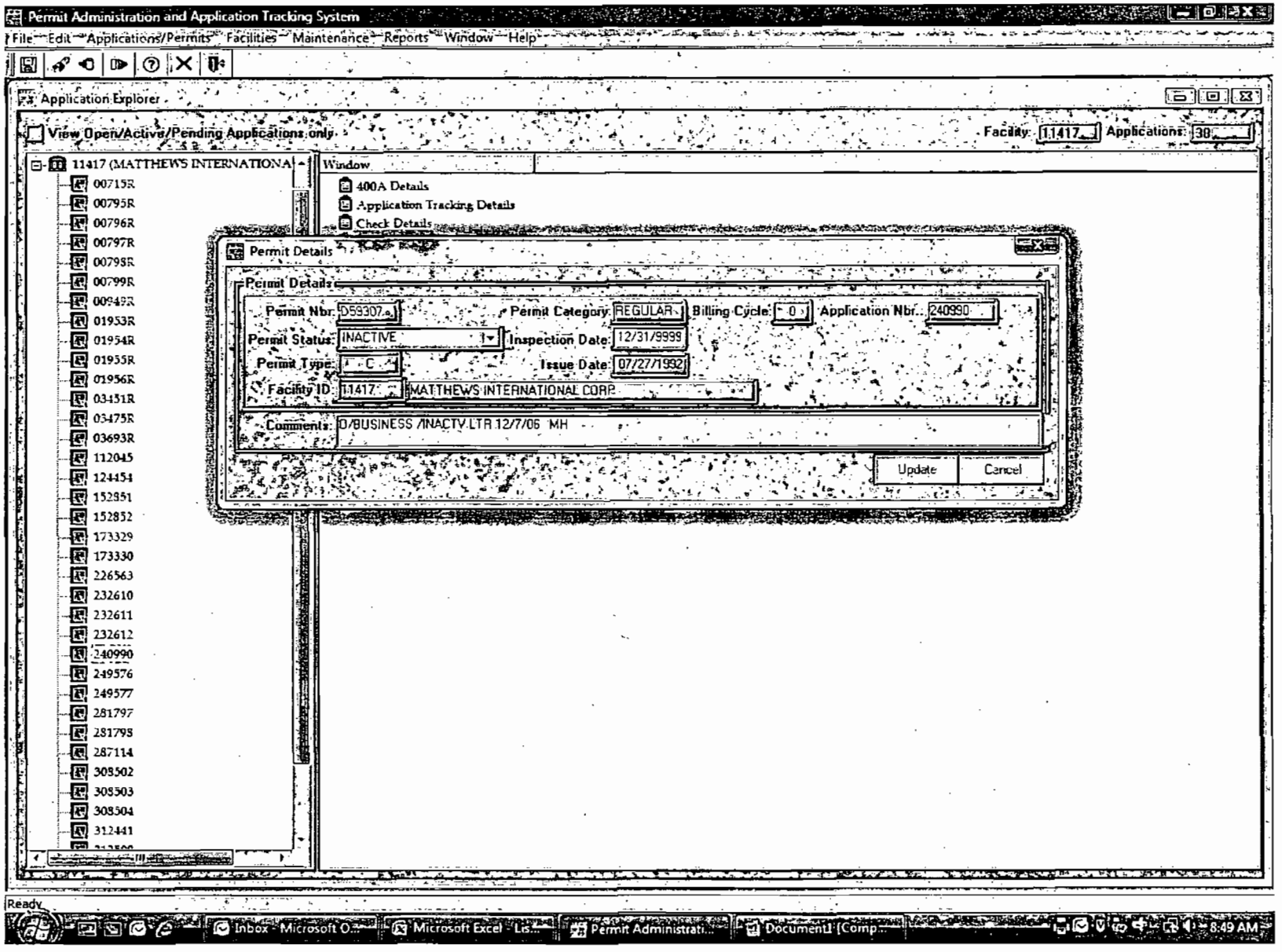
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February 24, 1978

A/N 8248 E - 2/77


Permit Administration and Application Tracking System
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Application Explorer
View Open/Active/Pending Applications only
Facility: 11417
Applications: 38
11417 (MATTHEWS INTERNATIONA
00715R
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400A Details
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Permit Nbr: E0272R
Permit Category: REGULAR
Billing Cycle: 0
Application Nbr: 03693R
Permit Status: INACTIVE
Inspection Date: 12/31/9999
Permit Type: B
Issue Date: 02/24/1978
Facility ID: 11417
MATTHEWS INTERNATIONAL CORP
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Permit Administration and Application Tracking System
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Application Tracking Details
Check Details
Permit Details
Permit Details
Permit Nbr: 059309
Permit Category: REGULAR
Billing Cycle: 0
Application Nbr.: 232610
Permit Status: INACTIVE
Inspection Date: 12/31/9999
Permit Type: C
Issue Date: 07/27/1992
Facility ID: 11417
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Permit Administration and Application Tracking System
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Check Details
Permit Details
Permit Details
Permit Nbr: D58307
Permit Category: REGULAR
Billing Cycle: 0
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Permit Status: INACTIVE
Inspection Date: 12/31/9999
Permit Type: C
Issue Date: 07/27/1992
Facility ID: 11417
MATTHEWS INTERNATIONAL CORP
Comments: O/BUSINESS /INACTV.LTR 12/7/06 MH
Update
Cancel
Ready
Inbox - Microsoft O...
Microsoft Excel - Ls...
Permit Administrati...
Document1 [Comp...
8:49 AM

ENGINEERING DIVISION....MEMORANDUM

TO	FROM	DATE
File	WCT	
REFERENCE		PERMIT APPL. NO.

SUBJECT: Matthews Intl Corp

All emissions for sand handling were accounted for on three permits and reported on line 2 on AER form 84. So, this number divided by three is PM and 50% of that number is PM_{10}.

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: KMC WHEEL CO INC
Facility ID: 104671
Facility Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507
Type of Business: WHEEL MANUFACTURING

Offset Credit ID No.:
PM10:
SOx:

Application No. 400236 Equipment Description: FURNACE REVERB ALUMINUM

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Paolo Longoni

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	FORM B1-FURNACE & FORM B4-METAL MELTING	FY (02-03)	4596.82	FY (01-02)	3643.85
SOx	FORM B1-FURNACE & FORM B4-METAL MELTING	FY (02-03)	11.63	FY (01-02)	11.53

Calculated Emissions for FURNACE REVERB ALUMINUM

PM10 Reductions: (Year 1 + Year 2)/2 4120 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 12 lbs/yr

Other Assumptions/ Comments: (See Attached)
All calculations and assumptions are included in the attached sheet.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: KMC WHEEL CO INC
Facility ID: 104671
Facility Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507
Type of Business: WHEEL MANUFACTURING

Offset Credit ID No.:
PM10:
SOx:

Application No. 400235 Equipment Description: FURNACE REVERB ALUMINUM

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different): 2004

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Paolo Longoni

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	FORM B1-FURNACE & FORM B4- METAL MELTING	FY (03-04)	0.00	FY (02-03)	7719.42
SOx	FORM B1-FURNACE & FORM B4- METAL MELTING	FY (03-04)	0.00	FY (02-03)	21.80

Calculated Emissions for FURNACE REVERB ALUMINUM

PM10 Reductions: (Year 1 + Year 2)/2 3860 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 11 lbs/yr

Other Assumptions/ Comments: (See Attached)
All calculations and assumptions are included in the attached sheet.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: KMC WHEEL CO INC
Facility ID: 104671
Facility Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507
Type of Business: WHEEL MANUFACTURING

Offset Credit ID No.:
PM10:
SOx:

Application No. 302844 Equipment Description: HEAT TREATING FURNACE

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Paolo Longoni

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	FURNACE	FY (02-03)	65.66	FY (01-02)	65.10
SOx	FURNACE	FY (02-03)	7.27	FY (01-02)	7.20

Calculated Emissions for HEAT TREATING FURNACE

PM10 Reductions: (Year 1 + Year 2)/2 65 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 7 lbs/yr

Other Assumptions/ Comments: (See Attached)
All calculations and assumptions are included in the attached sheet.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: KMC WHEEL CO INC
Facility ID: 104671
Facility Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507
Type of Business: WHEEL MANUFACTURING

Offset Credit ID No.:
PM10:
SOx:

Application No. 302846 Equipment Description: HEAT TREATING FURNACE

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different): 2004

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Paolo Longoni

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	FURNACE	FY (03-04)	0.00	FY (02-03)	65.66
SOx	FURNACE	FY (03-04)	0.00	FY (02-03)	7.27

Calculated Emissions for HEAT TREATING FURNACE

PM10 Reductions: (Year 1 + Year 2)/2 33 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 4 lbs/yr

Other Assumptions/ Comments: (See Attached)
All calculations and assumptions are included in the attached sheet.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: KMC WHEEL CO INC
Facility ID: 104671
Facility Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507
Type of Business: WHEEL MANUFACTURING

Offset Credit ID No.:
PM10:
SOx:

Application No. 348664 Equipment Description: OVEN, BAKING

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different): 2004

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Paolo Longoni

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	FURNACE	FY (03-04)	0.00	FY (02-03)	19.26
SOx	FURNACE	FY (03-04)	0.00	FY (02-03)	2.13

Calculated Emissions for OVEN, BAKING

PM10 Reductions: (Year 1 + Year 2)/2 10 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 1 lbs/yr

Other Assumptions/ Comments: (See Attached)
All calculations and assumptions are included in the attached sheet.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

	AER 2003 -2004	AER 2002-2003	AER 2001-2002*
Total PM reported for aluminum melting, lb/year (Form B4)	NO AER RECORDS	12,014.20	9,467.70
Total PM reported for N.G Combustion, lb/year (Form B1)		452.63	448.73
Total SOx reported for N.G. Combustion, lb/year (Form B1)		50.09	49.66

Application 400236, Melting Furnace	2002-2003	2001-2002	
Throughput Fraction (see calculations & notes below)	0.374	0.374	
N.G. Rating Fraction (see calculations & notes below)	0.232	0.232	
PM10 = (Throughput Fraction)(PM reported in Form B4), melting	4,491.76	3,539.70	
PM10 = (N.G. Rating Fraction)(PM Reported in Form B1), combustion	105.06	104.15	Average
PM10 Total = (melting + combustion)	4,596.82	3,643.85	4,120
SOx = (N.G. Rating Fraction)(SOx Reported in Form B1), combustion	11.63	11.53	12

Application 400235, Melting Furnace	2003 -2004	2002-2003	
Throughput Fraction (see calculations & notes below)	NO AER RECORDS	0.626	
N.G. Rating Fraction (see calculations & notes below)		0.435	
PM10 = (Throughput Fraction)(PM reported in Form B4), melting	0	7,522.44	
PM10 = (N.G. Rating Fraction)(PM Reported in Form B1), combustion	0	196.99	Average
PM10 Total = (melting + combustion)	0	7,719.42	3,860
SOx = (N.G. Rating Fraction)(SOx Reported in Form B1), combustion	0	21.80	11

Application 302844, Heat Treating Furnace	2002-2003	2001-2002	
N.G. Rating Fraction (see calculations & notes below)	0.145	0.145	Average
PM10 = (N.G. Rating Fraction)(PM Reported in Form B1), combustion	65.66	65.10	65
SOx = (N.G. Rating Fraction)(SOx Reported in Form B1), combustion	7.27	7.20	7

Application 302846, Heat Treating Furnace	2003 -2004	2002-2003	
N.G. Rating Fraction (see calculations & notes below)	NO AER RECORDS	0.145	Average
PM10 = (N.G. Rating Fraction)(PM Reported in Form B1), combustion	0	65.66	33
SOx = (N.G. Rating Fraction)(SOx Reported in Form B1), combustion	0	7.27	4

Application 348664, Baking Oven, Paint	2003 -2004	2002-2003	
N.G. Rating Fraction (see calculations & notes below)	NO AER RECORDS	0.043	Average
PM10 = (N.G. Rating Fraction)(PM Reported in Form B1), combustion	0	19.26	10
SOx = (N.G. Rating Fraction)(SOx Reported in Form B1), combustion	0	2.13	1

Application No.	Equipment		N.G. Rating mmbtu/hr	Throughput limit lb/month	N.G. Rating Fraction	Throughput Fraction	Inactivation Date	Shutdown Date	Inactivation records
400236	Aluminum melting furnace		4.80	310,500	0.232	0.374	11/5/2003	10/24/2003	Company's letter dated 10/24/2003
400235	Aluminum melting furnace		9.00	520,000	0.435	0.626	5/17/2005	Late 2004	Based on AQMD fee payment records
302844	Heat treating furnace		3.00	N/A	0.145	N/A	11/5/2003	10/24/2003	Company's letter dated 10/24/2003
302846	Heat treating furnace		3.00	N/A	0.145	N/A	5/17/2005	Late 2004	Based on AQMD fee payment records
348664	Baking oven, paint		0.88	N/A	0.043	N/A	5/17/2005	Late 2004	Based on AQMD fee payment records
		Total	20.68	830,500	1.000	1.000			

* *This facility reported 7,900 tons/year of annual throughput and 15,010 lbs/year of PM emissions in their AER 2001-2002. The total throughput limit for two aluminum melting furnaces is 4,983 tons/year (830,500 lbs/month). As a result, the reported PM emissions for AER 2001-2002 is adjusted to 9,467.70 (15,010 x 4,983/7900). Even though this facility under-reported PM emissions in AER 2001-2002 by using a lower emission factor of 1.9 lbs/ton (instead of 4.3 lbs/ton), the reported PM emissions are not adjusted by using a correct emission factor of 4.3 lbs/ton.*

Notes:

1. *Aluminum melting furnaces, heat treating furnaces, and baking oven emit PM & SOx emissions from combustion of natural gas. Aluminum melting furnaces also emit PM emissions from aluminum melting operations.*
2. *This facility reported emissions from natural gas combustion in Form B1 and emissions from aluminum melting operations in Form B4 of their Annual Emission Reports (AERs).*
3. *PM emissions from aluminum melting operations for each aluminum melting furnace are based on the ratio of the throughput limit for each aluminum melting furnace versus the total throughput limit for two aluminum melting furnaces.*
4. *PM & SOx emissions from natural gas combustion for each combustion equipment (furnace/oven) are based on the ratio of the heat input (btu rating) for each combustion equipment versus the total heat input (btu rating) for all five pieces of combustion equipment.*
5. *The aluminum melting furnace under A/N 400236 and heat treating furnace under A/N 302844 shut down in 2003 while the remaining equipment under A/Ns 400235, 302846, & 348664 shut down in 2004.*
6. *All PM emissions from the aluminum melting furnaces, heat treating furnaces, and oven are assumed to be equal to PM10 emissions.*

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Furnace	1. Natural Gas (mmcf)	60.35	7.00	422.45	2.30	138.81	130.00	7,845.50	0.83	50.09	35.00	2,112.25	7.50	452.63	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					422.45 lbs		**138.81 lbs**		**7845.50 lbs**		**50.09 lbs**		**2112.25 lbs**		**452.63 lbs**	
					0.21 tons		**0.07 tons**		**3.92 tons**		**0.03 tons**		**1.06 tons**		**0.23 tons**	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. METAL MELTING	N	1107	2,794.00	5. ton											4.3	12,014.20
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		12014.20 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		6.01 tons

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Furnace	1. Natural Gas (mmcf)	59.83	7.00	418.81	2.30	137.61	130.00	7,777.90	0.83	49.66	35.00	2,094.05	7.50	448.73	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					418.81 lbs		137.61 lbs		7777.90 lbs		49.66 lbs		2094.05 lbs		448.73 lbs	
					0.21 tons		0.07 tons		3.89 tons		0.02 tons		1.05 tons		0.22 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. METAL MELTING	N	1107	7,900.00	5. ton											1.9	15,010.00
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		15010.00 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		7.51 tons

FAC ID **104671**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **SP**

KMC WHEEL CO INC	1455 COLUMBIA AVE	RIVERSIDE , 92507

Last Inspection Date:	TS Code:	Compliance Team	Business Status:
5/27/2009	11	Industrial	☐Active ☐Unknown ☐New Owner ☒Out of Business

Contact Name:	Title:	Ph:

ALREADY LISTED

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
1	F19668	OVEN BAKING		☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC
2	D90788	HEAT TREATING FURNACE	HEAT TREATING FURNACE	☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC
3	FS2844	FURNACE REVERB ALUMINUM	"PER RAMIRO MUNOZ 10-24-03, EQ. NO LONGR N SERV	☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC
4	F55621	FURNACE REVERB ALUMINUM	CANCELLED FOR NONPAYMENT OVER ONE YEAR	☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC
5	D90797	HEAT TREATING FURNACE	CANCELLED FOR NONPAYMENT OVER ONE YEAR	☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC
6	D91916	SPRAY BOOTH PAINT AND SOLVENT	CANCELLED FOR NONPAYMENT OVER ONE YEAR	☐Yes ☒No ☐UTC	☐Yes ☒No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership?
N/A	ATI RIVERSIDE PLANT	N/A ☐Yes ☐No

Contact:	Title:	Phone:
STEPHEN SCHWARTZ	CEO	(909) 954-3697 EXT. 4000

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all **"Unable to confirm" "(U)" entries in this section**

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☒No		☒Removed from site	☐Operated w/o permits
		☐ On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
PAOLO LONGONI	03/22/10		

Attorney work product—prepared at the direction of and for Legal Department

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 104671 KMC WHEEL CO INC
Last Inspection: 05/27/2009
SIC:
Inspector: PL03 PAOLO LONGONI
Inspection Date: 05/27/2009
Location Address: 1455 COLUMBIA AVE, RIVERSIDE 92507 Sector:SP
Mailing Address: 1455 COLUMBIA AVE, RIVERSIDE 92507 Sector:SP
Instruction:

MR:
TS: TS-11 Industrial: Sector-based In
Facility Status: Active
Assignment No. 1111355
Disposition: Inspection in progress, Disposition pending

Contact: VIC VINET (951) 7844562
Quarter: 0001 - inspect in 4th quarter, every year
On Hold:
Suspended:
Facility Team: K

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
302346	D91914	07/10/1995	INACTIVE	001690	BCAT	FURNACE REVERB MISC METALS	06/10/1994	PERMIT TO OPERATE GRANTED
302347	D91915	07/10/1995	INACTIVE	001600	BCAT	FURNACE REVERB ALUMINUM	04/05/1995	PERMIT TO OPERATE GRANTED
302348	D91916	07/10/1995	INACT_NR	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	04/05/1995	PERMIT TO OPERATE GRANTED
302844	D90788	05/22/1995	INACTIVE	000302	BCAT	HEAT TREATING FURNACE	04/21/1995	PERMIT TO OPERATE GRANTED
302846	D90797	05/22/1995	INACT_NR	000302	BCAT	HEAT TREATING FURNACE	04/21/1995	PERMIT TO OPERATE GRANTED
328749	F12962	04/03/1998	INACTIVE	001600	BCAT	FURNACE REVERB ALUMINUM	04/22/1997	PERMIT TO OPERATE GRANTED
348664	F19668	02/18/1999	INACT_NR	000264	BCAT	OVEN, BAKING	12/09/1998	PERMIT TO OPERATE GRANTED
348665	F19669	02/18/1999	INACT_NR	26	CCAT	DUST COLLECTOR CARTRIDGE TYPE	12/09/1998	PERMIT TO OPERATE GRANTED
348666	F19670	02/18/1999	INACT_NR	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	12/09/1998	PERMIT TO OPERATE GRANTED
348667	F19671	02/18/1999	INACT_NR	60	CCAT	SPRAY BOOTH PAINT AND SOLVENT	12/09/1998	PERMIT TO OPERATE GRANTED
348668	F19684	02/19/1999	INACT_NR	64	CCAT	SPRAY BOOTH/ENCLOSURE, POWDER COATING SY	12/09/1998	PERMIT TO OPERATE GRANTED
400235	F55621	10/11/2002	INACT_NR	001600	BCAT	FURNACE REVERB ALUMINUM	04/16/2002	PERMIT TO OPERATE GRANTED
400236	F52844	06/14/2002	INACTIVE	001600	BCAT	FURNACE REVERB ALUMINUM	04/16/2002	PERMIT TO OPERATE GRANTED

Report: I arrived at the facility address on 05/27/09 at 07:40 hrs to conduct an annual facility compliance inspection.

Kmc Wheel Co Inc is no longer at this address.

The facility is now occupied by ATI Windows.

I met Deborah Schwartz, Retail Sales Manager, (909) 946-3697, who explained me that the facility, which manufactures windows, had been at this address for at least three years and asked me to return at a later day to inspect the facility.

When asked to accompany me on the facility inspection, Mrs. Schwartz asked me to return a different day when the appropriate person would be present.

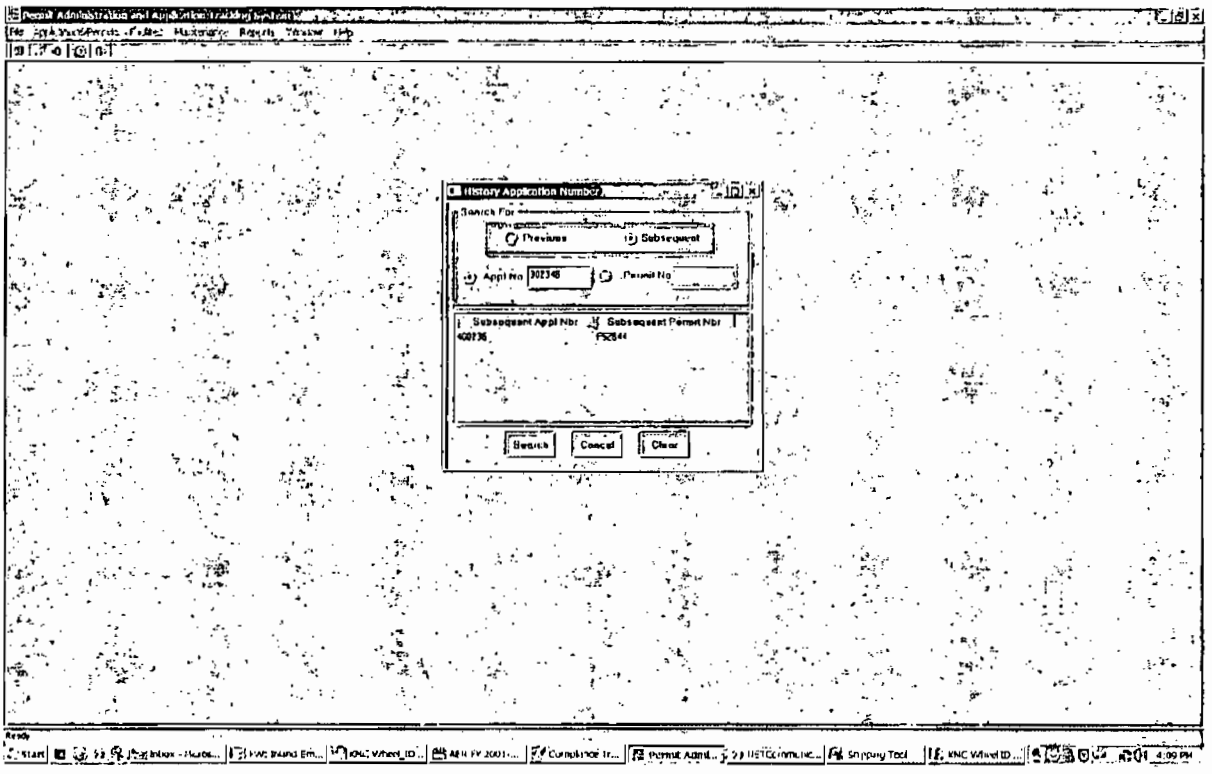
I departed the facility address at 08:10 hrs.

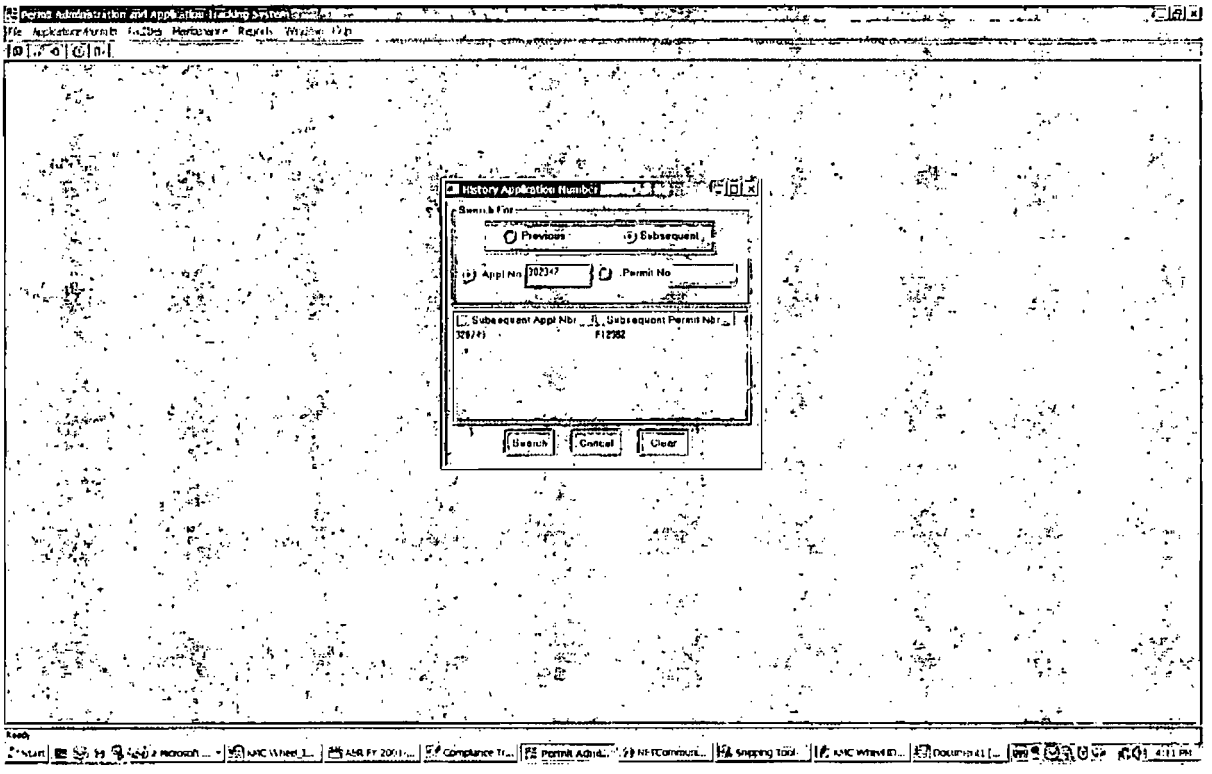
Paolo Longoni, 06/03/09

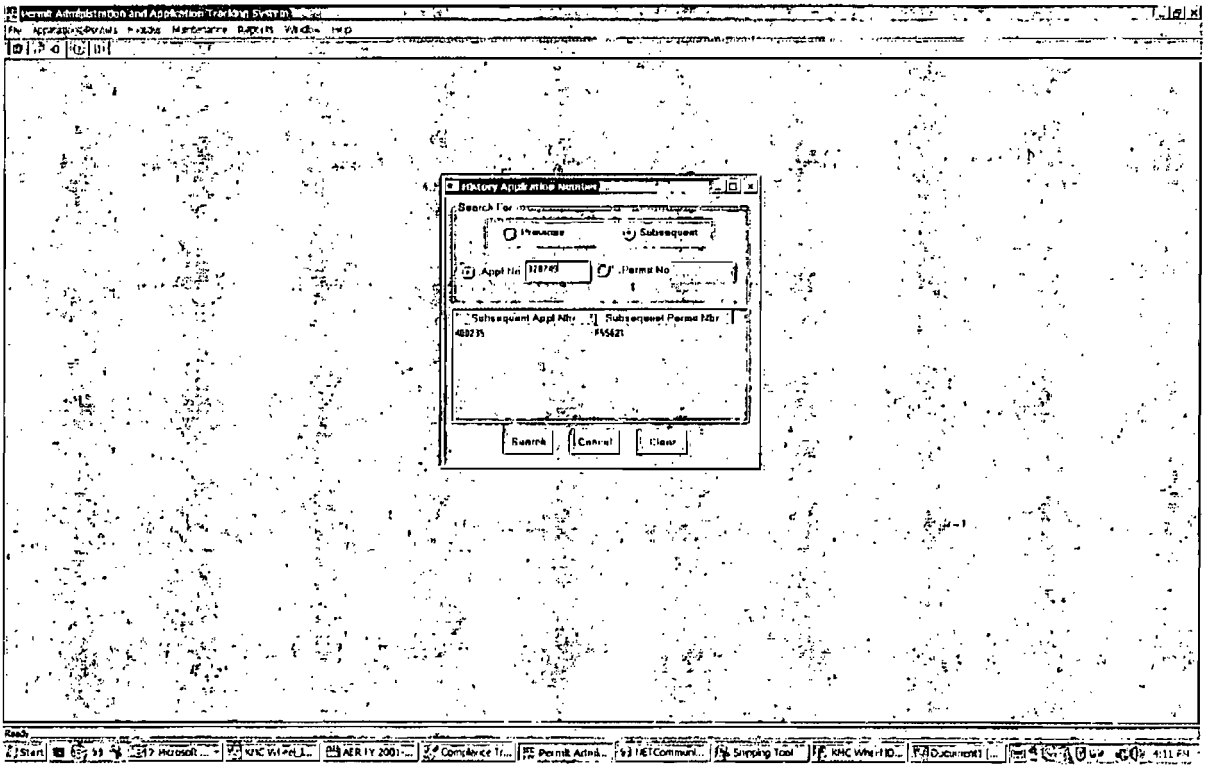
NoteNext quarter re-inspect the facility

REVIEWED BY:Gary L. Bancroft07-22-2009

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____


History Application Number
Search For
Previous
Subsequent
Appl No
Permit No
Subsequent Appl Nbr
Subsequent Permit Nbr
Search
Cancel
Clear


Search For
Previous
Subsequent
Appl Nbr
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Search For
Previous
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Appl Nbr
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Subsequent Appl Nbr
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Clear

12.8 Secondary Aluminum Operations

12.8.1 General[1]

Secondary aluminum producers recycle aluminum from aluminum-containing scrap, while primary aluminum producers convert bauxite ore into aluminum. The secondary aluminum industry was responsible for 27.5 percent of domestic aluminum produced in 1989. There are approximately 116 plants with a recovery capacity of approximately 2.4 million megagrams (2.6 million tons) of aluminum per year. Actual total secondary aluminum production was relatively constant during the 1980s. However, increased demand for aluminum by the automobile industry has doubled in the last 10 years to an average of 78.5 kilograms (173 pounds) per car. Recycling of used aluminum beverage cans (UBC) increased more than 26 percent from 1986 to 1989. In 1989, 1.3 million megagrams (1.4 million tons) of UBCs were recycled, representing over 60 percent of cans shipped. Recycling a ton of aluminum requires only 5 percent of the energy required to refine a ton of primary aluminum from bauxite ore, making the secondary aluminum economically viable.

12.8.2 Process Description

Secondary aluminum production involves 2 general categories of operations, scrap pretreatment and smelting/refining. Pretreatment operations include sorting, processing, and cleaning scrap. Smelting/refining operations include cleaning, melting, refining, alloying, and pouring of aluminum recovered from scrap. The processes used to convert scrap aluminum to products such as lightweight aluminum alloys for industrial castings are presented in Figure 12.8-1A and Figure 12.8-1B. Some or all the steps in these figures may be involved at any one facility. Some steps may be combined or reordered, depending on scrap quality, source of scrap, auxiliary equipment available, furnace design, and product specifications. Plant configuration, scrap type usage, and product output varies throughout the secondary aluminum industry.

12.8.2.1 Scrap Pretreatment -

Aluminum scrap comes from a variety of sources. "New" scrap is generated by pre-consumer sources, such as drilling and machining of aluminum castings, scrap from aluminum fabrication and manufacturing operations, and aluminum bearing residual material (dross) skimmed off molten aluminum during smelting operations. "Old" aluminum scrap is material that has been used by the consumer and discarded. Examples of old scrap include used appliances, aluminum foil, automobile and airplane parts, aluminum siding, and beverage cans.

Scrap pretreatment involves sorting and processing scrap to remove contaminants and to prepare the material for smelting. Sorting and processing separates the aluminum from other metals, dirt, oil, plastics, and paint. Pretreatment cleaning processes are based on mechanical, pyrometallurgical, and hydrometallurgical techniques.

12.8.2.1.1 Mechanical Cleaning -

Mechanical cleaning includes the physical separation of aluminum from other scrap, with hammer mills, ring rushers, and other machines to break scrap containing aluminum into smaller pieces. This improves the efficiency of downstream recovery by magnetic removal of iron. Other recovery processes include vibratory screens and air classifiers.

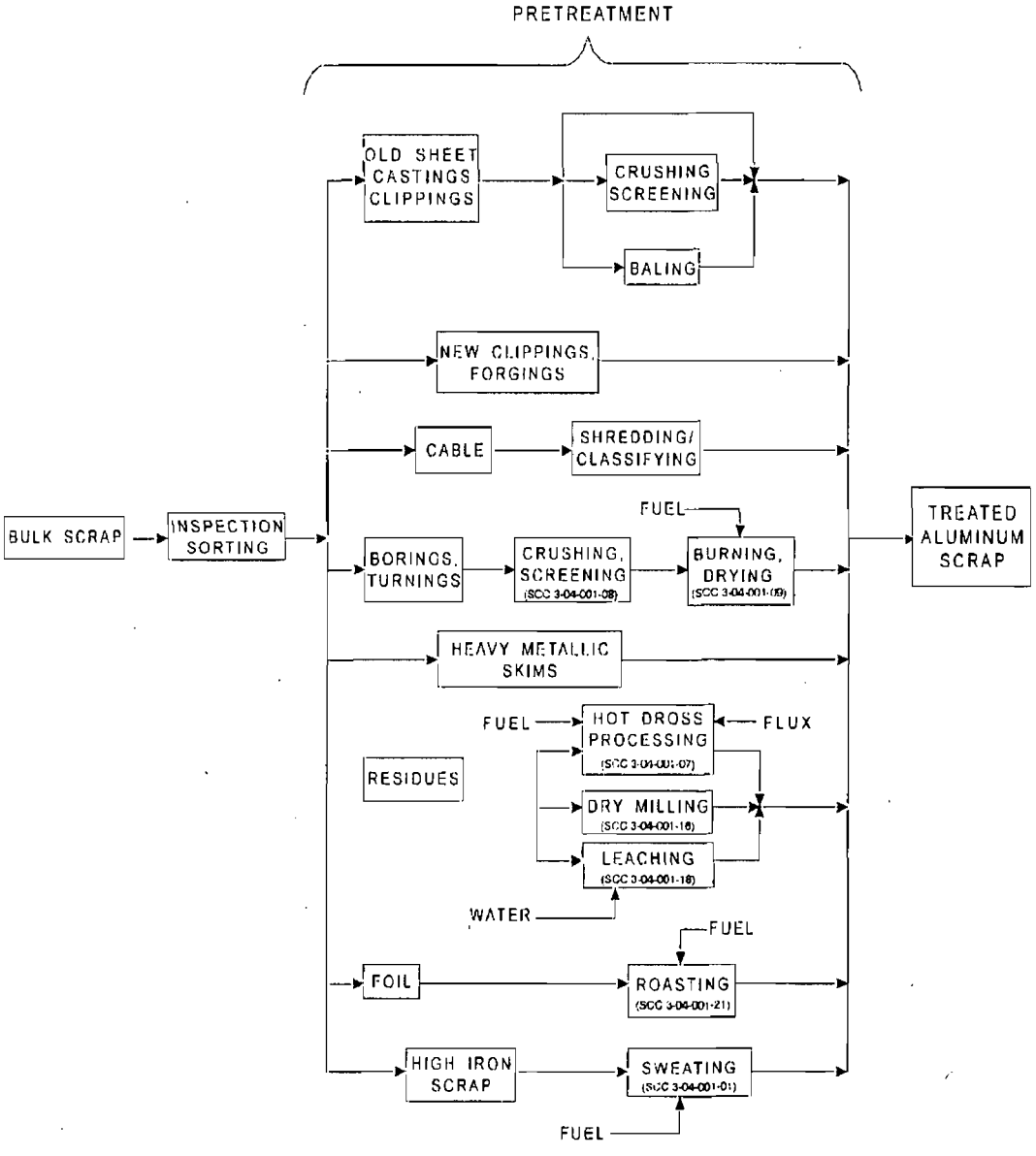


Figure 12.8-1A. Typical process diagram for secondary aluminum processing industry. (Source Classification Codes in parentheses.)

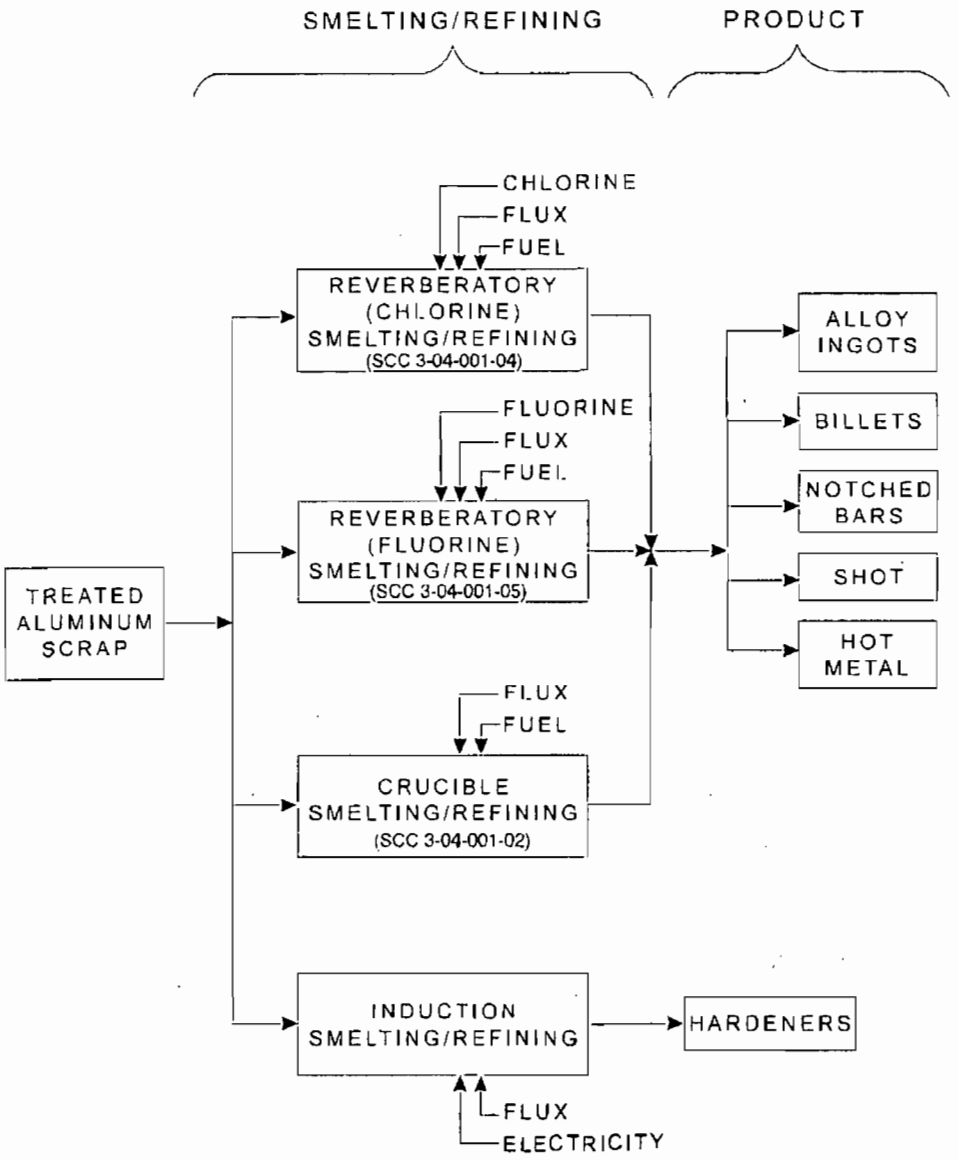


Figure 12.8-1B. Typical process diagram for secondary aluminum processing industry. (Source Classification Codes in parentheses.)

An example of mechanical cleaning is the dry milling process. Cold aluminum-laden dross and other residues are processed by milling and screening to obtain a product containing at least 60 to 70 percent aluminum. Ball, rod, or hammer mills can be used to reduce oxides and nonmetallic particles to fine powders for ease of removal during screening.

12.8.2.1.2 Pyrometallurgical Cleaning -

Pyrometallurgical techniques (called drying in the industry) use heat to separate aluminum from contaminates and other metals. Pyrometallurgical techniques include roasting and sweating. The roasting process involves heating aluminum scrap that contains organic contaminates in rotary dryers to temperatures high enough to vaporize or carbonize organic contaminates, but not high enough to melt aluminum (660°C [1220°F]). An example of roasting is the APROS delacquering and preheating process used during the processing of used beverage cans (shown in Figure 12.8-2). The sweating process involves heating aluminum scrap containing other metals in a sweat furnace to temperatures above the melting temperature of aluminum, but below that of the other metal. For example, sweating recovers aluminum from high-iron-content scrap by heating the scrap in an open flame reverberatory furnace. The temperature is raised and maintained above the melting temperature of aluminum, but below the melting temperature of iron. This condition causes aluminum and other low melting constituents to melt and trickle down the sloped hearth, through a grate and into air-cooled molds or collecting pots. This product is called "sweated pig". The higher-melting materials, including iron, brass, and the oxidation products formed during the sweating process, are periodically removed from the furnace.

In addition to roasting and sweating, a catalytic technique may also be used to clean aluminum dross. Dross is a layer of impurities and semisolid flux that has been skimmed from the surface of molten aluminum. Aluminum may be recovered from dross by batch fluxing with a salt/cryolite mixture in a mechanically rotated, refractory-lined barrel furnace. Cryolite acts as a catalyst that decreases aluminum surface tension and therefore increases recovery rates. Aluminum is tapped periodically through a hole in the base of the furnace.

12.8.2.1.3 Hydrometallurgical Cleaning -

Hydrometallurgical techniques use water to clean and process aluminum scrap. Hydrometallurgical techniques include leaching and heavy media separation. Leaching is used to recover aluminum from dross, furnace skimmings, and slag. It requires wet milling, screening, drying, and finally magnetic separation to remove fluxing salts and other waste products from the aluminum. First, raw material is fed into a long rotating drum or a wet-ball mill where water soluble contaminants are rinsed into waste water and removed (leached). The remaining washed material is then screened to remove fines and undissolved salts. The screened material is then dried and passed through a magnetic separator to remove ferrous materials.

The heavy media separation hydrometallurgical process separates high density metal from low density metal using a viscous medium, such as copper and iron, from aluminum. Heavy media separation has been used to concentrate aluminum recovered from shredded cars. The cars are shredded after large aluminum components have been removed (shredded material contains approximately 30 percent aluminum) and processed in heavy media to further concentrate aluminum to 80 percent or more.

12.8.2.2 Smelting/Refining -

After scrap pretreatment, smelting and refining is performed. Smelting and refining in secondary aluminum recovery takes place primarily in reverberatory furnaces. These furnaces are brick-lined and constructed with a curved roof. The term reverberatory is used because heat rising

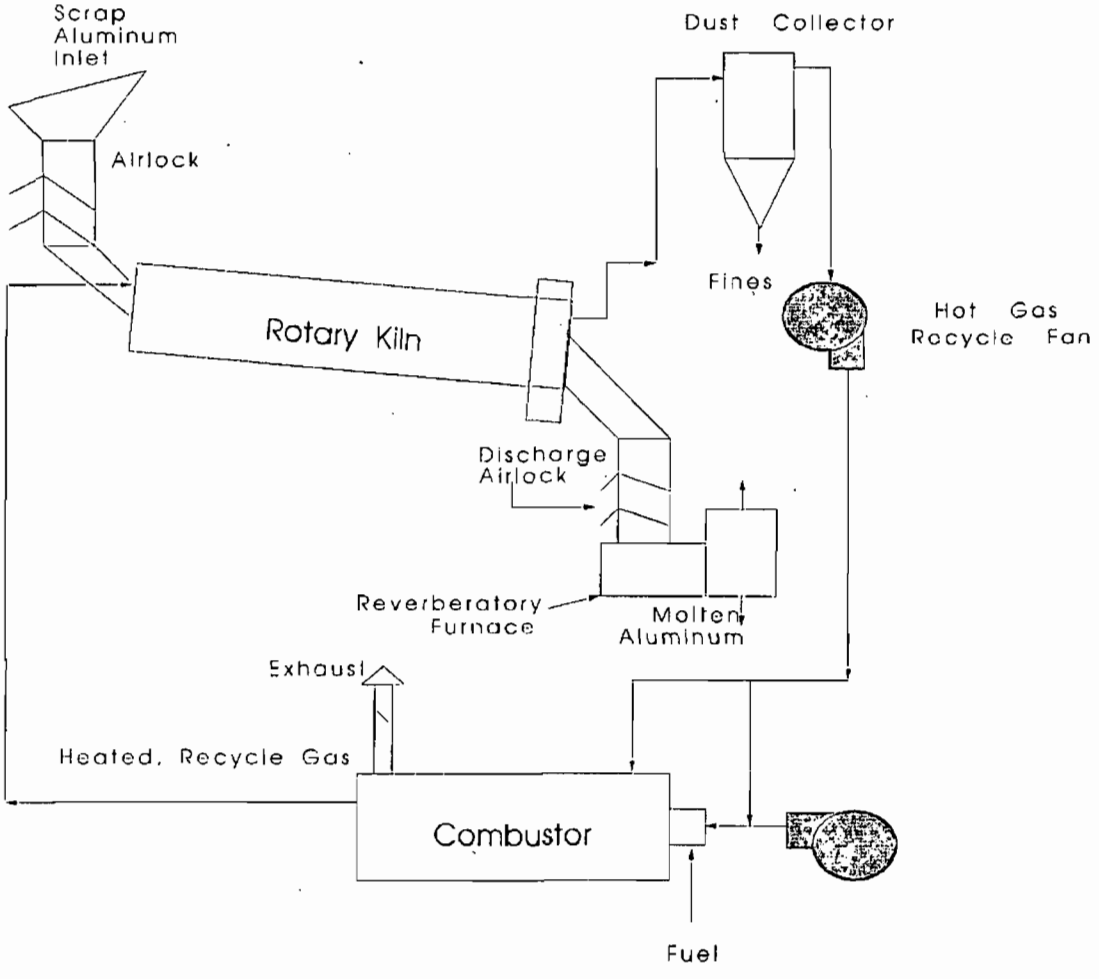


Figure 12.8-2. APROS delacquering and preheating process.

from ignited fuel is reflected (reverberated) back down from the curved furnace roof and into the melted charge. A typical reverberatory furnace has an enclosed melt area where the flame heat source operates directly above the molten aluminum. The furnace charging well is connected to the melt area by channels through which molten aluminum is pumped from the melt area into the charging well. Aluminum flows back into the melt section of the furnace under gravity.

Most secondary aluminum recovery facilities use batch processing in smelting and refining operations. It is common for 1 large melting reverberatory furnace to support the flow requirements for 2 or more smaller holding furnaces. The melting furnace is used to melt the scrap, and remove impurities and entrained gases. The molten aluminum is then pumped into a holding furnace. Holding furnaces are better suited for final alloying, and for making any additional adjustments necessary to ensure that the aluminum meets product specifications. Pouring takes place from holding furnaces, either into molds or as feedstock for continuous casters.

Smelting and refining operations can involve the following steps: charging, melting, fluxing, demagging, degassing, alloying, skimming, and pouring. Charging consists of placing pretreated aluminum scrap into a melted aluminum pool (heel) that is maintained in melting furnaces. The scrap, mixed with flux material, is normally placed into the furnace charging well, where heat from the molten aluminum surrounding the scrap causes it to melt by conduction. Flux materials combine with contaminates and float to the surface of the aluminum, trapping impurities and providing a barrier (up to 6 inches thick) that reduces oxidation of the melted aluminum. To minimize aluminum oxidation (melt loss), mechanical methods are used to submerge scrap into the heel as quickly as possible. Scrap may be charged as high density bales, loosely packed bales, or as dry shredded scrap that is continuously fed from a conveyor and into the vortex section of the charging well. The continuous feed system is advantageous when processing uniform scrap directly from a drier (such as a delacquering operation for UBCs).

Demagging reduces the magnesium content of the molten charge from approximately 0.5 percent to about 0.1 percent (a typical product specification). In the past, when demagging with liquid chlorine, chlorine was injected under pressure to react with magnesium as the chlorine bubbled to the surface. The pressurized chlorine was released through carbon lances directed under the heel surface, resulting in high chlorine emissions.

A more recent chlorine aluminum demagging process has replaced the carbon lance procedure. Molten aluminum in the furnace charging well gives up thermal energy to the scrap as scrap is melted. In order to maintain high melt rates in the charging well, a circulation pump moves high temperature molten aluminum from the melt section of the reverberatory furnace to the charging well. Chlorine gas is metered into the circulation pump's discharge pipe. By inserting chlorine gas into the turbulent flow of the molten aluminum at an angle to the aluminum pump discharge, small chlorine-filled gas bubbles are sheared off and mixed rapidly in the turbulent flow found in the pump's discharge pipe. In actual practice, the flow rate of chlorine gas is increased until a slight vapor (aluminum chloride) can be seen above the surface of the molten aluminum. Then the flow rate is decreased until no more vapor is seen. It is reported that chlorine usage approaches the stoichiometric relationship using this process. Chlorine emissions resulting from this procedure have not been made available, but it is anticipated that reductions of chlorine emissions (in the form of chloride compounds) will be reported in the future.

Other chlorinating agents or fluxes, such as anhydrous aluminum chloride or chlorinated organics, are used in demagging operations. Demagging with fluorine is similar to demagging with chlorine, except that aluminum fluoride (AlF_3) is employed instead of chlorine. The AlF_3 reacts with

magnesium to produce molten metallic aluminum and solid magnesium fluoride salt that floats to the surface of the molten aluminum and is trapped in the flux layer.

Degassing is a process used to remove gases entrained in molten aluminum. High-pressure inert gases are released below the molten surface to violently agitate the melt. This agitation causes the entrained gasses to rise to the surface to be absorbed in the floating flux. In some operations, degassing is combined with the demagging operation. A combination demagging and degassing process has been developed that uses a 10 percent concentration of chlorine gas mixed with a nonreactive gas (either nitrogen or argon). The combined high-pressure gases are forced through a hand held nozzle that has a designed distribution pattern of hole sizes across the face of the nozzle. The resulting high turbulent flow and the diluted chlorine content primarily degasses the melt. Chlorine emissions resulting from this process are not available.

Alloying combines aluminum with an alloying agent in order to change its strength and ductility. Alloying agents include zinc, copper, manganese, magnesium, and silicon. The alloying steps include an analysis of the furnace charge, addition of the required alloying agents, and then a reanalysis of the charge. This iterative process continues until the correct alloy is reached.

The skimming operation physically removes contaminated semisolid fluxes (dross, slag, or skimmings) by ladling them from the surface of the melt. Skimming is normally conducted several times during the melt cycle, particularly if the pretreated scrap contains high levels of contamination. Following the last skimming, the melt is allowed to cool before pouring into molds or casting machines.

The crucible smelting/refining process is used to melt small batches of aluminum scrap, generally limited to 500 kg (1,100 lb) or less. The metal-treating process steps are essentially the same as those of reverberatory furnaces.

The induction smelting and refining process is designed to produce aluminum alloys with increased strength and hardness by blending aluminum and hardening agents in an electric induction furnace. The process steps include charging scrap, melting, adding and blending the hardening agent, skimming, pouring, and casting into notched bars. Hardening agents include manganese and silicon.

12.8.3 Emissions And Controls[2-8]

The major sources of emissions from scrap pretreatment processes are scrap crushing and screening operations, scrap driers, sweat furnaces, and UBC delacquering systems. Although each step in scrap treatment and smelting/refining is a potential source of emissions, emission factors for scrap treatment processes have not been sufficiently characterized and documented and are therefore not presented below.

Smelting and refining emission sources originate from charging, fluxing, and demagging processes. Tables 12.8-1 and 12.8-2 present emission factors for sweating furnaces, crucible furnaces, reverberatory furnaces, and chlorine demagging process.

Table 12.8-1 (Metric Units). PARTICULATE EMISSION FACTORS FOR SECONDARY ALUMINUM OPERATIONS[a]

Operation	Uncontrolled	EMISSION FACTOR RATING	Baghouse	EMISSION FACTOR RATING	Electrostatic Precipitator	EMISSION FACTOR RATING
Sweating furnace[b] (SCC 3-04-001-01)	7.25	E	1.65	E	ND	NA
Smelting						
Crucible furnace[b] (SCC 3-04-001-02)	0.95	E	ND	NA	ND	NA
Reverberatory[c] (SCC 3-04-001-03)	2.15	E	0.65[e]	E	0.65	E
Chlorine demagging[d] (SCC 3-04-001-04)	500	E	25	E	ND	E

[a] Reference 3. Emission factors for sweating and smelting furnaces expressed as kg/Mg of metal processed. For chlorine demagging, emission factor is kg/Mg of chlorine used. SCC = Source Classification Code. ND = no data. NA = not applicable.

[b] Based upon averages of 2 source tests.

[c] Uncontrolled, based on averages of 10 source tests. Standard deviation of uncontrolled emission factor is 1.75 kg/Mg (3.5 lb/ton), that of controlled emission factor is 0.15 kg/Mg.

[d] Based on average of 10 source tests. Standard deviation of uncontrolled emission factor is 215 kg/Mg; that of controlled emission factor is 18 kg/Mg.

[e] This factor may be lower if a coated baghouse is used.

Table 12.8-2 (English Units). PARTICULATE EMISSION FACTORS FOR SECONDARY ALUMINUM OPERATIONS[a]

Operation	Uncontrolled	EMISSION FACTOR RATING	Baghouse	EMISSION FACTOR RATING	Electrostatic Precipitator	EMISSION FACTOR RATING
Sweating furnace[b] (SCC 3-04-001-01)	14.5	E	3.3	E	ND	NA
Smelting						
Crucible furnace[b] (SCC 3-04-001-02)	1.9	E	ND	NA	ND	NA
Reverberatory[c] (SCC 3-04-001-03)	4.3	E	1.3[e]	E	1.3	E
Chlorine demagging[d] (SCC 3-04-001-04)	1000	E	50	E	ND	NA

[a] Reference 3. Emission factors for sweating and smelting furnaces expressed as lb/ton of metal processed. For chlorine demagging, emission factor is lb/ton of chlorine used. SCC = Source Classification Code. ND = no data. NA = not applicable.

[b] Based upon averages of 2 source tests.

[c] Uncontrolled, based on averages of 10 source tests. Standard deviation of uncontrolled emission factor is 3.5 lb/ton, that of controlled emission factor is 0.3 lb/ton.

[d] Based on average of 10 source tests. Standard deviation of uncontrolled emission factor is 430 lb/ton; that of controlled emission factor is 36 lb/ton.

[e] This factor may be lower if a coated baghouse is used.

12.8.3.1 Scrap Pretreatment Emissions -

Mechanical cleaning techniques involve crushing, shredding, and screening and produce metallic and nonmetallic particulates. Burning and drying operations (pyrometallurgic techniques) emit particulates and organic vapors. Afterburners are frequently used to convert unburned VOCs to carbon dioxide and water vapor. Other gases that may be present, depending on the composition of the contaminants, include chlorides, fluorides, and sulfur oxides. Specific emission factors for these gases are not presented due to lack of data. Oxidized aluminum fines blown out of the dryer by the combustion gases contain particulate emissions. Wet scrubbers or fabric filters are sometimes used in conjunction with afterburners.

Mechanically generated dust from rotating barrel dross furnaces constitutes the main air emission of hot dross processing. Some fumes are produced from the fluxing reactions. Fugitive emissions are controlled by enclosing the barrel furnace in a hood system and by ducting the emissions to a fabric filter. Furnace offgas emissions, mainly fluxing salt fume, are often controlled by a venturi scrubber.

Emissions from sweating furnaces vary with the feed scrap composition. Smoke may result from incomplete combustion of organic contaminants (e. g., rubber, oil and grease, plastics, paint, cardboard, paper) that may be present. Fumes can result from the oxidation of magnesium and zinc contaminants and from fluxes in recovered dross and skims.

In dry milling, large amounts of dust are generated from the crushing, milling, screening, air classification, and materials transfer steps. Leaching operations (hydrometallurgic techniques) may produce particulate emissions during drying. Particulate emissions from roasting result from the charring of carbonaceous materials (ash).

12.8.3.2 Smelting/Refining Emissions -

Emissions from reverberatory furnaces represent a significant fraction of the total particulate and gaseous effluent generated in the secondary aluminum industry. Emissions from the charging well consist of organic and inorganic particulate, unburned organic vapors, and carbon dioxide. Emissions from furnace burners contain carbon monoxide, carbon dioxide, sulfuric oxide, and nitrogen oxide. Furnace burner emissions are usually separated from process emissions.

Emissions that result from fluxing operations are dependent upon both the type of fluxing agents and the amount required, which are a function of scrap quality. Emissions may include common fluxing salts such as sodium chloride, potassium chloride, and cryolite. Aluminum and magnesium chloride also may be generated from the fluxing materials being added to the melt. Studies have suggested that fluxing particulate emission are typically less than 1 micrometer in diameter. Specific emission factors for these compounds are not presented due to lack of information.

In the past, demagging represented the most severe source of emissions for the secondary aluminum industry. A more recent process change where chlorine gas is mixed into molten aluminum from the furnace circulation pump discharge may reduce chlorine emissions. However, total chlorine emissions are directly related to the amount of demagging effort and product specifications (the magnesium content in the scrap and the required magnesium reduction). Also, as the magnesium percentage decreases during demagging, a disproportional increase in emissions results due to the decreased efficiency of the scavenging process.

Both the chlorine and aluminum fluoride demagging processes create highly corrosive emissions. Chlorine demagging results in the formation of magnesium chloride that contributes to fumes leaving the dross. Excess chloride combines with aluminum to form aluminum chloride, a

vapor at furnace temperatures, but one that condenses into submicrometer fumes as it cools. Aluminum chloride has an extremely high affinity for water (hygroscopic) and combines with water vapor to form hydrochloric acid. Aluminum chloride and hydrochloric acid are irritants and corrosive. Free chlorine that does not form compounds may also escape from the furnace and become an emission.

Aluminum fluoride (AlF_3) demagging results in the formation of magnesium fluoride as a byproduct. Excess fluorine combines with hydrogen to form hydrogen fluoride. The principal emissions resulting from aluminum fluoride demagging is a highly corrosive fume containing aluminum fluoride, magnesium fluoride, and hydrogen fluoride. The use of AlF_3 rather than chlorine in the demagging step reduces demagging emissions. Fluorides are emitted as gaseous fluorides (hydrogen fluoride, aluminum and magnesium fluoride vapors, and silicon tetrafluoride) or as dusts. Venturi scrubbers are usually used for gaseous fluoride emission control.

Tables 12.8-3 and 12.8-4 present particle size distributions and corresponding emission factors for uncontrolled chlorine demagging and metal refining in secondary aluminum reverberatory furnaces.

According to the VOC/PM Speciate Data Base Management System (SPECIATE) data base, the following hazardous air pollutants (HAPs) have been found in emissions from reverberatory furnaces: chlorine, and compounds of manganese, nickel, lead, and chromium. In addition to the HAPs listed for reverberatory furnaces, general secondary aluminum plant emissions have been found to include HAPs such as antimony, cobalt, selenium, cadmium, and arsenic, but specific emission factors for these HAPs are not presented due to lack of information.

In summary, typical furnace effluent gases contain combustion products, chlorine, hydrogen chloride and metal chlorides of zinc, magnesium and aluminum, aluminum oxide and various metals and metal compounds, depending on the quality of scrap charged.

Table 12.8-3 (Metric Units). PARTICLE SIZE DISTRIBUTION AND SIZE-SPECIFIC EMISSION FACTORS FOR UNCONTROLLED REVERBERATORY FURNACES IN SECONDARY ALUMINUM OPERATIONS[a]

Aerodynamic Particle Diameter (μm)	Particle Size Distribution[b]		Size-Specific Emission Factor[c] (kg/Mg)			
	Chlorine Demagging	Refining	Chlorine Demagging	EMISSION FACTOR RATING	Refining	EMISSION FACTOR RATING
2.5	19.8	50.0	99.5	E	1.08	E
6.0	36.9	53.4	184.5	E	1.15	E
10.0	53.2	60.0	266.0	E	1.30	E

[a] References 4-5.

[b] Cumulative weight percent is less than the aerodynamic particle diameter, μm.

[c] Size-specific emission factor equals total particulate emission factor multiplied by particle size distribution (percent)/100. From Table 12.8-1, total particulate emission factor for chloride demagging is 500 kg/Mg chlorine used, and for refining, 2.15 kg/Mg aluminum processed.

Table 12.8-4 (English Units). PARTICLE SIZE DISTRIBUTION AND SIZE-SPECIFIC EMISSION FACTORS FOR UNCONTROLLED REVERBERATORY FURNACES IN SECONDARY ALUMINUM OPERATIONS[a]

Aerodynamic Particle Diameter (μm)	Particle size Distribution[b]		Size-Specific Emission Factor[c] (lb/ton)			
	Chlorine Demagging	Refining	Chlorine Demagging	EMISSION FACTOR RATING	Refining	EMISSION FACTOR RATING
2.5	19.8	50.0	199	E	2.16	E
6.0	36.9	53.4	369	E	2.3	E
10.0	53.2	60.0	532	E	2.6	E

[a] References 4-5.

[b] Cumulative weight percent is less than the aerodynamic particle diameter, μm.

[c] Size-specific emission factor equals total particulate emission factor multiplied by particle size distribution (percent)/100. From Table 12.8-2, total particulate emission factor for chloride demagging is 1000 lb/ton chlorine used, and for refining, 4.3 lb/ton aluminum processed.

References For Section 12.8

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8. Secondary Aluminum Plant—General, Speciation Data Base. U. S. Environmental Protection Agency. Research Triangle Park, NC, Profile Number 90009, 1989.

like no other.

10-24-03

AQMD,

The following equipment is no longer in service. The following transaction balance was deducted, from the original annual operating fee invoice.

Transaction	Reference #	Balance
6546129	D90788	-$201.77
6546137	F52844	-722.68

— 302844
— 400236

TOTAL $ 924.45

Ramiro Munoz
KMCWHEELCOMPANY
909-784-4562 x261

NOV 5 2003

CR# 15813
2730,98

KMC • WHEEL COMPANY
1455 Columbia Ave., Riverside, CA 92507 • Voice: 909.784-4562 • Fax: 909.784-5550
CERTIFIED TO ISO 9001

South Coast Air Quality Management District

Inquiry Transaction Report

Facility Id: 104671 **Run Date:** 04/23/2010

Facility Name: KMC WHEEL CO INC **Requested By:** elaineh

Location Address: 1455 COLUMBIA AVE RIVERSIDE, CA 92507

Date From: Jan 01, 2001 **Date Thru:** 00/00/0000

Transaction Number	Action Type	Trans Type	Reference Number	Transaction Date	Status	Invoice Number	Transaction Amount	Ar Balance	Transfer Flag
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5410505	REFUNDOP	20	F19684	06/01/2002	PD	970798	($137.55)	$0.00	
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6030432	PAYMENT	20	D90788	10/23/2001	PD	1269010	($191.11)	$0.00	
6030433	ANNUAL RENEWAL	20	D90797	08/01/2001	PD	1269010	$191.11		
6030433	PAYMENT	20	D90797	10/23/2001	PD	1269010	($191.11)	$0.00	
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6030441	ANNUAL RENEWAL	20	F19684	08/01/2001	PD	1269010	$191.11		
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6032049	ADJD1	90	FY01-02	10/20/2001	PD	1270186	($1.88)		
6032049	PAYMENT	90	FY01-02	10/23/2001	PD	1270186	($37.50)	$0.00	
6051809	PAYMENT	80	01L	09/05/2001	PD	1280323	($2,198.47)		
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6051810	EMISSIONS	80	01L	09/05/2001	PD	1280323	$1.41		
6051810	PAYMENT	80	01L	09/05/2001	PD	1280323	($1.41)	$0.00	
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6288585	OVERPAYMNT	10	400235	04/18/2002	PD	1387324	($3,938.97)		
6288585	ADJINV	10	400235	04/23/2002	PD	1387324	$2,625.98		
6288585	PAYMENT	10	400235	04/23/2002	PD	1387324	($2,625.98)	$0.00	
6288586	PERMIT PROCESS	10	400236	04/17/2002	PD	1387325	$0.00		
6288586	ADJINV	10	400236	04/23/2002	PD	1387325	$1,312.99		
6288586	PAYMENT	10	400236	04/23/2002	PD	1387325	($1,312.99)	$0.00	

South Coast Air Quality Management District

Inquiry Transaction Report

Facility Id: 104671 **Run Date:** 04/23/2010

Facility Name: KMC WHEEL CO INC **Requested By:** elaineh

Location Address: 1455 COLUMBIA AVE RIVERSIDE, CA 92507

Date From: Jan 01, 2001 **Date Thru:** 00/00/0000

Transaction Number	Action Type	Trans Type	Reference Number	Transaction Date	Status	Invoice Number	Transaction Amount	Ar Balance	Transfer Flag
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6359886	PAYMENT	20	D90788	10/17/2002	PD	1424644	($195.89)	$0.00	
6359887	ANNUAL RENEWAL	20	D90797	08/01/2002	PD	1424644	$195.89		
6359887	PAYMENT	20	D90797	10/17/2002	PD	1424644	($195.89)	$0.00	
6359888	ANNUAL RENEWAL	20	D91916	08/01/2002	PD	1424644	$195.89		
6359888	PAYMENT	20	D91916	10/17/2002	PD	1424644	($195.89)	$0.00	
6359889	ANNUAL RENEWAL	20	F12962	08/01/2002	PD	1424644	$701.63		
6359889	PAYMENT	20	F12962	10/17/2002	PD	1424644	($701.63)	$0.00	
6359890	ANNUAL RENEWAL	20	F19668	08/01/2002	PD	1424644	$195.89		
6359890	PAYMENT	20	F19668	10/17/2002	PD	1424644	($195.89)	$0.00	
6359891	ANNUAL RENEWAL	20	F19669	08/01/2002	PD	1424644	$701.63		
6359891	PAYMENT	20	F19669	10/17/2002	PD	1424644	($701.63)	$0.00	
6359892	ANNUAL RENEWAL	20	F19670	08/01/2002	PD	1424644	$195.89		
6359892	PAYMENT	20	F19670	10/17/2002	PD	1424644	($195.89)	$0.00	
6359893	ANNUAL RENEWAL	20	F19671	08/01/2002	PD	1424644	$195.89		
6359893	PAYMENT	20	F19671	10/17/2002	PD	1424644	($195.89)	$0.00	
6359894	ANNUAL RENEWAL	20	F19684	08/01/2002	PD	1424644	$195.89		
6359894	PAYMENT	20	F19684	10/17/2002	PD	1424644	($195.89)	$0.00	
6359895	ANNUAL RENEWAL	20	F52844	08/01/2002	PD	1424644	$701.63		
6359895	PAYMENT	20	F52844	10/17/2002	PD	1424644	($701.63)	$0.00	
6361711	EMISSIONS	90	FY02-03	08/01/2002	PD	1425875	$75.00		
6361711	PENALTY	90	FY02-03	10/01/2002	PD	1425875	$3.75		
6361711	ADJINV	90	FY02-03	10/17/2002	PD	1425875	($3.75)		
6361711	PAYMENT	90	FY02-03	10/17/2002	PD	1425875	($75.00)	$0.00	
6378097	PAYMENT	80	02L	09/05/2002	PD	1434715	($1,320.85)		
6378097	EMISSIONS	80	02L	09/05/2002	PD	1434715	$1,320.85	$0.00	
6543756	EMISSIONS	90	FY03-04	08/06/2003	PD	1526755	$75.00		
6543756	PENALTY	90	FY03-04	10/01/2003	PD	1526755	$3.75		
6543756	ADJD1	90	FY03-04	11/05/2003	PD	1526755	($3.75)		
6543756	PAYMENT	90	FY03-04	11/05/2003	PD	1526755	($75.00)	$0.00	
6546129	ANNUAL RENEWAL	20	D90788	08/06/2003	PD	1527910	$201.77		
6546129	ADJINV	20	D90788	11/05/2003	PD	1527910	($201.77)	$0.00	
6546130	ANNUAL RENEWAL	20	D90797	08/06/2003	PD	1527910	$201.77		
6546130	PAYMENT	20	D90797	11/05/2003	PD	1527910	($201.77)	$0.00	
6546131	ANNUAL RENEWAL	20	D91916	08/06/2003	PD	1527910	$201.77		
6546131	PAYMENT	20	D91916	11/05/2003	PD	1527910	($201.77)	$0.00	
6546132	ANNUAL RENEWAL	20	F19668	08/06/2003	PD	1527910	$201.77		

South Coast Air Quality Management District

Inquiry Transaction Report

Facility Id: 104671 **Run Date:** 04/23/2010

Facility Name: KMC WHEEL CO INC **Requested By:** elaineh

Location Address: 1455 COLUMBIA AVE RIVERSIDE, CA 92507

Date From: Jan 01, 2001 **Date Thru:** 00/00/0000

Transaction Number	Action Type	Trans Type	Reference Number	Transaction Date	Status	Invoice Number	Transaction Amount	Ar Balance	Transfer Flag
6546132	PAYMENT	20	F19668	11/05/2003	PD	1527910	($201.77)	$0.00	
6546133	ANNUAL RENEWAL	20	F19669	08/06/2003	PD	1527910	$722.68		
6546133	PAYMENT	20	F19669	11/05/2003	PD	1527910	($722.68)	$0.00	
6546134	ANNUAL RENEWAL	20	F19670	08/06/2003	PD	1527910	$201.77		
6546134	PAYMENT	20	F19670	11/05/2003	PD	1527910	($201.77)	$0.00	
6546135	ANNUAL RENEWAL	20	F19671	08/06/2003	PD	1527910	$201.77		
6546135	PAYMENT	20	F19671	11/05/2003	PD	1527910	($201.77)	$0.00	
6546136	ANNUAL RENEWAL	20	F19684	08/06/2003	PD	1527910	$201.77		
6546136	PAYMENT	20	F19684	11/05/2003	PD	1527910	($201.77)	$0.00	
6546137	ANNUAL RENEWAL	20	F52844	08/06/2003	PD	1527910	$722.68		
6546137	ADJINV	20	F52844	11/05/2003	PD	1527910	($722.68)	$0.00	
6546138	ANNUAL RENEWAL	20	F55621	08/06/2003	PD	1527910	$722.68		} Annual Renewal Fees (through 08/04) last payment
6546138	PAYMENT	20	F55621	11/05/2003	PD	1527910	($722.68)	$0.00	
6563399	EMISSIONS	80	FY0203	09/09/2003	PD	1536989	$816.30		
6563399	PAYMENT	80	FY0203	09/10/2003	PD	1536989	($816.30)	$0.00	
6563400	EMISSIONS	80	FY0203	09/09/2003	PD	1536989	$10.86		} Annual Emission Fees for 2002 - 2003
6563400	PAYMENT	80	FY0203	09/10/2003	PD	1536989	($10.86)	$0.00	
6700772	ANNUAL RENEWAL	20	D90797	08/04/2004	NR	1615663	$207.82		
6700772	ADJINV	20	D90797	05/17/2005	NR	1615663	($207.82)	$0.00	
6700773	ANNUAL RENEWAL	20	D91916	08/04/2004	NR	1615663	$207.82		
6700773	ADJINV	20	D91916	05/17/2005	NR	1615663	($207.82)	$0.00	
6700774	ANNUAL RENEWAL	20	F19668	08/04/2004	NR	1615663	$207.82		
6700774	ADJINV	20	F19668	05/17/2005	NR	1615663	($207.82)	$0.00	
6700775	ANNUAL RENEWAL	20	F19669	08/04/2004	NR	1615663	$744.36		
6700775	ADJINV	20	F19669	05/17/2005	NR	1615663	($744.36)	$0.00	
6700776	ANNUAL RENEWAL	20	F19670	08/04/2004	NR	1615663	$207.82		
6700776	ADJINV	20	F19670	05/17/2005	NR	1615663	($207.82)	$0.00	
6700777	ANNUAL RENEWAL	20	F19671	08/04/2004	NR	1615663	$207.82		
6700777	ADJINV	20	F19671	05/17/2005	NR	1615663	($207.82)	$0.00	
6700778	ANNUAL RENEWAL	20	F19684	08/04/2004	NR	1615663	$207.82		
6700778	ADJINV	20	F19684	05/17/2005	NR	1615663	($207.82)	$0.00	
6700779	ANNUAL RENEWAL	20	F55621	08/04/2004	NR	1615663	$744.36		
6700779	ADJINV	20	F55621	05/17/2005	NR	1615663	($744.36)	$0.00	
6702515	EMISSIONS	90	FY04-05	08/04/2004	PD	1616822	$77.25	-	} For 2003 - 2004 AER Flat Fee Last Payment
6702515	PAYMENT	90	FY04-05	09/22/2004	PD	1616822	($77.25)	$0.00	
6863296	ANNUAL RENEWAL	20	F12962	08/01/2005	RE	1707301	$789.02		
6863296	REINSTATE	20	F12962	01/10/2006	RE	1707301	$0.00		

* Based on the payment history, this facility was out of business in late 2004 since they did not pay annual renewal fees (through 08/05).

South Coast Air Quality Management District

Inquiry Transaction Report

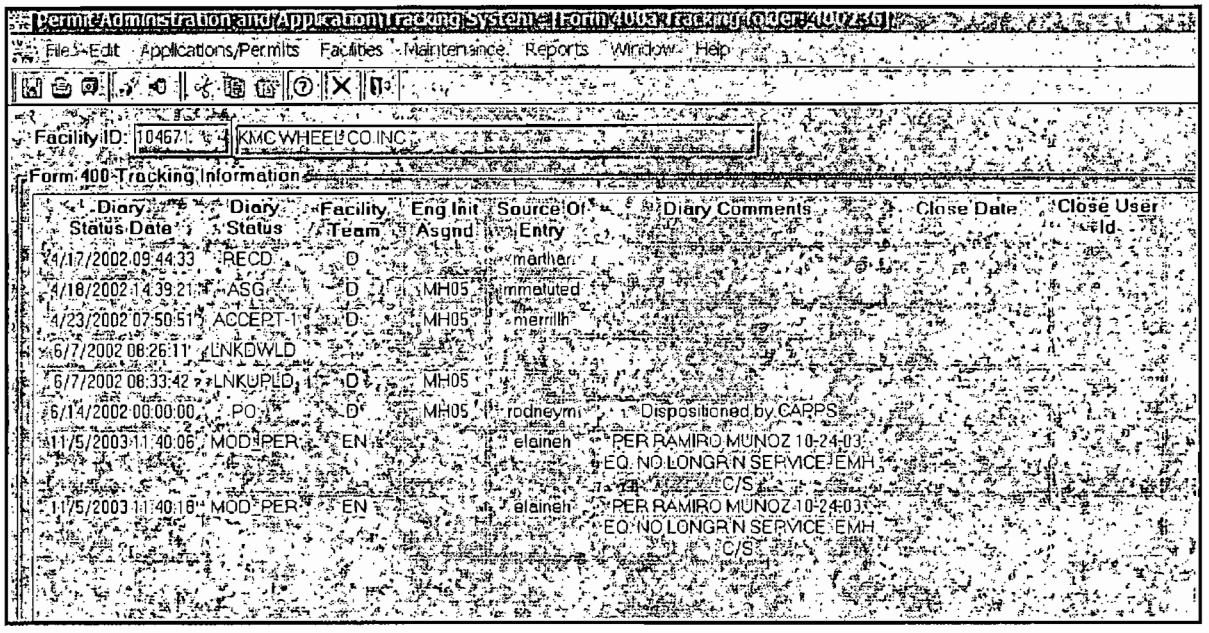
Facility Id: 104671 **Run Date:** 04/23/2010

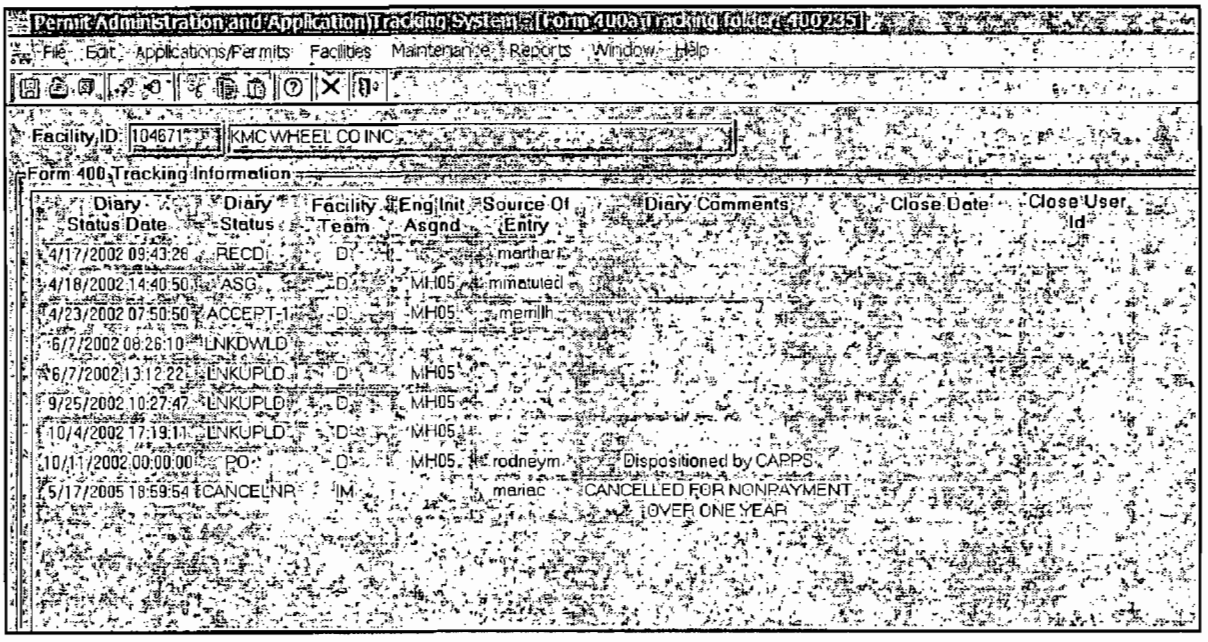
Facility Name: KMC WHEEL CO INC **Requested By:** elaineh

Location Address: 1455 COLUMBIA AVE RIVERSIDE, CA 92507

Date From: Jan 01, 2001 **Date Thru:** 00/00/0000

Transaction Number	Action Type	Trans Type	Reference Number	Transaction Date	Status	Invoice Number	Transaction Amount	Ar Balance	Transfer Flag
6863296	ADJRE	20	F12962	01/10/2006	RE	1707301	($789.02)	$0.00	


Permit Administration and Application Tracking System - [Form 400 Tracking (Order: 400736)]
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Facility ID: 104671 KMC WHEEL CO INC
Form 400 Tracking Information
Diary Status Date | Diary Status | Facility Team | Eng Init Asgnd | Source Of Entry | Diary Comments | Close Date | Close User Id
4/17/2002 09:44:33 RECD D marthar
4/18/2002 14:39:21 ASG D MH05 mmeluted
4/23/2002 07:50:51 ACCEPT-1 D MH05 merrillh
6/7/2002 08:26:11 LNKDWLD
6/7/2002 08:33:42 LNKUPLD 1 D MH05
6/14/2002 00:00:00 PO D MH05 rodneym Dispositioned by CARPS
11/5/2003 11:40:06 MOD PER EN elaineh PER RAMIRO MUNOZ 10-24-03
EQ NO LONGR N SERVICE EMH
C/S
11/5/2003 11:40:18 MOD PER EN elaineh PER RAMIRO MUNOZ 10-24-03
EQ NO LONGR N SERVICE EMH
C/S



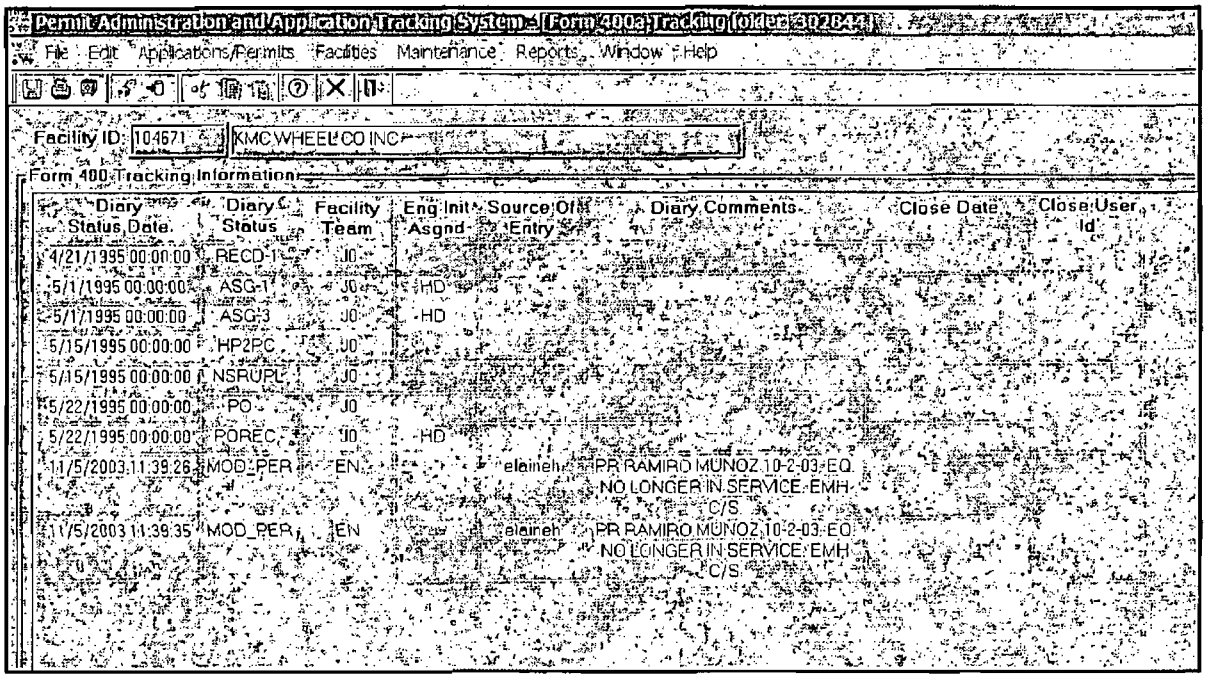
Permit Administration and Application Tracking System - [Form 400a Tracking folder 4002235]

File Edit Applications/Permits Facilities Maintenance Reports Window Help

Facility ID: 104671 KMC WHEEL CO INC

Form 400 Tracking Information

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
4/17/2002 09:43:26	RECD	D		marthar			
4/18/2002 14:40:50	ASG	D	MH05	mmatuted			
4/23/2002 07:50:50	ACCEPT-1	D	MH05	memilh			
6/7/2002 08:26:10	LNKDWLD						
6/7/2002 13:12:22	LNKUPLD	D	MH05				
9/25/2002 10:27:47	LNKUPLD	D	MH05				
10/4/2002 17:19:11	LNKUPLD	D	MH05				
10/11/2002 00:00:00	PO	D	MH05	rodneym	Dispositioned by CAPPS		
5/17/2005 18:59:54	CANCELNP	IM		mariac	CANCELLED FOR NONPAYMENT OVER ONE YEAR		



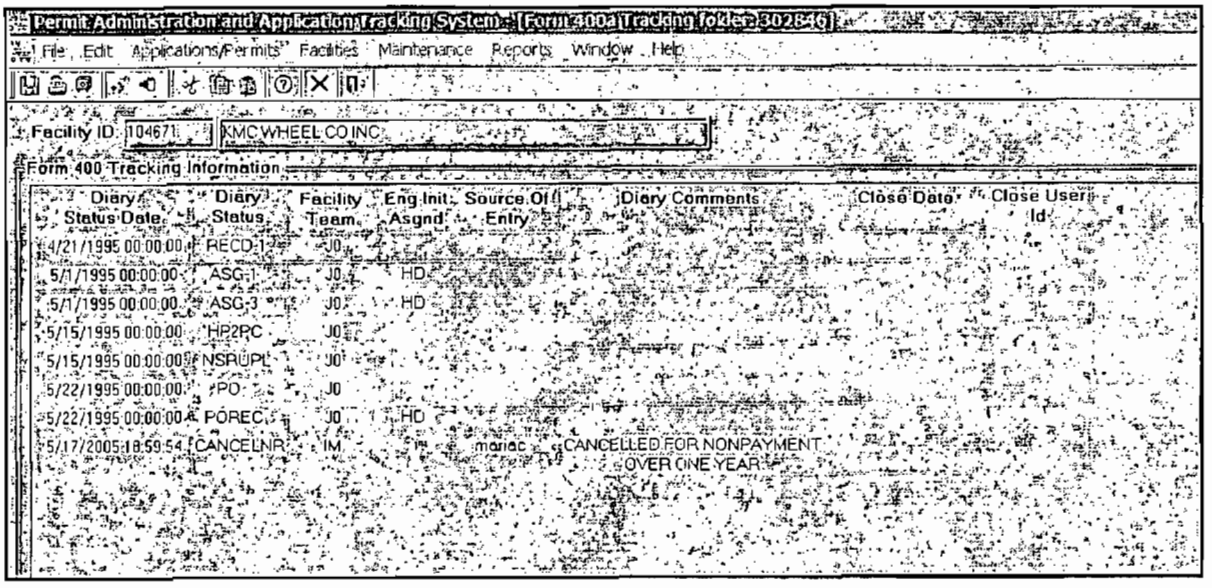
Permit Administration and Application Tracking System - [Form 400a Tracking (folder 302844)]

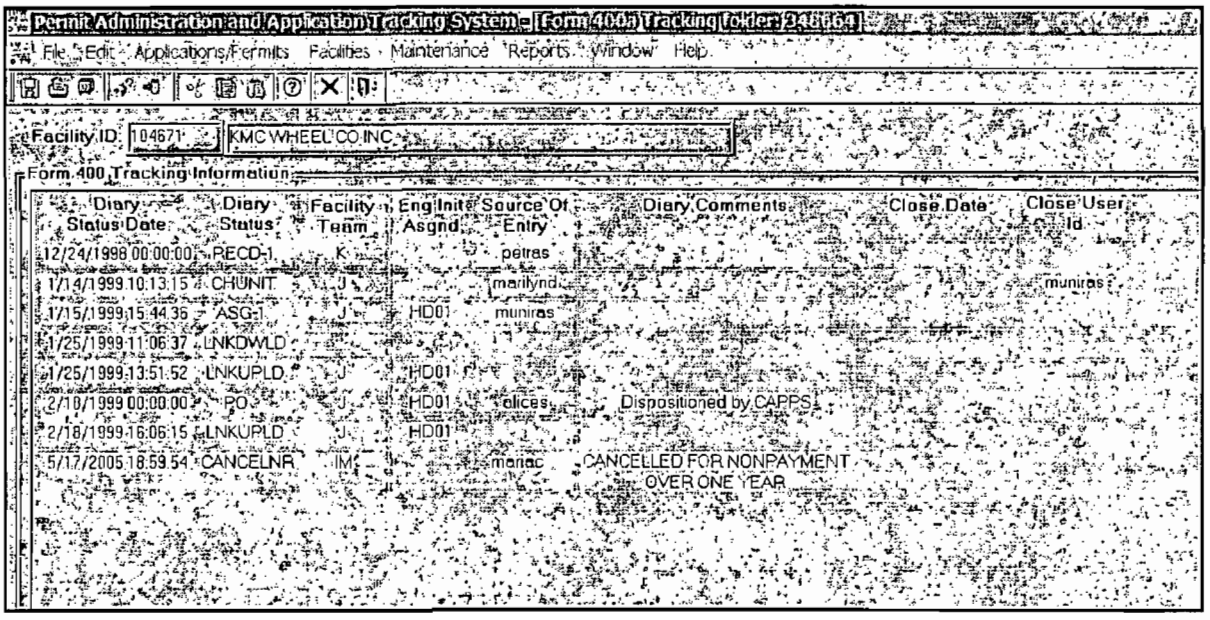
File Edit Applications/Permits Facilities Maintenance Reports Window Help

Facility ID: 104671 KMC WHEEL CO INC

Form 400 Tracking Information

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
4/21/1995 00:00:00	RECD-1	J0					
5/1/1995 00:00:00	ASG-1	J0	HD				
5/1/1995 00:00:00	ASG-3	J0	HD				
5/15/1995 00:00:00	HP2PC	J0					
5/15/1995 00:00:00	NSRUPL	J0					
5/22/1995 00:00:00	PO	J0					
5/22/1995 00:00:00	POREC	J0	HD				
11/5/2003 11:39:26	MOD_PER	EN		elaineh	PR RAMIRO MUNOZ 10-2-03-EQ NO LONGER IN SERVICE EMH C/S		
11/5/2003 11:39:35	MOD_PER	EN		elaineh	PR RAMIRO MUNOZ 10-2-03-EQ NO LONGER IN SERVICE EMH C/S		


Permit Administration and Application Tracking System - [Form 400a Tracking folder 302846]
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Facility ID: 10467I XMC WHEEL CO INC
Form 400 Tracking Information
Diary Status Date | Diary Status | Facility Team | Eng Init Asgnd | Source Of Entry | Diary Comments | Close Date | Close User Id
4/21/1995 00:00:00 RECD-1 J0
5/1/1995 00:00:00 ASG-1 J0 HD
5/1/1995 00:00:00 ASG-3 J0 HD
5/15/1995 00:00:00 HP2PC J0
5/15/1995 00:00:00 NSRUPL J0
5/22/1995 00:00:00 PO J0
5/22/1995 00:00:00 POREC J0 HD
5/17/2005 18:59:54 CANCELNR IM mariac CANCELLED FOR NONPAYMENT OVER ONE YEAR


Permit Administration and Application Tracking System - [Form 400 Tracking Folder: 240464]
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Facility ID: 04671 KMC WHEEL CO INC
Form 400 Tracking Information
Diary Status Date | Diary Status | Facility Term | Eng Init Asgnd | Source Of Entry | Diary Comments | Close Date | Close User Id
12/24/1998 00:00:00 RECD-1 K petras
1/14/1999 10:13:15 CHUNIT J marilynd munras
1/15/1999 15:44:35 ASG-1 J HD01 munras
1/25/1999 11:06:37 UNKDWLD J HD01
1/25/1999 13:51:52 UNKUPLD J HD01
2/10/1999 00:00:00 PO J HD01 olices Dispositioned by CAPPS
2/18/1999 16:06:15 UNKUPLD J HD01
5/17/2005 18:59:54 CANCELNR IM maniac CANCELLED FOR NONPAYMENT OVER ONE YEAR

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
F52844
A/N 400236

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

LEGAL OWNER
OR OPERATOR: KMC WHEEL CO INC
1455 COLUMBIA AVE
RIVERSIDE, CA 92507

ID 104671

Equipment Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507

Equipment Description:

FURNACE, ALUMINUM MELTING, REVERBERATORY TYPE, STAHL, MODEL 4500DR, 6,000 POUND HOLDING CAPACITY, WITH TWO MAXON, MODEL KINEMAX 3", NATURAL GAS FIRED BURNERS, 2,400,000 BTU PER HOUR EACH, AND A 5-HP COMBUSTION AIR BLOWER.

Conditions:

1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3) THIS FURNACE SHALL BE FIRED ON NATURAL GAS ONLY.

4) THE TOTAL WEIGHT OF MATERIAL CHARGED TO THE FURNACE SHALL NOT EXCEED 310,500 POUNDS IN ANY ONE MONTH.

5) METAL CONTAMINATED WITH RUBBER, PLASTICS, PAPERS, RAGS, OIL, GREASE, OR SIMILAR SMOKE PRODUCING MATERIAL SHALL NOT BE CHARGED TO THIS FURNACE.

6) FLUXING OR REFINING SHALL NOT BE CONDUCTED IN THIS FURNACE.

7) FLUORIDES, CHLORINE, OR ALUMINUM CHLORIDE SHALL NOT BE USED IN THIS FURNACE.

8) THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO SHOW COMPLIANCE WITH CONDITION NO. 4. THESE RECORDS SHALL BE MAINTAINED FOR AT LEAST TWO YEARS, AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

FILE COPY

PERMIT TO CONSTRUCT/OPERATE

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/mh05
6/14/2002

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
F55621
A/N 400235

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

LEGAL OWNER
OR OPERATOR: KMC WHEEL CO INC
1455 COLUMBIA AVE
RIVERSIDE, CA 92507

ID 104671

Equipment Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507

Equipment Description:

FURNACE, ALUMINUM MELTING, REVERBERATORY TYPE, GOLD COAST COMPANY, 16,000 POUND HOLDING CAPACITY, WITH THREE ECLIPSE, MODEL THERMJET TJ300MBHNNY, NATURAL GAS FIRED BURNERS, 3,000,000 BTU PER HOUR EACH, AND A 10-HP COMBUSTION AIR BLOWER.

Conditions:

1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3) THIS FURNACE SHALL BE FIRED ON NATURAL GAS ONLY.

4) THE TOTAL WEIGHT OF MATERIAL CHARGED TO THE FURNACE SHALL NOT EXCEED 520,000 POUNDS IN ANY ONE MONTH.

5) THE MAXIMUM AMOUNT OF NATURAL GAS BURNED IN THIS EQUIPMENT SHALL NOT EXCEED 1,702,473 CUBIC FEET IN ANY ONE MONTH.

6) AN OPERATIONAL NON-RESETTABLE TOTALIZING FUEL METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE NATURAL GAS FUEL USAGE OF THIS EQUIPMENT.

7) METAL CONTAMINATED WITH RUBBER, PLASTICS, PAPERS, RAGS, OIL, GREASE, OR SIMILAR SMOKE PRODUCING MATERIAL SHALL NOT BE CHARGED TO THIS FURNACE.

8) FLUXING OR REFINING SHALL NOT BE CONDUCTED IN THIS FURNACE.

9) FLUORIDES, CHLORINE, OR ALUMINUM CHLORIDE SHALL NOT BE USED IN THIS FURNACE.

FILE COPY

10) THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO SHOW COMPLIANCE WITH CONDITION NOS. 4 AND 5. THESE RECORDS SHALL BE MAINTAINED FOR AT LEAST TWO YEARS, AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/mh05
10/11/2002

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
D90788
A/N 302844
Page 1

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner or Operator: KMC WHEEL CO INC
1455 COLUMBIA AVE
RIVERSIDE, CA 92507

ID 104671

Equipment Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507

Equipment Description:

FURNACE, HEAT TREATING, NO.1, INDUSTRIAL FURNACE AND REFRACTORY, 16'-0" W.X 24'- 0" L. X 25'-7" H., WITH TWO, MAXON, MODEL NO. 415, 3,000,000 BTU PER HOUR TOTAL, NATURAL GAS FIRED BURNERS, AND A 1/3 HP COMBUSTION AIR BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS FURNACE SHALL BE FIRED WITH NATURAL GAS ONLY.

4. METAL CONTAMINATED WITH RUBBER, PLASTICS, PAPER, RAGS, OIL, GREASE, OR SIMILAR SMOKE PRODUCING MATERIAL SHALL NOT BE CHARGED TO THIS FURNACE.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
D90788
A/N 302844

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

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EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/hd
5/22/1995

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
D90797
A/N 302846
Page 1

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner or Operator: KMC WHEEL CO INC
1455 COLUMBIA AVE
RIVERSIDE, CA 92507

ID 104671

Equipment Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507

Equipment Description:

FURNACE, HEAT TREATING, NO. 2, INDUSTRIAL FURNACE AND REFRACTORY, 16'-0" W.X 24'- 0" L. X 25'-7" H., WITH TWO, MAXON, MODEL NO. 415, 3,000,000 BTU PER HOUR TOTAL, NATURAL GAS FIRED BURNERS, AND A 1/3 HP COMBUSTION AIR BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS FURNACE SHALL BE FIRED WITH NATURAL GAS ONLY.

4. METAL CONTAMINATED WITH RUBBER, PLASTICS, PAPER, RAGS, OIL, GREASE, OR SIMILAR SMOKE PRODUCING MATERIAL SHALL NOT BE CHARGED TO THIS FURNACE.

FILE COPY

PERMIT TO CONSTRUCT/OPERATE

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/hd
5/22/1995

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO CONSTRUCT/OPERATE

Permit No.
P19668
A/N 348664

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

LEGAL OWNER OR OPERATOR:
KMC WHEEL CO INC
1455 COLUMBIA AVE
RIVERSIDE, CA 92507

ID 104671

Equipment Location: 1455 COLUMBIA AVE, RIVERSIDE, CA 92507

Equipment Description:

OVEN, PAINT BAKING, 15'-8" W. X 36'-1" L. X 7'-3" H., WITH A NATURAL GAS FIRED BURNER, MAXON, MODEL NO. 408 OVEN PACK, RATED AT 880,000 BTU PER HOUR, AND A 1/3 H.P. COMBUSTION AIR BLOWER.

Conditions:

1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3) MATERIAL DATA SAFETY SHEETS FOR ALL MATERIALS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO THE DISTRICT PERSONNEL UPON REQUEST.

4) THE TOTAL AMOUNT OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS FROM THE SPRAY BOOTHS (OPERATING UNDER DISTRICT APPLICATION NOS. 348666, 348667, & 348668) AND THIS BAKING OVEN SHALL NOT EXCEED 600 POUNDS IN ANY ONE MONTH.

5) IN ADDITION TO RECORD KEEPING REQUIREMENTS IN RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS FOR THIS FACILITY TO VERIFY MONTHLY VOLATILE ORGANIC COMPOUNDS (VOC) EMISSIONS IN POUNDS. ALL RECORDS SHALL BE PREPARED IN A FORMAT WHICH IS ACCEPTABLE TO THE DISTRICT. THE RECORDS SHALL BE KEPT FOR AT LEAST TWO YEARS AND SHALL BE MADE AVAILABLE TO THE DISTRICT PERSONNEL UPON REQUEST.

6) THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULE 1401 AS AMENDED JULY 10, 1998.

7) THIS OVEN SHALL ONLY BE FIRED ON NATURAL GAS.

8) THE TOTAL AMOUNT OF NATURAL GAS BURNED BY THIS OVEN SHALL NOT EXCEED 10,022 CUBIC FEET IN ANY ONE DAY.

FILE COPY

CONTINUATION OF PERMIT TO CONSTRUCT/OPERATE

9) A NON-RESETTABLE TOTALIZING FUEL METER SHALL BE INSTALLED AND MAINTAINED IN FUEL SUPPLY LINE OF THE OVEN TO RECORD THE AMOUNT OF FUEL BURNED. THE RECORD SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILBLE TO THE DISTRICT PERSONNEL UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/hd01
2/18/1999

FILE COPY

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: DIAMOND PACIFIC PRODUCTS CO
Facility ID: 94642
Facility Location: 17971 215 HIGHWAY/OLEANDER, PERRIS, CA 92570
Type of Business: GRAIN MILL PRODUCTS

Offset Credit ID No.:
PM10:
SOx:

Application No. 276233 Equipment Description: GRAINS SIZE REDUCTION AND CLEANING

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/22/2010 Inspected By: Kathleen Linson

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	GRAIN CLEANING/999	FY (03-04)	14193.00	FY (02-03)	11522.52
SOx					

Calculated Emissions for GRAINS SIZE REDUCTION AND CLEANING

PM10 Reductions: (Year 1 + Year 2)/2 6429 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E.
Senior Manager

P.E. License No.: M 27752

Signature:

Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: DIAMOND PACIFIC PRODUCTS CO
Facility ID: 94642
Facility Location: 17971 215 HIGHWAY/OLEANDER, PERRIS, CA 92570
Type of Business: GRAIN MILL PRODUCTS

Offset Credit ID No.:
PM10:
SOx:

Application No. 289835 Equipment Description: LIVESTOCK FEED ROLLING AND STEAM FLAKING

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/22/2010 Inspected By: Kathleen Linson

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	STEAM FLAKING/999	FY (04-05)	1155.00	FY (03-04)	12773.70
SOx					

Calculated Emissions for LIVESTOCK FEED ROLLING AND STEAM FLAKING

PM10 Reductions: (Year 1 + Year 2)/2 3482 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E. Senior Manager P.E. License No.: M 27752

Signature: Jay Chen Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: DIAMOND PACIFIC PRODUCTS CO
Facility ID: 94642
Facility Location: 17971 215 HIGHWAY/OLEANDER, PERRIS, CA 92570
Type of Business: GRAIN MILL PRODUCTS

Offset Credit ID No.:
PM10:
SOx:

Application No. 289836 Equipment Description: BULK LOAD TRUCK (1 RACK) GRAIN

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/22/2010 Inspected By: Kathleen Linson

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	BULK LOADOUT/999	FY (04-05)	72.20	FY (03-04)	310.54
SOx					

Calculated Emissions for BULK LOAD TRUCK (1 RACK) GRAIN

PM10 Reductions: (Year 1 + Year 2)/2 96 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E. Senior Manager P.E. License No.: M 27752

Signature: Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: DIAMOND PACIFIC PRODUCTS CO
Facility ID: 94642
Facility Location: 17971 215 HIGHWAY/OLEANDER, PERRIS, CA 92570
Type of Business: GRAIN MILL PRODUCTS

Offset Credit ID No.:
PM10:
SOx:

Application No. 299411 Equipment Description: BOILER - NATURAL GAS

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 1/22/2010 Inspected By: Kathleen Linson

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	BOILER/ 1a	FY (04-05)	27.44	FY (03-04)	158.08
SOx					

Calculated Emissions for BOILER - NATURAL GAS

PM10 Reductions: (Year 1 + Year 2)/2 93 lbs/yr ☐ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E.
Senior Manager

P.E. License No.: M 27752

Signature:

Date: 5/6/10

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
1/4/1993 00:00:00	RECD-3	JM	JMR				
1/7/1993 00:00:00	ASG-3	JM	JMR				
1/14/1993 00:00:00	PO	JM					
1/14/1993 00:00:00	POREC	JM	JMR				
5/6/1993 00:00:00	CHUNIT	Q1	Q1				
11/30/2004 09:31:41	MOD_PER	EN		maryh	EQ NON USE/INACTV REQUEST 11/9/04 MH		

App# 276233

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
2/9/1994 00:00:00	RECD-1	RD	RDO				
2/18/1994 00:00:00	ASG-1	RD	RDO				
2/18/1994 00:00:00	ASG-3	RD	RDO				
3/22/1994 00:00:00	I-III	RD	RDO				
4/11/1994 00:00:00	HP2PC	RD					
4/11/1994 00:00:00	NSRUPL	RD					
4/11/1994 00:00:00	PO	RD					
4/13/1994 00:00:00	POREC	RD	RDO				
7/6/2005 09:18:23	MOD_PER	EN		maryh	EQ NON USE BY 8/1/05: INACTV LTR 6/22/05_MH		

Appt# 289855

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
2/16/1994 00:00:00	RECD-1	RD	RDO				
2/18/1994 00:00:00	ASG-1	RD	RDO				
2/18/1994 00:00:00	ASG-3	RD	RDO				
3/22/1994 00:00:00	I-III	RD	RDO				
4/11/1994 00:00:00	HP2PC	RD					
4/11/1994 00:00:00	NSRUPL	RD					
4/11/1994 00:00:00	PO	RD					
4/13/1994 00:00:00	POREC	RD	RDO				
11/30/2004 10:34:43	MOD_PER	EN		maryh	EQ NON USE/INACTV REQUEST 11/9/04 MH		

APP# 289836

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
12/19/1994 00:00:00	RECD-1	J0					
1/10/1995 00:00:00	ASG-1	J0	PV				
1/10/1995 00:00:00	ASG-3	J0	PV				
1/12/1995 00:00:00	HP2PC	J0					
4/17/1995 00:00:00	NSRUPL	J0					
4/17/1995 00:00:00	PO	J0					
7/6/2005 09:17:46	MOD_PER	EN		maryh	EQ NON USE BY 8/1/05: INACTV LTR 6/22/05 MH		

Appt# 299411

South Coast Air Quality Management District

Run Date : 02/24/2010 01:06 PM

Facility Equipment List Report

Facility: 94642 DIAMOND PACIFIC PRODUCTS CO
Last Inspection: 01/08/2010
SIC: 2040
Inspector: KL04 KATHLEEN LINSON
Inspection Date: 01/08/2010
Location Address: 17971 215 HIGHWAY/OLEANDER, PERRIS 92570 Sector:SR
Mailing Address: P O BOX 1987, PERRIS 92572-1987 Sector:SB
Instruction:

MR:
TS: TS-11 Industrial: Sector-based In
Facility Status: Active
Assignment No. 1151858
Disposition: Out of Business

Contact: STEVE LINDERSMITH (951) 6575121
Quarter: 0100 - Inspect in 2nd quarter, every year
On Hold: N
Facility Team: Q1
Suspended: N

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
276212	D74649	06/28/1993	INACTIVE	011001	BCAT	BOILER (<5 MMBTU/HR) NAT GAS ONLY	01/06/1993	PERMIT TO OPERATE GRANTED
276214	D74650	06/28/1993	INACTIVE	011001	BCAT	BOILER (<5 MMBTU/HR) NAT GAS ONLY	01/06/1993	PERMIT TO OPERATE GRANTED
276218	D68292	01/14/1993	INACTIVE	504550	BCAT	LIVESTOCK FEED PELLETIZING	01/04/1993	PERMIT TO OPERATE GRANTED
276221	D68291	01/14/1993	INACTIVE	508112	BCAT	BULK LOAD TRUCK (1 RACK) GRAIN	01/04/1993	PERMIT TO OPERATE GRANTED
276222	D68279	01/14/1993	INACTIVE	508920	BCAT	GRAIN STORAGE	01/04/1993	PERMIT TO OPERATE GRANTED
276224	D68290	01/14/1993	INACTIVE	24	CCAT	CYCLONE	01/04/1993	PERMIT TO OPERATE GRANTED
276225	D68289	01/14/1993	INACTIVE	508900	BCAT	GRAIN STORAGE	01/04/1993	PERMIT TO OPERATE GRANTED
276226	D68288	01/14/1993	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/04/1993	PERMIT TO OPERATE GRANTED
276227	D68287	01/14/1993	INACTIVE	504900	BCAT	STORAGE TANK LIVESTOCK FEED	01/04/1993	PERMIT TO OPERATE GRANTED
276228	D68286	01/14/1993	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/04/1993	PERMIT TO OPERATE GRANTED
276229	D68285	01/14/1993	INACTIVE	504540	BCAT	LIVESTOCK FEED PACKAGING	01/04/1993	PERMIT TO OPERATE GRANTED
276230	D68284	01/14/1993	INACTIVE	508113	BCAT	RAILROAD CAR UNLOADING GRAINS	01/04/1993	PERMIT TO OPERATE GRANTED
276231	D68283	01/14/1993	INACTIVE	508113	BCAT	RAILROAD CAR UNLOADING GRAINS	01/04/1993	PERMIT TO OPERATE GRANTED
276232	D68282	01/14/1993	INACTIVE	508100	BCAT	GRAINS BLENDING — Mixer	01/04/1993	PERMIT TO OPERATE GRANTED
276233	D68281	01/14/1993	INACTIVE	508750	BCAT	GRAINS SIZE REDUCTION	01/04/1993	PERMIT TO OPERATE GRANTED
276234	D68280	01/14/1993	INACTIVE	504110	BCAT	BULK LOAD/UNLOAD LIVESTOCK FEED	01/04/1993	PERMIT TO OPERATE GRANTED
276235	D68278	01/14/1993	INACTIVE	504650	BCAT	LIVESTOCK FEED ROLLING	01/04/1993	PERMIT TO OPERATE GRANTED
276236	D68277	01/14/1993	INACTIVE	24	CCAT	CYCLONE	01/04/1993	PERMIT TO OPERATE GRANTED
276297	D69172	02/03/1993	INACTIVE	514900	BCAT	STORAGE TANK FEED AND FOOD MISC	01/07/1992	PERMIT TO OPERATE GRANTED
276298	D69173	02/03/1993	INACTIVE	514900	BCAT	STORAGE TANK FEED AND FOOD MISC	01/07/1992	PERMIT TO OPERATE GRANTED
289835	D82001	04/11/1994	INACTIVE	504650	BCAT	LIVESTOCK FEED ROLLING	02/16/1994	PERMIT TO OPERATE GRANTED
289836	D82002	04/11/1994	INACTIVE	508112	BCAT	BULK LOAD TRUCK (1 RACK) GRAIN	02/16/1994	PERMIT TO OPERATE GRANTED
289837	D82003	04/11/1994	INACTIVE	508920	BCAT	GRAIN STORAGE	05/16/1994	PERMIT TO OPERATE GRANTED
299411	D89923	04/17/1995	INACTIVE	010003	BCAT	BOILER (5-20 MMBTU/HR) NAT GAS ONLY P/P	12/19/1994	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68281
A/N 276233
Page 1

This initial permit must be renewed by 06/16 ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301 f) is not received by the expiration date, contact the District

Legal Owner Or Operator: DIAMOND PACIFIC PRODUCTS CO.
P. O. BOX 758
PERRIS, CALIFORNIA 92570
ATTN: MARK JACOBS

ID 094642

Equipment located at: 17971 HIGHWAY 215/OLEANDER, PERRIS, CALIFORNIA 92570

Equipment Description:

BULK FEED INGREDIENTS RECEIVING, CLEANING, AND GRINDING SYSTEM CONSISTING OF:

1. TWO 1-1/2 H.P. PORTABLE FEED CONVEYORS DISCHARGING INTO TWO TRANSFER SCREW CONVEYORS, 10 H.P. AND 15 H.P.
2. TWO 5 H.P. RAILROAD RECEIVING SCREW CONVEYORS.
3. 10 H.P. TRANSFER AND TRUCK UNLOADING SCREW CONVEYOR.
4. 15 H.P. RECEIVING ELEVATOR, 90' H.
5. 5 H.P. STORAGE SCREW CONVEYOR.
6. 1/3 H.P. TURNHEAD TO STORAGE.
7. 7-1/2 H.P. CLEANER ELEVATOR, 60' H.
8. 20 H.P. GRAIN CLEANER, CLIPPER SUPER MODEL 2248D-2A SH27683.
9. TWO 20 H.P. ROLL MILLS, ROSKAMP 9 X 30.
10. 3 H.P. TRANSFER SCREW CONVEYOR.
11. 5 H.P. ROLLED GRAIN ELEVATOR, 80' H.

FILE COPY

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

12. 3 H.P. STORAGE SCREW CONVEYOR.
13. THREE 50 H.P. MILLS, ORBIT S/N 219, 228 AND 234.
14. 5 H.P. GROUND GRAIN SCREW CONVEYOR.
15. 5 H.P. GRINDER ELEVATOR, 80' H.
16. 5 H.P. STORAGE SCREW CONVEYOR.
17. 1-1/2 H.P. BAGHOUSE DISCHARGE SCREW CONVEYOR.
18. 3 H.P. SCREENINGS SCREW CONVEYOR.
19. 50 H.P. GRINDER, PRATER, MODEL G7MFS.
20. 25 H.P. AIRLIFT, HOLZINGER, WITH 3/4 H.P. ROTARY AIRLOCK.
21. INTERCONNECTING CHUTES.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS SYSTEM SHALL NOT BE OPERATED UNLESS THE HOLZINGER AIRLIFT AND THE CLIPPER CLEANER ARE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WITH A *VALID PERMIT TO OPERATE ISSUED BY THE EXECUTIVE OFFICER.*

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

FILE COPY

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

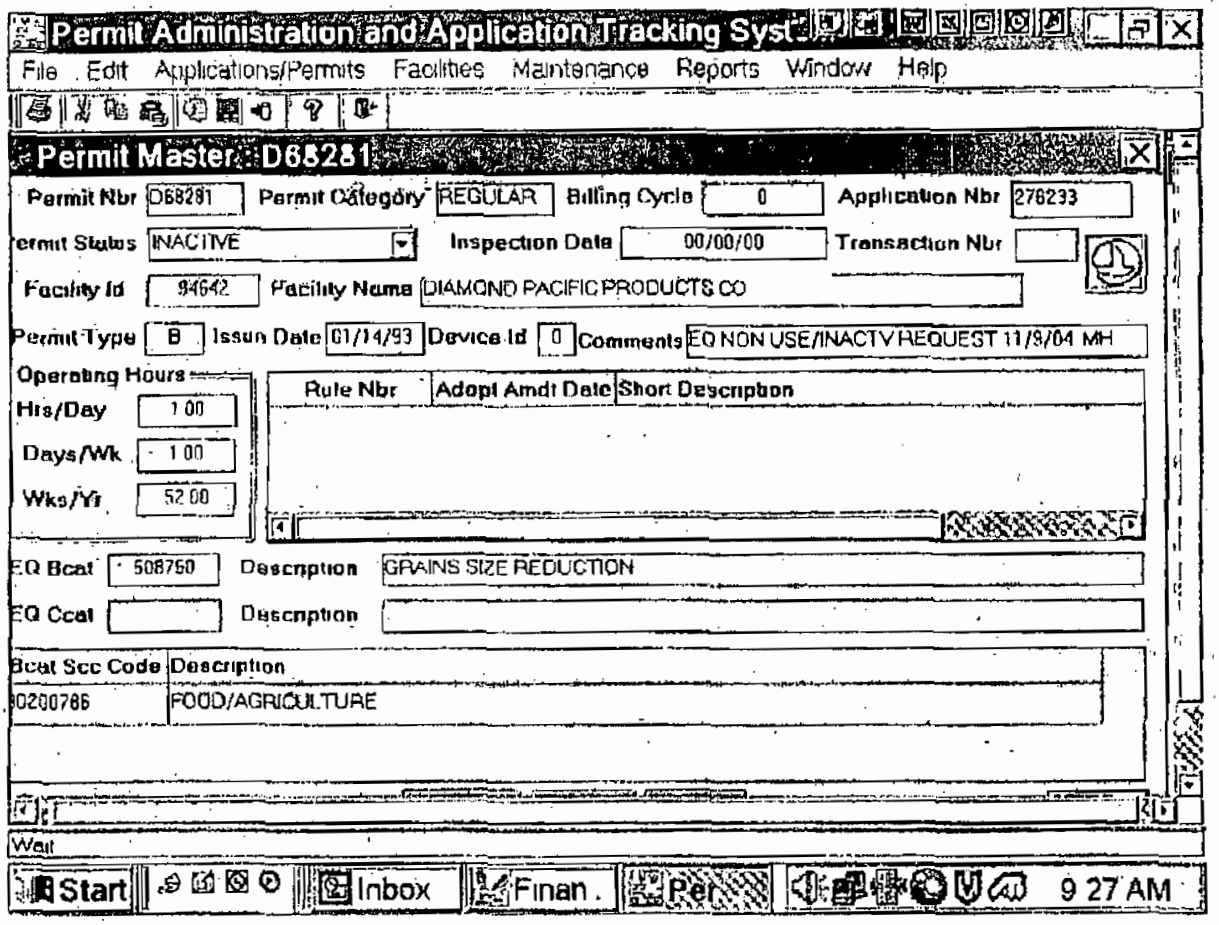
THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF *THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE* OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

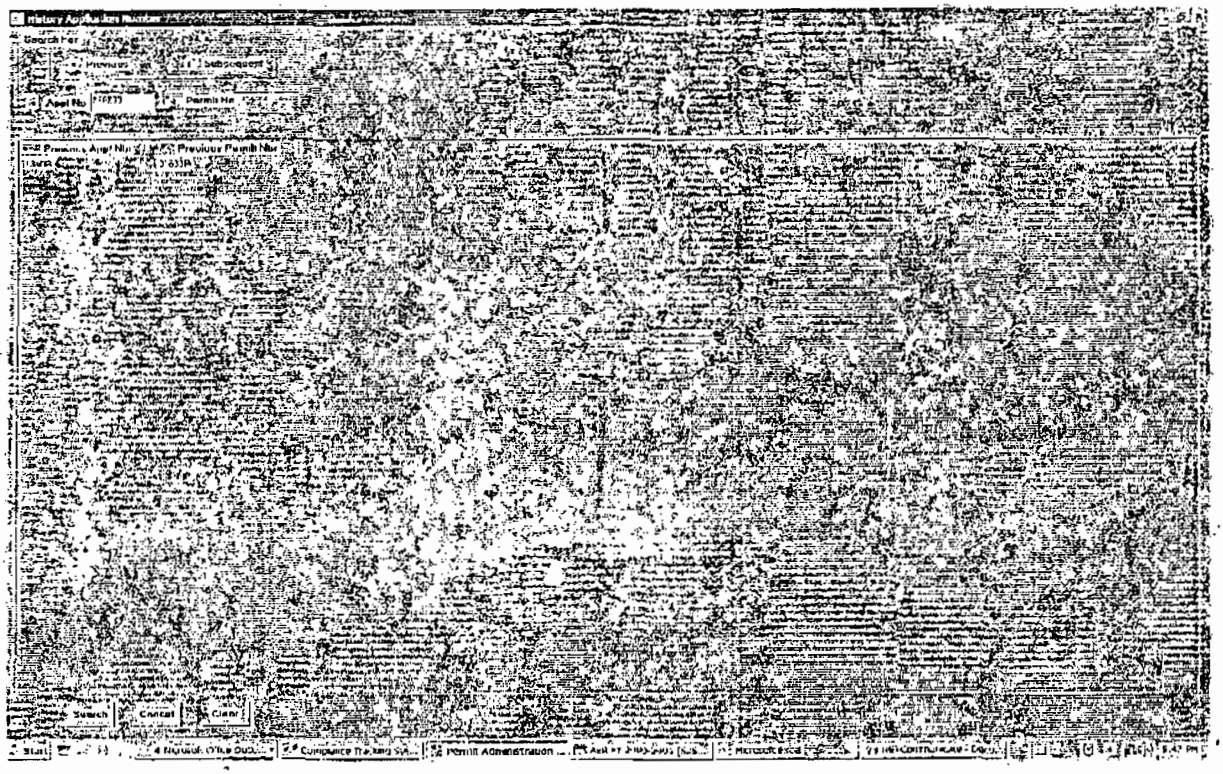
EXECUTIVE OFFICER

Dorris M Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
January 14, 1993

FILE COPY


Permit Administration and Application Tracking Syst
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Permit Master : D68281
Permit Nbr D68281
Permit Category REGULAR
Billing Cycle 0
Application Nbr 276233
ermit Status INACTIVE
Inspection Date 00/00/00
Transaction Nbr
Facility Id 94642
Facility Name DIAMOND PACIFIC PRODUCTS CO
Permit Type B
Issue Date 01/14/93
Device Id 0
Comments EQ NON USE/INACTV REQUEST 11/8/04 MH
Operating Hours
Hrs/Day 1.00
Days/Wk 1.00
Wks/Yr 52.00
Rule Nbr
Adopt Amdt Date
Short Description
EQ Bcat 508750
Description GRAINS SIZE REDUCTION
EQ Ccat
Description
Bcat Scc Code
Description
30200786
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Per
9 27 AM



Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
1/4/1993 00:00:00	RECD-3	JM	JMR				
1/7/1993 00:00:00	ASG-3	JM	JMR				
1/14/1993 00:00:00	PO	JM					
1/14/1993 00:00:00	POREC	JM	JMR				
5/6/1993 00:00:00	CHUNIT	Q1	Q1				
11/30/2004 09:31:41	MOD_PER	EN		maryh	EQ NON USE/INACTV REQUEST 11/9/04 MH		

OFFSET SOURCE TRACKING FORM

Attorney-Client privileged prepared for and at the direction of Counsel

Team: C

Name: Diamond Pacific Products Co.

Date: 2/20/10

ALL STAFF		ENGINEERING STAFF							ENFORCEMENT STAFF
Facility ID	Application Number	Emittant (PM10 or SOx)	Can Identify on AER? (Y or N)	AER Year 1 (eg 0102, 0203)	Amount of AER Year 1 (lb/yr)	AER Year 2 (eg 0102, 0203)	Amount of AER Year 2 (lb/yr)	Valid NSR (lb/day PTE)	Is the Equipment Shutdown? (Y or N)
94642	299411	PM10	Y	04-05	27.44	03-04	158.08	1	
94642	289835	PM10	Y	04-05	577.5	03-04	6386.85	11	
94642	289836	PM10	Y	04-05	18.05*	03-04	77.635*	1	

A/N 299411 is a 5-20 MMBtu/hr nat gas boiler. Note that the facility once had two additional <5MMBtu/hr boilers, but they were identified in 1995 as "no longer in use". Thus, AER emissions reported after 1995 are assumed to include only the A/N 299411 boiler.

* The facility's two truck loading systems (bulk loadout) are assumed to each contribute half the annual emissions. (A/N 289836 contributes half of the AER emissions. PM10 is half of PM emissions for this non-combustion source.

A/N 289835 feed rolling emissions are assumed to be reported in AER as steam flaking. A/N 289835 includes two steam chambers, two rolling mills (which flake the grains), and a cooler. PM10 is half of PM emissions for this non-combustion source.

PM emissions from Form B4 - Diamond Pacific Products Co #94642

	AER 04-05	AER 03-04	AER 02-03	AER 01-02	AER 00-01
grain receiving	348.19	3,217.08	2,611.77	426.67	420.82
bin vents	348.19	3,217.08	3,840.84	3,413.38	3,366.56
grain cleaning	1,536.15	14,193.00	11,522.52	3,208.58	3,164.57
hammer mill	252.26	2,789.41	2,264.56	1,259.06	1,537.62
steam flaking	**1,155.00**	**12,773.70**	**10,370.27**	**5,753.25**	**4,018.50**
cracking	135.60	1,498.78	1,216.78	676.51	826.19
micro room bag dump ventilation	20.64	227.09	184.37	102.40	161.59
pelleting	275.18	3,043.20	4,680.00	2,730.00	2,524.95
bulk loadout	**72.20**	**310.54**	**403.47**	**150.95**	**152.34**
	4,143.41	41,269.88	37,094.58	17,720.80	16,173.14 lbs/yr

Reviewed
2/23/10

OFFSET SOURCE TRACKING FORM

Attorney-Client privileged prepared for and at the direction of Counsel

Team: N

Name: Ed/Dave

Date: File made 2/24/10

Diamond Pacific Products

ALL STAFF		ENGINEERING STAFF							ENFORCEMENT STAFF
Facility ID	Application Number	Emittant (PM10 or SOx)	Can Identify on AER? (Y or N)	AER Year 1 (eg 0102, 0203)	Amount of AER Year 1 (lb/yr)	AER Year 2 (eg 0102, 0203)	Amount of AER Year 2 (lb/yr)	Valid NSR (lb/day PTE)	Is the Equipment Shutdown? (Y or N)
94642	289837	PM10	Y	03-04	1608	04-05	348	1	

Permit Date = 4-11-94

did not check for boiler - this is deleted (AN 289411, Dec 93)
inspection report did not indicate boiler
Check loaders were deactivated in 2001 per Co & Hist Dept records
are NOT listed (> 1,000 lbs)

Run Date : 02/24/2010 01:06 PM

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 94642 DIAMOND PACIFIC PRODUCTS CO
Last Inspection: 01/08/2010
SIC: 2040
Inspector: KL04 KATHLEEN LINSON
Inspection Date: 01/08/2010
Location Address: 17971 215 HIGHWAY/OLEANDER, PERRIS 92570 Sector:SR
Mailing Address: P O BOX 1987, PERRIS 92572-1987 Sector:SB
Instruction:

MR:
TS: TS-11 Industrial: Sector-based Ir
Facility Status: Active
Assignment No. 1151858
Disposition: Out of Business

Contact: STEVE LINDERSMITH (951) 6575121
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold: N
Suspended: N
Facility Team: Q1

24142

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
276212	D74649	06/28/1993	INACTIVE	011001	BCAT	BOILER (<5 MMBTU/HR) NAT GAS ONLY	01/06/1993	PERMIT TO OPERATE GRANTED
276214	D74650	06/28/1993	INACTIVE	011001	BCAT	BOILER (<5 MMBTU/HR) NAT GAS ONLY	01/06/1993	PERMIT TO OPERATE GRANTED
276218	D68292	01/14/1993	INACTIVE	504550	BCAT	LIVESTOCK FEED PELLETIZING	01/04/1993	PERMIT TO OPERATE GRANTED
276221	D68291	01/14/1993	INACTIVE	508112	BCAT	BULK LOAD TRUCK (1 RACK) GRAIN	01/04/1993	PERMIT TO OPERATE GRANTED
276222	D68279	01/14/1993	INACTIVE	508920	BCAT	GRAIN STORAGE	01/04/1993	PERMIT TO OPERATE GRANTED
276224	D68290	01/14/1993	INACTIVE	24	CCAT	CYCLONE	01/04/1993	PERMIT TO OPERATE GRANTED
276225	D68289	01/14/1993	INACTIVE	508900	BCAT	GRAIN STORAGE	01/04/1993	PERMIT TO OPERATE GRANTED
276226	D68288	01/14/1993	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/04/1993	PERMIT TO OPERATE GRANTED
276227	D68287	01/14/1993	INACTIVE	504900	BCAT	STORAGE TANK LIVESTOCK FEED	01/04/1993	PERMIT TO OPERATE GRANTED
276228	D68286	01/14/1993	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/04/1993	PERMIT TO OPERATE GRANTED
276229	D68285	01/14/1993	INACTIVE	504540	BCAT	LIVESTOCK FEED PACKAGING	01/04/1993	PERMIT TO OPERATE GRANTED
276230	D68284	01/14/1993	INACTIVE	508113	BCAT	RAILROAD CAR UNLOADING GRAINS	01/04/1993	PERMIT TO OPERATE GRANTED
276231	D68283	01/14/1993	INACTIVE	508113	BCAT	RAILROAD CAR UNLOADING GRAINS	01/04/1993	PERMIT TO OPERATE GRANTED
276232	D68282	01/14/1993	INACTIVE	508100	BCAT	GRAINS BLENDING — MIXER	01/04/1993	PERMIT TO OPERATE GRANTED
276233	D68281	01/14/1993	INACTIVE	508750	BCAT	GRAINS SIZE REDUCTION	01/04/1993	PERMIT TO OPERATE GRANTED
276234	D68280	01/14/1993	INACTIVE	504110	BCAT	BULK LOAD/UNLOAD LIVESTOCK FEED	01/04/1993	PERMIT TO OPERATE GRANTED
276235	D68278	01/14/1993	INACTIVE	504650	BCAT	LIVESTOCK FEED ROLLING	01/04/1993	PERMIT TO OPERATE GRANTED
276236	D68277	01/14/1993	INACTIVE	24	CCAT	CYCLONE	01/04/1993	PERMIT TO OPERATE GRANTED
276297	D69172	02/03/1993	INACTIVE	514900	BCAT	STORAGE TANK FEED AND FOOD MISC	01/07/1992	PERMIT TO OPERATE GRANTED
276298	D69173	02/03/1993	INACTIVE	514900	BCAT	STORAGE TANK FEED AND FOOD MISC	01/07/1992	PERMIT TO OPERATE GRANTED
289835	D82001	04/11/1994	INACTIVE	504650	BCAT	LIVESTOCK FEED ROLLING	02/16/1994	PERMIT TO OPERATE GRANTED
289836	D82002	04/11/1994	INACTIVE	508112	BCAT	BULK LOAD TRUCK (1 RACK) GRAIN	02/16/1994	PERMIT TO OPERATE GRANTED
289837	D82003	04/11/1994	INACTIVE	508920	BCAT	GRAIN STORAGE	05/16/1994	PERMIT TO OPERATE GRANTED
299411	D89920	04/17/1995	INACTIVE	010003	BCAT	BOILER (5-20 MMBTU/HR) NAT GAS ONLY P/P	12/19/1994	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999, GRAIN RECEIVING	N		20,482.00	5, ton											0.017	348.19
2	999, BIN VENTS	N		20,482.00	5, ton											0.017	348.19
3	999, GRAIN CLEANING	N		20,482.00	5, ton											0.075	1,536.15
4	999, HAMMER MILL	N		3,765.00	5, ton											0.067	252.26
5	999, STEM FLAKING	N		7,700.00	5, ton											0.15	1,155.00
6	999, CRACKING	N		5,650.00	5, ton											0.024	135.60
7	999, MICRO ROOM BAG DUMP	N		860.00	5, ton											0.024	20.64
8	999, PELLETING	N		1,834.54	5, ton											0.15	275.18
9	999, BULK LOADOUT	N		21,879.34	5, ton											0.0033	72.20
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		4143.41 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.07 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		189,240.00	5. ton											0.017	3,217.08
2	999. BIN VENTS	N		189,240.00	5. ton											0.017	3,217.08
3	999. GRAIN CLEANING	N		189,240.00	5. ton											0.075	14,193.00
4	999. HAMMER MILL	N		41,633.00	5. ton											0.067	2,789.41
5	999. STEAM FLAKING	N		85,158.00	5. ton											0.15	12,773.70
6	999. CRACKING	N		62,449.00	5. ton											0.024	1,498.78
7	999. MICRO ROOM BAG DUMP VENTILATION	N		9,462.00	5. ton											0.024	227.09
8	999. PELLETING	N		20,288.00	5. ton											0.15	3,043.20
9	999. BULK LOADOUT	N		94,104.00	5. ton											0.0033	310.64
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		41269.88 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		20.63 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		153,633.60	S. ton											0.017	2 611.77
2	999. BIN VENTS	N		153,633.60	S. ton											0.025	3 840.84
3	999. GRAIN CLEANING	N		153,633.60	S. ton											0.075	11.522.52
4	999. HAMMER MILL	N		38,799.40	S. ton											0.067	2 264.56
5	999. STEAM FLAKING	N		89,135.10	S. ton											0.15	10.370 27
6	999. CRACKING	N		50,699.10	S. ton											0.024	1.216.78
7	999. MICRO ROOM BAG DUMP VENTILATION	N		7,682.00	S. ton											0.024	184 37
8	999. PELLETING	N		31,200.00	S. ton											0.15	4,680 00
9	999. BULK LOADOUT	N		122,262.40	S. ton											0.0033	403 47
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		37094.58 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		18.55 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/CDC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		170,569.24	5. ton											0.0025	426.67
2	999. BIN VENTS	N		273,070.00	5. ton											0.0125	3,413.38
3	999. GRAIN CLEANING	N		170,669.00	5. ton											0.0188	3,208.59
4	999. HAMMER MILL	N		37,584.00	5. ton											0.0335	1,259.06
5	999. STEAM FLAKING	N		76,710.00	5. ton											0.075	5,753.25
6	999. CRACKING	N		56,376.00	5. ton											0.012	676.51
7	999. MICRO ROOM-BAG DUMP VENTILATION	N		8,533.00	5. ton											0.012	102.40
8	999. PELLETING	N		36,400.00	5. ton											0.075	2,730.00
9	999. BULK LOADOUT	N		188,688.00	5. ton											0.0008	150.95
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		17720.80 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.86 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Grain Receiving	N		168,328.00	S. ton											0.0025	420.82
2	999. Bin Vents	N		269,325.00	S. ton											0.0125	3,366.56
3	999. Grain Cleaning	N		168,328.00	S. ton											0.0188	3,164.67
4	999. Hammer Mill	N		45,899.00	S. ton											0.0335	1,537.62
5	999. Steam Flaking	N		52,590.00	S. ton											0.076	4,018.50
6	999. Cracking	N		68,849.00	S. ton											0.012	826.19
7	999. Micro Room-Bag Dump Ventilation	N		13,466.00	S. ton											0.012	161.59
8	999. Pelleting	N		33,656.00	S. ton											0.075	2,524.95
9	999. Bulk Loadout	N		190,426.70	S. ton											0.0008	152.34
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		16173.14 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.09 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		189,240.00	5. ton											0.017	3,217.08
2	999. BIN VENTS	N		189,240.00	5. ton											0.017	3,217.08
3	999. GRAIN CLEANING	N		189,240.00	5. ton											0.075	14,193.00
4	999. HAMMER MILL	N		41,633.00	5. ton											0.067	2,789.41
5	999. STEAM FLAKING	N		85,158.00	5. ton											0.15	12,773.70
6	999. CRACKING	N		62,449.00	5. ton											0.024	1,498.78
7	999. MICRO ROOM BAG DUMP VENTILATION	N		9,462.00	5. ton											0.024	227.09
8	999. PELLETING	N		20,288.00	5. ton											0.15	3,043.20
9	999. BULK LOADOUT	N		94,104.00	5. ton											0.0033	310.54
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		41269.88 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		20.63 tons

Facility ID	Company	year	permitted	emittent id	row	emission factor	annual usage	page nbr	units	activity id	activity desc	emission
094642	DIAMOND PACIFIC PRODUCTS CO	9697	N	ROG	2	0.028	110.92	1	1000 gallons	2B		3.11
094642	DIAMOND PACIFIC PRODUCTS CO	9697	N	ROG	1	9.8	5.46	1	1000 gallons	2B		53.51
094642	DIAMOND PACIFIC PRODUCTS CO	9697	P	TSP	1	0.029	110582.24	1	tons	23		3206.88
094642	DIAMOND PACIFIC PRODUCTS CO	9697	P	TSP	3	0.075	43536.85	1	tons	23	LIVESTOCK FEED ROLLING	3265.26
094642	DIAMOND PACIFIC PRODUCTS CO	9697	P	TSP	2	0.024	50102.44	1	tons	23	GRAINS REDUCTION AND BLENDING	1202.46
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	1	0.0025	107731.25	1	TONS	99	99.GRAIN RECEIVING	259.33
094642	DIAMOND PACIFIC PRODUCTS CO	9798	N	ROG	1	9.8	5.78	1	1000 GALLONS	2A	2A. GASOLINE STORAGE AND DISPENSING	56.64
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	9	0.0008	119600	1	TONS	99	99.BULK SHIPPING	95.68
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	2	0.01	145600	1	TONS	99	99.BIN VENTS	1820
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	3	0.01	107731.25	1	TONS	99	99.GRAIN CLEANING	2025.35
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	4	0.03	32408.4	1	TONS	99	99.HAMMERMILL	1085.68
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	5	0.07	42245.84	1	TONS	99	99.FLAKING	3168.44
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	6	0.01	21605.84	1	TONS	99	99.CRACKING	259.27
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	7	0.01	5980	1	TONS	99	99.MICRO ROOM/BAG DUMP VENTILATION	71.76
094642	DIAMOND PACIFIC PRODUCTS CO	9798	P	TSP	8	0.07	27300	1	TONS	99	99.PELLETING	2047.5
094642	DIAMOND PACIFIC PRODUCTS CO	9798	N	ROG	2	0.02	108.97	1	1000 GALLONS	2B	2B. DIESEL STORAGE AND DISPENSING	3.05
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	2	0.01	191184.51	1	Tons	99	Bin Vents	2389.81
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	1	0.0025	119490.32	1	Tons	99	Grain Receiving	298.73
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	7	0.01	6172.54	1	Tons	99	Micro Room/Bag Dump Ventilation	74.07
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	9	0.0008	105428	1	Tons	99	Bulk Loadout	84.34
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	6	0.01	22445.84	1	Tons	99	Cracking	269.35
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	5	0.07	49314	1	Tons	99	Steam Flaking	3698.55
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	8	0.07	29900	1	Tons	99	Pelleting	2242.5
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	3	0.01	119490.32	1	Tons	99	Grain Cleaning	2246.42
094642	DIAMOND PACIFIC PRODUCTS CO	9899	P	TSP	4	0.03	33668.77	1	Tons	99	Hammer Mill	1127.5
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	6	0.01	55997	1	Tons	99	Cracking	671.96
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	1	0.0025	149437	1	Tons	99	Grain Receiving	373.59
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	3	0.01	149437	1	Tons	99	Grain Cleaning	2809.42
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	5	0.07	53171	1	Tons	99	Steam Flaking	3987.83
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	7	0.01	7472	1	Tons	99	Micro Room/Bag Dump Ventilation	89.66
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	8	0.07	29887	1	Tons	99	Pelleting	2241.53
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	9	0.0008	170312	1	Tons	99	Bulk Loadout	136.25
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	2	0.01	239099	1	Tons	99	Bin Vents	2988.74
094642	DIAMOND PACIFIC PRODUCTS CO	9900	P	TSP	4	0.03	37332	1	Tons	99	Hammer Mill	1250.62

Fees Due Summary

	Submittal Date: No later than August 30,2001	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	0.07	0.00		0	$0.00	$0.00
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	1.36	0.00	0.00	0	$0.00	$0.00
4	SULFUR OXIDES	0.01	0.00	0.00	0	$0.00	$0.00
5	CARBON MONOXIDE	1.14	0.00		0	$0.00	$0.00
6	PARTICULATE MATTER	8.19	0.00		8	$1,288.65	$1,288.65

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$1,288.65	$1,288.65
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$0.00	$0.00
3	TOTAL FEES DUE	$1,288.65	$1,288.65
4	Installments Paid For FY 2000-2001 (if any) -- All Criteria Pollutants	$0.00	$0.00
5	Installments Paid For FY 2000-2001 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$1,288.65	$1,288.65
7	Late Fee (if any)	$0.00	$64.43
8	Amount Due (Line 6 + Line 7)	$1,288.65	
9	Amount Enclosed (please write Facility ID#(s) and FY 2000-2001 AER on the check)		$1,353.08

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/CDC
1	B1-1	Boiler, Natural Gas (mmcf)	Y
2	B4-1	Activity -Grain Receiving	N
3	B4-2	Activity -Bin Vents	N
4	B4-3	Activity -Grain Cleaning	N
5	B4-4	Activity -Hammer Mill	N
6	B4-5	Activity -Steam Flaking	N
7	B4-6	Activity -Cracking	N
8	B4-7	Activity -Micro Room-Bag Dump Ventilation	N
9	B4-8	Activity -Pelleting	N
10	B4-9	Activity -Bulk Loadout	N

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1	0.07	0.03		1.36	0.01	1.14	0.10
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4							8.09
8	Form E1							
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	Total Permitted Emissions	0.07	0.03	0	1.36	0.01	1.14	8.19

Reported Totals

1	Form B1, DCB or AB	0.07	0.03		1.36	0.01	1.14	0.10
2	Form B2							
3	B3 - W	0.00						
4	Form B4	0.00		0.00	0.00	0.00	0.00	8.09
5	Form E1							
6	Form R1							
7	Total Permitted Emissions	0.07	0.03	0.00	1.36	0.01	1.14	8.19

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.00						
6	Form WU	0.00						
7	Form B4U							
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU	0.00						
4	Form B4U							
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.00						
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 0.00)	0.00		0.00	0.00	0.00	0.00	0.00

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Boiler	1. Natural Gas (mmcf)	27.21	5.50	149.65	2.30	62.58	100.00	2,721.00	0.60	16.33	84.00	2,285.64	7.60	206.80	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					149.65 lbs		62.58 lbs		2721.00 lbs		16.33 lbs		2285.64 lbs		206.80 lbs	
					0.07 tons		0.03 tons		1.36 tons		0.01 tons		1.14 tons		0.10 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Grain Receiving	N		168,328.00	S. ton											0.0025	420.82
2	999. Bin Vents	N		239,325.00	S. ton											0.0125	3,366.56
3	999. Grain Cleaning	N		168,328.00	S. ton											0.0188	3,164.57
4	999. Hammer Mill	N		45,899.00	S. ton											0.0335	1,537.62
5	999. Steam Flaking	N		53,580.00	S. ton											0.075	4,018.50
6	999. Cracking	N		68,849.00	S. ton											0.012	826.19
7	999. Micro Room-Bag Dump Ventilation	N		13,465.00	S. ton											0.012	161.59
8	999. Pelleting	N		33,665.00	S. ton											0.075	2,524.95
9	999. Bulk Loadout	N		190,426.70	S. ton											0.0008	152.34
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		16173.14 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.09 tons

Fees Due Summary

	Submittal Date: No later than August 30,2002	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	0.09	0.00		0	$0.00	$0.00
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	1.71	0.00	0.00	0	$0.00	$0.00
4	SULFUR OXIDES	0.01	0.00	0.00	0	$0.00	$0.00
5	CARBON MONOXIDE	1.44	0.00		0	$0.00	$0.00
6	PARTICULATE MATTER	8.99	0.00		9	$1,585.02	$1,585.02

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$1,585.02	$1,585.02
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$0.00	$0.00
3	TOTAL FEES DUE	$1,585.02	$1,585.02
4	Installments Paid For FY 2001-2002 (if any) -- All Criteria Pollutants	$0.00	$0.00
5	Installments Paid For FY 2001-2002 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$1,585.02	$1,585.02
7	Late Fee (if any)	$0.00	$0.00
8	Amount Due (Line 6 + Line 7)	$1,585.02	
9	Amount Enclosed (please write Facility ID#(s) and FY 2001-2002 AER on the check)		$1,585.02

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/ODC
1	B1-1	Boiler,Natural Gas (mmcf)	Y
2	B4-1	Activity -GRAIN RECEIVING	N
3	B4-2	Activity -BIN VENTS	N
4	B4-3	Activity -GRAIN CLEANING	N
5	B4-4	Activity -HAMMER MILL	N
6	B4-5	Activity -STEAM FLAKING	N
7	B4-6	Activity -CRACKING	N
8	B4-7	Activity -MICRO ROOM-BAG DUMP VENTILATION	N
9	B4-8	Activity -PELLETING	N
10	B4-9	Activity -BULK LOADOUT	N

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1	0.09	0.04		1.71	0.01	1.44	0.13
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4							8.86
8	Form E1							
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	Total Permitted Emissions	0.09	0.04	0	1.71	0.01	1.44	8.99

Reported Totals

1	Form B1, DCB or AB	0.09	0.04		1.71	0.01	1.44	0.13
2	Form B2							
3	B3 - W	0.00						
4	Form B4	0.00		0.00	0.00	0.00	0.00	8.86
5	Form E1							
6	Form R1							
7	Total Permitted Emissions	0.09	0.04	0.00	1.71	0.01	1.44	8.99

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.00						
6	Form WU	0.00						
7	Form B4U							
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU	0.00						
4	Form B4U							
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.00						
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 0.33)	0.00		0.00	0.00	0.00	0.00	0.00

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Boiler	1. Natural Gas (mmcf)	34.20	5.50	188.10	2.30	78.66	100.00	3,420.00	0.60	20.52	84.00	2,872.80	7.60	259.92	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					188.10 lbs		78.66 lbs		3420.00 lbs		20.52 lbs		2872.80 lbs		259.92 lbs	
					0.09 tons		0.04 tons		1.71 tons		0.01 tons		1.44 tons		0.13 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		170,669.24	5. ton											0.0025	426.67
2	999. BIN VENTS	N		273,070.00	5. ton											0.0125	3,413.38
3	999. GRAIN CLEANING	N		170,669.00	5. ton											0.0188	3,208.58
4	999. HAMMER MILL	N		37,584.00	5. ton											0.0335	1,259.06
5	999. STEAM FLAKING	N		76,710.00	5. ton											0.075	5,753.25
6	999. CRACKING	N		56,376.00	5. ton											0.012	676.51
7	999. MICRO ROOM-BAG DUMP VENTILATION	N		8,533.00	5. ton											0.012	102.40
8	999. PELLETING	N		36,400.00	5. ton											0.075	2,730.00
9	999. BULK LOADOUT	N		168,668.00	5. ton											0.0008	150.95
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		17720.80 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.86 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		170,669.24	5. ton											0.0025	426.67
2	999. BIN VENTS	N		273,070.00	5. ton											0.0125	3,413.38
3	999. GRAIN CLEANING	N		170,669.00	5. ton											0.0188	3,208.56
4	999. HAMMER MILL	N		37,584.00	5. ton											0.0335	1,259.06
5	999. STEAM FLAKING	N		76,710.00	5. ton											0.075	5,753.25
6	999. CRACKING	N		56,376.00	5. ton											0.012	676.51
7	999. MICRO ROOM-BAG DUMP VENTILATION	N		8,533.00	5. ton											0.012	102.40
8	999. PELLETING	N		36,400.00	5. ton											0.075	2,730.00
9	999. BULK LOADOUT	N		188,688.00	5. ton											0.0008	150.95
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		17720.80 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.86 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. Grain Receiving	N		168,328.00	5. ton											0.0025	420.82
2	999. Bin Vents	N		269,325.00	5. ton											0.0125	3,366.56
3	999. Grain Cleaning	N		168,328.00	5. ton											0.0188	3,164.57
4	999. Hammer Mill	N		45,899.00	5. ton											0.0335	1,537.82
5	999. Steam Flaking	N		53,580.00	5. ton											0.075	4,018.50
6	999. Cracking	N		68,849.00	5. ton											0.012	826.19
7	999. Micro Room-Bag Dump Ventilation	N		13,466.00	5. ton											0.012	161.59
8	999. Pelleting	N		33,669.00	5. ton											0.075	2,524.95
9	999. Bulk Loadout	N		190,428.70	5. ton											0.0008	152.34
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		16173.14 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.09 tons

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	1a. Boiler <10 MMBTU/HR	1. Natural Gas (mmcf)	3.61	5.50	19.86	2.30	8.30	100.00	361.00	0.60	2.17	84.00	303.24	7.60	27.44	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL					19.86 lbs		8.30 lbs		361.00 lbs		2.17 lbs		303.24 lbs		27.44 lbs	
					0.01 tons		0.00 tons		0.18 tons		0.00 tons		0.15 tons		0.01 tons	

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	1a. Boiler <10 MMBTU/HR	1. Natural Gas (mmcf)	20.80	5.50	114.40	2.30	47.84	100.00	2,080.00	0.60	12.48	84.00	1,747.20	7.60	158.08	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					114.40 lbs		47.84 lbs		2080.00 lbs		12.48 lbs		1747.20 lbs		158.08 lbs	
					0.06 tons		0.02 tons		1.04 tons		0.01 tons		0.87 tons		0.08 tons	

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999 Boiler	1. Natural Gas (mmcf)	30.10	5.50	165.55	2.30	69.23	100.00	3,010.00	0.60	18.06	84.00	2,528.40	7.60	228.76	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL					165.55 lbs		69.23 lbs		3010.00 lbs		18.06 lbs		2528.40 lbs		228.76 lbs	
					0.08 tons		0.03 tons		1.51 tons		0.01 tons		1.26 tons		0.11 tons	

Fees Due Summary

	Submittal Date: No later than September 2, 2003	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	0.08	0.00		0	$0.00	$0.00
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	1.51	0.00	0.00	0	$0.00	$0.00
4	SULFUR OXIDES	0.01	0.00	0.00	0	$0.00	$0.00
5	CARBON MONOXIDE	1.26	0.00		0	$0.00	$0.00
6	PARTICULATE MATTER	18.66	0.00		19	$4,353.60	$4,353.60

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$4,353.60	$4,353.60
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$0.00	$0.00
3	TOTAL FEES DUE	$4,353.60	$4,353.60
4	Installments Paid For FY 2002-2003 (if any) -- All Criteria Pollutants	$0.00	$0.00
5	Installments Paid For FY 2002-2003 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$4,353.60	$4,353.60
7	Late Fee (if any)	$217.68	$217.68
8	Amount Due (Line 6 + Line 7)	$4,571.28	
9	Amount Enclosed (please write Facility ID#(s) and FY 2002-2003 AER on the check)		$4,571.28

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/ODC
1	B1-1	Boiler,Natural Gas (mmcf)	Y
2	B4-1	Activity -GRAIN RECEIVING	N
3	B4-2	Activity -BIN VENTS	N
4	B4-3	Activity -GRAIN CLEANING	N
5	B4-4	Activity -HAMMER MILL	N
6	B4-5	Activity -STEAM FLAKING	N
7	B4-6	Activity -CRACKING	N
8	B4-7	Activity -MICRO ROOM BAG DUMP VENTILATION	N
9	B4-8	Activity -PELLETING	N
10	B4-9	Activity -BULK LOADOUT	N

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1	0.08	0.03		1.51	0.01	1.26	0.11
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4							18.55
8	Form E1							
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	Total Permitted Emissions	0.08	0.03	0	1.51	0.01	1.26	18.66

Reported Totals

1	Form B1, DCB or AB	0.08	0.03		1.50	0.01	1.26	0.11
2	Form B2							
3	B3 - W							
4	Form B4	0.00		0.00	0.00	0.00	0.00	18.55
5	Form E1							
6	Form R1							
7	Total Permitted Emissions	0.08	0.03	0.00	1.50	0.01	1.26	18.66

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.00						
6	Form WU	0.00						
7	Form B4U							
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU							
4	Form B4U							
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions							
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 0.66)							

Toxic Air Contaminants & Ozone Depleters by Reference Numbers

Row	Ref Form	Ref Row	TAC Code	CAS#	Annual Usage	Unit	Emission Factor	Use Default Emission Factor	Overall Control Efficiency	Annual Gross Emissions	Waste Credit (Yes/No)
1	B1	1	02	71432	30.10	3. mmcf	0.008			0.2408	N
2	B1	1	12	50000	30.10	3. mmcf	0.017			0.5117	N
3	B1	1	19	1151	30.10	3. mmcf	0.0001			0.00301	N
4	B1	1	19	91203	30.10	3. mmcf	0.0003			0.00903	N

SUMMARY

02. Benzene	0.2408
12. Formaldehyde	0.5117
19. Polynuclear Aromatic Hydrocarbons (PAHs)	0.01204

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxices Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Boiler	1. Natural Gas (mmcf)	30.10	5.50	165.55	2.30	69.23	100.00	3 010 00	0.60	18 06	84.00	2.528 40	7.60	228.76	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					165.55 lbs		69.23 lbs		3010.00 lbs		18.06 lbs		2528.40 lbs		228.76 lbs	
					0.08 tons		0.03 tons		1.51 tons		0.01 tons		1.26 tons		0.11 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		153,633.60	5. ton											0.017	2,611.77
2	999. BIN VENTS	N		153,633.60	5. ton											0.025	3,840.84
3	999. GRAIN CLEANING	N		153,633.60	5. ton											0.075	11,522.52
4	999. HAMMER MILL	N		33,799.40	5. ton											0.067	2,264.56
5	999. STEAM FLAKING	N		69,135.10	5. ton											0.15	10,370.27
6	999. CRACKING	N		50,699.10	5. ton											0.024	1,216.78
7	999. MICRO ROOM BAG DUMP VENTILATION	N		7,692.00	5. ton											0.024	184.37
8	999. PELLETING	N		31,200.00	5. ton											0.15	4,680.00
9	999. BULK LOADOUT	N		122,262.40	5. ton											0.0033	403.47
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		37094.58 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		18.55 tons

Fees Due Summary

	Submittal Date: No later than September 30,2004	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	0.06	0.00		0	$0.00	$0.00
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	1.04	0.00	0.00	0	$0.00	$0.00
4	SULFUR OXIDES	0.01	0.00	0.00	0	$0.00	$0.00
5	CARBON MONOXIDE	0.87	0.00		0	$0.00	$0.00
6	PARTICULATE MATTER	20.71	0.00		21	$5,044.68	$5,044.68

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$5,044.68	$5,044.68
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$3.74	$3.74
3	TOTAL FEES DUE	$5,048.42	$5,048.42
4	Installments Paid For FY 2003-2004 (if any) -- All Criteria Pollutants	$0.00	$0.00
5	Installments Paid For FY 2003-2004 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$5,048.42	$5,048.42
7	Late Fee (if any)	$0.00	$0.00
8	Amount Due (Line 6 + Line 7)	$5,048.42	$5,048.42
9	Amount Enclosed (please write Facility ID#(s) and FY 2003-2004 AER on the check)		$5,048.42

List of Emission Sources

Row	Reference	Emission Source Category Description	Contains TAC/ODC
1	B1-1	Boiler <10 MMBTU/HR,Natural Gas (mmcf)	Y
2	B4-1	Activity -GRAIN RECEIVING	N
3	B4-2	Activity -BIN VENTS	N
4	B4-3	Activity -GRAIN CLEANING	N
5	B4-4	Activity -HAMMER MILL	N
6	B4-5	Activity -STEAM FLAKING	N
7	B4-6	Activity -CRACKING	N
8	B4-7	Activity -MICRO ROOM BAG DUMP VENTILATION	N
9	B4-8	Activity -PELLETING	N
10	B4-9	Activity -BULK LOADOUT	N

Annual Emissions Summary - Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1	0.06	0.02		1.04	0.01	0.87	0.08
2	Form AB							
3	Form DCB							
4	Form B2							
5	Form B3	0.00						
6	Form W	0.00						
7	Form B4							20.63
8	Form E1							
9	Form B6							
10	Form B7							
11	Form B8							
12	Form R2							
13	Form R3							
14	Form R4							
15	Form R5							
16	Form R6							
17	Form R7							
18	Form P1							
19	Form P2							
20	Form T1							
21	*Total Permitted Emissions*	*0.06*	*0.02*	*0*	*1.04*	*0.01*	*0.87*	*20.71*

Reported Totals

1	Form B1, DCB or AB	0.06	0.02		1.04	0.01	0.87	0.08
2	Form B2							
3	B3 - W	0.00						
4	Form B4	0.00		0.00	0.00	0.00	0.00	20.63
5	Form E1							
6	Form R1							
7	Total Permitted Emissions	0.06	0.02	0.00	1.04	0.01	0.87	20.71

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.00						
6	Form WU	0.00						
7	Form B4U							
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU	0.00						
4	Form B4U							
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.00						
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 1.00)	0.00		0.00	0.00	0.00	0.00	0.00

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	1a. Boiler <10 MMBTU/HR	1. Natural Gas (mmcf)	20.80	5.50	114.40	2.30	47.84	100.00	2,080.00	0.60	12.48	84.00	1,747.20	7.60	158.08	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					114.40 lbs		47.84 lbs		2080.00 lbs		12.48 lbs		1747.20 lbs		158.08 lbs	
					0.06 tons		0.02 tons		1.04 tons		0.01 tons		0.87 tons		0.08 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		189,240.00	5. ton											0.017	3,217.08
2	999. BIN VENTS	N		189,240.00	5. ton											0.017	3,217.08
3	999. GRAIN CLEANING	N		189,240.00	5. ton											0.075	14,193.00
4	999. HAMMER MILL	N		41,633.00	5. ton											0.067	2,789.41
5	999. STEAM FLAKING	N		85,158.00	5. ton											0.15	12,773.70
6	999. CRACKING	N		62,449.00	5. ton											0.024	1,498.78
7	999. MICRO ROOM BAG DUMP VENTILATION	N		9,462.00	5. ton											0.024	227.09
8	999. PELLETING	N		20,268.00	5. ton											0.15	3,043.20
9	999. BULK LOADOUT	N		94,104.00	5. ton											0.0033	310.54
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		41269.88 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		20.63 tons

Due Summary

	Submittal Date: No later than September 30,2005	Total Permitted Emissions from Form C (tons)	Total Non-Permitted Emissions Subject to Fees from Form CU (tons)	Total Emissions Subject to Fees from Form CR (tons)	Total Emissions (tons)	Emission Fees Due (Rule 301(e) Table III)	Emission Fee Due (Reported)
1	ORGANIC GASES	0.01	0.00		0	$0.00	$0.00
2	SPECIFIC ORGANICS	0.00	0.00		0	$0.00	$0.00
3	NITROGEN OXIDES	0.18	0.00	0.00	0	$0.00	$0.00
4	SULFUR OXIDES	0.00	0.00	0.00	0	$0.00	$0.00
5	CARBON MONOXIDE	0.15	0.00		0	$0.00	$0.00
6	PARTICULATE MATTER	2.08	0.00		0	$0.00	$0.00

		(Calculated)	(Reported)
1	TOTAL EMISSION FEES FOR ALL CRITERIA POLLUTANTS	$0.00	$0.00
2	TOXIC AIR CONTAMINANTS/OZONE DEPLETER FEES	$0.00	$0.00
3	TOTAL FEES DUE	$0.00	$0.00
4	Installments Paid For FY 2004-2005 (if any) -- All Criteria Pollutants	$0.00	$0.00
5	Installments Paid For FY 2004-2005 (if any) -- Toxic Air Contaminants/Ozone Depleters	$0.00	$0.00
6	Balance Due (Line 3 - Line 4 - Line 5)	$0.00	$0.00
7	Late Fee (if any)	$0.00	$0.00
8	Amount Due (Line 6 + Line 7)	$0.00	$0.00
9	Amount Enclosed (please write Facility ID#(s) and FY 2004-2005 AER on the check)		$0.00

Annual Emissions Summary - Non-Permitted

Row		Organic Gases (tons)	Methane (tons)	Specific Organics (tons)	Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Carbon Monoxide (tons)	Particulate Matter (tons)
1	Form B1U							
2	Form AB							
3	Form DCB							
4	Form B2U							
5	Form B3U	0.00						
6	Form WU	0.00						
7	Form B4U							
8	Form E1U							
9	Form B7U							
10	Form B8U							
11	Form P1U							
12	Form P2U							
13	Total Non-Permitted Emissions	0	0	0	0	0	0	0

Reported Totals

1	Form B1U, DCB or AB							
2	Form B2U							
3	B3U - WU							
4	Form B4U							
5	Form E1U							
6	Form R1U							
7	Total Non-Permitted Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Total Non-Permitted Emission Subject to Fees (Multiply Line 7 By 1.00)	0.00		0.00	0.00	0.00	0.00	0.00

Permitted Annual Emissions from Fuel Combustion in Boilers, Ovens, Furnaces, and Heaters

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	1a. Boiler <10 MMBTU/HR	1. Natural Gas (mmcf)	3.61	5.50	19.86	2.30	8.30	100.00	361.00	0.60	2.17	84.00	303.24	7.60	27.44	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL					19.86 lbs		8.30 lbs		361.00 lbs		2.17 lbs		303.24 lbs		27.44 lbs	
					0.01 tons		0.00 tons		0.18 tons		0.00 tons		0.15 tons		0.01 tons	

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. GRAIN RECEIVING	N		20,482.00	5. ton											0.017	348.19
2	999. BIN VENTS	N		20,482.00	5. ton											0.017	348.19
3	999. GRAIN CLEANING	N		20,482.00	5. ton											0.075	1,535.15
4	999. HAMMER MILL	N		3,765.00	5. ton											0.067	252.26
5	999. STEM FLAKING	N		7,700.00	5. ton											0.15	1,155.00
6	999. CRACKING	N		5,650.00	5. ton											0.024	135.60
7	999. MICRO ROOM BAG DUMP	N		860.00	5. ton											0.024	20.64
8	999. PELLETING	N		1,834.54	5. ton											0.15	275.18
9	999. BULK LOADOUT	N		21,879.34	5. ton											0.0033	72.20
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		4143.41 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.07 tons

FAC ID 94642

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector SR

DIAMOND PACIFIC PRODUCTS CO	17971 215 HIGHWAY/OLEANDER	PERRIS , 92570

Last Inspection Date:	I S Code:	Compliance Team	Business Status:
12/14/1994	11	Industrial	☐Active ☐Unknown ☑New Owner Out of Business

Contact Name:	Title:	Ph:

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation?
	D82003	GRAIN STORAGE	EQ NON USE/INACTV LTR 8/29/08 MH	☑Yes ☐No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (if applicable)	Fac Name:	Change of Ownership?
	CASS CONSTRUCTION	☑Yes ☐No

Contact:	title:	Phone:
MATT GOUBEAUX	ESTIMATOR	951.943.7043

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☑Yes ☐No	☐ Removed from site	☐Operated w/o permits	
	☐ Onsite, but rendered non-operable	☐Operated under new ID	
	☑Operable, but not operated	☐Other	

NC #:	Rules:	NOV #:	Rules:
D26671			

Inspector:	Inspection Date:	Reviewed By:	Date:
KATHLEEN LINSON	01/22/10		

Attorney work product—prepared at the direction of and for Legal Department

FAC ID **94642**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **SR**

DIAMOND PACIFIC PRODUCTS CO	17971 215 HIGHWAY/OLEANDER	PERRIS	, 92570

Last Inspection Date:	TS Code:	Compliance Team	Business Status:
12/14/1994	82	Ref/Energy	☐Active ☐Unknown ☐New Owner ☒Out of Business

Contact Name:	Title	Ph:
N/A		

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTO Unable to Confirm)	In operation? (UTO Unable to Confirm)
	D82003	GRAIN STORAGE	EQ NON USE/INACTV LTR 8/29/08 MH	☐Yes ☐No ☒UTC	☐Yes ☒No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment #					
	1	2	3	4	5	6
Permit #						

Comments: * Explain all "Unable to confirm" "(U)" entries in this section

Site fenced off, real estate broker's sign in front, equipment related to a grain mill is on the property however obvious non-operation

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☒No		☐ Removed from site	☐Operated w/o permits
		☒On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other UTC

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Brett Kimberly	12-29-09	Andy Wat	12/30/09

Attorney work product—prepared at the direction of and for Legal Department

DM

South Coast Air Quality Management District

NC D26671

Company

Facility:	CASS CONSTRUCTION (ID: 162879)
Location Address:	23120 OLEANDER, AVE PERRIS, CA 92570-4
Mailing Address:	P.O. BOX 309 EL CAJON, CA 92022
Representative:	ESTIMATOR

Violation

Notice Issued Date:	1/22/2010
Violation Date:	1/22/2010
Serve To:	MATT GOUBEAUX
Issue By:	KATHLEEN LINSON (Team: I)
Assignment No.:	1155268
Compliance Acheived Date:	01/25/2010
Equipment Description:	storage silos, livestock feed

Compliance Required: provide letter regarding non-operable equipment on site without valid P/O

Disposition

Final Action Code:	CLO 2/24/2010 00:00:00
Due Date:	1/29/2010
Violation Days:	0

Rule/Comment

42303 , provide letter regarding equipment w/o valid P/O

Emittent

Follow-Up

Status: INCOMP Inspector ID: KL04 Inspection Date: 01/25/10 00:00 Number:

Device IDs.

Inspector Comment

The facility has no permits to operate.

I arrived at the facility on 01.22.10 at 14:30 hours to conduct a Rule 203(a) targeted inspection for Diamond Pacific Products. Upon arrival I found that the facility was now Cass Construction, a general engineering contractor.

I met with Matt Goubeaux, Estimator, 951.943.7043, who accompanied me on the facility inspection. I observed storage silos and livestock feed equipment on site. All equipment was not in operation and Mr. Goubeaux showed me they were not being used and were just left from the last facility.

I explained to Mr. Goubeaux that the equipment cannot be used without a valid P/O and issued NC D26671 to provide a letter to AQMD regarding the equipment and that the facility understands the equipment cannot be used without first obtaining valid P/Os.

After issuing NC D26671 and explaining to Mr. Goubeaux how to achieve compliance, I departed the facility at 15:10 hours.

K. Linson, 02.24.10

On 01.25.10 Mr. Goubeaux emailed a letter regarding the equipment with no valid P/Os.

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

On 01.25.10, Mr. Goudeaux mailed me a letter regarding the equipment without valid P/OS.

K. Linson, 02.24.10

INSPECTOR: _____ DATE: _____
signature

SUPERVISOR: _____ DATE: _____
signature

CASS CONSTRUCTION, INC.
GENERAL ENGINEERING CONTRACTORS
LIC NO. 398336

MAILING ADDRESS
P.O. BOX 309
EL CAJON, CA 92033-0309
www.casscontruction.com

January 22, 2010

Kathleen Linson
Air Quality Inspector
Engineering and Compliance Office
Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-0941

RE: Notice to Comply Dated 1/22/2010

The purpose of this letter is to provide clarification regarding the notice referenced above. With the exception of the storage silos, all equipment registered by the previous owner (Star Milling) have been demolished, removed from the property, and recycled. The storage silos have not been in use (empty) since Star Milling left the premises and are non-operable. They will not be put into service without first obtaining the required permits from AQMD.

It is assumed that the information in this letter complies with the notice referenced above and that you will contact myself at either the below address or phone number if there are any further unresolved matters.

Respectfully,

FAC. ID 162879

CASS CONSTRUCTION

NC D26671

Matt Goubeaux

Project Manager
Cass Construction, Inc.

CORPORATE OFFICE
1100 WAGNER DRIVE
EL CAJON, CA 92020-3047
PHONE (619) 590-0929
FAX (619) 590-1202

INLAND EMPIRE
23120 OLEANDER AVENUE
PERRIS, CA 92570
PHONE (951) 943-7043
FAX (951) 943-7706

299411
289835

17971 215 Highway/Oleander
Perris, California

6/22/2005

Facility ID # 94642

Please find enclosed our payment for our annual operating and emissions fees.
We have crossed out permit #D 89920 and D82001. Please keep these permits active until the expiration date. We are discontinuing making the products that utilize these permitted pieces of equipment at this facility.
This facility will only unload grain and temporally store it. When needed it will reload the grain on trucks for transporting it to where it will be used.
If you have any questions , please call me at 951-657-3143.

Thank You
Carter Burruss

Star Milling Co.
Diamond Pacific Products



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21865 E COPLEY DR , DIAMOND BAR, CALIFORNIA 91765-4182

(909)396-2900

REQUEST TO INACTIVATE PERMIT TO OPERATE

CC ID# 94642

PERMIT ISSUED TO Diamond Pacific Products Co

EQUIPMENT LOCATION 17971 215 Hwy/Oleander, Perris

PERMIT NO D68281 (AIN 2-76-33) DATE ISSUED _____

EQUIPMENT DESCRIPTION Grain size Reduction

COMPLETE AND RETURN TO ADDRESS ABOVE

CANCELLATION OF THE PERMIT DESCRIBED ABOVE IS HEREBY REQUESTED FOR THE FOLLOWING REASON

[ ] Out of Business
effective date _____

[ ] Change of Ownership
effective date _____

[ ] Equipment sold, replaced, destroyed, or removed from premises

[✓] Equipment will no longer be used

[ ] Equipment is exempt from permit requirement by Rule 219

_____

[ ] Other _____

_____

IT IS UNDERSTOOD THAT ANY FUTURE USE OF THIS EQUIPMENT MAY REQUIRE A NEW PERMIT APPLICATION IN ACCORDANCE WITH THE LAWS THEN IN EFFECT

Carter Burruss
Signature of Responsible Member of Organization

Title Compliance Manager

Printed Name Carter Burruss

Date 11-9-04

PROCESSED
NOV 30 2004
CUSTOMER SERVICE UNIT
BY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

INVOICE

INVOICE NO. 094642-03-96

For information Call - 909-396-2900
Mail Remittance To: P.O. Box 4943 Diamond Bar Ca. 91765-0943

California Health and Safety Code Section 40510 and South Coast Air Quality Management District Rule 301 authorizes the District to charge permit fees on the equipment identified below.

EQUIPMENT LOCATED AT: 17971 HWY 215 & OLEANDER
PERRIS CA 92570

INVOICE DATE 06/10/96

ANNUAL BILL MONTH AUGUST

LEGAL OWNER OR OPERATOR: CO. ID. 094642
DIAMOND PACIFIC PRODUCTS CO
P.O. BOX 758
PERRIS CA 92572

PROCESSED
RECEIVED JUN 1 2 1996
AUG 2 1 1996
CUSTOMER SERVICE UNIT

DUPLICATE COPY - RETURN WITH PAYMENT

TRANSACTION NUMBER	TRANSACTION DATE	REFERENCE NUMBER	DESCRIPTION	TRANSACTION AMOUNT	TRANSACTION BALANCE
			CYCLONE		
02672769	061096	D68277	ANNUAL BILLING	167.90	167.90
276235			~~LIVESTOCK FEED ROLLING~~ REPLACED BY D82001		
~~02672770~~	~~061096~~	~~D68278~~	~~ANNUAL BILLING~~	~~601.10~~	~~601.10~~
			GRAIN STORAGE		
02672771	061096	D68279	ANNUAL BILLING	601.10	601.10
			BULK LOAD/UNLOAD LIVESTOCK FE		
02672772	061096	D68280	ANNUAL BILLING	601.10	601.10
			GRAINS SIZE REDUCTION		
02672773	061096	D68281	ANNUAL BILLING	601.10	601.10
			GRAINS BLENDING		
02672774	061096	D68282	ANNUAL BILLING	167.90	167.90
			RAILROAD CAR UNLOADING GRAINS		
02672775	061096	D68283	ANNUAL BILLING	601.10	601.10
			RAILROAD CAR UNLOADING GRAINS		
02672776	061096	D68284	ANNUAL BILLING	601.10	601.10
			LIVESTOCK FEED PACKAGING		
02672777	061096	D68285	ANNUAL BILLING	601.10	601.10
			BAGHOUSE, AMBIENT TEMP (>500		
02672778	061096	D68286	ANNUAL BILLING	601.10	601.10
			STORAGE TANK LIVESTOCK FEED		
02672779	061096	D68287	ANNUAL BILLING	167.90	167.90
276225			~~GRAIN STORAGE~~ REPLACED BY D82003		
~~02672780~~	~~061096~~	~~D68288~~	~~ANNUAL BILLING~~	~~601.10~~	~~601.10~~
			CYCLONE		
02672781	061096	D68290	ANNUAL BILLING	167.90	167.90
276224			~~BULK LOAD TRUCK (1 RACK) GRAT~~ REPLACED BY D82002		
~~02672782~~	~~061096~~	~~D68291~~	~~ANNUAL BILLING~~	~~601.10~~	~~601.10~~
			LIVESTOCK FEED PELLETIZING		
02672783	061096	D68292	ANNUAL BILLING	601.10	601.10

REMARKS:
If you are a new owner or operator of the equipment at this location, Pursuant to District Rules 203 and 209 you may need a new permit to operate. Before paying this invoice please call Customer Service at (909) 396-2900.

(51)

BALANCE NOW DUE

CONTINUED

If payment not received by application/permit will be delinquent.
If payment not received by application/permit will expire. Operation of equipment without a permit subjects owner or operator to misdemeanor or civil penalties for each day of operation.

Please return duplicate copy with remittance. "Make check payable to South Coast A.Q.M.D."

INVOICE

For information Call - 909-396-2900
Mail Remittance To: P.O. Box 4943 Diamond Bar Ca. 91765-0943

INVOICE NO.
094642-03-95

California Health and Safety Code Section 40510 and South Coast Air Quality Management District Rule 301 authorizes the District to charge permit fees on the equipment identified below.

EQUIPMENT LOCATED AT: 17971 HWY 215 & OLEANDER
PERRIS CA 92570

INVOICE DATE 06/01/95
ANNUAL BILL MONTH AUGUST

LEGAL OWNER OR OPERATOR: CO. ID. 094642
DIAMOND PACIFIC PRODUCTS CO
P.O. BOX 758
PERRIS CA 92572

DUPLICATE COPY - RETURN WITH PAYMENT

TRANSACTION NUMBER	TRANSACTION DATE	REFERENCE NUMBER	DESCRIPTION	TRANSACTION AMOUNT	TRANSACTION BALANCE
			STORAGE TANK LIVESTOCK FEED		
02388423	060195	D68287	ANNUAL BILLING	165.97	165.97
02388424	060195	D68287	FY9596 ANNUAL BILLING REBATE	6.64-	6.64-
	276226		BAGHOUSE, AMBIENT TEMP (>500 NO LONGER IN USE		
~~02388425~~	~~060195~~	~~D68288~~	~~ANNUAL BILLING~~	~~594.04~~	~~594.04~~
~~02388426~~	~~060195~~	~~D68288~~	~~FY9596 ANNUAL BILLING REBATE~~	~~23.76-~~	~~23.76-~~
	276222		GRAIN STORAGE		
02388427	060195	D68289	ANNUAL BILLING	594.04	594.04
02388428	060195	D68289	FY9596 ANNUAL BILLING REBATE	23.76-	23.76-
			CYCLONE		
02388429	060195	D68290	ANNUAL BILLING	165.97	165.97
02388430	060195	D68290	FY9596 ANNUAL BILLING REBATE	6.64-	6.64-
			BULK LOAD TRUCK (1 RACK) GRAI		
02388431	060195	D68291	ANNUAL BILLING	594.04	594.04
02388432	060195	D68291	FY9596 ANNUAL BILLING REBATE	23.76-	23.76-
			LIVESTOCK FEED PELLETIZING		
02388433	060195	D68292	ANNUAL BILLING	594.04	594.04
02388434	060195	D68292	FY9596 ANNUAL BILLING REBATE	23.76-	23.76-
			STORAGE TANK FEED AND FOOD MI		
02388435	060195	D69172	ANNUAL BILLING	165.97	165.97
02388436	060195	D69172	FY9596 ANNUAL BILLING REBATE	6.64-	6.64-
			STORAGE TANK FEED AND FOOD MI		
02388437	060195	D69173	ANNUAL BILLING	165.97	165.97
02388438	060195	D69173	FY9596 ANNUAL BILLING REBATE	6.64-	6.64-
	276212		BOILER (<5 MMBTU/HR) NAT GAS NO LONGER IN USE		
~~02388439~~	~~060195~~	~~D74649~~	~~ANNUAL BILLING~~	~~165.97~~	~~165.97~~
~~02388440~~	~~060195~~	~~D74649~~	~~FY9596 ANNUAL BILLING REBATE~~	~~6.64-~~	~~6.64-~~
	276214		BOILER (<5 MMBTU/HR) NAT GAS NO LONGER IN USE		
~~02388441~~	~~060195~~	~~D74650~~	~~ANNUAL BILLING~~	~~165.97~~	~~165.97~~
~~02388442~~	~~060195~~	~~D74650~~	~~FY9596 ANNUAL BILLING REBATE~~	~~6.64-~~	~~6.64-~~

REMARKS
If you are a new owner or operator of the equipment at this location, pursuant to District Rules 203 and 209 you may need a new permit to operate. Before paying this invoice please call Customer Service at (909) 396-2900.

(42)

BALANCE NOW DUE

CONTINUED

If payment not received by application/permit will be delinquent.
If payment not received by application/permit will expire. Operation of equipment without a permit subjects owner or operator to misdemeanor or civil penalties for each day of operation.

Please return duplicate copy with remittance. "Make check payable to South Coast A.Q.M.D."

only A/N 299411 boiler remained in service after 1995

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

21865 E COPLEY DR , DIAMOND BAR, CALIFORNIA 91765-4182

(909)396-2900

REQUEST TO INACTIVATE PERMIT TO OPERATE

CO ID# 94642

PERMIT ISSUED TO Diamond Pacific Products Co

EQUIPMENT LOCATION 17971 215 Hwy/Oleander, Perris

VN 28836

PERMIT NO D82002 28936 DATE ISSUED _____

EQUIPMENT DESCRIPTION Bulk Load Truck (1 rack) Grain

COMPLETE AND RETURN TO ADDRESS ABOVE

CANCELLATION OF THE PERMIT DESCRIBED ABOVE IS HEREBY REQUESTED FOR THE FOLLOWING REASON

[ ] Out of Business
effective date _____

[ ] Change of Ownership
effective date _____

[ ] Equipment sold, replaced, destroyed, or removed from premises

[ ] Equipment will no longer be used

[ ] Equipment is exempt from permit requirement by Rule 219

[ ] Other _____

IT IS UNDERSTOOD THAT ANY FUTURE USE OF THIS EQUIPMENT MAY REQUIRE A NEW PERMIT APPLICATION IN ACCORDANCE WITH THE LAWS THEN IN EFFECT

Carter Burruss
Signature of Responsible Member of Organization

Title Compliance Manager

Printed Name Carter Burruss

Date 11-9-04

NOV 30 2004
CUSTOMER SERVICE UNIT
BY

Star Milling Co.

MEMBER OF CALIFORNIA GRAIN & FEED DEALERS ASSN

24067 Water Street • P.O. Box 1987 • Perris, California 92572-1987
Phone 951/657-3143
FAX 951/943-2400

Attn: Mary Houze
Effective Immediately
Date: 08-29-08
Company code: 94642
Legal Owner/Operator: Diamond Pacific Products Co.
Equip. Location: 17971 215 Highway / Oleander
Perris, Ca. 92572-1987

2.20

To whom it concerns,

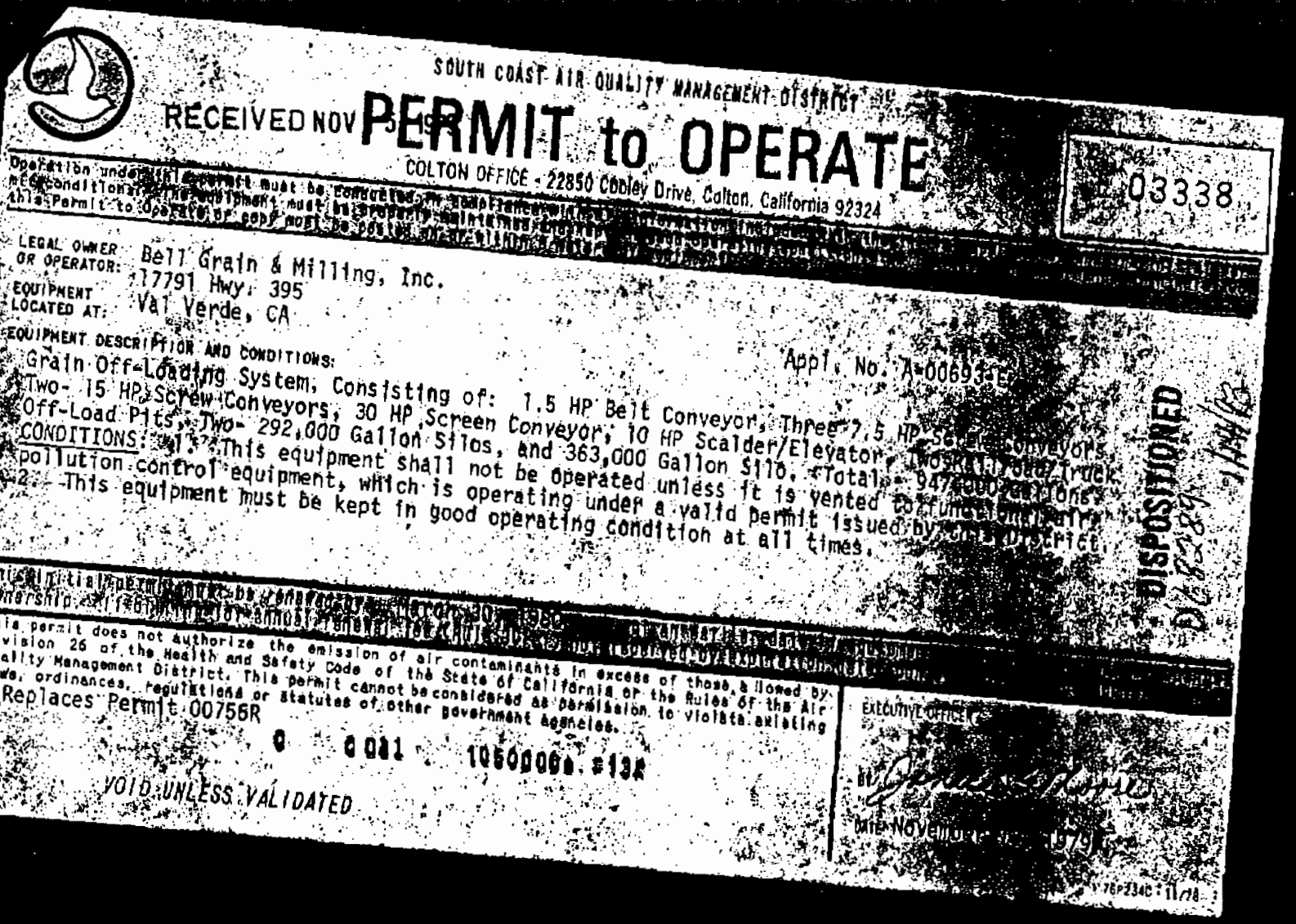
276231 thr 276230

289337 Please be advised that we are no longer operating the following permits: D68283, D68284, and D82003. We recently paid for these permits, but should have cancelled them before the due date. We are no longer using this facility. The rail is red tagged and the equipment has had all the copper stole from the site as of a couple months ago. If you need any more information, please call Greg Carls at Star Milling (951) 657-3143.

Greg Carls — 8-29-08

Greg Carls
Star Milling Co.
Controller / I.T.

Date



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

RECEIVED NOV

PERMIT to OPERATE

COLTON OFFICE - 22850 Cooley Drive, Colton, California 92324

03338

Operation under this permit must be conducted in accordance with all conditions listed. The equipment must be properly maintained and this Permit to Operate or copy must be posted on the premises.

LEGAL OWNER OR OPERATOR: Bell Grain & Milling, Inc.

EQUIPMENT LOCATED AT: 17791 Hwy. 395 Val Verde, CA

EQUIPMENT DESCRIPTION AND CONDITIONS:

Appl. No. A-006935

Grain Off-Loading System, Consisting of: 1.5 HP Belt Conveyor, Three-7.5 HP Screw conveyors, Two- 15 HP Screw Conveyors, 30 HP Screen Conveyor, 10 HP Scalder/Elevator, Two-Road Truck Off-Load Pits, Two- 292,000 Gallon Silos, and 363,000 Gallon Silo. Total 947,000 Gallons.

CONDITIONS: 1. This equipment shall not be operated unless it is vented to fully functional pollution control equipment, which is operating under a valid permit issued by the District.

2. This equipment must be kept in good operating condition at all times.

DISPOSITIONED

This initial permit must be surrendered upon change of ownership or location of equipment. Application for transfer must be made within 30 days.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

Replaces Permit 00756R

0 0 0 1 1050006 #13

VOID UNLESS VALIDATED

EXECUTIVE OFFICER

BY

DATE November 19

76P234C : 11/78

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68289
A/N 276225
Page 1

This initial permit must be renewed by 06/16 ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.C) is not received by the expiration date, contact the District.

Legal Owner Or Operator: DIAMOND PACIFIC PRODUCTS CO.
P. O. BOX 758
PERRIS, CALIFORNIA 92570
ATTN: MARK JACOBS

ID 094642

Equipment located at: 17971 HIGHWAY 215/OLEANDER, PERRIS, CALIFORNIA 92570

Equipment Description:

GRAIN OFF-LOADING SYSTEM, CONSISTING OF:

1.5 H.P. BELT CONVEYOR, THREE 7.5 H.P. SCREW CONVEYORS, TWO-15 H.P. SCREW CONVEYORS, 30 H.P. SCREEN CONVEYOR, 10 H.P. SCALDER/ELEVATOR, TWO RAILROAD/TRUCK OFF-LOAD PITS, TWO-292,000 GALLON SILOS, AND 363,000 GALLON SILO, TOTAL - 947,000 GALLONS.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO FUNCTIONAL AIR POLLUTION CONTROL EQUIPMENT WHICH IS OPERATING UNDER A VALID PERMIT ISSUED BY THE EXECUTIVE OFFICER.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

Permit No.
D68289
A/N 276225
Page 3

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY *DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF* CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
January 14, 1993

FILE COPY

DEC 22 '92 03:05PM SCAQMD COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

Permit No.
D66137
A/N 248670
Page 1

PERMIT TO OPERATE

This initial permit must be renewed by 08/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.C) is not received by the expiration date, contact the District.

1993 JAN -4 PM 3:02
SOUTH COAST
AIR QUALITY

Legal Owner Or Operator: ID 24142
MOORMAN MANUFACTURING COMPANY - BELL DIVISION
P. O. BOX 758
PERRIS, CALIFORNIA 92370
ATTN: DOMINIC DIANGELIS

Equipment located at: 17971 HWY 215/OLEANDER, PERRIS, CALIFORNIA 92370

Equipment Description:

GRAIN OFF-LOADING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, 22" W, X 10' - 0" L., 1.5 H.P. DRIVE.
2. FIVE SCREW CONVEYORS, 14" W. X 137' - 0" L., 14" W. X 25' - 0" L., 14" W. X 102' - 0" L., 14" W. X 175' - 0" L., AND 14" W. X 50' - 0" L., EACH WITH 7.5 H.P. DRIVE.
3. ROTARY SCALPER, DUAL SCREEN, WITH DISCHARGE SCREW CONVEYOR, 16" W. X 12' - 0" L., 10 H.P. DRIVE.
4. BUCKET ELEVATOR, 105' H., WITH 20 H.P. DRIVE.
5. TWO SILOS, CHICAGO-EASTERN, 30' DIA. X 48' H., 39,000 FT^3 CAPACITY, EACH. VENTED TO AN APC.
6. TWO SILOS, 27' DIA. X 32' H., 18,312 FT^3 CAPACITY, EACH. VENTED TO AN APC.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

D68279
1/14/93

DISPOSITIONED

FILE COPY

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

3. THIS OFF-LOADING SYSTEM SHALL NT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.

4. THE TOTAL QUANTITY OF GRAINS DISCHARGED THROUGH THIS SYSTEM SHALL NOT EXCEED 160 TON/DAY.

5. THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO PROVE COMPLIANCE. SUCH RECORDS SHALL BE RETAINED FOR A MINIMUM PERIOD OF TWO YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

NOTICE

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EXECUTIVE OFFICER

Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
November 25, 1992

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68279
A/N 276222
Page 1

This initial permit must be renewed by 06/16 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.C) is not received by the expiration date, contact the District.

Legal Owner Or Operator: *ID 094642*

DIAMOND PACIFIC PRODUCTS CO.
P. O. BOX 758
PERRIS, CALIFORNIA 92570
ATTN: MARK JACOBS

Equipment located at: 17971 HIGHWAY 215/OLEANDER, PERRIS, CALIFORNIA 92570

Equipment Description:

GRAIN OFF-LOADING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, 22" W. X 10' - 0" L., 1.5 H.P. DRIVE.
2. FIVE SCREW CONVEYORS, 14" W. X 137' - 0" L., 14" W. X 25' - 0" L., 14" W. X 102' - 0" L., 14" W. X 175' - 0" L., AND 14" W. X 50' - 0" L., EACH WITH 7.5 H.P. DRIVE.
3. ROTARY SCALPER, DUAL SCREEN, WITH DISCHARGE SCREW CONVEYOR, 16" W. X 12' - 0" L., 10 H.P. DRIVE.
4. BUCKET ELEVATOR, 105' H., WITH 20 H.P. DRIVE.
5. TWO SILOS, CHICAGO-EASTERN, 30' DIA. X 48' H., 39,000 FT^3 CAPACITY, EACH. VENTED TO AN APC.
6. TWO SILOS, 27' DIA. X 32' H., 18,312 FT^3 CAPACITY, EACH. VENTED TO AN APC.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68279
A/N 276222
Page 2

CONTINUATION OF PERMIT TO OPERATE

3. THIS OFF-LOADING SYSTEM SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.

4. THE TOTAL QUANTITY OF GRAINS DISCHARGED THROUGH THIS SYSTEM SHALL NOT EXCEED 160 TON/DAY.

5. THE OPERATOR SHALL KEEP ADEQUATE RECORDS TO PROVE COMPLIANCE. SUCH RECORDS SHALL BE RETAINED FOR A MINIMUM PERIOD OF TWO YEARS AND BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

NOTICE

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EXECUTIVE OFFICER

Dorris M. Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
January 14, 1993

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D82003
A/N 289837
Page 1

This initial permit must be renewed by 8/1 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.C) is not received by the expiration date, contact the District.

Legal Owner Or Operator: **ID 094642**
DIAMOND PACIFIC PRODUCTS COMPANY
P.O. BOX 758
PERRIS, CA. 92572
ATTN: DOMINIC DI ANGELIS

Equipment located at: 17971 HWY 215/OLEANDER, PERRIS, CA. 92570

Equipment Description:

GRAIN OFF-LOADING SYSTEM CONSISTING OF:

1. BELT CONVEYOR, 22" W. X 10' L., 1.5 H.P. DRIVE.
2. SCREW CONVEYOR, 14" W. X 137' L., 7.5 H.P. DRIVE.
3. SCREW CONVEYOR, 14" W. X 25 L., 7.5 H.P. DRIVE.
4. SCREW CONVEYOR, 14" W. X 103' L., 7.5 H.P. DRIVE.
5. SCREW CONVEYOR, 14" W. X 175' L., 7.5 H.P. DRIVE.
6. SCREW CONVEYOR, 14" W. X 50' L., 7.5 H.P. DRIVE.
7. ROTARY SCALPER, *DUAL SCREEN*, WITH DISCHARGE SCREW CONVEYOR, 16" W. X 12' L., 10 H.P. DRIVE.
8. BUCKET ELEVATOR, 105' H., WITH 30 H.P. DRIVE.
9. TWO SILOS, CHICAGO-EASTERN, 30' DIA. X 48' H., 39000 CUBIC FEET CAPACITY, EACH VENTED TO AN APC.
10. TWO SILOS, 27' DIA. X 32' H., 18312 CUBIC FEET CAPACITY, EACH VENTED TO AN APC.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS OFF-LOADING SYSTEM SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.

4. THE TOTAL QUANTITY OF GRAINS DISCHARGED THROUGH THIS SYSTEM SHALL NOT EXCEED 45000 TONS IN ANY ONE CALENDAR MONTH.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION FOUR. THE RECORDS SHALL MAINTAIN THE FOLLOWING GUIDELINES:

A. AT LEAST ONE SET OF RECORDS SHALL BE MAINTAINED ON SITE AT THIS FACILITY LOCATION.

B. RECORDS SHALL BE MAINTAINED FOR THE LATEST TWO YEARS.

C. RECORD SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

NOTICE

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EXECUTIVE OFFICER

By Dorris M. Bailey/ag
Principal Office Assistant
APRIL 11, 1994

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68280
A/N 276234
Page 1

This initial permit must be renewed by 06/16 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: DIAMOND PACIFIC PRODUCTS CO.
P. O. BOX 758
PERRIS, CALIFORNIA 92570
ATTN: MARK JACOBS

ID 094642

Equipment located at: 17971 HIGHWAY 215/OLEANDER, PERRIS, CALIFORNIA 92570

other feed system
see A/N 289836

Equipment Description:

FINISHED BULK FEED TRUCK LOADING SYSTEM CONSISTING OF:

A SIX COMPARTMENT STEEL BIN 18' L. X 14' W. X 8' SIDE X 7' HOPPER, AND A FOUR COMPARTMENT STEEL BIN 12' L. X 14' W. X 8' SIDE X 7 - 6" HOPPER. BINS RECEIVE MIXED FEED (OR PELLETS) FROM MIXING SYSTEM (OR PELLETIZER) VIA TURNHEADS, AND SPOUT TO TRUCKS.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D68280
A/N 276234
~~Page 2~~

CONTINUATION OF PERMIT TO OPERATE

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By DORRIS M. BAILEY/ps
Principal Office Assistant
January 14, 1993

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

Permit No.
D82001
A/N 289835
Page 1

PERMIT TO OPERATE

This initial permit must be renewed by 8/1 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District

Legal Owner **ID 094642**
Or Operator: DIAMOND PACIFIC PRODUCTS COMPANY
P.O. BOX 758
PERRIS, CA. 92572
ATTN: DOMINIC DI ANGELIS

Equipment
located at: 17971 HWY 1215/OLEANDER, PERRIS, CA. 92570

Equipment Description:

MILL SYSTEM LIVESTOCK FEED CONSISTING OF:

1. TWO GRAIN DISCHARGE SCREW CONVEYORS, 12" W. X 10' L., 3 &5 H.P. DRIVE EACH.
2. BUCKET ELEVATOR, 18'H., WITH 7.5 H.P. DRIVE, VENTED TO APC.
3. CLEAN GRAIN SCREW CONVEYOR, 12" W. X 80' L., 5 H.P. DRIVE.
4. TWO STEAM CHAMBERS.
5. TWO ROLLING MILLS, WITH A 30 AND 75 H.P. DRIVE.
6. BUCKET ELEVATOR, 46' H., WITH 20 H.P. DRIVE, VENTED TO APC.
7. COOLER, 5'-6" W. X 30' L., WITH A 20 H.P. BLOWER VENTED TO APC.
8. BUCKET ELEVATOR, 25' H., WITH 5 H.P. DRIVE, VENTED TO APC.
9. DRAG CHAIN 40" L., WITH A 5 H.P. DRIVE.
10. VERTICAL GRAIN SCREW CONVEYOR WITH A 2 H.P. DRIVE.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS MILLING SYSTEM SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.

4. THE TOTAL QUANTITY OF GRAINS DISCHARGED THROUGH THIS SYSTEM SHALL NOT EXCEED 9000 TONS IN ANY ONE CALENDAR MONTH.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

5. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION FOUR. THE RECORDS SHALL MAINTAIN THE FOLLOWING GUIDELINES:

A. AT LEAST ONE SET OF RECORDS SHALL BE MAINTAINED ON SITE AT THIS FACILITY LOCATION.

B. RECORDS SHALL BE MAINTAINED FOR THE LATEST TWO YEARS.

C. RECORD SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

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EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/ag
Principal Office Assistant
APRIL 11, 1994

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D89920
A/N 299411
Page 1

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner or Operator: DIAMOND PACIFIC PRODUCTS CO
P.O. BOX 758
PERRIS, CA 92572

ID 094642

Equipment Location: 17971 HWY 215 & OLEANDER, PERRIS, CA 92570

Equipment Description:

BOILER, DIXON, MODEL NO. WW, WITH A POWERFLAME, MODEL NO C4-25, 6,300,000 BTU PER HOUR, NATURAL-GAS FIRED LOW-NO_X BURNER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS BOILER SHALL ONLY BE FIRED WITH NATURAL GAS.

4. THIS EQUIPMENT SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 1146.

5. THIS BOILER SHALL EMIT NO MORE THAN 30 PPM FOR OXIDES OF NITROGEN (NOX), CALCULATED AS NO2, AND 400 PPM OF CARBON MONOXIDE (CO), ALL MEASURED BY VOLUME ON A DRY BASIS AT 3% O2.

FILE COPY

PERMIT TO OPERATE

CONTINUATION OF PERMIT TO OPERATE

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EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/pv
4/17/1995

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar CA 91765

PERMIT TO OPERATE

Permit No.
D82002
A/N 289836
Page 1

This initial permit must be renewed by 8/1 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.0) is not received by the expiration date, contact the District.

Legal Owner Or Operator: ID 094642
DIAMOND PACIFIC PRODUCTS COMPANY
P.O. BOX 758
PERRIS, CA. 92572
ATTN: DOMINIC DI ANGELIS

Equipment located at: 17971 HWY. 1215/OLEANDER, PERRIS, CA. 92570

Equipment Description:

FINISH BULK FEED TRUCK LOADING BATTERY CONSISTING OF THE FOLLOWING:

1. TRANSFER SCREW, 2 WAY VALVE, 7.5 H.P.
2. OVERBIN SCREW, 3 H.P.
3. THREE STEEL BINS, EACH 1250 CUBIC FOOT CAPACITY, 11'-0" DIA. X 9'-0" H., WITH TAPERED TOP AND CONE BOTTOM SPOUTING TO TRUCKS.
4. TWO STEEL BINS, EACH 11'-0" DIA. X 10'-6" H., WITH TAPERED TOP AND CONE BOTTOM SPOUTING TO TRUCKS.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE TOTAL QUANTITY OF GRAINS DISCHARGED THROUGH THIS SYSTEM SHALL NOT EXCEED 24000 TONS IN ANY ONE CALENDAR MONTH.
4. RECORDS SHALL BE MAINTAINED TO PROVE COMPLIANCE WITH CONDITION THREE. THE RECORDS SHALL MAINTAIN THE FOLLOWING GUIDELINES:

   A. AT LEAST ONE SET OF RECORDS SHALL BE MAINTAINED ON SITE AT THIS FACILITY LOCATION.

   B. RECORDS SHALL BE MAINTAINED FOR THE LATEST TWO YEARS.

   C. RECORD SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

FILE COPY

PERMIT TO OPERATE

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EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/ag
Principal Office Assistant
APRIL 11, 1994

FILE COPY

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: GATEWAY SANDBLASTING
Facility ID: 71393
Facility Location: VARIOUS LOCATIONS IN SCAQMD, DIAMOND BAR, CA 91765
Type of Business: SPECIAL TRADE CONTRACTOR

Offset Credit ID No.:
PM10:
SOx:

Application No. 200474 Equipment Description: OPEN ABRASIVE BLASTING

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different): 2002

Is the Equipment Still Shutdown? Yes Inspection Date: 2/26/2010 Inspected By: Chijioke Akunyili

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	ABRASIVE BLASTING/01; PORTABLE IC ENGINE/999	FY (01-02)	4896.80; 42.55	FY (00-01)	4649.60; 41.21
SOx	PORTABLE IC ENGINE/999	FY (01-02)	9.02	FY (00-01)	8.73

Calculated Emissions for OPEN ABRASIVE BLASTING

PM10 Reductions: (Year 1 + Year 2)/2 2428 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

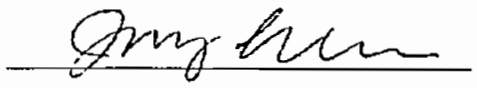
SOx Reductions: (Year 1 + Year 2)/2 9 lbs/yr

Other Assumptions/ Comments: (See Attached)

Equipment permit incorporated both sandblasting and IC Engine for which emissions were reported under two separate AER forms (B2 and B4). Emission factor for SOx for FY 0102 was in error. The emission factor used in AER was reduced and offset numbers used reflects the corrected EF.

Completed By: Jay Chen, P.E.
Senior Manager

P.E. License No.: M 27752

Signature: 

Date: 5/7/10

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
8/20/2003 00:17:58	CANCEL	IM		cherylw	CANCELLED FOR NONPAYMENT OVER ONE YEAR		

Appl# 200474

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 71393 GATEWAY SANDBLASTING
Last Inspection: 02/26/2010
SIC: 1799
Inspector: CA04 CHIJIOKE AKUNYILI
Inspection Date: 02/26/2010
Location Address: VARIOUS LOCATIONS IN SCAQMD, DIAMOND BAR 91765 Sector:SE
Mailing Address: 7203 E LA CUMBRE, ORANGE 92669-4464 Sector:RP
Instruction:

MR:
TS: TS-20 Industrial: Various Locatio
Facility Status: Active
Assignment No. 1161474
Disposition: Not Operating-source Identified

Contact: LEROY GAGE (714) 6391724
Quarter: 1000 - inspect in 1st quarter, every year
On Hold: Suspended:
Facility Team:

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category	BCAT/CCAT Description	Application Date	Application Status
200474	D10698	10/12/1989	INACT_NR	025000 BCAT	ABRASIVE BLASTING (OPEN)	05/17/1989	PERMIT TO OPERATE GRANTED

Report: Gateway Sandb'asting has a various locations permit to operate. The purpose of the inspection was to verify the status of inactive permits in the facility.

Prior to my visit, I tried unsuccessfully to contact Mr. Leroy Gage, the facility contact person by telephone(714-639-1724). After my attempts to reach Mr. Gage failed I decided to visit the facility's mailing address at 7203 E. La Cumbre, Orange. This address is a residential address and I was unable to conduct inspection. Therefore, I was unable to verify the status of the facility's inactive permits

approved by jh (3/25/10)

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

Permitted Annual Emissions from Fuel Combustion - Internal Combustion Engines and Turbines

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Portable I.C. Engines	3 Diesel/Distillate Oil (1000 gals)	1.27	37.50	47.63			469.00	595.63	710.00	901.70	102.00	129.54	33.50	42.55	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL					47.63 lbs		0.00 lbs		595.63 lbs		901.70 lbs		129.54 lbs		42.55 lbs	
					0.02 tons		0.00 tons		0.30 tons		0.45 tons		0.06 tons		0.02 tons	

710 is limit
5/8 7.10
Jam

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	C1. Abrasive blasting	N	1140	122.42	5. ton											40	4,896.80
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		4896.80 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.45 tons

Permitted Annual Emissions from Fuel Combustion - Internal Combustion Engines and Turbines

Row	Equipment Code	Fuel Code	Annual Fuel Usage	Organic Gases Emission Factor	Organic Gases Emission	Methane Emission Factor	Methane Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission	Use Default Emission Factor
1	999. Portable I.C. Engines.	3. Diesel /Distillate Oil (1000 gals)	1.23	37.50	46.13	0.00	0.00	469.00	576.87	7.10	8.73	102.00	125.46	33.50	41.21	
2																
3																
4																
5																
6																
7																
8																
9																
10																
TOTAL																
					46.13 lbs		0.00 lbs		576.87 lbs		8.73 lbs		125.46 lbs		41.21 lbs	
					0.02 tons		0.00 tons		0.29 tons		0.00 tons		0.06 tons		0.02 tons	

why the change in emission factor from 01-02 ? 7.1 is correct

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	01. Abrasive blasting	N	1140	116.24	5. ton											40	4,649.60
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		4649.60 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.32 tons

FAC ID 71393

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector SE

GATEWAY SANDBLASTING	VARLOC- 7203 E LA CUMBRE	ORANGE, 92669

Last Inspection Date:	TS Code:	Compliance Team:	Business Status:
	20	INDUSTRIAL	☐Active ☑Unknown ☐New Owner ☐Out of Business

Contact Name:	Title:	Ph:
unk	unk	unk

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
	d10698	ABRASIVE BLASTING (OPEN)	CANCELLED FOR NONPAYMENT OVER ONE YEAR	☐Yes ☐No ☑UTC	☐Yes ☐No ☑UTC

To be completed for new operator of equipment(If applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments: * Explain all "Unable to confirm" "(U)" entries in this section

Address is a residence with no knowledge of company. Phone number disconnected/ unable to locate on web.

Conclusions/Recommendations

Follow up recommended? ☐Yes ☐No	Conclusion: Equipment...	☐ Removed from site	☐Operated w/o permits
		☐ On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Chijioke AKunyili	02/26/10	Scott CABO	02/26/10

Attorney work product—prepared at the direction of and for Legal Department

Form B2 - Permitted Annual Emissions From Fuel Combustion - Internal Combustion Engines & Turbines

Note 1: DO NOT report fuel and emissions from on-road, off-road, or in-plant mobile source vehicles (i.e., self-propelled vehicles) such as forklifts.

Note 2: DO NOT report RECLAIM NOx and SOx emissions on this form. Instead use Form CR. Please refer to the General Instruction Book under Frequently Asked Questions for guidance on reporting either RECLAIM or non-RECLAIM emissions. Report all cogeneration or resource recovery fuel usage on Form E1.

Note 3: Emissions from SCAQMD-permitted portable internal combustion equipment currently registered with the Statewide Portable Equipment Registration Program should be reported on this form only for the period prior to the issuance of the registration certificate by the California Air Resources Board. Refer to the General Instruction Book under Frequently Asked Questions for more details. Please provide a copy of the registration certificate.

Note 4: Fuel combustion results in toxics emissions. These toxics emissions must be reported on Form TAC.

Equipment Type, Fuel Type, and Annual Fuel Usage: Choose the appropriate equipment type and the appropriate fuel type from the drop-down lists. If you have selected "Other" fuel type, please specify the fuel in the pop-up window. **Please use a separate row for each fuel/equipment combination and emission factor.** Select equipment code based on the size of your equipment. If you do not know size of your equipment, use 10c for portable ICE and 11c for stationary ICE as a default. If fuel usage is not measured separately (i.e., one common fuel meter for several equipment), then use the equipment sizes or ratings (i.e. horse power, HP) to distribute fuel usage for each equipment type (see example for Form B2U in Appendix O of the General Instruction Book). **Please use proper units (i.e., mmscf for gaseous fuels and 1000 gallons for liquid fuels).** If you have selected fuel code "999" please specify the fuel in the pop-up window. Do not report the annual fuel usage in hours. If the annual fuel usage is tracked by hours of operations, convert to annual fuel usage using manufacturer's data.

Note: Reported combustion for equipment/fuel combination that has toxic default emission factor listed in Appendix A of the General Instruction book or in Appendix B of the Reporting Procedures for AB2588 Facilities Reporting their Quadrennial Air Toxics Emissions Inventory. Automatic combustion toxic emission calculation for equipment/fuel with available default emission factors is built in on Form TAC. When you enter equipment/fuel with available toxic default emission factors on this form, the toxic emissions are automatically calculated on Form TAC by using default toxic emission factors. If you use natural gas or diesel, the ammonia default emission factor for equipment with SNCR will be automatically assigned, for equipment with SCR or without SNCR or SCR substitute the assigned emission factor by selecting your equipment description directly from the pull-down menu for the ammonia emission factor on Form TAC. If you have equipment specific emission factor for specific TAC/CAS#, de-select the check box for "Use default emission factor" on Form TAC and correct the emission factor to the equipment specific one.

Emission Factors: Enter the appropriate emission factors for each fuel/equipment combination in the appropriate column while in emission factor view. Please use correct units for each of the factors (i.e., the emission factor for gaseous fuels should be in lbs/mmscf and for liquid fuels in lbs/1000 gallons). Use emission factors which most accurately reflect emissions from your equipment. You must use the available equipment-specific emission factors even if these factors are higher than the default emission factors, listed in Table 1 below. All emission factors (except default emission factors listed in Table 1) must be supported with documentation which should be attached to the completed report. Preference for use of emission factors should be in the following order:

a) Continuous emissions monitoring (CEMS) data (if applicable). You must submit CEMS summary data.

b) Source tests pre-approved by AQMD (if applicable). You must submit a copy of the source test results and supporting data.

c) Rule or permit emission factors or Best Available Control Technologies (BACT) emission levels (if applicable). You must submit a list of equipment by rule number and by permit number that comply with the rule or permit limit,

or comply with the BACT levels. NOx emission factors for stationary IC engines subject to Rule 1110.2 are listed in Table 2, below.

d) Other available data (e.g., manufacturer's data) with supporting documentation. Default emission factors that represent uncontrolled emissions are listed in Table 1, below. For emissions from turbines, use data from the Continuous Emission Monitoring System (CEMS), if available. Otherwise, use source test data or refer to EPA Document AP-42, Supplement F, Section 3.1 for appropriate emission factors. Default emission factors should only be used if no other emission factors are available. If you decide to use default factors for a specific fuel type, check the box in the "Default Factors" column. The default factor will be displayed in red on the screen, and will be used in the emission calculation.

Emissions: The emissions for each pollutant are automatically calculated by multiplying the annual fuel usage by the emission factor for each pollutant. The calculated emissions are entered in the corresponding cell for each pollutant and can be viewed by changing to *calculated emissions* view (click on the "View Net Emissions" bar located above the form).

Total Emissions: Total emissions for each pollutant are automatically calculated and entered on the bottom of the form: the first line represents total pounds/year, and the second line represents total tons/year. The total emissions are converted to tons by dividing the pounds by 2000 and rounding to two (2) decimal places. The total emissions (tons) are transferred to Form C, in the respective columns.

Table 1: Default emission factors For Internal Combustion Engines

Fuel	Organic Gases	Methane	Nitrogen Oxides	Sulfur Oxides	Carbon Monoxide	Particulate Matter
Natural gas (mmscf) / 2 Stroke (Lean-Burn) ICE	122.00	1,479.00	3,233.00	0.60	394.00	39.00
Natural gas (mmscf) / 4 Stroke (Lean-Burn) ICE	120.00	1,275.00	4,162.00	0.60	323.00	---
Natural gas (mmscf) / 4 Stroke (Rich-Burn) ICE	30.00	235.00	2,254.00	0.60	3,794.00	10.00
LPG, Propane, Butane (1000 gallons) / All Types	83.00	----	139.00	0.35	129.00	5.00
Diesel / Distillate Oil (1000 gallons) / All Types	37.50	-----	469.00	7.10	102.00	33.50
Gasoline (1000 gallons) / All Types	206.00	-----	102.00	5.30	3,940.00	6.50

Table 2: Rule 1110.2 Compliant Emission Factors (For Stationary Internal Combustion Engine)

Fuel	Nitrogen Oxides
Natural gas (mmscf)	238.70
LPG, Propane, Butane (1000 gallons)	15.30
Gasoline (1000 gallons)	21.50
Diesel (1000 gallons)	33.40

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D10698
A/N 200474
Page 1

This initial permit must be renewed by 01/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner ID 71393
Or Operator: GATEWAY SANDBLASTING, LEROY GAGE DBA

Equipment
located at: VARIOUS LOCATIONS WITHIN THE S.C.A.Q.M.D.

Equipment Description:

FILE COPY

PORTABLE ABRASIVE-BLASTING SYSTEM CONSISTING OF:

1. ABRASIVE BLASTING POT KELCO, MODEL 124, 600 LBS. CAPACITY.

2. INTERNAL COMBUSTION ENGINE, DIESEL FUELED, 160 H.P., DRIVING A COMPRESSOR WITH A MAXIMUM DELIVERY RATE OF 450 CFM AT 110 PSIG.

3. ONE ABRASIVE-BLASTING NOZZLE WITH A MAXIMUM INSIDE DIAMETER OF 7/16".

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE DIRECTOR OF ENFORCEMENT MUST BE NOTIFIED OF THE FOLLOWING INFORMATION PRIOR TO PLACING THE EQUIPMENT IN OPERATION IN THE DISTRICT:

    1. THE LOCATION WHERE THE EQUIPMENT WILL BE OPERATED.

    2. THE ESTIMATED CALENDAR TIME THE EQUIPMENT WILL BE OPERATED AT THE LOCATION.

THIS PERMIT CONCLUDES ON THE NEXT PAGE.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D10698
A/N 200474
Page 2

CONTINUATION OF PERMIT TO OPERATE

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EXECUTIVE OFFICER

FILE COPY

By Raquel Puerta/jas
October 12, 1989

GATEWAY SANDBLASTING
ATTN: LEROY CAGE
7203 E. LACUMBRE
ORANGE, CA. 92669

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: CLEAN STEEL INC
Facility ID: 24199
Facility Location: 2061 E 220TH ST, LONG BEACH, CA 90810
Type of Business: SCRAP METAL

Offset Credit ID No.:
PM10:
SOx:

Application No. 318036 Equipment Description: MATERIAL SIZE REDUCTION

Is the Permit Inactivated? Yes Inactivation Year: 2004 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Lalo Bakhoum

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	AUTOMOBILE METAL SHREDDING	FY (03-04)	8000.00	FY (02-03)	8450.50
SOx					

Calculated Emissions for MATERIAL SIZE REDUCTION

PM10 Reductions: (Year 1 + Year 2)/2 4113 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)
See attached sheet

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William Thompson

Date: 05/05/10

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	20. Metal processing (non-combustion)	N		100,000.00	5. ton											0.16	16,000.00
2	2B. Diesel storage and dispensing	N		25.00	4. 1000 gallons	0.028	0.70										
3	2A. Gasoline storage and dispensing	Y		3.30	4. 1000 gallons	1.8	5.94										
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							6.64 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		16000.00 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		8.00 tons

50% PM = PM_{10}

$= \frac{16{,}000 \cdot 50\%}{2 \text{ shredders}} = \frac{8000 \text{ lbs/yr}}{2 \text{ shredders}}$

$= 4000 \frac{\text{lbs } PM_{10}}{\text{yr}}$ per shredder

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	30. Automobile metal shredding	N		210,000.00	5. ton											0.05	10,500.00
2	30. Automobile metal shredding	N		53,343.00	5. ton											0.12	6,401.16
3	2B. Diesel storage and dispensing	N		59,660.00	2. gallon											0.028	1,670.48
4	2A. Gasoline storage and dispensing	N		7,860.00	2. gallon											1.8	14,148.00
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		32719.64 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		16.36 tons

$50\% PM = PM_{10}$

$= \frac{(10\,500 + 6401.16) \cdot 50\%}{2 \text{ shredders}} = \frac{8450.58}{2 \text{ shredders}}$

$= 4225.3 \frac{\text{lbs } PM_{10}}{\text{year}}$ per shredder

FAC ID 24199

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector U

CLEAN STEEL INC	2061 E 220TH ST	LONG BEACH , 90810

Last Inspection Date:	TS Code:	Compliance Team	Business Status:
3/19/2004	12	Industrial	☐Active ☐Unknown ☐New Owner ☑Out of Business

Contact Name	Title:	Ph:
N/A		

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
	D07876	STORAGE SILO LIME & LIMESTONE	CEASED OPERATIONS PER LTR DATED 8/6/04 (PO)	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC
2	F2039	MISC MATERIALS SIZE REDUCTION	CEASED OPERATIONS PER LTR DATED 8/6/04 (PO)	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC
	P59189	"DEGREASER, COLD SOLVENT SPRAY	CEASED OPERATIONS PER LTR DATED 8/6/04 (PO)	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (if applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments: * Explain all "Unable to confirm" "(U)" entries in this section

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☑No	☑ Removed from site	☐ On site, but rendered non-operable	☐ Operable, but not operated
	☐Operated w/o permits	☐Operated under new ID	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
1802	2-22-10	K Keeler	2-22-10

Attorney work product—prepared at the direction of and for Legal Department

PERMIT TO OPERATE

Permit No.
F2039
A/N 318036
Page 1

Legal Owner or Operator: CLEAN STEEL INC
2061 E 220TH ST
LONG BEACH, 90810-1694

ID 024199

Equipment Location: 2061 E 220TH ST, LONG BEACH, 90810-1694

Equipment Description:

SCRAP METAL SHREDDING AND CLASSIFYING SYSTEM CONSISTING OF:

1. FEED-IN CONVEYOR, STEEL PLATE TYPE, 30 H.P.
2. FEEDER, 60 H.P. TOTAL.
3. HAMMERMILL, HAMMERMILL INC., 5,000 H.P.
4. VIBRATING CONVEYOR, 15 H.P.
5. ROTARY MAGNETIC SEPARATOR, 5 H.P.
6. BELT CONVEYOR, 5 H.P.
7. ROTARY MAGNETIC SEPARATOR, 5 H.P.
8. BELT CONVEYOR, 7 1/2 H.P.
9. AIR SEPARATOR WITH ONE 20 H.P. BLOWER, STEEL PRODUCT.
10. BELT CONVEYOR, 5 H.P.
11. BELT CONVEYOR, 5 H.P.
12. BELT CONVEYOR, 7 1/2 H.P.
13. BELT CONVEYOR, 7 1/2 H.P.
14. BELT CONVEYOR, 7 1/2 H.P.
15. ROTARY VALVE, 5 H.P.
16. BELT CONVEYOR, 7 1/2 H.P.

FILE COPY

PERMIT TO OPERATE

17. ROTARY MAGNETIC SEPARATOR, 5 H.P.

18 AIR SEPARATOR WITH A 15 H.P. BLOWER, PRODUCT.

19. PNEUMATIC CONVEYOR WITH A 9'-6" DIA. CYCLONE AND A 5 H.P. ROTARY VALVE.

20. BLOWER, 100 H.P.

21. BELT CONVEYOR, 5 H.P.

22. BELT CONVEYOR, 5 H.P.

23. DRUM SEPARATOR, TRIPLE R SYSTEMS, 2'-6" DIA. X 12'-0"L., 10 H.P.

24. BELT CONVEYOR, 2 H.P., NONFERROUS PRODUCT.

25. PNEUMATIC CONVEYOR, WITH 6'-0" DIA. CYCLONE SEPARATOR, ONE 150 H.P. BLOWER AND ONE 7 1/2 H.P. ROTARY VALVE.

26. ROTARY VALVE, 7 1/2 H.P.

27. BELT CONVEYOR, 5 H.P.

28. CLASSIFYING SCREEN, ALLIS CHALMERS, SINGLE-DECK, 30 H.P.

29. BELT CONVEYOR, 5 H.P., TREATED FINE DIRT, WET.

30. MIXER, 20 H.P.

31. THREE SCREW CONVEYORS, LIME CHARGING, 1 H.P.

32. BELT CONVEYOR, ENCLOSED, 5 H.P., FLUFF.

33. VIBRATING FEEDER, ENCLOSED, 6 H.P. TOTAL.

34. EDDY CURRENT SEPARATOR, HURON VALLEY STEEL CORPORATION, WITH BELT CONVEY, MAGNETIC PULLEY, 8 H.P. TOTAL, NONFERROUS METALS, TOTALLY ENCLOSED.

35. BELT CONVEYOR, ENCLOSED, 15 H.P., FLUFF.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

FILE COPY

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS THE HAMMERMILL, TWO MAGNETIC SEPARATORS, AIR CLASSIFIERS AND TWO BELT CONVEYORS ARE VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO OPERATE BY THE EXECUTIVE OFFICER.

4. MATERIAL CHARGED, AND MATERIAL IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT EXCESSIVE DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey

By Dorris M. Bailey/ACA
8/13/1996

FILE COPY

Run Date : 02/25/2010 12:04 PM

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 24199 CLEAN STEEL INC
Last Inspection: 03/19/2004
SIC: 5093
Inspector: VD01 VAUGHN DELPHIN
Inspection Date: 03/19/2004
Location Address: 2061 E 220TH ST, LONG BEACH 90810-1694 Sector:LJ
Mailing Address: 2061 E 220TH ST, LONG BEACH 90810-1694 Sector:LJ
Instruction:

MR: 1312
TS: TS-12 Industrial Sources - Out of
Facility Status: Active
Assignment No. 816113
Disposition: Out of Business

Contact: JAVIER ORTEGA (310) 8306010
Quarter: none - do not inspect
On Hold:
Suspended:
Facility Team: J

RECLAIM: N TITLE V: N SIP: AIR:

	Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
Similar	154030	D07875	05/23/1989	INACTIVE	21	CCAT	BAGHOUSE	03/05/1987	PERMIT TO OPERATE GRANTED
Similar	154030	D07875	05/23/1989	INACTIVE	299750	BCAT	MISC MATERIALS SIZE REDUCTION	03/05/1987	PERMIT TO OPERATE GRANTED
	154031	D07876	05/23/1989	INACTIVE	703920	BCAT	STORAGE SILO LIME & LIMESTONE	03/05/1987	PERMIT TO OPERATE GRANTED
	154031	D07876	05/23/1989	INACTIVE	20	CCAT	DRY FILTER (>500 SQ FT)	03/05/1987	PERMIT TO OPERATE GRANTED
	190802				016900	BCAT	DIESEL ENGINE	04/14/1989	APPLICATION CANCELLED, KEEP FILING I
	190803	D18158	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190804	D18159	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190805	D18160	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190806	D18161	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190807	D18162	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190808	D18163	05/02/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190809	D18164	04/03/1990	INACTIVE	040901	BCAT	I C E (50-500 HP) N-EM STAT DIESEL	04/14/1989	PERMIT TO OPERATE GRANTED
	190810	M96065	09/06/1990	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	04/14/1989	PERMIT TO OPERATE GRANTED
	190810	M96065	09/06/1990	INACTIVE	91	CCAT	AMINE TREATING	04/14/1989	PERMIT TO OPERATE GRANTED
	276867				666047	BCAT	I.C.ENGINE NOX & CO CONTROL	01/14/1993	APPLICATION CANCELLED, REFUND ALL I
	318036	F2039	08/13/1996	INACTIVE	299750	BCAT	MISC MATERIALS SIZE REDUCTION	07/16/1996	PERMIT TO OPERATE GRANTED
	361535	F23678	12/21/1999	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	09/30/1999	PERMIT TO OPERATE GRANTED
	366208	F41659	07/13/2001	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	02/15/2000	PERMIT TO OPERATE GRANTED
	A50577	P38161	05/14/1970	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/01/1990	PERMIT TO OPERATE GRANTED
	A50853	P38162	05/14/1970	INACTIVE	001880	BCAT	FURNACE REVERB (SWEATING) ZINC & KIRKSIT	01/01/1900	PERMIT TO OPERATE GRANTED
	A50853	P38162	05/14/1970	INACTIVE	21	CCAT	BAGHOUSE	01/01/1900	PERMIT TO OPERATE GRANTED
	A63234	P52252	03/02/1973	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	01/01/1990	PERMIT TO OPERATE GRANTED
	A77053	P60174	02/24/1975	INACTIVE	24	CCAT	CYCLONE ceased	01/01/1990	PERMIT TO OPERATE GRANTED
	A77053	P60174	02/24/1975	INACTIVE	000298	BCAT	AUTO BODY SHREDDING Aug. 04	01/01/1990	PERMIT TO OPERATE GRANTED
	A82612	P59189	01/03/1975	INACTIVE	000229	BCAT	DEGREASER, COLD SOLVENT SPRAY	01/01/1990	PERMIT TO OPERATE GRANTED
	A86477	P66895	06/02/1976	INACTIVE	21	CCAT	BAGHOUSE	01/01/1900	PERMIT TO OPERATE GRANTED
	A86477	P66895	06/02/1976	INACTIVE	000298	BCAT	AUTO BODY SHREDDING	01/01/1900	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

Run Date : 02/25/2010 12:04 PM

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 24199 CLEAN STEEL INC
Last Inspection: 03/19/2004
SIC: 5093
Inspector: VD01 VAUGHN DELPHIN
Inspection Date: 03/19/2004
Location Address: 2061 E 220TH ST, LONG BEACH 90810-1694 Sector:LJ
Mailing Address: 2061 E 220TH ST, LONG BEACH 90810-1694 Sector:LJ
Instruction:

MR: 1312
TS: TS-12 Industrial Sources - Out of
Facility Status: Active
Assignment No. 816113
Disposition: Out of Business

Contact: JAVIER ORTEGA (310) 8306010
Quarter: none - do not inspect
On Hold:
Facility Team: J
Suspended:

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
C24760	908590	03/01/1983	INACTIVE	90	CCAT	AMINE (OR DEA) REGENERATION	01/01/1900	PERMIT TO OPERATE GRANTED
C24760	908590	03/01/1983	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	01/01/1900	PERMIT TO OPERATE GRANTED
C43224	M31723	07/05/1983	INACTIVE	21	CCAT	BAGHOUSE	06/15/1982	PERMIT TO OPERATE GRANTED
C43224	M31723	07/05/1983	INACTIVE	000298	BCAT	AUTO BODY SHREDDING	06/15/1982	PERMIT TO OPERATE GRANTED

Report: On 03/19/04 at 0740 hours I arrived at Clean Steel (ID# 24199) located at 2061 E. 220th St., Long Beach, 90810, to conduct an equipment list inspection. I met with Javier Ortega, General Manager, (310) 830-6010. The facility shreds automobiles and separates the scrap metal.

All equipment from the facility has been removed and the company is in the process of tearing down all offices and structures on the property. According to Mr. Ortega the shredder has been sold to Pacific Rail. The equipment is currently being stored in Rialto however once permits have been secured the shredder will be installed in Colton.

The facility is out of business. I departed at 0815 hours.

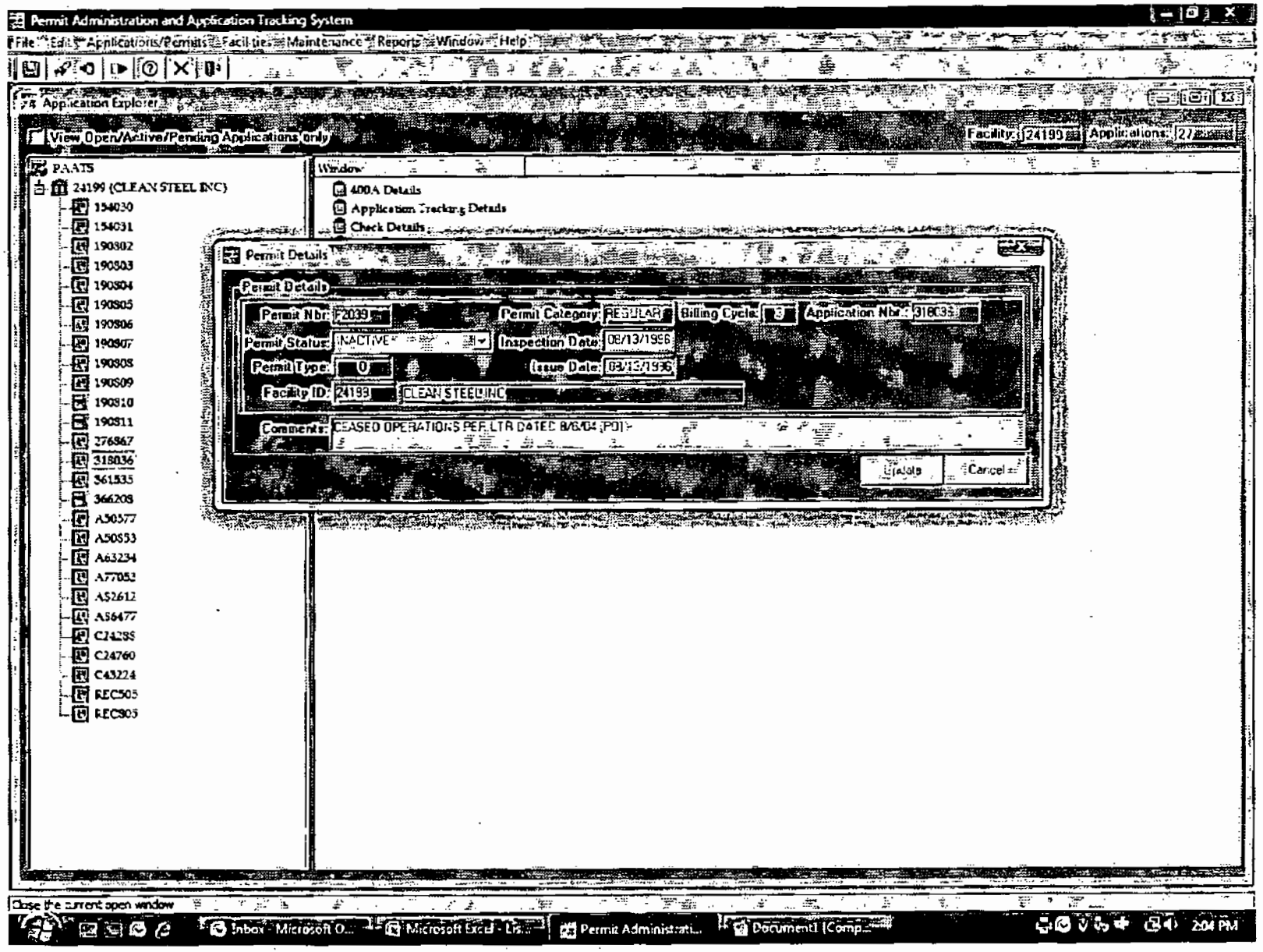
caltastic

	BCAT		Installed	Removed
318036	299750	Misc ... Size Reduc.	1996	Aug 04
Also 54030 subsq.				
A77053				Aug 04
A86477 subsq.				
C43224	000298	Auto Body Shredding		90's ?

Two shredders? To be conservative, assume 2, take credit for one. WET

Entire facility shutdown.

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____


Permit Administration and Application Tracking System
File Edit Applications/Permits Facilities Maintenance Reports Window Help
Application Explorer
View Open/Active/Pending Applications only
Facility: 24199
Applications: 27
PAATS
24199 (CLEAN STEEL INC)
154030
154031
190302
190303
190304
190305
190306
190307
190308
190309
190310
190311
276867
318036
361535
366208
A50577
A50853
A63234
A77052
A82612
A86477
C24295
C24760
C43224
REC505
REC903
Window
400A Details
Application Tracking Details
Check Details
Permit Details
Permit Details
Permit Nbr: 2039
Permit Category: REGULAR
Billing Cycle: 3
Application Nbr: 318036
Permit Status: INACTIVE
Inspection Date: 08/13/1996
Permit Type: 0
Issue Date: 08/13/1996
Facility ID: 24199
CLEAN STEEL INC
Comments: CEASED OPERATIONS PER LTR DATED 8/6/04 [PDT]
Update
Cancel
Close the current open window
Inbox - Microsoft O...
Microsoft Excel - Li...
Permit Administrati...
Document1 [Compa...
2:04 PM

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: STATEWIDE SANDBLASTING
Facility ID: 20969
Facility Location: VARIOUS LOCATIONS IN SCAQMD, DIAMOND BAR, CA 91765
Type of Business: SAND BLASTING

Offset Credit ID No.:
PM10:
SOx:

Application No. 01776A Equipment Description: ABRASIVE BLASTING (CABINET/MACHINE/ROOM)

Is the Permit Inactivated? Yes Inactivation Year: 2008 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/23/2010 Inspected By: Nick Volpone

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	ABRASIVE BLASTING	FY (06-07)	4034.76	FY (05-06)	3461.00
SOx					

Calculated Emissions for ABRASIVE BLASTING (CABINET/MACHINE/ROOM)

PM10 Reductions: (Year 1 + Year 2)/2 1874 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Total abrasive blasting emissions from AER form B4 are divided by two as there are two blasters. Then the PM emissions are divided by two to reflect PM10 to PM ratio of 50%.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William Thompson

Date: 05/07/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: STATEWIDE SANDBLASTING
Facility ID: 20969
Facility Location: VARIOUS LOCATIONS IN SCAQMD, DIAMOND BAR, CA 91765
Type of Business: SAND BLASTING

Offset Credit ID No.:
PM10:
SOx:

Application No. 01077A Equipment Description: ABRASIVE BLASTING - OPEN

Is the Permit Inactivated? Yes Inactivation Year: 2008 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/23/2010 Inspected By: Nick Volpone

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	ABRASIVE BLASTING	FY (06-07)	4034.76	FY (05-06)	3461.00
SOx					

Calculated Emissions for ABRASIVE BLASTING - OPEN

PM10 Reductions: (Year 1 + Year 2)/2 1874 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Total abrasive blasting emissions from AER form B4 are divided by two as there are two blasters. Then the PM emissions are divided by two to reflect PM10 to PM ratio of 50%.

Completed By: William Thompson, P.E.
Senior Manager

P.E. License No.: M 25818

Signature: William Thompson

Date: 05/07/10

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	01. Abrasive blasting	N		200.00	S. ton	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	33.5	6,700.00
2	01. Abrasive blasting	N		83.00	S. ton	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.5	1,369.50
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		8069.50 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		4.03 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	01. Abrasive blasting	N		182.00	5. ton	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	33.5	6,097.00
2	01. Abrasive blasting	N		42.00	5. ton	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.5	693.00
3	01. Abrasive blasting	N		8.00	5. ton	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	16.5	132.00
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		6922.00 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		3.46 tons

only these AB equipment

6922 ⇒ 3461 ⇒ 1731

FAC ID **20969**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **RJ**

STATEWIDE SANDBLASTING	VARIOUS LOCATIONS IN SCAQMD	DIAMOND BAR , 91765

Last Inspection Date:	TS Code:	Compliance Team	Business Status:
6/7/1988	20	Industrial	☑Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name	Title	Ph:
Tim Hohle	Owner	714

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation?
	S06734	ABRASIVE BLASTING (CABINET/MACHINE/R	Reinstated from EXPIRED to ACTIVE	☐Yes ☑No ☐UTC	☐Yes ☐No ☑UTC
	S06733	ABRASIVE BLASTING (CABINET/MACHINE/R	Reinstated from EXPIRED to ACTIVE	☐Yes ☑No ☐UTC	☐Yes ☐No ☑UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

Equipment was not on-site (yard) during 2/23/10 inspection. Mr. Hohle states that the equipment was scrapped. This equipment is not registered with CARB. PERP

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☑No		☑ Removed from site	☐Operated w/o permits
		☐ On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Dick Valpone	2/23/10		

Attorney work product—prepared at the direction of and for Legal Department

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
5/12/2005 15:32:57	MOD_PER	PS		gailg	REISSUED 6/26/02 LY01		
7/3/2008 14:47:51	MOD_PER	EN		marthaa	P/CO. 6.26.08, EQ. REMOVED. (MA 7/3/08)		

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

S 06733

ANAHEIM OFFICE - 1610 E. Ball Road, Anaheim, California 92805

Operation under this permit must be conducted in compliance with all information included with the initial application and the initial permit conditions. The equipment must be properly maintained and kept in good operating condition at all times. In accordance with Rule 206, this Permit to Operate or copy must be posted on or within 8 meters of equipment.

LEGAL OWNER OR OPERATOR: TIM HOHLE DBA
TIM HOHLE SANDBLASTING

APPL. NO. 01077A

EQUIPMENT LOCATED AT: VARIOUS LOCATIONS THROUGHOUT THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

EQUIPMENT DESCRIPTION AND CONDITIONS:

ABRASIVE BLASTING EQUIPMENT, PORTABLE, CONSISTING OF:

1. AIR COMPRESSOR, INGERSOL RAND, 315 CFM.
2. SAND BLASTING MACHINE, KELCO, MODEL 124, SERIAL NO. 582667.
3. SAND BLASTING MACHINE, PIONEER, MODEL S-1347.
4. SAND BLAST NOZZLE, KELCO KUT-OFF, WET OR DRY, WITH A MAXIMUM INSIDE DIAMETER OF 3/8".

FILE COPY

This initial permit must be renewed by JUNE 5, 1982 or an earlier date if equipment is moved, altered, or changes ownership. If billing for annual renewal fee (Rule 301.f) not received by expiration date, contact Zone office above.

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules of the Air Quality Management District. This permit cannot be considered as permission to violate existing laws, ordinances, regulations or statutes of other government agencies.

SCAQMD 001 25000a 8056

VOID UNLESS VALIDATED

EXECUTIVE OFFICER

DATE 6/5/81

76P235A - 11/78

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
R-S06734
A/N 01776A

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

LEGAL OWNER
OR OPERATOR: STATEWIDE SANDBLASTING
600 E LAMBERT RD
LA HABRA, CA 90631

ID 020969

Equipment Location: VARIOUS LOCATIONS IN SCAQMD

Equipment Description:

ABRASIVE BLASTING EQUIPMENT, PORTABLE, CONSISTING OF:

1. AIR COMPRESSOR, SCHRAMM, 315 CFM.
2. SANDLBIASTING MACHINE, KELCO, MODEL K 124, SERIAL NO. 57717.
3. SAND BLASTING MACHINE, KELCO, MODEL K1116, SERIAL NO. 8074.
4. SAND BLAST NOZZLE, KELCO KUT-OFF, WET OR DRY, WITH A MAXIMUM INSIDE DIAMETER OF 3/8".

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. UPON THE 5TH DAY AFTER PLACEMENT OF THIS EQUIPMENT INTO OPERATION AT A SITE, THE DISTRICT SHALL BE NOTIFIED VIA PHONE AT 1-877-810-6995 OF THE EXACT NATURE OF THE PROJECT AS FOLLOWS:

   A) THE PERMIT NUMBER OF THE PORTABLE EQUIPMENT
   B) THE NAME AND PHONE NUMBER OF A CONTACT PERSON
   C) THE LOCATION WHERE THE PORTABLE EQUIPMENT WILL BE OPERATED
   D) THE ESTIMATED TIME THE PORTABLE EQUIPMENT WILL BE LOCATED AT THE SITE
   E) DESCRIPTION OF THE PROJECT
   F) IF LESS THAN ¼ MILE, THE DISTANCE TO THE NEAREST SENSITIVE RECEPTOR, DEFINED AS: LONG-TERM HEALTH CARE FACILITIES, REHABILITATION CENTERS, CONVALESCENT CENTERS, RETIREMENT HOMES, RESIDENCES, SCHOOLS, PLAYGROUNDS, CHILD CARE CENTERS, AND ATHLETIC FACILITIES

THIS PERMIT TO OPERATE R-S06734 SUPERSEDES PERMIT TO OPERATE S06734 ISSUED 06/05/81.

FILE COPY

South Coast Air Quality Management District
P. O. Box 4944
Diamond Bar, CA 91765
Attn: Permit Services – Data Entry

REQUEST TO INACTIVATE PERMIT TO OPERATE

PERMIT ISSUED TO:

1. Current Facility ID: 20969

2. Company Name: STATEWIDE SANDBLASTING

3. Company Address: 600 E. LAMBERT RD. LA HABRA, CA.

4. Permit Number: 506733 Date Issued: 7

Equipment Description: PORTABLE SANDBLASTING EQUIPMENT
BLAST MACHINE AND AIR COMPRESSOR

Telephone No. 562 6970554 714 4487903

Reason for Inactivation:

Cancellation to the Permit to Operate Described above is hereby requested for the following reason:

- [X] Equipment sold, replaced, destroyed or removed from premises.
- [X] Equipment will no longer be used.
- [ ] Equipment is exempt form permit requirements by AQMD Rule 219.
- [ ] Other (explain): _____

It is understood that any future use of this equipment may require a new permit application in accordance with the laws then in effect.

Required Signatures:

Tim Hohle Signature of Responsible Official of Organization	6-26-08 Date
Tim Hohle Printed Name of Responsible Official of Organization	6-26-08 Date
Signature of AQMD Inspector	Date

Rev. 03/09/04

BATCH ROUTING REQUEST

TO: ~~ENGINEERING (PRE-PROCESSING)~~ Records

FROM: ENFORCEMENT DIVISION ( )
FINANCE- CUSTOMER SVC (✓)
RECORDS ( )

PROC
By MA

NAME OF ACTIVITIY Inactivations AMOUNT 2

SPECIAL INSTRUCTIONS: Co ID # 20969. Statewide Sandblasting
Company I.D/or Application number(s):

P/Co. 6/30/08. eg.
S 06733 & S 06734 removed

BATCH BY: MA DATE 7/3/08

TO BE FILLED OUT BY PRE-PROCESSING

BATCH NUMER ASSIGNED_____

ASSIGNED TO:

( ) DATA ENTRY
( ) PERMIT PROCESSING
( ) POST PROCESSING
( ) ENGINEERING UNIT#_____
( ) RECORDS
( ) OTHER (PLEASE SPECIFY)_____

AFTER COMPLETION PLEASE RETURN TO: _____ DATE:_____

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

ANNUAL OPERATING FEES INVOICE

INVOICE NO. 1951381

California Health and Safety Code Section 40510 and South Coast Air Quality Management District Rule 301 authorizes AQMD to charge permit fees on the equipment identified below.

EQUIPMENT LOCATED AT: VARIOUS LOCATIONS IN SCAQMD
DIAMOND BAR, CA, 91765

INVOICE DATE: 04/01/08

FACILITY ID: 20969

LEGAL OWNER OR OPERATOR:
STATEWIDE SANDBLASTING
600 E LAMBERT RD
LA HABRA, CA, 90631

By

ORIGINAL INVOICE

TRANSACTION NUMBER	TRANSACTION DATE	REFERENCE NUMBER	DESCRIPTION	TRANSACTION AMOUNT	TRANSACTION BALANCE
7321544	04/01/08	S06733	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	266.55	266.55
7321545	04/01/08	S06734	ABRASIVE BLASTING (CABINET/MACHINE/ROOM)	266.55	266.55

NO LONGER WILL BE OPERATING THIS EQUIPMENT

REMARKS
PLEASE RETURN THE DUPLICATE COPY OF THIS INVOICE WITH YOUR REMITTANCE TO ENSURE PROPER CREDIT TO YOUR ACCOUNT.
RETURNED CHECKS MAY BE SUBJECT TO A $25.00 SERVICE CHARGE.

INVOICE TOTAL: $533.10

If payment not received by **06/01/08** application/permit will be delinquent.
If payment not received by **07/01/08** application/permit will expire. Operation of equipment without a permit is a violation of District Rules and state law for every day of operation.

Please return duplicate copy with remittance. Make check payable to South Coast A.Q.M.D.

For Information Inside California Call Our Toll-Free Number (866) 888-8838 Or Call (909) 396-2900. Outside California Call (909) 396-2900 Only.
Mail Remittance to: P.O. Box 4943 Diamond Bar CA, 91765-0943

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: ELSINORE READY-MIX CO INC
Facility ID: 10873
Facility Location: 28251 ROBB RD, LAKE ELSINORE, CA 92530
Type of Business: READY-MIXED CONCRETE

Offset Credit ID No.:
PM10:
SOx:

Application No. 139185 Equipment Description: CONCRETE BATCH EQUIPMENT

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/26/2010 Inspected By: Kiersten Melville

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	CONCRETE BATCH PROCESSING/42	FY (01-02)	0.00	FY (00-01)	5158.60
SOx					

Calculated Emissions for CONCRETE BATCH EQUIPMENT

PM10 Reductions: (Year 1 + Year 2)/2 1290 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E. Senior Manager P.E. License No.: M 27752

Signature: Jay Chen Date: 5/6/10

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: ELSINORE READY-MIX CO INC
Facility ID: 10873
Facility Location: 28251 ROBB RD, LAKE ELSINORE, CA 92530
Type of Business: READY-MIXED CONCRETE

Offset Credit ID No.:
PM10:
SOx:

Application No. 229108 Equipment Description: AGGREGATE SIZE REDUCTION

Is the Permit Inactivated? Yes Inactivation Year: 2003 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/26/2010 Inspected By: Kiersten Melville

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	AGGREGATE HANDLING AND PROCESSING/17	FY (01-02)	0.00	FY (00-01)	109.14
SOx					

Calculated Emissions for AGGREGATE SIZE REDUCTION

PM10 Reductions: (Year 1 + Year 2)/2 27 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

Completed By: Jay Chen, P.E. Senior Manager P.E. License No.: M 27752

Signature: Jay Chen Date: 5/6/10

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
12/5/2003 11:05:51	MOD_PER	EN		elaineh	PER TINA WOMACK 12-1-03 EQ. DISMANTLED EMH C/S		

appt# 139185

Diary Status Date	Diary Status	Facility Team	Eng Init Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
5/18/1990 00:00:00	RECD-1	09	09				
6/20/1990 00:00:00	ASG-1	09	CAW				
6/20/1990 00:00:00	ASG-3	09	CAW				
9/25/1990 00:00:00	PCREC	09	CAW				
11/14/1990 00:00:00	PC	09					
1/2/1991 00:00:00	UC	09	CAW				
1/16/1991 00:00:00	RF	09					
2/2/1993 00:00:00	CHUNIT	D1	D1				
4/19/1994 00:00:00	ASG-3	D1	DJ				
5/3/1994 00:00:00	POREC	D1					
5/9/1994 00:00:00	I-III	D1	DJ				
5/9/1994 00:00:00	PO	D1					
12/5/2003 11:15:55	MOD_PER	EN		elaineh	PER TINA WOMACK 12-1-03 EQ. DISMANTLED EMH C/S		

Appt# 229108

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	2A. Gasoline storage and dispensing	Y	461	9.33	999. mgal	1.7676	16.49										
2	42. Concrete and asphalt batch processing	N		515.86	999. mtons											10	5,158.60
3	17. Aggregate handling, storage and processing	N		54.57	999. mtons											2	109.14
4	999. Sand Handling	N		233.99	999. mtons											0.3024	70.76
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							16.49 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		5338.50 lbs
							0.01 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.67 tons

Shut-down
12/5/03
0203 - No AER
0102 - Add AER
0001

South Coast Air Quality Management District

Run Date : 04/22/2010 01:38 PM

Facility Equipment List Report

Facility: 10673 ELSINORE READY-MIX CO INC
Last Inspection: 11/03/2004
SIC: 3273
Inspector: TS01 TROY STRICKLIN
Inspection Date:
Location Address: 28251 ROBB RD, LAKE ELSINORE 92530-1635 Sector:SB
Mailing Address: P O BOX 959, LAKE ELSINORE 92330
Instruction:

MR: 0801
TS: TS-04 Cycle II RECLAIM/Non-Tit
Facility Status: Active
Assignment No. 856290
Disposition: Not Operating - Equipment Removed

Contact: ROBERT CARTIER (951) 6742127
Quarter: 0001 - inspect in 4th quarter, every year
On Hold:
Suspended:
Facility Team: H

RECLAIM: Y TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Application Date	Application Status
139185	M58914	09/14/1987	INACTIVE	000292	BCAT	CONCRETE BATCH EQUIPMENT	11/26/1985	PERMIT TO OPERATE GRANTED
405297				000292	BCAT	CONCRETE BATCH EQUIPMENT	08/09/2002	APPLICATION CANCELLED, KEEP ALL FEE
00245E	E03391	12/12/1979	INACTIVE	000292	BCAT	CONCRETE BATCH EQUIPMENT	01/01/1900	PERMIT TO OPERATE GRANTED
03042R	02739R	09/17/1970	INACTIVE	000299	BCAT	AGGREGATE PRODUCTION/CRUSHING	01/01/1990	PERMIT TO OPERATE GRANTED
229106	D31608	09/05/1990	INACTIVE	040901	BCAT	I.C.E (50-500 HP) N-EM-STAT-DIESEL	05/18/1990	PERMIT TO OPERATE GRANTED
00244E	E03390	12/12/1979	INACTIVE	101900	BCAT	STORAGE TANK CEMENT	01/01/1900	PERMIT TO OPERATE GRANTED
00243E	E03389	12/12/1979	INACTIVE	101900	BCAT	STORAGE TANK CEMENT	01/01/1990	PERMIT TO OPERATE GRANTED
139188	M59125	10/06/1987	INACTIVE	101900	BCAT	STORAGE TANK CEMENT	11/26/1985	PERMIT TO OPERATE GRANTED
405300				101920	BCAT	STORAGE SILO CEMENT	08/09/2002	APPLICATION CANCELLED, KEEP ALL FEE
229108	D82711	05/09/1994	INACTIVE	107750	BCAT	AGGREGATE SIZE REDUCTION	05/16/1990	PERMIT TO OPERATE GRANTED
224413	D34732	12/17/1990	INACTIVE	107850	BCAT	AGGREGATE SIZE CLASSIFICATION	03/14/1990	PERMIT TO OPERATE GRANTED
139187	M58916	09/14/1987	INACTIVE	109900	BCAT	STORAGE TANK OTHER AGGREGATE	11/26/1985	PERMIT TO OPERATE GRANTED
00244E	E03390	12/12/1979	INACTIVE	21	CCAT	BAGHOUSE	01/01/1900	PERMIT TO OPERATE GRANTED
139186	M58915	09/14/1987	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	11/26/1985	PERMIT TO OPERATE GRANTED
139184	M58913	09/14/1987	INACTIVE	22	CCAT	BAGHOUSE, AMBIENT TEMP (>500 SQ FT)	11/26/1985	PERMIT TO OPERATE GRANTED
228293	M58096	12/18/1991	INACTIVE	248900	BCAT	STORAGE TANK GASOLINE	05/04/1990	PERMIT TO OPERATE GRANTED
224171	M54267	07/04/1990	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	03/14/1990	PERMIT TO OPERATE GRANTED
E04393	907187		INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	01/01/1900	PERMIT TO OPERATE GRANTED
319588	N9855	10/30/2001	INACTIVE	248915	BCAT	SERV STAT STORAGE & DISPENSING GASOLINE	08/28/1996	PERMIT TO OPERATE GRANTED
00245E	E03391	12/12/1979	INACTIVE	49	CCAT	SHIP HOLD HATCH COVER	01/01/1900	PERMIT TO OPERATE GRANTED
276856				666047	BCAT	I.C.ENGINE NOX & CO CONTROL	01/04/1993	BANKING/ PLAN GRANTED
E04393	907187		INACTIVE	70	CCAT	ETHYLENE OXIDE STERILIZATION CTL (HOSP)	01/01/1900	PERMIT TO OPERATE GRANTED
405299				75	CCAT	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	08/09/2002	APPLICATION CANCELLED, KEEP ALL FEE
00243E	E03389	12/12/1979	INACTIVE	75	CCAT	BAGHOUSE, AMBIENT TEMP (>100-500 SQ FT)	01/01/1990	PERMIT TO OPERATE GRANTED
228293	M58098	12/18/1991	INACTIVE	91	CCAT	AMINE TREATING	05/04/1990	PERMIT TO OPERATE GRANTED

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 10873 ELSINORE READY-MIX CO INC
Last Inspection: 11/03/2004
SIC: 3273
Inspector: TS01 TROY STRICKLIN
Inspection Date:
Location Address: 28251 ROBB RD, LAKE ELSINORE 92530-1635 Sector:SB
Mailing Address: P O BOX 959, LAKE ELSINORE 92330
Instruction:

MR: 0801
TS: TS-04 Cycle II RECLAIM/Non-Til
Facility Status: Active
Assignment No. 856290
Disposition: Not Operating - Equipment Removed

Contact: ROBERT CARTIER (951) 6742127
Quarter: 0001 - inspect in 4th quarter, every year
On Hold:
Suspended:
Facility Team: H

RECLAIM: Y TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category	BCAT/CCAT Description	Application Date	Application Status

Report: I arrived at ERM's Robb Road location on 11/3/04 at 0715 hours. The facility is no longer operating at this location and the equipment has been removed. I proceeded to ERM's corporate office at 16960 Lakeshore Dr. in Lake Elsinore. I met with Doug Caudell, Plant MGR, and Tina Womack, who informed me that they have not operated the equipment since 12/03. Mrs. Womack prepared the records necessary to conduct the 2003 RECLAIM audit.

(Std date

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____

FAC ID 10873

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector SB

ELSINORE READY-MIX CO INC	28251 ROBB RD	LAKE ELSINORE, 92530

Last Inspection Date:	TS Code:	Compliance Team	Business Status
	4	INDUSTRIAL	☐Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name:	Title	Ph:

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation?
	D82711	AGGREGATE SIZE REDUCTION	PER TINA WOMACK 12-1-03 EQ. DISMANTLED EMH C/S	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No

Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments: * Explain all "Unable to confirm" "(U)" entries in this section

Facility and equipment no longer at this location.

Conclusions/Recommendations

Follow up recommended?	Conclusion: Equipment...		
☐Yes ☑No		☑Removed from site	☐Operated w/o permits
		☐ On site, but rendered non-operable	☐Operated under new ID
		☐ Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
Kiersten Melville	02-26-10	Scott CASO	02-26-10

Attorney work product—prepared at the direction of and for Legal Department

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D82711
A/N 229108
Page 1

This initial permit shall be renewed by 10/01 ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: ID 010873

ELSINORE READY MIX CO., INC.
ATTN: R.D. CARTIER
P.O. BOX 959
16960 LAKESHORE DRIVE
LAKE ELSINORE, CALIFORNIA 92530

Equipment located at: 28251 ROBB ROAD., LAKE ELSINORE, CA 92530

Equipment Description:

AGGREGATE CRUSHING AND SCREENING PLANT CONSISTING OF:

1. RECEIVING HOPPER
2. SYNTRON FEEDER
3. SYNTRON SAND FEEDER
4. BELT CONVEYOR, SAND
5. FEED CONVEYOR FOR JAW CRUSHER, 5 H.P.
6. JAW CRUSHER, KUE KEN, 50 H.P.
7. CONVEYOR TO SINGLE DECK SCREEN, 3 H.P.
8. SINGLE DECK SCREEN, SYMONS, 7 1/2 H.P.
9. TWO 3 H.P. CONVEYORS AND ONE 5 H.P. CONVEYOR TO STOCKPILE
10. CONVEYOR TO EXEMPT WET SCREEN, 15 H.P.
11. WET SCREEN, EXEMPT
12. BELT CONVEYOR, ROCK RETURN
13. SAND SCREEN
14. FEED CONVEYOR TO 100 H.P. SYMONS CONE CRUSHER
15. CONE CRUSHER, SYMONS, 100 H.P.
16. CONVEYOR TO DOUBLE DECK SCREEN, 5 H.P.
17. DOUBLE DECK SCREEN, SYMONS, 7 1/2 H.P.
18. TWO LOADING BINS
19. TWO BELT CONVEYORS
20. TWO RADIAL STACKERS
21. SCREEN, WET SAND
22. BELT CONVEYOR, PEA GRAVEL

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M. Bailey

By Dorris M. Bailey/db
May 9, 1994

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D34732
A/N 224413
Page 1

This initial permit must be renewed by 10/01 ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: ID - 10873

ELSINORE READY MIX CO., INC.
P. O. BOX 959
LAKE ELSINORE, CALIFORNIA 92330
ATTN: R. CARTIER

Equipment located at: 28251 ROBB ROAD, LAKE ELSINORE, CALIFORNIA 92330

Equipment Description:

PORTABLE SCREENING PLANT, BUTLER FINLAY, CONSISTING OF:

1. RECEIVING HOPPER, 6 CU. YD. CAPACITY WITH REJECT GRID.
2. BELT CONVEYOR, 30" X 40' - 9".
3. SCREEN, DOUBLE DECK.
4. ENGINE, DIESEL, LISTER ST3, 30 H.P.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. DIESEL FUEL SHALL HAVE A SULFUR CONTENT OF NOT MORE THAN 0.05 PERCENT BY WEIGHT.
4. THE MAXIMUM AMOUNT OF DIESEL FUEL FOR THE SCREENING PLANT AND THE FRONT END LOADER IS LIMITED TO A TOTAL OF 74 GALLONS PER DAY.
5. THE MAXIMUM AMOUNT OF MATERIAL PROCESSED BY THIS EQUIPMENT IS LIMITED OT 600 TONS PER DAY.

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT TO OPERATE

9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731

Permit No.
D34732
A/N 224413
Page 2

CONTINUATION OF PERMIT TO OPERATE

6. A DAILY LOG OF THE TOTAL AMOUNT OF DIESEL FUEL USED AND MATERIAL PROCESSED IN THIS EQUIPMENT SHALL BE MAINTAINED. SUCH RECORDS SHALL BE RETAINED FOR A PERIOD OF TWO YEARS AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY MUST BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Raquel Puerta/ps
December 17, 1990

FILE COPY

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

9150 FLAIR DRIVE EL MONTE CALIFORNIA 91731

M 59125

ation under this permit must be conducted in compliance with all information included with the initial application and the initial pe
conditions The equipment must be properly maintained and kept in good operating condition at all times In accordance with Rule 2
Permit to Operate or copy must be posted on or within 8 meters of equipment

GAL OWNER OPERATOR: ELSINORE READY MIX COMPANY, INCORPORATED
28251 ROBB ROAD
LAKE ELSINORE, CALIFORNIA

APPL. NO. 139188
PREVIOUS PERMIT NO. E03390

IIPMENT CATED AT

IIPMENT DESCRIPTION AND CONDITIONS

CEMENT RECEIVING AND STORAGE SYSTEM CONSISTING OF-

1. STORAGE SILO, CEMENT, 18,600 GALLON CAPACITY..
2. STORAGE SILO, CEMENT, 18,600 GALLON CAPACITY WITH A T.F.C. MATERIAL FEEDER, 2 H.P., AND AN 8" DIA. VENT PIPE TO FIRST STORAGE SILO.
3. BLOWER, CEMENT TRANSFER T.F.C., 50 H.P.

-CONDITION-

1. THIS EQUIPMENT MUST NOT BE OPERATED UNLESS THE TWO STORAGE SILOS ARE VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE EXECUTIVE OFFICER.

is initial permit must be renewed by 10/01 ANNUALLY unless the equipment is moved or changes ownership If billing for annual renewal fe
ule 301 f) not received by expiration date contact office above

s permit does not authorize the emission of air contaminants in excess of those allowed by
ision 26 of the Health and Safety Code of the State of California or the Rules of the Air
lity Management District This permit cannot be considered as permission to violate existing
s, ordinances, regulations or statutes of other government agencies

EXECUTIVE OFFICER

BY RAQUEL M. PUERTA

DATE 10/06/87

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PERMIT to OPERATE

9150 FLAIR DRIVE EL MONTE CALIFORNIA 91731

M 58914

ation under this permit must be conducted in compliance with all information included with the initial application and the initial p
conditions The equipment must be properly maintained and kept in good operating condition at all times In accordance with Rule 2
Permit to Operate or copy must be posted on or within 8 meters of equipment

GAL OWNER OPERATOR
ELSINORE READY-MIX COMPANY INC.
28251 ROBB ROAD
LAKE ELSINORE, CALIFORNIA

APPL. NO. 139185

JIPMENT CATED AT

JIPMENT DESCRIPTION AND CONDITIONS

CONCRETE BATCH PLANT CONSISTING OF:

1. FOUR RECEIVING HOPPERS, AGGREGATE.
2. FOUR BELT CONVEYORS, AGGREGATE, 10 H.P. EACH.
3. SURGE BIN, AGGREGATE, FOUR COMPARTMENT.
4. WEIGH HOPPER, AGGREGATE, 10 CU. YD. CAPACITY.

-PAGE 1 OF 2-

10/01 ANNUALLY

is initial permit must be renewed by unless the equipment is moved or changes ownership If billing for annual renewal f
ule 301 f) not received by expiration date contact office above

e permit does not authorize the emission of air contaminants in excess of those allowed by
ision 26 of the Health and Safety Code of the State of California or the Rules of the Air
lity Management District This permit cannot be considered as permission to violate existing
s ordinances, regulations or statutes of other government agencies

EXECUTIVE OFFICER

BY RAQUEL M. PUERTA
PERMIT PROCESSING UNIT

DATE 09/14/87

OFFSET SOURCE CALCULATION/VERIFICATION FORM

Facility Name: CHANDLER AGGREGATES
Facility ID: 108046
Facility Location: 25225 MAITRI RD, CORONA, CA 92883
Type of Business: AGGREGATE PRODUCTION

Offset Credit ID No.:
PM10:
SOx:

Application No. 313359 Equipment Description: AGGREGATE PROCESSING SYSTEM

Is the Permit Inactivated? Yes Inactivation Year: 2005 Shutdown Year (if different):

Is the Equipment Still Shutdown? Yes Inspection Date: 2/22/2010 Inspected By: Nydia Ibarra

Were any ERCs Issued for the Removal of this Equipment? No

Facility Reported Emissions from AER Reports for Most Recent 2 Years

Pollutant	Equipment/Activity Code	AER Year 1	Amount of AER Year 1 (lb/yr)	AER Year 2	Amount of AER Year 2 (lb/yr)
PM	AGGREGATE HANDLING & PROCESSING	FY (04-05)	5011.94	FY (03-04)	6615.71
SOx					

Calculated Emissions for AGGREGATE PROCESSING SYSTEM

PM10 Reductions: (Year 1 + Year 2)/2 2907 lbs/yr ☒ Non-Combustion source (PM10 = 50% PM)

SOx Reductions: (Year 1 + Year 2)/2 lbs/yr

Other Assumptions/ Comments: (See Attached)

This facility operated only one aggregate processing system. PM emissions reported in AERs are used to calculate PM10 reduction assuming PM10=50% PM for non-combustion source.

Completed By: Brian L. Yeh, P.E.
Senior Manager

P.E. License No.: M 26415

Signature:

Date: 5/6/10

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/OTC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	999. AGGREGATE HANDLING & PROCESSING	N		422.14	16. 1000 tons per year											11.3727	5,011.94
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL																	
							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		5011.94 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		2.51 tons

Permitted Annual Equipment Emissions from Miscellaneous Sources

Row	Activity Code	Contains TAC/ODC	Rule	Annual Throughput or Operating Hours	Units	Organic Gases Emission Factor	Organic Gases Emission	Specific Organics Emission Factor	Specific Organics Emission	Nitrogen Oxides Emission Factor	Nitrogen Oxides Emission	Sulfur Oxides Emission Factor	Sulfur Oxides Emission	Carbon Monoxide Emission Factor	Carbon Monoxide Emission	Particulate Matter Emission Factor	Particulate Matter Emission
1	17. Aggregate handling, storage and processing	N		557.22	16. 1000 tons per year											11.8727	6,615.71
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
TOTAL							0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		0.00 lbs		6615.71 lbs
							0.00 tons		0.00 tons		0.00 tons		0.00 tons		0.00 tons		3.31 tons

FAC ID **108046**

INSPECTION OF FACILITIES WITH INACTIVE PERMITS

Sector **SG**

CHANDLER AGGREGATES	25225 MAITRI RD	CORONA	, 92883

Last Inspection Date:	FS Code:	Compliance Team:	Business Status:
6/17/1999	11	Industrial	☑Active ☐Unknown ☐New Owner ☐Out of Business

Contact Name	Title	Ph
Todd Pendergrass	Technical Services Manager	(951) 277-3000

Eq. #	Permit #	Equipment Description	Comment	On premises? (UTC Unable to Confirm)	In operation? (UTC Unable to Confirm)
	D97782	AGGREGATE PRODUCTION/CRUSHING	INACT. PER APPL. REQ. 9/6/05 T. PENDERGRASS	☐Yes ☑No ☐UTC	☐Yes ☑No ☐UTC

To be completed for new operator of equipment(if applicable)

Fac. ID (If applicable)	Fac Name:	Change of Ownership? ☐Yes ☐No
Contact:	Title:	Phone:

Equipment permitted?	Equipment # 1	2	3	4	5	6
Permit #						

Comments:* Explain all "Unable to confirm" "(U)" entries in this section

Conclusions/Recommendations

Follow up recommended? ☐Yes ☑No	Conclusion: Equipment...	☑Removed from site	☐Operated w/o permits
		☐On site, but rendered non-operable	☐Operated under new ID
		☐Operable, but not operated	☐Other

NC #:	Rules:	NOV #:	Rules:

Inspector:	Inspection Date:	Reviewed By:	Date:
NYDIA IBARRA	8/23/10		

Attorney work product—prepared at the direction of and for Legal Department

Called in @ 1341 hrs N. Leone.

South Coast Air Quality Management District

Facility Equipment List Report

Facility: 108046 CHANDLER AGGREGATES
Last Inspection: 06/17/1999
SIC: 1442
Inspector:
Inspection Date:
Location Address: 25225 MAITRI RD, CORONA 92883 Sector:SG
Mailing Address: P O BOX 78450, CORONA 92877-0148 Sector:SG
Instruction:

MR: 0801
TS: TS-1 Industrial: Sector-based In
Facility Status: Active
Assignment No.
Disposition:

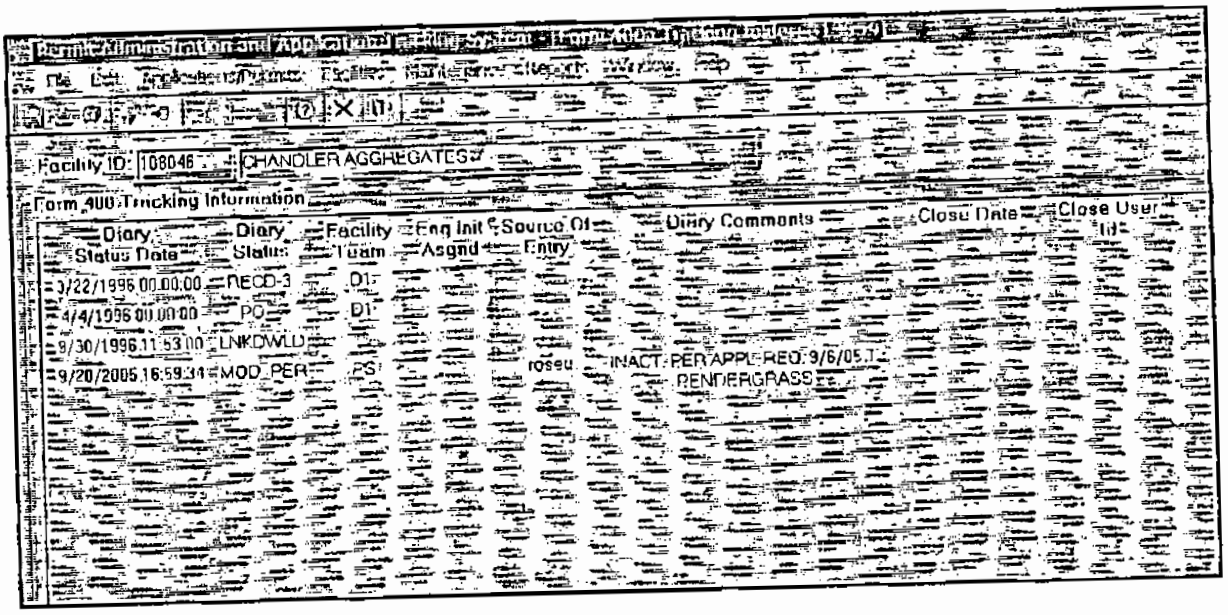
Contact: PATRICK WERNER (951) 2779110
Quarter: 0100 - inspect in 2nd quarter, every year
On Hold:
Suspended:
Facility Team: D

RECLAIM: N TITLE V: N SIP: AIR:

Application No.	Permit No.	Permit Issue Date	Permit Status	Equipment Category		BCAT/CCAT Description	Apptication Date	Application Status
313359	D97782	04/04/1996	INACTIVE	000299	BCAT	AGGREGATE PRODUCTION/CRUSHING	03/22/1996	PERMIT TO OPERATE GRANTED
313360	N03766	05/17/1996	ACTIVE	248900	BCAT	STORAGE TANK GASOLINE	03/22/1996	PERMIT TO OPERATE GRANTED
449146				999000	BCAT	EMISSION REDUCTION CREDIT	09/28/2005	APPLICATION DENIED

Report:

Inspector: _____ Date: _____ Reviewed By: _____ Date: _____



Facility ID: 108046 CHANDLER AGGREGATES

Form 400 Tracking Information

Diary Status Date	Diary Status	Facility Team	Eng Init & Asgnd	Source Of Entry	Diary Comments	Close Date	Close User Id
3/22/1996 00:00:00	RECD-3	DI					
4/4/1996 00:00:00	PO	DI					
9/30/1996 11:53:00	LNKDWLD						
9/20/2005 16:59:31	MOD_PER	PS		roseu	INACT PER APPL REC: 9/6/05 T2 RENDERGRASS		

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 East Copley Drive, Diamond Bar, CA 91765

PERMIT TO OPERATE

Permit No.
D97782
A/N 313359
Page 1

This initial permit shall be renewed by ANNUALLY unless the equipment is moved, or changes ownership. If the billing for annual renewal (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner Or Operator: CHANDLER AGGREGATES
ATTN: PATRICK WERNER
P.O. BOX 39
CORONA, CA 91718

ID 108046

Equipment located at: 25225 MEITRI ROAD, CORONA, CA 91719

Equipment Description:

AGGREGATE PROCESSING SYSTEM CONSISTING OF:

1. FEEDER, PRIMARY JAW, 20 H.P.
2. JAW CRUSHER, PRIMARY, 75 H.P.
3. BELT CONVEYOR, UNDER JAW, 10 H.P.
4. BELT CONVEYOR, FIELD, 30 H.P.
5. BELT CONVEYOR, FIELD, 50 H.P.
6. BELT CONVEYOR, FIELD, 30 H.P.
7. VIBRATING SCREEN, SCALPER, 7 1/2 H.P.
8. JAW CRUSHER, SECONDARY, 30 H.P.
9. BELT CONVEYOR, UNDER JAW, 15 H.P.
10. BELT CONVEYOR, 15 H.P.
11. BELT CONVEYOR, RADIAL STACKER, 40 H.P. WITH A 5 H.P. TRAVERSE DRIVE.
12. BELT CONVEYOR, TO ROD DECK, 10 H.P.
13. VIBRATING SCREEN, ROD DECK, WITH TWO 7 1/2 H.P.
14. BELT CONVEYOR, UNDER ROD DECK, 5 H.P.
15. BELT CONVEYOR, TRANSFER, 15 H.P.
16. BELT CONVEYOR, WASTE, 10 H.P.
17. BELT CONVEYOR, WASTE RETURN, 15 H.P.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

18. VIBRATING SCREEN, WET, DOUBLE DECK, 5 X 14, 15 H.P.
19. BELT CONVEYOR, 15 H.P.
20. BAND SCREW, WET, WITH TWO 15 H.P.
21. BELT CONVEYOR, RADIAL STACKER, 25 H.P. WITH A 3 H.P. TRAVERSE DRIVE.
22. BELT CONVEYOR, OVERSIZE RETURN, 5 H.P.
23. FEEDER, SURGE, 3 H.P.
24. BELT CONVEYOR, TUNNEL, 25 H.P.
25. VIBRATING SCREEN, 5 X 14, 20 H.P.
26. CONE CRUSHER, 45", 125 H.P.
27. BELT CONVEYOR, UNDER CONE, 7 1/2 H.P.
28. BELT CONVEYOR, RETURN TO SCREEN, 15 H.P.
29. BELT CONVEYOR, UNDER SCREEN, 7 1/2 H.P.
30. BELT CONVEYOR, TOWER FEEDER, 30 H.P.
31. TWO VIBRATING SCREENS 30 H.P. EACH.
32. TWO BELT CONVEYORS, UNDER SCREENS, 5 H.P. EACH.
33. TWO BELT CONVEYORS, BLENDING, 5 H.P. EACH.
34. BELT CONVEYOR, BLENDING, 10 H.P.
35. BELT CONVEYOR, WEST OVERSIZE RETURN, 20 H.P.
36. FEEDER, WEST CONE CRUSHER, 3 H.P.
37. CONE CRUSHER, WEST, 200 H.P.
38. BELT CONVEYOR, EAST OVERSIZE RETURN, 10 H.P.
39. CONE CRUSHER, EAST, 200 H.P.
40. BELT CONVEYOR, EAST CONE RETURN, 7 1/2 H.P.
41. BELT CONVEYOR, SOUTH BAND, 7 1/2 H.P.

FILE COPY

CONTINUATION OF PERMIT TO OPERATE

42. BELT CONVEYOR, RADIAL STACKER, SOUTH BAND, 20 H.P. WITH 3 H.P. TRAVERSE DRIVE.

43. BELT CONVEYOR, STACKER, 3/8", 20 H.P.

44. BELT CONVEYOR, STACKER, 3/4", 25 H.P.

45. BELT CONVEYOR, 1/2", 7 1/2 H.P.

46. BELT CONVEYOR, STACKER, 1/2", 7 1/2 H.P.

47. SURGE BIN, FINES.

48. BELT CONVEYOR, FINES RETURN, 5 H.P.

49. BELT CONVEYOR, BLENDING, 15 H.P.

50. BELT CONVEYOR, BUNKER, 50 H.P.

51. SURGE BIN, THREE COMPARTMENTS.

52. THREE BELT CONVEYORS, LOADOUT, 10 H.P. EACH.

53. BELT CONVEYOR, RADIAL STACKER, 40 H.P. WITH A 2 H.P. TRAVERSE DRIVE.

54. THREE BELT CONVEYORS, TUNNEL, 40 H.P. EACH.

55. THREE BELT CONVEYORS, TUNNEL, 7 1/2 H.P. EACH.

56. BELT CONVEYOR, TUNNEL, 10 H.P.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THE MAXIMUM AMOUNT OF AGGREGATE PROCESSED BY THIS EQUIPMENT IS LIMITED TO 3200 TONS PER DAY.

4. COMPLETE RECORDS OF THE AMOUNT OF AGGREGATE PROCESSED PER DAY IN THIS EQUIPMENT SHALL BE MAINTAINED IN A FORM APPROVED IN WRITING BY THE DISTRICT. SUCH RECORDS SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN TWO YEARS AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST.

FILE COPY

5. AGGREGATE CHARGED, AND AGGREGATE IN PROCESS SHALL BE KEPT SUFFICIENTLY MOIST TO PREVENT DUST EMISSIONS.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

Dorris M Bailey
By Dorris M. Bailey/gl
4/4/96

FILE COPY

11.19.2 Crushed Stone Processing and Pulverized Mineral Processing

11.19.2.1 Process Description [24, 25]

Crushed Stone Processing

Major rock types processed by the crushed stone industry include limestone, granite, dolomite, traprock, sandstone, quartz, and quartzite. Minor types include calcareous marl, marble, shell, and slate. Major mineral types processed by the pulverized minerals industry, a subset of the crushed stone processing industry, include calcium carbonate, talc, and barite. Industry classifications vary considerably and, in many cases, do not reflect actual geological definitions.

Rock and crushed stone products generally are loosened by drilling and blasting and then are loaded by power shovel or front-end loader into large haul trucks that transport the material to the processing operations. Techniques used for extraction vary with the nature and location of the deposit. Processing operations may include crushing, screening, size classification, material handling and storage operations. All of these processes can be significant sources of PM and PM-10 emissions if uncontrolled.

Quarried stone normally is delivered to the processing plant by truck and is dumped into a bin. A feeder is used as illustrated in Figure 11.19.2-1. The feeder or screens separate large boulders from finer rocks that do not require primary crushing, thus reducing the load to the primary crusher. Jaw, impactor, or gyratory crushers are usually used for initial reduction. The crusher product, normally 7.5 to 30 centimeters (3 to 12 inches) in diameter, and the grizzly throughs (undersize material) are discharged onto a belt conveyor and usually are conveyed to a surge pile for temporary storage or are sold as coarse aggregates.

The stone from the surge pile is conveyed to a vibrating inclined screen called the scalping screen. This unit separates oversized rock from the smaller stone. The undersized material from the scalping screen is considered to be a product stream and is transported to a storage pile and sold as base material. The stone that is too large to pass through the top deck of the scalping screen is processed in the secondary crusher. Cone crushers are commonly used for secondary crushing (although impact crushers are sometimes used), which typically reduces material to about 2.5 to 10 centimeters (1 to 4 inches). The material (throughs) from the second level of the screen bypasses the secondary crusher because it is sufficiently small for the last crushing step. The output from the secondary crusher and the throughs from the secondary screen are transported by conveyor to the tertiary circuit, which includes a sizing screen and a tertiary crusher.

Tertiary crushing is usually performed using cone crushers or other types of impactor crushers. Oversize material from the top deck of the sizing screen is fed to the tertiary crusher. The tertiary crusher output, which is typically about 0.50 to 2.5 centimeters (3/16th to 1 inch), is returned to the sizing screen. Various product streams with different size gradations are separated in the screening operation. The products are conveyed or trucked directly to finished product bins, to open area stock piles, or to other processing systems such as washing, air separators, and screens and classifiers (for the production of manufactured sand).

Some stone crushing plants produce manufactured sand. This is a small-sized rock product with a maximum size of 0.50 centimeters (3/16 th inch). Crushed stone from the tertiary sizing screen is sized in a vibrating inclined screen (fines screen) with relatively small mesh sizes.

Oversized material is processed in a cone crusher or a hammermill (fines crusher) adjusted to produce small diameter material. The output is returned to the fines screen for resizing.

In certain cases, stone washing is required to meet particulate end product specifications or demands.

Pulverized Mineral Processing

Pulverized minerals are produced at specialized processing plants. These plants supply mineral products ranging from sizes of approximately 1 micrometer to more than 75 micrometers aerodynamic diameter. Pharmaceutical, paint, plastics, pigment, rubber, and chemical industries use these products. Due to the specialized characteristics of the mineral products and the markets for these products, pulverized mineral processing plants have production rates that are less than 5% of the production capacities of conventional crushed stone plants. Two alternative processing systems for pulverized minerals are summarized in Figure 11-19.2-2.

In dry processing systems, the mineral aggregate material from conventional crushing and screening operations is subject to coarse and fine grinding primarily in roller mills and/or ball mills to reduce the material to the necessary product size range. A classifier is used to size the ground material and return oversized material that can be pulverized using either wet or dry processes. The classifier can either be associated with the grinding operation, or it can be a stand-alone process unit. Fabric filters control particulate matter emissions from the grinding operation and the classifier. The products are stored in silos and are shipped by truck or in bags.

In wet processing systems, the mineral aggregate material is processed in wet mode coarse and fine grinding operations. Beneficiation processes use flotation to separate mineral impurities. Finely ground material is concentrated and flash dried. Fabric filters are used to control particulate matter emissions from the flash dryer. The product is then stored in silos, bagged, and shipped.

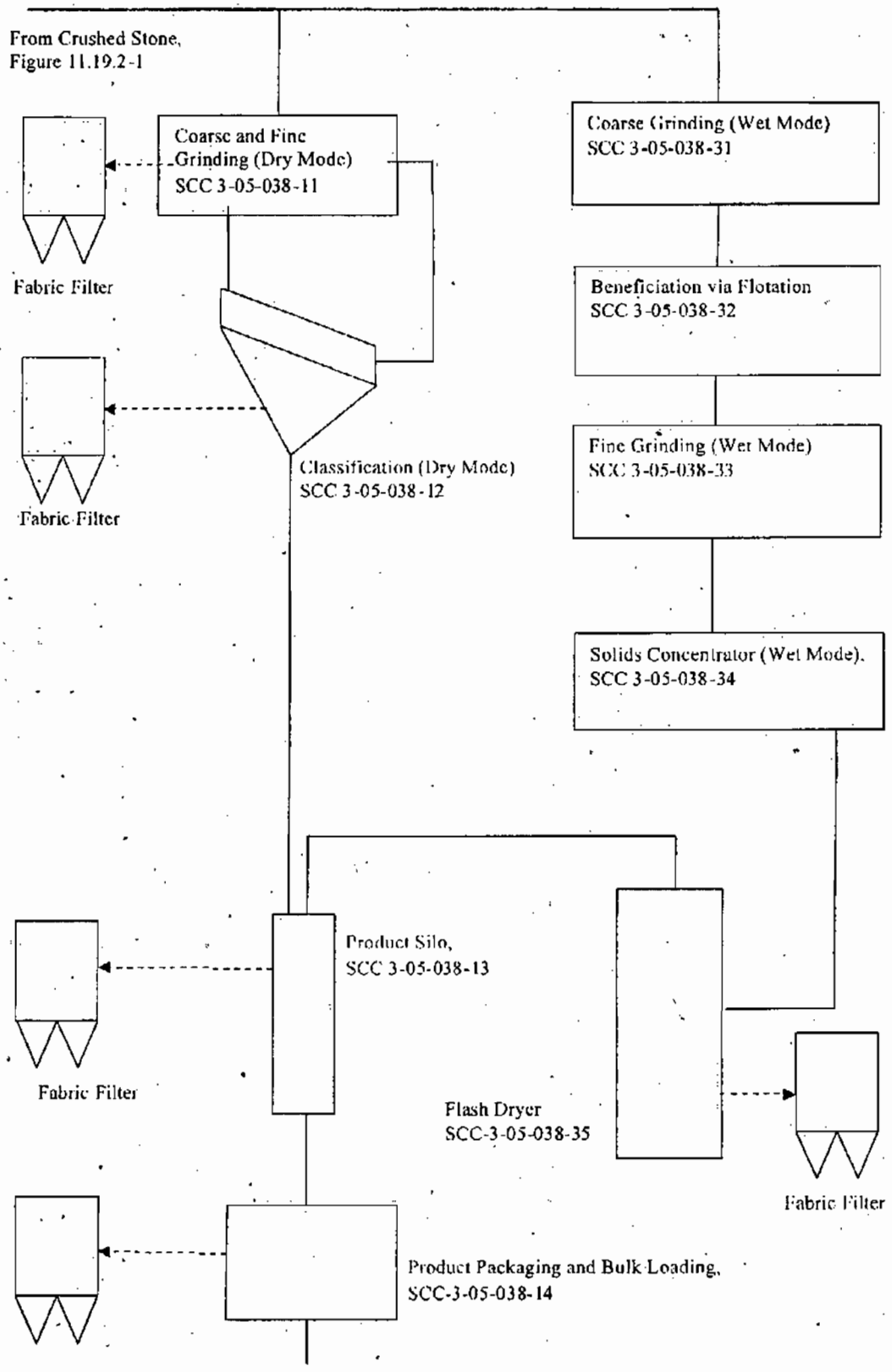


Figure 11.19.2-2 Flowchart for Pulverized Mineral Processing

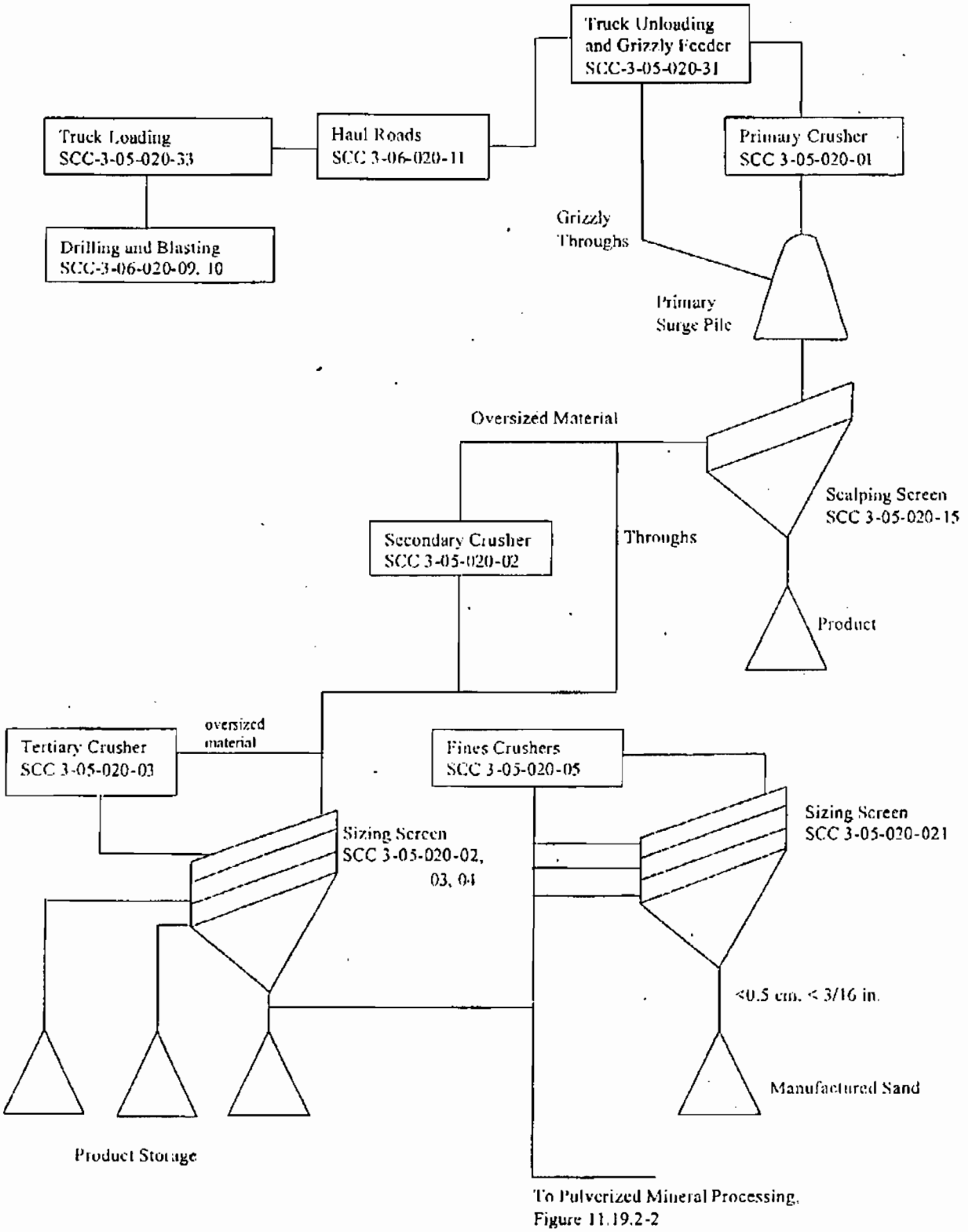


Figure 11.19.2-1. Typical stone processing plant

11.19.2.2 Emissions and Controls [10, 11, 12, 13, 14, and 26]

Crushed Stone Processing

Emissions of PM, PM-10, and PM-2.5 occur from a number of operations in stone quarrying and processing. A substantial portion of these emissions consists of heavy particles that may settle out within the plant. As in other operations, crushed stone emission sources may be categorized as either process sources or fugitive dust sources. Process sources include those for which emissions are amenable to capture and subsequent control. Fugitive dust sources generally involve the reentrainment of settled dust by wind or machine movement. Emissions from process sources should be considered fugitive unless the sources are vented to a baghouse or are contained in an enclosure with a forced-air vent or stack. Factors affecting emissions from either source category include the stone size distribution and the surface moisture content of the stone processed, the process throughput rate, the type of equipment and operating practices used, and topographical and climatic factors.

Of graphical and seasonal factors, the primary variables affecting uncontrolled PM emissions are wind and material moisture content. Wind parameters vary with geographical location, season, and weather. It can be expected that the level of emissions from unenclosed sources (principally fugitive dust sources) will be greater during periods of high winds. The material moisture content also varies with geographical location, season, and weather. Therefore, the levels of uncontrolled emissions from both process emission sources and fugitive dust sources generally will be greater in arid regions of the country than in temperate ones and greater during the summer months because of a higher evaporation rate.

The moisture content of the material processed can have a substantial effect on emissions. This effect is evident throughout the processing operations. Surface wetness causes fine particles to agglomerate on or to adhere to the faces of larger stones, with a resulting dust suppression effect. However, as new fine particles are created by crushing and attrition and as the moisture content is reduced by evaporation, this suppressive effect diminishes and may disappear. Plants that use wet suppression systems (spray nozzles) to maintain relatively high material moisture contents can effectively control PM emissions throughout the process. Depending on the geographical and climatic conditions, the moisture content of mined rock can range from nearly zero to several percent. Because moisture content is usually expressed on a basis of overall weight percent, the actual moisture amount per unit area will vary with the size of the rock being handled. On a constant mass-fraction basis, the per-unit area moisture content varies inversely with the diameter of the rock. The suppressive effect of the moisture depends on both the absolute mass water content and the size of the rock product. Typically, wet material contains >1.5 percent water.

A variety of material, equipment, and operating factors can influence emissions from crushing. These factors include (1) stone type, (2) feed size and distribution, (3) moisture content, (4) throughput rate, (5) crusher type, (6) size reduction ratio, and (7) fines content. Insufficient data are available to present a matrix of rock crushing emission factors detailing the above classifications and variables. Available data indicate that PM-10 and PM-2.5 emissions from limestone and granite processing operations are similar. Therefore, the emission factors developed from the emissions data gathered at limestone and granite processing facilities are considered to be representative of typical crushed stone processing operations. Emission factors for filterable PM, PM-10, and PM-2.5 emissions from crushed stone processing operations are presented in Tables 11.19.2-1 (Metric units) and 11.19.2-2 (English units.)

Table 11.19.2-1 (Metric Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (kg/Mg)[a]

Source [b]	Total Particulate Matter [c,s]	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Primary Crushing (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Secondary Crushing (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Tertiary Crushing (SCC 3-050030-03)	0.0027[d]	E	0.0012[o]	C	ND[n]	
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0006[d]	E	0.00027[p]	C	0.00005[q]	E
Fines Crushing (SCC 3-05-020-05)	0.0195[e]	E	0.0075[e]	E	ND	
Fines Crushing (controlled) (SCC 3-05-020-05)	0.0015[f]	E	0.0006[f]	E	0.000035[q]	E
Screening (SCC 3-05-020-02, 03)	0.0125[c]	E	0.0043[f]	C	ND	
Screening (controlled) (SCC 3-05-020-02, 03)	0.0011[d]	E	0.00037[m]	C	0.000025[q]	E
Fines Screening (SCC 3-05-020-21	0.15[g]	E	0.036[g]	E	ND	
Fines Screening (controlled) (SCC 3-05-020-21)	0.0018[g]	E	0.0011[g]	E	ND	
Conveyor Transfer Point (SCC 3-05-020-06)	0.0015[h]	E	0.00055[h]	D	ND	
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00007[r]	E	2.3×10^{-5}[r]	D	6.5×10^{-6}[q]	E
Wet Drilling - Unfragmented Stone (SCC 3-05-020-10)	ND		4.0×10^{-5}[j]	E	ND	
Truck Unloading - Fragmented Stone (SCC 3-05-020-31)	ND		8.0×10^{-6}[i]	E	ND	
Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		5.0×10^{-5}[k]	E	ND	

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in kg/Mg of material throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

e. Reference 4

f. References 4 and 15

g. Reference 4

h. References 5 and 6

i. References 5, 6, and 15

j. Reference 11

k. Reference 12

l. References 1, 3, 7, and 8

m. References 1, 3, 7, 8, and 15

n. No data available, but emission factors for PM-10 for tertiary crushers can be used as an upper limit for primary or secondary crushing

o. References 2, 3, 7, 8

p. References 2, 3, 7, 8, and 15

q. Reference 15

r. PM emission factors are presented based on PM-100 data in the Background Support Document for Section 11.19.2

s. Emission factors for PM-30 and PM-50 are available in Figures 11.19.2-3 through 11.19.2-6.

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)[a]

Source[b]	Total Particulate Matter[c,d]	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Primary Crushing (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND[n]		ND[n]	
Secondary Crushing (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND[n]		ND[n]	
Tertiary Crushing (SCC 3-050030-03)	0.0054[d]	E	0.0024[o]	C	ND[n]	
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0012[d]	E	0.00054[o]	C	0.00010[q]	E
Fines Crushing (SCC 3-05-020-05)	0.0390[e]	E	0.0150[e]	E	ND	
Fines Crushing (controlled) (SCC 3-05-020-05)	0.0030[f]	E	0.0012[f]	E	0.000070[q]	E
Screening (SCC 3-05-020-02, 03)	0.025[e]	E	0.0087[l]	C	ND	
Screening (controlled) (SCC 3-05-020-02, 03)	0.0022[d]	E	0.00074[m]	C	0.000050[q]	E
Fines Screening (SCC 3-05-020-21)	0.30[g]	E	0.072[s]	E	ND	
Fines Screening (controlled) (SCC 3-05-020-21)	0.0036[g]	E	0.0022[g]	E	ND	
Conveyor Transfer Point (SCC 3-05-020-06)	0.0030[h]	E	0.00110[h]	D	ND	
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00014[i]	E	4.6×10^{-5}[i]	D	1.3×10^{-5}[q]	E
Wet Drilling - Unfragmented Stone (SCC 3-05-020-10)	ND		8.0×10^{-5}[j]	E	ND	
Truck Unloading -Fragmented Stone (SCC 3-05-020-31)	ND		1.6×10^{-5}[j]	E	ND	
Truck Unloading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		0.00010[k]	E	ND	

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8

c. Reference 4

f. References 4 and 15

g. Reference 4

h. References 5 and 6

i. References 5, 6, and 15

j. Reference 11

k. Reference 12

l. References 1, 3, 7, and 8

m. References 1, 3, 7, 8, and 15

n. No data available, but emission factors for PM-10 for tertiary crushers can be used as an upper limit for primary or secondary crushing

o. References 2, 3, 7, 8

p. References 2, 3, 7, 8, and 15

q. Reference 15

r. PM emission factors are presented based on PM-100 data in the Background Support Document for Section 11.19.2

s. Emission factors for PM-30 and PM-50 are available in Figures 11.19.2-3 through 11.19.2-6.

Emission factor estimates for stone quarry blasting operations are not presented because of the sparsity and unreliability of available tests. While a procedure for estimating blasting emissions is presented in Section 11.9, Western Surface Coal Mining, that procedure should not be applied to stone quarries because of dissimilarities in blasting techniques, material blasted, and size of blast areas. Emission factors for fugitive dust sources, including paved and unpaved roads, materials handling and transfer, and wind erosion of storage piles, can be determined using the predictive emission factor equations presented in AP-42 Section 13.2.

The data used in the preparation of the controlled PM calculations was derived from the individual A-rated tests for PM-2.5 and PM-10 summarized in the Background Support Document. For conveyor transfer points, the controlled PM value was derived from A-rated PM-2.5, PM-10, and PM data summarized in the Background Support Document.

The extrapolation line was drawn through the PM-2.5 value and the mean of the PM-10 values. PM emission factors were calculated for PM-30, PM-50, and PM-100. Each of these particle size limits is used by one or more regulatory agencies as the definition of total particulate matter. The graphical extrapolations used in calculating the emission factors are presented in Figures 11.19.2-3, -4, -5, and -6.

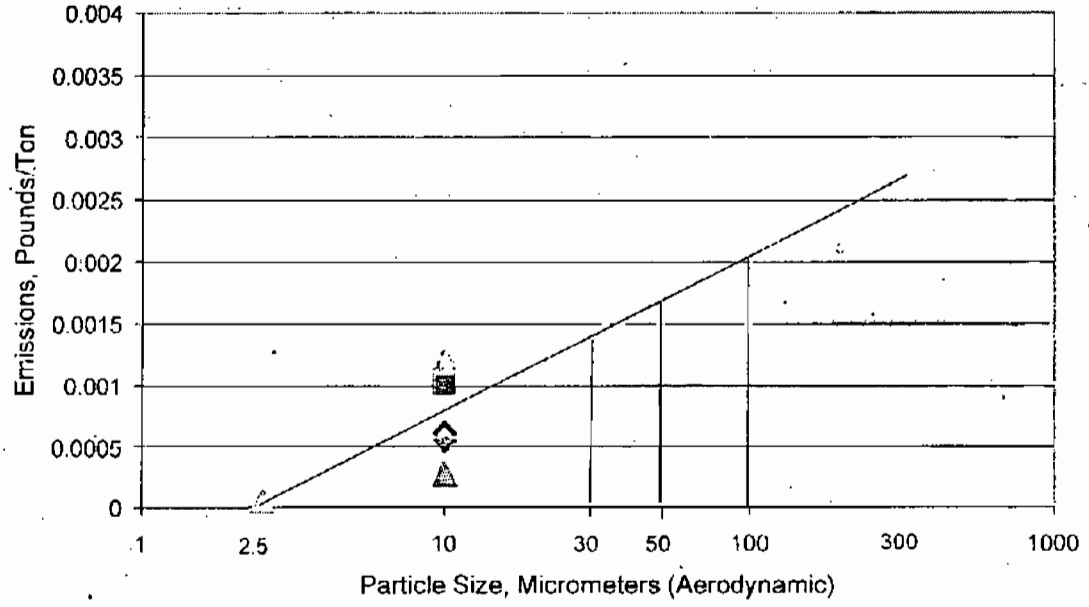


Figure 11-19-3. PM Emission Factor Calculation, Screening (Controlled)

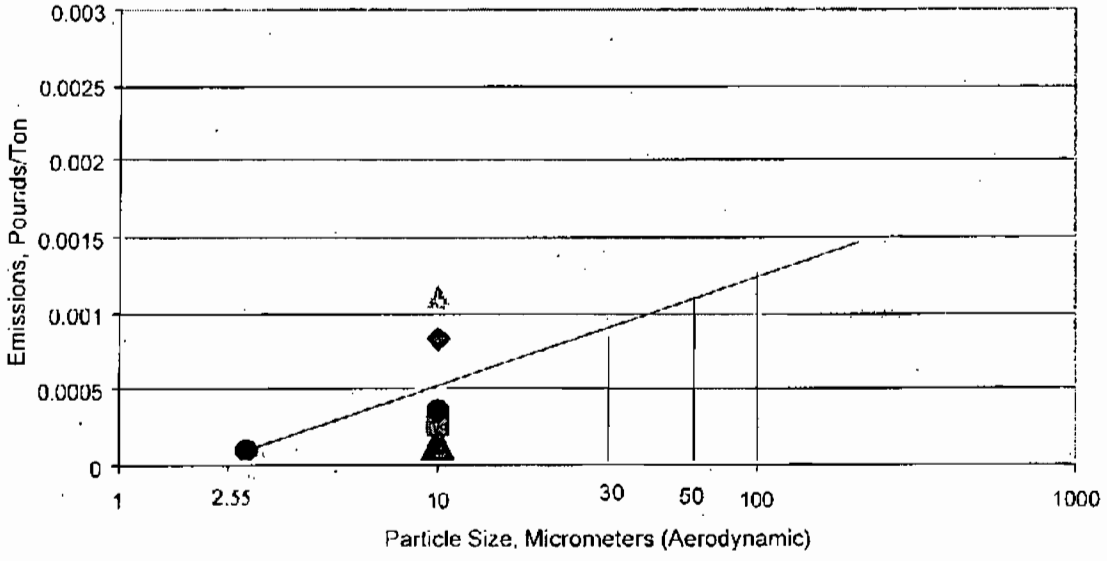


Figure 11.19-4. PM Emission Factor Calculation, Tertiary Crushing (Controlled)

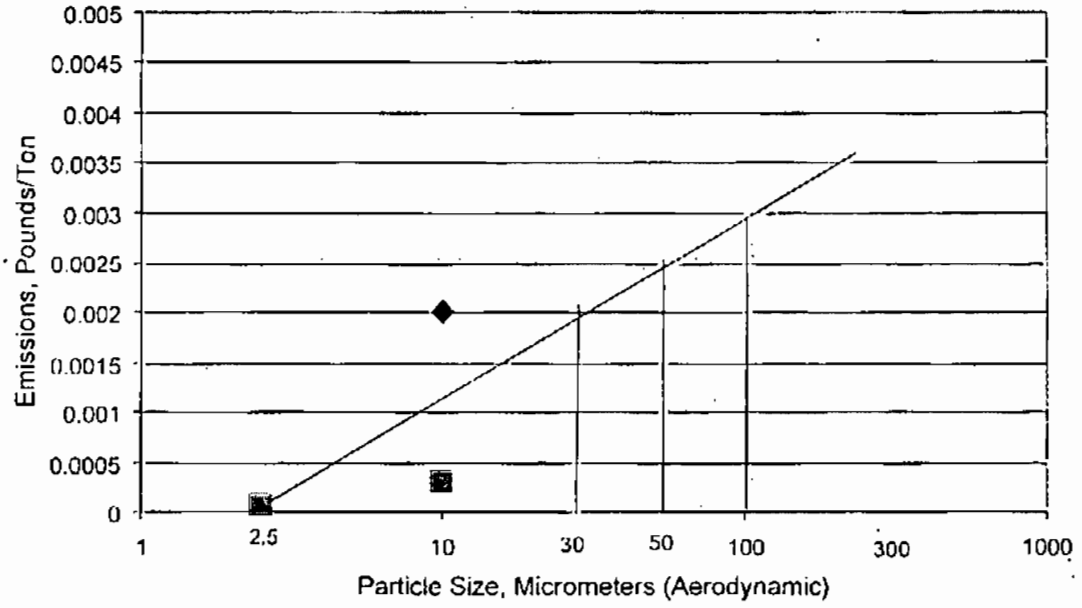


Figure 11-19.5. PM Emission Factor Calculation, Fines Crushing (Controlled)

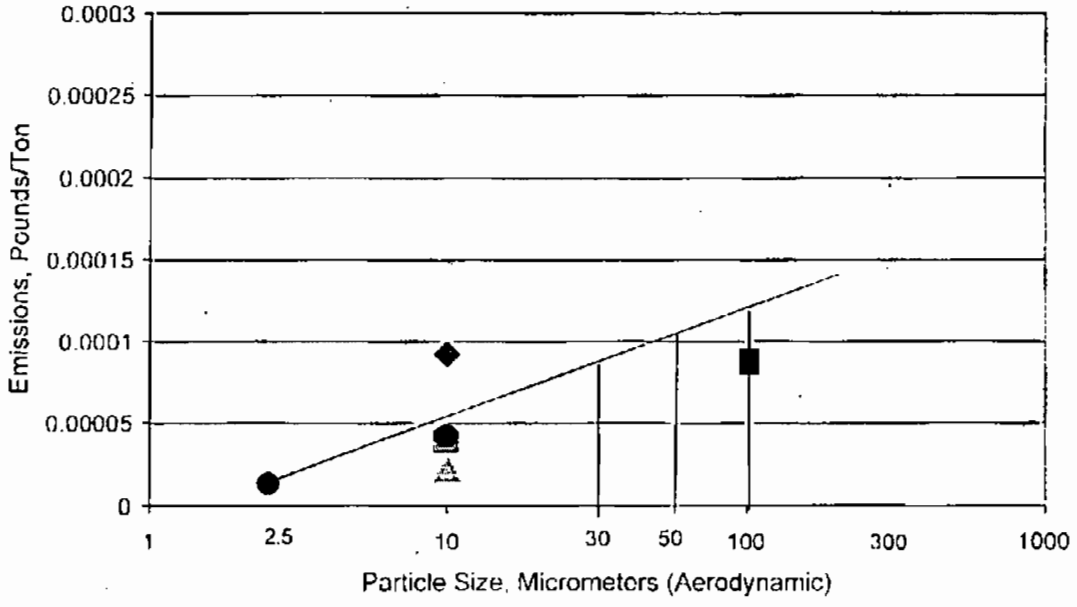


Figure 11.19-6. PM Emission Factor Calculation, Conveyor Transfer Points (Controlled)

The uncontrolled PM emission factors have been calculated from the controlled PM emission factors calculated in accordance with Figures 11.19.2-3 through 11.19.2-6. The PM-10 control efficiencies have been applied to the PM controlled emission factor data to calculate the uncontrolled PM emission rates.

Screening PM-10

Controlled = 0.00073 Lbs./Ton.

Uncontrolled = 0.00865 Lbs./Ton.

Efficiency = 91.6%

Tertiary Crushing PM-10

Controlled = 0.00054

Uncontrolled = 0.00243

Efficiency = 77.7%

Fines Crushing PM-10:

Controlled = 0.0012

Uncontrolled = 0.015

Efficiency = 92.0%

Conveyor Transfer Points PM-10

Controlled = 0.00004

Uncontrolled = 0.0011

Efficiency = 95.9%

The uncontrolled total particulate matter emission factor was calculated from the controlled total particulate matter using Equation 1:

$$\text{Uncontrolled emission factor} = \frac{\text{Controlled total particulate emission factor}}{(100\% - \text{PM-10 Efficiency \%})/100\%}$$

Equation 1

The Total PM emission factors calculated using Figures 11.19.2-3 through 11.19.2-6 were developed because (1) there are more A-rated test data supporting the calculated values and (2) the extrapolated values provide the flexibility for agencies and source operators to select the most appropriate definition for Total PM. All of the Total PM emission factors have been rated as E due to the limited test data and the need to estimate emission factors using extrapolations of the PM-2.5 and PM-10 data.

Pulverized Mineral Processing

Emissions of particulate matter from dry mode pulverized mineral processing operations are controlled by pulse jet and envelope type fabric filter systems. Due to the low-to-moderate gas temperatures generated by the processing equipment, conventional felted filter media are used. Collection efficiencies for fabric filter-controlled dry process equipment exceed 99.5%. Emission factors for pulverized mineral processing operations are presented in Tables 11.19.2-3 and 11.19.2-4.

Table 11.19.2-3 (Metric Units). EMISSION FACTORS FOR PULVERIZED MINERAL PROCESSING OPERATIONS [a]

Source [b]	Total *Particulate* Matter	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Grinding (Dry) with Fabric Filter Control (SCC 3-05-038-11)	0.0202	D	0.0169	B	0.0060	B
Classifiers (Dry) with Fabric Filter Control (SCC 3-05-038-12)	0.0112	E	0.0052	E	0.0020	E
Flash Drying with Fabric Filter Control (SCC 3-05-038-35)	0.0134	C	0.0073	C	0.0042	C
Product Storage with Fabric Filter Control (SCC 3-05-38-13)	0.0055	E	0.0008	E	0.0003	E

a. Emission factors represent controlled emissions unless noted. Emission factors are in kg/Mg of material throughput.

b. Date from references 16 through 23

Table 11.19.2-4 (English Units). EMISSION FACTORS FOR PULVERIZED MINERAL PROCESSING OPERATIONS [a]

Source [b]	*Total* Particulate Matter	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Grinding (Dry) with Fabric Filter Control (SCC 3-05-038-11)	0.0404	D	0.0339	B	0.0121	B
Classifiers (Dry) with Fabric Filter Control (SCC 3-05-038-12)	0.0225	E	0.0104	E	0.0041	E
Flash Drying with Fabric Filter Control (SCC 3-05-038-35)	0.0268	C	0.0146	C	0.0083	C
Product Storage with Fabric Filter Control (SCC 3-05-038-13)	0.0099	E	0.0016	E	0.0006	E

a. Emission factors represent controlled emissions unless noted. Emission factors are in lb/Ton of material throughput.

b. Data from references 16 through 23

References for Section 11.19.2[1]

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2. J. Richards, T. Brozell, and W. Kirk, *PM-10 Emission Factors for a Stone Crushing Plant Tertiary Crusher,* EPA Contract No. 68-D1-0055, Task 2.84, U. S. Environmental Protection Agency, Research Triangle Park, NC, February 1992.

3. W. Kirk, T. Brozell, and J. Richards, *PM-10 Emission Factors for a Stone Crushing Plant Deister Vibrating Screen and Crusher,* National Stone Association, Washington DC, December 1992.

4. T. Brozell, J. Richards, and W. Kirk, *PM-10 Emission Factors for a Stone Crushing Plant Tertiary Crusher and Vibrating Screen,* EPA Contract No. 68-DO-0122, U. S. Environmental Protection Agency, Research Triangle Park, NC, December 1992.

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13. *An Investigation of Particulate Emissions from Construction Aggregate Crushing Operations and Related New Source Performance Standards,* National Crushed Stone Association, Washington, DC, December 1979.

[1] References 1 through 23 are identical to References 1 through 23 in the Background Support Document for AP-42, Section 11.19-2.

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15. T. Brozell, T. Holder, and J. Richards, *Measurement of PM-10 and PM2.5 Emission Factors at a Stone Crushing Plant*, National Stone Association, December 1996.

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17. Frank Ward & Company, *A Report of Particulate Source Sampling Performed for Franklin Industrial Minerals Located in Sherwood, Tennessee*, Report to Franklin Industrial Minerals, August 1994.

18. Advanced Industrial Resources, LLC. *Performance Test Report of Baghouse No. 37 at Franklin Industrial Minerals, Report to Franklin Industrial Minerals*, November 1999.

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23. Air Quality Technical Services. *Performance Testing for Flash Dryer #3, Omya, Inc. Plant in Florence, Vermont*, September 2000.

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