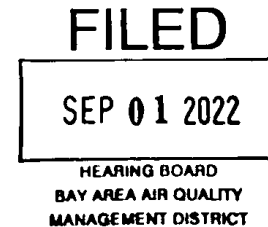


September 1, 2022  
File No. 01204082.01, Task 30

Marcy Hiratzka  
Clerk of the Boards, Executive & Administrative Resources  
Bay Area Air Quality Management District  
375 Beale Street, Suite 600  
San Francisco, CA 94105



**Subject: Request for a Regular Variance – 365 Days  
Request for Interim Variance Relief  
Potrero Hills Landfill, Inc.  
Facility A2039**

Dear Ms. Hiratzka,

On behalf on Potrero Hills Landfill (PHL), SCS Engineers (SCS) is submitting this request for regular variance to temporarily operate two tipper engines for up to 365 days (12 months). PHL is also requesting interim variance for relief during the period between the variance filing and Hearing Board determination. The existing permitted tippers, S-38 and S-39, were damaged in a small, centralized fire on August 5, 2022. The Bay Area Air Quality Management District (BAAQMD or District) granted an emergency variance to operate two temporary tipper engines from August 15, 2022 through September 15, 2022. PHL is requesting an additional 365 days to return the tipper engines to compliance, due to the uncertainty of how long it will take to find a solution and return to compliance. A summary of the malfunction event, corrective actions taken to date, and need for regular/long term variance relief are discussed below.

### Background

On Friday, August 5, 2022, PHL experienced a small, isolated fire in the active filling area suspected to be caused by a hot load from a residential refuse hauling truck. The fire was centralized in the trash and caused damage only to the two tippers, S-38 and S-39. There was no damage caused to any other equipment or to the landfill gas (LFG) system, and there were no excess emissions as a result of the event. The fire and resulting damage to the tipper engines was discovered by Fernando Parra, PHL mechanic. We verbally notified the District Clerk of the Hearing Board on August 11, 2022.

PHL scheduled the tipper manufacturer, Columbia Industries (Columbia), to complete a damage assessment of the equipment on August 12, 2022. Columbia indicated it would take several weeks to complete their report and coordinate either repairs (if feasible) or replacement of the equipment. In order to continue waste disposal critical to facility operations, PHL requested an emergency variance to temporarily operate two replacement tippers from other facilities.

### Emergency Variance Request

The S-38 and S-39 tippers engines are rated 174 brake-horsepower (bhp) and Tier 4F certified. PHL evaluated available options, including equipment rental and sourcing temporary replacement equipment from other facilities, but were unable to source any tippers with Portable Equipment

Registration Program (PERP) registration or Tier 4F engines that were readily available. A tipper with a 156 bhp Tier 3 engine (formerly permitted at PHL) and a tipper with a 174 bhp Tier 4 interim engine from two Waste Connections facilities were identified as temporary replacement options.

On August 11, 2022, an emergency variance application was submitted to the Clerk of the Hearing Board to request relief to temporarily operate the Tier 3 and Tier 4 interim tipper engines until the damage assessment for the existing tippers was completed and a course of action was determined. On August 23, 2022, the Hearing Board granted emergency variance relief from Regulation 2, Rule 1 and Permit Condition 27218, from August 15, 2022 at 7:00 a.m. to September 15, 2022 at 7:00 a.m.

### Equipment Inspection & Damage Assessment

As previously mentioned, following the fire on August 5, 2022, PHL immediately scheduled Columbia to complete a damage assessment which was conducted on August 12, 2022. On August 23, 2022, Columbia provided PHL with the results of their inspection, which reported sustainable fire damage to the hydraulic system, the undercarriage, and warping of the metal platforms which rendered both tippers inoperable. The tipper engines did not sustain any damage and remain operable. Columbia determined that repairing the tippers' damaged areas was a viable solution and may be completed by cutting out and replacing damaged sections of the structures. PHL has requested a quote from Columbia to complete the repairs at their Hillsboro, Oregon facility. Columbia is also providing costs for replacement equipment.

Once Columbia has provided cost estimates for 1) repairing the existing tippers at their Hillsboro facility, 2) retrofitting the existing tippers, and 3) replacing the existing tippers with new equipment, PHL will determine how to proceed and work with Columbia to coordinate equipment repairs or replacement.

### Regular Variance Request

Due to high workload demand and supply chain issues, Columbia has indicated it will take several weeks to schedule fabrication and repair work. If it is decided instead that new equipment will be purchased, the earliest the new tippers will be available from the factory is mid-September. Additionally, a permit application for an Authority to Construct (ATC) will need to be submitted to BAAQMD for approval. In both scenarios, it is expected that a return to compliance will take several months. As such, PHL is requesting a regular variance to extend relief from Regulation 2-1 and Condition 27218 to continue to operate the temporary replacement tippers from September 15, 2022 through September 15, 2023. PHL is also seeking an interim variance and requests relief during the period between the variance filing and Hearing Board determination. Once PHL has decided whether to replace or repair the tippers, PHL will notify BAAQMD and provide a tentative schedule detailing the course of actions planned to return to compliance.

Please note that a regular variance is being requested rather than a short term variance due to the uncertainty of how long it will take to find a solution and return to compliance, especially if a permit is required to be obtained from BAAQMD. The variance would end once the existing tippers are repaired and operational, or once replacement or retrofitted tippers are installed and operational under an ATC. PHL is committed to minimizing the length of the variance period and is working with the tipper manufacturer to return the tippers to compliance as soon as possible.

### Excess Emissions

There were no excess emissions from S-38 and S-39 resulting from the malfunction event.

The existing tippers, S-38 and S-39, both include Tier 4F engines. As mentioned above, PHL was unable to locate any Tier 4F rental or replacement equipment that were immediately available for PHL’s use. The operation of the temporary Tier 3 and Tier 4i engines will result in a slight increase in emissions of criteria pollutants and hazardous air pollutants (HAPs) as shown in the table below. Detailed emissions estimates are included in the attachments to this letter.

**Table 1. Estimated Excess Emissions**

Air Pollutant	12-Month Net Emissions Increase <sup>[1]</sup> (Temporary - Existing Tipper Engines)		
	Existing Tippers S-38 & S-39	Temporary Tipper Engines	Net Emissions
	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months
VOCs	15.18	136.89	121.71
NOx	455.38	4,281.06	3,825.68
SO <sub>x</sub>	1,891.94	1,795.71	-96.23
CO	30.36	2,729.77	2,699.41
PM <sub>10</sub>	15.18	25.00	9.82
Total HAPs	24.49	23.24	-1.25

*Permit Condition 27218 allows S-38 and S-39 tipper engines to operate up to 5,304 hours combined during any 12-month consecutive (approximately 2,652 hours per year per engine). Emissions estimate assumes each temporary engine will operate approximately 2,652 hours during the requested 12-month variance period, based on permitted annual operation.*

Emissions estimates were calculated assuming each engine may operate up to 2,562 hours per year. Condition 27218, Part 1 for the existing tipper engines allows the engines to operate a combined 5,304 hours in any consecutive 12-month period. Once PHL determines whether the tippers will either be retrofitted or purchased new, PHL will notify BAAQMD and submit a permit application if required as soon as possible. Assuming expected operations during the variance period, we have estimated the excess emissions that will occur during 12 months of operation, shown in Table 1 above.

Closing

The tippers are critical to landfill operations. Without them, PHL cannot properly dispose of the waste delivered to the facility. The landfill is an essential public service that serves as a critical public health function. As such, curtailment is not an option.

PHL would like to pursue a regular and interim variance at this time to continue to operate the Tier 3 and Tier 4 temporary replacement tipper engines beyond the emergency variance period ending September 15, 2022 at 7 a.m. The regular variance period requested is September 15, 2022 to September 15, 2023, which is 365 calendar days (12 months).

If you have any questions or concerns regarding this request, the proposed course of action, or proposed replacement equipment, please contact the undersigned.

Marcy Hiratzka  
September 1, 2022  
Page 4

Sincerely,



Kathleen Beresh  
Senior Project Manager  
**SCS Engineers**



Patrick S. Sullivan, REPA, CPP, BCES  
Senior Vice President  
**SCS Engineers**

Attachments: A. Regular Variance Application  
B. Tipper Engine Emissions Estimates  
C. Facility 2022-2023 Permit to Operate  
D. Facility Map

Cc: Salvador Rueda, BAAQMD  
Natalie Hicks, Potrero Hills Landfill, Inc.  
Curt Fujii, Potrero Hills Landfill, Inc.

## REGULAR VARIANCE APPLICATION

BEFORE THE HEARING BOARD  
OF THE  
BAY AREA AIR QUALITY MANAGEMENT DISTRICT  
STATE OF CALIFORNIA

**APPLICATION FOR VARIANCE**

**FILED**

**SEP 01 2022**

HEARING BOARD  
BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

In the Matter of the Application of )  
Potrero Hills Landfill, Inc. )

(Applicant: Insert business or organization )  
name above )

DOCKET NO. 3736  
(Assigned by Clerk)

For a Variance from Regulation(s): )  
District Regulation 2, Rule 1 and Permit Condition #27218 )

(Applicant: Insert Regulations in form: )  
Regulation \_\_\_\_\_, Rule \_\_\_\_\_, Section \_\_\_\_\_ )

TYPE OF VARIANCE REQUESTED (see Page 3 for further information)

SHORT     INTERIM     REGULAR     GROUP     PRODUCT

VARIANCE PERIOD REQUESTED (see Page 10, No. 20):

From: September 15, 2022 To September 15, 2023

TOTAL NUMBER OF (CALENDAR) DAYS IN VARIANCE PERIOD: 365 days (12 months)

(Note: Variance relief will not be granted for any period preceding the date of filing of the Application for Variance.)

**[ALL DOCUMENTS FILED WITH THE CLERK'S OFFICE BECOME PUBLIC RECORD]**

**SUMMARY PAGE**

NAME OF APPLICANT: Potrero Hills Landfill, Inc.

FACILITY ADDRESS: 3675 Potrero Hills Lane

City, State, Zip: Suisun City, CA 94585

PLANT # or G #: A2039

SOURCE

#(S): \_\_\_\_\_

**CONTACT:** Name, title, company (if different than Applicant), address, and phone number of persons authorized to receive notices regarding this Applicant (no more than two authorized persons).

Natalie Hicks  
Potrero Hills Landfill, Inc. - Waste Connections  
3675 Potrero Hills Lane  
Suisun City, California      Zip 94585  
( 707 ) 432-4637      Ext. 54637  
Fax (      )  
E-mail natalie.hicks@wasteconnections.com  
California Bar # \_\_\_\_\_

Kathleen Beresh  
SCS Engineers, Senior Project Manager  
3900 Kilroy Airport Way, Suite 100  
Long Beach, California      Zip 90806  
( 509 ) 220-0865      Ext.  
Fax (      )  
E-mail kberesh@scsengineers.com  
California Bar # \_\_\_\_\_

**BRIEFLY SUMMARIZE EQUIPMENT/ACTIVITY SUBJECT TO THIS VARIANCE REQUEST:**

The two permitted tippers, S-38 and S-39 (both 174 brake-horsepower [bhp], Tier 4F certified engines) experienced structural damage due to a centralized fire on August 5, 2022. Relief is being requested to operate two (2) temporary replacement tipper engines (one 156 bhp Tier 3 engine, and one 174 bhp Tier 4 interim engine) for up to 365 days (12 months) until repairs to the existing tippers are completed, or replacement equipment is selected if repairs are not an option.

**LIST DISTRICT REGULATIONS, RULES AND PERMIT CONDITIONS SUBJECT TO THIS VARIANCE REQUEST:**

District Regulation 2, Rule 1: Permits	Section 2-1-301: Authority to Construct
	Section 2-1-302: Permit to Operate
Permit Condition 27218, for S-38 and S-39	Engine certification and Tier

**SUMMARY OF TOTAL EXCESS EMISSIONS:**

Pollutants	Net Emissions After Mitigation (lbs/day or Opacity %)
See attached tables	

## **TYPE OF VARIANCE REQUESTED:**

**NOTE:** The date of filing of the Application for Variance is the earliest allowed starting date for a variance. State law [California Health and Safety Code (H&SC)] imposes requirements on the amount of time to be allowed for notification of the public and air quality regulatory agencies before a hearing on a variance request can be held by the Hearing Board. Review the following descriptions of the types of variances, and select that which is most appropriate for your situation:

**SHORT:** If compliance with the District Rule(s) can be achieved in **90 (calendar) days or less**, request a short-term variance. [*10-day notice required to Bay Area Air Quality Management District's Air Pollution Control Officer (APCO), Applicant, California State Air Resources Board (ARB), Federal Environmental Protection Agency (EPA).*]

**INTERIM:** If Applicant requires immediate relief for the period between the date of filing of variance application and the date of the decision on the matter by the Hearing Board, request an interim variance. An interim variance is recommended if significant excess emissions will occur between the date of filing and the date of the fully noticed hearing by the Hearing Board. If an interim variance is required, a hearing will be scheduled as soon as possible. The period of an interim variance shall not exceed 90 days. If an interim variance is requested, Applicant must also request a short or a regular variance on the same application.

**REGULAR (OR LONG-TERM):** If compliance with District Rule(s) will take **more than 90 (calendar) days**, request a regular variance. (*30-day published notice required. 30 days notice to APCO, Applicant, ARB.*)

**GROUP:** If non-compliance with District Rule(s) by each individual Applicant comprising a group is based on issues of law and fact common to each Applicant, request a group variance. (*Noticing requirements as for Short or Regular variances depending on period of the Group variance.*)

**PRODUCT:** Any person who manufactures a product may petition the Hearing Board for a product variance from a District Rule or Regulation. A product variance shall be granted only when a variance is necessary for the sale, supply, distribution, or use of the product. (*Noticing requirements as for Short or Regular variances depending on period of the product variance.*)

BAAQMD Regulation 1-402: **“Status of Violation Notices During Variance Proceedings:** Where a person has applied for a variance, no notices shall be issued during the period between the date of filing for the variance application and the date of decision by the Hearing Board for violations covered by the variance application. However, during the period between the date of the filing for a variance and the date of decision by the Hearing Board, evidence of additional violations shall be collected and duly recorded. Where the variance is denied, evidence of violations collected between the filing date and decision date shall be reviewed and a notice of violation issued for violations occurring during that period shall be served upon said person. Where the variance is granted, no notice of violation shall be issued for violations occurring during that period except in extraordinary circumstances as determined by the APCO.”

**NOTE:** The Environmental Protection Agency (EPA), a federal agency, does not recognize California's variance process, which is established by state law. The EPA considers facilities operating under a variance to be operating in violation of District regulations. Facilities that are in violation and then obtain a variance are advised that the EPA can independently pursue legal action based on federal law against the facility for continuing to be in violation.



1. Briefly describe the type of business and processes at your facility (Attach a map showing location)

Municipal Solid Waste Landfill. See attached map.

See Small Business Considerations on Page 12, No. 21 before answering the following question:

Is Applicant a "Small Business" as defined by Health & Safety Code Section 42352.5(b)(1)?  
Yes  No

Is Applicant a "Major Source" as defined by the applicable provisions of the Federal Clean Air Act, 42 U.S.C. Sec. 7661(2)?  
Yes  No

Is Applicant a "public agency" as defined in Health & Safety Code Section 42352(b)?  
Yes  No

2. Describe the equipment/activity for which a Variance is being sought (type of equipment/activity, source numbers, purpose, why is it essential to your business). Attach a copy of the BAAQMD Permit to Operate or Authority to construct for the subject equipment and/or facility so long as such Permit is less than 50 pages. If the Permit is greater than 50 pages, all portions relevant to the Application shall be provided.

S-38, Portable Diesel Tipper Engine, Tier 4F, 174 bhp  
S-39 Portable Diesel Tipper Engine, Tier 4F, 174 bhp

See attached Permit to Operate and Condition 27218

Is there a regular maintenance and/or inspection schedule for this equipment? Yes  No

If Yes, how often? Every 250 hours of operation

What was the date of the last maintenance and/or inspection? October 2021

Are maintenance records available? Yes  No

Was there any indication of problems? Yes  No

Malfunction was caused by fire damage to equipment. The fire did not originate with the equipment itself.

**APPLICANT’S PETITION FOR REQUIRED FINDINGS**

California Health and Safety Code (H&S Code) 42352 requires the Hearing Board to make six findings for a variance to be granted. In this Section, Applicant must provide sufficient information to enable the Hearing Board to make a decision on each of the six findings:

**Finding # 1: That the Applicant for a variance is, or will be, in violation of Health and Safety Code Section 41701 or of any rule, regulation or order of the District.**

3. List all District Regulations, Rules, and/or Permit Conditions from which Applicant is seeking variance relief. Briefly explain how Applicant is or will be in violation of each rule or condition. If Applicant is requesting relief from Regulation 6, and the excess opacity during the variance period will reach or exceed 40% (Ringelmann 2), Applicant should also request relief from California Health and Safety Code Section 41701.

Regulation, Rules, Permit Conditions	Explanation
Regulation 2, Rule 1: Permits	Section 2-1-301: Authority to Construct. Requesting relief to operate Tier 3 and Tier 4i tipper engines temporarily without first obtaining an ATC.
Regulation 2, Rule 1: Permits	Section 2-1-302: Permit to Operate. Requesting relief to operate Tier 3 and Tier 4i tipper engines temporarily without first obtaining a PTO.
Permit Condition #27218	Allows for operation of two (2) 174 brake-horsepower (bhp) Tier 4F portable tipper engines.
	Requesting relief from engine rating and EPA Tier requirements in order to temporarily operate one (1) 174 bhp Tier 4 interim tipper engine and one (1) 156 bhp Tier 3 tipper engine.

4. Has the District issued any Notice(s) of Violation (NOVs) to the Applicant concerning the subject of this variance request? Yes  No  **If “Yes”, please attach copies of the NOVs.**
5. Has the equipment in question or any other equipment at this facility been under variance protection during the last year? Yes  No

Docket #	Variance Period	Nature of Emission	Regulation/Rule/Section
3735	8/15/2022 7 a.m. to 9/15/2022 7 a.m.	No excess emissions. Relief granted from Regulation 2-1 and Condition #27218	Emergency variance granted by Hearing Board 8/23/2022

6. List all NOV(s) issued to equipment at the **entire** facility during the previous 12 months:

Date of Notice	NOV #	Nature of Emission	Regulation/Rule/Section
11/19/2021	A56052	6/20/21 - 8/31/21 loss of operating data for A-2 LFG Flare	Regulation 1, Section 523.3 Condition 1948, Part 9



10. When and how did Applicant first become aware that it was not in compliance with the Rule(s) and/or permit condition(s)?

On Friday, August 5, 2022 a small, centralized fire caused damage to the S-38 and S-39 tippers. The fire was discovered by Fernando Parra, PHL Mechanic. The fire was immediately extinguished to minimize the risk of damage to any other equipment. No other equipment or LFG system components were damaged as a result of the fire. The fire was unforeseen since it was accidental. Non-compliance first occurred when replacement tippers were initially used, which did not comply with the existing Permit to Operate for PHL. This occurred under an emergency variance.

Refer to attached letter for details.

11. What actions has Applicant taken since that time to achieve compliance with the Regulation(s) or permit condition(s)?

PHL coordinated with the tipper manufacturer, Columbia Industries, to complete a damage assessment of both tippers on August 12, 2022. The damage assessment report was provided to PHL on August 23, 2022. Columbia is currently preparing a cost estimate for PHL to complete repairs to the existing tippers, as well as a quote to replace the equipment.

Once the pricing options and scheduling are provided by Columbia, PHL will determine if the tippers will be repaired or replaced.

12. What would be the harm to Applicant's business if the variance were not granted?

Economic losses: \$ 40,000 per day

Number of Employees laid off (if any): \_\_\_\_\_

Provide detailed information regarding economic losses, if any, (anticipated business closure, breach of contracts, hardship on customers, layoffs and/or similar impacts).

If PHL is not granted the regular variance to temporarily operate the 156 bhp Tier 3 tipper and 174 bhp Tier 4 interim tipper, PHL will be required to divert waste to other facilities in the region. This would result in PHL being in breach of contract, with estimated costs to transport and dispose of waste at other facilities of approximately \$40,000 per day. Many customers would have waste piling at their homes and businesses as the increased transportation time significantly reduces the number of loads that can be delivered. The increased truck traffic and travel time would result in additional mobile source emissions. Additionally, PHL has discovered there is a shortage of trucks and drivers which could also result in waste pickup and disposal delays. As a result, customers of PHL could also become out of compliance with their permits.

**Finding # 3: That the closing or taking would be without a corresponding benefit in reducing air contaminants.**

13. List the estimated or measured excess emissions or excess opacity, if any, on a daily basis, or over a more appropriate period of time (For example: duration of requested variance period, hourly basis). Also list emissions reductions proposed by Applicant as mitigation. If no excess emissions or opacity are expected during the variance period, go to No. 16.

Pollutant	(A)	(B)	(C)**
	Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
See attached tables.			

\*\*Column A minus Column B = Column C

14. Show the calculations used to determine the excess emissions listed in No. 13. Are the values in No. 13 based on measurements \_\_\_\_\_ or estimates X \_\_\_\_\_?

See attached tables.
----------------------

15. Do the additional emissions during the variance period contain any Toxic Air Contaminants (TACs) [pursuant to Health and Safety Code Section 39655] or odorous substances? Yes  No

If Yes, list the TACs or odorous substances and approximate amounts:

See attached tables, primarily diesel particulate matter.
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16. List measured or estimated annual emissions from entire facility for each pollutant which is the subject of this variance application:

Pollutant	Total Emissions from Entire Facility (tons/year)
See attached tables.	

Briefly explain the basis for these facility emission values:

Excess emissions were estimated using criteria pollutant emission factors based on the tipper engine manufacturer's emissions data. Hazardous air pollutant emission factors were based on AP-42 standards for diesel engines. See attached tables.

**Finding # 4: That the Applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance.**

17. Explain why the Applicant cannot curtail or terminate operations in lieu of obtaining a variance:

The tippers are critical to landfill operations. Without them, PHL cannot properly dispose of the waste delivered to the facility. The landfill is an essential public service that serves as a critical public health function. As such, curtailment is not an option.

**Finding # 5: During the period that the variance is in effect, the Applicant will reduce excess emissions to the maximum extent feasible.**

18. Explain how Applicant plans to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible (mitigation may include reductions at other sources):

PHL proposes to operate two (2) temporary replacement tippers in order to continue landfill disposal operations until either repairs to the existing tippers is completed or permanent replacement equipment is selected and permitted. PHL will only operate the temporary replacement equipment as necessary to ensure proper and safe operation of the Landfill. Refer to the attached letter for details.

**Finding # 6: During the period the variance is in effect, the Applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the District, and report these emissions levels to the District pursuant to a schedule established by the District.**

19. Has the District requested that the Applicant monitor or otherwise quantify emissions during the variance period? Yes  No

If Yes, please describe how Applicant will do so:

PHL will record temporary tipper engine operating hours and quantify emissions based on operation during the requested variance period.

**APPLICANT’S PLAN FOR ACHIEVING COMPLIANCE:**

20. How does the Applicant intend to achieve compliance with the Rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed and/or modifications or process changes to be made, a list of the dates by which the actions will be completed, and an estimate of total costs:

**Detailed Description:**

PHL has coordinated with the tipper manufacturer, Columbia Industries, to provide a quotes to either retrofit the existing tippers or replace with new equipment, following completion of the damage assessment conducted on August 12, 2022. PHL will evaluate the proposed costs and options, make a decision, and coordinate repairs or equipment replacement with Columbia in September. A permit application will be submitted to BAAQMD once PHL determines how to proceed.

PHL will provide the estimated schedule of equipment repairs or replacement to BAAQMD once available, and the tentative time frame in which PHL expects to return to compliance. A permit application will be submitted to BAAQMD as soon as possible. Please note that the date of compliance will be dependent on the approval and issuance of an Authority to Construct permit.

**Schedule Of Increments Of Progress:**

<b>Increment Description</b>	<b>Completion Date</b>
Equipment Inspection and Damage Assessment by Columbia Industries	8/12/22
Cost /schedule estimate to retrofit, repair, or replace equipment (to be provided by Columbia)	9/07/22
PHL to determine whether to retrofit, repair, or replace tippers	11/15/22
PHL to submit permit application to District (if needed)	11/16/22
Completion of retrofit, repair and or replacement (if possible)	9/15/23

*\*Return to compliance dependent on course of action determined, equipment repair or replacement schedule, and issuance of ATC*

Applicant may propose operating conditions for the variance period which may be considered by the Hearing Board in its evaluation of the variance application.

**PROPOSED OPERATING CONDITIONS:**

In order to continue typical waste disposal operations,PHL requests to operate the two temporary replacement tippers with the operational limits set forth in Condition 27218 for S-38 and S-38 tipper engines:

Condition 27218, Part 1: *The owner/operator shall ensure that the portable engines S-38 and S-39 are operated not more than 5,304 hours, combined, in any consecutive 12-month period.*

Variance Period Requested: From: September 15, 2022 To: September 15, 2023

Total Number of (Calendar) Days in Variance Period: 365 Days

*(Note: Variance relief will not be granted for any period preceding the date of filing of the Application for Variance.)*

Date of Application: September 1, 2022

Completed By: Kathleen Beresh, SCS Engineers Title: Senior Project Manager  
(Print Name)

**The following verification must be signed by the owner, manager, director or other responsible party of the plant, business, factory, or agency requesting the Variance.**

**VERIFICATION**

I, the undersigned, hereby declare under the penalty of perjury, under the laws of the State of California, that I have read the foregoing document, including attachments and the items therein set forth, and that I know its contents, are true.

Dated at 4:30 PM, on September 1, 2022

Signature Kathleen Beresh

Print Name Kathleen Beresh

Title Senior Project Manager, SCS Engineers



## SMALL BUSINESS MATTERS

**Small Business Assistance:** Assistance in completing the Application for Variance and in developing a compliance schedule is available to small businesses. Contact the office of the Hearing Board Clerk at (415) 749-5073 for assistance.

**Small Business Considerations in the Granting of Variances by the Hearing Board:** California Health & Safety Code Section 42352.5 directs the Hearing Board to consider additional factors when making the required Findings for the granting of a variance to a small business.

### 21. Definition of Small Business for purposes of special considerations:

Is Applicant a manufacturing or wholesaling business with fewer than 100 employees?

Yes  No  Number of Employees: \_\_\_\_\_

#### OR

Is Applicant a retailing or service business with annual sales under \$5 million?

Yes  No  Annual Sales: \$\_\_\_\_\_

#### AND

Does Applicant emit 10 tons or less per year of air contaminants? Yes  No

If the Applicant satisfies the above conditions, the Hearing Board will consider the following special factors:

- (A) In determining the extent to which the petitioner took timely actions to comply or seek a variance, the Hearing Board shall make specific inquiries into, and shall take into account, the reasons for any claimed ignorance of the requirement from which a variance is sought.
- (B) In determining the extent to which the petitioner took reasonable actions to comply, the Hearing Board shall make specific inquiries into, and shall take into account, the petitioner's financial and other capabilities to comply.
- (C) In determining whether or not the burden of requiring immediate compliance would be unreasonable, the Hearing Board shall make specific inquiries into, and shall consider, the impact on the petitioner's business and the benefit to the environment which would result if the petitioner is required to immediately comply.

### **Reduced Filing and Excess Emission Fees for Small Businesses:**

Bay Area Air Quality Management District Regulation 3 allows reduced filing fees and excess emission fees to be charged to small businesses. The definition of a small business for the purpose of these reduced fees is different than the definition used by the State of California for the special considerations listed above.

### 22. Definition of Small Business for purposes of reduced filing and excess emission fees (District Regulation 3, Section 209; Both the number of employees AND gross annual income must apply);

Does Applicant have no more than 10 employees?

Yes  No  Number of Employees: 35 employees

Does Applicant have a gross annual income of no more than \$600,000?

Yes  No  Gross Annual Income: \$ 35 million

Is Applicant not affiliated with a non-small business? Yes  No

**Declaration Regarding Small Business**

- 1. I am an officer, partner or owner of the Applicant herein, or a duly authorized agent of the Applicant authorized to make the representations set forth herein.
  
- 2. The Applicant is a business that meets the following definitions of Small Business (check those that are applicable):

Small Business for Purposes of Special Considerations (No. 21)

Small Business for Purposes of Filing and Excess Emission Fees (No. 22)

I declare under penalty of perjury that the foregoing is true and correct.

Executed on \_\_\_\_\_, at \_\_\_\_\_, California

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Position with Company

*Revised 4/4/19*

## TIPPER ENGINE EMISSIONS ESTIMATES

**Table 1. Potential to Emit Emissions  
S-38 and S-39 Tipper Engines  
Potrero Hills Landfill, Inc.**

**S-38: Caterpillar Tier 4F IC Engine**

Pollutant	Potential to Emit					
	Engine Rating (horsepower)	Hours of Operation (hours/year)	Emissions Factor (lb/hp-hour)	PTE Emissions (lbs/hour)	PTE Emissions (tons/year)	PTE: 12-Months Emissions (lbs/year)
<b>Regulated Air Pollutants<sup>(b)</sup></b>						
VOCs <sup>(d)</sup>	174	2,652	0.00002	0.003	0.004	7.59
NOx <sup>(c)(d)</sup>	174	2,652	0.00049	0.086	0.114	227.69
SOx <sup>(b)</sup>	174	2,652	0.00205	0.357	0.473	945.97
CO <sup>(d)</sup>	174	2,652	0.00003	0.006	0.008	15.18
PM <sub>10</sub> <sup>(a)(d)</sup>	174	2,652	0.00002	0.003	0.004	7.59
<b>Hazardous Air Pollutants<sup>(b)</sup></b>						
1,3-Butadiene	174	2,652	2.74E-07	4.768E-05	6.32E-05	0.13
Acetaldehyde	174	2,652	5.37E-06	9.342E-04	1.24E-03	2.48
Acrolein	174	2,652	6.48E-07	1.127E-04	1.49E-04	0.30
Benzene	174	2,652	6.53E-06	1.136E-03	1.51E-03	3.01
Formaldehyde	174	2,652	8.26E-06	1.437E-03	1.91E-03	3.81
Naphthalene	174	2,652	5.94E-07	1.033E-04	1.37E-04	0.27
Toluene	174	2,652	2.86E-06	4.982E-04	6.61E-04	1.32
Xylenes	174	2,652	2.00E-06	3.471E-04	4.60E-04	0.92
<b>Total HAPs</b>					<b>6.12E-03</b>	<b>12.24</b>

**S-39: Caterpillar Tier 4F IC Engine**

Pollutant	Potential to Emit					
	Engine Rating (horsepower)	Hours of Operation (hours/year)	Emissions Factor (lb/hp-hour)	PTE Emissions (lbs/hour)	PTE Emissions (tons/year)	PTE: 12-Months Emissions (lbs/year)
<b>Regulated Air Pollutants<sup>(b)</sup></b>						
VOCs <sup>(d)</sup>	174	2,652	0.00002	0.003	0.004	7.59
NOx <sup>(c)(d)</sup>	174	2,652	0.00049	0.086	0.114	227.69
SOx <sup>(b)</sup>	174	2,652	0.00205	0.357	0.473	945.97
CO <sup>(d)</sup>	174	2,652	0.00003	0.006	0.008	15.18
PM <sub>10</sub> <sup>(a)(d)</sup>	174	2,652	0.00002	0.003	0.004	7.59
<b>Hazardous Air Pollutants<sup>(b)</sup></b>						
1,3-Butadiene	174	2,652	2.74E-07	4.768E-05	6.32E-05	0.13
Acetaldehyde	174	2,652	5.37E-06	9.342E-04	1.24E-03	2.48
Acrolein	174	2,652	6.48E-07	1.127E-04	1.49E-04	0.30
Benzene	174	2,652	6.53E-06	1.136E-03	1.51E-03	3.01
Formaldehyde	174	2,652	8.26E-06	1.437E-03	1.91E-03	3.81
Naphthalene	174	2,652	5.94E-07	1.033E-04	1.37E-04	0.27
Toluene	174	2,652	2.86E-06	4.982E-04	6.61E-04	1.32
Xylenes	174	2,652	2.00E-06	3.471E-04	4.60E-04	0.92
<b>Total HAPs</b>					<b>6.12E-03</b>	<b>12.24</b>

**NOTES:**

PM<sub>10</sub> = Particulate Matter less than 10 microns

PTE = Potential to Emit

Permit Condition 27218 allows S-38 and S-39 tipper engines to operate up to 5,304 hours combined during any 12-month consecutive (approximately 2,652 hours per year per engine). Emissions estimate assumes each temporary engine will operate approximately 2,652 hours during the requested 12-month variance period, based on permitted annual operation.

(a) For the purposes of calculating particulate, PM<sub>10</sub> = PM (all combustion PM assumed to be PM-10)

(b) Emission factors for criteria pollutants are from AP-42 (10/96) Section 3.3 Table 3.3-1. HAPs for diesel engines are from AP-42 Section 3.3 Table 3.3-2 (assumes 7000 Btu/hp-hr).

(c) Emissions factor includes non-methane hydrocarbons (NMHC) and nitrogen oxide (NOx). Typically NOx is 95% of NMHC and NOx.

(d) Emissions factors for criteria pollutants are from Executive Order U-R-022-0218 for Engine Family KPKXL04.4MT1.

**Table 2. Potential to Emit Emissions  
Temporary Replacement Tipper Engines  
Potrero Hills Landfill, Inc.**

**Caterpillar Tier 4 Interim IC Engine**

Pollutant	Engine Rating (horsepower)	PTE Hours of Operation (hours/year)	Emissions Factor (lb/hp-hour)	Level 3 Verified PM Reduction Technology <sup>(f)</sup>	PTE Emissions (lbs/hour)	PTE Emissions (tons/year)	PTE: 12-Months Emissions (lbs/year)
<b>Regulated Air Pollutants<sup>(b)</sup></b>							
VOCs <sup>(d)</sup>	174.3	2,652	0.00002	NA	0.003	0.004	7.603
NOx <sup>(c)(d)</sup>	174.3	2,652	0.0039	NA	0.688	0.912	1824.646
SOx <sup>(b)</sup>	174.3	2,652	0.0021	NA	0.357	0.474	947.599
CO <sup>(d)</sup>	174.3	2,652	0.0002	NA	0.029	0.038	76.027
PM <sub>10</sub> <sup>(a)(d)</sup>	174.3	2,652	0.000003	NA	0.001	0.001	1.521
<b>Hazardous Air Pollutants<sup>(b)</sup></b>							
1,3-Butadiene	174.3	2,652	2.74E-07	NA	4.78E-05	6.33E-05	0.127
Acetaldehyde	174.3	2,652	5.37E-06	NA	9.36E-04	1.24E-03	2.482
Acrolein	174.3	2,652	6.48E-07	NA	1.13E-04	1.50E-04	0.299
Benzene	174.3	2,652	6.53E-06	NA	1.14E-03	1.51E-03	3.019
Formaldehyde	174.3	2,652	8.26E-06	NA	1.44E-03	1.91E-03	3.818
Naphthalene	174.3	2,652	5.94E-07	NA	1.03E-04	1.37E-04	0.274
Toluene	174.3	2,652	2.86E-06	NA	4.99E-04	6.62E-04	1.323
Xylenes	174.3	2,652	2.00E-06	NA	3.48E-04	4.61E-04	0.922
<b>Total HAPs</b>						<b>6.13E-03</b>	<b>12.26</b>

**Caterpillar Tier 3 IC Engine**

Pollutant	Engine Rating (horsepower)	PTE Hours of Operation (hours/year)	Emissions Factor (lb/hp-hour)	Level 3 Verified PM Reduction Technology <sup>(f)</sup>	PTE Emissions (lbs/hour)	PTE Emissions (tons/year)	PTE: 12-Months Emissions (lbs/year)
<b>Regulated Air Pollutants<sup>(b)</sup></b>							
VOCs <sup>(d)</sup>	156	2,652	0.0003	NA	0.049	0.065	129.285
NOx <sup>(c)(e)</sup>	156	2,652	0.0059	NA	0.926	1.228	2456.415
SOx <sup>(b)</sup>	156	2,652	0.0021	NA	0.320	0.424	848.110
CO <sup>(e)</sup>	156	2,652	0.0064	NA	1.001	1.327	2653.745
PM <sub>10</sub> <sup>(a)(e)</sup>	156	2,652	0.0004	85%	0.009	0.012	23.475
<b>Hazardous Air Pollutants<sup>(b)</sup></b>							
1,3-Butadiene	156	2,652	2.74E-07	NA	4.274E-05	5.67E-05	0.113
Acetaldehyde	156	2,652	5.37E-06	NA	8.376E-04	1.11E-03	2.221
Acrolein	156	2,652	6.48E-07	NA	1.010E-04	1.34E-04	0.268
Benzene	156	2,652	6.53E-06	NA	1.019E-03	1.35E-03	2.702
Formaldehyde	156	2,652	8.26E-06	NA	1.289E-03	1.71E-03	3.417
Naphthalene	156	2,652	5.94E-07	NA	9.260E-05	1.23E-04	0.246
Toluene	156	2,652	2.86E-06	NA	4.466E-04	5.92E-04	1.184
Xylenes	156	2,652	2.00E-06	NA	3.112E-04	4.13E-04	0.825
<b>Total HAPs</b>						<b>5.49E-03</b>	<b>10.977</b>

**NOTES:**

PM<sub>10</sub> = Particulate Matter less than 10 microns

PTE = Potential to Emit

Permit Condition 27218 allows S-38 and S-39 tipper engines to operate up to 5,304 hours combined during any 12-month consecutive (approximately 2,652 hours per year per engine). Emissions estimate assumes each temporary engine will operate approximately 2,652 hours during the requested 12-month variance period, based on permitted annual operation.

(a) For the purposes of calculating particulate, PM<sub>10</sub> = PM (all combustion PM assumed to be PM-10)

(b) Emission factors for criteria pollutants are from AP-42 (10/96) Section 3.3 Table 3.3-1. HAPs for diesel engines are from AP-42 Section 3.3 Table 3.3-2 (assumes 7000 Btu/hp-hr).

(c) Emissions factor includes non-methane hydrocarbons (NMHC) and nitrogen oxide (NOx). Typically NOx is 95% of NMHC and NOx.

(d) Emissions factors for criteria pollutants are from Executive Order U-R-022-0190 for Engine Family EPKXL06.6BK1

(e) Emissions factors for criteria pollutants are from Executive Order U-R-022-0113 for Engine Family 8PKXL06.6PJ2.

(f) Level 3 verification is for those technologies achieving at least an 85 percent or greater reduction in particulate matter or less than 0.01 g/bhp-hr emission level.

**Table 3. Tipper Engine Emissions Summary  
Potrero Hills Landfill, Inc.**

Regulated Air Pollutants	Existing Permitted Tipper Engines			Temporary Replacement Tipper Engines <sup>[1]</sup>			Net Emissions (Temporary - Existing Tippers)  lb - 12 Months <sup>[1]</sup>
	S-38 CAT Tier 4 Engine	S-39 CAT Tier 4 Engine	Total Emissions	CAT Tier 4 Interim Engine	CAT Tier 3 Engine	Total Emissions	
	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	
VOCs	7.59	7.59	15.18	7.60	129.29	136.89	121.71
NOx	227.69	227.69	455.38	1,824.65	2,456.42	4,281.06	3,825.68
SO <sub>x</sub>	945.97	945.97	1,891.94	947.60	848.11	1,795.71	-96.23
CO	15.18	15.18	30.36	76.03	2,653.74	2,729.77	2,699.41
PM <sub>10</sub>	7.59	7.59	15.18	1.52	23.48	25.00	9.82

<sup>[1]</sup> Permit Condition 27218 allows S-38 and S-39 tipper engines to operate up to 5,304 hours combined during any 12-month consecutive (approximately 2,652 hours per year per engine). Emissions estimate assumes each temporary engine will operate approximately 2,652 hours during the requested 12-month variance period, based on permitted annual operation.

Hazardous Air Pollutants	Existing Permitted Tipper Engines			Temporary Replacement Tipper Engines <sup>[1]</sup>			Net Emissions (Temporary - Existing Tippers)  lb - 12 Months <sup>[1]</sup>
	S-38 CAT Tier 4 Engine	S-39 CAT Tier 4 Engine	Total	CAT Tier 4 Interim Engine	CAT Tier 3 Engine	Total	
	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	lbs - 12 Months	
1,3-Butadiene	0.13	0.13	0.25	0.13	0.11	0.24	-0.01
Acetaldehyde	2.48	2.48	4.96	2.48	2.22	4.70	-0.25
Acrolein	0.30	0.30	0.60	0.30	0.27	0.57	-0.03
Benzene	3.01	3.01	6.03	3.02	2.70	5.72	-0.31
Formaldehyde	3.81	3.81	7.62	3.82	3.42	7.24	-0.39
Naphthalene	0.27	0.27	0.55	0.27	0.25	0.52	-0.03
Toluene	1.32	1.32	2.64	1.32	1.18	2.51	-0.13
Xylenes	0.92	0.92	1.84	0.92	0.83	1.75	-0.09
<b>HAPs Totals</b>	<b>12.24</b>	<b>12.24</b>	<b>24.49</b>	<b>12.26</b>	<b>10.98</b>	<b>23.24</b>	<b>-1.25</b>

<sup>[1]</sup> Permit Condition 27218 allows S-38 and S-39 tipper engines to operate up to 5,304 hours combined during any 12-month consecutive (approximately 2,652 hours per year per engine). Emissions estimate assumes each temporary engine will operate approximately 2,652 hours during the requested 12-month variance period, based on permitted annual operation.

# 2022 – 2023 FACILITY PERMIT TO OPERATE



BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

PERMIT  
TO OPERATE

This document does not permit the holder to violate any BAAQMD regulation or any other law.

PERMIT EXPIRATION DATE  
AUG 1, 2023

PLANT# 2039

David Jappert, District Manager  
Potrero Hills Landfill, Inc  
P O Box 68  
Fairfield, CA 94533

ORIGINAL SENT TO:

Potrero Hills Landfill, Inc  
3675 Potrero Hills Lane  
Suisun City, CA 94585

Location: 3675 Potrero Hills Lane  
Suisun City, CA 94585

S#	DESCRIPTION	[Schedule]	PAID
1	CHEM> Landfill with gas collection system, Multi-material Potrero Hills MSW Landfill - Waste Decomposition Process; Equipped with Gas Collection System and Le Abated by: A2 Flare A4 Flare Emissions at: P2 Stack P4 Stack	[K]	4223
14	Service Station G11138, 1 gasoline nozzles, Vehicle Non Retail Gasoline Dispensing Facility	[D]	150
15	MISC> Composting, windrows, Green waste, 25 tons/hr max Green Waste Composting Operation Abated by: A15 Water Spray System	[G1]	3296
20	MISC-HDLG> Storage, Concrete Concrete/Asphalt Stockpiles Abated by: A15 Water Spray System	[F]	591
21	MISC-HDLG> Storage, Wood - other/not spec, Green waste Greenwaste & Wood Waste Stockpiles Abated by: A15 Water Spray System	[F]	591
23	MISC-HDLG> Storage Cover & Construction Material Stockpiles Abated by: A15 Water Spray System	[F]	591





**BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT**

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**PERMIT EXPIRATION DATE**  
AUG 1, 2023

PLANT# 2039

S#	DESCRIPTION	[Schedule]	PAID
33	Standby Diesel engine, 237 hp, EPA# 8JDXL06.8104, John Deere Emergency Diesel Generator Engine Emissions at: P33 Stack	[B]	299
36	Standby Diesel engine, 385 hp, EPA# DJDXL09.0114, John Deere Emergency Diesel Generator Engine Emissions at: P36 Stack	[B]	329
38	Diesel engine, 174 hp, EPA# KPKXL04.4MT1, Caterpillar Portable Diesel Tipper Engine Emissions at: P38 Stack	[B]	329
39	Diesel engine, 174 hp, EPA# KPKXL04.4MT1, Caterpillar Portable Diesel Tipper Engine Emissions at: P39 Stack	[B]	299
202	MISC> Landfill dumping, Solid waste - other/not spec Potrero Hills MSW Landfill - Waste and Cover Material Dumping	[K]	1919
203	MISC> Landfill bulldozing, compacting, etc Potrero Hills MSW Landfill - Excavating, Bulldozing, and Compacting Activities	[K]	1919
A4	Industrial Flare - Other (not refinery), 72MM BTU/hr max Landfill Gas Flare Emissions at: P4 Stack	[exempt]	0
A2	Industrial Flare - Other (not refinery), 45MM BTU/hr max Landfill Gas Flare Emissions at: P2 Stack	[exempt]	0

12 Permitted Sources, 2 Exempt Sources

\*\*\* See attached Permit Conditions \*\*\*



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**PERMIT EXPIRATION DATE**

AUG 1, 2023

PLANT# 2039

\*\*\* PERMIT CONDITIONS \*\*\*

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Source#	Subject to Condition Numbers
-----	-----

1	1948
14	26838, 20853, 26550, 26551
15	26039
20	26040
21	26040
23	26040
33	22850
36	22850
38	27218
39	27218
202	1948
203	1948
A4	1948

The operating parameters described above are based on information supplied by permit holder and may differ from the limits set forth in the attached conditions of the Permit to Operate. The limits of operation in the permit conditions are not to be exceeded. Exceeding these limits is considered a violation of District regulations subject to enforcement action.





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\*\*\* PERMIT CONDITIONS \*\*\*

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COND# 1948 applies to S#'s 1, 202, 203, A4

For: S-1 Potrero Hills MSW Landfill - Waste Decomposition  
Process Equipped with Gas Collection System  
and Leachate Collection and Recovery System;  
Abated By  
A-2 Landfill Gas Flare 45 MMBtu/hr, maximum and  
A-4 Landfill Gas Flare, 72 MMBtu/hr, maximum;  
S-202 Potrero Hills MSW Landfill - Waste and Cover  
Material Dumping; and  
S-203 Potrero Hills MSW Landfill - Excavating,  
Bulldozing, and Compacting Activities

1. The owner/operator shall comply with the following waste acceptance and disposal and emission limits and shall obtain the appropriate New Source Review permit, if one of the following limits is exceeded:
  - a. Except for temporary emergency situations approved by the Local Enforcement Agency, total waste accepted and placed at the landfill shall not exceed 4430 tons in any day. (Basis: Regulation 2-1-301)
  - b. The total cumulative amount of all decomposable waste placed in the landfill shall not exceed 16.35 million tons, and annual acceptance and placement of decomposable materials shall not exceed 715,000 tons in any consecutive 12 month period, unless the owner/operator can demonstrate that increase of these limits will not result in increases in waste decomposition-related emissions identified in the Engineering Evaluation for Application #24634. (Basis: Regulations 2-1-301, 2-1-302, and 2-1-234)
  - c. The maximum design capacity of the landfill (total volume of all wastes and cover materials placed in the landfill, excluding final cover) shall not exceed 21.8 million cubic yards, unless the owner/operator can demonstrate that an increase in this design capacity limit will not result in any increases in the maximum permitted POC and NPOC emission rates, which are identified in the Engineering Evaluation for Application #24634. (Basis: Regulation 2-1-301)
  - d. The maximum permitted fugitive precursor organic compound (POC) emission rate is 42.19 tons per year from the S-1 Potrero Hills MSW Landfill. The maximum permitted residual POC emission rate is 2.53 tons per





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year from the flare(s) (A-2 and/or A-4). Any changes in waste acceptance rates, types of waste accepted, or other practices that will result in an increase in the maximum permitted POC, NPOC, or toxic air contaminant emission rates, which are identified in the Engineering Evaluation for Application #24634, shall be considered a modification pursuant to Regulation 2-1-234. (Basis: Regulations 2-1-301, 2-1-302, and 2-1-234)

- e. The concentration of non-methane organic compound (NMOC) in the landfill gas collected from the S-1 Potrero Hills Landfill shall not exceed 595 ppmv, calculated as hexane equivalent, and the concentration of precursor organic compounds (POC) in the landfill gas shall not exceed 565 ppmv, calculated as hexane equivalent, unless the owner/operator can demonstrate that exceedance of these limits will not result in exceedance of the maximum permitted emission rates, which are identified in subpart 1d above. (Basis: Regulation 2-1-301)

- 2. This facility is not subject to Regulation 8, Rule 40 because the landfill does not accept contaminated soil (soil containing more than 50 ppmw of volatile organic compounds, VOCs). The following types of materials may be accepted:
  - a. Materials for which the owner/operator has appropriate documentation demonstrating that either the organic content of the soil or the organic concentration above the soil is below the "contaminated" level (as defined in Regulation 8, Rule 40, Sections 205, 207, and 211).
  - b. Materials for which the owner/operator lacks documentation to prove that the soil is not contaminated, but source of the soil is known and there is no reason to suspect that the soil might contain organic compounds.
  - c. Materials which the owner/operator plans to test in order to determine the VOC contamination level in the soil, provided that the material is sampled within 24 hours of receipt by this site and is handled as if the soil were contaminated until the owner/operator receives the test results. The owner/operator shall collect soil samples in accordance with Regulation





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8-40-601. The organic content of the collected soil samples shall be determined in accordance with Regulation 8-40-602.

i. If the test results indicate that the soil is contaminated or if the soil was not sampled within 24 hours of receipt by the facility, the owner/operator must continue to handle the soil in accordance with Regulation 8, Rule 40, until the soil has been removed from this site or has completed treatment. Storing soil in a temporary stockpile or pit is not considered treatment. Co-mingling, blending, or mixing of soil lots is not considered treatment.

ii. If the test results indicate that the soil, as received at this site, has an organic content of 50 ppmw or less, then the soil need not be handled in accordance with Regulation 8, Rule 40 any longer.

(Basis: Regulation 8-40-301)

3. The owner/operator shall limit the quantity of low VOC soil (soil that contains 50 ppmw or less of VOCs) disposed of per day so that no more than 15 pounds of total carbon could be emitted to the atmosphere per day. In order to demonstrate compliance with this condition, the owner/operator shall maintain the following records in a District-approved log.

a. Record on a daily basis the amount of low VOC soil disposed of in the landfill or used as cover material in the landfill. This total amount (in units of pounds per day) is Q in the equation in subpart c. below.

b. Record on a daily basis the VOC content of all low VOC soils disposed of or used as cover material. This VOC Content (C in the equation below) should be expressed as parts per million by weight as total carbon.

c. Calculate and record on a daily basis the VOC Emission Rate (E) using the following equation:

$$E = Q * C / 106$$

(Basis: Regulation 8-2-301)

4. Water and/or dust suppressants shall be applied to all unpaved roadways and active soil removal and fill areas





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associated with this landfill as necessary to prevent visible particulate emissions. Paved roadways at the facility shall be kept sufficiently clear of dirt and debris as necessary to prevent visible particulate emissions from vehicle traffic or wind. (Basis: Regulations 2-1-403, 6-1-301, and 6-1-305)

5. All collected landfill gas shall be vented to one or both of the properly operating Landfill Gas Flares (A-2 and A-4). Raw landfill gas shall not be vented to the atmosphere, except for unavoidable landfill gas emissions that occur during collection system installation, maintenance, or repair that is performed in compliance with Regulation 8, Rule 34, Sections 113, 116, 117, or 118 and for inadvertent component or surface leaks that do not exceed the limits specified in 8-34-301.2 or 8-34-303. (Basis: Regulation 8-34-301)
6. The owner/operator shall ensure that the landfill gas collection system, described in subpart 6a below, is operated continuously as defined in Regulation 8-34-219. Wells, collectors, and adjustment valves shall not be shut off, disconnected, or removed from operation without written authorization from the APCO, unless the owner/operator complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 117, and 118. The owner/operator shall apply for and receive a Change of Conditions before altering the landfill gas collection system, other than described in subpart 6b below. Increasing or decreasing the number of wells or collectors, changing the length of collectors, or changing the locations of wells or collectors are all considered to be alterations that require a Change of Conditions. Adding or modifying risers, laterals, or header pipes are not subject to this requirement. The leachate collection system components are only subject to subpart 6c below; the leachate collection system components are not subject to Regulation 8, Rule 34 continuous operation requirements (8-34-301.1) or wellhead standards (8-34-305).
  - a. The owner/operator has been issued a Permit to Operate for the landfill gas collection system components listed below (well count as of 7-2015) plus any components added and minus any components





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decommissioned pursuant to subpart 6b, as evidenced by start-up/ shut-down notification letters submitted to the District.

Vertical Wells: 73

Horizontal Collectors: 14

b. The owner/operator is authorized to make the landfill gas system component alterations described below:

Installation of up to 20 new horizontal trench Collectors.

Installation of up to 60 new vertical wells.

Decommissioning of up to 12 horizontal trench Collectors.

Decommissioning of up to 45 vertical wells.

Wells installed, relocated, replaced, or shutdown pursuant to subpart 6b shall be added to or removed from subpart 6a in accordance with the procedures identified in Regulations 2-6-414 or 2-6-415. The owner/operator shall maintain records of the decommissioning date for each component that is shutdown and the initial operation date for each new or relocated component.

c. On a monthly basis, the owner/operator shall monitor and record the methane content at the leachate collection system cleanout risers and injection wells and vent any landfill gas that has collected in the leachate collection system components to the landfill gas collection system, as long as necessary to ensure there is no landfill gas leak to the atmosphere in excess of 500 ppmv, measured as methane.

(Basis: Regulations 2-1-301, 8-34-301.1, 8-34-303, 8-34-304, 8-34-305, CA H&S Code, Title 17, Division 3, Chapter 10, Article 4, Subarticle 6)

7. The landfill gas collection system in Part 6 shall be operated continuously. Wells shall not be shut off, disconnected or removed from operation without written authorization from the APCO, unless the owner/operator complies with all applicable requirements of Regulation 8, Rule 34, Sections 113, 116, 117, and 118.

(Basis: Regulation 8-34-301.1)

8. The combined heat input to the A-2 Landfill Gas Flare and the A-4 Landfill Gas Flare shall not exceed 2,049.3 million BTU per day and shall not exceed 748,000 million





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BTU per year. In addition, the heat input to each flare shall not exceed either of the following quantities:

- a. For A-2: 1,080 million BTU per day and 394,200 million BTU per year.
- b. For A-4: 1,728 million BTU per day and 630,720 million BTU per year.

In order to demonstrate compliance with this part, the owner/operator shall calculate and record, on a monthly basis, the maximum daily, total monthly, and rolling 12-month heat input to each flare and both flares combined based on: (a) the landfill gas flow rate recorded pursuant to part 13.h., (b) the average methane concentration in the landfill gas measured in most recent source test, and (c) a high heating value for methane of 1013 BTU per cubic foot at 60 degrees F. (Basis: Cumulative Increase, Regulation 2-1-301)

9. The combustion zone temperature of the Landfill Gas Flares shall be maintained at the following minimum temperatures, during all times that landfill gas is being combusted:
  - a. For A-2: 1,504 degrees F, averaged over any 3-hour period
  - b. For A-4: 1,467 degrees F, averaged over any 3-hour period

If a source test demonstrates compliance with all applicable requirements at a different temperature, the APCO may revise the minimum combustion zone temperature limit in accordance with the procedures identified in Regulation 2-6-414 or 2-6-415, based on the following criteria: (1) the minimum combustion zone temperature measured during the most recent complying source test minus 50 degrees F, (2) the minimum combustion zone temperature shall not be less than 1,400 degrees F. (Basis: Regulation 8-34-301.3)

10. Total reduced sulfur compounds in the collected landfill gas shall be monitored as a surrogate for monitoring sulfur dioxide in control system's exhaust. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 560 ppmv (dry). In order to demonstrate compliance with this part, the owner/operator shall measure the hydrogen sulfide content in collected landfill gas on a quarterly basis





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using a draeger tube. Compliance with the total sulfur limit is assumed if the hydrogen sulfide content is found to be equal to or less than 504 ppmv. The landfill gas sample shall be taken from the main landfill gas header. The owner/operator shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. The owner/operator shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and quarterly thereafter.

(Basis: Regulation 9-1-302, voluntary limit on SO<sub>2</sub> PTE to avoid public notice, Regulation 2-2-405)

11. In order to demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412 and these permit conditions, the owner/operator shall ensure that a District-approved source test is conducted annually on both of the Landfill Gas Flares (A-2 and A-4). The annual source tests shall determine the following:
- a. landfill gas flow rate to each flare (dry basis);
  - b. concentrations (dry basis) of carbon dioxide (CO<sub>2</sub>), nitrogen (N<sub>2</sub>), oxygen (O<sub>2</sub>), methane (CH<sub>4</sub>), and total non-methane organic compounds (NMOC) in the landfill gas;
  - c. stack gas flow rate from each flare (dry basis);
  - d. concentrations (dry basis) of CH<sub>4</sub>, NMOC, CO, SO<sub>2</sub>, and O<sub>2</sub> in the stack gas for each flare and NO<sub>x</sub> in the stack gas for A-4;
  - e. the NMOC and methane destruction efficiencies achieved by each flare; and
  - f. the average combustion temperature for each flare during the test period.

Annual source tests shall be conducted no earlier than 9 months and no later than 12 months after the previous source test on each flare. The annual flare source test is not required for a flare that has not been operated since the last District-approved source test. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and to the Source Test Section





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within 60 days of the test date. (Basis: Regulations 2-1-301, 8-34-301.3, 8-34-412, and 9-1-302)

12. The owner/operator shall conduct a characterization of the landfill gas concurrent with the annual source test required by part 11 above. The landfill gas sample shall be drawn from the main landfill gas header. In addition to the compounds listed in part 11b, the landfill gas shall be analyzed for the following compounds:

Acetone  
Acrylonitrile  
Benzene  
Butane  
Carbon disulfide  
Carbon tetrachloride  
Carbonyl sulfide  
Chlorobenzene  
Chlorodifluoromethane  
Chloroethane  
Chloroform  
1,1 Dichloroethane  
1,1 Dichloroethene  
1,2 Dichloroethane  
1,4 Dichlorobenzene  
Dichlorodifluoromethane  
Dichlorofluoromethane  
Dimethyl sulfide  
Ethane  
Ethyl alcohol  
Ethylbenzene  
Ethylene dibromide  
Ethyl mercaptan  
Fluorotrichloromethane  
Hexane  
Hydrogen sulfide  
Isopropyl alcohol  
Methyl alcohol  
Methyl ethyl ketone  
Methylene chloride  
Methyl mercaptan  
Pentane  
Perchloroethylene  
Propane





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1,1,2,2 Tetrachloroethane  
Toluene  
1,1,1 Trichloroethane  
Trichloroethylene  
Vinyl chloride  
Xylenes

All concentrations shall be reported on a dry basis. To demonstrate compliance with the precursor organic compound (POC) limit in Part 1e, the owner/operator shall calculate and report the concentration of POC in the landfill gas, based on this landfill gas analysis. The POC concentration shall be calculated by deducting the total concentration of measured non-precursor organic compounds (NPOC) listed above from the measured NMOC concentration in the landfill gas (from Part 11b). The test report and calculations shall be submitted to the Compliance and Enforcement Division within 60 days of the test date. After conducting three annual landfill gas characterization tests, the owner/operator may request to remove specific compounds from the list of compounds to be tested for if the compounds have not been detected, have no significant impact on the cancer risk determination for the site, and have no significant impact on the hazard index determination for the site. (basis: Regulations 2-5-302, and 8-34-412)

13. In order to demonstrate compliance with the above conditions, the owner/operator shall maintain the following records in a District-approved logbook.
- a. Record the type and total amount of all materials received at the landfill on a daily basis.
    - i. For each type of material received at the landfill, clearly identify how the material will be used at this site (i.e. disposed of in the landfill directly, used as daily cover material, used as intermediate cover material, used in composting operations, sent to yard and green waste recycling operations, sent to other recycling operations, used for on-site road construction or surfacing, used for other construction purposes, sent to on-site stockpiles for later use, etc.). For material types that may be used for multiple purposes at





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this site, identify the amount of material used for each purpose.

- ii. For each type of material received at the landfill, clearly identify whether the material is decomposable or inert. Inert materials are defined by Regulation 8-34-203. For the purposes of this condition, soils containing more than 50 ppm by weight of volatile organic compounds (VOC) or "contaminated soil" as defined in Regulation 8-40-205 are decomposable materials. Soils containing 50 ppm by weight VOC or less are inert materials.
- iii. If cover materials are taken from on-site stockpiles, record on a daily basis the amount of material removed from the stockpiles and used as cover material (for each type of material).
- iv. Summarize on a monthly basis: the total amount of all wastes accepted, the total amount of sewage sludge accepted, the total amount of accepted materials that were directly used as cover material, the amount of cover materials that were removed from on-site stockpiles, the total amount of materials used for cover, the total amount of decomposable cover materials, the total amount of decomposable wastes placed in the landfill, the total amount on non-decomposable wastes disposed of in the landfill, the total amount of decomposable materials placed in the landfill, and the total amount of all materials placed in the landfill.
- b. For each area or cell that is not controlled by a landfill gas collection system, maintain a record of the date that waste was initially placed in the area or cell. The cumulative amount of waste placed in each uncontrolled area or cell, recorded on a monthly basis.
- c. If the owner/operator plans to exclude an uncontrolled area or cell from the collection system requirement, the owner/operator shall also record the types and amounts of all non-decomposable waste placed in the area and the percentage (if any) of decomposable waste placed in the area.
- d. Daily records of low VOC soil acceptance rate and emissions, pursuant to part 3.





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- e. The dates, locations, and frequency per day of all watering activities on unpaved roads or active soil or fill areas. The dates, locations, and type of any dust suppressant applications. The dates and description of all paved roadway cleaning activities. All records shall be summarized on a monthly basis.
- f. The initial operation date for each new landfill gas well and collector and monitoring of the leachate collection system components pursuant to part 6 and any required venting of these components to the landfill gas collection system.
- g. An accurate map of the landfill that indicates the locations of all refuse boundaries and the locations of all wells and collectors (using unique identifiers) that are required to be operating continuously pursuant to Part 6. Any areas containing only non-decomposable waste shall be clearly identified. This map shall be updated at least once a year to indicate changes in refuse boundaries and to include any newly installed wells and collectors.
- h. Record the operating times and the landfill gas flow rate to the A-2 Landfill Gas Flare and to the A-4 Landfill Gas flare on a daily basis. Summarize these records on a monthly basis. Calculate and record the individual heat inputs to A-2 and to A-4 and the combined heat input for both flares, pursuant to Part 8.
- i. Maintain continuous records of the combustion zone temperature for the A-2 and A-4 Landfill Gas Flares during all hours of operation.
- j. Maintain records of all test dates and test results performed to demonstrate compliance with Parts 10, 11, and 12 above and any applicable rule or regulation.

All records shall be maintained on site or shall be made readily available to District staff upon request for a period of at least 5 years from the date of entry. These record keeping requirements do not replace the record keeping requirements contained in any applicable rules or regulations. (Basis: Cumulative Increase, Regulations 2-1-301, 2-6-501, 6-1-301, 6-1-305, 8-2-301, 8-34-301, 8-34-304, 8-34-501, and 9-1-302, CA H&S Code, Title 17, Division 3, Chapter 10, Article 4, Subarticle 6)





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- 14. The Potrero Hills Landfill is subject to the following waste acceptance and waste handling requirements:
    - a. No Class I wastes may be disposed on onsite without prior BAAQMD approval except for ash from a waste-to-energy plant burning municipal waste, owned and operated by Solano Garbage Company under a BAAQMD permit. All other necessary state, federal, and local permits must be obtained before such disposal is allowed.
    - b. At the end of each operating day, the working face and all other exposed refuse shall be covered with a 6-inch minimum layer of soil such that no refuse is left exposed.
    - c. Alternative daily cover, including digested, dewatered, municipal sewage sludge (biosolids) and/or wood chips, may be used provided that dust and/or odor from the alternative cover are not present on adjacent property in such quantities as to cause nuisance. If the District received and verifies 4 or more odor complaints originating from the use of alternative daily cover in any consecutive 3-month period, Potrero Hills Landfill shall cease using alternative cover materials until the problem has been identified and corrected to the satisfaction of the APCO.  
(Basis: Regulation 2-1-403)
  
  - 15. The annual report required by BAAQMD Regulation 8-34-411 shall be submitted in two semi-annual increments. The reporting periods and report submittal due dates for the Regulation 8-34-411 report shall be synchronized with the reporting periods and report submittal due dates for the semi-annual MFR Permit monitoring reports that are required by Section I.F of the MFR Permit for this site.  
(Basis: Regulation 8-34-411 and 40 CFR Part 63.1980(a))
  
  - \*16. Within 3 months of issuance of the Title V permit renewal, the owner/operator shall submit a proposal for monitoring ground level hydrogen sulfide concentrations at or near the fence line or property boundary for this facility and a proposal that identifies all feasible hydrogen sulfide emission reduction measures that could be implemented at this site if necessary. The owner/operator shall initiate hydrogen sulfide monitoring





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within 3 months of receiving District approval for the monitoring protocol.

- a. If a measured hydrogen sulfide concentration at the fence line or property boundary exceeds a concentration limit in Regulation 9-2-301 (0.03 ppmv averaged over 60 minutes or 0.06 ppmv averaged over 3 minutes), the owner/operator shall notify the District of the excess and shall implement any hydrogen sulfide emission reduction measures required by the District at that time.
- b. If the District receives an odor complaint and if a District inspector verifies an odor originating from the landfill at an 8 to 1 dilution ratio off property, the owner/operator shall implement any hydrogen sulfide emission reduction measures required by the District at that time.

Ground level hydrogen sulfide monitoring may be discontinued five years after this facility ceases waste disposal activities or when the hydrogen sulfide measurements show compliance with the Regulation 9-2-301 limit for at least 8 consecutive quarters and no verified odor complaints have been documented, whichever occurs sooner. (Basis: Regulation 9-2-301)

- 17. The owner/operator shall ensure that the emissions of Nitrogen Oxides (NOx) from the Flare A-4 do not exceed 0.06 pounds per million BTU (calculated as NO2). (basis: RACT)
- 18. The owner/operator shall ensure that the emissions of Carbon Monoxide (CO) from the Flare A-4 do not exceed 0.2 pounds per million BTU. (basis: RACT)
- 19. The owner/operator shall ensure that the combined emissions of Carbon Monoxide (CO) from the Flares, A-2 and A-4, do not exceed 164,500 pounds (82.25 tons) in any 12-month period. The owner/operator shall demonstrate compliance with this limit by calculating CO emissions each month for the previous 12-month period, based on the fuel usage to the flares and the CO emission rate from the most recent source test data from Parts 11 and 20 of this condition. (basis: voluntary limit to avoid public notice, Regulation 2-2-405)





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20. To demonstrate compliance with Regulation 8, Rule 34, Sections 301.3 and 412, and the above requirements, the owner/operator shall ensure that a District-approved source test is conducted on the Landfill Gas Flare, A-4, within 90 days of startup, followed by annual source tests thereafter as detailed in Part 11. The facility shall obtain prior approval from the Source Test Manager for the location of sampling ports and source testing procedures. The startup and annual source tests shall measure the data specified in Parts 11, 17, 18, and 19 above. The Source Test Section of the District shall be contacted to obtain approval of the source test procedures at least 14 days in advance of each source test. The Source Test Section shall be notified of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the Compliance and Enforcement Division and to the Source Test Section within 60 days of the test date. (basis: Regulation 8-34-301, RACT, TBACT)

21. The gas collection system operating requirements listed below shall replace the well head requirements identified in Regulation 8-34-305.2 through 8-34-305.4 for the specified wells. All landfill gas collection wells remain subject to the Regulation 8-34-305.1 requirement to maintain vacuum at each well head.

a. The temperature limit in Regulation 8-34-305.2 shall not apply to the following wells, provided that the landfill gas temperature at each well does not exceed 145 degrees F (63 degrees C) and either the nitrogen level is less than 10% by volume or the oxygen level is less than 5% by volume:

EW-06-04R	EW-09-04	EW-14-07	EW-1515	
EW-06-05R	EW-11-01	EW-14-25	EW-1516	
EW-06-09	EW-11-02	EW-14-28	EW-1517	
EW-07-04R	EW-11-03	EW-14-29	EW-1520	
EW-07-21R	EW-11-05	EW-1001	EW-1527	0706R
EW-09-01	EW-11-06	EW-1513	EW-1532	LW-11-01
EW-09-03	EW-13-02	EW-1514	EW-1533	LW-11-02

b. The owner/operator shall demonstrate compliance with the alternative wellhead landfill gas temperature and gas composition specified in Part 21(a) above by monitoring the temperature and nitrogen concentration or oxygen concentration at each





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wellhead on a monthly basis, in accordance with Regulation 8-37-505.

- c. All records to demonstrate compliance with Part 21(a) and all applicable sections of Regulation 8, Rule 34 shall be recorded in a District-approved log and made available to District staff upon request.
- d. If the temperatures measured at any of the wells listed in Part 21(a) exceed 131 degrees F, the owner/operator shall perform monthly CO monitoring using Draeger tubes, or a District/EPA-approved monitoring device.
  - i. If the measured field CO readings are less than 200 ppmv, the well may continue to operate up to temperature less than 145 degrees F;
  - ii. If the measured field CO readings are equal to or greater than 200 ppmv and less than or equal to 500 ppmv, the well shall be monitored on a weekly basis to verify that there is no subsurface oxidation occurring. Once the CO levels decrease to below 200 ppmv, the monthly monitoring schedule shall resume;
  - iii. If the measured field CO readings are greater than 500 ppmv, the well shall be temporarily closed and documented and a sample shall be obtained within one week of the exceedance and analyzed for CO using EPA Method D-1946. If the results confirm the readings are in excess of 500 ppmv, the well shall remain closed and offline and the owner/operator shall notify the District within 24 hours of the exceedance and shall take all measures necessary to investigate the possibility of subsurface fires. If a fire is suspected, the owner/operator shall employ all means as appropriate to extinguish the fire, repair the well, and bring the well back into service.

(Basis: Regulation 8-34-305, 8-34-505)

COND# 20853 applies to S# 14

The owner/operator of the facility shall ensure the following:





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1. Pursuant to Regulation 8-7-112.9, at least 90% of the vehicles refueled at this facility shall be owned by a common operator and equipped with On-board Refueling Vapor Recovery (ORVR) controls.
  2. Facility shall retain records of vehicles refueled during the preceding consecutive twelve month period to demonstrate compliance with the above. Records shall be retained for 24 months, and be available for inspection by District staff upon request.
  3. Conventional (i.e., non-vapor recovery) nozzles, breakaways and hoses shall be operated at this facility. Only low permeation hoses certified under E.O. NVR-1 shall be used. Prior to March 1, 2023, if a nozzle is newly installed or replaced, an enhanced conventional nozzle certified under E.O. NVR-1 shall be used. As of March 1, 2023, only enhanced conventional nozzles certified under E.O. NVR-1 shall be used.
  4. All remaining vapor recovery piping (including internal dispenser piping) shall be capped with NPT galvanized pipe.

COND# 22850 *applies to S#'s 33, 36*

1. The owner/operator shall not exceed 50 hours per year per engine for reliability-related testing.  
[Basis: Title 17, California Code of Regulations, section 93115, ATCM for Stationary CI Engines]
2. The owner/operator shall operate each emergency standby engine only for the following purposes: to mitigate emergency conditions, for emission testing to demonstrate compliance with a District, State or Federal emission limit, or for reliability-related activities (maintenance and other testing, but excluding emission testing). Operating while mitigating emergency conditions or while emission testing to show compliance with District, State or Federal





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emission limits is not limited.

[Basis: Title 17, California Code of Regulations, section 93115, ATCM for Stationary CI Engines]

3. The owner/operator shall operate each emergency standby engine only when a non-resettable totalizing meter (with a minimum display capability of 9,999 hours) that measures the hours of operation for the engine is installed, operated and properly maintained.  
[Basis: Title 17, California Code of Regulations, section 93115, ATCM for Stationary CI Engines]
4. Records: The owner/operator shall maintain the following monthly records in a District-approved log for at least 36 months from the date of entry (60 months if the facility has been issued a Title V Major Facility Review Permit or a Synthetic Minor Operating Permit). Log entries shall be retained on-site, either at a central location or at the engine's location, and made immediately available to the District staff upon request.
  - a. Hours of operation for reliability-related activities (maintenance and testing).
  - b. Hours of operation for emission testing to show compliance with emission limits.
  - c. Hours of operation (emergency).
  - d. For each emergency, the nature of the emergency condition.
  - e. Fuel usage for each engine(s).  
[Basis: Title 17, California Code of Regulations, section 93115, ATCM for Stationary CI Engines]
5. At School and Near-School Operation:  
If the emergency standby engine is located on school grounds or within 500 feet of any school grounds, the following requirements shall apply:

The owner/operator shall not operate each





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stationary emergency standby diesel-fueled engine for non-emergency use, including maintenance and testing, during the following periods:

- a. Whenever there is a school sponsored activity (if the engine is located on school grounds)
- b. Between 7:30 a.m. and 3:30 p.m. on days when school is in session.

"School" or "School Grounds" means any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in a private home(s). "School" or "School Grounds" includes any building or structure, athletic field, or other areas of school property but does not include unimproved school property.

[Basis: Title 17, California Code of Regulations, section 93115, ATCM for Stationary CI Engines]

COND# 26039 applies to S# 15

S-15, Green Waste Composting Operation, uncontrolled windrows; abated by A-15, Water Spray

1. The total amount of feedstock material delivered to the composting operation shall not exceed 2,025 tons during any consecutive rolling 12 month period. Feedstock material shall include green and wood waste only (such as yard trimmings, untreated wood wastes, natural fiber products, and construction and demolition wood waste). The feedstock shall not include any food, biosolids, animal wastes, or poultry litter, other than incidental contamination with food waste. For the purposes of the feedstock throughput limit in this part, feedstock does not include any finished compost that is added to the windrows or curing piles and that is acting as a biofilter for odor or organic emissions control.





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- (Basis: Cumulative Increase, Offsets)
2. Visible dust emissions from S-15 and related operations shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. To ensure compliance with this part, the Permit Holder shall visually observe all material handling operations and roadways associated with S-15 and shall immediately initiate corrective actions, if any visible dust emissions are detected that persist for longer than 3 minutes in an hour. (Basis: Regulations 1-301, 6-1-301 and 6-1-305)
  3. The material handling operations associated with S-15, such as loading, unloading, stockpiling, mixing, turning, and screening, shall be abated by water sprays A-15, as necessary to comply with Part 2. (Basis: Regulations 1-301 and 6-1-305)
  4. \* During normal operations, compost feedstock shall be processed and incorporated into an active compost pile within 48 hours of grinding so that these feedstocks do not decompose in the storage piles and generate odors on site. Any stockpile that is deemed to be odorous by a District inspector shall be removed within 24 hours. (Basis: Regulation 1-301 and Regulation 7-1)
  5. \* The owner/operator shall manage liquids that have come in contact with S-15 in a manner that ensures that these liquids do not become a source of odors. The owner/operator shall sweep or clear debris and waste materials from the feedstock stockpile areas, active composting areas, and curing pile areas as needed to ensure that these materials do not become a source of odors or excessive dust. (Basis: Regulation 1-301)
  6. \* If the plant receives two or more Violation Notices from the District for "Public Nuisance" in any consecutive 12 month period, the owner/operator shall implement the following control measures, as applicable, or any other measures that the District deems necessary and appropriate within the time period specified by the District. If requested by the District, the owner/operator shall submit to the District an application to modify the Permit to Operate and/or these permit conditions within 30 days of notification.
    - a. Reduce the total feedstock throughput rate allowed by Part 1.





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- b. Reduce the compost feedstock stockpile times.
- c. Application and use of biofilters or cover materials to control odors
- d. Apply odor inhibitor solutions to odorous operations.
- e. Install an odor abatement system to prevent odors from traveling off site.
- f. Enclose odor nuisance operations in a building that is kept under negative pressure with emissions vented to a biofilter.
- g. Use chemical suppressants to control fugitive dust emissions from roadways associated with the dust nuisance operation.
- h. Pave roadways associated with the dust nuisance operation.
- i. Enclose dust nuisance operations in a warehouse like building.

(Basis: Regulation 1-301)

- 7. The owner/operator shall maintain the following records:
  - a. A dated record of the type and amount of each feedstock material (green waste and wood waste materials) that is received for composting at S-15.
  - b. Compost pile initiation dates. Identify and record any instances when the stockpile storage times in Part 4 were exceeded.
  - c. Calculate and record the total amount of compost feedstock throughput on a monthly basis and the total amount of compost feedstock throughput for each consecutive rolling 12 month period.

All records shall be kept on site and shall be made available for inspection by District staff upon request. Records shall be retained for at least five years from the date of entry. These record keeping requirements shall not replace the record keeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase, Offsets)

COND# 26040 applies to S#'s 20, 21, 23

S-20, Concrete/Asphalt Stockpiles, abated by A-15, Water Spray  
 S-21, Green and Wood Waste Stockpiles, abated by A-15, Water Spray





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S-23, Cover and Construction Material Stockpiles, abated by  
A-15, Water Spray

1. The owner/operator shall ensure that no more than the following quantities of materials are accepted at the site and added to the following stockpiles in any consecutive 12 month period:
  - a. S-20: 109,500 tons of concrete and asphalt
  - b. S-21: 44,000 tons of green waste and 18,000 tons of wood waste  
(Basis: Cumulative Increase)
2. The owner/operator shall ensure that the total amount of cover and construction materials excavated at the site do not exceed 1,000,000 tons per year and that the total amount of cover and construction materials accepted at the site and stored at S-23 do not exceed 650,000 tons in any consecutive 12 month period. Cover and construction materials include all soil, sand, and aggregate stockpiled at the site, other than the material excavated from and stored directly at the working face of the landfill. (Basis: Cumulative Increase)
3. Visible dust emissions from any operation of this facility shall not exceed Ringelmann 1.0 or result in fallout on adjacent property in such quantities as to cause a public nuisance per Regulation 1-301. To ensure compliance with this part, the owner/operator shall visually observe all material handling operations and roadways associated with these sources and shall immediately initiate corrective actions, if any visible dust emissions are detected that persist for longer than 3 minutes in an hour. (Basis: Regulations 1-301, 6-1-301 and 6-1-305)
4. The owner/operator shall ensure that dry, dusty material is wetted down before loading or unloading, as necessary to comply with Part 2. The owner/operator shall minimize disturbance of the stockpiles, and use water spray additionally, as necessary, on the stockpiles and stockpile area to comply with Part 2.  
(Basis: Regulations 1-301, 2-1-403, 6-1-301, and 6-1-305, Cumulative Increase)
5. If the facility receives 2 or more violation notices for odor or nuisance dust in any consecutive 12 month period, the owner/operator of the facility shall submit





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an application to the District within 30 days proposing control measures to address the violation and shall implement the control measures that the District deems necessary to address the violation within the time period specified by the District. (Basis: Regulations 1-301, 6-1-301 and 6-1-305)

- 6. The owner/operator shall maintain the following records:
  - a. On a daily basis, the amounts of concrete and asphalt accepted at the site and added to S-20, green waste accepted at the site and added to S-21, wood waste accepted at the site and added to S-21.
  - b. On a daily basis, the amounts of cover and construction materials accepted at the site for storage and addition to S-23.
  - c. Amounts of daily quantities in parts 6a and 6b shall be totaled at the end of each month and added to the previous 11 months to calculate the most recent sum for the previous 12 month period.
  - d. On an annual basis, the owner/operator shall determine the amount of cover and construction materials excavated from the site, using District approved procedures.

The owner/operator shall record all records in a District approved log. The owner/operator shall retain the records for five years from the date of entry and make them available for inspection by District staff upon request. These record keeping requirements shall not replace the record keeping requirements contained in any applicable District Regulations. (Basis: Cumulative Increase)

COND# 26550 applies to S# 14

- 1. The owner/operator shall operate and maintain the Morrison Brothers EVR Phase I Vapor Recovery system, including all associated plumbing and components, in accordance with the most recent version of California Air Resources Board (CARB) Executive Order VR-402. Section 41954(f) of the California Health and Safety Code prohibits the sale offering for sale, or installation of any vapor control system unless the system has been certified by the state board.
- 2. The owner/operator shall install the Morrison Brothers





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- EVR Phase I Vapor Recovery System only on tanks meeting the Standing Loss Control requirements of CARB Executive Orders VR-301 or VR-302.
3. The owner/operator shall conduct and pass a Static Pressure Performance Test (CARB Test Procedure TP 206.3) at least once in each 12 month period. The owner/operator shall ensure that measured leak rates of each component do not exceed the levels specified in VR-402.
  4. The owner/operator shall:
    - a. Notify Source Test by email (gdfnotice@baaqmd.gov) or Fax (510-758-3087), at least 48 hours prior to any required testing.
    - b. Submit test results in a District approved format within thirty (30) days of testing.
      - 1) For start up tests results, cover sheet shall include the Plant number (Facility ID) and application number of the Authority to Construct permit.
      - 2) For annual test results, cover sheet shall include the Plant number (Facility ID) and identified as 'Annual' in lieu of the application number.
      - 3) Test results shall be emailed to (gdfresults@baaqmd.gov) or mailed to the District's main office.

COND# 26551 applies to S# 14

The owner/operator of the facility shall maintain the following records. The owner/operator shall maintain records on site and make them available for inspection for a period of 24 months from the date the record is made.

1. Monthly totals of throughput (sales) of gasoline (all grades) and other fuels pumped and summarized on an annual basis for each type of fuel (excluding diesel).
2. All scheduled testing and maintenance activities, including:
  - a. \*the date of maintenance, inspection, failure and, if applicable, ISD alarm history;
  - b. \*the date and time of maintenance call;
  - c. \*the maintenance performed;
  - d. \*Certified Technician ID number or name of





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individual conducting maintenance and their phone number.

- 3. Weekly, quarterly and annual inspection sheets as required by the appropriate CARB Executive Orders.

COND# 26838 applies to S# 14

The owner/operator of the facility shall not exceed the facility's annual gasoline throughput of 940,000 gallons in any consecutive 12-month period.

COND# 27218 applies to S#'s 38, 39

Potrero Hills Landfill, P#2039  
 Permit Conditions for  
 S-38, Portable Diesel Tipper Engine, Caterpillar.  
 Model C4.4 ACERT, Tier 4 final, 174 bhp  
 S-39, Portable Diesel Tipper Engine, Caterpillar  
 Model C4.4 ACERT, Tier 4 final, 174 bhp

- 1. The owner/operator shall ensure that the portable engines S-38 and S-39 are operated not more than 5,304 hours, combined, in any consecutive 12-month period.  
(basis: Cumulative Increase, Regulation 2, Rule 5)
- 2. Deleted.
- 3. The owner/operator shall ensure that only CARB-diesel fuel or other fuel complying with the CA Code of Regulations, Title 17, Section 93116.3 is used at S-38 and S-39.  
(basis: Cumulative Increase, CCR Title 17 Section 93116.3)
- 4. The owner/operator shall properly install, operate, and maintain a non-resettable totalizing meter on each engine that measures the hours of operation.  
(basis: Cumulative Increase, CCR Title 17 Section 93116.4)
- 5. The owner/operator shall maintain the following records:
  - a. Daily number of hours of operation for both engines S-38 and S-39 combined.
  - b. Maintenance records for the engines.





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- c. Fuel records to document compliance with Part 3.
- d. The number of operating hours for both engines shall be totaled at the end of each month. The current month total shall be added to the previous 11 months to calculate total combined hours of operation for S-38 and S-39 during the previous 12-month period.
- e. The dates that S-38 and S-39 were started up and the dates that S-35 and S-37 were removed from service. The owner/operator shall maintain all records in a District-approved log. The owner/operator shall retain the records for five years from the date of entry and make them available for inspection by District staff upon request. These record-keeping requirements shall not replace the record-keeping requirements contained in any applicable District Regulations.

(basis: Cumulative Increase, Regulation 2, Rule 5, CCR Title 17 Section 93116)

~~~~~ END OF CONDITIONS ~~~~~

| S#          | Source Description                         | Annual Average lbs/day |      |      |      |      |
|-------------|--------------------------------------------|------------------------|------|------|------|------|
|             |                                            | PART                   | ORG  | NOx  | SO2  | CO   |
| 1           | Potrero Hills MSW Landfill - Waste Decompo | -                      | 8.2  | 1.4  | -    | -    |
| 14          | Non Retail Gasoline Dispensing Facility    | -                      | 5.4  | -    | -    | -    |
| 15          | Green Waste Composting Operation           | -                      | -    | -    | -    | -    |
| 20          | Concrete/Asphalt Stockpiles                | 0                      | -    | -    | -    | -    |
| 21          | Greenwaste & Wood Waste Stockpiles         | 0                      | -    | -    | -    | -    |
| 23          | Cover & Construction Material Stockpiles   | 0                      | -    | -    | -    | -    |
| 33          | Emergency Diesel Generator Engine          | -                      | -    | -    | -    | -    |
| 36          | Emergency Diesel Generator Engine          | 0                      | 0    | .6   | -    | .1   |
| 38          | Portable Diesel Tipper Engine              | -                      | -    | .1   | -    | -    |
| 39          | Portable Diesel Tipper Engine              | -                      | -    | -    | -    | -    |
| 202         | Potrero Hills MSW Landfill - Waste and Cov | 463                    | -    | -    | -    | -    |
| 203         | Potrero Hills MSW Landfill - Excavating, B | 151                    | -    | -    | -    | -    |
| A4          | Landfill Gas Flare                         | 1                      | .5   | 5.7  | 12.7 | 18.8 |
| A2          | Landfill Gas Flare                         | 1                      | .9   | 13.8 | 23.2 | 34.3 |
| T O T A L S |                                            | 616                    | 15.1 | 21.5 | 35.9 | 53.3 |

\*\* PLANT TOTALS FOR EACH EMITTED TOXIC POLLUTANT \*\*

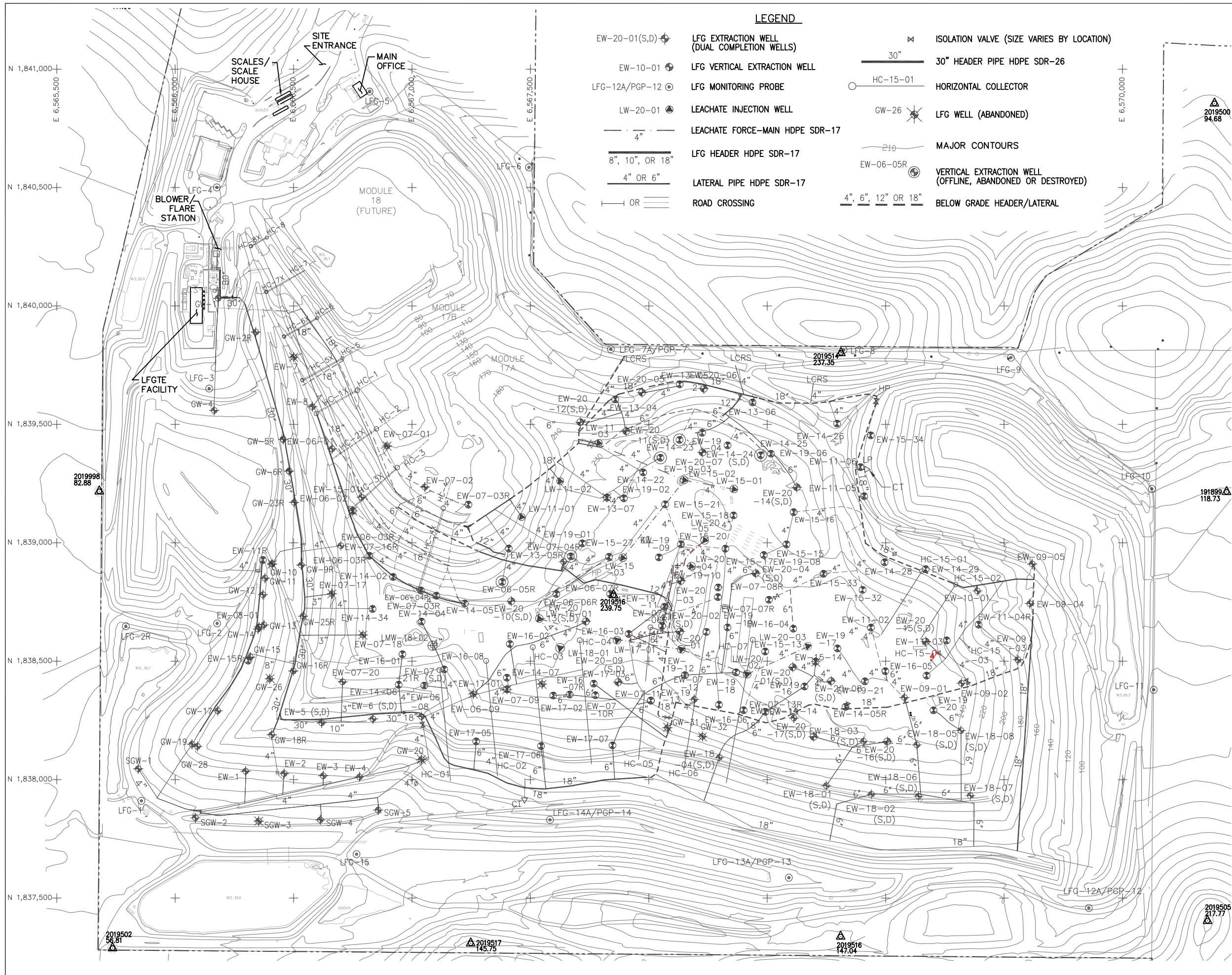
| Pollutant Name                           | Emissions lbs/day |
|------------------------------------------|-------------------|
| Benzene                                  | .08               |
| Hexane                                   | .04               |
| Isopropyl alcohol                        | .60               |
| Methyl ethyl ketone (MEK)                | .78               |
| Perchloroethylene                        | .04               |
| Toluene                                  | .70               |
| Trichloroethylene                        | .02               |
| Xylene                                   | .68               |
| Ethylbenzene                             | .27               |
| Methylene chloride                       | .04               |
| Vinyl chloride                           | .02               |
| Dichlorobenzene                          | .03               |
| Diesel Engine Exhaust Particulate Matter | .03               |
| Silica (crystalline, respirable)         | .04               |
| Hydrogen Sulfide (H2S)                   | .49               |

Pollutant Name  
-----

Emissions lbs/day  
-----

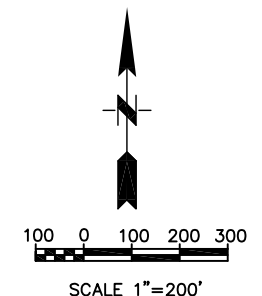
## FACILITY MAP





**LEGEND**

- EW-20-01(S,D) LFG EXTRACTION WELL (DUAL COMPLETION WELLS)
- EW-10-01 LFG VERTICAL EXTRACTION WELL
- LFG-12A/PGP-12 LFG MONITORING PROBE
- LW-20-01 LEACHATE INJECTION WELL
- LEACHATE FORCE-MAIN HDPE SDR-17
- 8", 10", OR 18" LFG HEADER HDPE SDR-17
- 4" OR 6" LATERAL PIPE HDPE SDR-17
- OR ROAD CROSSING
- ISOLATION VALVE (SIZE VARIES BY LOCATION)
- 30" 30" HEADER PIPE HDPE SDR-26
- HC-15-01 HORIZONTAL COLLECTOR
- GW-26 LFG WELL (ABANDONED)
- MAJOR CONTOURS
- EW-06-05R VERTICAL EXTRACTION WELL (OFFLINE, ABANDONED OR DESTROYED)
- 4", 6", 12" OR 18" BELOW GRADE HEADER/LATERAL



**DRAWING IS  
HALF-SIZE AT 11x17**

**EXISTING LFG SYSTEM PLAN NOTES**

- SOME EXISTING LANDFILL GAS (LFG) FACILITIES SHOWN MAY HAVE BEEN BURIED, RE-ALIGNED, OR OTHERWISE REMOVED DURING THE COURSE OF GCCS INSTALLATIONS AT THE SITE. AS SUCH, THIS DRAWING SHOULD BE USED SOLELY FOR INFORMATIONAL PURPOSES FOR GENERAL LOCATIONS OF EXISTING LFG SYSTEM FACILITIES. FIELD VERIFICATION OF FACILITIES SHOWN WITHIN THE CONTRACT WORK AREA WILL REQUIRE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO PERFORMING ANY INSTALLATIONS UNDER THE CONTRACT WORK.

**SURVEY CONTROL**

|                   |                   |
|-------------------|-------------------|
| 2019505<br>217.77 | 2019514<br>237.35 |
| 191899<br>118.73  | 2019998<br>82.88  |
| 2019516<br>239.75 |                   |

**TOPOGRAPHICAL INFORMATION**

**Potrero Hills Landfill**

Date of Photography: 02-11-2020  
Horizontal Coordinate System: Local Coordinate System, Survey Feet

Photogrammetry By:  
Continental Mapping Consultants, LLC  
100 QBE Way, Suite 1225  
Sun Prairie, WI 53590

Compilation Date: 03/2020  
CMC Job No: J19002

|                      |                                                                                                                                                                                                                                                  |               |                                                                                  |     |  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------------------------------------------------------------------------|-----|--|
| DATE                 |                                                                                                                                                                                                                                                  | REVISION      |                                                                                  | NO. |  |
| SHEET TITLE          | EXISTING GCCS PLAN                                                                                                                                                                                                                               | PROJECT TITLE | POTRERO HILLS LANDFILL<br>SEMI-ANNUAL REPORTING<br>SUISUN CITY, CALIFORNIA 94585 |     |  |
| <b>SCS ENGINEERS</b> | <b>STEARNS, CONRAD, AND SCHMIDT</b><br>CONSULTING ENGINEERS & CONTRACTORS<br>3117 FILE CIRCLE, SUITE 108<br>SACRAMENTO, CA 95827 PH: (916) 361-1297 FAX: (916) 361-1299<br>PROJ. NO. 0120-0082 PWN. BY: MJE APP. BY: MOC<br>DSN. BY: MJE/AAS HMD |               |                                                                                  |     |  |
| DATE:                | 2-16-21                                                                                                                                                                                                                                          |               |                                                                                  |     |  |
| SCALE:               | AS SHOWN                                                                                                                                                                                                                                         |               |                                                                                  |     |  |
| FIGURE:              | 1                                                                                                                                                                                                                                                |               |                                                                                  |     |  |

