

## DOCKETED

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<b>Document Title:</b>	ACE Cogen - 2017 PTA Landfill Separation
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<b>Filer:</b>	Mary Dyas
<b>Organization:</b>	Ace Cogeneration Company
<b>Submitter Role:</b>	Applicant
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# **ACE Cogeneration Expansion Project - Ash Landfill Separation Amendment**

Submitted to the

**California Energy Commission**

Prepared by

**ACE Cogeneration Company**

**May 15, 2017**

**Docket No. 86-AFC-1C**

# ACE Cogeneration Expansion Project – Ash Landfill Separation Amendment

## Requested Action

The ACE Cogeneration Company (ACC) requests the California Energy Commission (CEC) to approve this petition to:

1. Modify conditions Soil Resources 8-4 D and Visual Resources 3-8 to allow a portion of ash landfill cell #5 to remain open,
2. Separate the ash landfill from the rest of the ACE project, and
3. Terminate CEC jurisdiction over the ash landfill.

These actions will not have an environmental impact, will comply with applicable LORS, and will facilitate the sale and reuse of the ash landfill site.

## Background

The Argus Cogeneration Expansion (ACE) project is an existing but non-operable 108-megawatt (MW) coal-fired power plant. It is located on the northwest side of Searles Lake in Trona, San Bernardino County, California. The project is owned by ACE Cogeneration Company (ACC) and includes a circulating fluidized bed boiler, turbine generator, related equipment and structures, switchyard, cooling tower, administration building, and ash landfill. When the project was permitted in 1988, the California Energy Commission (CEC) also approved disposal of the fly and bottom ash produced by project in a landfill located on Searles Lake. The Bureau of Land Management subsequently closed the landfill due to a change in policy. ACC subsequently petitioned the CEC to allow the construction and operation of a new landfill dedicated to handling ACE project ash. The CEC approved the landfill in December 1989. The power plant and relocated ash landfill began operations in January 1991. The ACE coal-fired power plant ceased operations in October 2014.

The ACE ash landfill consists of five cells located on a 65-acre site immediately northwest of the power plant. The only material disposed in the landfill was fly and bottom ash produced by the power plant and refractory lining from the boiler. When slurried into the landfill during disposal, the ash became a concrete-like material determined by the Lahontan Regional Water Quality Control Board (LRWQCB) to be inert and non-hazardous. The entire ash landfill site is fenced, secured, and monitored.

When ACE ceased operations, all ash remaining at the boiler was disposed in the landfill and ash disposal operations terminated. Cells #1 to 4 had previously been closed, capped, and allowed to naturally revegetate. Cell #5 was approximately 80% full with solidified ash sloping gently from the two ash disposal locations on the north and south of the cell toward the west. A portion of cell #5 was left open to allow for disposal of boiler refractory lining during demolition.

ACC submitted a petition to the CEC in November 2014 requesting approval to decommission the power plant and close the ash landfill. The CEC approved the petition in June 2015.

In September 2015, ownership of ACC was transferred to New Mill Capital. The new owners asked if demolition could be delayed while they evaluated options for reuse of the ACE project. ACC later determined it was viable to operate ACE but there is a potential market for reuse of the boiler and other major equipment. ACC also concluded that the refractory material will not be disposed in the existing landfill. The material will either be disposed in another permitted landfill or relocated with the boiler. Consequently, the ash landfill is no longer required and the site can potentially be sold and reused for other industrial development.

## Petition

This petition to separate the ash landfill from the rest of the ACE project and terminate CEC jurisdiction is consistent with the intent of the CEC's approved decommissioning plan for the ACE project. The proposed action will not involve any physical changes to the environment, will not result in any significant adverse environmental impacts, and is consistent with all applicable laws, ordinances, regulations, and standards (LORS). It will allow sale of the ash landfill site, reuse a disturbed industrial site, and provide jobs and economic development benefits to Trona and San Bernardino County.

This filing is made pursuant to Section 1769 of the Energy Commission's Power Plant Siting Regulations. When submitting a petition for modifying a Commission decision, the regulations require a project owner to provide specific information summarized below:

### **(A) A complete description of the proposed modifications, including new language for any conditions that will be affected**

The modification, if approved, will separate the ash landfill and site from the ACE Project certification and terminate the CEC's jurisdiction over the ash landfill and site.

No physical changes will occur to the site. ACC will be removing the all pumps, structures (sheds), and equipment associated with ash disposal operations. These activities will not result in any changes to the site, any environmental impacts, and are consistent with applicable LORS.

Conditions Soil Resources 8-4 D and Visual Resources 3-8, approved in 1989, require closed landfill cells to be covered with two feet of soil to minimize wind erosion and minimize contrast with the surrounding area. This petition requests the Commission to modify these two conditions allowing the remaining open portion of cell #5 to remain open if they meet the intent of these conditions. Proposed language for modifying these conditions is proposed on pages 21 and 22.

**(B) A discussion of the necessity for the proposed modifications**

The modifications will reduce costs and facilitate the sale and reuse of the ash landfill site. This will create jobs in the Trona area, provide regional economic benefits, and reduce the potential of industrial development on a green-field site.

Reuse of the site will require obtaining an Environmental Impact Report, Conditional Use Permit, and approved grading plan from San Bernardino County.

**(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time**

The project owner did not know of or have information related to this modification during the certification proceeding in 1988, ash landfill relocation amendment proceeding in 1989, or decommissioning plan amendment proceeding in 2015.

**(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted**

The modification is consistent with the objectives of the CEC's decision on decommissioning the project and will facilitate sale of the ash landfill for a new industrial use.

**(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts**

The modification will not result in changes to the environment or significant adverse environmental impacts (see discussion of potential environmental impacts below).

Modifying conditions Soil Resources 8-4 D and Visual Resources 3-8 to allow a portion of cell #5 to remain open is consistent with the intent of those conditions and will not create any potential public health, safety, or environmental risk:

- The ash landfill is fully fenced and secured to preclude public access.
- The design and engineering of the landfill berms and cells was previously approved by the CEC.
- The slopes of the berms have been allowed to revegetate naturally and blend with the environment.
- The ash is a solid, cement-like material that has been determined to be inert and non-hazardous by the Lahontan Regional Water Quality Control Board and not subject to producing windborne particulate emissions.
- Cells #1-4 and a portion of cell #5 have been closed and capped.
- The Lahontan Regional Water Quality Control Board has rescinded their permit and returned the closure and post closure financial assurance for the ash landfill because the ash does not pose a threat to water quality.
- The exposed disposed ash is not prone to producing windborne particulate emissions and the Mojave Air Quality Management District has rescinded their permit for the entire ACE project.
- The open portion of cell #5 is not visible from adjacent parcels because of the location and configuration of the ACE ash landfill site.

**(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards**

The modification will not result in noncompliance with any LORS (see detailed discussion of LORS compliance below).

Modification of condition Soil Resources 8-4 D and Visual Resources 3-8 to allow a portion of cell #5 to remain open is consistent with the intent of those conditions and will not result in any LORS compliance issues. The exposed ash is a cement-like material the Lahontan Regional Water Quality Control Board has determined to be inert and non-hazardous. The Lahontan Regional Water Quality Control Board has rescinded their permit and returned the closure and post closure financial assurance for the ash landfill because the ash does not pose a threat to water quality (see discussion of the ash material and Lahontan Regional Water Quality Control Board determinations and actions below). The exposed ash is not prone to producing windborne particulate emissions and the Mojave Air Quality Management District has rescinded their permit for the entire ACE project.

**(G) A discussion of how the modification affects the public**

The modification will have no direct impact on the public. The modification will have a socioeconomic benefit by allowing the ash landfill to be sold and reused as an existing industrial site, creating jobs, and providing economic development.

**(H) A list of property owners potentially affected by the modification**

A list of property owners is provided in Attachment A.

**(I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.**

The modification will have no impact of nearby property owners. The modification will benefit the community of Trona and county of San Bernardino by allowing the ash landfill site to be sold and reused for industrial development, creating jobs and economic development.

## **Argus Cogeneration Expansion Project – Description and Background**

The Argus Cogeneration Expansion (ACE) project is an existing but non-operable 108 megawatt (MW) coal-fired circulating fluidized bed power plant located on the northwest side of Searles Lake in Trona, San Bernardino County, California. It was originally proposed and permitted by the Kerr-McGee Chemical Corporation (KMCC) who also owned and operated the adjacent Argus chemical production plant. KMCC developed the ACE project to reduce its energy costs, provide steam to the adjacent Argus chemical plant, and generate electricity for sale. The California Energy Commission (CEC) approved the ACE Application for Certification (AFC) on January 8, 1988 and KMCC began commercial operation of the power plant in January 1991. KMCC later transferred ownership of the ACE project to the ACE Cogeneration Company (ACC) and sold its mining and mineral processing facilities including the Argus plant located immediately adjacent to ACE. ACC still owns the ACE project while Searles Valley Minerals (SVM) owns and operates the former KMCC mining and mineral facilities.

ACC ceased operations at the ACE power plant on October 2, 2014 and placed the facility in a long-term outage mode to secure the facility and minimize or avoid safety and environmental hazards while the decommissioning plan was prepared and reviewed. Placing the facility in long-term outage mode included consuming all remaining fuel stock; disposing all remaining ash in the ash land fill; draining and either returning or disposing most of the fluids<sup>1</sup> including ammonia for the air emission control system; de-energizing the plant; and isolating the plant interconnections to off-site services. The CEC approved the decommissioning plan for the project on June 10, 2015.

New Mill Capital acquired ACC in September 2105. In November 2015, ACC requested demolition be delayed while it evaluated options to find new uses for the ACE facility that would provide economic benefits to the region. After an initial screening, ACC focused on two primary reuse options:

1. Modify the facility to produce renewable hydrogen.
2. Dismantle and transport the major equipment for use in a different location.

ACC determined the ideal reuse option would be produce renewable, carbon-free hydrogen. This would require ACC to convert the ACE boiler to burn forest and agriculture wood waste and use the resulting electricity to produce hydrogen through electrolysis of brackish water. The hydrogen could be available for the emerging fuel

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<sup>1</sup> Only three tanks on-site contain hazardous materials: two containing sulfuric acid and one caustic soda. The tanks are partially drained and located in on-site containment structures.

cell vehicle market, stationary fuel cell market, refineries, or natural gas utility system. While conversion of the ACE facility to a renewable hydrogen facility is a viable option from a technical, environmental, regulatory, and policy perspective, ACC identified barriers prevent it from becoming reality:

1. The lack of credible information on the current and expected future market for hydrogen, including renewable hydrogen, in California and/or the western United States.
2. The lack of facilities demonstrating the direct use of biomass generated power in hydrogen electrolysis facilities.
3. The lack of government support for new renewable hydrogen production facilities.

The only reuse option for the ACE project at this point is to remove and transport select equipment and structures to a new location. Several entities are interested in purchasing equipment and are continuing their inspections of the facility and discussions with ACC. If those discussions are not successful, ACC will proceed with demolition and removal of the equipment and structures under the approved decommissioning plan.

## ACE Ash Landfill – Description and Background

The ACE ash landfill is located on 65 acres owned by ACC located northwest of the ACE power plant site (see Figure 1). The site is bound on the southeast by the ACE Project and SVM's mineral processing facility, on the southwest by SVM's ash landfill, on the northwest by a flood control levee and BLM managed land, and on the east by the Trona Cemetery and Trona Valley Railroad track.

The landfill is divided into five cells that were successively filled during the operation of the ACE power plant (see Figure 2). Cells #1, 2, and 4 have been closed and capped according to CEC and LRWQCB requirements. Cell #3 has been closed and is covered with excess soil to be used for closing and capping cell #5. Boulders have been placed randomly on the capped cells and slopes of the landfill and native vegetation has been allowed to reestablish<sup>2</sup>.

The entire landfill is fenced and secured to prohibit unauthorized access. The perimeter fence and landfill are inspected weekly.

A portion of cell #5 remains open. As described in the Decommissioning Plan (Argus Cogeneration Company, ACE Project Decommissioning Plan, November 25, 2014, page 3-5), all but approximately 20% of cell 5 was filled with ash produced during the 2014 operating season and closed in accordance with the existing RWQCB waste discharge requirements (WDRs). The open area covers approximately 6.5 acres. Pumps and other equipment used to slurry the ash into the landfill remain in place on the northwest and southeast edge of the open area. The surface of the open area is a few feet below the pumps and slopes gradually to the western side of the cell.

The existing ash landfill was not part of the ACE project when it was permitted by the CEC. As noted in the AFC Decision, the ash produced by ACE was to be disposed at Searles Lake:

“The proper disposal of wastes generated during operation of the proposed ACE project will ensure the protection of area water quality. Boiler fly ash and bottom ash will be transported to and disposed of at the Searles Lake bed.” (CEC, Commission Decision Application for Certification for Kerr McGee Chemical Corporation's Argus Cogeneration Expansion Project, January 1988, page 42)

“During operation of the proposed project, several types of wastes will be generated. Approximately 94 tons per day of boiler fly ash and bottom ash will

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<sup>2</sup> The CEC biological resources condition 8-4 D. requires extensive revegetation including container plants and saplings. All these efforts failed because of the harsh climate. The agencies agreed that natural revegetation had a greater success rate and was deemed more appropriate (Personal communication with Steve Haleman, ACE Environmental Coordinator)

**Figure 1  
ACE PROJECT SITE AND ASH LANDFILL**



**Figure 2**  
**ACE ASH LANDFILL DETAIL**



 **Open portion of cell #5.**

result from the burning of coal. If the ash is found to be (or assumed to be) potentially hazardous, Applicant will seek a variance from DHS to manage the ash as a special waste, and will dispose of it as specified by the LRWQCB. Otherwise the ash will be disposed of at the Searles Lake disposal facility which has adequate capacity for project ash disposal (March FSA 18-7-8, 18-9, 18-10).” (CEC, Commission Decision Application for Certification for Kerr McGee Chemical Corporation’s Argus Cogeneration Expansion Project, January 1988, page 70)

The Searles Lake disposal area was located on land managed by the Bureau of Land Management. After the CEC permitted ACE, federal policy was modified to prohibit waste disposal on federal land. This led to closure of the Searles Lake disposal area.

KMCC subsequently submitted an amendment requesting CEC approval to change the location of the disposal site and methods of handling ash at the new site. The CEC approved the amendment on November 29, 1989 (CEC, Docket No. 86-AFC-1C, Order Approving Amendment of Project Description, November 29, 1989) concluding the proposed landfill:

- Was consistent with the overall intent of the ACE Project Decision
- Would not result in new unmitigated impacts
- Would not harm the public interest

The CEC also established conditions of certification related to the construction, operation, and closure of the landfill. Conditions related to closure were:

**Visual Resources 3-8:** ACC shall cover the ash disposal site with soil and revegetate the outer berm slopes with native plants so as to minimize visual contrast with the natural setting of the site.

Verification: In the monthly compliance report ACC shall notify the California Energy Commission (CEC) Compliance Project Manager (CPM) when each phase has been completed and is ready for inspection.

**Biological Resources 5-13:** One year prior to the time of facilities deactivation, ACC shall prepare a decommissioning plan which includes biological resource elements.

Verification: ACC will submit the biological resource elements of the decommissioning plan to the Commission CPM for a determination of adequacy and acceptability according to the laws in effect at that time.

**Soil Resources 8-4:** ACC shall submit a combined grading and erosion control plan for the ACE ash disposal site. Mitigation shall include all of the following...:

- D. After a disposal cell is filled to capacity, it shall be capped with a 2 foot soil layer and the exposed surfaces revegetated with native plants to minimize wind erosion over the long term. The erosion control plan shall identify the

type of plants that shall be used for revegetation, seeding rates, number and spacing of container plants or saplings, the type and amount of soil amendments and mulches, and amount and timing of irrigation.

Verification: Sixty days prior to commencing site preparation, ACC shall submit the grading and erosion control plan to the CEC Compliance Project Manager (CPM) and the San Bernardino County Building and Safety or Inyo County Building Department, depending upon the site selected, for review and approval. Within 30 days after receipt of the combined plan, CEC and the appropriate county shall notify ACC of the acceptability of the plan.

ACC also obtained a waste discharge permit for the landfill from the Lahontan Regional Water Quality Control Board (LRWQCB) in 1990 (Board Order No. 06-90-05). It authorized creation of the landfill and established operating, monitoring, and sampling requirements. The LRWQCB updated the waste discharge requirements in 2000 (Board Order No. 6-00-92; see Attachment 2). The updated order concluded:

- The discharge of ash poses a minor threat to ground water quality (page 6)
- The ash waste produced by ACE is non-hazardous and inert (page 4)
- Disposal of refractory/boiler waste in the landfill is allowed (page 2)
- ACC needed to develop and update a closure/post closure plan (page 11)
- ACC needed to provide financial assurance for closure and post closure (page 11)

On January 11, 2017, the LRWQCB issued an order rescinding the waste discharge requirements and permit for the ash landfill. They took this action because: “Water Board staff have determined that the ash waste is inert. It has always been determined to be non-hazardous. WB staff have also determined this ash landfill does not pose a threat to water quality...” (Christy Hunter, LRWQCB, email, October 20, 2016) After rescinding the permit, the Board returned the closure and post closure financial assurance bonds for the landfill.

ACC also holds Standardized Non-hazardous Ash Solid Waste Facility Permit 36-AA-0311 issued by San Bernardino County Division of Environmental Health Services as the Local Enforcement Agency dated December 6, 2011. This allows ACC to operate the landfill as a nonhazardous ash disposal site. The San Bernardino County Department of Environmental Health Services also makes monthly inspections of the ash landfill. ACC is working with the County and California Department of Resources Recycling and Recovery (CalRecycle) on terminating their permit since the landfill is no longer operational. In conjunction with termination of this permit, ACC will be restoring the site by removing all pumps, structures (sheds), and equipment associated with ash disposal operations.

In its November 2014 petition to decommission the ACE Project, ACC discussed closing the ash landfill in accordance with LRWQCB requirements and turning the site over for potential industrial use (ACC, ACE Project Decommissioning Plan, November 25, 2014, pages 4-1 and 4-6). The CEC staff concluded the proposed

decommissioning activities would not result in significant adverse impacts and would comply with all applicable LORS (California Energy Commission, Argus Cogeneration Expansion Project (86-AFC-1C) Staff Analysis of Petition to Decommission, April 8, 2015). The Commission did not establish any new conditions when it approved the decommissioning decision (California Energy Commission, Order Approving a Petition to Decommission the Argus Cogeneration Expansion Project, June 10, 2015).

## Environmental Impact and LORS Conformance Assessment

The setting, environmental impacts and LORS conformance associated with the decommissioning of the ACE project including closure of the ash landfill have been previously discussed in three documents:

- Argus Cogeneration Company, ACE Project Decommissioning Plan, November 25, 2014
- California Energy Commission, Argus Cogeneration Expansion Project (86-AFC-1C) Staff Analysis of Petition to Decommission, April 8, 2015
- California Energy Commission, Order Approving a Petition to Decommission the Argus Cogeneration Expansion Project, June 10, 2015

This petition seeks to modify two existing conditions (Soil Resources 8-4 and Visual Resources 3-8), separate the ash landfill from the ACE project, and terminate CEC jurisdiction over the ash landfill. These actions will not result in any physical changes to the existing environment and will comply with all applicable LORS.

The following sections describe the setting, environmental impacts, LORS conformance, and conditions for the ash landfill separation and permit termination.

### Setting

The ACE ash landfill site is currently a heavily disturbed and fenced industrial site (see Figure 2). A majority of the landfill (cells #1 to 4 and a portion of cell #5) is closed and capped with soil at least 2 feet deep, randomly placed boulders, and allowed to revegetate naturally. Cell #3 is also covered with excess soil intended for closing and capping the open portion of cell #5. Cell #5 is approximately 80% full and partially covered. The exposed ash in the open portion of the cell is a solid, concrete-like material certified to be inert and non-hazardous by the LRWQCB.

The CEC's recent Staff Assessment for the Petition to decommissioning the ACE Project stated:

“Biological Resources notes that the project site is an existing developed industrial site and decommissioning would occur on site with no new disturbance to any natural habitats (saltbush scrub and creosote bush scrub). The biological surveys performed by ACE in 2012 and 2013 on the plant site and surrounding area concluded that no habitats or protected species were present on or immediately adjacent to the ACE site.”

“Geological and Paleontological Resources found that the ACE site and its surroundings are currently heavily disturbed and have been used for industrial

purposes including power generation, mineral extraction, coal storage, and ash landfills for over 35 years.” (California Energy Commission, Argus Cogeneration Expansion Project (86-AFC-1C) Staff Analysis of Petition to Decommission, April 8, 2015, page 3)

Attachment 3 contains photos of the existing ash landfill site.

## **LORS Conformance and Potential for Environmental Impacts**

The CEC staff’s analysis of the Petition to decommission the ACE Project stated:

“Staff concludes that the following required findings, mandated by Title 20, California Code of Regulations, section 1769 (a)(3), can be made, and staff recommends approval of the petition by the Energy Commission:

- ...There would be no new or additional unmitigated, significant environmental impacts associated with the proposed decommissioning;
- The facility would remain in compliance with all applicable laws, ordinances, regulations, and standards;
- Decommissioning of the heavily disturbed ACE site and its surroundings will remove some industrial uses including power generation, mineral extraction, coal storage, and ash landfills (and accompanying emission and environmental impacts) related to coal-fired power generation;
- The proposed decommissioning would be beneficial to the public because analysis of the decommissioning proposal shows that the planned activities will not result in any adverse environmental impacts; and
- The proposed decommissioning is justified because there has been a substantial change in circumstances since the Energy Commission certification, in that under California’s greenhouse gas emissions requirements, the project will no longer be economically viable using coal as a fuel.” (California Energy Commission, Argus Cogeneration Expansion Project (86-AFC-1C) Staff Analysis of Petition to Decommission, April 8, 2015, page 8)

The Commission, in its decision on the Petition to decommission the ACE project concluded:

“Based on staff’s analysis, the Energy Commission concludes that the proposed decommissioning will not result in any significant impacts to public health and safety, or to the environment. The Energy Commission finds that:

- ...The project will remain in compliance with all applicable laws, ordinances, regulations, and standards, subject to the provisions of Public Resources Code, section 25525..." (California Energy Commission, Order Approving a Petition to Decommission the Argus Cogeneration Expansion Project, June 10, 2015, page 2)

The proposed action to separate the ash landfill from the existing ACE Project certification and terminate the CEC jurisdiction to allow for sale and reuse of the site is consistent with the CEC's previous conclusions. It will not result in any physical change to the existing environment. It will result in leaving a portion of cell #5 open until sale and redevelopment of the site occurs. Leaving a portion of cell #5 open does not represent a public health or environmental concern because:

- The disposed ash has been certified inert and non-hazardous by the LRWQCB.
- The disposed ash is a solid, concrete like material not subject to wind or water erosion.
- The open portion of cell #5 is internal to the landfill and not visible from the adjacent areas and does not contrast with the surrounding area.

Leaving a portion of cell #5 open does not represent safety concern because the landfill site is fenced and secured to prevent public access and the surface of open portion of cell #5 is easily accessible and hence not an entrapment hazard.

Once the CEC's jurisdiction is terminated, San Bernardino County will be responsible for reviewing and approving any proposed reuse and final grading of the ash landfill site through its Conditional Use Permit process. San Bernardino County will also be the lead agency under the California Environmental Quality Act. Depending on the nature of the reuse, other state and local agency permits may also be required.

The proposed action will have a local and regional socioeconomic benefit. Splitting the ash land from the rest of the ACE project and terminating CEC jurisdiction will facilitate sale and redevelopment of the site. This will result in land use and socioeconomic benefits by allowing business development and job creation opportunities is consistent with Policy ED 10.2 of the Economic Development Element of the San Bernardino County General Plan (San Bernardino County, 2007 General Plan, adopted March 13, 2007, amended April 24, 2014, page IX-13).

Table 1 summarizes the LORS compliance, environmental impact, and condition compliance of the requested action.

**Table 1**  
**LORS COMPLIANCE, ENVIRONMENTAL IMPACT, and CONDITION ASSESSMENT**

<b>Technical Area</b>	<b>Complies with Existing Applicable LORS?</b>	<b>Potential for Significant Adverse Impacts?</b>	<b>Approved and Proposed Conditions</b>
Air Quality and Greenhouse Gases	Complies with all applicable air quality LORS. There are no activities resulting in air or greenhouse gas emissions.	There are no potential impacts. There are no activities resulting in air emissions and the disposed ash is a solid, cement-like material that is not subject to wind erosion.	Complies with all existing conditions. No additional conditions are proposed.
Public Health	Complies with all applicable public health LORS.	There are no potential impacts. There are no activities resulting in air emissions and the disposed ash is a solid, cement-like material that has been certified as inert and non-hazardous. The landfill is fenced and secured.	Complies with all existing conditions. No additional conditions are proposed.
Hazardous Materials Management	Complies with all applicable hazardous material management LORS.	There are no potential impacts. There are no activities resulting in air emissions and the existing disposed ash is a solid, cement-like material that has been certified as inert and non-hazardous. The landfill is fenced and secured.	Complies with all existing conditions. No additional conditions are proposed.
Waste Management	Complies with all applicable waste management LORS.	There are no potential impacts. There are no activities generating waste. The existing disposal material is a solid, cement-like substance that has been certified as inert and non-hazardous. The landfill is fenced and secured.	Complies with all existing conditions. No additional conditions are proposed.
Worker Safety and Fire Protection	Complies with all applicable worker safety and fire protection LORS.	There are no potential impacts because there are no activities.	Complies with all existing conditions. No additional conditions are proposed.
Cultural Resources	Complies with all applicable cultural resource LORS.	There will be no significant impacts because no cultural resources are located on the	Complies with all existing conditions. No additional

<b>Technical Area</b>	<b>Complies with Existing Applicable LORS?</b>	<b>Potential for Significant Adverse Impacts?</b>	<b>Approved and Proposed Conditions</b>
		ash landfill and ground disturbance will not occur.	conditions are proposed.
Biological Resources	Complies with all applicable biological resource LORS.	There will be no significant impacts because of the highly disturbed nature of the site and surroundings and no ground or vegetation disturbance will occur.	Complies with all existing conditions. No additional conditions are proposed.
Paleontology	Complies with all applicable paleontological LORS.	There will be no significant impacts because no paleontological resources are located on the site and ground disturbance will not occur.	Complies with all existing conditions. No additional conditions are proposed.
Geologic Hazards and Soil Resources	Complies with all applicable geological and soil resource LORS.	There will be no significant impacts because no ground disturbance will occur.	<i>See discussion below on existing condition.</i> No additional conditions are proposed.
Water Resources	Complies with all applicable water resource LORS.	There will be no significant impacts because no ground disturbance will occur and the disposed ash is not subject to water erosion.	Complies with all existing conditions. No additional conditions are proposed.
Land Use	Complies with current land use designations, plans, and goals. Complies with Policy ED 10.2 of the San Bernardino County Economic Development Element that encourages business development and retention.	There are no land use impacts.	Complies with all existing conditions. No additional conditions are proposed.
Noise	Complies with all applicable noise LORS.	There will be no significant impacts because no noise creating activities will occur.	Complies with all existing conditions. No additional conditions are proposed.
Socioeconomics	Complies with applicable socioeconomic LORS including Policy ED 10.2 of the San Bernardino County	There are no adverse socioeconomic impacts. There will be socioeconomic benefits because sale and redevelopment of the site will result in new business	Complies with all existing conditions. No additional conditions are proposed.

Technical Area	Complies with Existing Applicable LORS?	Potential for Significant Adverse Impacts?	Approved and Proposed Conditions
	Economic Development Element that encourages business development and retention.	and job opportunities.	
Traffic and Transportation	Complies with all applicable traffic and transportation LORS.	There will be no significant impacts because no additional traffic will be generated.	Complies with all existing conditions. No additional conditions are proposed.
Visual Resources	Complies with all applicable visual resource LORS.	There will be no significant impacts because no changes in the existing visual environment will occur. The open portion of cell #5 is internal to the site and not visible from surrounding parcels or areas.	<i>See discussion below on existing condition.</i> No additional conditions are proposed.

## Conditions

The proposed action complies with all conditions established in the original ACE Project certification and the order approving decommissioning of the ACE Project and ash landfill. As noted earlier, it complies with all but except two of the conditions in the amendment to establish the ash landfill was approved in 1989. These conditions, Soil Resources 8-4 and Visual Resources 3-8, require the project owner to cover filled disposal cells with soil:

**Soil Resources 8-4:** ACC shall submit a combined grading and erosion control plan for the ACE ash disposal site. Mitigation shall include all of the following...:

D. After a disposal cell is filled to capacity, it shall be capped with a 2 foot soil layer and the exposed surfaces revegetated with native plants *to minimize wind erosion over the long term.* The erosion control plan shall identify the type of plants that shall be used for revegetation, seeding rates, number and spacing of container plants or saplings, the type and amount of soil amendments and mulches, and amount and timing of irrigation.

Verification: Sixty days prior to commencing site preparation, ACC shall submit the grading and erosion control plan to the CEC Compliance Project Manager (CPM) and the San Bernardino County Building and Safety or Inyo County Building Department, depending upon the site

selected, for review and approval. Within 30 days after receipt of the combined plan, CEC and the appropriate county shall notify ACC of the acceptability of the plan.”

(CEC, Docket No. 86-AFC-1C, Order Approving Amendment of Project Description, November 29, 1989, page iii, emphasis in italics added)

**Visual Resources 3-8:** ACC shall cover the ash disposal site with soil and revegetate the outer berm slopes with native plants so as *to minimize visual contrast with the natural setting of the site.*

Verification: In the monthly compliance report ACC shall notify the California Energy Commission (CEC) Compliance Project Manager (CPM) when each phase has been completed and is ready for inspection.

(CEC, Docket No. 86-AFC-1C, Order Approving Amendment of Project Description, November 29, 1989, page ix, emphasis in italics added)

The intent of condition Soil Resources 8-4 is to “minimize wind erosion over the long term.” The request to leave a portion of cell #5 open at this time is consistent with this intent. The cement-like nature of the ash in the open portion of cell #5 is not subject to wind or water erosion and the design of the landfill along with the soil covering and natural revegetation on the berms and covered cells will minimize long term wind erosion.

The intent of condition Visual Resources 3-8 is to “minimize visual contrast with the natural setting of the site.” The design of the landfill; covering and natural revegetation of the berm; and covering, random placement of boulders, and natural revegetation of the closed cells has resulted in the landfill having minimal visual contrast with the surroundings. Since the open portion of cell #5 is in the interior of the landfill and lower than the surrounding closed cells and berm, it is not visible from the adjacent area and does not contribute to visual contrast.

ACC anticipates that covering the open portion of cell #5 will be undertaken in conjunction to future redevelopment and reuse of the site. As noted above, the reuse will be reviewed and permitted by San Bernardino County and other appropriate state and local agencies. San Bernardino County will be the lead agency under the California Environmental Quality Act, approve the Conditional Use Permit, and approve the grading plan for the site.

ACC requests modifying conditions Soil Resources 8-4 and Visual Resources 3-8 with the following underlined additions:

**Soil Resources 8-4:** ACC shall submit a combined grading and erosion control plan for the ACE ash disposal site. Mitigation shall include all of the following:

- A. Runoff generated on the interior faces of an active disposal cell shall be collected at one location and allowed to evaporate and/or percolate.
- B. The slope of the closed disposal cells shall be no steeper than 2:1. To ensure the finished cell slopes do not become severely eroded, an erosion maintenance program shall be implemented which shall restore any eroded slopes at least once annually and/or following any major (more than ½ inch) storm that occurs at the project site.
- C. Static evacuated soil piles shall be compacted and treated with a chemical dust suppressant or protected with a fabric cover to minimize wind erosion.
- D. After a disposal cell is filled to capacity, it shall be capped with a 2-foot soil layer and the exposed surfaces revegetated with native plants to minimize wind erosion over the long term. The erosion control plan shall identify the type of plants that shall be used for revegetation, seeding rates, number and spacing of container plants or saplings, the type and amount of soil amendments and mulches, and amount and timing of irrigation.
- E. Trailers used to transport ash to the site shall be pneumatically sealed to minimize the generation of particulate matter emissions during loading and unloading.
- F. The ACE Project ash silos shall incorporate retractable loading chutes to bulk load ash trucks to reduce particulate matter emissions.
- G. The ash/water mixing system shall increase the average water content of the ash to 40% by weight in order to control particulate emissions during batch unloading to the ash cells and to minimize wind erosion from the ash stored in the cells.
- H. Following closure of the ash landfill, any unfilled cells may remain open provided the material in the open portion of the cells is treated to avoid or minimize wind or water erosion.

Verification: Sixty days prior to commencing site preparation, ACC shall submit the grading and erosion control plan to the CEC Compliance Project Manager (CPM) and the San Bernardino County Building and Safety or Inyo County Building Department, depending upon the site selected, for review and approval. Within 30 days after receipt of the combined plan, CEC and the appropriate county shall notify ACC of the acceptability of the plan.”

**Visual Resources 3-8:** ACC shall cover the ash disposal site with soil and revegetate the outer berm slopes with native plants so as to minimize visual contrast with the natural setting of the site. Upon closure of the landfill, any unfilled cells may remain open provided they are not readily visible from surrounding parcels and present minimal contrast with the natural setting of the area.

Verification: In the monthly compliance report ACC shall notify the California Energy Commission (CEC) Compliance Project Manager (CPM) when each phase has been completed and is ready for inspection.

# Attachment 1

## Mailing List of Property Owners within 1000 feet of the ACE Facility

Assessor's Parcel Number	Property Owner	Contact and Mailing Address
0485031100000	Government Land – Bureau of Land Management	Carl B. Symons, Field Manager Bureau of Land Management Ridgecrest Field Office 300 S. Richmond Rd. Ridgecrest, CA 93555
0485021120000 0485031060000	San Bernardino County Flood Control District C/O R/W Engineer	Kevin Blakeslee, Deputy Director, Flood Control District County of San Bernardino Department of Public Works 825 E. 3 <sup>rd</sup> Street San Bernardino, CA 92415
0485021210000	County of San Bernardino, C/O County Service Area No. 82	San Bernardino County Special Districts Department 157 West 5 <sup>th</sup> Street, 2 <sup>nd</sup> Floor San Bernardino, CA 92415-0450
0485041280000	County of San Bernardino CSA 82, C/O CSA 82 Water/Sanitation Division	San Bernardino County Special Districts Department 157 West 5 <sup>th</sup> Street, 2 <sup>nd</sup> Floor San Bernardino, CA 92415-0450
0485021130000 0485031140000 0485021220000 0485031070000 0485041290000 0485041300000 0485031180000 0485031170000 0485041350000 0485031130000 0485031160000 0485031150000 0486061330000 0486061340000 0485041310000 0485041360000 0485041370000 0485041380000 0486061040000 0486061050000	Searles Valley Minerals Operations Inc.	Burnell Blanchard Searles Valley Minerals 13200 Main Street P.O. Box 367 Trona, CA 93562

## **Attachment 2**

### **Lahontan Regional Water Quality Control Board Rescission Order**

## **Attachment 3**

### **ACE Ash Landfill Photos**