RESPONSES TO QUESTIONS FROM CALIFORNIA ENERGY COMMISSION STAFF

for Watson Cogeneration Steam and Electric Reliability Project

Submitted to:
California Energy Commission
1516 9th Street , MS 15
Sacramento, CA 95814-5504

Submitted by:
Watson Cogeneration Company
22850 South Wilmington Avenue
Carson, CA 90745

With support from:
URS Corporation
8181 East Tufts Avenue
Denver, CO 80237

June 2010

URS

June 11, 2010

Dockets Unit
California Energy Commission
1516 Ninth Street, MS 4
Sacramento, CA 95814-5512

Re: Watson Cogeneration Steam and Electric Reliability Project
Application for Certification 09-AFC-1

On behalf of Watson Cogeneration Company, the applicant for the above-referenced Watson Cogeneration Steam and Electric Reliability Project, we are pleased to submit the following:

- Responses to Questions from California Energy Commission Staff.

This document is being submitted to the CEC for docketing.

Sincerely,
URS Corporation

Cindy Kyle-Fischer
Project Manager

Enclosure

cc: Proof of Service List

URS Corporation
8181 East Tufts Avenue
Denver, CO 80237
Tel: 303.694.2770
Fax: 303.694.3946

Responses to Questions from California Energy Commission Staff

Appendices

List of Acronyms and Abbreviations Used in Responses

AFC	Application for Certification
APE	Area of Potential Effect
APN	Assessors Parcel Number
Applicant	Watson Cogeneration Company
CBC	California Building Code
CEC	California Energy Commission
CPM	Compliance Project Manager
CTG	combustion turbine generators
DESCP	Draft Drainage, Erosion, and Sediment Control Plan
GIS	gas insulated substation
HRSG	Heat recovery steam generator
LACoFD	Los Angeles County Fire Department
NFPA	National Fire Protection Association
NPDES	National Pollutant Discharge Elimination System
RO	reverse osmosis

BIOLOGY

Technical Area: Biology

Author: Andrea Martine

DATA REQUEST

1. Where does the water drain to, at the Parking Lot/Laydown Site?

RESPONSE

Stormwater drains to the Dominguez Channel. As further explained in the Application for Certification (AFC), Section 5.5 (Water Resources), Subsection 5.5.1.6 (Hydrogeology):

"Within the Project vicinity, surface runoff flows into a network of storm drains that are pumped into the BP Refinery's existing treatment system on-site. During rain events, stormwater runoff can be discharged to the Dominguez Channel under a state General Industrial NPDES stormwater permit."

The Draft Drainage, Erosion, and Sediment Control Plan (DESCP), which was submitted within the Applicant's responses to California Energy Commission (CEC) Data Requests Set 2, states:

"Runoff from the Construction Laydown and Parking Area currently enters the Dominguez Channel. No improvements are proposed for the Construction Laydown and Parking Area; therefore, it will continue to enter the Dominguez Channel post construction. During the construction phase, the workers' parking area will be separated from the Construction Laydown area in order to address storm water quality requirements during equipment staging..."

"The Construction Laydown and Parking Area is currently paved and used as a truck parking and staging area. The existing slope is approximately 1 percent from the North and South portions of the parking lot towards the center. Catch basins convey runoff through storm water pipes in a west to east fashion to outlet to the Dominguez Channel..."

"The Parking Area will have no changes to the existing drainage. The Construction Laydown area will be separated from the Parking Area by jersey barriers and sand bags to mitigate the flow of runoff to the Dominguez Channel."

LAND USE

Technical Area: Land Use

Author: Candace Hill

DATA REQUEST

1. How many acres is the entire BP Refinery? According to an EPA Remediation System Evaluation for a Ground Water Pump and Treat System for BP Carson Refinery report dated 12/22/05, the entire site is 702 acres and the AFC states the overall size is 428 acres.

RESPONSE

The entire BP Carson Refinery extends beyond the Project Site and the Construction Laydown and Parking Area. As stated in the Project's AFC, Section 3.0 Project Description, Subsection 3.2 (Facility Location):

"The Project Area consists of the Project Site and the off-site Construction Laydown and Parking Area. The Project Site is a 2.5-acre brown field site located within the boundary of the existing Watson Cogeneration Facility, which is a 21.7-acre area within the 428-acre parcel further described as Assessors Parcel Number (APN) 7315-006-003, 1801 Sepulveda Boulevard, Carson, California, 90745 and is integral to BP's existing Carson Refinery (BP Refinery). The street address of the Project Site is located within the boundary of the existing Watson Cogeneration Facility at 22850 South Wilmington Avenue, Carson, California..."

The Project Site is within one of the BP Carson Refinery parcels of land. The BP Carson Refinery encompasses more than this single parcel, but the Project Site is completely within the boundary of this 428-acre parcel.

WASTE MANAGEMENT

Technical Area: Waste Management

Author: Ellie Townsend-Hough

DATA REQUEST

1. How much of the proposed project will sit in the foot print of the old refinery retention basin?

RESPONSE

According to historical aerial photographs and a previous geotechnical report, the Applicant's Project Site (i.e., the "Fifth Train", associated cooling towers, transformers, etc.) is located entirely within the footprint of the old refinery retention basin. The Construction Laydown and Parking Area is not located within a historical retention basin.

The historical photographs that were presented in the Phase I Environmental Site Assessment (Appendix A of the AFC) document the previous existence of the basin. The 1989 photograph shows the existing Watson Cogeneration Facility in place of the basin.

The 1986 geotechnical report, provided in Appendix L of the AFC, was prepared prior to construction of the existing Watson Cogeneration Facility. Plate 1 within this report illustrates the location of the then-proposed Watson Cogeneration Facility to be within a basin. The text of the report identifies the basin as "Reservoir 504".

2. What are the underground man-made structures located in the operation and maintenance area?

RESPONSE

The AFC Project Description Subsection 3.8.1.1 (Execution Plans) contains the following explanation:

"Site preparation for construction will include the demolition or removal of some known existing underground man-made structures located on the site, including warehouse foundations, piping systems, and maintenance access roads..."

And:

"Prior to excavation, appropriate reconnaissance will be performed to locate existing underground structures and appropriate measures will be taken to protect or remove the existing structures as required."

Specifically, in the fifth train area, there are underground fire protection piping systems, oily water waste drains, storm water drains, and natural gas piping beneath the immediate power block area. These piping/drain systems will be either retained in their present locations, removed, or relocated, depending upon on the detailed design and considering the Project operation and maintenance requirements. Additionally, there are underground electrical duct banks and buried conduit. Similar underground facilities are anticipated near the cooling tower area and at the location of the new gas insulated substation (GIS). Prior to construction, the precise location of these facilities will be determined by ground penetrating radar, potholing, and other techniques.

3. How far below grade will the applicant dig for foundations?

RESPONSE

As stated in AFC Section 5.7 (Cultural Resources), Subsection 5.7.1.3 (Area of Potential Effect):

"The excavation area within the archaeological [Area of Potential Effect] APE will not be more than 10 feet below the existing grade."

4. Where will the new fill come from?

RESPONSE

As stated in the AFC Project Description Subsection 3.8.1.1 (Execution Plans, Site Preparation):

"No fill is anticipated, but in the event fill is required, material present on-site is expected to be adequate, subject to final geotechnical evaluation."

5. Will all of the fill at the site now be disposed of in a Class I landfill?

RESPONSE

Some information on this topic was previously presented in the Applicant's October 2009 response to CEC Data Request 37.

The excavated fill will be sampled and analyzed for characterization and for preparation of profiling documents for off-site treatment or disposal facilities. Prior to transport off Site, the excavated soils will be managed pursuant to applicable BP Refinery soil management procedures. Currently, there is no indication that all (or any) of the excavated fill will require disposal at a Class I (i.e., hazardous waste) landfill.

6. What are the procedures for managing excavated soil?

RESPONSE

The BP Carson Refinery's procedures for managing excavated soil include Procedure E107 (Soils Handling) and Procedure E112 (Excavation Planning and Soils Management). These procedures are attached as Appendix A-1 and Appendix A-2, respectively.

WORKER SAFETY

Technical Area: Worker Safety / Fire Protection Safety

Author: Geoff Lesh

DATA REQUEST

1. Will the noise enclosures for the natural gas compressors be "total enclosures" or are they "walls only", i.e.: will the compressors be in a building?

a) If so, what fire protection measures are planned for the enclosures and to what codes?

RESPONSE

The natural gas compressors will be totally enclosed in a weather-tight, sound-attenuating enclosure.

a) The enclosure will be equipped with fire detection and suppression systems in accordance with applicable California Building Codes (CBCs) and National Fire Protection Association (NFPA) codes. The CBCs dictate when fire protection systems are required by establishing the enclosure's occupancy. NFPA codes 72 and 13 pertain to the installation of the detection and suppression systems, respectively.

2. Would the refinery's fire brigade respond to a fire or hazmat release incident at Watson Cogen?

a) If so, under what conditions, and would they be a first responder? Who would be the point of contact?

b) Who would be the first responders for a non-fire worker injury accident?

RESPONSE

a) The BP Carson Refinery Fire Department (the refinery's fire brigade) would respond to fire and hazmat incidents. The point of contact is the battalion chief on duty. The Los Angeles County Fire Department (LACoFD) would also respond to large-scale hazmat incidents and fires.

As presented in AFC Project Description Subsection 3.8.1.1 (Project Construction):

"The general contractor will have a Safety Coordinator who will prepare a site-specific safety plan. Emergency services will be coordinated with the City of Carson and Carson Refinery Fire Departments and local hospitals in the City of Carson..."

AFC Project Description Subsection 3.11.1.4 (Project Safety, Availability, and Reliability) states:

"The Project will have on-site fire protection systems and will be supported by local fire protection services. These systems will be coordinated with the existing procedures...Employees will be given fire safety training including instruction in fire prevention, the use of portable fire extinguishers and hose stations, and reporting fires to the local fire department."

AFC Worker Safety Subsection 5.17.2.2 (Operation Health and Safety Program):

"...the Project will be incorporated into the Watson Cogeneration Facility site-specific Emergency Action Plan/Emergency Response Plan. The plan will address potential emergencies, including chemical releases, fires, and injuries, and will describe ... procedures for reporting to local emergency response agencies, responsibilities for emergency response, and other actions to take in the event of an emergency...Employee response to an emergency will be limited to an immediate response to minimize the risk of escalation of an accident or injury. Employees will be trained to respond to fires, spills, earthquakes, and injuries."

b) The BP Carson Refinery Fire Department would respond to medical emergencies and administer basic first aid. The LACoFD's paramedics would also respond to medical emergencies and provide first aid treatment.

3. Describe the secondary access for emergency vehicles.

a) Will the local LAFD be able to get themselves in through the secondary access, or is the secondary access always staffed?

RESPONSE

There are five entrances for emergency access.

a) The LACoFD emergency responders would be met at the gate by BP security officers or by one of the BP emergency response team members and they would be escorted directly to the incident.

GENERAL COMPLIANCE

Technical Area: General Compliance

Author: Dale Rundquist

DATA REQUEST

1. How soon does the Project Owner want to start construction after the Decision is issued? This has a bearing on how soon they need to start submitting the pre-construction Conditions of Certification for approval.

RESPONSE

The Project Owner does not anticipate starting construction any sooner than nine months after the Final Commission Decision is issued.

Appendix A
BP Carson Refinery Procedures for Soil Management

Appendix A-1
BP Carson Soils Handling Procedure E107

BP – Carson Business Unit
Policy & Procedure

SOILS HANDLING

Table of Contents

SECTION I - POLICY

DESCRIPTION

Soil handing policy must be integrated into all planned excavations to assure compliance with federal, state and local environmental regulations and to avoid unforeseen costs to the project. Unforeseen costs result from encountering contaminated soil that must be shipped off site for disposal or soil that can not be used as backfill and must also be shipped off site for disposal. The refinery cannot stockpile clean soil unless there is a plan for its use or disposal in the immediate future.

Proper identification, monitoring, handling and disposal of contaminated soil are necessary at the Refinery to prevent an unwanted release of hazardous materials or exposure to Refinery personnel. Air, water and waste regulations and requirements must be considered when excavating soil. These requirements include:

- SCAQMD Rule 1166 for VOC emissions from decontamination of soil, including the Refinery's Rule 1166 VOC Contaminated Soil Mitigation Plan (Various Locations),
- SCAQMD Rule 1150 for excavation of abandoned landfills,
- SCAQMD Rule 403 Fugitive Dust
- NESHAPs for demolition and renovation of regulated asbestos-containing materials (40 CFR 61 Subpart M),
- Site Remediation NESHAPs (40 CFR 63 Subpart GGGGG),
- DTSC and RCRA hazardous waste regulations, including RCRA Subpart CC,
- LARWQCB Cleanup & Abatement Orders, including the Refinery's Soil Remediation Plan
- NPDES General Permit for Storm Water Discharges Associated with Construction Activity and LACDPW storm water management requirements.

Many of the requirements for these regulatory programs overlap. The purpose of this policy and the following procedures is to link them together. All but Rule 1166 are addressed in other policies and procedures, so the focus of the following procedure is the Rule 1166 requirement.

Activities to which this policy and the following procedures apply and the individuals responsible for implementing them include:

- Planned Excavations– Foremen, OVA Specialist, Contractor Rep
- Maintenance – Maintenance Coordinator
- Spill cleanup – Waste yard Supervisor
- Notifications and Reporting – Environmental Field Compliance Coordinator

SCAQMD Rule 1166 rule sets requirements to control the emission of Volatile Organic Compounds (VOC) from excavating, grading, handling and treating VOC-contaminated soil as a result of leakage from storage or transfer operations, accidental spillage, or other deposition.

SCAQMD Rule 403 attempts to reduce the amount of solid, airborne particles by requiring actions to prevent, reduce or control fugitive dust emissions. Fugitive dust sources must be controlled to ensure that dust does not leave the refinery fence line either in the air or on the street, including the Southwest Tank Farm. Requirements for this rule are addressed in Policy & Procedure E208, Fugitive Dust.

SCAQMD Rule 1150 applies to excavation of the abandoned landfill in the northeast property, also known as the Johns Manville property. Requirements for this rule are addressed in Policy & Procedure E211, the Northeast Property Excavation.

40 CFR 61 Subpart M NESHAPs applies to demolition and renovation or regulated asbestos-containing materials, which could be buried anywhere in the northeast area of the Refinery, but most likely in the northeast property, also known as the Johns Manville property. These requirements are addressed in Policy & Procedure E211, Northeast Property Excavation.

40 CFR 63 Subpart GGGGG (Site Remediation) NESHAPS applies to remediation operations performed at the Refinery which involve materials with average total VOHAP concentrations greater than 500 ppm stored in remediation material management units, with capacities greater than 26.4 gallons. These requirements are addressed in Policy & Procedure E302, High VOC Wastes.

RCRA Subpart CC applies to waste with VOC concentrations greater than 500 ppm stored in hazardous waste management units, including containers and surface impoundments, with capacities greater than 26.4 gallons. Subpart CC requirements include containers, labeling, and inspections. More information on Subpart CC requirements can be found in Policy & Procedure E302, High VOC Wastes.

The NPDES General Permit for Storm Water Discharges Associated with Construction Activity applies to construction projects with five or more acres of disturbed soil. The LACDPW storm water management requirements apply to construction projects with two or more acres of disturbed soil or 40,000 or more square feet of impervious area. Construction Storm Water Permit requirements and LACDPW storm water management requirements include erosion control best management practices. More information on storm water pollution prevention for construction projects can be found in Policy & Procedure E907, Construction Stormwater Permit and E402, Construction Stormwater Pollution Prevention.

All excavations must be evaluated before excavation is started. The soil must be visually monitored for VOC contamination as well as any other soil contamination that could occur. Any discovery of contamination must be reported to the Environmental department, as soon as possible.

OBJECTIVE

The Refinery's policy is to comply with the regulations and requirements set forth by the EPA, SCAQMD, DTSC and LARWQCB in regards to handling, monitoring and disposing of contaminated soil and preventing the release of VOCs to the atmosphere.

DEFINITIONS

Contaminated Soil – A soil that contains odors or visible contamination with materials such as acids, caustics, hydrocarbons and other waste characteristics. This includes VOC-contaminated soil.

DTSC – The mission of the Department of Toxic Substances Control is to protect public health and the environment in California from harmful exposure to hazardous substances. The DTSC

is responsible for administering and enforcing the federal and California regulations associated with the RCRA.

Excavation – The process of digging out and removing materials, including any material necessary to that process such as the digging and removal of asphalt or concrete necessary to expose, dig out and remove known VOC contaminated soil

Grading – The process of leveling off to produce a smooth surface including the removal of any material necessary to that process such as asphalt and concrete necessary to expose known VOC-contaminated soil

LARWQCB – The Los Angeles Regional Water Quality Control Board is responsible for enforcing water quality objectives and implementing plans to protect the beneficial uses of waters in the Los Angeles Region.

NESHAPs – National Emission Standards for Hazardous Air Pollutants

NPDES – The National Pollutant Discharge Elimination System is a national permit system governing the discharge of pollutants or other materials into waters of the United States.

OVA – An organic vapor analyzer used for Rule 1166 VOC monitoring using flame ionization, photo ionization or any other method that complies with the specifications of 40 CFR Part 60 Appendix A, EPA Method 21 Section 3.1.1.a. *It must be calibrated using hexane*.

Remediation material – material that contains one or more of the hazardous air pollutants listed in Table 1 of 40 CFR 63 subpart GGGGG. This material may include soils contaminated by spilled material.

RCRA – The Resource Conservation and Recovery Act was passed by the United States Congress to regulate the management of hazardous and non-hazardous waste. The United States Environmental Protection Agency has delegated most RCRA administration and enforcement duties in California to the DTSC.

Site remediation – One or more activities or processes used to remove, destroy, degrade, transform, immobilize, or otherwise manage remediation material. The monitoring or measuring of contamination levels in environmental media using wells or by sampling is not considered to be a site remediation. Activities performed under the authority of Compensation Liability Act (CERCLA) or a Resource Conservation and Recovery Act (RCRA) corrective action at a treatment, storage and disposal facility (TSDF) are also not considered to be site remediation. Refer to the regulation for more exemptions.

SCAQMD – The South Coast Air Quality Management District is the local agency responsible for controlling emissions from stationary sources of air pollution, including emissions from the excavation of hydrocarbon impacted soils. The SCAQMD is required to develop and follow an Air Quality Management Plan that describes how to reduce emissions and bring the air basin into compliance with state and federal ambient air quality standards.

UST – Underground storage tanks used to store hazardous substances are regulated by the California Health and Safety Code. The DPW and the CUPA administer the regulations.

VOC – A volatile organic compound is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and exempt compounds.

VOC-contaminated soil –A soil that registers a concentration of 50 ppm or greater Volatile Organic Compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane.

VOC Contaminated Soil Mitigation Plan – A plan to minimize VOC emissions to the atmosphere during excavation and any subsequent handling of VOC-contaminated soil.

Volatile Organic Materials – include gasoline, diesel, crude oil, lubricant, waste oil, adhesive, paint, stain, solvent, resin, monomer, and/or any other material containing VOC.

VOHAP – A volatile organic hazardous air pollutant, which includes benzene, ethyl benzene, toluene, vinyl chloride, xylenes and other VOCs.

RELEVANT DOCUMENTS

- Rule 1166 Contaminated Soil Various Locations Mitigation Plan
- Rule 1166 Soil Monitoring Records form
- Rules 1149 & 1166 Notification Form
- Rule 1166 Soil Treatment/Disposal Plan
- Cleanup and Abatement Orders
- Soil Remediation Plan
- Construction Storm Water Permit
- Policy & Procedure E208, Fugitive Dust
- Policy & Procedure E211, Northeast Property Excavation
- Policy & Procedure E302, High VOC Wastes
- Policy & Procedure E902, Cleanup & Abatement Order
- Policy & Procedure E907, Construction Stormwater Permit
- Policy & Procedure E911, Industrial Stormwater Pollution Prevention Plan
- Policy & Procedure F/S 1010 Excavation Inspection and Soil Monitoring

SECTION II - PROCEDURE

Activity	Responsibility
SCAQMD Rule 1166 Contaminated Soil Mitigation Plan Submittal for BP	
For annual excavations of less than 2000 cubic yards of VOC contaminated soil, follow the requirements of the Refinery's Various Locations Rule 1166 Contaminated Soil Mitigation Plan. A Various Location Plan is limited to the excavation of 2000 cubic yards or less of VOC contaminated soil in any consecutive 12 month period at the same site. The plan should be renewed annually. The application must be submitted at least 60 days prior to the expiration of the previous years plan. The application should be addressed and submitted to: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT P.O. BOX 4944 – ATTN: STANDARD PERMITS DIAMOND BAR, CA 91765-0944 The application information and cover letter are located in file: Q:\EHNS\ENV\AQMD\Rule 1166\Applications A copy of the approved plan must be filed in Environmental file 3G01-0019570. If an excavation is expected to generate over 2,000 cubic yards of VOC-contaminated soil a site-specific application for a mitigation plan must be prepared. Excavation activities could be delayed upon reaching 2,000 cubic yards of VOC contaminated soil if the application is not submitted and approved by the AQMD. This could take several weeks.	Environmental Field Compiance Coordinator
SCAQMD Rule 1166 Contaminated Soil Mitigation Plan Submittal for Contractors	
All contractors conducting excavation at the refinery or associated properties or work directed by bp must apply for and maintain a Rule 1166 Various Locations VOC Contaminated Mitigation Plan. This plan must be kept up to date and a copy must be made available upon request. Contractors working in the refinery are not allowed to make notifications or work under the plan held by bp. If an excavation is expected to generate over 2,000 cubic yards of VOC-contaminated soil a site-specific application for a mitigation plan must be prepared. Excavation activities could be delayed upon reaching 2,000 cubic yards of VOC contaminated soil if the application is not submitted and approved by the AQMD. This could take several weeks.	Contractor Site Supervisor
Pre-Excavation Notifications	
Excavation Conducted by bp personnel	
Notify the Environmental Field Compliance Coordinator at least 48 hours before beginning any soil excavation greater than one cubic yard. Provide the Environmental Field Compliance Coordinator with the site location, project coordinator's name and phone number, foreman's name and phone number, project start and end dates, expected start time, and approximate quantity of soil to be excavated.	Project Coordinator/Planner/

Activity	Responsibility
When notified of planned soil excavation: • Fill out the SCAQMD notification form (Attachment II) and send it to SCAQMD at least 24 hours prior to the start of excavation. Attach a copy of the refinery plot plan highlighting the general area of the excavation, a photocopy of the Check for $52.06 and the signature page from the Various Location plan to the form prior to faxing. Notification can be done by faxing the SCAQMD notification form to (909) 396-3342 or by calling (909) 396-2326 • After receiving the notification number from the SCAQMD, mail the original notification form, signature page, refinery plot plan, and check to: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 203/1166 NOTIFICATIONS, FILE # 55641 LOS ANGELES, CA 90074-5641 • The reference number given by the SCAQMD at the time of notification should be kept as proof of compliance. Provide the project coordinator the reference number for the projects files. Verify that the current reference number is entered onto page 3 of the mitigation plan prior to turning the plan over to the job foreman. • For all excavations provide the project manager or site foreman with a copy of the Various Locations - VOC Contaminated Soil Mitigation Plan. Notify the project manager that a copy of this plan should be present at the excavation site at all times. • For excavations that are a result of spilled material or other incident requiring cleanup, treat material as if the VOC/VOHAP concentration is greater than 500 ppm (i.e. in accordance with Site Remediation NESHAPs). See procedure E302 for specific handling and storage requirements. In general, only store the remediation material in drums with closed covers and DOT-approved bins and dump trucks.	Environmental Field Compliance Coordinator
Excavation conducted by a Contractor	
Prior to starting excavation: • Fill out the SCAQMD notification form (Attachment II) and send it to SCAQMD at least 24 hours prior to the start of excavation. Attach a copy of the refinery plot plan highlighting the general area of the excavation, a photocopy of the Check for $52.06 and the signature page from the Various Location plan to the form prior to faxing. Notification can be done by faxing the SCAQMD notification form to (909) 396-3342 or by calling (909) 396-2326 • The **Responsible Party** signature line on the signature page of the plan must be signed by the Environmental Field Compliance Coordinator prior to submittal to the AQMD • Make sure to include all of the required contractor information. Including: AQMD ID #, Contractor corporate address, California State Contractor License Board #, Site contact name and contact phone number. • Include the fax back number at the top of the form. The AQMD will fax the notification page to that number with the notification number entered into the form. • After receiving the notification number from the SCAQMD, mail the original notification form, signature page, refinery plot plan, and check to: SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 203/1166 NOTIFICATIONS, FILE # 55641 LOS ANGELES, CA 90074-5641 • The reference number given by the SCAQMD at the time of notification should be kept as proof of compliance. Provide the project coordinator the reference number for the projects files. Verify that the current reference number is entered into page 3 of the mitigation plan prior to turning the plan over to the job foreman. • Insure that the signed copy of the 1166 plan is kept on site at the excavation.	Excavation Contractor/ Planner

Activity	Responsibility
OVA use and Monitoring (bp and contractor)	
• All monitoring shall be conducted by trained personnel who are proficient in the use of an Organic Vapor Analyzer (OVA) • A list of the personnel trained to use the OVA must be kept on site • The analyzers used for monitoring under this plan shall be on site and in good working order at all times. The analyzers shall also comply with the specifications and performance criteria specified by EPA method 21. • The analyzers shall be calibrated with hexane in accordance to the procedures of EPA method 21 at the beginning of each work day. The analyzers shall not be used to monitor for VOC under this plan unless the calibration precision is equal to or less than 10 percent on the calibration gas value. The analyzers shall be re-certified by the manufacturer at least once every three months. • Keep a copy of the 3 month calibration certificate with the OVA on the jobsite.	Foreman/OVA Specialist
Soil Monitoring Procedure (bp and contractor)	
The monitoring provisions listed below must be followed for all excavations of greater than one cubic yard. • Sampling for VOC shall be taken only from the soil excavated during the previous three minutes. The sampling shall be conducted by placing the probe at a distance of no more than 3 inches from the surface of the soil and while slowly moving the probe across the soil surface, and observing the instrument readout. If an increased meter reading is observed, continue to sample the excavated soil until the maximum meter reading is obtained. Leave the probe inlet at this maximum reading location for approximately double the instrument response time. Record the maximum reading on the Rule 1166 Soil Monitoring Records Form (Attachment I) • Monitor VOCs at least once every two cubic yard of soil excavated, not to exceed 15 minutes between readings • Record visual, odor, VOC monitoring results and bin and/or drum label number where soil is being accumulated on the Soil Monitoring Records form (Attachment I). • Make sure that the monitoring record is updated at least every 15 minutes. If you stop for a break, to move equipment or take lunch note it on the record. • Conduct a daily inspection of all bins and drums containing VOC contaminated soil. Note this inspection on the Rule 1166 Soil Monitoring Records Form (Attachment I).	Foreman/OVA Specialist
First Detection of Soil >50ppm VOC	
• **When VOC concentrations meet or exceed 50 ppm** • Contact the Environmental Field Coordinator immediately. If discovery is after normal business hours or on the weekend, contact the Shift Superintendent (501) or the on call environmental contact and follow proper procedures for VOC contaminated soil handling and disposal. • Label bins and/or drums as “SCAQMD Rule 1166 – VOC Contaminated Soil” • If possible make arrangements with the on-site waste contractor to move all VOC contaminated soil to the waste yard on Thursday afternoon for storage. The VOC contaminated soil must be inspected over the weekend	Foreman/OVA Specialist
• Complete the relevant sections of the SCAQMD Notification Form and submit it to the SCAQMD within 24 hours of the time when VOC contaminated soil was detected. Include a brief description of how the contaminated soil is being stored. Notification needs to be submitted the first time soil with VOCs of 50 ppm or greater are detected at the site. And resubmitted when the soil is greater than 1000 ppm of VOC.	Environmental Field Compliance Coordinator/ Contractor Rep.

Activity	Responsibility
VOC-contaminated Soil Handling & Disposal	

The following rules apply to handling of soil contaminated with VOCs, with concentrations between 50 and 1,000 ppm (or VOC concentrations greater than 500 ppm for contamination, resulting from spills or other activity requiring cleanup):
• For spill contamination or cleanup, use drums and bins that are Site Remediation NESHAPs-approved. See procedure E302 for specific requirements.
• Immediately spray working area with water or spray it with a SCAQMD-approved vapor suppressant, e.g., Ramco's PAC Attack.
• Spray each load of excavated soil with water or a SCAQMD-approved vapor suppressant and separate from uncontaminated soil.
• Use Bin management labels to identify the soil being collected in bins or drums. Record the highest VOC concentration of soil at point of generation on the label.
• Limit stockpiles of VOC-contaminated soil to 400 cubic yards.
• Whenever work stops for any reason, cover stockpiles of VOC-contaminated soil with continuous sheets of heavy-duty plastic and anchor the plastic to prevent exposure to the atmosphere.
  • The edges of the plastic must overlap by a minimum of 24 inches and be sealed with duct tape or folded over and anchored down with weights to prevent emissions.
• When removing VOC contaminated soil from a stock pile only the working face of the stock pile may be exposed.
• If the soil is stored in bins, the bins must be inspected daily. The inspection can be logged on the OVA monitoring record if the excavation is ongoing.
• Once the bins have been removed from the excavation site and are stored at the Resource Recovery Yard, the daily inspections will be preformed by the waste yard personnel.
• If any VOC contaminated soil is stockpiled, the excavation contractor is required to visually inspect soil stockpiles daily and record time, date and name of inspector.
  • A record if these inspection must be kept on site and made available to the inspector upon request.
• All VOC-contaminated soil must be removed from the refinery within 30 days of excavation.
• The Waste Engineer will decide on the final destination for disposal or remediation of the soil.
Special Handling requirements for soil >1000 ppm VOC
• The soil and excavated area must be immediately sprayed with water or an SCAQMD approved vapor suppressant
• As soon as possible, but not more than 15 minutes, place soil in sealed containers or vapor-tight bins.
• The bins must be kept in a vapor tight condition unless soil is actively being placed in the bin.
• The soil must remain undisturbed in the bin until the soil leaves the facility.
• The excavation must be kept covered with plastic and not exposed to the atmosphere. Only the working face of the excavation should be exposed.
 	
Do not engage in any on-site or off-site spreading of VOC-contaminated soil.
 	
Non-VOC Contaminated Soil Handling & Disposal
• If backfilling is not an option, the Waste Engineer will make all final decisions regarding handling and disposal of soil.
	Foreman/ Waste yard Supervisor

Activity	Responsibility
Soil Analysis & Waste Determination • Collect a soil sample or samples from the excavated soil and send it to the Waste Engineer (Sampling does not need to be done immediately, but must be done in time to classify the soil for disposal. If done prior to the beginning of the excavation it will speed up the disposal process). Waste engineer will arrange for laboratory analysis of the sample and, upon receipt of the analytical results, determine waste classification and evaluate options for managing the soil. **Clean Soil Storage & Use** Contact the Waste Engineer to stock pile uncontaminated soil in designated area waiting for disposal or future use as fill material. Be aware that soil cannot be stockpiled at any time in the refinery unless there is a plan for its immediate use or disposal.	Waste Yard Personnel/ Waste Engineer
30 Day Follow-up Reporting	
Bp conducted excavation	
Within thirty days of the completion of excavation, a follow-up close out report must be sent to the AQMD at: SOUTH COAST AIR QUALITY MGMT DISTRICT ENGINEERING & COMPLIANCE DIVISION TOXICS & WASTE MANAGEMENT UNIT (RULE 1166 COMPLIANCE) 21865 E. COPLEY DR. DIAMOND BAR, CA 91765-4182 The report must include the following records: • Total quantity of VOC contaminated soil excavated • VOC monitoring records of the excavated soil • Signed changes of custody for any transfer of the VOC contaminated soil including the AQMD identification number, business address of the generator, transporter and storage/treatment facilities, and quantity of soil removed from the site. • Calibration records of the analyzers used to monitor for VOC including daily and manufacturer calibration. The calibration records shall be signed and dated by the operator performing the calibration and kept on site during excavation • Daily inspection of the soil stored in bins or stockpiles. The inspection shall include at a minimum the date, time of inspection, name, and brief description of the location, integrity of the bin or stockpile, any problems identified and the repairs taken to mitigate the release of VOCs. o There must be a daily record of inspection including weekends and holidays. • Notifications made to the AQMD including the notification numbers • A brief summary of the excavation including the status of the excavated area and the status of all VOC contaminated soil. A copy of the follow up report must be sent to the environmental file: 3E01-0019269	Environmental Field Compliance Coordinator
Contractor Conducted Excavation	
Within thirty days of the completion of excavation, a follow-up close out report must be sent to the AQMD at: SOUTH COAST AIR QUALITY MGMT DISTRIC ENGINEERING & COMPLIANCE DIVISION TOXICS & WASTE MANAGEMENT UNIT (RULE 1166 COMPLIANCE) 21865 E. COPLEY DR. DIAMOND BAR, CA. 91765-4182	Contractor Representative

Activity	Responsibility
The report must include the following records: • Total quantity of VOC contaminated soil excavated • VOC monitoring records of the excavated soil • Signed changes of custody for any transfer of the VOC contaminated soil including the AQMD identification number, business address of the generator, transporter and storage/treatment facilities, and quantity of soil removed from the site. • Calibration records of the analyzers used to monitor for VOC including daily and manufacturer calibration. The calibration records shall be signed and dated by the operator performing the calibration and kept on site during excavation • Daily inspection of the soil stored in bins or stockpiles. The inspection shall include at a minimum the date, time of inspection, name, and brief description of the location, integrity of the bin or stockpile, any problems identified and the repairs taken to mitigate the release of VOCs. o There must be a daily record of inspection including weekends and holidays. • Notifications made to the AQMD including the notification numbers • A brief summary of the excavation including the status of the excavated area and the status of all VOC contaminated soil. A copy of the follow up report must be sent to the Environmental Field Compliance Coordinator • The close out report will be put into the environmental file: 3E01-0019269	

SECTION III - ATTACHMENTS

ATTACHMENT I - Rule 1166 Soil Monitoring Records

BP West Coast Products LLC 1801 E. Sepulveda Blvd. Carson, CA 90749 Plan #: ID #: 131003	Facility/Site Information BP West Coast Products LLC – Carson Business unit Name: Carson Refinery Address: 1801 E. Sepulveda Blvd.
Reference No(s).	City: Carson, CA Zip: 90749

Monitor Information	Calibration Data	Verification Data	Monitoring Personnel	Excavation Summary (Upon completion of each page)	
Brand/Model:	Date:	Date:	Name:	Total Cubic Yds (This page)	
Type:	Gas/PPM:	Gas/PPM:	Company:	Total Cubic Yds (To date)	
Serial No.	By:	By:	Phone:	Removed from Site (To date)	

Time	VOC Concentration (PPMV) @ Excavated Load			Comment (Background, Wind speed)	Time	VOC Concentration (PPMV)@ Excavated Load			Comment (Background, Wind speed)
Every 15 min.	Reading	Hexane Factor	Adjusted Reading		Every 15 min.	Reading	Hexane Factor	Adjusted Reading	

I certify that the information contained in the above document is true and correct. I further certify that the above listed hydrocarbon monitor was operated in a manner consistent with the manufacturer's specifications and the conditions specified within this plan. In addition, I certify that the above readings represent the actual measurements I observed and recorded during the excavation process.

SIGNATURE:_____ DATE:_____

ATTACHMENT II

Rule 1166 Notification Form

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Rules 203 or R1166 NOTIFICATION FORM

Use this form to notify of known or suspect VOC contaminated soil Excavation, Handling and/or Monitoring; Mitigation/Treating of VOC contaminated soil; and VOC Vapor Extraction. See instructions on the back of this form.
For questions check our website at www.aqmd.gov or call the Hotline at (909) 396-2326.
FAX this form to 909-396-3342 and within 48 hours of fax MAIL the original form and fee to:
SCAQMD – 1166/203 Notifications, File # 55641, Los Angeles, CA 90074-5641
This form will be faxed back to you with a REFERENCE number if you provide a FAXBACK # here:

AQMD USE ONLY	RECEIVED BY		POSTMARK		REFERENCE #
COMPLETED BY			Company		Phone #
Date	Check #		Amount $		Project #
NOTIFICATION TYPE	Original (Initial)	Revision (prior reference #)		Cancellation (prior reference #)	
PROJECT TYPE (circle one only)	R1166 Soil / Tank Excavation	Soil Vapor Extraction (SVE)	VOC Contaminated Soil Mitigation / Treating	Reporting > 50 ppm VOC Contaminated Soil	Reporting > 1000 ppm VOC Contaminated Soil
Provide the R1166 mitigation plan name and number when reporting soil excavation, tank removal or contaminated soil Mitigation Plan issued to: Plan #				For reporting VOC > 50 or 1000 ppm only Date & time of VOC exceedance Highest VOC reading in ppm	
Provide the Soil Vapor Extraction unit permit name and number when reporting use of an SVE unit Permit issued to: Permit # Distance to nearest sensitive receptor in feet (see your permit condition requirements)					
PROJECT DATES	START		END		WORK SHIFT (day, swing, night)
SITE CONTRACTOR INFORMATION	AQMD ID #		CSLB License #		Phone #
Name			Address		
City		Zip	Site supv name & phone #		
SITE INFORMATION	Site Name			Site AQMD ID #	
Site Address				Cross Street	
Site City		Zip	Site contact name & phone #		

TANK INFORMATION	# OF TANKS	EACH	CAPACITY (gal)	MATERIAL STORED IN TANK	ABOVE GROUND? (Y/N)
		@			
		@			
Example	*3 tanks*	@	*10,000*	*Gasoline*	*no*

INFORMATION CERTIFICATION	I certify that the above information is complete and accurate			
Company Name		Print Name	Signature	Date
COMMENTS				

INSTRUCTIONS FOR SCAQMD RULES 203 and 1166 NOTIFICATION FORM

Use this form to notify of known or suspect VOC contaminated soil Excavation, Handling and/or Monitoring; Mitigation/Treating of VOC contaminated soil; and VOC Vapor Extraction.
For questions check our website at www.aqmd.gov or call the Hotline at (909) 396-2326

WHERE TO FAX AND MAIL YOUR NOTIFICATION AND FEE
Rule 301(ab) requires any person or operator required to submit a notification per Rule 1166 or Rule 203 - Soil Vapor Extraction projects to pay a notification fee. Any questions call the Hotline at 909-396-2326.

FAX all notifications to (909) 396-3342
MAIL the form and fee to within 48 hours of fax to:
SCAQMD Rule 1166 / 203 Notifications, File # 55641, Los Angeles, CA 90074-5641

NOTIFICATIONS MUST CONTAIN THE FOLLOWING INFORMATION:
Faxback # - Provide your fax # at the top of the Notification Form if you want a Reference # faxed back to you.

Notification Type – Circle the type of Notification. Original is for new or initial Notifications. Revisions are for updating information on notifications in which the project End Date has not expired. Provide the most recent prior Reference # issued for Revisions and Cancellations. The fee applies to *each* required notification

Project Type - Circle the type of work you are submitting a notification for. A separate notification and fee is required for each type of work selected.

Mitigation Plan/Permit - Each Project Type requires a valid Mitigation Plan *or* Permit #.

Site Contractor Information - Provide the required information for the actual contractor *doing the work*. The AQMD ID #, also know as Company or Facility ID #, can be found on the contractor's AQMD permits, Mitigation Plans or invoices.

Site Information - Provide the site name and complete address. Include the street number and name, city, zip code, and nearest cross street. Give more detailed directions if you think the site is difficult to locate.

Project Dates - Provide the project Start and End Dates. Any changes will require a Revision notification.

Tank Information – For tank excavation specify the tank capacity and the VOC material stored and if the tank is underground or above ground.

Information Certification - The contractor doing the work, or an authorized representative, must sign and date the notification to confirm that the information provided is complete and accurate.

SOIL/TANK EXCAVATION NOTIFICATION Rule 1166(c)(1)(B) Notify 24 hours prior to excavation when:
Notifying of intent to *Excavate* known or suspected VOC storage and/or transfer equipment (includes diesel and waste oil tanks), or *handling* known or suspected VOC contaminated soil.
NOTE: Soil excavation > 5,000 cubic yards may require a pre-approved AQMD Rule 403 Fugitive Dust Plan.

MONITORING NOTIFICATION - Rule 1166(c)(1)(D)(ii) Notify within 1 hour or 24 hours of detecting VOC when:
Notifying of *finding/detecting* VOC contaminated soil greater than 50 ppm or 1000 ppm

- Notify within 1 hour of detecting VOC greater than 1000 ppm*
- Notify within 24 hours of detecting VOC greater than 50 ppm

EMERGENCY NOTIFICATION Rule 1166(c)(1)(B) Notify prior to start work when:
Notify of any incident declared as an emergency by an authorized agency that requires the tank removal/repairs or excavating and handling of known or suspected VOC contaminated soil:

- Call 1-800-CUT-SMOG prior to excavating or fax the emergency notification to 909-396-3342 and
- Mail the notification within 48 hours after the excavation (include the agency Order or Declaration)

SOIL VAPOR EXTRACTION NOTIFICATION – Rule 203* Notify upon the 5th day after operating at a new site:
Notifying of *start-up* or *testing* of operation of portable Soil Vapor Extraction equipment lasting 5 days or more. Provide the distance in feet to the nearest sensitive receptor *if* the site is located less than ¼ mile from any Long-Term Health Care Facility, Rehabilitation Center, Convalescent Center, Retirement Home, Residence, School, Playground, Child Care Center or Athletic Facility. * Refer to your SVE permit condition requirements.

MITIGATION/TREATING NOTIFICATION – Rule 203* Notify per Plan or Permit condition requirements when:
Notifying of on-site *mitigation* or *treating* of VOC contaminated soil (see your Permit condition requirements).

Appendix A-2
BP Carson Excavation Planning and Soils Management Procedure E112

BP - Carson Business Unit
Policy & Procedure

EXCAVATION PLANNING AND SOIL MANAGEMENT

Table of Contents

List of Attachments

SECTION I - POLICY

DESCRIPTION

Excavations conducted at the BP Carson Refinery have the potential to uncover soil that is contaminated with volatile compounds and hazardous materials. A number of rules and regulations specify soil monitoring, handling and storage requirements to prevent these volatile compounds or hazardous materials from being released to the environment during and after the excavation process. In addition, some locations within the refinery have been identified as requiring special excavation procedures because of historical use or activities performed at these locations.

Site Remediation MACT (SR MACT), also known as Site Remediation NESHAPS [40 CFR 63 Subpart GGGGG], is a regulation that imposes excavation requirements for soils contaminated with Volatile Organic Hazardous Air Pollutants (VOHAPS). A list of SR MACT HAPs is provided in Attachment A. Laboratory analysis is required to determine VOHAP levels, thus, pre-assessment is an important part of the excavation planning process Pre-assessment is recommended for all excavations that generate ≥ 20 yd3 of soil and required for all excavations ≥ 400 yd3 of soil. . If an excavation location is not pre-assessed, then the excavated soil must be treated as VOHAP-contaminated soil until the results of post-excavation samples are obtained. The focus of this document is planning for compliance with the SR MACT requirements and other regulatory requirements. Policy & Procedure E302, High VOC Wastes (RCRA Subpart CC and Site Remediation NESHAPs) outlines requirements for handling of high VOC wastes in bins and containers after excavation/generation.

SCAQMD Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil, is primarily concerned with soils contaminated with Volatile Organic Compounds (VOC). Since hand-held Photoionization Detectors (PID) can be used to detect the presence of VOCs, the Rule 1166 requirements focus on monitoring during the excavation. The Rule 1166 requirements are discussed in detail in Policy & Procedure E107, VOC in Soils Handling (AQMD Rule 1166).

SCAQMD Rule 1150, Excavation of Landfill Sites; SCAQMD Rule 1403, Asbestos Emissions from Demolition/Renovation Activities; and Asbestos NESHAP [40CFR61 Subpart M] apply to the Northeast portion of the refinery, a former asbestos manufacturing facility that is now categorized as an inactive asbestos landfill. Policy & Procedure E211, Northeast Property Excavation, includes a map showing the boundaries of this area, and also details the specific requirements that apply to excavations performed in this area.

Other refinery areas with excavation restrictions are designated Solid Waste Management Units (SWMUs). A map showing the locations of these areas is provided in Attachment B. Note that no excavation is allowed in these areas unless approved by the Remediation Management Engineer (RME) and/or the Waste & Maintenance Engineer (WE).

Before an excavation is conducted, it is important to a) assess whether the location is within the boundaries of an excavation-restricted refinery area; and b) develop a strategy for identifying and complying with applicable rules and regulations, which may include pre-excavation soil sampling and analysis.

The CBU has a limited number of areas with special restrictions on excavations (primarily SWMUs and the inactive asbestos landfill). All other areas have unknown levels of soil

contamination, if any, and must be characterized during the excavation planning process or during the excavation itself. A decision tree flow chart based on the excavation category (location as well as size), provided as Attachment C, identifies the excavation planning requirements and regulatory requirements for storage and handling of different categories of contaminated soils.

The size of an excavation (cubic yards of soil to be excavated) is a key factor that impacts the course of action with regard to the amount of pre-planning and pre-assessment that is required or recommended. Extensive planning and pre-sampling is not required for small excavations. For large excavations, pre-assessments are required, and a site-specific monitoring plan must be approved prior to the excavation. The pre-assessment is aimed at conducting field sampling and performing laboratory analysis prior to the excavation to identify soil handling requirements and a cost effective plan to manage the soils to be excavated. The results will also be useful in assessing potential hazards to personnel and identifying appropriate worker controls and personal protective equipment (PPE).

OBJECTIVE

The objective of this policy & procedure is to specify the planning requirements for excavations and outline the requirements for excavations based on location and size. In addition, this procedure identifies the requirements for handling, storage, and disposal of excavation soils based on their contamination classification. This document focuses on the pre-planning required to comply with SR MACT and other soil handling requirements.

DEFINITIONS

Asbestos Containing Material - Any material containing more than one percent (1%) asbestos.

Container - A container is any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled (40 CFR §260.10). The definition is broad enough to include some of the following: 55-gallon drum made of steel or plastic, a large tanker truck, a railroad car, or a bucket.

Hazardous Waste - A waste (solid or liquid) that is regulated under 40 CFR §261 or Title 22 of the California Code of Regulations. Wastes are considered hazardous if they are listed as hazardous by EPA or California or if they exhibit certain characteristics (ignitability, corrosivity, reactivity or toxicity).

Manifest - The form that identifies the name, quantity, and the origin, routing, and destination of waste during its transportation from the point of generation to the point of disposal, treatment, or storage.

PID Screening - A field screening method for the detection of VOCs. (PID is photoionization detector)

Site Remediation MACT (SR MACT) - Site Remediation MACT (40 CFR §63 Subpart GGGGG) sets standards to control emissions of Hazardous Air Pollutants (HAPs) from site remediation activities which includes soil excavation. Sometimes referred to as Site Remediation NESHAPs.

RELEVANT DOCUMENTS

- 40 CFR 63 Subpart GGGGG, Site Remediation MACT
- SCAQMD Rule 1166, Volatile Organic Compound Emissions from Decontamination of Soil
- SCAQMD Rule 1166 Various Locations Contaminated Soil Mitigation Plan
- SCAQMD Rule 1150, Excavation of Landfill Sites
- SCAQMD Rule 1403, Asbestos Emissions from Demolition/Renovation Activities
- Asbestos NESHAP [40CFR61 Subpart M]
- Policy & Procedure E107, VOC in Soils Handling (AQMD Rule 1166)
- Policy & Procedure E208, Fugitive Dust
- Policy & Procedure E211, Northeast Property Excavation
- Policy & Procedure E302, High VOC Wastes (RCRA Subpart CC and Site Remediation NESHAPS)
- Policy & Procedure E806, Waste Determination
- Policy & Procedure E303, Waste Storage Yard
- Policy & Procedure E304, Satellite Accumulation Areas
- Policy & Procedure E301, Container & Temporary Tank Labeling
- Policy & Procedure F/S 520, Excavations and Shoring
- Policy & Procedure F/S 1010, Excavation Inspection and Soil Monitoring
- Policy & Procedure F/S 1011, Excavations and Protection System
- Policy & Procedure L-014, Excavations or Ground Disturbance

SECTION II – PROCEDURE

EXPM = Excavation Project Manager
EXC = Excavation Contractor
EXF = Excavation Foreman
ECC = Environmental Compliance Coordinator
WE = Waste & Maintenance Engineer
RME = Remediation Management Engineer
WHC = Waste Handling Contractor
H&S = Health & Safety Department

Refer to Attachment C for "Excavation Planning Flow Chart Based on Categories of Excavation Area and Excavation Size" to complement this procedure

Activity	Responsibility
Identification of Excavation Location Category	
When the need for an excavation is identified, the Excavation Project Manager (EXPM) makes the initial determination of the location category using the map of restricted areas provided in this procedure (Attachment B) and the map in Procedure E211.	EXPM
Approvals for Excavations in Restricted Areas – Northeast Area	
If the excavation location is within the boundaries of the Northeast Area, refer to E211, contact the Waste & Maintenance Engineer (WE), and wait for approval and guidance before proceeding.	EXPM
Evaluate the need for excavation and provide guidance per procedure E211.	WE
Approvals for Excavations in Restricted Areas – Other Restricted Areas	
If the excavation location is within the boundaries of the restricted areas depicted in Attachment B of this procedure, contact the WE or Remediation Management Engineer (RME) and wait for approval before proceeding.	EXPM
Evaluate case-specific need for excavation, and provide approvals as warranted.	WE/RME
Excavation Size Evaluation	
Prepare a preliminary estimate of the amount of soil that will be disturbed during the excavation.	EXC
Minor Excavation, < 1 yd^3 soil	
Perform excavation; no pre-sampling or VOC monitoring for AQMD Rule 1166 is required.	EXF
Use appropriate PPE and safety procedures (see F/S 1011) in performing excavation.	EXF
Place soil in drum(s) or other appropriate waste container(s) as designated by the WHC if intended for disposal or stockpile for backfill if no apparent contamination. Install and secure cover over container except when added or removing soil.	EXF
Contact waste handling contractor (WHC) when containers are full or excavation is complete. Transfer containers within 3 days of filling to	EXF

Activity	Responsibility
designated drop-off area.	
Appropriately identify bins/containers as whether subject to SR MACT in the waste database and verify database.	WHC
Small Excavation, 1 – 20 yd^3 soil or Routine Construction/Maintenance	
Contact Environmental Compliance coordinator x5637 (ECC) regarding Rule 1166 requirements; see Procedure E107	EXC
Review excavation details and develop strategy for Rule 1166 compliance per Procedure E107.	ECC
Follow all 1166 requirements (see Procedure E107) per ECC, and: • If there is no apparent soil contamination and PID readings are less than 50 ppm, place soil in drums if intended for disposal or stockpile for backfill. • If soil contamination is apparent or PID readings are ≥ 50 ppm o Follow SR MACT handling and storage requirements (described in SR MACT Labeling, Storage and Transfer Requirements section) o Label as SR MACT VOHAP Contaminated Soil Pending Characterization	EXF
Use appropriate PPE and safety procedures (see F/S 1011) in performing excavation.	EXF
Track the number of containers/bins on Excavation Log form (Attachment E)	EXF
Contact waste handling contractor (WHC) when containers are full or excavation is complete. Transfer containers within 3 days of filling to designated drop-off area (waste yard or approved area).	EXF
Appropriately identify bins/containers as whether subject to SR MACT in the waste database and verify database against Excavation Log Form. Complete bottom portion of Excavation Log form (Attachment E).	WHC
Medium Excavation, 20 – 400 yd^3 soil	
Contact WE with information in Pre-assessment Form (Attachment D) if a pre-assessment will be conducted. (Pre-assessment is highly recommended to clearly define requirements and to control soil management costs)	EXPM
If pre-assessment is conducted, review data from Attachment D- Excavation Pre-Assessment Reporting Form and develop pre-assessment sampling plan. Review with WHC to ensure that containers are available and samples are handled according to the plan.	WE
Contact Environmental Compliance Coordinator (ECC) regarding Rule 1166 requirements; see Procedure E107	EXC
Review excavation details and develop strategy for Rule 1166 compliance per Procedure E107.	ECC
Follow all 1166 requirements (see Procedure E107) per ECC.	EXF
If no pre-assessment is conducted, then: • Follow most strict SR MACT handling and storage requirements	EXF

Activity	Responsibility
(described in SR MACT Labeling, Storage and Transfer Requirements section) • Label as SR MACT VOHAP Contaminated Soil Pending Characterization	
If pre-assessment is conducted, ensure that appropriately trained personnel perform pre-assessment sampling according to plan and submit samples to WHC for analysis.	EXPM
If pre-assessment is conducted, notify excavator of sample results (VOHAP level) / waste determination and provide guidance for performing excavation to comply with environmental requirements.	WE
Review sample results for potential hazards to excavation personnel and contact H&S as necessary to identify appropriate health and safety requirements.	EXF
Use appropriate PPE and safety procedures (see F/S 1011) in performing excavation.	EXF
Appropriately segregate contaminated soils and follow SR MACT requirements based on VOHAP contamination level and guidance provided by WE if pre-assessment was performed. • VOHAP < 10 ppm o No SR MACT requirements apply o Follow 1166 procedures (E107) • 10 ppm ≤ VOHAP < 500 ppm o Follow SR MACT procedures (described in SR MACT Labeling, Storage and Transfer Requirements section) for labeling and transfer only o Follow 1166 procedures (E107) for notifications, excavation monitoring and labeling. • VOHAP ≥ 500 ppm o Follow SR MACT procedures (described in SR MACT Labeling, Storage and Transfer Requirements section) for labeling, storage and transfer o Follow 1166 procedures (E107) for notifications, excavation monitoring and labeling. NOTE: Assume VOHAP≥ 500 ppm if no pre-assessment was completed.	EXF
Track the number of containers/bins on Excavation Log form (Attachment E)	EXF
Contact waste handling contractor (WHC) when containers are full or excavation is complete. Transfer containers within 3 days of filling to designated drop-off area.	EXF
Appropriately identify bins as whether subject to SR MACT in the waste database and verify database against Excavation Log Form. Complete bottom portion of Excavation Log form (Attachment E).	WHC
Large Excavation, ≥ 400 yd^3 soil	
Contact WE with information in Pre-assessment Form (Attachment D) (Pre-	EXPM

Activity	Responsibility
assessment is required).	
Review data from Attachment D- Excavation Pre-Assessment Reporting Form and develop pre-assessment sampling plan. Review with WHC to ensure that containers are available and samples are handled according to the plan..	WE
Contact Environmental Compliance Coordinator (ECC) regarding Rule 1166 requirements; see Procedure E107	EXC
Review excavation details and develop strategy for Rule 1166 compliance per Procedure E107.	ECC
Follow all 1166 requirements (see Procedure E107) per ECC.	EXF
Ensure that appropriately trained personnel perform pre-assessment sampling according to plan and submit samples to WHC for analysis.	EXPM
Notify excavator of sample results (VOHAP level) / waste determination and provide guidance for performing excavation to comply with environmental requirements	WE
Review sample results for potential hazards to excavation personnel and contact H&S as necessary to identify appropriate health and safety requirements.	EXF
Use appropriate PPE and safety procedures (see F/S 1011)	EXF
Appropriately segregate contaminated soils and follow SR MACT requirements based on VOHAP contamination level and follow guidance provided by WE as a result of pre-assessment. • VOHAP < 10 ppm o No SR MACT requirements o Follow 1166 procedures (E107) • 10 ppm ≤ VOHAP < 500 ppm o Follow SR MACT requirements (described below) for labeling and transfer only o Follow 1166 procedures (E107) for notifications, excavation monitoring and labeling. • VOHAP ≥ 500 ppm o Follow SR MACT procedures for labeling, storage and transfer o Follow 1166 procedures (E107) for notifications, excavation monitoring and labeling	EXF
Track the number of containers/bins on Excavation Log Form (Attachment E)	EXF
Contact waste handling contractor (WHC) when containers are full or excavation is complete. Transfer containers within 3 days of filling to designated drop-off area.	EXF
Appropriately identify bins as whether subject to SR MACT in the waste database and verify database against Excavation Log Form. Complete bottom portion of Excavation Log form (Attachment E).	WHC

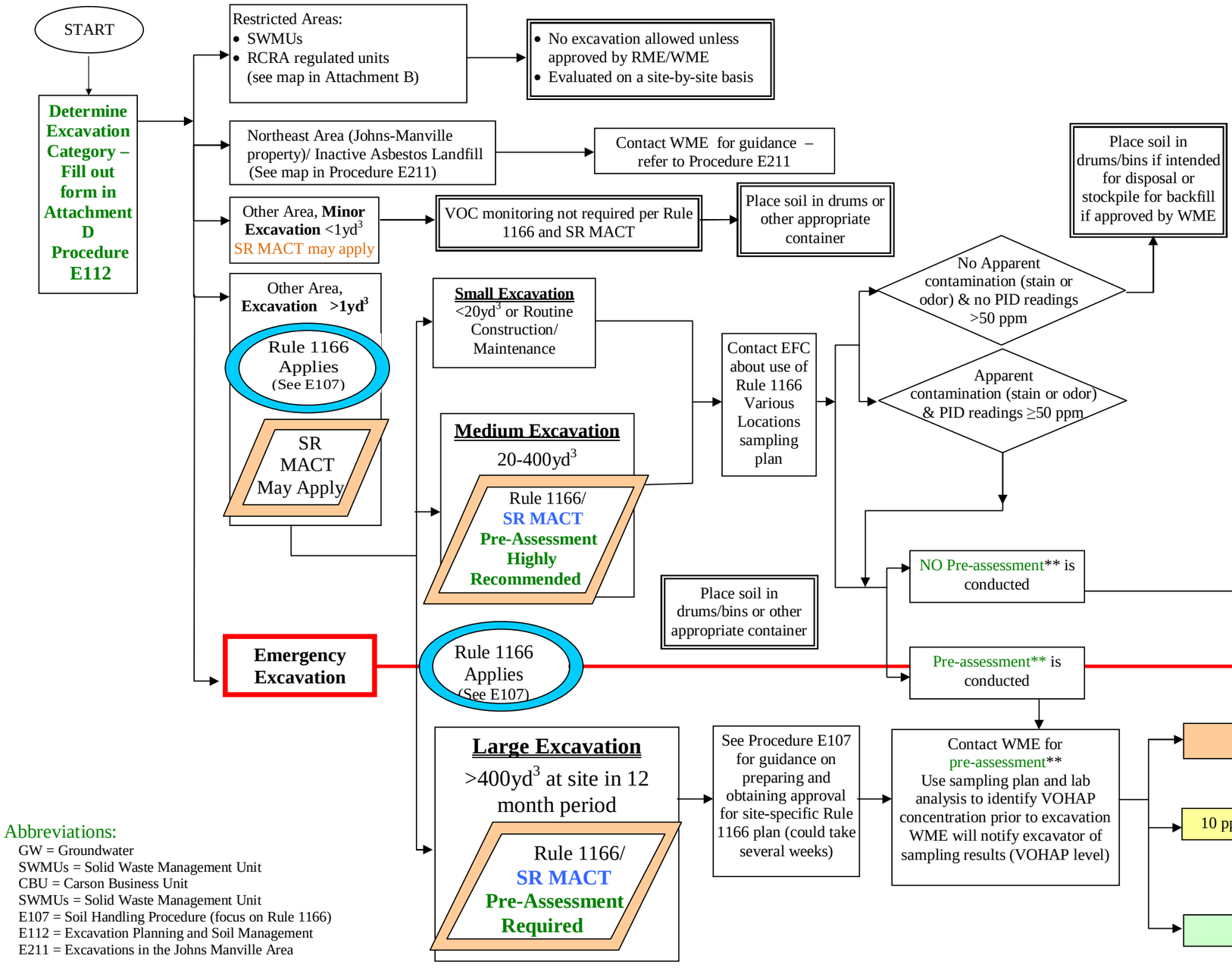
Activity	Responsibility
EMERGENCY EXCAVATIONS	
Notify ECC (or 501, who will notify Environmental on-call rep) via phone, email or in person prior to beginning excavation.	EXPM
If the incident requiring the emergency excavation was triggered following an Incident Command System (ICS) response, a specific waste management plan will be required. This plan will be created by the Waste adn Prevention Programs Engineerand approved by the HSSE incident command officer.	ICS Incident Command Officer / WE
Make appropriate Rule 1166 notifications per E107.	ECC or on-call Env. Rep.
Contact WHC to request that containers be made available.	EXF
Make containers available for emergency excavation use.	WHC
Follow all 1166 requirements (see Procedure E107) per ECC.	EXF
Use appropriate PPE and safety procedures (see F/S 1011)	EXF
No pre-assessment is conducted for emergency excavations, so • Follow the most strict SR MACT handling and storage requirements (i.e. assume VOHAP ≥ 500 ppm) • Label as SR MACT VOHAP Contaminated Soil Pending Characterization	EXF
Track the number of containers/bins on Excavation Log form as practical (Attachment E)	EXF
Contact waste handling contractor (WHC) when containers are full or excavation is complete. Transfer containers within 3 days of filling to designated drop-off area.	EXF WHC
Appropriately identify bins as whether subject to SR MACT in the waste database and verify database against Excavation Log Form. Complete bottom portion of Excavation Log form as practical (Attachment E).	WHC
SR MACT Labeling and Storage Requirements	
SR MACT Labeling Requirements	
Label as “SR MACT VOHAP Contaminated Soil”	EXF
SR MACT Storage Requirements	
Place excavated soil directly in an appropriate container which is with a secure cover except when adding or removing soil to container. Note that an appropriate container typically consist of the following: o Roll-off bin or end dump (certified vapor tight) o Drum with properly secured top, or o Certified vacuum truck only opened when adding or removing material. Contact ECC for guidance.	EXF
Excavation Pre-Assessment Information	
Submit the following information to the WE (Use Attachment D Form): • Purpose of excavation (new construction, maintenance);	EXPM

Activity	Responsibility
• Location of excavation on a scaled map; • Expected date of excavation; • Size of excavation, • Depth of excavation; • Any special considerations (known releases, types of wastes and products managed); and • Intended use of excavated soil, including backfill at original locations; reuse at different locations within the CBU; or off-site disposal.	
Provide the following information to the Excavator based on pre-assessment form data: • Number of samples needed • Locations and depths of soil sample locations; • Type of sample analysis needed Provide the following information to the Excavator based on pre-assessment sampling results • Type of containers needed for excavated soils • Type of vapor controls needed during excavation • Type of labels to be used	WE
Review sample results for potential hazards to excavation personnel and contact H&S as necessary to identify appropriate health and safety requirements. Determine appropriate health and safety requirements (see F/S 1011).	EXF
SR MACT Offsite Transfer Requirements	
Based on guidance provided by the WE and scope of excavation, transfer excavated soil within 30 days of beginning of excavation to an appropriate offsite facility to qualify for exemption provided by SR MACT regulation. Document meeting 30 day period on Excavation Log form (Attachment E).	WHC
If 30 day period is not met to qualify for SR MACT exemption, perform monitoring of containers and send soil to an offsite facility that meets SR MACT requirements (See E302).	WHC

SECTION III - ATTACHMENTS

Attachment A	Site Remediation MACT HAPs List
Attachment B	Site Map showing Restricted Areas/SWMUs
Attachment C	Excavation Planning Flow Chart Based on Categories of Excavation Area and Excavation Size
Attachment D	Excavation Pre-Assessment Reporting Form
Attachment E	Excavation Log Form

Attachment C. Excavation Planning Flow Chart Based on Categories of Excavation Area and Excavation Size



** Pre-assessment involves following an approved sampling plan prior to the excavation. Samples must be analyzed for VOHAP concentrations (results take up to two weeks). Samples must be collected following an approved sampling plan. Approval is obtained through the WME.
Benefits of pre-assessment:

- Determine whether soil is non-hazardous and can be stockpiled
- Identify the type and # of containers needed for contaminated soil
- Assist the excavators in planning for soil handling requirements and appropriate PPE

*** * Site Remediation MACT (SR MACT) Procedures:**

SR MACT Labeling Requirements (Contact WME for labeling requirements)
"SR MACT VOHAP Contaminated Soil"

SR MACT Storage Requirements
Place soil in containers as excavated and install/secure cover except when adding or removing soil from container. Typical containers include:

- Roll-off bin or end dump (certified vapor tight);
- Drum with properly secured top, or
- Certified vacuum truck only opened when adding or removing material

SR MACT Transfer Requirements
Based on guidance provided by the WME and scope of excavation, transfer excavated soil within 30 days of beginning of excavation to an appropriate offsite facility to qualify for exemption provided by SR MACT regulation. Otherwise, perform monitoring of containers and send soil to an offsite facility that meets SR MACT requirements
(see E302)

Abbreviations:

GW = Groundwater
SWMUs = Solid Waste Management Unit
CBU = Carson Business Unit
SWMUs = Solid Waste Management Unit
E107 = Soil Handling Procedure (focus on Rule 1166)
E112 = Excavation Planning and Soil Management
E211 = Excavations in the Johns Manville Area

Important Contact Information:

WME = Waste & Maintenance Engineer
RME = Remediation Management Engineer
EFC = Environmental ComplianceCoordinator

VOC level → (based on PID measurements) **VOHAP level ↓** (based on analytic results)	**VOC < 50 ppmv**	**50 ≤ VOC < 1000 ppmv**	**VOC ≥ 1000 ppmv**
VOHAP < 10 ppmv	No labeling or special storage OK to stockpile (<400 yd^3) if approved by WME	1166_{50} label Storage per Rule 1166 requirements Transfer per Rule 1166 requirements	1166_{1000} label Storage per Rule 1166 requirements Transfer per Rule 1166 requirements
10 ppmv ≤ VOHAP < 500 ppmv	SR MACT label No special storage Transfer per SR MACT requirements	SR MACT, 1166_{50} labels Storage per Rule 1166 requirements Transfer per SR MACT requirements	SR MACT, 1166_{1000} labels Storage per Rule 1166 requirements Transfer per SR MACT requirements
VOHAP ≥ 500 ppmv OR No pre-assessment conducted (VOHAP not known)	SR MACT label Storage per SR MACT requirements Transfer per SR MACT requirements	SR MACT, 1166_{50} labels Storage per SR MACT requirements Transfer per SR MACT requirements	SR MACT, 1166_{1000} labels Storage per SR MACT requirements Transfer per SR MACT requirements

TYPES OF LABELS

1166_{50} Label, 1166_{1000} Label
See Procedure E107

SR MACT Labeling Requirements
"SR MACT VOHAP Contaminated Soil"

TYPES OF TRANSFER

1166 Transfer Requirements
See Procedure E107

SR MACT Transfer Requirements
See Procedure E302

TYPES OF STORAGE

Rule 1166 Storage Requirements
See Procedure E107

SR MACT Storage Requirements
See Procedure E302

Attachment A Site Remediation MACT Hazardous Air Pollutants (HAPs) List

Acetaldehyde	Hexachlorobutadiene
Acetonitrile	Hexachloroethane
Acetophenone	hexane
Acrolein	Isophorone
Acrylonitrile	Lindane (all isomers)
Allyl chloride	Methanol
Benzene	Methyl bromide (Bromomethane)
Benzotrichloride	Methyl chloride (Choromethane)
Benzyl chloride	Methyl chloroform (1,1,1-Trichloroethane)
Biphenyl	Methyl iodide (Iodomethane)
Bis(chloromethyl)ehter	Methyl isobutyl ketone (Hexone)
Bromoform	Methyl isocyanate
1,3-Butadiene	Methyl methacrylate
Carbon disulfide	Methyl tert butyl ether
Carvon Tetrachloride	Methylene chloride (Dichloromethane)
Carbonyl sulfide	Naphthalene
Chloramben	Nitrobenzene
Chlorobenzene	2-Nitropropane
Chloroform	Pentachloronitrobenzene (Quintobenzene)
Chloromethyl methyl ether	Pentachloophenol
Chloroprene	Phosgene
Cumene	Proplonaldehyde
2,4-D, salts and esters	Propylene dichloride (1,2-Dichloroporpane)
Diazomethane	Propylene oxide
Dibenzofurans	1,2-Propytenimine (2-Methyl aziridine)
B1,2-Dibromo-3chloropropane	Styrene
1,4-Dichlorobenzene(p)	Styrene oxide
Dichloroethane (Ethylene dichloride)	1,1,2,2-Tetrachloroethane
Dichloroethyl ether Bis(2-chloroethylether)	Tetrachloroethylene (Perchloroethylene)
1,3-Ddichloropropene	Toluene
Diethyl sulfate	o-Toluidine
Dimethyl carbomoyl chloride	1,2,4-Trichlorobenzene
Dimethyl sulfate	1,1,1-Trichloroethane (Methyl chlorform)
N,N-Dimethylaniline	1,1,2-Trichloroethane (Vinyltrichloride)
2,4-Dinitrophenol	Trichloroethylene
2,4-Dinitrotoluene	2,4,5-Trichlorophenol
1,4-Dioxane (1,4-Diethyleneoxide)	2,4,6-Trichlorophenol
Epichlorohydrin (1-Chloro-2,3-epolypropane)	Triethylamine
1,2-Epoxybutane	2,2,4-Trimethylpentane
Ethyl acrylate	Vinyl acetate
Ethyl benzene	Vinyl bromide
Ethyl chloride (Chloroethane)	Vinyl chloride
Ethylene dibromide (Dibromoethane)	Vinylidene chloride (1,1-Dichloroethylene)
Ethylene dichloride (1,2-Dichloroethane)	Xylenes (isomers and mixture)
Ethylene imine (Aziridine)	o-Xylenes
Ethylene oxide	m-Xylenes
Ethylene dichloride (1,1-Dichloroethane)	p-Xylenes
Hexachlorobenzene	

ATTACHMENT B (SITE MAP) HAS BEEN OMITTED FROM THIS COPY OF THE PROCEDURE.

Attachment D
Excavation Reporting Form

Submit this information to the WE at least 1 month prior to excavation	
Information Prepared by:	Date:
Excavator Contact Information	
Company Name:	
Contact Name:	
Street Address:	
City, State, ZIP:	Phone:

Project Name/Description	
Location of Planned Excavation	_____ **Also attach scaled refinery map indicating location of planned excavation**
Purpose of Excavation	❒ New Construction ❒ Maintenance ❒ Other (comment below) _____
Expected Date of Excavation	Start Date _____ End Date _____
Approximate Size of Excavation (ft^3 of soil excavated)	❒ < 1yd^3 ❒ 1-20 yd^3 (1 bin) ❒ 20-400 yd^3 (1-20 bins) ❒ ≥ 400 yd^3 (>20 bins) Additional information, if available _____
Depth of Excavation	
Special Considerations (if applicable)	(known releases, types of wastes and products managed, etc)
Intended use of excavated soil	❒ Off-site disposal ❒ Other *(describe below)* ❒ Backfill at original location ❒ Reuse at different location within CBU _____

Pre-Excavation Sampling Plan *(to be filled out by WE)*	
Number of samples required	
Locations and depths of soil samples (also see marked map)	
Excavation Requirements *(to be filled out by WE using sampling results)*	
Type of containers required	
Type of vapor controls required	
Type of labels required	

Soil Transfer Plan (decided by WE, WHC & Excavator)	❒ All excavated soils removed within 30 days* ❒ Container monitoring per E302
* If soils cannot be removed within 30 days, contact WE and WHC as soon as possible	
NOTE: If contamination that was not identified in the pre-assessment is encountered, IMMEDIATELY STOP THE EXCAVATION and notify WE, HSE and/or 501	

WHC = Waste Handling Contractor, WME = Waste & Maintenance Engineer

Attachment E
Excavation Log Form

Information Prepared by:	Date:
Excavator Contact Information	
Company Name:	
Contact Name:	
Street Address:	
City, State, ZIP:	Phone:
Project Information	
Project Name/Description	
Location of Excavation	______________________________
Date of Excavation	Start Date ____________ End Date ______________

Bin #	**Size**	**Date/time filled**	**Date/time transferred to WHC**	**Label description** ***(Contact WHC with label questions)***	***(To be filled in by WHC)***	
					Lab report #	**Manifest #**
Database Tracking Updated ***(to be completed by WHC)***	❒ Yes ❒ No					

Soil Transfer Certification (if applicable)	I certify that all excavated soils from this project were removed and received by offsite facility within 30 days of the start of excavation. WHC Certification Signature: ______________________________ Name (printed) ______________________ Date ____________

WHC = Waste Handling Contractor, WME = Waste & Maintenance Engineer

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 *WATSON COGENERATION STEAM AND ELECTRICITY RELIABILITY PROJECT*

Docket No. 09-AFC-1

PROOF OF SERVICE LIST
(Revised 2/8/10)

APPLICANT

Ross Metersky
BP Products North America, Inc.
700 Louisiana Street, 12th Floor
Houston, Texas 77002
ross.metersky@bp.com

APPLICANT'S CONSULTANTS

URS Corporation
Cynthia H. Kyle-Fischer
8181 East Tufts Avenue
Denver, Colorado 80237
cindy_kyle-fischer@urscorp.com

COUNSEL FOR APPLICANT

Chris Ellison
Ellison Schneider and Harris LLP
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816
cte@eslawfirm.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

INTERVENORS

California Unions for Reliable Energy (CURE)
c/o: Tanya A. Gulesserin
Marc D. Joseph
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard,
Suite 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com

ENERGY COMMISSION

ROBERT WEISENMILLER
Commissioner and Presiding Member
rweisenm@energy.state.ca.us

KAREN DOUGLAS
Chairman and Associate Member
kldougla@energy.state.ca.us

Kourtney Vaccaro
Hearing Officer
kvaccaro@energy.state.ca.us

Alan Solomon
Project Manager
asolomon@energy.state.ca.us

Christine Hammond
Staff Counsel
chammond@energy.state.ca.us

*Jennifer Jennings
Public Adviser's Office
publicadviser@energy.state.ca.us

*indicates change

DECLARATION OF SERVICE

I, Cindy Kyle-Fischer, declare that on June 11, 2010, I served and filed copies of the attached *Responses to Questions from California Energy Commission Staff*, dated June 2010. 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: **[www.energy.ca.gov/sitingcases/watson]**.

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

_X_ by personal delivery or by depositing in the United States mail at Denver, Colorado 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 and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

____depositing in the mail an original and ___ paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 09-AFC-1
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.

Cindy Kyle-Fischer