



Ms. Erin Fanning
Browning Ferris Industries of California
9999 South Austin Road
Manteca, CA 95336

**Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # C-150
Project # C-1141210**

Dear Ms. Fanning:

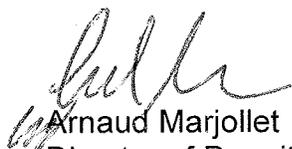
Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project was to install a 15 MMBtu/hr flare to replace an existing 54 MMBtu/hr flare.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authority to Construct with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Replace 54 MMBtu/hr flare with 15 MMBtu/hr flare

Facility Name: Browning Ferris Industries of California Date: July 10, 2014
Mailing Address: 9999 South Austin Road Engineer: Dan Klevann
Manteca, CA 95336 Lead Engineer: Allan Phillips
Contact Person: Erin Fanning
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Application #(s): C-150-1-10
Project #: C-1141210
Deemed Complete: May 21, 2014

I. Proposal

Browning Ferris Industries of California Inc.(BFI) has requested an Authority to Construct (ATC) permit for the installation of a 15 MMBtu/hr enclosed flare to replace an existing 54 MMBtu/hr flare. The larger flare is being replaced because the landfill is closed and gas flows are decreasing resulting in difficulty in keeping the flare operating. The draft ATC is included in Appendix A.

Disposition of Outstanding ATCs:

ATC C-150-1-8 will be implemented concurrently or prior to this ATC and serves as the base document. ATC C-150-1-8 is included in Appendix B.

BFI received their Title V Permit on October 6, 2000. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. BFI must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/21/11)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4311	Flares (6/18/09) – not applicable

Rule 4642: Solid Waste Disposal Sites (4/16/98)
Rule 4801 Sulfur Compounds (12/17/92)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines
California Code of Regulations Title 17, Subchapter 10, Article 4, Subarticle 6, sections 95460 through 95476: Methane Emissions from Municipal Solid Waste Landfills

III. Project Location

The facility is located at 8622 W. Muscat Avenue in Fresno, California.

IV. Process Description

The facility operates a MSW landfill. The landfill is equipped with a landfill gas collection and control system (C-150-1). The control system includes a 54 MMBtu/hr flare. Landfill gas is generated by the decomposition of material in the landfill. This gas is collected by a network of wells and blowers. The gas is sent to a flare for disposal. At a closed landfill, the gas generation increases then drops off. The gas production at BFI has started to drop off. It has become harder to keep the large flare operating without increasing amounts of supplemental fuel. The new flare is smaller and will be better able to handle the reduced gas production.

V. Equipment Listing

Pre-Project Equipment Description:

ATC:

C-150-1-8: MODIFICATION OF 54 MMBTU/HR LANDFILL GAS COLLECTION AND TREATMENT SYSTEM WITH MCGILL MODEL EGF-4 ENCLOSED FLARE WITH COMBUSTION AIR CONTROLS, PROPANE-FIRED PILOT FLAME, FLAME ARRESTOR, BLOWERS, CONCRETE CONDENSATE SUMPS, EXHAUST STACK AND 67 EXTRACTION WELLS: REMOVE REQUIREMENTS FOR OPEN FLARE AND ADD CONDITIONS TO COMPLY WITH CARB LANDFILL METHANE REGULATIONS

Proposed Modification:

C-150-1-10: MODIFICATION OF 54 MMBTU/HR LANDFILL GAS COLLECTION AND TREATMENT SYSTEM WITH MCGILL MODEL EGF-4 ENCLOSED FLARE WITH COMBUSTION AIR CONTROLS, PROPANE-FIRED PILOT FLAME, FLAME ARRESTOR, BLOWERS, CONCRETE CONDENSATE SUMPS, EXHAUST STACK AND 67 EXTRACTION WELLS: REPLACE 54 MMBTU/HR ENCLOSED FLARE WITH 15 MMBTU/HR ENCLOSED GROUND FLARE.

Post Project Equipment Description:

C-150-1-10: 15 MMBTU/HR LANDFILL GAS COLLECTION AND TREATMENT SYSTEM WITH ZINK MODEL ENCLOSED FLARE WITH COMBUSTION AIR CONTROLS, PROPANE-FIRED PILOT FLAME, FLAME ARRESTOR, BLOWERS, CONCRETE CONDENSATE SUMPS, EXHAUST STACK AND 67 EXTRACTION WELLS

VI. Emission Control Technology Evaluation

VOCs are emitted at landfills when decomposing material that is collected by the landfill off gasses. This gas is mainly methane gas which is not considered an ozone precursor, but a significant portion of this gas is also non-methane organic hydrocarbon (NMOC) which does contribute to the formation of ozone. The gas is collected and incinerated in an enclosed flare, which results in the formation of combustion pollutants which includes NOx, SOx, PM10, CO, and any remaining uncombusted VOCs. However, the flare is at least 98% efficient at destroying VOC emissions. Therefore the benefit of VOC reduction outweighs the resulting criteria pollutant formation. Further, the flare meets the latest BACT standards, as discussed in Section VIII below.

VII. General Calculations

A. Assumptions

Flare

- Higher heating value of the flared gas is 500 Btu/scf.
- Daily flare throughput: 720,000 scf/day (360 MMBtu/day = 15 MMBtu/hr)
- Annual flare throughput: 262,800,000 scf/yr(131,400 MMBtu/yr)
- Sulfur content of the flared gas will not exceed 150 ppmv H₂S~ 33 gr/100 scf
- Pilot fuel consumption: 22 scf/hr
- Emissions from combustion of pilot gas are negligible

B. Emission Factors

Existing Flare:

Pollutant	Emission Factor (lb/MMBtu)	Source
NOx	0.0616	Permit
SOx	0.020	Permit
PM10	0.054	Permit
CO	0.144	Permit
VOC	0.036	Permit

New Flare:

Pollutant	Emission Factor (lb/MMBtu)	Source
NO _x	0.06	Manufacturer
SO _x *	150 ppmv (0.0536 lb/MMBtu)	applicant
PM ₁₀	0.017	AP-42
CO	0.20	Manufacturer
VOC	0.0063	FYI-83

*(150 ppmv)(1 scf/500 Btu)(1 lb/7000 gr)(2 lb SO₂/lb S)(10E6/MM) = 0.0536 lb-SO_x/MMBtu

C. Calculations

1. Pre-Project Potential to Emit (PE1)

The potential to emit for the existing flare is from the current permit and summarized in the table below:

PE1 – existing flare		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	63.4	23,141
SO _x	27.1	9,892
PM ₁₀	70	25,550
CO	186	67,890
VOC	47	17,155

PE1 from the new flare is 0 for all pollutants.

2. Post Project Potential to Emit (PE2)

The potential to emit for the flare is calculated as follows, and summarized in the table below:

$$\begin{aligned}
 PE2_{NO_x} &= (0.06 \text{ lb/MMBtu}) * (15 \text{ MMBtu/hr}) * (24 \text{ hr/day}) \\
 &= 21.6 \text{ lb NO}_x/\text{day} \\
 &= (0.06 \text{ lb/MMBtu}) * (15 \text{ MMBtu/hr}) * (24 \text{ hr/day}) * (365 \text{ day/year}) \\
 &= 7,884 \text{ lb NO}_x/\text{year}
 \end{aligned}$$

PE2 – new flare		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	21.6	7,884
SO _x	19.3	7,045
PM ₁₀	6.1	2,227
CO	72.0	26,280
VOC	2.3	840

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

SSPE1 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-150-1-8	23,141	9,892	25,550	67,890	17,155
C-150-2-2	0	0	4,000	0	0
SSPE1	23,141	9,892	29,550	67,890	17,155

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

SSPE2 (lb/year)					
Permit Unit	NO _x	SO _x	PM ₁₀	CO	VOC
C-150-1-10	7,884	7,045	2,227	26,280	840
C-150-2-2	0	0	0	0	0
SSPE2	7,884	7,045	2,227	26,280	840

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
Facility emissions pre-project	23,141	9,892	25,550	67,890	17,155
Facility emissions – post project	7,884	7,045	2,227	26,280	840
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	No

As seen in the table above, the facility was an existing Major Source for NO_x but is reducing emissions so that it is not a Major Source.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Estimated Facility PE before Project Increase	10	8	4	34	12	12
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing major source for PSD for at least one pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

As shown in Section VII.C.5 above, the facility is not a Major Source for any pollutant. Therefore BE=PE1.

C-150-1-8:

As calculated in Section VII.C.1 above, PE1 is summarized in the following table:

BE (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
C-150-1-8	23,141	9,892	25,550	67,890	17,155

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is not a major source for any of the pollutants addressed in this project, this project does not constitute an SB 288 major modification.

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Since this facility is not a Major Source for any pollutants, this project does not constitute a Federal Major Modification. Additionally, since the facility is not a major source for PM₁₀ (140,000 lb/year), it is not a major source for PM_{2.5} (200,000 lb/year).

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to pollutants for which the District is in attainment or for unclassified, pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO₂ (as a primary pollutant)
- SO₂ (as a primary pollutant)
- CO
- PM
- PM₁₀
- Greenhouse gases (GHG): CO₂, N₂O, CH₄, HFCs, PFCs, and SF₆

The first step of this PSD evaluation consists of determining whether the facility is an existing PSD Major Source or not (See Section VII.C.5 of this document).

In the case the facility is NOT an existing PSD Major Source but is an existing source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

Potential to Emit for New or Modified Emission Units vs PSD Major Source Thresholds

As a screening tool, the project potential to emit from all new and modified units is compared to the PSD major source threshold, and if total project potential to emit from all new and modified units is below this threshold, no further analysis will be needed.

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(i). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination: Potential to Emit (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM	PM ₁₀
Total PE from New and Modified Units	4	0	3	13	1	1
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

As shown in the table above, the project potential to emit, by itself, does not exceed any of the PSD major source thresholds. Therefore Rule 2410 is not applicable and no further discussion is required.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis as per Rule 2201. Pursuant to Section 4.2.6, routine replacements are exempt from BACT. The replacement of an old flare with a new flare that is smaller and has less emissions qualifies as a routine replacement and BACT is not required.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
	NO _x	SO _x	PM ₁₀	CO	VOC
SSPE2	7,884	7,045	2,227	26,280	840
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	No

2. Quantity of Offsets Required

As seen above, the SSPE2 is not greater than the offset thresholds for all the pollutants; therefore offset calculations are not necessary and offsets will not be required for this project.

C. Public Notification

1. Applicability

Public noticing is required for:

- New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- Any project which results in the offset thresholds being surpassed, and/or
- Any project with an SSPE2 of greater than 20,000 lb/year for any pollutant.

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO _x	23,141	7,884	20,000 lb/year	No
SO _x	9,892	7,045	54,750 lb/year	No
PM ₁₀	25,550	2,227	29,200 lb/year	No
CO	67,890	26,280	200,000 lb/year	No
VOC	17,155	840	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO _x	7,884	23,141	-15,257	20,000 lb/year	No
SO _x	7,045	9,892	-2,847	20,000 lb/year	No
PM ₁₀	2,227	25,550	-23,323	20,000 lb/year	No
CO	26,280	67,890	-41,610	20,000 lb/year	No
VOC	840	17,155	-16,315	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:

- The following emissions factors shall be used to calculate flare emissions (based on total gas combusted): NO_x (as NO₂): 0.06 lb/MMBtu; PM₁₀: 0.017 lb/MMBtu; CO: 0.20 lb/MMBtu; or VOC: 0.063 lb/MMBtu. [District Rule 2201] N
- Sulfur content of flared gas shall not exceed 9.8 gr H₂S/100 scf. [District Rule 2201] N

E. Compliance Assurance

1. Source Testing

The performance of the collection and control system will be evaluated by an initial inspection and performance test required for the flare. This test will reveal whether a destruction efficiency of 98% by weight is achieved and whether the flare can operate without visible emissions exceeding 20% opacity.

Therefore, source testing for VOC destruction will be required within 60 days of initial operation and at least once every 12 months thereafter. No additional source testing is required.

2. Monitoring

The facility will monitor the combustion temperature of the flare to ensure the flare is operating within 50 F of the temperature from the most recent source test. Sulfur emissions are monitored by testing the landfill gas with Draeger tubes. The facility shall monitor the wellhead pressures, well temperature and oxygen, and surface emissions from the landfill. No additional monitoring is required.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- Permittee shall maintain continuous records of flare combustion temperature and volumetric gas flow rate. Permittee shall record and test the net heating value of landfill gas being combusted at least annually using ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201 and 40 CFR 60.756(b), 60.758(b)(2)(i), (c)(2) and (b)(2)(i)]
- The operator shall record quarterly the surface emission tests including test time, weather conditions, precipitation records, areas sampled, calibration records, and test results. Corrective action shall be taken if required in accordance to 40 CFR 60.755(c). [District Rule 2201, 40 CFR 60.755(c), 60.756(f)]

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII. C. 9. above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and

6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment/minor modification application. The compliance certification form is attachment C.

Rule 4001 New Source Performance Standards (NSPS)

Subpart Cc Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills.

BFI was modified after May 30, 1991. Therefore, this facility is not subject to Subpart Cc.

40 CFR Part 60 Subpart WWW Standards of Performance for Municipal Solid Waste Landfills provisions apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. The BFI facility is subject to subpart WWW.

The proposed new flare for the current LFG collection and control system satisfies the requirements set forth in Part 60, Subpart WWW for an active collection and control system. Continued compliance is expected.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

This rule incorporates NESHAPs from Part 61, Chapter I, Subchapter C, Title 40, CFR and the NESHAPs from Part 63, Chapter I, Subchapter C, Title 40, CFR; and applies to all sources of hazardous air pollution listed in 40 CFR Part 61 or 40 CFR Part 63.

The requirements of 40 CFR Part 63, Subpart AAAA (National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills) are applicable to facilities that are subject to NSPS WWW. BFI is subject to NSPS WWW so NESHAPS AAAA applies. Compliance is shown by complying with NSPS WWW.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

A properly operating enclosed ground flare combusting primarily methane is expected to comply with these requirements. Therefore, continued compliance with the requirements of this rule is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project (**Appendix D**), the total facility prioritization score including this project was less than or equal to one. Therefore, no future analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot.

Particulate matter emissions from this unit will be less than or equal to the rule limit of 0.1 grain per cubic foot are expected for a properly designed flare for which smokeless operation is required. Therefore, compliance with the requirements of this rule is expected.

Rule 4311 Flares

Pursuant to section 4.2 of this rule, flares that are subject to the requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Waste Landfills), or Subpart Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills) are exempt from this rule. Since flare at BFI is subject to requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), therefore requirements of this rule does not apply.

Rule 4642 Solid Waste Disposal Sites

Pursuant to section 4.1.2 of this rule, requirements of this rule shall not apply to any solid waste disposal site which is subject to the requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), or Subpart Cc (Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills). Since BFI is subject to requirements of 40 CFR 60 Subpart WWW (Standards of Performance for Municipal Solid Waste Landfills), therefore requirements of this rule does not apply.

Rule 4801 – Sulfur Compounds

This rule contains a limit on sulfur compounds. The limit at the point of discharge is 0.2 percent by volume, 2000 ppmv, calculated as sulfur dioxide (SO₂), on a dry basis averaged over 15 consecutive minutes.

The proposed limit of 150 ppmv sulfur on the LFG guarantees that emissions of SO₂ out the stack are less than 2000 ppmv. At the highest concentration (without consideration for other exhaust gas products of combustions), stack emissions cannot exceed 300 ppmv as SO₂ if fuel sulfur limit is met.

Therefore, continued compliance with the requirements of this rule is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors.

Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or

deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful EPA COC 45-day Noticing period, issue ATC C-150-1-10 subject to the permit conditions on the attached draft ATC in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
C-150-1-10	3020-02-H	15 MMBtu/hr flare	\$1030.00

Appendixes

- A: Draft ATC
- B: Current PTO
- C: Compliance Certification
- D: HRA Summary

APPENDIX A
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: C-150-1-10

LEGAL OWNER OR OPERATOR: BROWNING FERRIS INDUSTRIES
MAILING ADDRESS: ATTN: DON LITCHFIELD, ENVIRONMENTAL MANAGER
9999 S AUSTIN ROAD
MANTECA, CA 95336

LOCATION: 8662 W MUSCAT AVE
FRESNO, CA 93710

EQUIPMENT DESCRIPTION:

MODIFICATION OF 54 MMBTU/HR LANDFILL GAS COLLECTION AND TREATMENT SYSTEM WITH MCGILL MODEL EGF-4 ENCLOSED FLARE WITH COMBUSTION AIR CONTROLS, PROPANE-FIRED PILOT FLAME, FLAME ARRESTOR, BLOWERS, CONCRETE CONDENSATE SUMPS, EXHAUST STACK AND 67 EXTRACTION WELLS: REPLACE 54 MMBTU/HR ENCLOSED FLARE WITH 15 MMBTU/HR ENCLOSED GROUND FLARE.

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Landfill gas shall be tested for sulfur content quarterly using Draeger tubes. If source specific historical data (for a period of at least one year) shows seasonal variation of less than 20%, then landfill gas shall be tested annually using Draeger tubes. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
5. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director APCO

Arnaud Marjollet, Director of Permit Services

C-150-1-10 : Jul 10 2014 1:35PM - KLEVANND : Joint Inspection NOT Required

6. Actual flare emissions shall not exceed 20 tons VOC/year. Process information, including fuel usage data for the flare and process rates for operations controlled by the flare, shall be submitted to the District annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Flare shall be equipped with a failure alarm to automatically shut off the blower and landfill gas supply. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Landfill gas flowrate shall be monitored by flow indicator and recorders. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Gas collection system shall be sealed at all times during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
10. All condensate traps shall remain covered unless treatment of condensate is taking place. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Flame temperature indicator and recorder shall be operated whenever gas is flared. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Flare temperature shall be maintained to at least 1400 degree F. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Total volume of landfill gas flared shall not exceed 500 scf/min (720,000 scf/day) and shall be recorded daily. [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit
14. Emissions shall not exceed any of the following: NO_x - 0.06 lb/MMbtu, PM₁₀ - 0.3 lb/hr, CO - 7.75 lb/hr, SO_x - 0.8 lb/hr, nor VOC(NMHC) - 0.1 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Daily emissions shall not exceed any of the following: NO_x - 21.6 lb/day, PM₁₀ - 6.1 lb/day, CO - 72.9 lb/day, SO_x - 17.9 lb/day, nor VOC(NMHC) - 1.6 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Methane destruction efficiency shall be at least 99% by weight. [17 CCR 95464]
17. Interior wells: DEW-04, DEW-06, and DEW-07 may be operated with 15% oxygen concentration or less, provided that the temperature of these wells stays below the 130 °F which would indicate that aerobic decomposition is not occurring. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
18. Perimeter wells: EW-01, EW-02, EW-04, EW-05, EW-07, EW-09, EW-10, EW-12, EW-16, EW-17, EW-18, EW-20, EW-22, EW-23, EW-24, EW-25, EW-28, EW-29, EW-31, EW-32, EW-33, EW-35, EW-36, EW-38, EW-40, EW-43, EW-46, EW-47, EW-49, EW-50, EW-53, EW-55, and EW-56 may be operated with 15% oxygen concentration or less, provided that the temperature of these wells stays below the 130 °F which would indicate that aerobic decomposition is not occurring. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
19. The enclosed flares shall either reduce VOC by 98 weight percent or reduce the outlet VOC concentration to less than 20 parts per million by volume, dry basis as methane at 3 percent oxygen. [District Rules 2201 and 4102, and 40 CFR 60.752(b)(2)(iii)(B)] Federally Enforceable Through Title V Permit
20. The enclosed flares shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
21. The enclosed flare control devices shall be operated within the parameter ranges established during the initial or most recent performance test. [40 CFR 60.752(b)(2)(iii)(B)(2) and 17 CCR 95464] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

22. Except during periods of startup, shutdown, and malfunction, the permittee shall continuously monitor and record combustion chamber temperature. The enclosed flare average combustion temperature, for all 3-hour periods of operation, shall not drop more than 28 degrees C below the average combustion temperature, during the most recent performance test at which compliance with 60.752(b)(2)(iii)(B)(2) was determined. Upon detecting any temperature excursion lower than 28 degree C (50 degree F) below the source test average combustion temperature, averaged over a 3-hour period, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. Duration of startup, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for control devices where free venting of landfill gas occurs. [40 CFR 60.758(c)(1)(i), 60.755(e)] Federally Enforceable Through Title V Permit
23. The owner or operator shall measure the gauge pressure in the gas collection header at each individual interior well on a monthly basis as provided in 60.755(a)(3). If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [40 CFR 60.755(a)(3), 60.756(a)(1)] Federally Enforceable Through Title V Permit
24. The owner or operator shall monitor each interior well monthly for temperature and oxygen as provided in 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [40 CFR 60.753(c), 60.755(a)(3) and (a)(5), 60.756(a)(2) and (a)(3)] Federally Enforceable Through Title V Permit
25. The operator shall record quarterly the surface emission tests including test time, weather conditions, precipitation records, areas sampled, calibration records, and test results. Corrective action shall be taken if required in accordance to 40 CFR 60.755(c). [District Rule 2201, 40 CFR 60.755(c), 60.756(f)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain continuous records of flare combustion temperature and volumetric gas flow rate. Permittee shall record and test the net heating value of landfill gas being combusted at least annually using ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201 and 40 CFR 60.756(b), 60.758(b)(2)(i), (c)(2) and (b)(2)(i)] Federally Enforceable Through Title V Permit
27. Permittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [40 CFR 60.758(d)] Federally Enforceable Through Title V Permit
28. Permittee shall operate the landfill gas collection system with negative pressure at each wellhead except under the following conditions: (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 60.757(f)(1); (2) At a wellhead within the immediate vicinity of filling; (3) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; (4) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the APCO. [40 CFR 60.753(b), 17 CCR 95464 and 17 CCR 95468] Federally Enforceable Through Title V Permit
29. Permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [40 CFR 60.753(d), 60.755(c)(1)] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

30. Compliance with the surface methane operational standard shall be demonstrated using the procedures outlined in 40 CFR 60.755(c) within 180 days of installation and startup of the collection and control system and quarterly thereafter. [40 CFR 60.753(d), 60.755(c)] Federally Enforceable Through Title V Permit
31. Permittee shall operate the enclosed flares at all times when the collected gas is routed to it. [40 CFR 60.753(f)] Federally Enforceable Through Title V Permit
32. Permittee shall operate the landfill gas collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: (1) five years or more if active; or (2) two years or more if closed or at final grade. [40 CFR 60.753(a)] Federally Enforceable Through Title V Permit
33. Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 C and with oxygen level less than 5 percent except under the following conditions: (1) A fire or increased well temperature; or (2) at a wellhead within the immediate vicinity of filling. The owner or operator may establish a higher operating temperature or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decompositions by killing methanogens. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
34. The collection system shall be operated so that the methane concentration is less than 500 parts per million above background at the surface of the landfill, and such that all collected gases are sent to a control system designed and operated in compliance with 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.753(d), (e), 60.755(c)] Federally Enforceable Through Title V Permit
35. If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3 - 5) or (c). [40 CFR 60.753(g)] Federally Enforceable Through Title V Permit
36. For each interior wellhead, unless an alternative test method is established as allowed by 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by a Landtec GEM gas meter or equal, in accordance with the equipment requirements set forth in 40 CFR 60.753 for field measurement of temperature and oxygen or an oxygen meter using Method 3A or 3C except that: (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; (ii) A data recorder is not required; (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; (iv) A calibration error check is not required; (v) The allowable sample bias, zero drift, and calibration drift are +/-10 percent. [40 CFR 60.753(c)(2)] Federally Enforceable Through Title V Permit
37. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i-v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 60.753(d). [40 CFR 60.755(c)(3), (4)] Federally Enforceable Through Title V Permit
38. Permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed as provided in 40 CFR 60.752(b)(2)(v) by using the equation found in 40 CFR 60.754(b). [40 CFR 60.754(b)] Federally Enforceable Through Title V Permit
39. For the performance test required in 60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of Appendix A must be used to determine compliance with the 98 weight percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the APCO as provided by 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency: $(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / \text{NMOC}_{\text{in}}$. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081 and 40 CFR 60.754(d)] Federally Enforceable Through Title V Permit

40. Each owner or operator shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: 1) 5 years or more if active or 2) 2 years or more if closed or at final grade. [40 CFR 60.755(b)] Federally Enforceable Through Title V Permit
41. Surface monitoring shall be performed on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d). [40 CFR 60.755(c)(1)] Federally Enforceable Through Title V Permit
42. Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)] Federally Enforceable Through Title V Permit
43. The portable analyzer shall meet the instrument specifications of Method 21, section 3 (except that "methane" shall replace all references to VOC). The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. To meet the performance evaluation requirements of Method 21, section 3.1.3, the instrument evaluation procedures of Method 21, section 4.4 shall be used. The calibration procedures provided in Method 21, section 4.2 shall be followed immediately before commencing a surface monitoring survey. The provisions of this condition apply at all times, except during periods of start-up, shutdown, or malfunction which shall not exceed 5 days for collections systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(d), (e)] Federally Enforceable Through Title V Permit
44. Each wellhead shall have a sampling port and a thermometer, other temperature-measuring device, or an access port for temperature measurements. [40 CFR 60.756(a)] Federally Enforceable Through Title V Permit
45. The enclosed flares shall be equipped with a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. The temperature indicator and recorder must operate continuously. [District Rule 2201 and 40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
46. The owner/operator shall install, calibrate, maintain, and operate a meter with a continuous recording device that measures and records the landfill gas flow rate into the flare at least once every 15 minutes. This meter shall also be capable of measuring the landfill gas flow rate that might bypass the flare in the event of equipment malfunction or maintenance. [40 CFR 60.754(b)(1), 60.756(b)(2)] Federally Enforceable Through Title V Permit
47. When performing surface monitoring, any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [40 CFR 60.756(f)] Federally Enforceable Through Title V Permit
48. The operator shall monitor and record maintenance-related and other control system downtimes and individual well shutdowns. Exceedances defined under 60.758(c) shall be reported once every 180 days. [District Rule 4102 and 40 CFR 60.757(f), (g)(4) and 60.758(c) and (e)] Federally Enforceable Through Title V Permit
49. Except as provided in 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)] Federally Enforceable Through Title V Permit
50. Permittee shall keep the following records: (1)(i) the maximum expected gas generation flow rate as calculated in 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the APCO; (ii) the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 60.759(a)(1); (2)(i) the average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test; (ii) the percent reduction of NMOC determined as specified in 60.752(b)(2)(iii)(B) achieved by the control device. [40 CFR 60.758(b)(1) and (2)] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

51. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. If applicable, permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as well as any nonproductive areas excluded from collection. [40 CFR 60.758(d)] Federally Enforceable Through Title V Permit
52. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)] Federally Enforceable Through Title V Permit
53. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. Landfill gas collection system wellheads may be operated under neutral or positive pressure when there is a fire or during other times as allowed in sections 95464(c), 95464(d), and 95464(e). [17 CCR 95464]
54. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmv as methane. Components must be checked quarterly. If compliance with the methane limit has been demonstrated for 4 consecutive quarters, then the component checking frequency shall be annually. If an annual test fails to show compliance, quarterly testing shall resume. [17 CCR 95464]
55. The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 95464]
56. The flare must be source tested annually. If the flare is in compliance after three consecutive source tests, the facility may move to source testing the flare every three years. If subsequent tests show the flare out of compliance, the test frequency shall revert to annual testing. [17 CCR 95464]
57. The flare must have automatic dampers, an automatic shutdown device, a flame arrester, and continuous recording temperature sensors. [17 CCR 95464]
58. Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. [17 CCR 95464, 17 CCR 95465]
59. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. If there are no exceedances after 4 consecutive quarterly measurements, the facility may measure annually. Any exceedances that can not be remediated within 10 days or any exceedances during compliance inspection will result in a return to quarterly monitoring. [17 CCR 95469]
60. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
61. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
62. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e). [17 CCR 95470]
63. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
64. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
65. Permittee shall terminate surface emission testing when the measured average wind speed is over 10 mph or the instantaneous wind speed is over 20 mph. [17 CCR 95468, 17 CCR 95471]
66. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]

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CONDITIONS CONTINUE ON NEXT PAGE

67. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
68. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]
69. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
70. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
71. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
72. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
73. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not specifically approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]

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APPENDIX B
Current ATC (base document)



AUTHORITY TO CONSTRUCT

PERMIT NO: C-150-1-8

ISSUANCE DATE: 04/24/2014

LEGAL OWNER OR OPERATOR: BROWNING FERRIS INDUSTRIES
MAILING ADDRESS: ATTN: DON LITCHFIELD, ENVIRONMENTAL MANAGER
9999 S AUSTIN ROAD
MANTECA, CA 95336

LOCATION: 8662 W MUSCAT AVE
FRESNO, CA 93710

EQUIPMENT DESCRIPTION:

MODIFICATION OF 54 MMBTU/HR LANDFILL GAS COLLECTION AND TREATMENT SYSTEM WITH MCGILL MODEL EGF-4 ENCLOSED FLARE WITH COMBUSTION AIR CONTROLS, PROPANE-FIRED PILOT FLAME, FLAME ARRESTOR, BLOWERS, CONCRETE CONDENSATE SUMPS, EXHAUST STACK AND 67 EXTRACTION WELLS: REMOVE REQUIREMENTS FOR OPEN FLARE AND ADD CONDITIONS TO COMPLY WITH CARB LANDFILL METHANE REGULATIONS

CONDITIONS

1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Landfill gas shall be tested for sulfur content quarterly using Draeger tubes. If source specific historical data (for a period of at least one year) shows seasonal variation of less than 20%, then landfill gas shall be tested annually using Draeger tubes. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
5. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

COPY

Arnaud Marjollet, Director of Permit Services

C-150-1-8 - Jun 25 2014 7:53AM - KLEVANND : Joint Inspection NOT Required

6. Actual flare emissions shall not exceed 20 tons VOC/year. Process information, including fuel usage data for the flare and process rates for operations controlled by the flare, shall be submitted to the District annually. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. Flare shall be equipped with a failure alarm to automatically shut off the blower and landfill gas supply. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Landfill gas flowrate shall be monitored by flow indicator and recorders. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Gas collection system shall be sealed at all times during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
10. All condensate traps shall remain covered unless treatment of condensate is taking place. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Flame temperature indicator and recorder shall be operated whenever gas is flared. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Flare temperature shall be maintained to at least 1400 degree F. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Total volume of landfill gas flared shall not exceed 2600 scf/min (3,744,000 scf/day) and shall be recorded daily. [District Rules 2520, 9.4.2 and NSR] Federally Enforceable Through Title V Permit
14. Emissions shall not exceed any of the following: NO_x - 0.0616 lb/MMbtu, PM₁₀ - 2.92 lb/hr, CO - 7.75 lb/hr, SO_x - 1.1 lb/hr, nor VOC(NMHC) - 1.92 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Daily emissions shall not exceed any of the following: NO_x - 63.4 lb/day, PM₁₀ - 70.0 lb/day, CO - 186.0 lb/day, SO_x - 27.1 lb/day, nor VOC(NMHC) - 47.0 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Methane destruction efficiency shall be at least 99% by weight. [17 CCR 95464]
17. Interior wells: DEW-04, DEW-06, and DEW-07 may be operated with 15% oxygen concentration or less, provided that the temperature of these wells stays below the 130 °F which would indicate that aerobic decomposition is not occurring. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
18. Perimeter wells: EW-01, EW-02, EW-04, EW-05, EW-07, EW-09, EW-10, EW-12, EW-16, EW-17, EW-18, EW-20, EW-22, EW-23, EW-24, EW-25, EW-28, EW-29, EW-31, EW-32, EW-33, EW-35, EW-36, EW-38, EW-40, EW-43, EW-46, EW-47, EW-49, EW-50, EW-53, EW-55, and EW-56 may be operated with 15% oxygen concentration or less, provided that the temperature of these wells stays below the 130 °F which would indicate that aerobic decomposition is not occurring. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
19. The enclosed flares shall either reduce VOC by 98 weight percent or reduce the outlet VOC concentration to less than 20 parts per million by volume, dry basis as methane at 3 percent oxygen. [District Rules 2201 and 4102, and 40 CFR 60.752(b)(2)(iii)(B)] Federally Enforceable Through Title V Permit
20. The enclosed flares shall be equipped with a temperature indicator and recorder which measures and records the operating temperature. The temperature indicator and recorder must operate continuously. [40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
21. The enclosed flare control devices shall be operated within the parameter ranges established during the initial or most recent performance test. [40 CFR 60.752(b)(2)(iii)(B)(2) and 17 CCR 95464] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

22. Except during periods of startup, shutdown, and malfunction, the permittee shall continuously monitor and record combustion chamber temperature. The enclosed flare average combustion temperature, for all 3-hour periods of operation, shall not drop more than 28 degrees C below the average combustion temperature, during the most recent performance test at which compliance with 60.752(b)(2)(iii)(B)(2) was determined. Upon detecting any temperature excursion lower than 28 degree C (50 degree F) below the source test average combustion temperature, averaged over a 3-hour period, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. Duration of startup, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for control devices where free venting of landfill gas occurs. [40 CFR 60.758(c)(1)(i), 60.755(e)] Federally Enforceable Through Title V Permit
23. The owner or operator shall measure the gauge pressure in the gas collection header at each individual interior well on a monthly basis as provided in 60.755(a)(3). If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days. If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [40 CFR 60.755(a)(3), 60.756(a)(1)] Federally Enforceable Through Title V Permit
24. The owner or operator shall monitor each interior well monthly for temperature and oxygen as provided in 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval. [40 CFR 60.753(c), 60.755(a)(3) and (a)(5), 60.756(a)(2) and (a)(3)] Federally Enforceable Through Title V Permit
25. The operator shall record quarterly the surface emission tests including test time, weather conditions, precipitation records, areas sampled, calibration records, and test results. Corrective action shall be taken if required in accordance to 40 CFR 60.755(c). [District Rule 2201, 40 CFR 60.755(c), 60.756(f)] Federally Enforceable Through Title V Permit
26. Permittee shall maintain continuous records of flare combustion temperature and volumetric gas flow rate. Permittee shall record and test the net heating value of landfill gas being combusted at least annually using ASTM D 1826 or D 1945 in conjunction with ASTM D 3588 for gaseous fuels. [District Rule 2201 and 40 CFR 60.756(b), 60.758(b)(2)(i), (c)(2) and (b)(2)(i)] Federally Enforceable Through Title V Permit
27. Permittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. [40 CFR 60.758(d)] Federally Enforceable Through Title V Permit
28. Permittee shall operate the landfill gas collection system with negative pressure at each wellhead except under the following conditions: (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 60.757(f)(1); (2) At a wellhead within the immediate vicinity of filling; (3) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; (4) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the APCO. [40 CFR 60.753(b), 17 CCR 95464 and 17 CCR 95468] Federally Enforceable Through Title V Permit
29. Permittee shall operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [40 CFR 60.753(d), 60.755(c)(1)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. Compliance with the surface methane operational standard shall be demonstrated using the procedures outlined in 40 CFR 60.755(c) within 180 days of installation and startup of the collection and control system and quarterly thereafter. [40 CFR 60.753(d), 60.755(c)] Federally Enforceable Through Title V Permit
31. Permittee shall operate the enclosed flares at all times when the collected gas is routed to it. [40 CFR 60.753(f)] Federally Enforceable Through Title V Permit
32. Permittee shall operate the landfill gas collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: (1) five years or more if active; or (2) two years or more if closed or at final grade. [40 CFR 60.753(a)] Federally Enforceable Through Title V Permit
33. Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 C and with oxygen level less than 5 percent except under the following conditions: (1) A fire or increased well temperature; or (2) at a wellhead within the immediate vicinity of filling. The owner or operator may establish a higher operating temperature or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decompositions by killing methanogens. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
34. The collection system shall be operated so that the methane concentration is less than 500 parts per million above background at the surface of the landfill, and such that all collected gases are sent to a control system designed and operated in compliance with 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour. [40 CFR 60.753(d), (e), 60.755(c)] Federally Enforceable Through Title V Permit
35. If monitoring demonstrates that the operational requirements are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3 - 5) or (c). [40 CFR 60.753(g)] Federally Enforceable Through Title V Permit
36. For each interior wellhead, unless an alternative test method is established as allowed by 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by a Landtec GEM gas meter or equal, in accordance with the equipment requirements set forth in 40 CFR 60.753 for field measurement of temperature and oxygen or an oxygen meter using Method 3A or 3C except that: (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; (ii) A data recorder is not required; (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; (iv) A calibration error check is not required; (v) The allowable sample bias, zero drift, and calibration drift are +/-10 percent. [40 CFR 60.753(c)(2)] Federally Enforceable Through Title V Permit
37. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i-v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 60.753(d). [40 CFR 60.755(c)(3), (4)] Federally Enforceable Through Title V Permit
38. Permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed as provided in 40 CFR 60.752(b)(2)(v) by using the equation found in 40 CFR 60.754(b). [40 CFR 60.754(b)] Federally Enforceable Through Title V Permit
39. For the performance test required in 60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of Appendix A must be used to determine compliance with the 98 weight percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the APCO as provided by 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency: $(\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / \text{NMOC}_{\text{in}}$. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081 and 40 CFR 60.754(d)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

40. Each owner or operator shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: 1) 5 years or more if active or 2) 2 years or more if closed or at final grade. [40 CFR 60.755(b)] Federally Enforceable Through Title V Permit
41. Surface monitoring shall be performed on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d). [40 CFR 60.755(c)(1)] Federally Enforceable Through Title V Permit
42. Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)] Federally Enforceable Through Title V Permit
43. The portable analyzer shall meet the instrument specifications of Method 21, section 3 (except that "methane" shall replace all references to VOC). The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. To meet the performance evaluation requirements of Method 21, section 3.1.3, the instrument evaluation procedures of Method 21, section 4.4 shall be used. The calibration procedures provided in Method 21, section 4.2 shall be followed immediately before commencing a surface monitoring survey. The provisions of this condition apply at all times, except during periods of start-up, shutdown, or malfunction which shall not exceed 5 days for collections systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(d), (e)] Federally Enforceable Through Title V Permit
44. Each wellhead shall have a sampling port and a thermometer, other temperature-measuring device, or an access port for temperature measurements. [40 CFR 60.756(a)] Federally Enforceable Through Title V Permit
45. The enclosed flares shall be equipped with a temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. The temperature indicator and recorder must operate continuously. [District Rule 2201 and 40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
46. The owner/operator shall install, calibrate, maintain, and operate a meter with a continuous recording device that measures and records the landfill gas flow rate into the flare at least once every 15 minutes. This meter shall also be capable of measuring the landfill gas flow rate that might bypass the flare in the event of equipment malfunction or maintenance. [40 CFR 60.754(b)(1), 60.756(b)(2)] Federally Enforceable Through Title V Permit
47. When performing surface monitoring, any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [40 CFR 60.756(f)] Federally Enforceable Through Title V Permit
48. The operator shall monitor and record maintenance-related and other control system downtimes and individual well shutdowns. Exceedances defined under 60.758(c) shall be reported once every 180 days. [District Rule 4102 and 40 CFR 60.757(f), (g)(4) and 60.758(c) and (e)] Federally Enforceable Through Title V Permit
49. Except as provided in 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)] Federally Enforceable Through Title V Permit
50. Permittee shall keep the following records: (1)(i) the maximum expected gas generation flow rate as calculated in 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the APCO; (ii) the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 60.759(a)(1); (2)(i) the average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test; (ii) the percent reduction of NMOC determined as specified in 60.752(b)(2)(iii)(B) achieved by the control device. [40 CFR 60.758(b)(1) and (2)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

51. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. If applicable, permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as well as any nonproductive areas excluded from collection. [40 CFR 60.758(d)] Federally Enforceable Through Title V Permit
52. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)] Federally Enforceable Through Title V Permit
53. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. Landfill gas collection system wellheads may be operated under neutral or positive pressure when there is a fire or during other times as allowed in sections 95464(c), 95464(d), and 95464(e). [17 CCR 95464]
54. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmv as methane. Components must be checked quarterly. If compliance with the methane limit has been demonstrated for 4 consecutive quarters, then the component checking frequency shall be annually. If an annual test fails to show compliance, quarterly testing shall resume. [17 CCR 95464]
55. The flare must operate within the parameter ranges established during the initial or most recent source test. [17 CCR 95464]
56. The flare must be source tested annually. If the flare is in compliance after three consecutive source tests, the facility may move to source testing the flare every three years. If subsequent tests show the flare out of compliance, the test frequency shall revert to annual testing. [17 CCR 95464]
57. The flare must have automatic dampers, an automatic shutdown device, a flame arrester, and continuous recording temperature sensors. [17 CCR 95464]
58. Landfill collection and control system must be operated such that landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. [17 CCR 95464, 17 CCR 95465]
59. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. If there are no exceedances after 4 consecutive quarterly measurements, the facility may measure annually. Any exceedances that can not be remediated within 10 days or any exceedances during compliance inspection will result in a return to quarterly monitoring. [17 CCR 95469]
60. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
61. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
62. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e). [17 CCR 95470]
63. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
64. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
65. Permittee shall terminate surface emission testing when the measured average wind speed is over 10 mph or the instantaneous wind speed is over 20 mph. [17 CCR 95468, 17 CCR 95471]
66. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]

CONDITIONS CONTINUE ON NEXT PAGE

67. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
68. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]
69. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
70. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
71. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
72. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
73. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not specifically approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]

APPENDIX C

Compliance Certification

RECEIVED

APR 08 2014

SJVAPCD
Southern Region

San Joaquin Valley Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

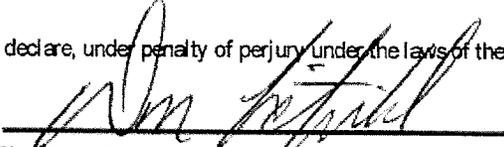
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE AMENDMENT
 MINOR PERMIT MODIFICATION

COMPANY NAME: Browning-Ferris Industries of California, Inc.	FACILITY ID: C-150
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Republic Services, Inc.	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



 Signature of Responsible Official

4/1/14

 Date

Don Litchfield

 Name of Responsible Official (please print)
Area Environmental Manager

 Title of Responsible Official (please print)

APPENDIX D

HRA

San Joaquin Valley Air Pollution Control District Risk Management Review

To: Dan Klevann – Permit Services
 From: Cheryl Lawler – Technical Services
 Date: July 7, 2014
 Facility Name: Browning Ferris Industries
 Location: 8662 W. Muscat Avenue, Fresno
 Application #(s): C-150-1-10
 Project #: C-1141210

A. RMR SUMMARY

RMR Summary			
Categories	Landfill Gas Flare (Unit 1-10)	Project Totals	Facility Totals
Prioritization Score	0.01*	0.01	0.01
Acute Hazard Index	N/A	N/A	N/A
Chronic Hazard Index	N/A	N/A	N/A
Maximum Individual Cancer Risk	N/A	N/A	N/A
T-BACT Required?	No		
Special Permit Conditions?	No		

* The project passed on prioritization with a score of less than 1; therefore, no further analysis was required.

I. Project Description

Technical Services received a request on July 1, 2014, to perform a Risk Management Review for a 15 MMBtu/hr landfill gas enclosed flare that is replacing an existing 54 MMBtu/hr landfill gas flare.

II. Analysis

Toxic emissions from the flare were calculated using default values for methane combustion and biomethane characterization (55% methane, 98% destruction efficiency). Methane (Natural Gas) combustion emissions were based on the May, 2001, update of *VCAPCD AB 2588 Combustion Emission Factors*. Methane content and biomethane characterization are based on Table 2.4-1 in 1998's *AP42 Chapter 2, Section 4, Municipal Solid Waste Landfills*. In accordance with the District's *Risk Management Policy for Permitting New and Modified Sources* (APR 1905-1, March 2, 2001), risks from the proposed project were prioritized using the procedures in the 1990 CAPCOA Facility Prioritization Guidelines and incorporated in the District's HEART's database. The prioritization score for the project was less than 1.0 (see RMR Summary Table). Therefore, no further analysis was necessary.

The following parameters were used for the review:

Analysis Parameters			
Facility Location Type	Rural	Closest Receptor (m)	610
Landfill Gas Process Rates (mmscf)	0.03 hr 262.8 yr	Closest Receptor Type	Residence & Business

III. Conclusions

The prioritization score for this project is not above 1.0. In accordance with the District's Risk Management Policy, the project is approved **without** Toxic Best Available Control Technology (T-BACT).

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

Attachments

RMR Request Form & Attachments
Landfill Gas Flare Speciation Worksheet
Prioritization
Facility Summary