



# Department of Conservation and Development

## County Planning Commission

Wednesday, February 13, 2019 – 7:00 .P.M.

### SUPPLEMENTAL STAFF REPORT

Agenda Item # \_\_\_\_\_

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<b>Project Title:</b>	Keller Canyon Landfill Land Use Permit Review
<b>County File(s):</b>	#LP89-2020
<b>Applicant/Owner:</b>	Keller Canyon Landfill Company (KCLC) / Republic Services
<b>General Plan/Zoning:</b>	Landfill (LF) / Heavy Agricultural (A-3)
<b>Site Address/Location:</b>	901 Bailey Road, Pittsburg – Bay Point area (APN: 094-060-008, 018, 019, 020 & 021)
<b>California Environmental Quality Act (CEQA) Status:</b>	Exempt. This action does not constitute a project since staff is not currently recommending any new or modified conditions of approval (COA) 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).
<b>Project Planner:</b>	David Brockbank, Senior Planner (925) 674-7794
<b>Staff Recommendation:</b>	ACCEPT the seventh staff report prepared for Keller Canyon Landfill's (KCL) third LUP review. CONSIDER continuing the permit review hearing to May 22, 2019, to allow the completion of physical improvements at the landfill (and the assessment of alleged disposal of potentially radioactive material from Hunters Point Naval Shipyard). Staff will determine if additional permit compliance is warranted that may include potential modification(s) to the COAs.

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### I. PROJECT SUMMARY

This remains the third annual review of the conditions of approval for KCL's approved LUP that was initiated in October 2017, in accordance with permit condition of

approval #11.1. The Permit Review Criteria approved by the Board of Supervisors (Board) in 1995 and condition 11.1 affords the Board the opportunity to approve new and/or modified conditions of approval to improve public health, safety, and welfare or to address inconsistencies resulting from court decisions or regulatory changes made since the LUP was last amended in September 2015. The CPC may recommend potential modifications to the LUP's conditions in order to address demonstrated public health, safety, or welfare impacts; or new regulations or court decisions. The CPC may propose new or modified conditions to the LUP, however only the Board has the authority to approve any proposed changes.

## **II. BACKGROUND**

The CPC has continued this third permit review about every three months, since the initial hearing held on October 25, 2017. The hearing was continued due to testimony from some of the residents living in the adjacent neighborhood and additional questions from the CPC that required additional time to review. Local residents brought up various issues potentially associated with the landfill at the initial hearing, including odor, dust, noise, visual impacts, seagulls, and litter. Staff prepared supplemental staff reports to address the applicable concerns brought up by the local residents as well as questions from the CPC. At each meeting date, the CPC took additional testimony from residents and the operator, when warranted to respond to questions from the CPC or comments from the public. At the last CPC hearing on October 24, 2018, the permit review was continued to February 13, 2019. Before coming back to the CPC, the District V Supervisor requested that an update on the permit review be provided to the Board. Staff prepared a board order and brought the item to the Board on December 11, 2018. The Board also took testimony from the public and then directed staff to continue the permit review hearing under the CPC's purview.

## **III. STATUS UPDATE**

Odors: The landfill operator implemented numerous changes to address odors potentially migrating off-site. The operator has contracted with odor experts, installed odor suppression devices, and routinely monitors/inspects potential on-site sources, such as leachate tanks, as well as conducting regular odor investigations on- and off-site in response to complaints. The operator ceased using the odor suppression devices (mistors) in December last year, due to complaints from residents about a chemical smell.

The landfill gas (LFG) collection and control system is constantly maintained through on-site testing, monitoring, and installing LFG extraction wells. Twenty-four new LFG extraction wells were installed in 2017. Last spring, 26 new LFG extraction wells were installed. The operator is planning to install approximately 20 new LFG extraction wells this spring. Currently the entire gas collection and control system is sent to the on-site LFG power plant, where excess gas that is not used for power production can be flared off. Installation of a new replacement flare have been ongoing for the past few years. Several improvements have steadily been brought online to improve the overall collection system. Electrical upgrades for the replacement flare were completed in 2017, and a new blower skid was installed in December 2018. The operator plans to have the actual replacement flare installed later this summer.

Several personnel of KCLC are on the list of recipients for odor complaints submitted through the County website, ensuring that the landfill operator is aware of complaints as soon as they are submitted to the County. A monthly breakdown of odor complaints submitted in the past three months is provided below, since the last CPC hearing in October 2018:

**November 2018: 8 complaints**  
**December 2018: 22 complaints**  
**January 2019: 17 complaints**

The CPC requested staff to continue researching the effectiveness of installing tree lines or vegetative barriers to mitigate odors in addition to traditional odor control BMPs.

Vegetative Barrier: Under COA #20.2 – Odor Containment – The Department of Conservation and Development (DCD) may require additional physical improvements or management practices as necessary to alleviate odor problems. Staff could not find any studies that confirms planting a tree line or vegetative windbreak will alleviate potential odor issues. However, the feasibility study performed at Sunshine Canyon Landfill in Southern California determined planting tree breaks would mitigate for visual and windblown dust impacts. As a result, the landfill operator has begun working with arborists and landscape architects to look at drafting preliminary plans for planting trees north of the extent of the approved disposal area, which may provide screening of the access road and some disposal cells. The operator intends to have preliminary landscape plans drafted, which would be shared with staff, and later, to the residents to get additional feedback.

Litter: The operator regularly maintains a litter crew on-site to clear debris from the litter fences, but also to collect litter from the open hillsides surrounding the disposal area (buffer areas). On windy days, the operator will increase the size of the litter crew as needed. The landfill operator is responsible for controlling and containing the litter on-site and are required to remove litter from the litter fences daily. Since the LEA and the operator already receive email notifications of odor complaints through the County's online complaint form, DCD staff have added another online complaint form to account for litter complaints. The new complaint form allows for the uploading of multiple digital photos per complaint. If staff receives a litter complaint, the same recipients that receive odor complaints are also on the litter complaint list. Unfortunately, only DCD staff will have access to view the photos, so staff will need to manually forward any uploaded photos associated with each litter complaint to the operator and the Local Enforcement Agency (LEA).

In July last year, three litter complaints were submitted to the LEA and/or DCD. Staff investigated the litter complaints and forwarded the complaints to the operator to address on-site clean up. After visiting the complainant and reviewing the photo evidence, staff confirmed the litter had blown off-site and was not contained within the landfill's buffer area, as previously thought. The landfill operator was made aware of this situation and will take precautionary steps to control wind-blown litter on-site, so it does not end up escaping from escaping landfill property.

Visual: The operator constructed disposal cell Phase 2E last year, to move away from the previous disposal cell, Phase 3B1, where the anaerobic compost material was disposed. Construction of Phase 2E was completed and in use for disposal in the middle of September last year. Moving the disposal activity 0.5 miles south, away from the residential neighborhoods has had some effect. There has been a reduction in overall odor complaints and reduced noise impacts from active landfill operations. However, relocation of the disposal cell has not reduced visibility of trucks entering and leaving the landfill along the main access road or dust from the access road.

Per attached Exhibit A, the 2018/19 Timeline of Scheduled Improvements is updated to include an extra milestone of consulting with landscape specialists to prepare plans that will assist in mitigating visual and dust impacts. Building up the Toe Berm and installing new mitigation berms as required by the permit conditions will also help to further reduce future visual, noise, and dust impacts. Extending this permit review will also allow time for the operator to provide updates and continue working on the key 2019 improvement milestones while staff continues monitoring effectiveness of recent installations and overall COA compliance.

Noise: Staff has not received any noise complaints about the landfill since March 2018.

Extending Permit Review: The landfill operator and staff suggest that this permit review be extended through the spring and possibly the summer of 2019. Due to community concerns raised throughout this permit review, staff is recommending this third annual permit review be extended before moving on to holding permit reviews every three years. Continuing the hearing until May 22, 2019, will provide time for staff to monitor the implementation of milestones outlined in Exhibit A, as well as for continued COA compliance. The landfill operator intends to install 20 new methane gas extraction wells this spring, to further maintain the landfill's gas levels. This additional time will allow the operator to continue working with arborists on a preliminary landscape plan for planting trees and examining proper irrigation systems. The operator also intends to complete the new replacement flare this year. Having staff report back in May this year, will keep the public and local community apprised of progress and improvements at the landfill. The winter season will be over, which correlates to significantly reduced odor complaints. Staff's goal during the next three months is to monitor the effectiveness of existing recent improvements for odor mitigation, before any determination is made about the potential need to add or modify conditions in the LUP.

Hunters Point Naval Shipyard (HPNS): On April 21, 2018, the San Francisco Chronicle published an article regarding material that was sent to KCL back in 2010-2011. The article states that former shipyard employees contend that radiological levels were not adequately tested / disclosed for some of the soil trucked to conventional landfills across California, including KCL. CCEH acting as the LEA is working with state and federal agencies, in coordination with the landfill operator, to investigate if any radioactive waste material from HPNS was disposed at KCL. Starting at the end of July through early September 2018, the County conducted a consultant solicitation process. This involved CCEH staff collaborating with DCD, the City of Pittsburg, the landfill operator, and a representative of the local community to interview qualified consultants. After some follow up inquiries were made, and responses received, TRC Solutions was selected to assist CCEH with this investigation.

The consultant began a forensic audit (document review) to determine if there is any evidence that inaccurate radiologic sampling data was used to determine if the soil transported from HPNS was eligible to be accepted at KCL. This paperwork audit is expected to last 12 weeks and should be completed about the time of the CPC hearing. At the conclusion of the paperwork audit, the consultant will draft a technical

memorandum containing their findings. The findings may be used to develop a future work plan, a community participation plan, a sampling and analysis plan, and a quality assurance plan, all of which will help the County determine next steps. Under the current contract, the consultant is not charged with performing any radiologic testing or other sampling at the landfill or in the surrounding neighborhood. However, the sampling and analysis plan to be prepared by the consultant will assist staff in bringing options to the Board for further direction. It is also in the contract to hold at least one more community meeting to update the local residents about their findings. The date of the community meeting has yet to be determined.

#### **IV. CONCLUSION**

Staff recommends that the CPC accept this status update report on the third permit review for KCL's use permit. The continued meeting for this item will be on May 22, 2019.

Exhibit A: 2018/19 Timeline of Scheduled Improvements at KCL

Exhibit B: Board Order dated December 11, 2018

# EXHIBIT A

County Planning Commission 2-13-2019

Improvement Milestone	Status	Targeted Start Date	Targeted Completion Date	Comments
Gas Collection & Control System	COMPLETE/ In Progress	Spring 2019	Summer 2019	26 landfill gas extraction wells went online and functioning per design in April 2018. <b>20 new</b> gas extraction wells planned for Spring 2019.
Replacement Flare Electrical System and New Blower Skid	COMPLETE	Spring 2018	Late Autumn 2018	Electric Panel upgrade completed in 2017. Blower skid installed December 2018, providing greater landfill gas collection capacity.
Replacement Flare	PLANNED	Late Spring 2019	Summer 2019	BAAQMD reviewing emission calculations. New replacement flare to go online this summer.
Phase 2E Construction	COMPLETE	March 2018	August/ September 2018	RWQCB and County approved in August 2018. In use starting September 2018.
Landscape Plans	In Progress	March 2019	April/May 2019	Landfill operator is voluntarily hiring landscape consultant to prepare plans and cost estimate for potential vegetative barrier.
Toe Berm / Mitigation Lift Level Berms Feasibility Study	In Progress	Autumn 201	Late Autumn 2019	Fiscal year resources dedicated to new Phase 2E construction. Study of Toe / Mitigation berms to follow. Requires assessment of future berm plans compared to phasing plan. <i>May include potential to add landscape plans.</i>
Berm Construction	PLANNED	Autumn 2019	Spring / Summer 2020	Construction of mitigation berms completion date dependent on permissible weather. Phased construction of Toe Berm to reach ultimate planned height.



Contra  
Costa  
County

To: Board of Supervisors  
From: John Kopchik, Director, Conservation & Development Department  
Date: December 11, 2018

Subject: Permit Review of Keller Canyon Landfill's Land Use Permit

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**RECOMMENDATION(S):**

1. ACCEPT report on status of third annual Keller Canyon Landfill land use permit review.
2. DIRECT staff to continue the third annual Keller Canyon Landfill land use permit review at the Planning Commission and report to the Board of Supervisors at the conclusion of the permit review process.

**FISCAL IMPACT:**

The land use permit (LUP) review itself has no impact to the County General Fund. Keller Canyon Landfill Company, the landfill operator, is responsible for providing reimbursement for the County's staff costs associated with the permit review process.

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- RECOMMENDATION OF CNTY ADMINISTRATOR     RECOMMENDATION OF BOARD COMMITTEE  
 APPROVE     OTHER
- 

Action of Board On: **12/11/2018**     APPROVED AS RECOMMENDED     OTHER

Clerks Notes:

**VOTE OF SUPERVISORS**

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown.

ATTESTED: December 11, 2018

Contact: David Brockbank, (925) 674-7794

David J. Twa, County Administrator and Clerk of the Board of Supervisors

By: , Deputy

cc:



## BACKGROUND:

On October 25, 2017, the County Planning Commission (CPC) held its first hearing to consider the 3rd annual permit review for the Keller Canyon Landfill (KCL). The purpose of the permit review process is to assess compliance with the Land Use Permit (LUP) for KCL and consider whether to recommend any modifications to permit conditions to the Board of Supervisors. The CPC has been thoroughly reviewing compliance with the LUP and complaints about the landfill over the course of the last year, continuing the hearing five times and requesting staff to analyze and report on a number of matters. The CPC review is ongoing.

At the October 24, 2018, County Planning Commission (CPC) meeting, staff informed the Commissioners about the District V Supervisor's interest in bringing an update on the third annual permit review to the full Board. The CPC approved staff updating the Board on the CPC efforts thus far and continued the third permit review process to February 13, 2019 to allow additional time for CPC and staff to monitor the effectiveness of recently installed infrastructure improvements (see Exhibit A) during the winter months, (when the County and Bay Area Air Quality Management District (BAAQMD) have received the majority of complaints), assess compliance with Conditions of Approval (COA) and formulate any recommendations to the Board.

This is the last annual permit review provided for by LUP Condition 11.1. Once the third permit review is complete, future permit reviews are scheduled to occur once every three years.

**THIRD PERMIT REVIEW PROGRESS TO DATE:** The CPC has continued the KCL permit review five times since October 2017. The first hearing, held on October 25, 2017, was continued to December 6, 2017, and subsequently continued a second time to January 10, 2018, due to time constraints. The continuances were based on testimony from some of the residents living in the neighborhoods north of the landfill that brought up concerns associated with the landfill, including odor, dust, noise, visual impacts, seagulls, and litter. The CPC wanted to continue the permit review and give staff time to prepare responses to questions from both the CPC and the public. Staff's supplemental staff reports included information related to each of the concerns brought up by the local residents and provided updates on landfill infrastructure improvement projects (all staff reports to the CPC are provided as attachments to this Board Order).

On January 10, 2018, the CPC continued the hearing a third time to July 11, 2018. Staff was also directed to prepare a three-month status update in April 2018, informing the CPC and other interested parties about the landfill's progress on a improvement projects expected to help reduce odors. Those projects included installing methane gas capture wells; and moving disposal activities to a new disposal cell (new Phase) one-half mile south away from the residential neighborhoods (see Exhibit A for current progress report). Staff recommended the fourth continuance in July in order for the landfill operator to complete the improvement project expected to have the greatest odor reducing potential, namely the construction of the new disposal cell, which was completed in September of this year. An additional matter related to the landfill was raised during public testimony beginning with the July hearing, the ongoing investigation being spearheaded by Contra Costa Environmental Health (CCEH), acting as the Local Enforcement Agency (LEA), related to acceptance of potentially ineligible waste generated from the Hunters Point Naval Shipyard (HPNS).

The remainder of this report's content is intended to summarize and supplement information presented in prior staff reports (Attachments 1-6) pertaining to major areas of concern raised by residents during hearings conducted by the CPC, as well current or potential future actions to address them.

**ODORS:** A primary complaint of residents over the past year has been odors emanating from the

landfill. The landfill operator has implemented several best management practices (BMPs) to address odors potentially migrating off-site. The operator has contracted with odor experts, installed odor suppression devices, and continues to routinely monitor/inspect potential on-site odor sources, including leachate tanks. The operator conducts regular odor investigations on and off-site. Several landfill employees automatically receive copies of all odor complaints at the time they are submitted through the County's website, ensuring that the landfill operator is made aware of complaints immediately. In addition to the operator, the LEA also receives email notifications automatically for each odor complaint submitted through the online complaint form on the County's website. Provided below is a monthly breakdown of odor complaints submitted through the County's on-line system starting with September 2017:

- September 2017 = 1 complaint
- October 2017 = 31 complaints
- November 2017 = 8 complaints
- December 2017 = 13 complaints
- January 2018 = 36 complaints
- February 2018 = 49 complaints
- March 2018 = 27 complaints
- April 2018 = 2 complaints
- May 2018 = 1 complaints
- June 2018 = 0 complaints
- July 2018 = 2 complaints
- August 2018 = 6 complaints
- September 2018 = 0 complaints
- October 2018 = 12 complaints
- November 2018 = 7 complaints

A noticeable pattern shows the vast majority of complaints are generally submitted in the winter months. This is also reflected in the 2016 / 2017 complaint log.

The CPC asked staff to research other landfills and solid waste facilities to determine what other facilities have used or are using to address odor issues. Specifically, the CPC requested staff to research the potential effectiveness of installing tree lines/breaks to mitigate odors. Staff discovered a feasibility assessment of installing physical barriers to contain dust/odors at Sunshine Canyon Landfill (SCL) in Southern California. Republic Services (Republic) actually authored this feasibility assessment in March 2017. It was found that vegetative barriers such as tree-lined windbreaks of either single row or multiple rows of varied species may be effective in controlling windblown dust. Physical barriers such as earthen berms were found to be more effective addressing odor and visual impacts. The SCL used a combination of odor/dust BMPs that included the planting of trees on top of physical berms. Approximately 1,000 trees were planted along several earthen berms engineered near the entrance to the landfill to offset potential dust, visual, and odor impacts. This feasibility study is attached as Exhibit B to Attachment 1.

As indicated previously, the landfill operator has implemented a number of actions to address odor and other concerns (see Exhibit A). Chief among these was developing and implementing a plan to discontinue use of a disposal cell in the front of the landfill and open a new cell in the back of the canyon. Moving the disposal activity further from sensitive receptors is anticipated to address odor issues, potential noise and dust impacts, and off-site visibility of landfill operations. The operator accelerated the scheduled construction of disposal cell Phase 2E, to move away from the previous disposal cell, where the anaerobic compost material was disposed in 2016. Construction of Phase 2E was completed in August of this year. The new cell started being used for disposal in the middle of

September. Relocating from Phase 3B1 to Phase 2E increases the distance between the nearest residential neighborhood and the active disposal cell by approximately 0.5 miles. The landfill operator has indicated that it may seek future permit amendments to permanently shift the disposal envelope further back in the canyon.

**VEGETATIVE BARRIER:** At the request of the CPC, staff investigated the idea of a vegetative barrier and identified considerations. The following steps and vegetation related factors should be considered in collaboration with CCEH, BAAQMD, and the landfill operator, in order to determine what, if any, tree planting requirements would be most potentially effective:

- \* consulting / hiring a certified arborist;
- \* assessing different species susceptibility to disease/pests, growth rates, suitability in/near landfill environment;
- \* planting a single row versus multiple rows of mixed trees;
- \* soil analysis;
- \* adequate on-site irrigation; and
- \* planting location, including feasibility to plant on mitigation berms.

Planting a sizable vegetative barrier consisting of multiple rows of trees will need proper irrigation and will most likely require connecting to municipal water as existing well water will not be a sufficient source. Bringing municipal water to the landfill site will necessitate the City of Pittsburg's involvement and authorization.

**LITTER:** Since the beginning of 2018, eight litter complaints were submitted to the LEA and/or Department of Conservation and Development (DCD). Staff investigated the litter complaints and also forwarded the complaints to the operator to address on-site clean-up. The complaints could not be confirmed, as the submitted photo evidence did not show litter blowing off site or through the community.

The operator deploys a litter crew on-site to clear debris from the litter fences, but also collects litter from the buffer areas (open hillsides surrounding the disposal area). On windy days, the operator will increase the size of the litter crew as needed. It is known that this area of the County can experience high winds, which can make it more challenging to control litter on-site. The landfill operator is responsible for controlling and containing the litter on-site. The operator is required to remove litter from the litter fences daily. Since the LEA and the operator already receive email notifications of odor complaints through the County's online complaint form, DCD staff is currently seeking to modify the online odor complaint form to provide for submittal of litter complaints that will rely on a feature that allows for the uploading of digital photos. Staff hopes to implement these modifications either before the end of the year, or early next year. In the meantime, when DCD staff receives a litter complaint, that complaint is forwarded to both the operator and the LEA for appropriate response and the LEA follows up with the complainant.

**DUST & VISIBILITY:** Certain previously noted site improvements that can help reduce potential off-site odors should also reduce potential off-site visibility and dust. For example, moving the disposal activity further from sensitive receptors is expected to reduce concerns about dust and visibility. Trucks entering and leaving the landfill continue to be visible along the main access road, but the operator also recently hydro-seeded 60 acres of the landfill that will help with visual and future dust impacts.

**HUNTERS POINT NAVAL SHIPYARD (HPNS):** On April 21, 2018, the San Francisco Chronicle published an article regarding material that may have been sent to KCL back in 2010-2011. The article alleged falsified documentation associated with radiological waste from HPNS that was sent to one or

more landfills across the state, including KCL. The LEA is working with state and federal agencies, in coordination with DCD and the landfill operator, to investigate if any of the radioactive waste material in question was disposed of at KCL. If radiological waste was disposed at KCL, the investigation will examine if there are potential health concerns for employees and local residents and what, if any, remedial actions are necessary.

At the Board's direction, on May 1, 2018, CCEH staff prepared a brief report related to the allegations printed in the newspaper. At the end of May, CCEH put out a Request for Qualifications / Proposal (RFQ/P) in order to contract with a consultant to recommend the most appropriate means of assessing the landfill and surrounding community to detect the presence of any potential radioactive material that may have been disposed at KCL. During the May 1, 2018, Board meeting, the District V Supervisor requested a community meeting be held for residents of Pittsburg and Bay Point, with representatives from applicable federal, state and local agencies on hand to discuss the on-going investigation and future potential testing for radioactive material. CCEH organized a community meeting held on June 21, 2018, at the Ambrose Community Center in Bay Point. Experts from the Radiologic Health Branch of the state Department of Public Health, US Navy, San Francisco Regional Water Quality Control Board (RWQCB), and other state and local agencies were in attendance to speak and/or answer questions.

Over the course of six weeks, between the end of July through early September, the County conducted a solicitation process. This involved CCEH collaborating with DCD, the City of Pittsburg, the landfill operator, and a representative of the local community to review the RFQ/Ps received by CCEH and interviewing the qualified consultants. After some follow up inquiries were made, and responses received, a potential consultant was selected. CCEH has entered into a contract with the chosen consultant, TRC Solutions. The consultant is reviewing initial information and data provided by the LEA. The LEA has introduced the consultant to representatives from the following key agencies involved with the Hunters Point site: U.S. Navy, U.S. Environmental Protection Agency, California Department of Toxic Substances, and the California Department of Public Health Radiological Health Branch as well as the City of Pittsburg and the Keller Canyon Landfill. Pursuant to the terms of the contract, over the next six months, the consultant is expected to gather and analyze data, provide next step recommendations, conduct process to gather community concerns and convene a community meeting.

CONSEQUENCE OF NEGATIVE ACTION:

The Board would not accept a status report on the CPC's ongoing permit review.

ATTACHMENTS

Exhibit A: Landfill Infrastructure Improvements

Attachment 1: 10-24-2018 Continued Permit Review

Attachment 2: 7-11-2018 Continued Permit Review

Attachment 3: 4-11-2018 Continued Permit Review

Attachment 4: 1-10-2018 Continued Permit Review

Attachment 5: 12-06-2017 Continued Permit Review

Attachment 6: Initial 10-25-2017 Permit Review Report