

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: August 25, 2015

TO: Honorable Felipe Fuentes, Chair
Honorable Bob Blumenfield, Vice Chair
Honorable Paul Koretz, Member
Honorable Gilbert Cedillo, Member
Honorable Mitch O’Farrell, Member
Energy and Environment Committee

Honorable Mitch O’Farrell, Chair
Honorable Curren Price, Vice Chair
Honorable Paul Koretz, Member
Honorable Bob Blumenfield, Member
Honorable David Ryu, Member
Arts, Parks, and River Committee

FROM: Enrique C. Zaldivar, Director
LA Sanitation

SUBJECT: CF# 15-0314 - LOPEZ CANYON LANDFILL EQUESTRIAN PROJECT AND POST-CLOSURE STABILITY AND ENVIRONMENTAL RESTORATION

On March 18, 2015, Council Motion 15-0314 (Fuentes-Huizar) was introduced instructing LA Sanitation (LASAN) to:

1. Report on the status of LASAN’s preliminary plans for an equestrian staging area and recreational trails for the Lopez Canyon bufferlands; including potential project implementation and timeframe.
2. Report on the current status of ground settlement activity at the Lopez Canyon landfill site and the projected timeframe for post-closure stability and environmental restoration.

LOPEZ CANYON DEVELOPMENT PLANS

In 2010, LASAN prepared a proposed development plan for the landfill property which has been shared with the community for their input. The plan consisted of three phases.

Phase I of the plan calls for the improvements of the park located at the entrance of the site and the construction of an Environmental Education Center (EEC). Both projects have been completed. The opening ceremony for the EEC, presided by Councilmember Fuentes, was held on April 16, 2015. The EEC is being utilized by LA Sanitation and the Los Angeles Department of Water and Power staff to educate residents on composting and water conservation.

Phase II calls for the construction of an equestrian staging area and recreational trails. The initial preliminary design of the equestrian staging area was completed in 2012. The class-C cost estimate for construction was \$497,100. LASAN shared the proposed design with the community at several meetings and received comments. We were informed at past community meetings that some members of the community had expertise constructing similar projects around the State and offered to assist us in improving the design. As of this date, there has been no specific feedback from the equestrian community regarding the offer. LASAN, in collaboration with CD-7 staff, will reestablish the outreach with the community to revisit the design concept of the equestrian trails and staging area. We will reach out by email to offer stakeholders and the local community other opportunities to provide us with their feedback as well as, during future community meetings. Once the community's input is received, the design will be completed.

Furthermore, for the last several years, the location of the proposed equestrian staging area has been presented and discussed with the community at several meetings held at Lopez Canyon Landfill, at Lake View Terrace Improvement Association, Kagel Canyon Civic Association and Foothill Trails District Neighborhood Council. No objections were raised during any of these meetings. Based on those meetings and the feedback received from the community, LASAN anticipated that a Negative Declaration will be adequate for the project. However, on May 12, 2015, at a community meeting held at Lopez Canyon, concerns were raised about the proposed location of the equestrian staging area by several residents who live in close proximity of the proposed location. As a result, an environmental impact study is necessary and will be prepared.

In addition, LASAN has received unsolicited offers to place solar panels at the landfill to help increase renewable power generation in the Los Angeles basin. LASAN has secured the services of a consultant to study the feasibility of developing a solar power generation project at 23 acres of Lopez Canyon Landfill. We envision the solar power project, if feasible, be integrated with the proposed hiking and equestrian trail plan. The draft feasibility report is currently being reviewed. If the solar power project is found to be feasible, LASAN will incorporate the funding of the equestrian trail system as part of the request for proposals, and combine the environmental impact study for both projects under one report. LASAN is committed to open space. However, we believe that utilizing an area of the landfill that is not ready for public access for the next 20 years is a good candidate for increasing the renewable power generation in the LA basin. If the solar power project is found to be unfeasible, an alternative source of funding would need to be identified for the equestrian trail project.

Phase III consists of development of the landfill area after stabilization of the land settlement and reduction of landfill gas production to a level considered safe for public access. Several potential end uses for LASAN-owned landfills have been identified to exist under Phase III. The possible uses are separated into two main groups: Additional LASAN Uses and Community/Public Uses. The groups are not mutually exclusive; they may be pursued in combination. Examples of LASAN Uses include the construction of a permanent building that may be used for office space, training and conferences. Examples of Community/Public Uses include both active and passive recreation such as: golf course, organized sport facilities, playground and hiking and equestrian trails.

LANDFILL SETTLEMENT ACTIVITY

Landfill settlement occurs from compaction and decomposition of refuse into gas and liquid. For arid environments such as Los Angeles, the rate of decomposition in a landfill is slower than in other areas of the country with more rain because of the low moisture content within the refuse cell. Furthermore, the rate of uneven settling or subsidence of landfills is at the highest during the first 20 to 30 years after cessation of refuse placement. Decomposition continues until the organic material is reduced to some appreciable amount, or as long as organic material continues to decompose.

Lopez Canyon last accepted refuse in 1996. The current settlement of the disposal area compared to the topography in 1996 when the landfill was closed is around 15-25 feet. This rate will decrease as the landfill ages. However, it is expected that a considerable rate of settling will continue for the next 15 to 20 years.

The decomposition settlement rate is directly proportional to the landfill gas production. Landfill Gas (LFG) generation rate is projected to continue for many years, and will decrease over time to eventually insignificant levels with the maximum LFG generation rate occurring at or within two years of closure. Figure 1 shows the Lopez Canyon gas production data compared to a mathematical decay curve model that predicts future gas production. The model is a first-order decay rate equation used to estimate methane and LFG generation. It is the most widely used LFG model and is the industry standard for regulatory and non-regulatory applications in the United States.

The primary purpose of post-closure maintenance as required by Title 27 Environmental Protection, Division 2 Solid Waste, Subchapter 5 Closure and Post-Closure Maintenance of the California Code of Regulations is for the landfill owner/operator to maintain and monitor the landfill for a period of not less than 30 years following the closure of the last disposal unit. At a minimum, the required maintenance and monitoring include the following:

- Site security
- Maintenance of the final cover
- Groundwater monitoring and maintenance of the groundwater monitoring system
- Landfill gas monitoring and maintenance of the gas recovery system which consists of over seven miles of gas conveyance pipe and 450 gas extraction wells
- Maintenance of the leachate and condensate control and removal system
- Maintenance of the surface water drainage and erosion control system
- Periodic reporting on all the above

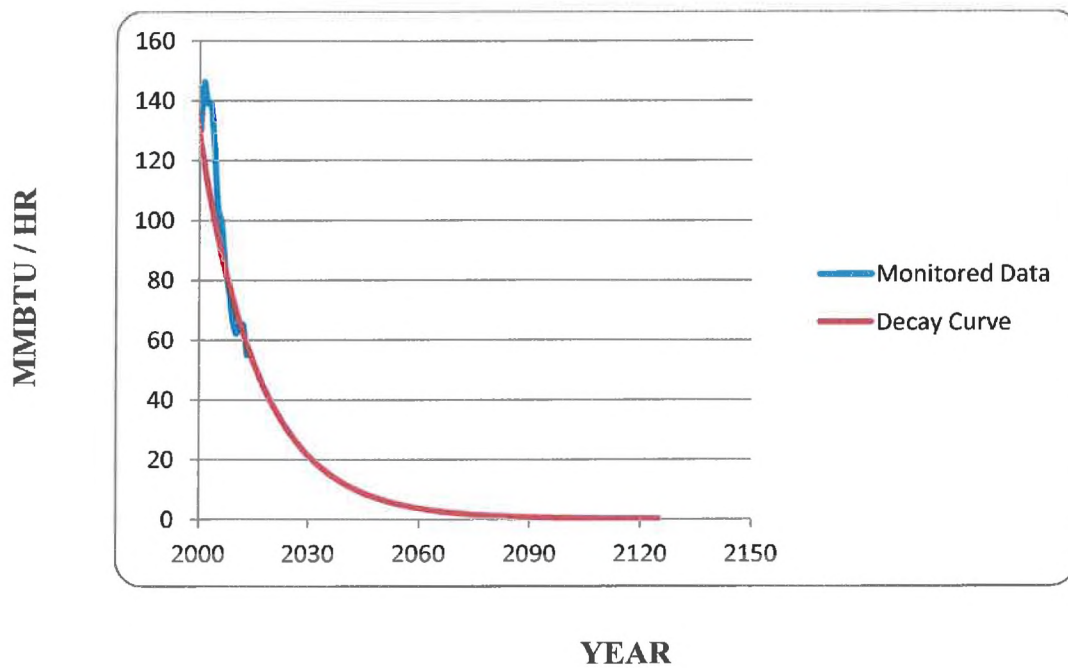
Based on the projected uneven settlement and the required post closure maintenance, it would be difficult to determine with certainty an exact time frame for post-closure stability and environmental restoration. However, based on our experience in converting other City owned landfills into public access facilities such as active recreation; we believe that the post closure stability milestone for Lopez Canyon Landfill will be reached after 2030.

RECOMMENDATIONS

We recommend that the City Council:

1. Support the development of equestrian staging area and trails within Lopez Canyon landfill property boundaries.
2. Support that the access to the equestrian and hikers be limited and controlled until the post closure maintenance and/ or the settlement has decreased to less than significant.

FIGURE 1



ECZ/KMG:jh

Attachment: Council Motion 15-0314, dated March 18, 2015

c: Rafael Prieto, CLA
Alex Helou, LASAN
Khalil Gharios, LASAN