

DOCKETED

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January 9, 2014

Mr. John Heiser
California Energy Commission
1516 Ninth Street, MS-40
Sacramento, CA 95814-5512
john.heiser@energy.ca.gov

Re: Eric Winegar Technical Memorandum re Summary of Facility Air Monitoring Programs on Behalf of Sierra Club (08-AFC-8A)

Dear Mr. Heiser,

Please find attached Eric Winegar's Technical Memorandum re Summary of Facility Air Monitoring Programs on Behalf of Sierra Club in the above-referenced docket. This document has been e-filed with the Commission and served on parties via the Commission's e-filing system.

Please let me know if you have any questions. Thank you.

Sincerely,

Andrea Issod, Staff Attorney
Sierra Club Environmental Law Program
85 Second St, Second Floor
San Francisco, CA 94105
andrea.issod@sierraclub.org
(415) 977-5544

TECHNICAL MEMORANDUM

TO: Petra Pless, D.Env.
FROM: Eric Winegar, PhD/Winegar Air Sciences*
DATE: January 4, 2014
SUBJECT: Summary of Facility Air Monitoring Programs

The following list presents a summary of various facilities that have been required by permit or other regulatory frameworks to conduct air monitoring in proximity to their operations. Each facility will be presented in terms of the following elements:

- Monitoring approach—parameters, type (fenceline vs. community), instruments, frequency, duration
- Authority/Document
- Direct experience with site

1. Molycorp Minerals, LLC, Mountain Pass, CA—Fence Line Program

- Fence line PM10 as surrogate for lanthanide elements being mined; continuous, using Federal Equivalent Method (FEM)
- Fence Line Black Carbon (BC) as surrogate for diesel particulate matter; continuous using Aethalometer.
- Fence Line and Community Radionuclides: quarterly using high volume samplers
- Meteorology, hourly averages for multiple parameters
- Required as part of operating permit from County of San Bernardino and CA Department of Health (radionuclides)
- I operate the facility monitoring network

2. Molycorp Minerals, LLC Mountain Pass, CA—Tailings Facility

- Internal sites downwind of tailings facility; PM10, as surrogate to assess fugitives with contaminants from tailings; continuous, using portable solar-powered EBAM instruments. Hourly averages
- Meteorology
- Additional operating permit from CA Regional Water Quality Control Board
- I operate this as part of the Molycorp network

3. Inglewood Oil Field, Baldwin Hills-Los Angeles, CA

- Internal sites (4) in proximity to operations, oriented towards community exposure protection, two at operation locations: hydrogen sulfide, total hydrocarbons using portable continuous sensors, 5 minute averages.
- Meteorology: two towers
- Operating permit from South Coast Air Quality Management District
- No involvement

4. Avalon South Bay Commercial Plaza—Carson, CA

- Fence Line; PM10 fugitive dust using high volume samplers and continuous instruments. Chromium using low-volume samplers. Monitoring frequency varies over time frame of operation, from once per day to continuous.
- Meteorology using nearby District station
- SCAQMD Rule 403 re Fugitive Dust
- No involvement

5. Oceano Dunes State Vehicular Recreation Area (SVRA)

(Operated by CA Department of Parks and Recreation)

- Multiple community monitors for PM10 using continuous monitors with hourly output.
- Meteorology integrated with monitors
- Permit from San Luis Obispo County APCD
- No involvement

6. Venoco Oil Company, Beverly Hills

- Fence Line remote sensing system for VOCs, continuous, located on side of facility adjacent to sensitive receptor site (public school).
- Meteorological station onsite, required as well.
- Permit requirement from South Coast District
- I conduct semi-annual audits of the meteorological system, which is also part of the permit conditions.

7. Clean Harbors Hazardous Waste Disposal Facility, Westmoreland, CA

- Fence Line sampling sites (two) for periodic collection of integrated samples of toxic gas pollutants.
- Meteorology from onsite station
- Permits requirement multiple agencies
- No involvement currently, though I did do an audit at the site approximately 15 years ago.

8. Kettleman Hills Hazardous Waste Management Facility, Kettleman City, CA

- Multiple fence line stations for collection of toxic VOC and PCB pollutants on a periodic basis.
- Meteorology from onsite station
- Permits from multiple agencies
- No involvement, though I was involved in a single test program approximately 6 years ago.

9. Multiple Refineries around California

- Many refineries have fence line monitoring programs as mandated by air district permit requirements. Some consist of continuous monitors, others utilize periodic integrated samples.
- Meteorology is generally included with the monitoring stations
- Permit requirement from local air districts. Currently, CARB is conducting an extensive review of fence line and community monitoring at all refineries around the state with the goal of improving the protection of the community from emissions from these sites.
- I have had past involvement with the Chevron El Segundo refinery and the Rodeo Tesoro refineries.

10. Chevron Mining Tailings Facility, Questa, New Mexico

- Multiple fence line PM10 continuous monitors as surrogate for elemental constituents of tailings operations.
- Meteorology integrated with sensors.
- Permit requirement as part of EPA oversight
- Previous involvement; I set up the network and operated it for approximately 5 years.

11. GAMP—Geysers Air Monitoring Program—Geothermal Energy Production Area, Lake County, CA

- Program established under MOU between geyser energy producers (multiple entities), CARB, and local air districts.
- Multiple stations with various targets, mostly focused on hydrogen sulfide. Hourly averages of hydrogen sulfide.
- Other parameters included from time to time
- Meteorology—two stations
- No personal involvement

12. Sunshine Canyon Landfill, Sylmar, CA

- City of Los Angeles required two monitoring stations for PM10, black carbon (surrogate for diesel exhaust) and meteorology. Periodic VOC and landfill gases are collected as well. Monitoring is conducted using BAM PM10 for hourly PM10 concentrations, 5 minute black carbon using aethalometers.
- One station onsite, one station at local school
- Previous involvement: I was involved for preconstruction monitoring from about 2003 to 2006.

*Contact information:

Eric Winegar, PhD.
Winegar Air Sciences
Gold River, CA 95670
916-837-4251
winegar.eric@gmail.com