



July 25, 2012
Project No. 124094

Dr. Teklewold Ayalew
Los Angeles Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, California 90013

**Subject: Addendum 1 to Remedial Action Plan Phase I
Former Athens Tank Farm
Willowbrook, California 90059
Site Cleanup No. 0374, Site ID 2040306**

Dear Dr. Ayalew:

This letter is submitted on behalf of ExxonMobil Environmental Services Company (EMES) by Kleinfelder West, Inc. (Kleinfelder) in response to a June 29, 2012 email from the Los Angeles Regional Water Quality Control Board (LARWQCB). A Remedial Action Plan (*Remedial Action Plan Phase I*, referred to hereafter as RAP) was prepared for the former Athens Tank Farm (Site) by EMES and submitted to LARWQCB on June 15, 2012. The LARWQCB requested outlined information regarding mitigation measures to be implemented prior to and during RAP Phase I soil vapor extraction (SVE) system concurrent with preparation and submittal of California Environmental Quality Act (CEQA) *Appendix G: Environmental Checklist Form* for the Site.

AIR QUALITY MITIGATION MEASURES:

The Site is located within the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SVE Piping Trenching and Soil Removal Excavations

Trenching excavation and backfilling activities will be performed for the installation of Phase I SVE system piping and soil removal and backfilling at the nine locations specified in the RAP. These activities will use diesel-power construction equipment that will have emissions of carbon dioxide, carbon monoxide, nitrogen oxides, volatile organic compounds (VOCs), and particulate matter. In addition, these activities may result in the release from soils of methane, VOCs, and semi-volatile organic compounds (SVOCs), by several mechanisms, including volatilization, dust emissions, and/or soil vapors escaping to the atmosphere. Dust emissions containing lead may also be associated with the nine areas designated in the RAP for soil removal. Excavation in areas with petroleum hydrocarbon impacted soils could give off odors. The estimated in-place volumes of soil to be excavated for SVE system piping installation and from the nine soil-removal locations specified in the RAP is approximately 1,200 and 72 cubic yards, respectively. Excavated soil requiring off-site removal will be properly disposed at a licensed facility.

Implementation of the following mitigation measures will reduce the level of impact to less than significant.

1. **Dust Suppression:** During SVE system piping trenching excavation, soil removal excavation, and backfilling activities, dust and particulate matter at the excavation exclusion zone boundary will be continuously monitored using a miniRAM™ dust monitor, or equivalent, in accordance with SCAQMD *Rule 403 Fugitive Dust* requirements. Dust and particulate matter control measures will be implemented to mitigate migration. Periodic watering of the active excavation areas will be conducted throughout trench and soil removal excavation and backfilling activities. Water mist may also be used on soil placed in the transport trucks or bins. After the soil is loaded into the transport trucks, the load will be covered with a tarp to prevent dust generation during transportation from the Site to the disposal facility. Soil will be brushed from truck tires and truck bodies. Trucks may also be required to run over rumble strips to remove excess soil before leaving the Site.
2. **Odors Suppression:** During SVE system piping trenching excavation, soil removal excavation, and backfilling activities, odors control measures will be implemented in sequential steps that will include: (a) application of water spray to the working area and excavated soils; (b) spraying the excavation surface and excavated soils with Simple Green™ using a pump sprayer; (c) application of Odex®, a commercial vapor and odors suppressant chemical manufactured by Kuma Corporation; and (d) application of vapor/odors suppressant foam, if warranted. Odex® is an all-natural, biodegradable, odors neutralizing solution made entirely of food-grade products. If unpleasant odor emissions cannot be promptly controlled, work will be temporarily halted so that alternative odor control methods can be evaluated and implemented.
3. **VOCs Suppression:** During SVE system piping trenching excavation and soil removal excavation excavated soils and the excavation face will be monitored for VOCs using a photoionization detector (PID) calibrated to hexane. Monitoring will be performed at a distance of not more than 3 inches above the soil surface. Monitoring will be performed at a frequency of not less than one reading for every two cubic yards of soil excavated and not exceeding 15 minutes between monitoring readings. If PID readings of 50 parts per million (ppm) or greater are detected for a sustained period of 15 minutes, SCAQMD will be notified within 24 hours of the first detection of VOC-impacted soil and appropriate mitigation measures will be implemented immediately as required by SCAQMD *Rule 1166 Volatile Organic Compound Emissions from Decontamination of Soil*. If PID measurements of 1,000 ppm or greater are detected for a sustained period of 15 minutes, excavation work will stop and SCAQMD will be notified within one hour of detection and appropriate mitigation measures will be implemented immediately as required by SCAQMD *Rule 1166*. Once these notification and mitigation measures have been accomplished, work will resume. SVE trench excavated soil with PID screening values of less than 50 ppm may be used for trench backfill.
4. **Methane Suppression:** SVE piping trenching and soil removal excavations will be monitored for potential presence of methane using a flame ionization detector (FID) or a four-gas meter. If methane is detected at a concentration of 10 percent of lower explosive limit (LEL), work will stop and the area will be ventilated using portable fans. Once methane concentrations have been reduced to less than 10 percent of LEL, excavation activities will be resumed.

GREENHOUSE GAS EMISSIONS MITIGATION MEASURES:

Equipment used in soil removal excavation, SVE wells installation, SVE piping trench excavation, loading and transporting of soil, SVE system compound construction, SVE system operation, and personnel vehicle movement during the implementation of the proposed project will generate greenhouse gas emissions (i.e., carbon dioxide) from combustion of fossil fuels in engine-powered equipment.

The duration of the Phase I SVE system implementation and operation approximately will be approximately 2 years, as detailed in the schedule included in the RAP (Plate 6.1 – Proposed Implementation Schedule). The data collected during the first 6 months of operation of the Phase I SVE system will be used to support the design of the Phase II SVE system. The emissions associated with construction activities are temporary and minimal, thus emissions are not estimated here. Phase I SVE system operation will generate greenhouse gas emissions estimated at approximately 1,400 metric tons of carbon dioxide equivalent (CO₂e) per year, consistent with carbon dioxide emissions from the combustion equipment that are integral to the off-gas treatment system. The estimated operational emissions are below the SCAQMD interim industrial standard of 10,000 metric tons of CO₂e per year.

The resulting greenhouse gas emissions from the proposed project would have less than significant impact to the environment. Therefore, no additional mitigation is required.

Phase I SVE System Operation

Emissions from Phase I SVE system operation activities will include carbon dioxide, carbon monoxide, nitrogen oxides, and particulate matter from the use of two (2) propane-powered internal combustion engines (ICE) integrated into one unit. Residual concentrations of methane, VOCs and SVOCs will also be emitted. SVE system operation will be conducted and managed consistent with the requirements of SCAQMD operation permit monitoring and reporting requirements. The Phase I SVE system operation will be approximately 2 years as detailed in the proposed schedule.

Operation of the ICE unit for off-gas treatment will result in estimated emissions of 8 metric tons of nitrogen oxides per year. These emissions are equivalent to 43 pounds on nitrogen oxides per day, which is below SCAQMD CEQA threshold of 55 pounds per day of nitrogen oxides and therefore are considered less than significant. Nitrogen oxides are ozone precursors and are included as criteria pollutants; the project region is non-attainment for ozone under applicable federal and state ambient air quality standard.

NOISE MITIGATION MEASURES:

Noise producing equipment that may be used over the course of the project includes construction vehicles, excavation equipment, power tools, vacuum blowers and off-gas treatment units. Specific drilling and excavation equipment has not been selected at this time. Elevated noise levels resulting from the proposed project trenching, excavation, and backfill activities would be temporary in nature. There may be short duration activities where noise reduction is not feasible or warranted (i.e., asphalt or concrete saw cutting). The use of equipment on-site during soil removal excavation, SVE piping trench excavation, SVE well installation, as well as the temporary increase in construction vehicles, would only result in a temporary change to the existing noise levels at the Site. The duration of the project activities

would be limited to approximately 6 months for the installation of the SVE system and 2 years for Phase I SVE system operation. The Phase I SVE system equipment (blowers and off-gas units) will be installed within a fenced enclosure located more than 500 feet from the closest private residence and will incorporate sound attenuation elements.

The Noise Control Ordinance of Los Angeles County limits exterior noise levels at residential structures to below 50 decibels (dB) during daytime (7:00 a.m. to 10:00 p.m.) and below 45 dB during nighttime (10:00 p.m. to 7:00 a.m.), the trench excavation activity would be restricted between the hours of 7:00 a.m. and 5:00 p.m. on weekdays, and would be prohibited on weekends. Thus, during the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday, persons may be temporarily exposed to noise levels exceeding ambient levels during the proposed project operation.

With the mitigation measures proposed, the project would result in less than significant noise impacts. Noise mitigation measures to avoid or reduce exceedances may include the following:

1. Contractors performing trench excavation work will be required to utilize well maintained equipment fitted with properly functioning mufflers. In selecting equipment to be used, contractors will be directed to utilize the smallest, quietest equipment capable of effectively and safely completing planned trench excavation tasks. If necessary, equipment will be retrofitted with sound damping materials and exhaust and intake mufflers.
2. Truck operators will be directed to shut down engines when trucks are staged or during soil loading, if they are stationary for a period of 5 minutes or longer.
3. When necessary, and to the extent practicable where it can be done safely, sound attenuation barriers or blankets will be used between the area of the property where trench excavation is conducted and adjacent properties. Sound attenuation barriers may be constructed on-site using wood framing for support and plywood covered with sound absorbing materials, or sound blankets supported on metal frames may be used. Depending on the site physical layout and excavation location, use of such sound attenuation barriers may require modification of excavation areas and layout. Sound attenuation barriers will not be placed between the excavation area and the street due to the need for equipment to operate, excavate, and transfer soil to trucks staged in the street.
4. If noise levels from project activities measured at adjacent residential property line exceed background levels and applicable County of Los Angeles noise standards, work will be temporarily halted so that further noise mitigation measures can be evaluated and implemented.

There may be short duration activities where noise reduction is not feasible or warranted (i.e., asphalt or concrete saw cutting). In these cases, notices to property owners or residents providing details of scheduled activities and anticipated noise levels will be mailed in advance of starting activities.

The proposed project activities are expected to result in less than significant groundborne noise level impact to nearby residences.

LIMITATIONS

Kleinfelder performed the services for this project under the Standard Procurement Agreement with Procurement, a division of ExxonMobil Global Services Company (signed on June 21, 2007). Kleinfelder states that the services performed are consistent with professional standard of care defined as that level of services provided by similar professionals under like circumstances. This report is based on the regulatory standards in effect on the date of the report. It has been produced for the primary benefit of ExxonMobil Global Services Company and its affiliates.

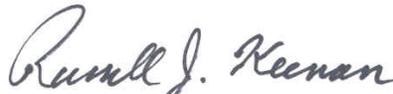
If you have questions about this letter or wish to discuss the proposed mitigation measures, please contact us at your convenience.

Sincerely,

KLEINFELDER WEST, INC.



Mark E. Pate, P.G.
Senior Project Manager



Russell J. Keenan
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