

Environmental Report Palos Verdes Landfill – Third Quarter 2016

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 Third Quarter of 2016.

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 Third Quarter of 2016, 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. On September 9, 2016, the South Coast Botanic Garden Superintendent called the landfill office and reported a small depression (approximately 24"

diameter, approximately 24" deep), caused by normal settling of refuse in the landfill, had formed on one of the Garden roads. Districts' staff visited the site with the total vapor analyzer (TVA) and measured methane levels in exceedance of action levels. Soil cover repair corrective action was immediately taken to ensure compliance with regulations. Clean soil was brought to the Garden from the Main Site and was added and compacted to fill the depression. Subsequent methane readings showed no exceedances of action levels. Other routine surface gas monitoring conducted by site staff in the Third Quarter of 2016 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. Monthly monitoring during the Third Quarter of 2016 did not detect landfill gas in any boundary probes.

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

The site was used for community events three times during the quarter. The City of Rolling Hills Estates held its annual "The Hills Are Alive" race on August 13, 2016 and utilized a portion of the site for the race route. Additionally, the City of Rolling Hills Estates used the landfill site for parking during its City Celebration held at Ernie Howlett Park on September 17, 2016. Lastly, the annual Portuguese Bend National Horse Show, a fundraiser for Children's Hospital Los Angeles, was held at Ernie Howlett Park over Labor Day weekend and used the landfill site for parking.