



Department of Conservation and Development

County Planning Commission

Wednesday, April 11, 2018 – 7:00 .P.M.

STAFF REPORT

Agenda Item # _____

Project Title: Keller Canyon Landfill Land Use Permit Review

County File(s): #LP89-2020

Applicant/Owner: Keller Canyon Landfill Company (KCLC) / Republic Services

General Plan/Zoning: Landfill (LF) / Heavy Agricultural (A-3)

Site Address/Location: 901 Bailey Road, Pittsburg – Bay Point area
(APN: 094-060-008, 018, 019, 020 & 021)

California Environmental Quality Act (CEQA) Status: Exempt. This action does not constitute a project since staff is not recommending any new or modified conditions of approval for the existing land use permit (LUP). This permit review and the preparation and proposed acceptance of the staff report are purely administrative in nature and not subject to CEQA per Section 15061(b)(3).

Project Planner: David Brockbank, Senior Planner (925) 674-7794

Staff Recommendation: ACCEPT the staff report update prepared for KCL's third annual LUP review.

I. BACKGROUND

The County Planning Commission (CPC) continued KCL's third annual LUP review for a third time on January 10, 2018. The first hearing, held on October 25, 2017, was continued to December 6, 2017, and continued a second time to January 10, 2018. The first, as well as the second continuance was based on testimony from some of the residents living in the adjacent neighborhood that brought up various issues potentially associated with the landfill, including odor, dust, noise, visual impacts, seagulls, and litter. It was determined at the October 2017 meeting that the CPC wanted more time to further review the issues and give staff time to prepare responses to questions from the CPC and the public. Staff's supplemental staff report in

December addressed each of the concerns brought up by the local residents. At the December 2017 meeting, additional residents raised a number of the same concerns with potential landfill impacts on the neighborhood. The operator also made a presentation about landfill operations and controls, which shared additional information specific to previous comments from the public. The CPC Chair then closed the public hearing and the commissioners began deliberations. The item was continued a second time.

Due to the number of complaints about the landfill from the community, the CPC was not been prepared to move the Keller Canyon Landfill (KCL) permit review on to the Board of Supervisors (Board), with or without recommending modifications to LUP's conditions of approval (COA). This report serves as a status update to inform the CPC and other interested parties about progress and next steps related to community concerns with the landfill, most notably odor issues, but also view, litter, noise, dust, and seagulls. The CPC continued the permit review deliberation until July, however requested that staff return three months later to solely provide an update at the first meeting in April.

II. STATUS UPDATE

Odor Issues: Since the odor complaints really started to increase in late 2016, KCL has taken a number of steps to identify and address odor issues that may be a result of standard landfill activity, including contracting with odor experts, installing odor suppression devices, and monitoring/inspecting potential on-site sources like the leachate tanks, to conducting regular odor investigations on- and off-site. Several members of KCL's staff are on the list of recipients for all odor complaints submitted through the County website, so the landfill operator is fully aware of the complaints submitted to the County. Since the start of this third permit review, 164 odor complaints were submitted through the County's online complaint form (October 1, 2017 – March 31, 2018). Approximately 112 of those complaints were submitted during the past three months, January 1 – March 31, 2018, or roughly since the last CPC meeting on January 10, 2018. The 112 complaints were submitted on 34 separate days, some of those days complaints were received first thing in the morning and then again in the evening. Twenty-seven complaints were received for just January 30th and January 31st. The monthly breakdown for 2018 is as follows:

January 2018: 36 complaints

February 2018: 49 complaints

March 2018: 27 complaints.

Other regulatory agencies are aware of the odor complaints at KCL that also conduct regular inspections of the landfill and the surrounding community. Contra Costa Environmental Health staff also receive a copy of the odor complaint submitted through the County's online form. While the Bay Area Air Quality Management District (BAAQMD), maintains a separate online, odor / emissions complaint form. In February this year, 40 odor complaints were filed with BAAQMD, and 23 complaints were submitted last month (many of the complaints submitted to BAAQMD are from persons that also submit complaints to the County).

The CPC requested staff to research other landfills and solid waste facilities to determine what other facilities have used or are using to address odor issues. Staff reached out to other regulatory agencies to ask the inspectors of landfills, compost facilities, and transfer stations, what, if anything worked on odors. A common practice amongst solid waste facilities is using what KCL is already employing, a misting system. This odor control device attempts to mask the odors, but can sometimes create a new chemical smell. Some misting systems use another formula that is supposed to neutralize the odor all together; however, the inspectors that staff spoke with felt this did not alleviate the odor issue either. One consensus is that landfill odors are seasonal, heavier in the winter and more rare in the summer. Installing additional landfill gas (LFG) collection wells is another measure to reduce odors, which also happens to coincide with the seasons. The LFG collection wells cannot be drilled/installed during the rainy season. KCL is in the process of installing 26 new wells, and plan to finish that project around the middle of next month (weather permitting).

Staff had many discussions with the landfill operator about odors, visual and noise impacts. Through these discussions, one involving staff for the City of Pittsburg, KCL collaborated with their engineers and odor experts to put the attachments together that are included with this staff report. Other odor management and reduction projects are currently underway at KCL. Attachment A is list of those projects with an associated timeline that includes start and completion dates. Attachment B is a list of landfill's odor mitigations managed by the operator. Attachment C summarizes wind direction data for 2018. Attachments D and E are the two projects KCL is investing its resources to alleviate odors and view impacts. One describes the LFG extraction wells mentioned above and the other is the relocation of the active disposal cell, which is discussed below.

Visual: Following the October 2017 CPC meeting, after witnessing reactions from the residents, the KCL operator initiated discussions with the parent company, Republic

Services, about securing significant unbudgeted funding to move up the schedule for Phase 2E's design and construction, rather than waiting until the end of 2019. The Phase 2E cell is approximately 0.5 miles south of the currently active Phase 3B1. This distance provides a larger buffer between active disposal activity and the nearest local residents. Relocating the disposal activity to Phase 2E would significantly diminish existing visual impacts of tippers and long lines of trucks using the access road for the adjacent neighborhood. This is likely going to be true, although possibly to a lesser degree from the third floor of the City of Pittsburg's Civic building. Relocating to a disposal cell, a half-mile away from the residents will likely minimize detectible odors off-site as well. In transferring the location of the disposal cell, even prematurely or ahead of schedule, the future sequencing of disposal cells would have to be modified as well. In modifying the sequencing plan, the operator would take into account maintaining a greater distance between active disposal operations and the local neighborhoods. The landfill operator has stated that the design and construction costs for these efforts are estimated to exceed \$5 million.

Noise: For about a week at the end of February, DCD received numerous noise complaints, almost daily, about KCL shooting off an air canon early in the morning, starting around 5:40 AM and repeatedly firing every seven to eight minutes, for almost an hour. Both CCEH and DCD inquired with KCL about this canon noise, to which the operator explained that KCL was no longer using its canon (at the request of the neighbors), but continued the use of the bird whistlers. This was concerning, not only for the noise disturbance, but for firing the canon that early in the morning would violate the COAs regulating the hours of operation. Then the noise complaints stopped. DCD staff later found out it was the property manager for the Safeway shopping center north on Bailey Road, using its own canon to discourage the seagulls.

IV. CONCLUSION

Staff recommends that the CPC accept this status update report on the third permit review for KCL's LUP. The continued meeting for this item will be on July 11, 2018.

Attachment A: 2018 Timeline of Scheduled Improvements at KCL

Attachment B: KCL Odor Mitigation Summary

Attachment C: Wind Direction Data for Odor Complaints in 2018

Attachment D: KCL Phase 2E Design

Attachment E: KCL Gas Collection and Control System

Attachment F: Toe Berm/Mitigation Lift Level Berms

Attachment A

Outline of 2018 Scheduled Improvements and Studies at KCL

Milestone	Status	Targeted Start Date	Targeted Completion Date	Comments
Relocation within Phase 3B1	Completed	--	--	Completed February 2018
Gas Collection & Control System	Installations In Progress	March 2018	May 2018	Completion Date Weather Permitting
Flare Station Upgrades	Design in Progress	March 2018	Summer 2018	Design plans submitted to BAAQMD
Phase 2E Design	Design In Progress	December 2017	March 2018	Design Report to be approved by DCD & RWQCB
Phase 2E Construction	Initial Stages in Progress	March 2018	August 2018	Completion Date Weather Permitting. Construction period of 12 to 16 weeks
Toe Berm/Mitigation Lift Level Berms Feasibility Study	Establishing Parameters of Feasibility Study	Nov/Dec 2018 (After Completion of Phase 2E)	TBD	Resources are dedicated to new Phase 2E and new LFG wells. Study of possible mitigation berms to follow.

Attachment B

Keller Canyon Landfill Odor Mitigation Summary

Since the odors began in October 2016, KCL has put forth a great deal of effort and money towards mitigating any offsite impacts from disposal operations. These include, in part, the following:

1. Conducting routine odor patrols onsite and offsite 2 to 4 times daily. On-going;
2. Investigating all odor complaints received. On-going;
3. Designated staff person responsible for receiving after-hours complaints;
4. Conducted community outreach events with neighbors, with plans to facilitate more in the future;
5. Instructed after-hours security personnel to document any odors detected in their daily log, and to contact KCL staff immediately if any significant events occur after-hours;
6. Correcting any odor sources that may be found onsite immediately, to the extent possible. On-going;
7. Monitoring wind and weather conditions associated with all complaints received. Data sent to County DCD. On-going;
8. Added additional wind monitoring station onsite;
9. Design and installation of additional LFG extraction wells, piping, and capacity to control LFG from site disposal activity. Further expand LFG extraction and control system in 2018;
10. Adjusting cover type and usage, including placement of additional soil, to ensure odors are not being caused by alternate cover materials. On-going;
11. Coordinating with odor consultant (starting in 2016 and continuing to present) and following recommendations for odor misting system purchase, installation and operation using only non-toxic, FDA approved odor neutralizing agents. On-going;
12. Secured funding to design and ultimately construct a new Phase 2E disposal cell far away from any potential offsite receptors with respect to odor, noise, litter or visual impacts;
13. Gained corporate approval to construct new Phase 2E disposal cell in 2018.

In all, by the end of 2018, nearly \$9 million will have been spent to address this issue.

Attachment C

Wind Direction Data for Odor Complaints in 2018

(PDF of Odor Complaint Table Provided in Separate Attachment)

The wind direction data provided in the summary table for 2018 includes wind direction and speed at the approximate dates and times specified in the odor complaint table provided by DCD. The data were obtained from the weather monitoring station installed at the KCL scale house for the period of January 5, 2018 through February 17, 2018 as specified in the odor complaint table.

On the dates and times that odor complaints were noted, wind speed data ranged from a low of 0 mph, a high of 12 mph, with an average of 2 mph. Trends in wind direction data include the following approximate percent composition:

- Winds from the North: 4 percent
- Winds from the South: 54 percent
- Winds from the East: 21 percent
- Winds from the West: 21 percent

Attachment D

Keller Canyon Landfill Phase 2E Design

The design of Phase 2E schedule was accelerated in response to community concerns. The purpose of Phase 2E is to minimize odor, noise, and visibility issues associated with active landfill operations in Phase 3B1. Phase 2E site is located at the farthest and most buffered area within the KCL permitted disposal area. Moreover, efforts are currently underway to reconfigure future disposal fill sequence to keep operations in this more distant buffered area for as long as possible. Design and construction costs for these efforts are estimated to be in excess of \$5.0 million.

Design of Phase 2E was initiated on December 2017 and is expected to be completed in this month. The Design Report is expected to be approved by the San Francisco Bay Regional Water Quality Control Board about 30 days after submittal. Approval by County DCD is expected in the same timeframe. Phase 2E will be situated in the southeast portion of the Extent of Waste Placement (please see Site Map);


Attachment E

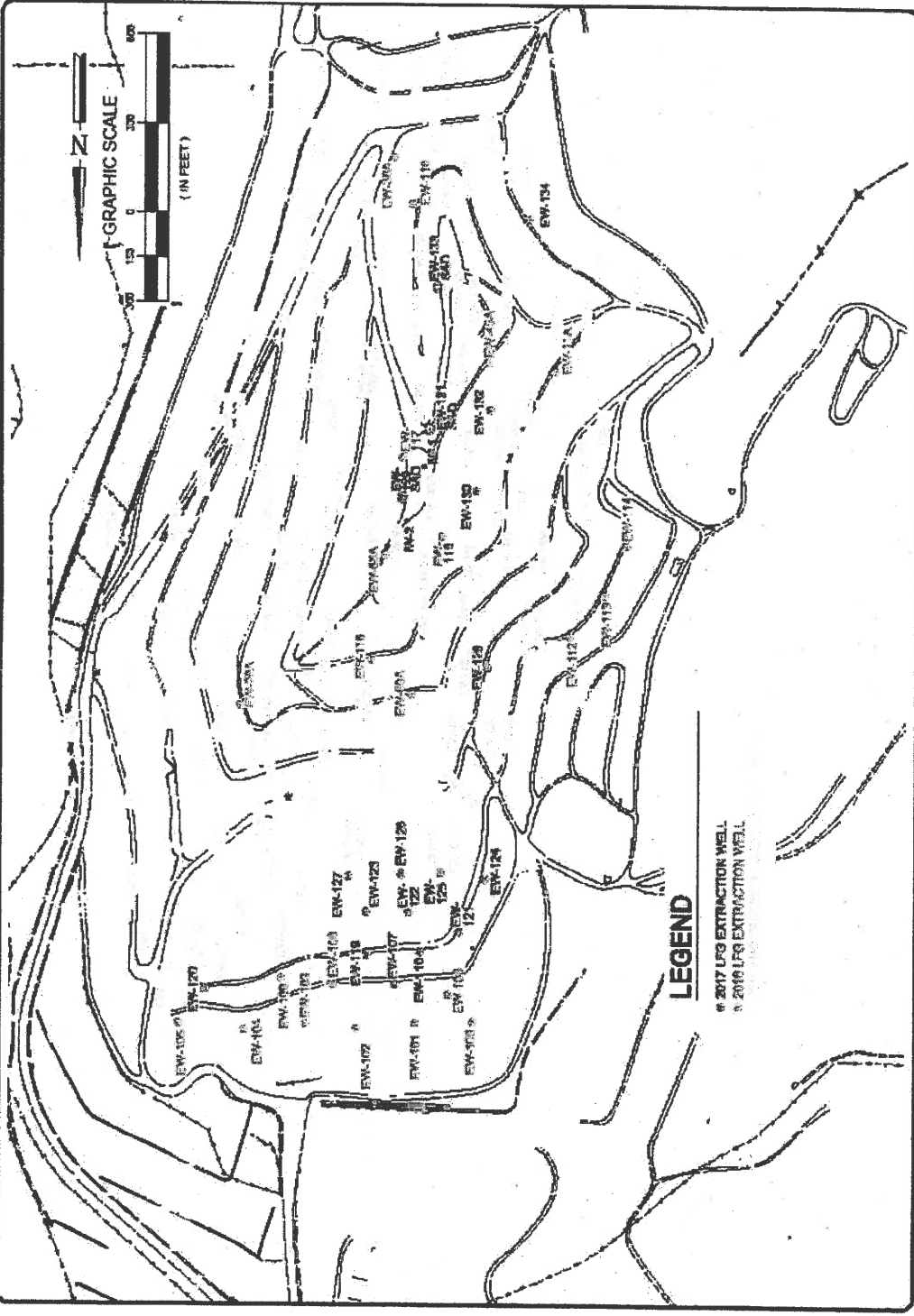
Keller Canyon Landfill Gas Collection and Control System

Republic Services is investing approximately \$ 1.5 million to expand and upgrade the landfill GCCS infrastructure. Upgrades to the flare station (described below) will include about \$1.6 million in improvements separate from the GCCS infrastructure.

- In 2017 twenty-four (24) new wells and associated piping were installed in the vicinity of the active cell Phase 3B1.
- An additional 26 landfill gas extraction wells and associated piping and fittings, will be installed in 2018, mostly in the north and east portion of the landfill, that will help control potential offsite odor migration;
- Well installation is in progress and will continue throughout the spring and summer of 2018 weather permitting;
- Enhancements to the flare station comprising a new flare, blower system, and upgraded electrical system will be installed in 2018. Plans have been submitted to the BAAQMD. Permits are expected in late summer 2018. Upon completion, these upgrades will ensure additional capacity is available for future gas volumes;

The existing GCCS system is shown in the attached figure. Upon completion of scheduled 2018 improvements to the GCCS, the system map will be updated.

 TETRA TECH SAS 1340 Via Vista Drive, Diamond Bar, CA 91765 TEL: 909.840.7777 FAX: 909.840.8017	
KELLER CANYON LANDFILL LANDFILL GAS COLLECTION AND CONTROL SYSTEM PLAN	
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Attachment F

Toe Berm/Mitigation Lift Level Berms

A feasibility analysis of design and construction of mitigation/lift level berms and the potential impact on permanent roadways will require a major multi-disciplinary study of site constraints and opportunities. The company has prioritized the design and construction of Phase 2E and GCCS improvements over a feasibility analysis of mitigation/lift level berms. By doing so, the relocation of fill operations to Phase 2E will immediately mitigate impacts currently attributed to fill operations in Phase 3B1. Examples of potential constraints associated with mitigation berm construction include, but are not limited to the following:

- Impacts to the structural stability of the Toe Berm;
- Potential impacts on future stormwater system improvements;
- Impacts to the main LFG 24-inch header located under the paved haul road;
- Construction impacts on the local community and daily operations;
- Short and long-term impacts associated with on-site sourcing/excavation of required soil or the import of soil from off-site sources;
- Potential impacts on the KCL 5 Year Development Plan for future phase development.

Republic proposes to work with DCD on the scoping of the feasibility analysis with intent of better understanding implications of such improvements by the end of 2018.