

## **Environmental Report Palos Verdes Landfill – First Quarter 2020**

At the January 23, 2012 meeting of the Palos Verdes Landfill Citizens' Advisory Committee (CAC), the Committee decided that regularly-scheduled quarterly meetings were no longer necessary. Instead, the Committee decided to meet on an "as-needed" schedule. The Committee requested the Sanitation Districts' staff prepare a quarterly Environmental Report that updates the Committee on the results of routine temperature and landfill gas monitoring. This report covers the First Quarter of 2020 (January 1 through March 31, 2020).

### **Landfill Gas Well Temperature Monitoring**

As discussed at the May 3, 2010 CAC meeting, household refuse includes organic matter that can generate heat as it decomposes (similar to the heat generated in an active backyard compost pile). The composting process and the temperature of the waste can be controlled by limiting the amount of air available within the landfill. The Sanitation Districts control the air available in the Palos Verdes Landfill by monitoring the integrity of the soil cap and by controlling the draw rate at individual gas collection wells (i.e., preventing conditions that could draw excess air into the waste mass). The Sanitation Districts monitor the temperature of the landfill gas collection wells to determine if adjustments are needed. These procedures have been shown to effectively control the temperature of the waste.

At the CAC's request, the Sanitation Districts share the results of temperature monitoring with the CAC on a quarterly basis. Specifically, the Sanitation Districts have been asked to include a discussion in the environmental report whenever the temperature in any well exceeds 170 degrees Fahrenheit. In that case, the Sanitation Districts would also discuss the follow-up actions that were taken to control composting at that location.

During the First Quarter of 2020, there were no gas collection wells where temperature measurements exceeded 170 degrees Fahrenheit.

For more information about landfill gas temperature control, please see Appendix I of the First Five-Year Review for the Palos Verdes Landfill.

### **Surface Gas Monitoring**

As discussed at the April 25, 2011 CAC meeting, the surface of the landfill is monitored for evidence of landfill gas emissions on a quarterly basis. Monitoring is conducted by continuously recording the methane content of the air immediately above the cover surface while traversing the landfill area in a systematic grid pattern. If methane readings are above prescribed action levels, the Sanitation Districts are required to make gas system adjustments or soil cover repair within the time limits specified in the South Coast Air Quality Management District (SCAQMD) Rule 1150.1 Compliance Plan.

At the CAC's request, the Sanitation Districts provide a summary of action level exceedances and the Sanitation Districts' response. Routine surface gas monitoring conducted by site staff in the First Quarter of 2020 did not show any areas of the site where action levels were exceeded.

For more information about surface monitoring of landfill gas, please see Appendix B of the First Five-Year Review for the Palos Verdes Landfill.

### **Perimeter Probe Monitoring**

As discussed at the October 25, 2010 CAC meeting, the subsurface zone around the perimeter of the landfill is monitored for evidence of landfill gas migration on a monthly basis. If methane is detected at greater than five percent by volume in any boundary probe, the Sanitation Districts are required to adjust the gas system to clear the probe within the time limits specified in the SCAQMD Rule 1150.1 Compliance Plan.

At the CAC's request, the Sanitation Districts provide a summary of action level exceedances in boundary probes and the Sanitation Districts' response to clear the probe. Routine boundary probe monitoring in the First Quarter of 2020 did not show any probes where action levels were exceeded.

For more information about boundary probe monitoring, please see Appendix C of the First Five-Year Review for the Palos Verdes Landfill.

### **Other Issues of Interest to the CAC**

As was discussed in previous Environmental Reports, California Water Service (CWS) continues to work on constructing new potable water pipelines that will supply the Palos Verdes Peninsula. Project details may be found at <https://www.pvpwaterproject.com/>. The project is utilizing the landfill's old Recycle Center area for construction office trailers and the eastern corner of the landfill's top deck for storage of construction materials and equipment.

During First Quarter 2020, seepage was identified along the east side of the normally-dry earthen channel at the South Coast Botanic Garden. As a result, the Sanitation Districts installed a French Drain along the alignment of the seep to prevent surface water expression and a sump to collect the seepage. The Sanitation Districts investigated two possibilities as a source of the seep water. The South Coast Botanic Garden's staff tested their irrigation system and found no leaks. California Water Service has a pipeline that runs through the southern portion of the garden. CWS found a small leak (about 2 gallons per minute) that was repaired on February 25, 2020. The Sanitation Districts are currently in the process of installing an extraction sump adjacent to the low spot of the earthen channel, removing and replacing a drainage pipe that conveys offsite stormwater and urban runoff through the South Coast Botanic Garden, and planning for repairs of a storm drain that connects to the offsite storm drain system. During dry weather, the Sanitation Districts are also setting up containment in the on-site storm drain to collect any seepage that may make its way to the storm drain system.

During this quarter, the Sanitation Districts completed work on the installation of the new extraction well E19 near existing extraction well E16 at the South Coast Botanic Garden to help further improve containment of the affected groundwater in that area of the site. This well is currently operating.

Operations and maintenance of the environmental control systems at the landfill are essential functions and continue to be covered during the current Safer-at-Home order. Landfill staff have adjusted schedules to provide for physical distance, and except as needed for the care of horses housed at the Peter Weber Equestrian Center, the gates providing offsite access to the site have been closed.