South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

November 18, 2011

Mr. Gerardo Rios
Chief – Permits Office
U. S. EPA, Region IX
75 Hawthorne Street, Air 3
San Francisco, CA 94105

Dear Mr. Rios:

Subject: SCE, Mountainview Generating Station (ID 160437) – Title V Permit Revision (Application No. 523196)

SCE, Mountainview Generating Station has proposed to revise their Title V permit by adding the existing soda ash storage silo and mixing tank to the permit description. This proposed permit revision is considered as a "de-minimis significant permit revision" to their Title V permit. Attached for your review are the permit evaluation and proposed Section D. With your receipt of the proposed Section D today, we will note that the EPA 45-day review period begins on November 18, 2011.

If you have any questions or need additional information regarding the proposed permit revision, please call Chris Perri at (909) 396-2696.

Very truly yours,

Brian L. Yeh
Senior Manager
Mechanical, Chemical, and Public Services

Cc: Ian Cuthbertson, SCE

BLY:AYL:cgp

Attachments

PERMIT TO OPERATE EVALUATION

APPLICANT:

Southern California Edison
2492 West San Bernardino Ave
Redlands, CA 92374

EQUIPMENT LOCATION:

2492 West San Bernardino Ave
Redlands, CA 92374

EQUIPMENT DESCRIPTION:

Section D of the RECLAIM/Title V Permit, ID# 160437

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions and Requirements	Conditions
PROCESS 4: WASTE WATER TREATMENT					
STORAGE SILO, MATERIAL SODA ASH, DIA 12 FT; HT 60 FT; 5000 CUBIC FEET, WITH PASSIVE VENT FILTER, 14 CARTRIDGES, 250 FT2 FILTER AREA A/N 523195	D63				E195.5
TANK, SODA ASH MIXING, HT 5 FT; DIA 5 FT; CAPACITY 600 GALS, FULLY ENCLOSED A/N 523197	D64				E195.5
TRUCK UNLOADING STATION, WITH 1 PNEUMATIC HOSE A/N 523195	D65				E195.5

BACKGROUND:

The waste water treatment system at the Mountainview Generating Station has been in operation since the plant was originally constructed in 2001. However, the facility did not apply for permits initially, and AQMD compliance personnel on a routine inspection in May of 2011, noticed the storage silo and mixing tank were not permitted and issued a Notice to Comply (D04198).

The following table summarizes the application submittal and associated processing fees.

A/N	Submittal Date	Equip	Bcat	Fee Sch	Fee
523195	June 2, 2011	Soda Ash Storage Silo	706920	A	1,971.38(1)
523196	June 2, 2011	Soda Ash Mix Tank	706900	A	1,991.38(1)
523197	June 2, 2011	Title V Revision	555009	C	1,723.07
				Total	$5,665.83 (2)

(1) Includes 50% penalty for operating without a permit does not qualify for amnesty due to NC.
(2) Applicant submitted $8680.33, was refunded $3014.50

COMPLIANCE RECORD REVIEW:

The AQMD compliance database shows only 1 compliance action taken against the facility since 2009. N/C D04198 was issued on 5/19/11 for failure to obtain a permit for the soda ash storage silo and mixing tank.

PROCESS DESCRIPTION:

The soda ash storage silo and mixing tank are part of the water treatment system at Mountainview. The water from the cooling towers is mixed with soda ash for pH control before being reused or discharged into the sewer system. The soda ash is stored in dry form in the silo and feed into the mixing tank through internal piping.

Soda Ash Storage Silo
The silo is 60 ft high X 12 ft in diameter, and has a capacity of 5000 cubic feet, or about 300,000 lbs of soda ash at 60 lbs/ft3. The silo is filled through a 4" diameter hose from the self-unloading bulk trucks with the use of pneumatic pressure.

The silo is equipped with a passive vent filter to allow conveying air to escape while capturing any entrained dust. The vent filter consists of 14 cartridges which are made of spun bound polyester. The total filter area is 250 ft2.

The filter is equipped with an automatic cleaning system that prevents the individual filter cartridges from being blocked with accumulated dust. Air nozzles inject short pulses of compressed air through the filters at regular intervals. In auto mode, the vent filter is turned on once the bulk unloading truck hose is connected to the fill pipe, and stays on a few minutes after disconnection to clean the accumulated dust on the filters. Although the filter is designed for

maintenance free operation, the manufacturer recommends a regular inspection every 2 months to check for dust accumulation or other problems.

Soda ash from the silo is feed to the mixing day by gravity flow, regulated by a volumetric feeder at a variable rate. The soda ash system is designed to supply at a maximum rate of 720 lbs/hr. The product is fed to the downstream equipment with the aid of flow promotion devices Water is added to the tank through a separate water pipe. A mixer mounted on top of the tank provides the agitation needed for mixing. From the mixing tank, solution is delivered to the process through the use of a progressive cavity pump.

EMISSIONS:

Emission from the storage silo are released in the form of entrained dust from the filter vent. AP-42 Chapter 8.12 Table 8.12-2 shows a controlled particulate emission factor of 0.0051 lbs/ton Product for soda ash unloading/storage.

The applicant provided the following information:

Delivery Time	90 minutes
Deliveries per day	1
Deliveries per month	4
Bin Vent Maximum Exhaust Rate	1400 acfm
Soda Ash Delivery Rate	32,000 lbs/hr

Based on the above data, emissions of PM are calculated as follows:

32,000 lbs/hr X (ton/2000 lbs) X 1.5 hours X 0.0051 lbs/ton

PM emissions per delivery: 0.12 lbs
PM emissions per hour: 0.08 lbs/hr

Emissions Summary

Pollutant	Emissions			
	lbs/hr	lbs/day	30 Day Average	lbs/yr
PM10*	0.08	0.12	0.016	4.9

* *Assume all PM emissions are PM10*

No emissions are expected from the mixing tank.

EVALUATION:

Rule 212 – Standards for Approving Permits
The facility is not located within 1,000 ft of a school, the emissions of PM10 do not exceed the rule thresholds, and there are no toxic emissions from this equipment. Therefore, the addition of

the storage silo and mixing tank is not considered a significant project and a public notice is not required under this rule.

Rule 219 – Equipment Not Requiring a Written Permit
Rule 219(p)(16) exempts "industrial wastewater treatment equipment which does pH adjustment, precipitation, gravity separation and/or filtration of wastewater." The soda ash storage silo would not be considered treatment equipment, but storage equipment, so this exemption does not apply. Paragraph (m)(16) wouldn't apply to the mixing tank or storage silo because its only for temporary storage less than 550 gallons. And paragraph (m)(1)(c) wouldn't apply because it's only for water based solutions of salts or sodium hydroxide. The soda ash is stored as dry material.

Rule 401 – Visible Emissions
Visible emissions exceeding the limits of this rule are not expected given the efficiency of the vent filters on this equipment.

Rule 402 – Nuisance
Nuisance problems are not expected under normal operation.

Rule 403 – Fugitive Dust
The purpose of this rule is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. The provisions of this rule apply to any activity or man-made condition capable of generating fugitive dust. This rule prohibits emissions of fugitive dust beyond the property line of the emission source. The use of the vent filter on the storage silo will reduce the emissions of particulates, and there should be no dust beyond the property line from the equipment. Compliance is expected.

Rule 404 – Particulate Matter Concentration
At the maximum exhaust rate of 1400 cfm, the Rule 404 allowable concentration of particulate out of the vent is about 0.165 gr/cf. The storage silo is expected to comply based on the following calculation:

(0.08 lbs/hr * 7000 gr/lb)/(1400*60) dscfh = 0.007gr/scf

Rule 405 – Particulate Matter Weight
At the maximum process rate of 32,000 lbs/hr, the Rule 405 allowable mass of particulate out of the vent is about 13 lb/hr. The storage silo is expected to comply based on the calculated emission rate of 0.08 lbs/hr.

Regulation XIII – New Source Review
The emissions from the equipment are below 0.5 lbs/day, therefore no offsets, BACT, or modeling is required.

Regulation XXX – Title V
This is a Title V source, and the addition of the storage silo and mixing tank to the permit is considered a de-minimis significant permit revision, because the emissions from the equipment

are below the thresholds of significance. This is the first de-minimis significant revision since the permit was issued on 4/9/10. Emissions from all de-minimis significant revisions are tracked through the 5 year period of the permit, and if the sum of the emissions at any point exceed the threshold, that revision and all de-minimis revisions after, are then considered significant revisions until the new 5 year term begins.

RECOMMENDATION:

After the 45 day EPA review and comment period, a Permit to Operate is recommended for the storage silo, mixing tank, and truck unloading station subject to the conditions listed in the following section.

CONDITIONS:

E193.5
The operator shall operate and maintain this equipment according to the following specifications:

The bin vent filter shall be in the ON position at all times during filling of the silo, and for at least 1 hour after filling has ended

Filling of the silo shall be stopped immediately if the high level switch is activated.

The storage silo shall not be filled past the high level switch.

The unload truck hose shall be equipped with a dust cap. The dust cap shall be in place at all times except during the actual filling operation.
[Rule 1303(a)(1) BACT, Rule 403]

FACILITY PERMIT TO OPERATE
SOUTHERN CALIFORNIA EDISON

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 3: R219 EQUIPMENT SUBJECT TO SOURCE-SPECIFIC RULE					
RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, <= 53 FT3, WITH DUST FILTER	E14			**PM**: (9) [RULE 1140, 8-2-1985; **RULE 404, 2-7-1986; RULE 405, 2-7-1986**]	D322.1, D381.1, K67.1
RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS	E16			**ROG**: (9) [**RULE 1113, 11-8-1996;** *RULE 1113, 7-9-2004;* **RULE 1171, 11-7-2003;** *RULE 1171, 5-6-2005*]	K67.2
Process 6: DRY STORAGE					
STORAGE SILO, SODA ASH, 5000 FT3, WITH PASSIVE FILTER, 14 CARTRIGES, 250 FT2 FILTER AREA, HEIGHT: 60 FT ; DIAMETER: 12 FT A/N:	D63				E193.5
TANK, SODA ASH MIXING, FULLY ENCLOSED, 600 GALS; DIAMETER: 5 FT ; HEIGHT: 5 FT A/N:	D64				E193.5
UNLOADING STATION, WITH 1 PNEUMATIC HOSE A/N:	D65				E193.5

* (1) (1A) (1B) Denotes RECLAIM emission factor
(2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits
(10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
SOUTHERN CALIFORNIA EDISON

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[40CFR 52.21 - PSD, 6-19-1978]

[Devices subject to this condition : D18, D27, D36, D45]

E193.5 The operator shall operate and maintain this equipment according to the following specifications:

The bin vent filter shall be in the ON position at all times during filling of the silo, and for at least 1 hour after filling has ended

Filling of the silo shall be stopped immediately if the high level switch is activated

The storage silo shall not be filled past the high level switch

The unload truck hose shall be equipped with a dust cap. The dust cap shall be in place at all times except during the actual filling operation

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 403, 4-2-2004;** RULE 403, 6-3-2005]

[Devices subject to this condition : D63, D64, D65]

H. Applicable Rules

H23.4 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
NOX	40CFR60, SUBPART	KKKK
CO	40CFR60, SUBPART	KKKK
PM10	40CFR60, SUBPART	KKKK
SOX	40CFR60, SUBPART	KKKK