

Environmental Report Palos Verdes Landfill – First Quarter 2017

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 2017.

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 have shared the results of the 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 2017, 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 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 2017 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 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 2017 did not show any probes where action levels were exceeded.

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

Other Issues of Interest to the CAC

Renovations began on the South Coast Botanic Garden's Rose Garden in February 2017. The renovations include construction of trellis structures and a decorative water fountain as well as installation of irrigation and electric utilities and re-contouring of the Rose Garden area to accommodate Americans with Disabilities Act requirements. As is the case with any construction project at the Botanic Garden, both the Sanitation Districts and the Department of Toxic Substances Control have reviewed the construction details to ensure that the construction does not impact the integrity of the landfill cover or any other environmental control systems.

At the end of March, Flare 7 (the main flare) was shut down for three days so a new flare floor could be installed. The old flare floor had corroded in areas which made it unsafe to enter the flare to perform necessary preventative maintenance; however, the installation of the new floor occurred before any preventative maintenance servicing was missed. During the time the main flare was not in service, the backup flares were used to burn the landfill gas. The new floor was installed without incident, and the main flare was subsequently put back in service.