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# DUST CONTROL PLAN

## DEMOLITION OF THE IEEC POWER GENERATING STATION

***Inland Empire Energy Company, LLC***

***Menifee, California***

POWER PLANT DECOMMISSIONING AND DEMOLITION EXPERIENCE THAT MATTERS

SILVERADO CONTRACTORS

***Submitted to:***

**IEEC/ATC Group Services**
**910 Louisiana Street, Suite 200B**
**Houston, Texas 77002**

***January 30, 2020***

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## DEMOLITION OF THE IEEC POWER GENERATING STATION
### INLAND EMPIRE ENERGY COMPANY, LLC
***26226 ANTELOPE ROAD***
***MENIFEE, CALIFORNIA***

# 1.0 Introduction

Silverado Contractors, Inc., (Silverado, SCI, Contractor) has been contracted to provide environmental/demolition contractor services to Inland Empire Energy Center, LLC (IEEC), a subsidiary of the General Electric Company (GE), for the following project:

**INLAND EMPIRE ENERGY CENTER (IEEC)**
**Generating Station Demolition**
***26226 Antelope Road***
***Menifee, California***

This *Dust Control Plan* (the Plan) describes the temporary engineering controls to prevent fugitive dust emissions at IEEC.

## *1.1 Site Description*

The IEEC is a 35-acre project site located at 26226 Antelope Road in the City of Menifee, Riverside County, California, approximately six miles west of the City of Hemet, four miles east of the City of Perris, and 30 miles southeast of the City of Riverside. The site is located within the South Coast Air Quality Management District (SCAQMD), and is therefore subject to SCAQMD regulatory requirements (specifically, Rule 403). Rule 403 requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust.

## *1.2 SCAQMD Rule 403 Requirements*

Rule 403 requires the implementation of best available dust control measures (BACM) during active operations capable of generating fugitive dust.

SCAQMD has additional Rule 403 requirements for projects that qualify as "large operations" or medium operations. Large operations means any active operations on property which contains in excess of 100 acres of disturbed surface area; or any earth-moving operation which exceeds a daily earth-moving or throughput volume of 7,700 cubic meters (10,000 cubic yards) three times during the most recent 365-day period.

Medium operations means any active operations on property which contains between 50 and 100 acres of disturbed surface area; or any earth-moving operation with a daily earth-moving or throughput volume of between 3,850 cubic meters (5,000 cubic yards) and 7,700 cubic meters (10,000 cubic yards) three times during the most recent 365-day period.

The IEEC project is not classified as a large or medium operation. Nevertheless, Silverado will implement BACM during its work, including watering, stabilizing construction entrances, minimizing vehicle speeds, and if necessary, stopping dust-producing activities during high wind conditions.

## 1.3 Potential Fugitive Dust Emission Sources

The following are potential sources of fugitive dust during Silverado's work, and will be addressed as noted in the controls section below.

- *Demolition—Potential dust sources during the demolition at IEEC include those created from windblown emissions from disturbed surfaces, vehicular travel on disturbed surfaces, and material tracked from unpaved surfaces onto paved public roads.*
- *Material Hauling—Dust emissions are possible when haul trucks are traveling through the site and when materials are loaded on to trucks or unloaded from trucks. Additionally, material tracked from unpaved surfaces onto paved roads by haul trucks can also contribute to dust emissions.*
- *Haul Routes—The haul routes through the site will be monitored and maintained with water sprays to minimize fugitive dust. Any tracked material from the haul operations will be removed from road surfaces on site and on surrounding public roadways as necessary via street sweeping.*
- *Earthwork—Dust emissions from backfilling of demolition voids and placement of gravel cover is possible. There is minimal earth moving or formal grading planned for our work at IEEC. When earthwork activities are performed, controls will include water sprays.*
- *High Wind Conditions—During demolition in windy conditions (25 MPH or higher), fugitive dust may be generated from any unpaved surfaces or conditions resulting from soil disturbance or stockpiling activities.*

# 2.0 Dust Control Methods-Overview

The general approach and precautions that Silverado will take to prevent fugitive particulate matter emissions include those noted below. If additional controls are necessary, they will be commensurate with Rule 403 Tables 1, 2 and 3, as appropriate (see Attachment A):

- ***Water Sprays—*** *Silverado will use of water sprays and/or suppressants for control of dust during demolition of buildings and structures, during operations such as grading or excavation, during material transport both on and offsite, and during its stockpiling activities.*
- ***Good Housekeeping—****Silverado will implement good housekeeping practices to avoid or minimize the accumulation of dusty materials that have the potential to become airborne and will conduct prompt cleanup of spilled or accumulated materials.*
- ***Freeboard—****Silverado will provide sufficient freeboard or covering of open bodied trucks or dumps transporting any materials likely to become airborne.*
- ***Best Management Practices (BMPs)—****Silverado will maintain and/or install BMPs within its work areas in accordance with the project SWPPP.*
- ***Inspections****—Silverado will perform routine inspections and monitor meteorological data to evaluate conditions that may result in airborne emissions. Inspections will be documented, and any new sources of fugitive particulate matters identified. If identified, we will determine the reasonable precautions required to prevent fugitive emissions.*

## *2.1 Dust Control Methods*

Silverado's general policy for dust control is to prevent visible dust emissions. Site personnel will be responsible for reporting any observed fugitive dust emissions, and to help eliminate or minimize such emissions by using the following controls, as appropriate:

(1) Apply water in sufficient quantity to prevent the generation of dust plumes;

(2) Empty loader buckets and dump trucks slowly;

(3) Minimize the drop height from loader buckets;

(4) Limit disturbances to soils when possible; Limit onsite vehicle speeds to 15 miles per hour (MPH) to prevent dust emissions caused by truck travel on unpaved surfaces;

(5) Avoid dust-producing work when wind exceeds 25 MPH;

(6) Use stabilized construction entrances to prevent track-out;

(7) Install and use track-out control devices, if required.

(A) Installation of track-out control devices is required for projects greater than or equal to five acres, or projects where import/export of soils is greater than or equal to 100 cubic yards of soil per day.

(B) Regardless of the project size or track-out control device selected, all materials tracked-out onto a paved public road must be removed at anytime the track-out extends more than 25 feet from a site entrance and at the conclusion of each workday.

(8) Cover trucks with a tarp and maintain required freeboard clearances (6 inches) to keep excessive dust during hauling operations;

(9) During crushing operations, stabilize surface soils prior to operating equipment, and stabilize material after crushing. Spray materials prior to loading into crusher, and visually monitor crusher emissions. Apply water to crushed materials.

(10) Maintain stockpiles, covering if necessary, and/or apply sufficient water sprays;

(11) Visually estimate opacity;

(12) Use sufficient water sprays when any earth-moving operations result in greater than one acre of disturbed surface area;

(13) Use soil stabilizers and dust suppressants if necessary.

(A) These controls consist of commercially available chemicals applied to the soil surface that maintain the moisture levels in exposed soils or chemically bind the surface material to reduce fugitive dust emissions.

## 3.0 Monitoring

Rule 403 is designed to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources. This is accomplished by implementing actions to prevent, reduce, or mitigate fugitive dust emissions. Silverado's monitoring of its activities will include visual estimation monitoring of opacity.

## 4.0 Inspection

Silverado will maintain a record of inspections conducted to evaluate the efficacy of dust controls, and the actions taken to address fugitive dust. The inspection will be documented to document these controls, along with the date, time control measures taken, weather conditions, and any public complaints, if any.

# Attachment A

## *SCAQMD Rule 403 BACM*

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Backfilling | 01-1 Stabilize backfill material when not actively handling; and<br>01-2 Stabilize backfill material during handling; and<br>01-3 Stabilize soil at completion of activity. | ✓ Mix backfill soil with water prior to moving<br>✓ Dedicate water truck or high capacity hose to backfilling equipment<br>✓ Empty loader bucket slowly so that no dust plumes are generated<br>✓ Minimize drop height from loader bucket |
| Clearing and grubbing | 02-1 Maintain stability of soil through pre-watering of site prior to clearing and grubbing; and<br>02-2 Stabilize soil during clearing and grubbing activities; and<br>02-3 Stabilize soil immediately after clearing and grubbing activities. | ✓ Maintain live perennial vegetation where possible<br>✓ Apply water in sufficient quantity to prevent generation of dust plumes |
| Clearing forms | 03-1 Use water spray to clear forms; or<br>03-2 Use sweeping and water spray to clear forms; or<br>03-3 Use vacuum system to clear forms. | ✓ Use of high pressure air to clear forms may cause exceedance of Rule requirements |
| Crushing | 04-1 Stabilize surface soils prior to operation of support equipment; and<br>04-2 Stabilize material after crushing. | ✓ Follow permit conditions for crushing equipment<br>✓ Pre-water material prior to loading into crusher<br>✓ Monitor crusher emissions opacity<br>✓ Apply water to crushed material to prevent dust plumes |

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Cut and fill | 05-1 Pre-water soils prior to cut and fill activities; and<br>05-2 Stabilize soil during and after cut and fill activities. | ✓ For large sites, pre-water with sprinklers or water trucks and allow time for penetration<br>✓ Use water trucks/pulls to water soils to depth of cut prior to subsequent cuts |
| Demolition – mechanical/manual | 06-1 Stabilize wind erodible surfaces to reduce dust; and<br>06-2 Stabilize surface soil where support equipment and vehicles will operate; and<br>06-3 Stabilize loose soil and demolition debris; and<br>06-4 Comply with AQMD Rule 1403. | ✓ Apply water in sufficient quantities to prevent the generation of visible dust plumes |
| Disturbed soil | 07-1 Stabilize disturbed soil throughout the construction site; and<br>07-2 Stabilize disturbed soil between structures | ✓ Limit vehicular traffic and disturbances on soils where possible<br>✓ If interior block walls are planned, install as early as possible<br>✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes |
| Earth-moving activities | 08-1 Pre-apply water to depth of proposed cuts; and<br>08-2 Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction; and<br>08-3 Stabilize soils once earth-moving activities are complete. | ✓ Grade each project phase separately, timed to coincide with construction phase<br>✓ Upwind fencing can prevent material movement on site<br>✓ Apply water or a stabilizing agent in sufficient quantities to prevent the generation of visible dust plumes |

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Importing/exporting of bulk materials | 09-1 Stabilize material while loading to reduce fugitive dust emissions; and<br>09-2 Maintain at least six inches of freeboard on haul vehicles; and<br>09-3 Stabilize material while transporting to reduce fugitive dust emissions; and<br>09-4 Stabilize material while unloading to reduce fugitive dust emissions; and<br>09-5 Comply with Vehicle Code Section 23114. | ✓ Use tarps or other suitable enclosures on haul trucks<br>✓ Check belly-dump truck seals regularly and remove any trapped rocks to prevent spillage<br>✓ Comply with track-out prevention/mitigation requirements<br>✓ Provide water while loading and unloading to reduce visible dust plumes |
| Landscaping | 10-1 Stabilize soils, materials, slopes | ✓ Apply water to materials to stabilize<br>✓ Maintain materials in a crusted condition<br>✓ Maintain effective cover over materials<br>✓ Stabilize sloping surfaces using soil binders until vegetation or ground cover can effectively stabilize the slopes<br>✓ Hydroseed prior to rain season |
| Road shoulder maintenance | 11-1 Apply water to unpaved shoulders prior to clearing; and<br>11-2 Apply chemical dust suppressants and/or washed gravel to maintain a stabilized surface after completing road shoulder maintenance. | ✓ Installation of curbing and/or paving of road shoulders can reduce recurring maintenance costs<br>✓ Use of chemical dust suppressants can inhibit vegetation growth and reduce future road shoulder maintenance costs |

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Screening | 12-1 Pre-water material prior to screening; and<br>12-2 Limit fugitive dust emissions to opacity and plume length standards; and<br>12-3 Stabilize material immediately after screening. | ✓ Dedicate water truck or high capacity hose to screening operation<br>✓ Drop material through the screen slowly and minimize drop height<br>✓ Install wind barrier with a porosity of no more than 50% upwind of screen to the height of the drop point |
| Staging areas | 13-1 Stabilize staging areas during use; and<br>13-2 Stabilize staging area soils at project completion. | ✓ Limit size of staging area<br>✓ Limit vehicle speeds to 15 miles per hour<br>✓ Limit number and size of staging area entrances/exists |
| Stockpiles/<br>Bulk Material<br>Handling | 14-1 Stabilize stockpiled materials.<br>14-2 Stockpiles within 100 yards of off-site occupied buildings must not be greater than eight feet in height; or must have a road bladed to the top to allow water truck access or must have an operational water irrigation system that is capable of complete stockpile coverage. | ✓ Add or remove material from the downwind portion of the storage pile<br>✓ Maintain storage piles to avoid steep sides or faces |

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Traffic areas for construction activities | 15-1 Stabilize all off-road traffic and parking areas; and<br>15-2 Stabilize all haul routes; and<br>15-3 Direct construction traffic over established haul routes. | ✓ Apply gravel/paving to all haul routes as soon as possible to all future roadway areas<br>✓ Barriers can be used to ensure vehicles are only used on established parking areas/haul routes |
| Trenching | 16-1 Stabilize surface soils where trencher or excavator and support equipment will operate; and<br>16-2 Stabilize soils at the completion of trenching activities. | ✓ Pre-watering of soils prior to trenching is an effective preventive measure. For deep trenching activities, pre-trench to 18 inches soak soils via the pre-trench and resuming trenching<br>✓ Washing mud and soils from equipment at the conclusion of trenching activities can prevent crusting and drying of soil on equipment |
| Truck loading | 17-1 Pre-water material prior to loading; and<br>17-2 Ensure that freeboard exceeds six inches (CVC 23114) | ✓ Empty loader bucket such that no visible dust plumes are created<br>✓ Ensure that the loader bucket is close to the truck to minimize drop height while loading |
| Turf Overseeding | 18-1 Apply sufficient water immediately prior to conducting turf vacuuming activities to meet opacity and plume length standards; and<br>18-2 Cover haul vehicles prior to exiting the site. | ✓ Haul waste material immediately off-site |

**TABLE 1**
**BEST AVAILABLE CONTROL MEASURES**
**(Applicable to All Construction Activity Sources)**

| Source Category | Control Measure | Guidance |
|---|---|---|
| Unpaved roads/parking lots | 19-1 Stabilize soils to meet the applicable performance standards; and<br>19-2 Limit vehicular travel to established unpaved roads (haul routes) and unpaved parking lots. | ✓ Restricting vehicular access to established unpaved travel paths and parking lots can reduce stabilization requirements |
| Vacant land | 20-1 In instances where vacant lots are 0.10 acre or larger and have a cumulative area of 500 square feet or more that are driven over and/or used by motor vehicles and/or off-road vehicles, prevent motor vehicle and/or off-road vehicle trespassing, parking and/or access by installing barriers, curbs, fences, gates, posts, signs, shrubs, trees or other effective control measures. | |

## Table 2
## DUST CONTROL MEASURES FOR LARGE OPERATIONS

| FUGITIVE DUST SOURCE CATEGORY | | CONTROL ACTIONS |
|---|---|---|
| **Earth-moving (except construction cutting and filling areas, and mining operations)** | (1a) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations each subsequent four-hour period of active operations; OR |
| | (1a-1) | For any earth-moving which is more than 100 feet from all property lines, conduct watering as necessary to prevent visible dust emissions from exceeding 100 feet in length in any direction. |
| **Earth-moving: Construction fill areas:** | (1b) | Maintain soil moisture content at a minimum of 12 percent, as determined by ASTM method D-2216, or other equivalent method approved by the Executive Officer, the California Air Resources Board, and the U.S. EPA. For areas which have an optimum moisture content for compaction of less than 12 percent, as determined by ASTM Method 1557 or other equivalent method approved by the Executive Officer and the California Air Resources Board and the U.S. EPA, complete the compaction process as expeditiously as possible after achieving at least 70 percent of the optimum soil moisture content. Two soil moisture evaluations must be conducted during the first three hours of active operations during a calendar day, and two such evaluations during each subsequent four-hour period of active operations. |

**Table 2 (Continued)**

| FUGITIVE DUST SOURCE CATEGORY | CONTROL ACTIONS | |
|---|---|---|
| **Earth-moving: Construction cut areas and mining operations:** | (1c) | Conduct watering as necessary to prevent visible emissions from extending more than 100 feet beyond the active cut or mining area unless the area is inaccessible to watering vehicles due to slope conditions or other safety factors. |
| **Disturbed surface areas (except completed grading areas)** | (2a/b) | Apply dust suppression in sufficient quantity and frequency to maintain a stabilized surface. Any areas which cannot be stabilized, as evidenced by wind driven fugitive dust must have an application of water at least twice per day to at least 80 percent of the unstabilized area. |
| **Disturbed surface areas: Completed grading areas** | (2c) | Apply chemical stabilizers within five working days of grading completion; OR |
| | (2d) | Take actions (3a) or (3c) specified for inactive disturbed surface areas. |
| **Inactive disturbed surface areas** | (3a) | Apply water to at least 80 percent of all inactive disturbed surface areas on a daily basis when there is evidence of wind driven fugitive dust, excluding any areas which are inaccessible to watering vehicles due to excessive slope or other safety conditions; OR |
| | (3b) | Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR |
| | (3c) | Establish a vegetative ground cover within 21 days after active operations have ceased. Ground cover must be of sufficient density to expose less than 30 percent of unstabilized ground within 90 days of planting, and at all times thereafter; OR |
| | (3d) | Utilize any combination of control actions (3a), (3b), and (3c) such that, in total, these actions apply to all inactive disturbed surface areas. |

**Table 2 (Continued)**

| FUGITIVE DUST SOURCE CATEGORY | CONTROL ACTIONS | |
|---|---|---|
| **Unpaved Roads** | (4a) | Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR |
| | (4b) | Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR |
| | (4c) | Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface. |
| **Open storage piles** | (5a) | Apply chemical stabilizers; OR |
| | (5b) | Apply water to at least 80 percent of the surface area of all open storage piles on a daily basis when there is evidence of wind driven fugitive dust; OR |
| | (5c) | Install temporary coverings; OR |
| | (5d) | Install a three-sided enclosure with walls with no more than 50 percent porosity which extend, at a minimum, to the top of the pile. This option may only be used at aggregate-related plants or at cement manufacturing facilities. |
| **All Categories** | (6a) | Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 2 may be used. |

**TABLE 3**
**CONTINGENCY CONTROL MEASURES FOR LARGE OPERATIONS**

| FUGITIVE DUST SOURCE CATEGORY | CONTROL MEASURES |
|---|---|
| **Earth-moving** | (1A) Cease all active operations; OR<br>(2A) Apply water to soil not more than 15 minutes prior to moving such soil. |
| **Disturbed surface areas** | (0B) On the last day of active operations prior to a weekend, holiday, or any other period when active operations will not occur for not more than four consecutive days: apply water with a mixture of chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; OR<br>(1B) Apply chemical stabilizers prior to wind event; OR<br>(2B) Apply water to all unstabilized disturbed areas 3 times per day. If there is any evidence of wind driven fugitive dust, watering frequency is increased to a minimum of four times per day; OR<br>(3B) Take the actions specified in Table 2, Item (3c); OR<br>(4B) Utilize any combination of control actions (1B), (2B), and (3B) such that, in total, these actions apply to all disturbed surface areas. |
| **Unpaved roads** | (1C) Apply chemical stabilizers prior to wind event; OR<br>(2C) Apply water twice per hour during active operation; OR<br>(3C) Stop all vehicular traffic. |
| **Open storage piles** | (1D) Apply water twice per hour; OR<br>(2D) Install temporary coverings. |
| **Paved road track-out** | (1E) Cover all haul vehicles; OR<br>(2E) Comply with the vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads. |
| **All Categories** | (1F) Any other control measures approved by the Executive Officer and the U.S. EPA as equivalent to the methods specified in Table 3 may be used. |

## Table 4
## (Conservation Management Practices for Confined Animal Facilities)

| SOURCE CATEGORY | CONSERVATION MANAGEMENT PRACTICES |
|---|---|
| **Manure Handling**<br><br>**(Only applicable to Commercial Poultry Ranches)** | (1a) Cover manure prior to removing material off-site; AND<br>(1b) Spread the manure before 11:00 AM and when wind conditions are less than 25 miles per hour; AND<br>(1c) Utilize coning and drying manure management by removing manure at laying hen houses at least twice per year and maintain a base of no less than 6 inches of dry manure after clean out; or in lieu of complying with conservation management practice (1c), comply with conservation management practice (1d).<br>(1d) Utilize frequent manure removal by removing the manure from laying hen houses at least every seven days and immediately thin bed dry the material. |
| **Feedstock Handling** | (2a) Utilize a sock or boot on the feed truck auger when filling feed storage bins. |
| **Disturbed Surfaces** | (3a) Maintain at least 70 percent vegetative cover on vacant portions of the facility; OR<br>(3b) Utilize conservation tillage practices to manage the amount, orientation and distribution of crop and other plant residues on the soil surface year-round, while growing crops (if applicable) in narrow slots or tilled strips; OR<br>(3c) Apply dust suppressants in sufficient concentrations and frequencies to maintain a stabilized surface. |
| **Unpaved Roads** | (4a) Restrict access to private unpaved roads either through signage or physical access restrictions and control vehicular speeds to no more than 15 miles per hour through worker notifications, signage, or any other necessary means; OR<br>(4b) Cover frequently traveled unpaved roads with low silt content material (i.e., asphalt, concrete, recycled road base, or gravel to a minimum depth of four inches); OR<br>(4c) Treat unpaved roads with water, mulch, chemical dust suppressants or other cover to maintain a stabilized surface. |
| **Equipment Parking Areas** | (5a) Apply dust suppressants in sufficient quantity and frequency to maintain a stabilized surface; OR<br>(5b) Apply material with low silt content (i.e., asphalt, concrete, recycled road base, or gravel to a depth of four inches). |