## Environmental Report Palos Verdes Landfill – Fourth Quarter 2015

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 Fourth Quarter of 2015.

## 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 Fourth Quarter of 2015, 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 summary of action level exceedances and the Sanitation Districts' response. Surface gas monitoring in the Fourth Quarter of 2015 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 Fourth Quarter of 2015 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

During the Fourth Quarter of 2015, work continued with the installation of a new 8-inch high density polyethylene sewer pipe at Ernie Howlett Park. The new sewer pipe is being placed within steel casing and suspended inside a concrete storm drain. Installation work began in September 2015 and is scheduled to complete in January 2016.