# **Bay Area Air Quality Management District**

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# Statement of Basis for MAJOR FACILITY REVIEW PERMIT MINOR REVISION

Keller Canyon Landfill Company Facility #A4618

**Facility Address:** 

901 Bailey Road Pittsburg, CA 94565

**Mailing Address:** 

901 Bailey Road Pittsburg, CA 94565

Application Engineer: Davis Zhu Site Engineer: Nimrat Sandhu

Application: 28399

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Minor Revision: Updates to Landfill Gas Collection System Descriptions and Allowable Alterations

# STATEMENT of BASIS Keller Canyon Landfill Company; SITE # A4618 APPLICATION # 28399

# A. BACKGROUND

As discussed in previous Statements of Basis for the Major Facility Review (MFR) Permit for the Keller Canyon Landfill Company (Site # A4618), this facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Volume 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. This facility has the "potential to emit," as defined by Regulation 2-6-218, more than 100 tons per year of a regulated air pollutant, specifically more than 100 tons per year of carbon monoxide. Therefore, this facility is required to have an MFR permit pursuant to Regulation 2-6-301.

This facility is also subject to the Title V operating permit requirements and Regulation 2, Rule 6, MFR permit requirements, because it is a designated facility as defined by Regulation 2-6-204. The Standards of Performance for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart WWW) require the owner or operator of a landfill that is subject to Subpart WWW and that has a design capacity of greater than or equal to 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) to obtain an operating permit pursuant to Part 70. The landfill at this facility is subject to this NSPS because it commenced construction after May 30, 1991 and has design capacities that are larger than 2.5 million Mg and larger than 2.5 million m³. Therefore, this facility is required to have an MFR permit pursuant to Regulation 2-6-304.

The initial MFR Permit for this facility was issued on September 20, 2001. This MFR Permit was revised on: December 17, 2003; March 16, 2006; September 20, 2006; October 4, 2006; and March 2, 2007. This MFR Permit was renewed on January 3, 2008 and subsequently revised on: October 9, 2008 and January 11, 2012. This MFR Permit was renewed again on: June 12, 2014.

The main purpose of this current action is to update the landfill gas collection system description and incorporate gas collection system alterations that were approved by the District pursuant to District Application # 28398. The engineering evaluation for Application # 28398 and other reports describing related permit condition revisions that have been authorized by the District are included in Appendix A. These permit condition changes do not result in any emission increases and do not trigger any new applicable requirements.

The attached proposed MFR permit shows all changes to the existing permit in strikeout/underline format. The permit will be formally re-issued after EPA's 45-day review period is complete.

Minor Revision: Updates to Landfill Gas Collection System Descriptions and Allowable Alterations

# **Facility Description:**

Keller Canyon Landfill Company (KCLC), a subsidiary of Allied Waste Industries, Inc., owns and operates the Keller Canyon Landfill Facility (Facility # A4618) in Pittsburg, CA. This facility includes: an active Class II MSW landfill (S-1, S-4, and S-5), yard and green waste stockpiles (S-3), and two enclosed flares (A-1 and A-2). KCLC may also divert collected landfill gas to an independent company, Ameresco Keller Canyon, LLC (Plant # 17667), which produces energy for sale to the grid by burning landfill gas in IC engines. In 2017, KCLC diverted about 32% of the collected landfill gas to this energy plant.

The maximum design capacity for this landfill is approximately 75 million cubic yard. The landfill is currently permitted to accept a maximum of 3500 tons/day of refuse and to dispose of a total of 38.4 million tons of decomposable materials. As of June 30, 2017, KCLC reported that the landfill contained 19.7 million tons of decomposable waste (about 51% of total capacity). The landfill is expected to remain active for at least 20 more years.

As required by District, state, and federal regulations, the Keller Canyon Landfill – Waste Decomposition Process (S-1) is equipped with landfill gas collection and control systems that are designed to reduce the emissions of methane, precursor organic compounds (POC), toxic air contaminants (TAC), and greenhouse gases (GHG) from the landfill. As of June 2017, this gas collection system was collecting an average of 3406 cfm of landfill gas.

The landfill gas control systems for this site include both on-site controls (A-1 and A-2 Enclosed Landfill Gas Flares) and off-site controls (Ameresco Keller Canyon LLC Landfill Gas to Energy Plant (Site # B7667). During 2017, an average of 2324 cfm of landfill gas or about 68% of the total gas collected was vented to the on-site flares for control. The remainder of the collected landfill gas (about 32% during 2017) is vented to the independently owned and operated landfill gas energy plant. Although the landfill gas energy plant is located on property owned by KCLC, it is owned and operated by an independent company: Ameresco Keller Canyon LLC (Site # B7667). Therefore, this energy plant is not part of this Title V permit for Keller Canyon Landfill Company. The landfill gas energy plant includes a landfill gas treatment system, two lean-burn IC engines that are primarily on treated landfill gas, and a small enclosed waste gas flare. This energy plant is discussed in detail in the Title V permit for Site # B7667 (see Application # 17615).

# Application # 28399:

At active MSW landfills, the landfill operator frequently makes improvements to the gas collection system to ensure that the system is properly balanced and is achieving the required emissions control in new waste areas. In the Bay Area, the description of the landfill gas collection system and any authorized alterations are maintained in Table II-A of the MFR Permit and in the permit conditions for the landfill.

Minor Revision: Updates to Landfill Gas Collection System Descriptions and Allowable Alterations

For KCLC, the District approved several landfill gas collection system alterations in 2014 pursuant to Application # 26269. Since the approval of Application Number 26269, 62 vertical wells were installed, and 29 vertical wells were decommissioned. KCLC requests the well actions remaining in Application Number 26269 be closed and that the allowable well counts be revised in NSR application 28398. The gas collection system, alterations, and related operating requirements are described in Condition # 17309, Parts 18 and 19.

For this current Title V minor revision, the District is updating the gas collection system description in Table II-A and is revising the permit conditions for the landfill. The new gas collection system description includes all collection system revisions completed through June 2017. The revised permit conditions will also identify the remaining authorized gas collection alterations and updated operating requirements.

#### **B. EMISSIONS**

As discussed in the Engineering Evaluation for Application #28398 (see Appendix A), gas collection system alterations do not result in any changes to maximum permitted emission levels for the landfill. Therefore, the permit condition changes described in this report do not result in any emission increases.

# C. PERMIT CONTENT

Since a Statement of Basis was prepared for the most recent version of the MFR Permit for Site # A4618 (the June 12, 2014 renewal permit) that fully describes and explains the legal and factual basis for the current permit, this report will only address the proposed revisions to this current MFR Permit.

The definition of significant revision is discussed below to further explain why the current application does not constitute a significant MFR revision.

- Regulation 2-6-226.1 and 226.2: This action does not involve the incorporation of a change considered to be a major modification, or a modification under NSPS, NESHAPs, or Section 112 of the CAA.
- Regulation 2-6-226.3: This action does not involve the relaxation of any monitoring, record keeping or reporting requirements.
- Regulation 2-6-226.4: This action does not involve limits imposed to avoid an applicable requirement.
- Regulation 2-6-226.5 and 226.6: This action does not involve the establishment of or change to any case-by-case emission limits or standards or any facility-specific determinations.
- Regulation 2-6-226.7: This action does not involve the incorporation of any requirements promulgated by the EPA.

Since this action does not involve any of the above actions, it does not require a significant revision. This action will involve some MFR permit revisions other than

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those allowed under the definition of administrative amendment in Regulation 2-6-201. Therefore, this modification will be handled as a minor revision of the MFR Permit.

Changes to the permit sections are described below in the order that they are presented in the permit.

# Title Page:

• The BAAQMD address and Engineering contact information were updated.

#### Section I:

This section contains administrative requirements and conditions that apply to all facilities.

# Changes to Section I:

- The BAAQMD postal and email addresses were updated in Section I.F.
- The EPA postal and email addresses were updated in Section I.G.

### Section II:

This section of the permit lists all permitted or significant sources and all abatement or control devices for these sources. Each source is identified by an S and a number (e.g., S-24). Each abatement device is identified by an A and a number (e.g., A-25).

# Changes to Section II:

• In Table II-A, the District is updating the landfill gas collection system description for: S-1 Keller Canyon Landfill – Waste Decomposition Process.

# Section III:

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit.

# Changes to Section III:

• The District is not making any changes to Section III

# Section IV:

Section IV of the permit contains citations to all of the applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District's or EPA's websites, or in the permit conditions, which are found in Section VI of the permit.

# Changes to Section IV:

• The District is not making any changes to Section IV.

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# Section V:

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 which provides that a major facility review permit shall contain the following information and provisions:

"409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted."

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit contains only sections 2-6-409.10.1 and 2-6-409.10.2.

# Changes to Section V:

• The District is not making any changes to Section V.

# Section VI:

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO which limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.

All changes to existing permit conditions are clearly shown in "strike-out/underline" format in the proposed permit. When the permit is issued, all 'strike-out" language will be deleted and all "underline" language will be retained, subject to consideration of comments received.

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# Changes to Section VI:

• The District is revising Condition # 17309, Parts 18 to include the new gas collection system description and the remaining approved alterations.

# Section VII:

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

The District has reviewed all monitoring and has determined the existing monitoring is adequate.

# Changes to Section VII:

• The District is not making any changes to Section VII.

# Section VIII:

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

# Changes to Section VIII:

• The District is not making any changes to Section VIII.

# Section IX:

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting

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requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has no permit shields.

# Changes to Section IX:

• The District is not making any changes to Section IX.

# Section X:

This section contains the details of issuance and revisions for each permit.

# Changes to Section X:

• The District is adding the details of this minor revision to the end of Section X.

# Section XI:

This section contains terms that may be unfamiliar to the general public or EPA.

# Changes to Section XI:

• The District is not making any changes to Section XI.

# D. ALTERNATIVE OPERATING SCENARIOS

No alternate operating scenarios have been requested.

#### E. COMPLIANCE STATUS

The responsible official for Keller Canyon Landfill Company submitted a signed Certification Statement form, dated January 22, 2014, with the most recent Title V renewal permit application. On this form, the responsible official certified that the following statements are true:

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is (are) in compliance will continue to comply with the applicable requirement(s);

Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;

Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;

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Based on these statements, the District expects that the landfill gas collection system will continue to comply with all applicable requirements.

# F. DIFFERENCES BETWEEN THE APPLICATION AND THE PROPOSED PERMIT

The application materials for the minor MFR revision to incorporate permit condition changes for the S-1 Keller Canyon Landfill – Waste Decomposition Process and Landfill Gas Collection are contained in Application # 28399. The Applicant did not submit forms to identify any specific applicable requirements or emissions information, but the Applicant did indicate in the cover letter that this minor revision would not result in any emission increases. As indicated in the District's Statement of Basis report, this minor revision will not change any emission limits, applicable requirements, or monitoring requirements. The specific permit condition revisions are identified in the District's proposed permit.

# G. SUMMARY OF PROPOSED ACTIONS

The District recommends approval of a proposed minor revision of the MFR Permit for Site # A4618 that will:

- Correct BAAQMD address and contact information on the Title page.
- Correct BAAQMD and EPA addresses in Sections I.F and I.G.
- Revise the landfill gas collection system description in Table II-A.
- Revise Condition # 17309, Parts 18a and 18b by including the updated collection system description and remaining authorized collection system alterations.
- Update Section X, Revision History.

 $H: \c Engineering \c TITLE\c V\ Permit\ Applis \c I\ ALL\c T5\ Application\ File\ here \c A4618 \c Minor-28399 \c 3.0\ Proposed\c Docs \c A4618 \c App 28399 \c Minor Rev\_SOB. doc$ 

# APPENDIX A

# REPORTS FOR PERMIT CONDTION CHANGES (APPLICATIONS # 28398)

# Engineering Evaluation Landfill Gas Collection System Alterations at S-1 Keller Canyon Landfill Company

Keller Canyon Landfill Company; SITE # A4618 APPLICATION # 28398

# **BACKGROUND**

Keller Canyon Landfill Company (KCLC), a Republic Services company, owns and operates the Keller Canyon Landfill Facility (Facility # A4618) in Pittsburg, CA. This facility includes: an active Class II MSW landfill (S-1, S-4, and S-5), yard and green waste stockpiles (S-3), and two enclosed flares (A-1 and A-2) to abate the collected landfill gas. KCLC may also divert collected landfill gas to an independent company, Ameresco Keller Canyon, LLC (Plant # 17667), which produces energy for sale to the grid by burning landfill gas in IC engines. In 2014, KCLC diverted about 37% of the collected landfill gas to this energy plant.

As described in the District's March 17, 2016 Major Facility Review Permit for Facility Number A4618, Condition # 17309, Part 18(a), the landfill gas collection system for the S-1 Keller Canyon Landfill consists of 120 vertical wells, 1 horizontal collectors. As described in Application # 26269 issued on August 06, 2014, the authorized collection system alterations were:

- Install up to 100 new vertical gas collection wells,
- Install up to 20 horizontal collectors,
- Decommission up to 48 vertical wells,
- Decommission up to 10 horizontal collectors.

Since the approval of Application Number 26269, 62 vertical wells were installed, and 29 vertical wells were decommissioned. The remaining gas collection system alterations pursuant to Application #26269:

- Install up to 38 new vertical gas collection wells,
- Install up to 20 horizontal collectors,
- Decommission up to 19 vertical wells,
- Decommission up to 10 horizontal collectors.

KCLC requests the well actions remaining in Application Number 26269 be closed and that the allowable well counts be revised as follow in this application 28398:

- Install up to 100 new vertical gas collection wells,
- Install up to 40 horizontal collectors,
- Decommission up to 100 vertical wells,
- Decommission up to 40 horizontal collectors.

These proposed changes in this application 28398 will not result in an increase of total collection wells and therefore, no increase of LFG from the extraction wells.

# **COLLECTION SYSTEM DESCRIPTION**

As of June 9, 2017, the landfill gas collection system for the S-1 Keller Canyon Landfill consisted of the following collection system components: 146 active vertical wells (18 wells at stations A-S and 128 wells identified as "EW") and 1 horizontal collector (HC-2). KCLC also operates 1 horizontal collector (HC-3) and 2 leachate clean-out risers (LCRS-1 and LCRS-2) on an intermittent basis to control unintended landfill gas migration into mon-refuse areas or into piping used to collect and remove the liquid leachate from the landfill. Condition # 17309, Part 18(a) reflects this current list of collection system components. Specific component identification numbers are listed in Table 1a, 1b.

Table 1a. Landfill Gas Collection System Components Installed as of June 9, 2017

			CENTIP		
GEM ID	Well ID	Collector	GEM ID	Well ID	Collector
IZCEW120 A	EW 120 A	Type	IZCL ENVIOA	FW 124	Type
KCEW129A	EW-129A	VW	KCLEW134	EW-134	VW
KCEW129B	EW-129B	VW	KCLEW13A	EW-13A	VW
KCEW131A	EW-131A	VW	KCLEW14A	EW-14A	VW
KCEW131B	EW-131B	VW	KCLEW15A	EW-15A	VW
KCEW133A	EW-133A	VW	KCLEW25A	EW-25A	VW
KCEW133B	EW-133B	VW	KCLEW26A	EW-26A	VW
KCEW22RR	K022R	VW	KCLEW28A	EW-28A	VW
KCEWA23R	A023R	VW	KCLEW32A	EW-32A	VW
KCEWE19R	E019R	VW	KCLEW35A	EW-35A	VW
KCEWQ09R	Q009R	VW	KCLEW36A	EW-36A	VW
KCLEW04A	EW-4A	VW	KCLEW38A	EW-38A	VW
KCLEW06A	EW-6A	VW	KCLEW42A	EW-42A	VW
KCLEW09A	EW-9A	VW	KCLEW45A	EW-45A	VW
KCLEW100	EW-100	VW	KCLEW48A	EW-48A	VW
KCLEW101	EW-101	VW	KCLEW55A	EW-55A	VW
KCLEW102	EW-102	VW	KCLEW60A	EW-60A	VW
KCLEW103	EW-103	VW	KCLEWHC2	HC-2	HC
KCLEW104	EW-104	VW	KCLEWHC3	HC-3	НС
KCLEW105	EW-105	VW	KCLEWK18	K018R	VW
KCLEW106	EW-106	VW	KCLEWLR1	LCRS-1	LCRS
KCLEW107	EW-107	VW	KCLEWLR2	LCRS-2	LCRS
KCLEW108	EW-108	VW	KCLEWM10	M010	VW
KCLEW109	EW-109	VW	KCLEWM11	M011	VW
KCLEW10A	EW-10A	VW	KCLEWM12	M012	VW
KCLEW110	EW-110	VW	KCLFEW01	EW-1	VW
KCLEW112	EW-112	VW	KCLFEW02	EW-2	VW
KCLEW113	EW-113	VW	KCLFEW03	EW-3	VW
KCLEW114	EW-113	VW	KCLFEW05	EW-5	VW
KCLEW115	EW-115	VW	KCLFEW08	EW-8	VW
KCLEW116	EW-116	VW	KCLFEW16	EW-16	VW
KCLEW110	EW-110	VW	KCLFEW17	EW-10	VW
KCLEW117 KCLEW118	EW-117 EW-118	VW	KCLFEW17	EW-17 EW-18	VW
KCLEW118 KCLEW119		VW		-	
	EW-119		KCLFEW19	EW-19	VW
KCLEW11A	EW-11A	VW	KCLFEW21	EW-21	VW
KCLEW120	EW-120	VW	KCLFEW22	EW-22	VW
KCLEW121	EW-121	VW	KCLFEW23	EW-23	VW
KCLEW122	EW-122	VW	KCLFEW24	EW-24	VW
KCLEW123	EW-123	VW	KCLFEW27	EW-27	VW
KCLEW124	EW-124	VW	KCLFEW30	EW-30	VW
KCLEW125	EW-125	VW	KCLFEW31	EW-31	VW
KCLEW126	EW-126	VW	KCLFEW33	EW-33	VW
KCLEW127	EW-127	VW	KCLFEW34	EW-34	VW
KCLEW128	EW-128	VW	KCLFEW37	EW-37	VW
KCLEW12A	EW-12A	VW	KCLFEW39	EW-39	VW
KCLEW130	EW-130	VW	KCLFEW40	EW-40	VW

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Table 1b. Landfill Gas Collection System Components Installed as of June 9, 2017 continued

GEM ID	Well ID	Collector	GEM ID	Well ID	Collector
		Type			Type
KCLFEW41	EW-41	VW	KCLFEW78	EW-78	VW
KCLFEW43	EW-43	VW	KCLFEW79	EW-79	VW
KCLFEW44	EW-44	VW	KCLFEW80	EW-80	VW
KCLFEW46	EW-46	VW	KCLFEW81	EW-81	VW
KCLFEW47	EW-47	VW	KCLFEW82	EW-82	VW
KCLFEW49	EW-49	VW	KCLFEW83	EW-83	VW
KCLFEW50	EW-50	VW	KCLFEW84	EW-84	VW
KCLFEW51	EW-51	VW	KCLFEW85	EW-85	VW
KCLFEW52	EW-52	VW	KCLFEW86	EW-86	VW
KCLFEW53	EW-53	VW	KCLFEW87	EW-87	VW
KCLFEW54	EW-54	VW	KCLFEW88	EW-88	VW
KCLFEW56	EW-56	VW	KCLFEW91	EW-91	VW
KCLFEW57	EW-57	VW	KCLFEW92	EW-92	VW
KCLFEW58	EW-58	VW	KCLFEW93	EW-93	VW
KCLFEW61	EW-61	VW	KCLFEW94	EW-94	VW
KCLFEW62	EW-62	VW	KCLFEW95	EW-95	VW
KCLFEW63	EW-63	VW	KCLFEW96	EW-96	VW
KCLFEW64	EW-64	VW	KCLFEW97	EW-97	VW
KCLFEW66	EW-66	VW	KCLFEW98	EW-98	VW
KCLFEW67	EW-67	VW	KCLFEW99	EW-99	VW
KCLFEW68	EW-68	VW	KCLFEWB3	B003	VW
KCLFEW69	EW-69	VW	KCLFEWB4	B004	VW
KCLFEW70	EW-70	VW	KCLFEWB5	B005	VW
KCLFEW71	EW-71	VW	KCLFEWB6	B006	VW
KCLFEW72	EW-72	VW	KCLFEWR1	R1	VW
KCLFEW73	EW-73	VW	KCLFEWR3	R3	VW
KCLFEW74	EW-74	VW	KCLFEWS3	S003	VW
KCLFEW75	EW-75	VW	KCLFIW01	I01	VW
KCLFEW76	EW-76	VW	KCLFIW02	I02	VW
KCLFEW77	EW-77	VW	KCLW27RR	E027R	VW

# STATEMENT OF COMPLIANCE

# Regulation 2, Rule 1 (CEQA and Public Notice Requirements):

This application is for a change of permit conditions at the S-1 Landfill with Gas Collection System that involves some physical alterations of the gas collection system, but that will not involve any modifications to the source (S-1). The gas collection system is part of the landfill gas abatement systems for the landfill. The proposed alterations do not result in any emission increases. Therefore, this application is categorically exempt from CEQA review pursuant to Regulation 2-1-312.2. In addition, the Engineering Evaluation for this application uses fixed standards and objective measurements and does not involve any element of discretion. Consequently, no further CEQA review is required.

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The project is over 1000 feet from the nearest school and is therefore not subject to the public notification requirements of Regulation 2-1-412.

# Regulation 2, Rule 2:

Since this application does not result in any emission increases, this project is not subject to New Source Review (NSR). No new BACT, Offset or PSD requirements will apply.

# New Source Review for Toxic Air Contaminants:

This application does not result in any increases of Toxic Air Contaminants (TACs). Therefore, NSR for TACs is not triggered, and no new T-BACT requirements will apply.

# Regulation 2, Rule 6:

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act (40 CFR, Part 70) and BAAQMD Regulation 2, Rule 6, Major Facility Review (MFR), because it is a major facility for NO<sub>x</sub> and CO emissions and also because it is a designated facility (since it is subject to the control requirements of the Emission Guidelines for MSW Landfills). Therefore, this facility is required to have an MFR permit pursuant to Regulations 2-6-301 and 2-6-304.

The MFR Permit for this facility was last revised on March 17, 2016. Since this application will result in permit condition modifications, a minor revision of the Title V permit will be required.

# Regulation 8, Rule 34:

Keller Canyon Landfill (S-1) is subject to Regulation 8, Rule 34. S-1 is expected to comply with Regulation 8-34-301 by:

- (a) continuously operating the gas collection system and continuously operating gas control systems (including A-1 and A-2),
- (b) having no leaks (exceeding 1000 ppmv) from the gas collection system, and
- (c) processing all collected gases in control devices achieving at least 98% NMOC destruction efficiency (or emitting less than 20 ppmv of NMOC from the IC engines and gas turbines).

The S-1 Keller Canyon Landfill is also subject to Regulation 8-34-303, which limits leaks on the surface of the landfill to less than 500 ppmv as methane. This site has generally been complying with the surface leak requirements. However, surface leaks above the standard are occasionally discovered by the facility and are typically eliminated within a few days of discovery. The proposed collection system alterations will keep pace with the expected increases in gas production rate at this site and are expected to prevent excessive surface leaks at this landfill.

For deep interior wells, well spacing should be less than 300 feet with each well achieving a radius of influence of about 150 feet. For perimeter wells, well spacing should be less than 200 feet apart. Based on maps of the gas collection system, the current vertical wells are 150-300 feet apart and appear to be of sufficient density.

The proposed collection system alterations are necessary to maintain compliance with the collection system installation dates specified in Regulation 8-34-304. This site is complying with all applicable monitoring requirements (8-34-505-510).

# Federal Requirements:

The landfill at this facility is subject to the 40 CFR Part 60, Subpart WWW NSPS for Municipal Solid Waste (MSW) Landfills. Compliance with the District's Regulation 8, Rule 34 operating requirements is expected to ensure compliance with all applicable federal NSPS operating provisions.

NESHAPs for MSW Landfills: Any landfills that are subject to the landfill gas collection and control requirements of either the NSPS for MSW Landfills or the EG for MSW Landfills are also subject to the NESHAPs for MSW Landfills (40 CFR, Part 63, Subpart AAAA). This NESHAP requires that subject facilities prepare and implement startup, shutdown, malfunction plans and additional reporting requirements. All applicable requirements are contained in the existing MFR permit, and this facility is expected to comply with these requirements.

# PERMIT CONDITION REVISIONS

The District is proposing to modify Condition # 17309, Part 18, as indicated below to reflect the landfill gas collection system alterations identified above.

# **Condition # 17309**

For S-1 Keller Canyon Landfill, A-1 Landfill Gas Flare, and A-2 Landfill Gas Flare:

(no changes to Parts 1-17 or Parts 19-37)

- 18. Landfill Gas Collection System Design and Alteration Requirements: The Permit Holder shall have a properly operated and properly maintained active landfill gas collection system at the S-1 Keller Canyon Landfill that complies with the design and alteration requirements listed below. (Basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, 40 CFR 60.755(a) and 60.759)
  - a. The Permit Holder has been issued a Permit to Operate for the landfill gas collection system components listed below. Well and collector locations, depths, and lengths of associated piping are as described in detail in Permit Application #26269 and #28398. The authorized number of landfill gas collection system components is the baseline count listed below plus any components installed and minus any components permanently decommissioned pursuant to Part 18b, as evidenced by start-up and decommissioning notification letters submitted to the District.
    - i. The following components constitute the main landfill gas collection system as of  $\frac{12}{31/20156} \frac{9}{2017}$ .

Well Station	Vertical Wells
A-S	<del>19</del> 18
EW	<del>91</del> 128
ID	Horizontal Collectors
HC-2	1

ii. The following components have been installed to prevent or control landfill gas migration and are not part of the main landfill gas collection and control system.

•	Horizontal Collectors
HC-3	1
	Other Components
LCRS-1	1
LCRS-2	1

- b. The Permit Holder has been authorized to conduct the landfill gas collection system alterations listed below pursuant to Application #26269 and #28398. All collection system alterations shall comply with subparts i-vii below. Components installed or decommissioned pursuant to Part 18b shall be added to or removed from Part 18a(i) in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415.
  - i. The authorized collection system alterations are:
    - Install up to \$3100 vertical gas collection wells.
    - Install up to 2040 horizontal collectors.
    - Permanently decommission up to <u>28100</u> vertical wells.
    - Permanently decommission up to <del>1040</del> horizontal collectors.
  - ii. The Permit Holder shall apply for and receive a Change of Conditions from the District before implementing any changes to the landfill gas collection system described in Part 18a, other than those authorized by Part 18b. Installing, decommissioning, and relocating vertical wells and horizontal collectors are alterations that are subject to this requirement, unless this change constitutes a replacement as defined in subpart iii below.
  - iii. Replacement of landfill gas collection system components with identical or functionally equivalent components will not be deemed an alteration and will not subject to the Authority to Construct requirement under the following circumstances. If a well or collector will be shut down and replaced by a new well or collector in essentially the same location as the old component and this decommission/installation will be accomplished in accordance with Regulations 8-34-117 and 8-34-118, then this activity shall be considered a component replacement that is not subject to an Authority to Construct or Change of Conditions requirement. For each individual well or collector replacement, this subpart authorizes a maximum vacuum disconnection time of five consecutive days for compliance with Regulation 8-34-117.5. The disconnected component and the new component shall not be counted toward the Part 18b(i) component alteration limits; the numbers of replacement wells and replacement collectors are not limited. Alterations, repairs, or replacements of non-perforated piping sections (such as risers, laterals, or header pipes), piping connectors, or valves are not subject to the Authority to Construct requirement.
  - iv. At least three days prior to initiating operation of a well or collector installed pursuant to Part 18b, the Permit Holder shall submit a start-up notice to the District that contains the component ID number for each new well or collector and the anticipated initial start-up date for each new component.

- v. For each well or collector that is permanently decommissioned after April 16, 2007, the Permit Holder shall submit a decommissioning notice to the District within no later than three working days after the component was disconnected from vacuum system. This decommissioning notice shall contain the component ID for each well or collector that was decommissioned, the date and time that each component was disconnected from the vacuum system, and the reason the component was decommissioned.
- vi. Within six months of installing a new component or permanently decommissioning an existing component, the Permit Holder shall prepare an updated map of the landfill gas collection system that identifies the ID numbers and locations of all operable wells and collectors. On this map or in accompanying documentation, the Permit Holder shall summarize all component changes that were made since the last map was prepared. The previous collection system map, the updated collection system map, and the component change summary shall be provided to District staff upon request.
- If the Permit Holder has a net reduction (number of decommissioned vii. components minus the number of installed components) of more than five components within a 120-day period, the Permit Holder shall submit a more comprehensive decommissioning notice to the District. In addition to the information required by subpart v, this comprehensive decommissioning notice shall include the maps and documentation required by subpart vi, shall identify all component changes that have occurred but that are not included on the most recently updated map, shall identify any components that are temporarily disconnected from vacuum pursuant to Part 19c, shall provide estimated vacuum reconnection dates for these components, shall include a list of all well installations that are expected to occur within the next 120 days, and shall discuss the reasons why this reduction in gas collection components is not expected to result in surface emission leaks. Upon request, the Permit Holder shall provide wellhead monitoring data, surface leak monitoring data, records of repair attempts made to date, and other information to support the need for a net component reduction of more than five wells. The District may require additional surface monitoring to verify that this net component reduction is not causing landfill surface leaks. The District will notify the Permit Holder in writing of any additional surface monitoring that is required pursuant to this subpart.

#### RECOMMENDATION

Issue an administrative Change of Permit Conditions for the following equipment, subject to Condition # 17309:

S-1 Keller Canyon Landfill; abated by Flares (A-1 and A-2):

Statement of Basis: Site A4618, Keller Canyon Landfill Company Application # 28399 901 Bailey Road, Pittsburg, CA 94565

Minor Revision:	: Updates to Landfill Gas Collection System Descriptions and Allowable Altera			
Ву:	Davis Zhu Air Quality Engineer	Sep 05, 2017 Date		