
Central Coast Regional Water Quality Control Board

February 26, 2016

Kevin Bumen, Airport Manager
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Return Receipt Requested**

Dear Mr. Bumen:

SITE CLEANUP PROGRAM: SAN LUIS OBISPO COUNTY REGIONAL AIRPORT, 903 AIRPORT DRIVE, SAN LUIS OBISPO, SAN LUIS OBISPO COUNTY – REQUIREMENT FOR GROUNDWATER INVESTIGATION WORKPLAN

Central Coast Regional Water Quality Control Board (Central Coast Water Board) staff reviewed San Luis Obispo County submittals dated January 20, 2016, which included a cover letter and several attachments, and February 19, 2016 letter (submittals) responding to our November 23, 2015 letter requiring information about historical and current trichloroethene (TCE) use and disposal at the San Luis Obispo County (SLO) Airport. Central Coast Water Board staff required results from environmental investigations and available information on chemical usage and industrial operations of current and past property owners and occupants to identify potential source(s) of the TCE plume in groundwater southwest of the runway along Buckley Road. The February 19 submittal indicated more records have been discovered and evaluated by county staff. In the January 20 submittal, SLO Airport staff requested a 30-day extension to collect and submit records on Hazardous Materials Business Plans (Plans) submitted by lease holders at the Airport and information acquired in investigations of adjacent properties where use of TCE may have occurred. Central Coast Water Board staff concurs with your January 20, 2016 request for an extension to submit additional information. SLO Airport is required to submit this information on or before **April 15, 2016**. This extension also applies to the information that was required in our November 23, 2015 letter but has not been submitted by SLO Airport to date, as detailed below. This information is an important part of the investigation to determine the TCE source(s) in groundwater. However, considering the magnitude of the known TCE impacts (as described below and as discussed with SLO County staff in our meeting on February 3, 2016), and hydrogeologic and groundwater information, Central Coast Water Board requires the SLO Airport prepare a workplan to conduct soil gas and groundwater assessment activities. The SLO Airport must submit a detailed workplan by **April 15, 2016** to delineate TCE in soil gas and groundwater along Buckley Road and at locations on the SLO Airport property where TCE may have been discharged to the ground based on historical information. Minimum requirements to be included in the workplan are described in further detail in this letter.

Background

The chlorinated solvent TCE has been detected in two of six SLO County Environmental Health Services-regulated public supply wells (both historic and currently regulated wells) in the immediate vicinity of the Thread Lane/Buckley Road area since the late 1990s. In Fall 2015, TCE distribution in groundwater may have shifted in the Thread Lane area due to drought as indicated by increases in TCE concentrations in a private well located west of Thread Lane and in one adjacent public supply well. These increases led to broader well sampling in the area in December 2015 and January 2016. Results from these subsequent sampling events revealed that 27 wells had TCE detections, with 11 of those wells having concentrations above the maximum contaminant level (MCL) for TCE. The higher TCE concentrations in sampled wells extend from Thread Lane to Davenport Creek Road parallel to Buckley Road. Two wells sampled on the SLO Airport property also had detections of TCE, including one well located upgradient of the Thread Lane area. The California Department of Public Health's MCL for TCE is 5 micrograms per liter ($\mu\text{g/L}$) in groundwater (the drinking water standard), which is also the water quality objective in the Central Coast Water Board's Basin Plan. Environmental site investigations conducted at industrial properties on Thread Lane have not identified a source of TCE; therefore, the next most probable source of TCE is the SLO Airport. Portions of the SLO Airport are hydraulically upgradient of the Thread Lane area (regional groundwater flow is from east to west), and the aircraft industry generally used TCE as a solvent (degreaser) in the past to clean airplane parts, as such, the SLO Airport is considered a potential source of TCE in groundwater.

According to our available records, the SLO Airport was used by the United States military (U.S. Army Air Corps, California National Guard, and Navy) between 1938 and 1946, followed by various private industries until the present for aircraft maintenance and storage. Therefore, TCE could have been used and disposed of at the SLO Airport sometime between 1938 and the 1970s when TCE was largely phased out of use because of its toxicity. The Submittals only provided waste manifest information dating back to 1998, and environmental review documents dating back to 1979. Based on our review of the documents provided by the SLO Airport to date, a detailed discussion on historical chemical use or historical waste disposal practices at the SLO Airport was not included, and specifically not for the time period during which TCE was widely in use as a solvent. One potential waste disposal location was an old leach field located on the east side of the runway according to Figure 9 of Cleath's Ground Water Study (1987)¹. The "Airport-Old App. Building Well" where TCE was detected at 4.0 $\mu\text{g/L}$ in December 2015, is located in the vicinity of this old leach field and upgradient of the Thread Lane area. This suggests that the former leach field may be a potential source of TCE. The January 20 submittal references a large excavation that the SLO airport recently backfilled which is part of the foundation for new airport facilities, stating that "*There have been no reports of unusual odors or soil colors, and no reports of visually detectable impacts to groundwater*". For TCE impacts to soil and groundwater, at lower TCE concentrations, visual and olfactory methods of detecting impacted soil and groundwater are not reliable or appropriate screening methods. Additionally, the large excavation may not be in the exact location of the former leach field or other areas of potential discharge.

Extension for Submittal of Required Documentation

As stated above, the Central Coast Water Board grants an extension for SLO Airport's submittal of the following information:

¹ T. Cleath, 1987. Ground Water Study, San Luis Obispo Airport Area.

1. Copies of current and historical aerial photos and historical surface drainage maps for the runway and associated industrial buildings. This should include aerial photos for the portion of the airport's history as a military facility, and for periods in the 1950s through the ensuing decades to the present.
2. Information on current and former owners, lessees, and operators of properties within the area now owned by the SLO Airport, along with descriptions of present and historic businesses and the locations where they operated. Provide details on the location where current and former aircraft or other operations used, stored, and disposed of TCE or other wastes, and maintained or repaired aircraft, during the period between when the land was first developed and 1998.
3. Provide information on any current or former supply wells and monitoring wells located on the airport property, including a map of locations, well construction details, and laboratory analytical results.
4. Submit all available Hazardous Waste Manifest Plans
5. Submit any information obtained by SLO Airport for other properties in the area that may have used TCE.

Water Board staff will not recommend enforcement action if you submit the above items (as originally required in our November 23, 2015 letter) on or before **April 15, 2016**. Failure to comply with this deadline will subject you to enforcement action, including administrative civil liability, based on the original due date.

April 15, 2016 Workplan Requirements

To determine if there are sources of TCE at the SLO Airport, the Central Coast Water Board requires the SLO Airport to submit a workplan by **April 15, 2016** to perform groundwater and soil gas investigations. The environmental investigations must be conducted with direct oversight by, and reports must be signed by a registered engineer or professional geologist experienced in conducting complex environmental soil and groundwater investigations. The workplan must include, at a minimum, the following:

1. Proposal for collecting groundwater samples along Buckley Road (these can be grab groundwater samples) and analyze for TCE and related volatile organic compounds (VOCs). SLO Airport must collect groundwater samples south of runway 29 and 25 at locations that are spaced close enough to fully characterize the width, depth, and maximum concentrations of TCE currently identified along the Buckley Road area. The SLO Airport must collect a sufficient number of soil samples to characterize the lithology, especially any potentially impacted water bearing units in the borings used to collect groundwater samples. SLO Airport must also use a photoionization detector (PID) to screen soil from the boring for VOCs and record this on the boring log.
2. Proposal for soil gas sampling locations and methods to evaluate potential sources of TCE introduced into the subsurface from historical and current stormwater drainage pathways and storm drain locations along Buckley Road.
3. Proposal for locations to conduct soil gas sampling for TCE and related VOC analyses in the former leach field area located east of runway 25 (as discussed above). The proposal will include collection of groundwater samples for TCE and related VOC laboratory analyses beneath locations having elevated TCE in soil gas samples. SLO Airport is required to laterally and vertically delineate TCE in soil gas and groundwater in all areas where TCE is present. The workplan must specify criteria/rationale for stepping out to define the lateral extent of TCE on the airport property.
4. Proposal for conducting soil gas sampling for TCE and related VOC analyses at other potential disposal areas. The SLO Airport must review historical aerial photographs, disposal records,

and operational records for other potential disposal locations (i.e., leach fields) and incorporate additional proposed soil gas sampling locations, as appropriate.

5. Include a detailed schedule for the environmental investigations proposed in the workplan. The workplan should be sequenced such that SLO Airport conducts items No. 1 and 2 above prior to conducting items 3 and 4.
6. Provide names and contact information for employees who are/were involved in waste disposal operations at the SLO Airport prior to 1998.

TCE has impacted several domestic supply wells and the source has not been identified. Therefore, there is urgency in finding the source and starting cleanup activities to prevent further degradation of the groundwater resources in this area. As a result, Central Coast Water Board staff has required a relatively short timeframe for submittal of the workplan. We encourage SLO County staff to contact and meet with Central Coast Water Board staff to discuss the details of the above required workplan tasks. We strongly encourage you to meet with us as soon as possible to discuss proposed groundwater and soil gas sampling locations.

Legal Requirements

The Central Coast Water Board's requirement that you submit a workplan and provide names and contact information for employees who are/were involved in waste disposal operations are made pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the California Water Code, a violation of a Water Code Section 13267 requirement may subject you to civil liability of up to \$1,000 per day for each day in which the violation occurs.

The Central Coast Water Board needs the required information to determine if past and/or current airport operations are a source of pollution for the TCE detected in groundwater and to delineate the extent of TCE impacts in soil and groundwater beneath the SLO Airport property. SLO Airport is required to submit this information because it is the current property owner. The evidence supporting this requirement is described above.

Any person affected by this action of the Central Coast Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board, Office of Chief Counsel, P. O. Box 100, Sacramento, 95812 within 30 days of the date of this order. Copies of the law and regulations applicable to filing petitions will be provided upon request.

If you have questions, please contact **Dean Thomas at (805) 549-3690 or Dean.Thomas@waterboards.ca.gov** or Thea Tryon at (805) 542-4776.

Sincerely,

for Lisa Horowitz McCann
Interim Executive Officer

cc:

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