

Environmental Report Palos Verdes Landfill – Second 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 Second 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 Second 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 Second Quarter of 2017 did not show any areas of the site where action levels were

exceeded. However, excavations overseen by the City of Rolling Hills Estates at Ernie Howlett Park during the quarter did result in methane detections in excess of SCAQMD Rule 1150.1 gas monitoring limits. Please see “Other Issues of Interest to the CAC” for more details.

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 Second 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

The site was used for two community events during the Second Quarter of 2017. The Sunrise Chapter of the Rotary Club held their annual South Bay Beer and Wine Festival at Ernie Howlett Park on May 21, 2017, using the Main Site of the landfill for parking. Additionally, the Chadwick School used the landfill parking area for overflow parking for its annual graduation ceremony on June 17, 2017.

In late June, the City of Rolling Hills Estates (City) hired a contractor to pour concrete footings for two new judging stands at Ernie Howlett Park. Upon excavating the ten approximately 24” diameter, 36” deep holes for the footings, the contractor came across refuse and contacted the City, which subsequently contacted the site engineer on June 28, 2017 for guidance. Immediately after the City’s notification, site personnel went to the excavation site and used the total vapor analyzer (TVA) to check if there was any methane coming from the holes, finding that several of the holes had methane detections that were in excess of SCAQMD Rule 1150.1 gas monitoring limits. Rule 1150.1 requires that point methane detections be remediated within 10 days. The City placed plastic sheeting over the holes and secured the sheeting with sandbags until the holes were backfilled with concrete, which occurred within two days of the initial methane detections. After the concrete was poured, site personnel returned with the TVA gas analyzer and did not detect methane above background levels at any of the footings. Site personnel additionally ensured that the soil was compacted and the surface graded to prevent infiltration at the footings, and that there were no gaps between the concrete and the soil. The

Sanitation Districts requested that the City contact them as well as the Department of Toxic Substances Control prior to any future excavations at Ernie Howlett Park.