

**PALOS VERDES LANDFILL
CITIZENS ADVISORY COMMITTEE MEETING MINUTES
Monday, May 3, 2010 @ Rolling Hills Estates City Hall**

MEMBERS PRESENT: John Addleman, Pat Furey, David Wahba, Doug Henry, Tim Scott, Kurt Swanson, Linda Cessna, Kathleen McGowan, James Greene.

STAFF PRESENT: Robert Ferrante, Kristen Ruffell, Ethan Laden, Don Avila, Mark McDannel, Basil Hewitt

GUESTS: Steve Bradley, Melody Colbert, Karen Greenberg, David Henseler, and Charles Michel Deemer

The inaugural Palos Verdes Landfill Citizen's Advisory Committee (CAC) meeting was called to order with introductions. Robert Ferrante, Department Head of the Solid Waste Management for the Sanitation Districts, indicated that the purpose of the CAC was to provide a vehicle for two-way communication between the Sanitation Districts and the communities adjacent to the main site of Palos Verdes Landfill (Torrance, Rolling Hills Estates, and unincorporated Los Angeles County).

The CAC members, appointed by their respective jurisdictions, proceeded to establish the meeting date, time and location for future CAC meetings. The Committee unanimously agreed that future meetings be held quarterly on the fourth Monday of the month at Rolling Hills Estates' City Hall at 5:30 p.m. The next three CAC meetings will be on July 26, 2010, October 25, 2010, and January 24, 2011, respectively. The proposed bylaws were then adopted by the Committee. John Addleman and Pat Furey were unanimously elected as Chair and Vice Chair of the Committee.

Mark McDannel, Supervising Engineer in the Sanitation Districts' Energy Recovery Section, summarized the history of the power plants at the Palos Verdes Landfill. The existing power plant was put into operation in the 1980's. This facility initially produced 11 Megawatts (MW) of electricity, which has now diminished to 2.4 MW as the quantity and quality of landfill gas has diminished over the years. The Sanitation Districts sold this energy to Southern California Edison under terms of a 20-year contract, which expired in 2008. The power presently produced at the PVLFF is being delivered to the Sanitation Districts' wastewater treatment facilities.

In 2006, the Sanitation Districts planned to replace the existing facility with a new power plant. The new facility would have 8 micro-turbines, producing 1.6 MW of electricity for sale to Southern California Edison, a 300 kW fuel cell for on-site power use, and a new ultra low emissions flare for perimeter gases and power plant backup. In the fall of 2006, the Sanitation Districts entered into a 10-year contract to sell electricity from the new facility to Southern California Edison. In March 2008, the Sanitation Districts' Board approved the environmental document for the new power plant, however, a court ruling in October 2008 led to a permit moratorium by the South Coast Air Quality Management District (SCAQMD) for any new equipment requiring emissions offsets. This moratorium was lifted in January 2010 with the passage of a new law that overrode the earlier court ruling.

SCAQMD issued a draft permit in January 2010 for the new PVLf power plant, submitted the permit to the USEPA, held a public consultation meeting in Rolling Hills Estates, and responded to community comments on the draft permit. In particular, SCAQMD responded to community concerns about the air quality model and the meteorological data used in the health risk assessment modeling. New modeling was done as requested by the community. The new modeling results were in agreement with earlier results showing health risk from the proposed facility is below regulatory thresholds.

In late April 2010 members of the community submitted a petition to the USEPA for additional review of the permit. Depending on the EPA's actions and timing, their review of the permit may take up to one year. The project economics will be re-evaluated when, and if the Sanitation Districts receive the SCAQMD permit. Delays in project implementation will impact the technical and economic viability of the project since methane production at PVLf decreases approximately 3 to 5% per year.

Kristen Ruffell, Supervising Engineer in the Sanitation Districts' Water Quality & Soils Section, summarized the PVLf Gas Well Temperature Monitoring Program. Kristen began with a brief description of how decomposing organic matter can generate heat, using backyard composting as an example. She then described the measures the Sanitation Districts use to control the composting process and limit heat generation by controlling the air available within the landfill.

The landfill is constructed with a soil cap that averages 7 feet thick. The Sanitation Districts monitor the cap to make sure there are no cracks that could allow air to enter the interior of the landfill. The Sanitation Districts monitor the entire cap on a quarterly basis as part of a monitoring requirement of the SCAQMD (AQMD Rule 1150.1). As part of this program, Sanitation Districts' personnel ensure that landfill gas is not escaping and there are no cracks or rapid settlement. The Sanitation Districts also monitor the temperature of each gas collection well on a monthly basis. If the temperature of the well reaches 140° Fahrenheit, the cause is investigated. These measures are effective in controlling temperatures.

During a routine month, most wells at the landfill are below 140° Fahrenheit, and all wells are below 170°F. A temperature exceeding 170°F is an indication that either the landfill is being composted by hyperthermophilic microbes or there could be a subsurface fire.

Because other landfills without similar controls have experienced landfill fires, some people have expressed concern that an underground fire could occur at the Palos Verdes Landfill. CalRecycle indicates that signs of a fire include rapid settlement, smoldering odors, soot in the extraction system, and high carbon monoxide in the landfill gas. The operating procedures at the landfill were discussed with CalRecycle's landfill fire expert and it was found that the Sanitation Districts' operating procedures are adequate for preventing fires. Also, the monitoring program at the Palos Verdes Landfill is adequate to detect and respond to conditions that could lead to a fire. The operating procedures and conditions at the site were discussed with the local fire department as well and they indicated that there were no concerns with the site.

As documented in the Five-Year Review, the Sanitation Districts' procedures for responding to elevated temperatures were shown to be very effective in September 2004. A single gas well with a temperature of 317°F was discovered during routine temperature monitoring. The Sanitation Districts determined that excess air was being drawn through the refuse into the well due to a break in the gas well's air valve. Once the monitoring crew found this break it was quickly repaired and the temperatures in the well returned to normal approximately one week later. This break did not lead to a landfill fire. There was no evidence of combustion (smoke, soot, etc.) and the well's PVC head and casing remained intact. If there had been a fire the well would have been destroyed. A review of the gas well data collected since the Five-Year Review confirms that there been no temperatures over 170°F since the Five-Year review was completed.

Pictures of deformed pipes that some people believe indicate a landfill fire were actually deformed by exposure to the sun during an early summer heat wave. They were in areas of the landfill where the gas flow within the pipes was not sufficient to carry away the heat. To ensure that this type of deformation does not occur again in the future, the Sanitation Districts lightened the external color of the header pipes and increased the wall thickness in the areas with the highest potential for deformation.

During Oral Communications, the following questions were asked (with Districts' staff and CAC response).

- (1) What is the size of the landfill? (291 acres)
- (2) Has the landfill been inspected for earthquakes? (As described in the Five-Year Review, the Site was confirmed to be able to withstand the Maximum Credible Earthquake. Also, after seismic events, Districts personnel inspect the site to make sure everything is in working order.)
- (3) Do the Sanitation Districts conduct groundwater monitoring? (The Sanitation Districts conduct routine groundwater monitoring. The groundwater monitoring program will be discuss in detail at the next CAC meeting.)
- (4) Does any member of the Committee have air quality expertise? (No member of the Committee has specific air quality modeling expertise. However, Kathleen McGowan has experience with groundwater modeling.)
- (5) When was the landfill opened, when was it closed, and when did most settlement occur? (The Sanitation Districts began operating the landfill in 1957 and closed it in 1980 with most settlement occurring within the first few years after closure.)
- (6) How is the CAC different from the Citizens Advisory Board (CAB)? (The CAC is a vehicle for two-way communication between the Sanitation Districts and the local community. The CAB was formed by citizens to address specific issues of concern to them.)

The next CAC meeting is scheduled for **Monday, July 26 at 5:30 p.m.** at Rolling Hills Estates' City Hall. The meeting was adjourned.