

Bay Area Air Quality Management District

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

Final Proposed

MAJOR FACILITY REVIEW PERMIT

Issued To:
Gas Recovery Systems, Inc.
Facility #B1669

Facility Address:
15999 Guadalupe Mines Road
San Jose, CA 95120

Mailing Address:
5087 Junction Road 5717 Brisa Street
Lockport, NY 14094 Livermore, CA 94550

Responsible Official

Alan J. Purves, COO

Anthony J. Falbo

VP and General Manager

(925) 461-4400 (716) 439-1004

Facility Contact

Matthew Nourot, Environmental Manager

Suparna Chakladar

Technical Director, Environmental Services

(925) 606-3700 (951) 883-4153

Type of Facility: Landfill Gas
Primary SIC: 4911
Product: Electrical Power

BAAQMD Permit Division Contact:
Hon. Man Tamiko Endow

ISSUED BY THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Ellen Garvey Jack P. Broadbent, Executive Officer/Air Pollution Control Officer Date

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I. STANDARD CONDITIONS

A. Administrative Requirements

The permit holder shall comply with all applicable requirements in the following regulations:

- BAAQMD Regulation 1 - General Provisions and Definitions
(as amended by the District Board on ~~5/2/01~~7/9/08);
- SIP Regulation 1 - General Provisions and Definitions
(as approved by EPA through ~~8/27~~6/28/99);
- BAAQMD Regulation 2, Rule 1 - Permits, General Requirements
(as amended by the District Board on ~~8/1/01~~3/4/09);
- SIP Regulation 2, Rule 1 - Permits, General Requirements
(as approved by EPA through ~~2/25~~1/26/99);
- BAAQMD Regulation 2, Rule 2 - Permits, New Source Review
(as amended by the District Board on ~~5/17/00~~6/15/05);
- SIP Regulation 2, Rule 2 - Permits, New Source Review and Prevention of Significant Deterioration
(as approved by EPA through ~~2/25~~1/26/99);
- BAAQMD Regulation 2, Rule 4 - Permits, Emissions Banking
(as amended by the District Board on ~~5/17/00~~12/21/04);
- SIP Regulation 2, Rule 4 - Permits, Emissions Banking
(as approved by EPA through ~~2/25~~1/26/99); ~~and~~
BAAQMD Regulation 2, Rule 5 – New Source Review of Toxic Air Contaminants
(as amended by the District Board on 1/6/10)
- BAAQMD Regulation 2, Rule 6 - Permits, Major Facility Review
(as amended by the District Board on ~~5/2/01~~4/16/03); ~~and~~
SIP Regulation 2, Rule 6 – Permits, Major Facility Review
(as approved by EPA through 6/23/95)

B. Conditions to Implement Regulation 2, Rule 6, Major Facility Review

1. This Major Facility Review Permit was issued on ~~November 30, 2001~~[insert date] and expires on ~~October 31, 2006~~[insert date]. The permit holder shall submit a complete application for renewal of this Major Facility Review Permit no later than ~~April 30, 2006~~[insert date] and no earlier than ~~October 31, 2005~~[insert date]. **If a complete application for renewal has not been submitted in accordance with this deadline, the facility may not operate after ~~October 31, 2006~~[insert date].** If the permit renewal has not been issued by [insert date], but a complete application for renewal has been submitted in accordance with the above deadlines, the existing permit will continue in force until the District takes final action on the renewal application. (Regulation 2-6-307, 404.2, ~~407~~, & 409.6; MOP Volume II, Part 3, §4.2)

I. Standard Conditions

2. The permit holder shall comply with all conditions of this permit. The permit consists of this document and all appendices. Any non-compliance with the terms and conditions of this permit will constitute a violation of the law and will be grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. (Regulation 2-6-307; MOP Volume II, Part 3, §4.11)
3. In the event any enforcement action is brought as a result of a violation of any term or condition of this permit, the fact that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with such term or condition shall not be a defense to such enforcement action. (MOP Volume II, Part 3, §4.11)
4. This permit may be modified, revoked, reopened and reissued, or terminated for cause. (Regulation 2-6-307, 409.8, 415; MOP Volume II, Part 3, §4.11)
5. The filing of a request by the facility for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated non-compliance does not stay the applicability of any permit condition. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
6. This permit does not convey any property rights of any sort, or any exclusive privilege. (Regulation 2-6-409.7; MOP Volume II, Part 3, §4.11)
7. The permit holder shall supply within 30 days any information that the District requests in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. (Regulation 1-441, Regulation 2-6-409.4 & 501; MOP Volume II, Part 3, §4.11)
8. Any records required to be maintained pursuant to this permit which the permittee considers to contain proprietary or trade secret information shall be prominently designated as such. Copies of any such proprietary or trade secret information which are provided to the District shall be maintained by the District in a locked confidential file, provided, however, that requests from the public for the review of any such information shall be handled in accordance with the District's procedures set forth in Section 11 of the District's Administrative Code. (Regulation 2-6-419; MOP Volume II, Part 3, §4.11)
9. Proprietary or trade secret information provided to EPA will be subject to the requirements of 40 CFR Part 2, Subpart B - Public Information, Confidentiality of Business Information. (40 CFR Part 2)
10. The emissions inventory submitted with the application for this Major Facility Review Permit is an estimate of actual emissions or the potential to emit for the time period stated and is included only as one means of determining applicable requirements for emission sources. It does not establish, or constitute a basis for establishing, any new emission limitations. (MOP Volume II, Part 3, §4.11)

I. Standard Conditions

11. The responsible official shall certify all documents submitted by the facility pursuant to the major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility. (Regulation 2-6-409.20, MOP Volume II, Part 3, §4.11)

12. The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)

C. Requirement To Pay Fees

The permit holder shall pay annual fees in accordance with District Regulation 3, including Schedule P. (Regulation 2-6-402 & 409.13, Regulation 3; MOP Volume II, Part 3, §4.12)

D. Inspection and Entry

Access to Facility: The permit holder shall provide reasonable access to the facility and equipment which is subject to this permit to the APCO and/or to his or her designee. (Regulation 1-440, Regulation 2-6-409.3; MOP Volume II, Part 3, §4.14)

E. Records

1. The permit holder must provide any information, records, and reports requested or specified by the APCO. (Regulation 1-441, Regulation 2-6-409.4)
2. Notwithstanding the specific wording in any requirement, all records for federally enforceable requirements shall be maintained for at least five years from the date of creation of the record. (Regulation 2-6-501, ~~Regulation 3~~; MOP Volume II, Part 3, §4.7)

F. Monitoring Reports

Reports of all required monitoring must be submitted to the District at least once every six months, except where an applicable requirement specifies more frequent reporting. The first reporting period for this permit shall be ~~November 30, 2001~~ [insert date] ~~to through [insert date] April 30, 2002~~. The report shall be submitted by ~~May 31, 2002~~ [insert date]. Subsequent reports shall be for the following periods: ~~May 1st~~ January 1st through ~~October 31st~~ June 30th and ~~November 1st~~ July 1st through ~~April 30th~~ December 31st, and are due on the last day of the month after the end of the reporting period. All instances of non-compliance shall be clearly identified in these reports. The reports shall be certified by the responsible official as true, accurate, and complete. In addition, all instances of non-compliance with the permit shall be reported in writing to the District's Compliance and Enforcement Division within 10 calendar days of the discovery of the incident. Within 30 calendar days of

I. Standard Conditions

the discovery of any incident of non-compliance, the facility shall submit a written report including the probable cause of non-compliance and any corrective or preventative actions. The reports shall be sent to the following address:

Director of Compliance and Enforcement
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109
Attn: Title V Reports

(Regulation 2-6-502, ~~Regulation 3~~; MOP Volume II, Part 3, §4.7)

G. Compliance Certification

Compliance certifications shall be submitted annually by the responsible official of this facility to the Bay Area Air Quality Management District and to the Environmental Protection Agency. The certification period will be ~~November 1st~~ ~~January 1st to through October 31st~~ ~~December 31st~~. The certification shall be submitted by ~~November 30th~~ ~~January 31st~~ of each year. The certification must list each applicable requirement, the compliance status, whether compliance was continuous or intermittent, the method used to determine compliance, and any other specific information required by the permit. The permit holder may satisfy this requirement through submittal of District-generated Compliance Certification forms. The certification should be directed to the District's Compliance and Enforcement Division at the address above, and a copy of the certification should be sent to the Environmental Protection Agency at the following address:

Director of the Air Division
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105
Attention: Air-3

(MOP Volume II, Part 3, §4.5 and 4.15)

H. Emergency Provisions

1. The permit holder may seek relief from enforcement action in the event of a breakdown, as defined by Regulation 1-208 of the District's Rules and Regulations, by following the procedures contained in Regulations 1-431 and 1-432. The District will thereafter determine whether breakdown relief will be granted in accordance with Regulation 1-433. (MOP Volume II, Part 3, §4.8)
2. The permit holder may seek relief from enforcement action for a violation of any of the terms and conditions of this permit by applying to the District's Hearing Board for a variance pursuant to Health and Safety Code Section 42350. The Hearing Board will determine after notice and hearing whether variance relief should be granted in

I. Standard Conditions

accordance with the procedures and standards set forth in Health and Safety Code Section 42350 et seq. (MOP Volume II, Part 3, §4.8)

3. The granting by the District of breakdown relief or the issuance by the Hearing Board of a variance will not provide relief from federal enforcement. (MOP Volume II, Part 3, §4.8)

I. Severability

In the event that any provision of this permit is invalidated by a court or tribunal of competent jurisdiction, or by the Administrator of the EPA, all remaining portions of the permit shall remain in full force and effect. (Regulation 2-6-409.5; MOP Volume II, Part 3, §4.10)

J. Miscellaneous Conditions

1. The maximum capacity for each source as shown in Table II-A is the maximum allowable capacity. Exceedance of the maximum allowable capacity for any source is a violation of Regulation 2, Rule 1, Section 301. (Regulation 2-1-301)

II. EQUIPMENT LIST

A. Permitted Source List

Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

Table II A—Permitted Sources

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Each of the following sources has been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. The capacities in this table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-301.

S-#	Description	Make or Type	Model	Capacity
2	Internal Combustion Engine, Landfill Gas (landfill gas)	Superior, Rich Burn	8G825	750 HP 6.75 MM BTU/hour
3	Internal Combustion Engine, Landfill Gas (landfill gas)	Superior, Rich Burn	8G825	750 HP 6.75 MM BTU/hour
4	Internal Combustion Engine, Landfill Gas (landfill gas)	Superior, Rich Burn	8G825	750 HP 6.75 MM BTU/hour
5	Internal Combustion Engine, Landfill Gas (landfill gas)	Waukesha GL Series Lean Burn	7042 GL	1547 HP 13.5 MM BTU/hour
7	Landfill Gas Condensate Storage Tank	Fixed Roof		6500 Gallons

B. Abatement Device List

Table II B—Abatement Devices

A-#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1	Genstar Thermal Reactor	S-2	BAAQMD Condition #17777-part 4		740 ppmv CO @ 15% O2
2	Genstar Thermal Reactor	S-3	BAAQMD Condition #17777-part 4		740 ppmv CO @ 15% O2
3	Genstar Thermal Reactor	S-4	BAAQMD Condition #17777-part 4		740 ppmv CO @ 15% O2

III. GENERALLY APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and [State Implementation Plan \(SIP\)](#) Rules and Regulations and other federal requirements cited below. These requirements apply in a general manner to the facility and/or to sources exempt from the requirement to obtain a District Permit to Operate. The District has determined that these requirements will not be violated under normal, routine operations, and that no additional periodic monitoring or reporting to demonstrate compliance is warranted. In cases where a requirement, in addition to being generally applicable, is also specifically applicable to one or more sources, the requirement and the source are also included in Section IV, Source-Specific Applicable Requirements, of this permit. [This section also contains provisions that may apply to temporary sources.](#)

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. [For](#) BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board [of Directors](#)
2. [For](#) ~~Any~~ federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

The full language of SIP requirements is on EPA Region 9's website. The address is: [included at the end of this permit.](#)

[http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions.](http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions)

Field Code Changed

NOTE:

There are differences between the current BAAQMD rule and the version of the rule in the SIP. All sources must comply with [both](#) versions of the rule until US EPA has reviewed and approved the District's revision of the regulation.

**Table III
 Generally Applicable Requirements**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 1	General Provisions and Definitions (5/2/017/9/08)	N
SIP Regulation 1	General Provisions and Definitions (8/27/996/28/99)	Y
BAAQMD Regulation 2, Rule 1	Permits - General Requirements (8/4/013/4/09)	N
BAAQMD 2-1-429	Federal Emissions Statement (6/7/9512/21/04)	Y N
SIP Regulation 2, Rule 1	Permits - General Requirements (8/27/991/26/99)	Y
SIP Regulation 2-1-429	Federal Emissions Statement (4/3/95)	Y

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
BAAQMD Regulation 2, Rule 5	Permits - New Source Review of Toxic Air Contaminants (1/6/10)	N
BAAQMD Regulation 4	Air Pollution Episode Plan (3/20/91)	N
SIP Regulation 4	Air Pollution Episode Plan (8/6/90)	Y
BAAQMD Regulation 5	Open Burning (11/2/94 9/08)	Y N
SIP Regulation 5	Open Burning (9/4/98)	Y
BAAQMD Regulation 6, Rule 1	Particulate Matter, and Visible Emissions - General Requirements (12/4/90 12/5/07)	Y N
SIP Regulation 6	Particulate Matter and Visible Emissions (9/4/98)	Y
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 7	Odorous Substances (3/17/82)	N
BAAQMD Regulation 8, Rule 1	Organic Compounds - General Provisions (6/15/94)	Y
BAAQMD Regulation 8, Rule 2	Organic Compounds - Miscellaneous Operations (7/20/05)	N
SIP Regulation 8, Rule 2	Organic Compounds - Miscellaneous Operations (3/22/95)	Y
BAAQMD Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (12/20/95 11/21/01 7/1/09)	Y
SIP Regulation 8, Rule 3	Organic Compounds - Architectural Coatings (1/2/04)	Y
BAAQMD Regulation 8, Rule 4	Organic Compounds - General Solvent and Surface Coating Operations (10/16/02)	Y
BAAQMD Regulation 8, Rule 5	Organic Compounds - Storage of Organic Liquids (12/4/99 10/18/06)	N
SIP Regulation 8, Rule 5	Organic Compounds - Storage of Organic Liquids (8/25/97)6/5/03)	Y
BAAQMD Regulation 8, Rule 15	Organic Compounds - Emulsified and Liquid Asphalts (6/1/94)	Y
BAAQMD Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (9/16/98)10/16/02)	Y
SIP Regulation 8, Rule 16	Organic Compounds - Solvent Cleaning Operations (12/9/94)	Y ⁺
BAAQMD Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (6/15/05)	N
SIP Regulation 8, Rule 40	Organic Compounds - Aeration of Contaminated Soil and Removal of Underground Storage Tanks (4/19/01)	Y
BAAQMD Regulation 8, Rule 47	Organic Compounds - Air Stripping and Soil Vapor Extraction Operations (6/15/05)	N

III. Generally Applicable Requirements

Table III
Generally Applicable Requirements

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)
SIP Regulation 8, Rule 47	Organic Compounds – Air Stripping and Soil Vapor Extraction Operations (4/26/95)	<u>Y</u>
BAAQMD Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (12/20/95)	N
SIP Regulation 8, Rule 49	Organic Compounds - Aerosol Paint Products (3/22/95)	Y
BAAQMD Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (4/2/20/95 7/17/02)	N
SIP Regulation 8, Rule 51	Organic Compounds - Adhesive and Sealant Products (2/26/02)	<u>Y</u>
BAAQMD Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (3/15/95)	<u>N</u>
SIP Regulation 9, Rule 1	Inorganic Gaseous Pollutants - Sulfur Dioxide (6/8/99)	<u>Y</u>
BAAQMD Regulation 11, Rule 2	Hazardous Pollutants - Asbestos Demolition, Renovation and Manufacturing (4/2/4/94 10/7/98)	Y N
BAAQMD Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (7/11/90)	Y N
SIP Regulation 12, Rule 4	Miscellaneous Standards of Performance - Sandblasting (9/2/81)	<u>Y</u>
California Health and Safety Code Section 41750 et seq.	Portable Equipment	<u>N</u>
California Health and Safety Code Section 44300 et seq.	Air Toxics “Hot Spots” Information and Assessment Act of 1987	N
California Health and Safety Code, Title 17, Section 93115	Airborne Toxic Control Measure for Stationary Compression Ignition Engines	<u>N</u>
California Health and Safety Code, Title 17, Section 93116	Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater	<u>N</u>
California Health and Safety Code Title 17, Subchapter 10, Article 2, Sections 95100 through 95109	Mandatory Greenhouse Gas Emissions Reporting	<u>N</u>
40 CFR Part 61, Subpart M	National Emission Standards for Hazardous Air Pollutants – National Emission Standard for Asbestos (6/19/95)	<u>Y</u>

IV. SOURCE-SPECIFIC APPLICABLE REQUIREMENTS

The permit holder shall comply with all applicable requirements, including those specified in the BAAQMD and SIP Rules and Regulations and other federal requirements cited below. The requirements cited in the following tables apply in a specific manner to the indicated source(s).

The dates in parentheses in the Title column identify the versions of the regulations being cited and are, as applicable:

1. ~~For~~ BAAQMD regulation(s): The date(s) of adoption or most recent amendment of the regulation by the District Board of Directors
2. ~~For A~~ny federal requirement, including a version of a District regulation that has been approved into the SIP: The most recent date of EPA approval of any portion of the rule, encompassing all actions on the rule through that date

~~The full text of each permit condition cited is included in Section VI, Permit Conditions, of this permit.~~ The full language of SIP requirements is on EPA Region 9’s website. The address is:

~~<http://yosemite.epa.gov/r9/r9sips.nsf/Agency?ReadForm&count=500&state=California&cat=Bay+Area+Air+Quality+Management+District-Agency-Wide+Provisions>~~ ~~included~~ ~~at the end of this permit.~~ All other text may be found in the regulations themselves.

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (5/17/007/9/08)		
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>NY</u>	before performance test and not later than 6/27/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	<u>NY</u>	before performance test and not later than 6/27/02

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
1-523.2	Limit on duration of inoperation	<u>NY</u>	before performance test and not later than 6/27/02
1-523.3	Reporting requirement for violations of any applicable limits	N	before performance test and not later than 6/27/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	<u>NY</u>	before performance test and not later than 6/27/02
<u>1-523.5</u>	<u>Maintenance and calibration of monitors</u>	<u>N</u>	
<u>SIP Regulation 1</u>	<u>General Provisions and Definitions (6/28/99)</u>		
<u>1-523</u>	<u>Parametric Monitoring and Recordkeeping Procedures</u>	<u>Y</u>	
<u>1-523.3</u>	<u>Reporting requirement for violations of any applicable limits</u>	<u>Y</u>	
BAAQMD Regulation 6, Rule 1	Particulate Matter – General Requirements and Visible Emissions (12/19/90)(2/5/07)		
6-1-301	Ringelmann No. 1 Limitation	<u>YN</u>	
6-1-305	Visible Particles	<u>NY</u>	
6-1-310	Particle Weight Limitation	<u>NY</u>	
6-1-401	Appearance of Emissions	<u>NY</u>	
<u>SIP Regulation 6</u>	<u>Particulate Matter and Visible Emissions (12/19/90)</u>		
<u>6-301</u>	<u>Ringelmann No. 1 Limitation</u>	<u>Y</u>	
<u>6-305</u>	<u>Visible Particles</u>	<u>Y</u>	
<u>6-310</u>	<u>Particle Weight Limitation</u>	<u>Y</u>	
<u>6-401</u>	<u>Appearance of Emissions</u>	<u>Y</u>	

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/996/15/05)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y	Expires 7/1/02 (exp. date not in SIP)
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	10/1/02
8-34-413	Performance Test Report	Y	1/1/03
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	
8-34-501.6	Leak Discovery and Repair Records (Permit holder is responsible only for collection system components that are owned by the permit holder)	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Key emission control system operating parameters	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing (Permit holder is responsible only for collection system components that are owned by the permit holder)	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorder	Y	7/1/02
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key Emission Control System Operating Parameter(s)	Y	

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
SIP			
Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (6/15/94)		
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	—Emission Minimization Requirement	Y	
8-34-113.2	—Shutdown Time Limitation	Y ⁺	
8-34-113.3	—Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y ⁺	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	—Collection and Control Systems Leak Limitations	Y	
8-34-301.4	—Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	—Emission Control System Downtime	Y	
8-34-501.4	—Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	—Records Retention	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing —(Permit holder is responsible only for collection system components that are owned by the permit holder)	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD			
Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	
9-1-302	General Emission Limitations	Y	
BAAQMD			
Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD			
Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (4/20/93 /25/07)		
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-8-302.2	Rich-Burn Engines: NOx Emission Limit <u>210 ppmv corrected to 15% oxygen, dry basis</u>	Y	
	Rich-Burn Engines: NOx Emission Limit <u>70 ppmv corrected to 15% oxygen, dry basis</u>	N	<u>1/1/2012</u>
9-8-302.3	CO Emission Limit <u>2000 ppmv corrected to 15% oxygen, dry basis</u>	Y	
<u>9-8-401</u>	<u>Compliance Schedule</u>	<u>N</u>	
<u>9-8-501</u>	<u>Initial Demonstration of Compliance</u>	<u>N</u>	
<u>9-8-502</u>	<u>Recordkeeping</u>	<u>N</u>	
<u>9-8-502.3</u>	<u>Compliance Demonstration Records</u>	<u>N</u>	
<u>9-8-503</u>	<u>Quarterly Demonstration of Compliance</u>	<u>N</u>	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
<u>60.4(b)</u>	<u>Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator</u>	<u>Y</u>	
<u>60.7</u>	<u>Notification and Record Keeping</u>	<u>Y</u>	
<u>60.8</u>	<u>Performance Tests</u>	<u>Y</u>	
<u>60.11</u>	<u>Compliance with Standards and Maintenance Requirements</u>	<u>Y</u>	
<u>60.11(a)</u>	<u>Compliance determined by performance tests</u>	<u>Y</u>	
<u>60.11(d)</u>	<u>Good air pollution control practice</u>	<u>Y</u>	
<u>60.12</u>	<u>Circumvention</u>	<u>Y</u>	
<u>60.13</u>	<u>Monitoring Requirements</u>	<u>Y</u>	
<u>60.13(a)</u>	<u>Applies to all continuous monitoring systems</u>	<u>Y</u>	
<u>60.13(b)</u>	<u>Monitors shall be installed and operation before performing performance tests</u>	<u>Y</u>	
<u>60.13(e)</u>	<u>Continuous monitors shall operate continuously</u>	<u>Y</u>	
<u>60.13(f)</u>	<u>Monitors shall be installed in proper locations</u>	<u>Y</u>	
<u>60.13(g)</u>	<u>Requires multiple monitors for multiple stacks</u>	<u>Y</u>	
<u>60.14</u>	<u>Modification</u>	<u>Y</u>	
<u>60.15</u>	<u>Reconstruction</u>	<u>Y</u>	
<u>60.19</u>	<u>General Notification and Reporting Requirements</u>	<u>Y</u>	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O ₂ , dry basis	Y	2/12/02
60.752 (b)(2)(iv)	Operate in accordance with 60.753(e), 60.753(f), 60.755(e), and 60.756(b)	Y	2/12/02
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii) (The permit holder is responsible only for gases routed to its collection and control equipment)	Y	2/12/02
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	2/12/02
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems (The permit holder is responsible only for its collection and control equipment)	Y	2/12/02
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder	Y	before performance test and not later than 6/27/02
60.756(b)(2)	Device that records flow to or bypass of the control device	Y	2/12/02
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	8/11/02
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	8/11/02
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	8/11/02
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	8/11/02
60.758(b)	Control Equipment Records	Y	
60.758(b)(2)	Performance test data for enclosed combustors other than boilers or process heaters (greater than 44 MW heat input)		
60.758(e)	Records of parameters monitored pursuant to 60.756(b) or (e)	Y	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	

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IV. Source-Specific Applicable Requirements

Table IV – A
Source-Specific Applicable Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 750 HP EACH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 17777			
Part 1	Exclusively on landfill gas Fuel Restrictions (Plant Cumulative Increase)	Y	
Part 3	NO2 from each engine ≤ 210 ppmv, dry @ 15% O2 Exhaust Gas NO_x Concentration Limit (BACT and Regulation 9-8-302.2)	Y	
Part 4	Exhaust Gas CO Concentration Limit from each engine ≤ 740 ppmv, dry @ 15% O2 (BACT and Plant Cumulative Increase)	Y	
Part 7 a-f	Annual source test (Regulations 8-34-114, 8-34-301.4, 8-34-412, 8-34-509 , 9-8-302.1, 9-8-302.2, and 9-8-302.3, 40 CFR 60.752(b)(2)(iii)(B) , BACT, and Plant Cumulative Increase)	Y	
Part 8	Total reduced sulfur compounds of the collected landfill gas ≤ 1300 ppmv (dry) Landfill Gas Sulfur Content Limit and Monitoring Requirements (Regulation 9-1-302)	Y	
Part 9	Annual throughput limit (Regulation 2-1-301)	Y	
Part 10 a-eg	Recordkeeping for throughput limit <u>and destruction efficiency</u> (Regulation 2-1-301)	Y	
Part 11	Information for design plans and annual reports (Regulation 1-441)	Y	
<u>Part 12 a-b</u>	<u>CO and exhaust oxygen mMonitoring rRequirements for Exhaust Gas CO and O₂ Concentrations Using Portable Analyzers (Regulations 2-6-501, 8-34-301.4, 8-34-501.4, 8-34-509)</u>	<u>Y</u>	

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~~†This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.~~

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 1	General Provisions and Definitions (7/9/085/17/00)		
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>NY</u>	before performance test and not later than 6/27/02
1-523.1	Reporting requirement for periods of inoperation > 24 hours	<u>NY</u>	before performance test and not later than 6/27/02
1-523.2	Limit on duration of inoperation	<u>NY</u>	before performance test and not later than 6/27/02
1-523.3	Reporting requirement for violations of any applicable limits	N	before performance test and not later than 6/27/02
1-523.4	Records of inoperation, tests, calibrations, adjustments, & maintenance	<u>NY</u>	before performance test and not later than 6/27/02
1-523.5	Maintenance and calibration of monitors	<u>N</u>	
SIP Regulation 1	General Provisions and Definitions (6/28/99)		
1-523	Parametric Monitoring and Recordkeeping Procedures	<u>Y</u>	
1-523.3	Reporting requirement for violations of any applicable limits	<u>Y</u>	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 6, Rule 1	Particulate Matter and Visible Emissions- General Requirements (12/19/90/12/5/07)		
6-1-301	Ringelmann No. 1 Limitation	Y N	
6-1-305	Visible Particles	N Y	
6-1-310	Particle Weight Limitation	N Y	
6-1-401	Appearance of Emissions	N Y	
SIP Regulation 6	Particulate Matter and Visible Emissions (12/19/90)		
6-301	Ringelmann No. 1 Limitation	Y	
6-305	Visible Particles	Y	
6-310	Particle Weight Limitation	Y	
6-401	Appearance of Emissions	Y	
BAAQMD Regulation 8, Rule 34	Organic Compounds - Solid Waste Disposal Sites (10/6/996/15/05)		
8-34-113	Limited Exemption, Inspection and Maintenance	Y	
8-34-113.1	Emission Minimization Requirement	Y	
8-34-113.2	Shutdown Time Limitation	Y	
8-34-113.3	Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y	Expires 7/1/02 (exp. date not in SIP)
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	Continuous Operation	Y	
8-34-301.2	Collection and Control Systems Leak Limitations	Y	
8-34-301.4b	Limits for Other Emission Control Systems	Y	7/1/02
8-34-412	Compliance Demonstration Tests	Y	10/1/02
8-34-413	Performance Test Report	Y	1/1/03
8-34-501	Operating Records	Y	
8-34-501.2	Emission Control System Downtime	Y	
8-34-501.3	Continuous Temperature Records for Enclosed Combustors	Y	7/1/02
8-34-501.4	Testing	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
8-34-501.6	Leak Discovery and Repair Records (Permit holder is responsible only for collection system components that are owned by the permit holder)	Y	
8-34-501.10	Gas Flow Rate Records for All Emission Control Systems	Y	7/1/02
8-34-501.11	Key emission control system operating parameters	Y	
8-34-501.12	Records Retention for 5 Years	Y	
8-34-503	Landfill Gas Collection and Emission Control System Leak Testing (Permit holder is responsible only for collection system components that are owned by the permit holder)	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
8-34-507	Continuous Temperature Monitor and Recorded	Y	7/1/02
8-34-508	Gas Flow Meter	Y	7/1/02
8-34-509	Key Emission Control System Operating Parameter(s)	Y	
SIP			
Regulation 8, Rule 34	Organic Compounds – Solid Waste Disposal Sites (6/15/94)		
8-34-113	Exemption, Inspection and Maintenance	Y	
8-34-113.1	—Emission Minimization Requirement	Y	
8-34-113.2	—Shutdown Time Limitation	Y⁺	
8-34-113.3	—Recordkeeping Requirement	Y	
8-34-114	Limited Exemption, Energy Recovery Device and Emission Control System	Y⁺	
8-34-301	Landfill Gas Collection and Emission Control System Requirements	Y	
8-34-301.1	—Collection and Control Systems Leak Limitations	Y	
8-34-301.4	—Continuous Operation	Y	
8-34-501	Operating Records	Y	
8-34-501.2	—Emission Control System Downtime	Y	
8-34-501.4	—Records of Testing for Compliance with 8-34-111.3 or 301	Y	
8-34-501.6	—Records Retention	Y	
8-34-503	Landfill Gas Collection System Testing	Y	
8-34-504	Portable Hydrocarbon Detector	Y	
BAAQMD			
Regulation 9, Rule 1	Inorganic Gaseous Pollutants – Sulfur Dioxide (3/15/95)		
9-1-301	Limitations on Ground Level Concentrations	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
9-1-302	General Emission Limitations	Y	
BAAQMD Regulation 9, Rule 2	Inorganic Gaseous Pollutants – Hydrogen Sulfide (10/6/99)		
9-2-301	Limitations on Hydrogen Sulfide	N	
BAAQMD Regulation 9 Rule 8	Inorganic Gaseous Pollutants – Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines (<u>1/20/937/25/07</u>)		
9-8-302	Emission Limits – Waste Derived Fuel Gas	Y	
9-8-302.1	Lean-Burn Engines: NOx Emission Limit <u>140 ppmv corrected to 15% oxygen, dry basis</u>	Y	
<u>9-8-302.1</u>	<u>Lean Burn Engines: NOx Emission Limit 70 ppmv corrected to 15% oxygen, dry basis</u>	N	<u>1/1/2012</u>
9-8-302.3	CO Emission Limit <u>2000 ppmv corrected to 15% oxygen, dry basis</u>	Y	
<u>9-8-401</u>	<u>Compliance Schedule</u>	N	
<u>9-8-501</u>	<u>Initial Demonstration of Compliance</u>	N	
<u>9-8-502</u>	<u>Recordkeeping</u>	N	
<u>9-8-502.3</u>	<u>Compliance Demonstration Records</u>	N	
<u>9-8-503</u>	<u>Quarterly Demonstration of Compliance</u>	N	
40 CFR Part 60, Subpart A	Standards of Performance for New Stationary Sources – General Provisions (5/4/98)		
60.4(b)	Requires Submission of Requests, Reports, Applications, and Other Correspondence to the Administrator	Y	
60.7	Notification and Record Keeping	Y	
60.8	Performance Tests	Y	
60.14	Compliance with Standards and Maintenance Requirements	Y	
60.11(a)	Compliance determined by performance tests	Y	
60.11(d)	Good air pollution control practice	Y	
60.12	Circumvention	Y	
60.13	Monitoring Requirements	Y	
60.13(a)	Applies to all continuous monitoring systems	Y	
60.13(b)	Monitors shall be installed and operation before performing performance tests	Y	

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.13(e)	Continuous monitors shall operate continuously	Y	
60.13(f)	Monitors shall be installed in proper locations	Y	
60.13(g)	Requires multiple monitors for multiple stacks	Y	
60.14	Modification	Y	
60.15	Reconstruction	Y	
60.19	General Notification and Reporting Requirements	Y	
40 CFR Part 60, Subpart WWW	Standards of Performance for New Stationary Sources – Standards of Performance for Municipal Solid Waste Landfills (2/24/99)		
60.752 (b)(2)(iii)(B)	Reduce NMOC emissions by 98% by weight or reduce NMOC outlet concentration to less than 20 ppmv as hexane at 3% O ₂ , dry basis	Y	2/12/02
60.752 (b)(2)(iv)	Operate in accordance with 60.753(e), 60.753(f), 60.755(e), and 60.756(b)	Y	2/12/02
60.753(e)	Vent all collected gases to a control system complying with 60.752(b)(2)(iii) (The permit holder is responsible only for gases routed to its collection and control equipment)	Y	2/12/02
60.753(f)	Operate the control system at all times when collected gas is routed to the control system	Y	2/12/02
60.754(d)	Test Methods for Performance Test (Method 18 or 25C)	Y	
60.755(e)	Provisions apply at all times except during startup, shutdown, or malfunction, provided the duration of these shall not exceed 5 days for collection systems or 1 hour for control systems (The permit holder is responsible only for its collection and control equipment)	Y	2/12/02
60.756(b)	Enclosed combustors shall comply with (b)(1) and (b)(2)	Y	
60.756(b)(1)	Temperature monitor and continuous recorder	Y	before performance test and not later than 6/27/02
60.756(b)(2)	Device that records flow to or bypass of the control device	Y	2/12/02
60.757(f)	Submit Annual Reports containing information required by (f)(1), (f)(2), and (f)(3)	Y	8/11/02
60.757(f)(1)	Value and length of time for exceedance of parameters monitored per 60.756(b) or (e)	Y	8/11/02

IV. Source-Specific Applicable Requirements

Table IV – B
Source-Specific Applicable Requirements
S-5 INTERNAL COMBUSTION ENGINES, LANDFILL GAS FIRED, 1547 HP

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
60.757(f)(2)	Description and duration of all periods when gas is diverted from the control device by a by-pass line	Y	8/11/02
60.757(f)(3)	Description and duration of all periods when control device was not operating for more than 1 hour	Y	8/11/02
60.758(b)	Control Equipment Records	Y	
60.758(b)(2)	Performance test data for enclosed combustors other than boilers or process heaters (greater than 44 MW heat input)		
60.758(e)	Records of parameters monitored pursuant to 60.756(b) or (e)	Y	
60.758(e)	Records of any exceedance of 60.753(e) or (f)	Y	
BAAQMD Condition # 17777			
Part 1	Exclusively on landfill gas Fuel Restrictions (Plant Cumulative Increase)	Y	
Part 2	S-5 should be given priority over all other engines Engine Operating Priorities (S-2, S-3 and S-4) (Plant Cumulative Increase)		
Part 5	NO₂ ≤ 130 ppmv, dry @ 15% O₂ Exhaust Gas NO_x Concentration Limit (BACT)	Y	
Part 6	CO ≤ 260 ppmv, dry @ 15% O₂ Exhaust Gas CO Concentration Limit (BACT and Plant Cumulative Increase)	Y	
Part 7 a-f	Annual source test (Regulations 8-34-114, 8-34-301.4, 8-34-412, 8-34-509 , 9-8-302.1, 9-8-302.2, and 9-8-302.3, 40 CFR 60.752(b)(2)(iii)(B) , BACT, and Plant Cumulative Increase)	Y	
Part 8	Total reduced sulfur compounds of the collected landfill gas ≤ 1300 ppmv (dry) Landfill Gas Sulfur Content Limits and Monitoring Requirements (Regulation 9-1-302)	Y	
Part 9	Annual throughput limit (Regulation 2-1-301)	Y	
Part 10 a-g	Recordkeeping for throughput limit and destruction efficiency (Regulation 2-1-301)	Y	
Part 11	Information for design plans and annual reports (Regulation 1-441)	Y	
Part 12	CO and exhaust oxygen mMonitoring rRequirements for Exhaust Gas CO and O₂ Concentrations Using Portable Analyzers (Regulations 2-6-501, 8-34-301.4, 8-34-501.4, 8-34-509)	Y	

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IV. Source-Specific Applicable Requirements

~~This section has been removed from BAAQMD Regulations because it has been superseded. Nevertheless, the source must comply with this regulation until US EPA has reviewed and approved (or disapproved) the District's revision of the regulation.~~

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Table IV
Source-Specific Applicable Requirements
S-7 – LANDFILL GAS CONDENSATE STORAGE TANK, 6500 GALLONS

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Regulation 8, Rule 2	Organic Compounds – Miscellaneous Operations (6/15/94/20/05)		
8-2-301	Miscellaneous Operations	Y	
BAAQMD Condition # 18306			
Part 1	Annual condensate throughput limit (Cumulative Increase)	Y	
Part 2	Restriction on materials stored in S-7 (Cumulative Increase)	Y	
Part 3	Limit on toxic compound emissions (Toxic Risk Management Policy Regulation 2-5-110)	Y N	
Part 4	Record keeping requirements (Cumulative Increase and Regulation 2-6-501)	Y	

Facility Name: Gas Recovery Systems, Inc.
Permit for Facility #: B1669

V. SCHEDULE OF COMPLIANCE

The permit holder shall comply with all applicable requirements cited in this permit. The permit holder shall also comply on a timely basis with applicable requirements that become effective during the term of this permit ~~on a timely basis~~.

VI. PERMIT CONDITIONS

Any condition that is preceded by an asterisk (*) is not federally enforceable.

~~The District has provided comments in italicized text following each condition number. These comments describe the rationale behind the proposed condition changes identified in this section by strikeout and underline formatting. All italicized text will be deleted from the final permit conditions.~~

Condition # 17777

For S-2, S-3, S-4, S-5, Internal Combustion Engines, Landfill Gas Fired

1. The Permit Holder shall ensure that the Internal Combustion Engines (S-2, S-3, S-4, and S-5) ~~shall be~~ fired on landfill gas exclusively. (Basis: Plant Cumulative Increase)
2. The Permit Holder shall ensure that the operation of S-5 Waukesha Internal Combustion Engine ~~shall be~~ given priority over all other engines (S-2, S-3 and S-4) at all times that a sufficient quantity of landfill gas exists to operate S-5. (Basis: Plant Cumulative Increase)
3. The Permit Holder shall ensure that the Nitrogen Oxide (NO_x) emissions; from each Internal Combustion Engine (S-2, S-3 and S-4) ~~shall do~~ not exceed 210 ppmv, dry basis, corrected to 15% O₂. (Basis: BACT and Regulation 9-8-302.2)
4. The Permit Holder shall ensure that the Carbon Monoxide (CO) emissions from each Internal Combustion Engine (S-2, S-3 and S-4) ~~shall do~~ not exceed 740 ppmv, dry basis, corrected to 15% O₂. (Basis: BACT and Plant Cumulative Increase)
5. The Permit Holder shall ensure that the Nitrogen Oxide (NO_x) emissions; from S-5 ~~shall do~~ not exceed 130 ppmv, dry basis, corrected to 15% O₂. (Basis: BACT)
6. The Permit Holder shall ensure that the Carbon Monoxide (CO) emissions from S-5 ~~shall do~~ not exceed 260 ppmv, dry basis, corrected to 15% O₂. (Basis: BACT and Plant Cumulative Increase)
7. In order to demonstrate compliance with Parts #3, #4, #5 and #6 above; Regulation 8, Rule 34, Sections ~~14~~, 301.4, and 412; Regulation 9, Rule 8, Sections 302.1, 302.2, and 302.3; ~~and 40 CFR 60.752(b)(2)(iii)(B)~~; the Permit Holder shall ensure that a District approved source test is conducted annually on each Internal Combustion Engine (S-2, S-3, S-4, and S-5). The annual source tests shall determine the following:
 - a. landfill gas flow rate to each engine (dry basis);

VI. Permit Conditions

Condition # 17777

For S-2, S-3, S-4, S-5, Internal Combustion Engines, Landfill Gas Fired

- b. concentrations (dry basis) of carbon dioxide (CO₂), nitrogen (N₂), oxygen (O₂), methane (CH₄), ~~and total non-methane organic compounds (NMOC), and total hydrocarbons (THC)~~ in the landfill gas;
- c. exhaust gas flow rate from each engine (dry basis);
- d. concentrations (dry basis) of NO_x, CO, CH₄, NMOC, ~~THC~~, and O₂ in the exhaust gas from each engine;
- e. the CH₄, ~~and NMOC, and THC~~ destruction efficiencies achieved by each engine; and

~~f. the combustion temperature of each engine during the test period.~~

~~The first annual source test for each engine shall be conducted by no later than June 27, 2002 or no later than 12 months after the issue date of the MFR Permit, whichever date occurs first. Subsequent source tests for each engine shall be conducted no sooner than 9 months and no later than 12 months after the previous source test. The Permit Holder shall contact the District's Source Test Section of the District shall be contacted to obtain their approval of the source test procedures at least 14 days in advance of each source test and. They shall be notified the Source Test Section of the scheduled test date at least 7 days in advance of each source test. The source test report shall be submitted to the District's Compliance and Enforcement Division within 45 days of the test date. (Basis: BACT or Plant Cumulative Increase, Regulations 8-34-114, 8-34-301.4, 8-34-412, 9-8-302.1, 9-8-302.2, 9-8-302.3, and 40 CFR 60.752(b)(2)(iii)(B))~~

- 8. ~~The Permit Holder shall monitor Total reduced sulfur compounds in the collected landfill gas shall be monitored~~ as a surrogate for monitoring sulfur dioxide in the exhaust from the Internal Combustion Engines. The concentration of total reduced sulfur compounds in the collected landfill gas shall not exceed 1300 ppmv (dry), reported as hydrogen sulfide (H₂S). In order to demonstrate compliance with this Part, the Permit Holder shall measure the total sulfur content in collected landfill gas on a ~~weekly~~ quarterly basis using a draeger tube. The landfill gas sample shall be taken from the main landfill gas header. The Permit Holder shall follow the manufacturer's recommended procedures for using the draeger tube and interpreting the results. ~~The Permit Holder shall conduct the first draeger tube test no later than 3 months after the issue date of the MFR Permit and weekly thereafter. After collecting three months of landfill gas sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a monthly basis, if all tests indicate compliance with the limit specified above. After collecting one year of sulfur content data, the Permit Holder may reduce the sulfur content testing frequency to a quarterly basis, if all tests indicate compliance with the limit specified above.~~ (Basis: Regulation 9-1-302)

VI. Permit Conditions

Condition # 17777

For S-2, S-3, S-4, S-5, Internal Combustion Engines, Landfill Gas Fired

9. The Permit Holder shall ensure that the heat input to each Internal Combustion Engine (S-2, S-3 or S-4) ~~shall does~~ not exceed 162 million BTU during any one day. The Permit Holder shall ensure that the heat input to S-5 ~~shall does~~ not exceed 324 million BTU during any one day. The Permit Holder shall ensure that the combined heat input to the four Internal Combustion Engines (S-2, S-3, S-4, and S-5) ~~shall does~~ not exceed 295,650 million BTU during any rolling consecutive 12-month period. (Basis: Regulation 2-1-301)

10. In order to demonstrate compliance with Parts 8 and 9 ~~above~~, the Permit Holder shall maintain the following records in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made. (Basis: Regulations 2-1-301 and 2-6-501)

- a. Daily records of operating hours for each engine (S-2, S-3, S-4, and S-5), summarized on a monthly basis,
- b. Monthly records of the ~~consumption of landfill gas~~ amount sold of energy produced at S-5 and monthly records of the ~~combined consumption of landfill gas~~ amount of sold energy produced at S-2, S-3 and S-4 (kW-hr/kwh/month),
- c. Monthly records of the average methane content of the landfill gas burned in the engines (S-2, S-3, S-4, and S-5), ~~Deleted~~
- d. Monthly records of the average high heat value of the landfill gas calculated by ~~multiplying the methane content recorded pursuant to subpart c times the high heat value of methane (1013 BTU/sef), and Deleted~~
- e. Monthly records of the heat input to S-5 and monthly records of the combined heat input to S-2, S-3 and S-4, calculated ~~by multiplying the landfill gas consumption recorded pursuant to subpart b times the average high heat value of the landfill gas determined pursuant to subpart d as the kW-hr/kwh/month produced (from part b)-, adjusted for 5% losses and multiplied by the 13,320 Btu/kwh-BTU/kW-hr for S-2, S-3, and S-4 and adjusted for 10% losses and multiplied by 12,210 Btu/kwh-BTU/kW-hr for S-5.~~

~~e.f. Records of the date and the measured H₂S concentration for all landfill gas sulfur content analyses.~~

~~Both these records and records of H₂S data shall be kept on site and made available for District inspection for a period of at least five years from the date on which a record is made. (Basis: Regulations 2-1-301 and 2-6-501)~~

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VI. Permit Conditions

Condition # 17777

For S-2, S-3, S-4, S-5, Internal Combustion Engines, Landfill Gas Fired

11. The ~~p~~Permit ~~h~~Holder shall supply any information required by BAAQMD Regulation ~~8-34-408~~, 8-34-411, EPA Regulations 40 CFR 60.757(c), 40 CFR 60.757(f)(1), (2), and (3) to the permit holder of the Guadalupe Mines Road Landfill and to the District within 30 days of a request from said landfill or the District. (Basis: Regulation 1-441)

12. In order to demonstrate compliance with the NMOC emission limits in Regulation 8-34-301.4, the Permit Holder shall measure and record the following for each engine (S-2, S-3, S-4, S-5):

- a. Exhaust gas oxygen content: Weekly CO and oxygen content measurements shall be made with a LAND Instruments Lancom III portable flue gas analyzer or District-approved equivalent. If this device is not the same device used to measure exhaust CO and oxygen during the most recent annual performance test required by Part 7 above, it shall be calibrated to achieve a one to one correlation to the device used in the performance test. If the same device is used during the annual performance test and for this monitoring, its calibration shall be maintained to achieve a one to one correlation with its condition at the time of the performance test.
- b. Reportable exceedances: A CO concentration level, corrected to 15% O₂, dry, in excess of the limit in Part 3 shall be considered a reportable CO exceedance and also a violation of Regulation 8-34-301.4 and shall be included in the semi-annual monitoring report required by Section I.F. of this permit.
- c. Corrections: Exceedance of the CO concentration limit in Part 4 shall be corrected upon discovery through adjustment of the engine.
- d. Monitoring frequency: If the measured CO concentration, corrected to 15% O₂, dry, is 80% of the limit in Part 4, or less, then the CO and oxygen measurements in Part 12a may be performed on a calendar month basis, instead of a weekly basis. The interval between required monthly monitoring events shall be at least 15 days. In the event of a reportable exceedance, the CO and oxygen content monitoring frequency shall return to weekly monitoring

All calibration and monitoring records shall be maintained onsite or shall be made readily available to District staff upon request for at least 5 years from the date of entry. (Basis: Regulations 2-6-501, 8-34-301.4, 8-34-501.4, 8-34-509)

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VI. Permit Conditions

Condition # 18306

For S-7, Landfill Gas Condensate Storage Tank

1. ~~The Permit Holder shall ensure that the Total~~ throughput of landfill gas condensate at Landfill Gas Condensate Storage Tank (S-7) ~~shall does~~ not exceed 90,000 gallons during any consecutive 12-month period. (Basis: Cumulative Increase)
2. ~~The Permit Holder shall ensure that Only~~ landfill gas condensate ~~shall be is~~ stored in tank S-7. (Basis: Cumulative Increase)
- *3. The ~~Permit Holder shall ensure that~~ storage of landfill gas condensate at S-7 ~~shall does~~ not result in emissions exceeding any risk screening trigger level, as specified in Table ~~2-1-3162-5-1~~ of Regulation 2, Rule ~~4.5~~. (Basis: ~~Toxic Risk Management Policy Regulation 2-5-110~~)
4. To demonstrate compliance with above conditions, ~~the Permit Holder shall record the~~ type of liquid stored and the monthly throughput ~~for S-7 shall be maintained~~ in a District approved log. These records shall be kept on site and made available for District inspection for a period of at least 5 years from the date on which a record is made. ~~(Basis: Cumulative Increase and Regulation 2-6-501) All records shall be retained on site for a period of 5 years from the date of entry and made available for inspection by District staff upon request.~~ These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations. ~~(Basis: Cumulative Increase and Regulation 2-6-501)~~

VII. APPLICABLE LIMITS AND COMPLIANCE MONITORING REQUIREMENTS

This section has been included only to summarize the applicable emission limits contained in Section IV, Source-Specific Applicable Requirements, of this permit. The following tables show the relationship between each emission limit and the associated compliance monitoring provisions, if any. The monitoring frequency column indicates whether periodic (P) or continuous (C) monitoring is required. For periodic monitoring, the frequency of the monitoring has also been shown using the following codes: annual (A), quarterly (Q), monthly (M), weekly (W), daily (D), or on an event basis (E). No monitoring (N) has been required if the current applicable rule or regulation does not require monitoring, and the operation is unlikely to deviate from the applicable emission limit based upon the nature of the operation.

This section is only a summary of the limits and monitoring requirements. In the case of a conflict with any requirement in Sections I-VI and Section VII, the preceding sections take precedence over Section VII.

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	Y N		Ringelmann No. 1 for < 3 minutes in any hour	NA	N	none
FP	BAAQMD 6-1-310	Y N		≤ 0.15 grains/dscf	NA	N	none
<u>Opacity</u>	<u>SIP 6-301</u>	<u>Y</u>		<u>Ringelmann No. 1</u> <u>for < 3 minutes in any hour</u>	<u>NA</u>	<u>N</u>	<u>none</u>
<u>FP</u>	<u>SIP 6-310</u>	<u>Y</u>		<u>≤ 0.15 grains/dscf</u>	<u>NA</u>	<u>N</u>	<u>none</u>
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		≤ 1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 8-34-503	P/Q	Quarterly Inspection and Records
<u>TOC</u>	<u>SIP 8-34-301.2</u>	<u>Y</u>		<u>1000 ppmv as methane (component leak limit)</u>	<u>SIP 8-34-503</u>	<u>P/Q</u>	<u>Quarterly Inspection</u>

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
TOC	BAAQMD 8-34-114	Y	Expires 7/1/02	90% removal by weight	BAAQMD Condition # 17777, Part 7e	P/A	Annual Source Test
TOC	SIP 8-34-114	Y		90% removal by weight	BAAQMD Condition # 17777, Part 7e	P/A	Annual Source Test
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4b	Y	7/1/02	≥ 98% removal by weight OR < 120 ppmv dry @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17777, Parts 7d-e, and 12	P/A and P/W or M	Annual Source Tests and Exhaust Gas Testing with Portable Analyzers and Records
NMOC	40 CFR 60.752(b) (2)(iii)(B)	Y	2/12/02	98% removal by weight OR < 20 ppmv dry @ 3% O ₂ , expressed as hexane	40 CFR 60.8 and 60.752(b) (2)(iii)(B) and 60.758(b)(2)	P/A	Initial Source Test and Records
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes, and ≤ 0.05 ppm for 24 hours	NA	N	none

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry)	BAAQMD Condition # 17777, Parts 8 and 9	P/W, M, or Q (Monthly if 3 months data < 1300 ppm; Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of <u>H</u> andfill <u>g</u> Gas only and Records
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes	NA	N	none
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 17777, Part 8	Y		≤ 1300 ppmv (dry)	BAAQMD Condition # 17777, Parts 8 and 9	P/W, M, or Q (Monthly if 3 months data < 1300 ppmv (dry); Quarterly if 1 year of data < 1300 ppmv (dry))	Sulfur Analysis of <u>H</u> andfill <u>g</u> Gas only and Records
NO _x	BAAQMD 9-8-302.2 and BAAQMD Condition # 17777, Part 3	Y		Waste Fuel Gas, Rich-Burn ≤ 210 ppmv dry, expressed as NO _x , corrected to 15% O₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Part 7d	P/Q and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD 9-8-302.2	N	1/1/12	Waste Fuel Gas, Rich-Burn < 70 ppmv dry, expressed as NO _x , at corrected to 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Part 7d	P/Q and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: < 2000 ppmv dry, at corrected to 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Parts 7d and 12	P/Q/M or W and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
CO	BAAQMD Condition # 17777, Part 4	Y		< 740 ppmv dry, corrected to at 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 And BAAQMD Condition # 17777, Parts 7d and 12	P/Q/M or W and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	Y		< 240 hours/year	BAAQMD 8-34-501.2	P/D	Records

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Emission Control System Shutdown Time	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.2	P/D	Records
Emission Control System Startup Shutdown or Malfunction	40-CFR 60.755(e)	Y	2/12/02	≤ 1 hour per event	40-CFR 60.7(b); 60.757(f)(2) and (f)(3); and 60.758(e)	P/D	Records of occurrence and duration
Temperature of Combustion Zone		Y	7/1/02	Temperature limit will be established during performance test	BAAQMD 8-34-501.3 and 8-34-507 (effective 7/1/02)	C	Temperature sensor and continuous recorder; effective 7/1/02
Combustion Temperature	40-CFR 60.758(e) (1)(i)	Y	8/11/02	3-Hour Average Temperature No Less Than 28 °C below Average Temperature Recorded During Most Recent Complying Performance Test	60-CFR 60.756(b)(1) and 60.758(e)	C	Temperature sensor and continuous recorder; effective before performance test and not later than 6/27/02

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.1;	Y	7/1/02	Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301 and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	SIP 8-34-501.1	P/D	Operating Records
Gas Flow	40 CFR 60.753(a) and (e)	Y	2/12/02	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(e)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	before performance test and not later than 6/27/02	≤ 15 consecutive days/ per incident and ≤ 30 calendar days/ per 12 month period	BAAQMD 1-523.4	P/D	Records of occurrence and duration

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – A
Applicable Limits and Compliance Monitoring Requirements
S-2, S-3 & S-4 INTERNAL COMBUSTION ENGINES, RICH-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Continuous Monitors	40 CFR 60.13(e)	Y	before performance test and not later than 6/27/02	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Records of occurrence and duration
Heat Input	BAAQMD Condition # 17777, Part 9	Y		≤ 162 MM BTU/day/engine and ≤ 177,390 MM BTU per 12-month period for all 3 engines combined	BAAQMD Condition # 17777, Part 10a-e	P/D and P/M	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Opacity	BAAQMD 6-1-301	Y N		Ringelmann No. 1 for < 3 minutes in any hour	NA	N	none
FP	BAAQMD 6-1-310	Y N		≤ 0.15 grains/dscf	NA	N	none
Opacity	SIP 6-301	Y		Ringelmann No. 1 for < 3 minutes in any hour	NA	N	none
FP	SIP 6-310	Y		≤ 0.15 grains/dscf	NA	N	none
TOC (Total Organic Compounds Plus Methane)	BAAQMD 8-34-301.2	Y		≤ 1000 ppmv as methane (component leak limit)	BAAQMD 8-34-501.6 and 8-34-503	P/Q	Quarterly Inspection and Records
TOC	SIP 8-34-301.1	Y		1000 ppmv as methane (component leak limit)	SIP 8-34-503	P/Q	Quarterly Inspection
TOC	BAAQMD 8-34-114	Y	Expires 7/1/02	90% removal by weight	BAAQMD Condition # 17777, Part 7e	P/A	Annual Source Test
TOC	SIP 8-34-114	Y		90% removal by weight	BAAQMD Condition # 17777, Part 7e	P/A	Annual Source Test

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Non-Methane Organic Compounds (NMOC)	BAAQMD 8-34-301.4b	Y	7/1/02	≥ 98% removal by weight OR < 120 ppmv dry @ 3% O ₂ , expressed as methane	BAAQMD 8-34-412 and 8-34-501.4 and BAAQMD Condition # 17777, Parts 7d-e and 12	P/A and P/W or M	Annual Source Tests and Exhaust Gas Testing with Portable Analyzers and Records
NMOC	40 CFR 60.752(b) (2)(iii)(B)	Y	2/12/02	98% removal by weight OR < 20 ppmv dry @ 3% O ₂ , expressed as hexane	40 CFR 60.8 and 60.752(b) (2)(iii)(B) and 60.758(b)(2)	P/A	Initial Source Test and Records
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits ≤ 0.5 ppm for 3 minutes, ≤ 0.25 ppm for 60 minutes, and ≤ 0.05 ppm for 24 hours	NA	N	none
SO ₂	BAAQMD 9-1-302	Y		≤ 300 ppm (dry)	BAAQMD Condition # 17777, Parts 8 and 9	P/W, M, or Q (Monthly if 3 months data < 1300 ppm; Quarterly if 1 year of data < 1300 ppm)	Sulfur Analysis of Landfill Gas only and Records
H ₂ S	BAAQMD 9-2-301	N		Property Line ground level limits ≤ 0.06 ppm Averaged over 3 minutes and ≤ 0.03 ppm Averaged over 60 minutes	NA	N	none

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Total Sulfur Content in Landfill Gas	BAAQMD Condition # 17777, Part 8	Y		≤ 1300 ppmv (dry)	BAAQMD Condition # 17777, Parts 8 and 9	P/W, M, or Q (Monthly if 3 months data < 1300 ppmv (dry); Quarterly if 1 year of data < 1300 ppmv (dry))	Sulfur Analysis of Landfill Gas-only and Records
NO _x	BAAQMD 9-8-302.1	Y		Waste Fuel Gas, Lean-Burn ≤ 140 ppmv dry, expressed as NO ₂ , corrected to @ 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Part 7d BAAQMD 9-8-302.1	P/Q and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
NO _x	BAAQMD Condition # 17777, Part 5	Y		Waste Fuel Gas, Lean-Burn ≤ 130 ppmv dry, expressed as NO ₂ , corrected to @ 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Part 7d	P/Q and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
NO _x	BAAQMD 9-8-302.1	N	1/1/12	Waste Fuel Gas, Lean Burn < 70 ppmv dry, expressed as NO _x , corrected to @ 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Part 7d	P/Q and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
CO	BAAQMD 9-8-302.3	Y		Waste Fuel Gas: ≤ 2000 ppmv dry, corrected to @ 15% O ₂	BAAQMD 9-8-503 and BAAQMD Condition # 17777, Parts 7d and 12	P/Q/M or W and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
CO	BAAQMD Condition # 17777, Part 6	Y		≤ 260 ppmv dry, corrected to @ 15% O ₂	BAAQMD 9-8-503 and 9-8-502.3 and BAAQMD Condition # 17777, Parts 7d and 12	P/Q/M or W and P/A	Exhaust Gas Testing with Portable Analyzers and Annual Source Test and Records
Emission Control System Shutdown Time	BAAQMD 8-34-113.2	Y		≤ 240 hours/year	BAAQMD 8-34-501.2	P/D	Records

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Emission Control System Shutdown Time	SIP 8-34-113.2	Y		12 hours/calendar month	SIP 8-34-501.2	P/D	Records
Emission Control System Startup Shutdown or Malfunction	40-CFR 60.755(e)	Y	2/12/02	≤ 1 hour per event	40-CFR 60.7(b); 60.757(f)(2) and (f)(3); and 60.758(e)	P/D	Records of occurrence and duration
Temperature of Combustion Zone		Y	7/1/02	Temperature limit will be established during performance test	BAAQMD 8-34-501.3 and 8-34-507 (effective 7/1/02)	C	Temperature sensor and continuous recorder; effective 7/1/02
Combustion Temperature	40-CFR 60.758(e) (1)(i)	Y	8/11/02	3-Hour Average Temperature No Less Than 28 °C below Average Temperature Recorded During Most Recent Complying Performance Test	60-CFR 60.756(b)(1) and 60.758(e)	C	Temperature sensor and continuous recorder; effective before performance test and not later than 6/27/02

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Gas Flow	BAAQMD 8-34-301 and 301.2;	Y	7/1/02	Vent all collected gases to a properly operating control system and operate control system continuously.	BAAQMD 8-34-501.10 and 508 (effective 7/1/02)	C	Gas Flow Meter and Recorder (every 15 minutes); effective 7/1/02
Gas Flow	SIP 8-34-301 and 301.4	Y		Vent all collected gases to a properly operating control system and operate control system continuously.	SIP 8-34-501.1	P/D	Operating Records
Gas Flow	40 CFR 60.753(a) and (e)	Y	2/12/02	Vent all collected gases to a properly operating control system and operate control system at all times when gas is vented to it	40 CFR 60.756(b)(2) (i or ii) and 60.758(e)(2)	C or P/M	Gas Flow Meter and Recorder (every 15 minutes) or Monthly Inspection of Bypass Valve and Lock and Records
Periods of Inoperation for Parametric Monitors	BAAQMD 1-523.2	Y	before performance test and not later than 6/27/02	≤ 15 consecutive days per incident and ≤ 30 calendar days per 12 month period	BAAQMD 1-523.4	P/D	Records of occurrence and duration

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VII. Applicable Limits and Compliance Monitoring Requirements

Table VII – B
Applicable Limits and Compliance Monitoring Requirements
S-5 INTERNAL COMBUSTION ENGINE, LEAN-BURN, LANDFILL GAS FIRED

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
Continuous Monitors	40 CFR 60.13(e)	Y	-before performance test and not later than 6/27/02	Requires Continuous Operation except for breakdowns, repairs, calibration, and required span adjustments	40 CFR 60.7(b)	P/D	Records of occurrence and duration
Heat Input	BAAQMD Condition # 17777, Part 9	Y		≤ 324 MM BTU per day and ≤ 118,260 MM BTU per 12-month period	BAAQMD Condition # 17777, Part 10a-e	P/D; and P/M	Records

VII. Applicable Limits and Compliance Monitoring Requirements

Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S-7 - LANDFILL GAS CONDENSATE STORAGE TANK, 6500 GALLONS

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
V ₂ TOC	BAAQMD 8-2-301	Y		≤ 15 pounds/day or ≤ 300 ppm, dry basis	BAAQMD Condition # 18306, Part 4	P/D	Records
Through-put Limit	BAAQMD Condition # 18306, Part 1	Y		≤ 90,000 gallons of landfill gas condensate per 12-month period	BAAQMD Condition # 18306, Part 4	P/D	Records

VIII. TEST METHODS

The test methods associated with the emission limit of a District regulation are generally referenced in Section 600 et seq. of the regulation. The following table indicates only the test methods associated with the emission limits ~~referenced~~ included in Section VII, Applicable Emission Limits & Compliance Monitoring Requirements, of this permit.

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 6-1-301 <u>and</u> SIP 6-301	Ringelmann No. 1 Limitation	Manual of Procedures, Volume I, Evaluation of Visible Emissions; <u>or US EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources</u>
BAAQMD 6-1-310 <u>and</u> SIP 6-310	Particulate Weight Limitation	Manual of Procedures, Volume IV, ST-15, Particulate <u>Sampling</u> <u>or US EPA Method 5, Determination of Particulate Matter Emissions from Stationary Sources</u>
BAAQMD 8-2-301	<u>Total Organic Compound Mass and Concentration Limitations</u>	<u>Manual of Procedures, Volume IV, ST-7, Non-Methane Organic Carbon Sampling; or EPA Reference Method 25, or 25A</u>
BAAQMD 8-34-114	<u>Energy Recovery Device and Emission Control System</u>	<u>Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C</u>
BAAQMD 8-34-301.2	Collection and Control System Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
BAAQMD 8-34-301.4	Limits for Other Emission Control Systems	<u>For Source Tests: Manual of Procedures, Volume IV, ST-7, Organic Compounds and ST-14, Oxygen, Continuous Sampling; or EPA Reference Method 18, 25, 25A, or 25C</u> <u>For Weekly or Monthly Compliance Checks: Portable CO and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures</u>
BAAQMD 8-34-412	<u>Compliance Demonstration Test</u>	<u>EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases</u>
SIP 8-34-301.1	Collection and Control Systems Leak Limitations	EPA Reference Method 21, Determination of Volatile Organic Compound Leaks
SIP 8-34-301.3 ⁺	<u>Energy Recovery Device or Emission Control System Limit</u>	<u>Manual of Procedures, Volume IV, ST-7, Organic Compounds; or EPA Reference Method 25 or 25A</u>

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VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
BAAQMD 9-1-302	General Emission Limitation	Manual of Procedures, Volume IV, ST-19A, Sulfur Dioxide, Continuous Sampling, or ST-19B, Total Sulfur Oxides, Integrated Sample
BAAQMD 9-8-302.1	Waste Derived Fuel Gas NOx Limits for Lean Burn Engines	For Source Tests: Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling; and For Quarterly Compliance Checks Pursuant to BAAQMD Regulation 9-8-503: Portable NO_x and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures with NO_x readings averaged over a consecutive 15-minute period
BAAQMD 9-8-302.2	Waste Derived Fuel Gas NOx Limits for Rich Burn Engines	For Source Tests: Manual of Procedures, Volume IV, ST-13A, Oxides of Nitrogen, Continuous Sampling and ST-14, Oxygen, Continuous Sampling; or For Quarterly Compliance Checks Pursuant to BAAQMD Regulation 9-8-503: Portable NO_x and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures with NO_x readings averaged over a consecutive 15-minute period
BAAQMD 9-8-302.3	Waste Derived Fuel Gas CO Limits	For Source Tests: Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling and ST-14, Oxygen, Continuous Sampling; and For Quarterly Compliance Checks Pursuant to BAAQMD Regulation 9-8-503: Portable CO and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures
40 CFR 60.8	Performance Tests	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases

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VIII. Test Methods

**Table VIII
 Test Methods**

Applicable Requirement	Description of Requirement	Acceptable Test Methods
40 CFR 60.752 (b)(2)(iii)(B)	NMOC Destruction Efficiency and Outlet Concentration Limits	EPA Reference Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography, Method 25, Determination of Total Gaseous Nonmethane Organic Emissions as Carbon, Method 25A, Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer, or Method 25C, Determination of Nonmethane Organic Compounds (NMOC) in MSW Landfill Gases
BAAQMD Condition # 17777		
BAAQMD Condition # 17777, Parts 3 & 5	NOx Limit	<u>For Source Tests:</u> Manual of Procedures, Volume IV, Oxides of Nitrogen, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; <u>and</u> <u>For Quarterly Compliance Checks Pursuant to BAAQMD Regulation 9-8-503: Portable NO_x and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures with NOx readings averaged over a consecutive 15-minute period</u>
BAAQMD Condition # 17777, Parts 4 & 6	CO Limit	<u>For Source Tests:</u> Manual of Procedures, Volume IV, ST-6, Carbon Monoxide, Continuous Sampling, and ST-14, Oxygen, Continuous Sampling; <u>and</u> <u>For Weekly or Monthly Compliance Checks: Portable CO and O₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures</u>
BAAQMD Condition # 17777, Part 8	Limit for Total Reduced Sulfur Compounds in Landfill Gas	Draeger Tube: used in accordance with manufacturer's recommended procedures
BAAQMD Condition # 17777, Part 9	Heat Input Limit	Gas Flow Meter: used in accordance with manufacturer's recommended procedures; Methane Content: determined by Manual of Procedures, Volume IV, ST-7, Organic Compounds or EPA Reference Method 18, 25, 25A, or 25C; and Calculation procedure identified in BAAQMD Condition # 17777, Part 10-de
BAAQMD Condition # 17777, Part 12	CO Limit as a Surrogate for Demonstrating On-Going Compliance with NMOC Limits	Portable CO and O ₂ Analyzers calibrated and used in accordance with manufacturer's recommended procedures

Facility Name: Gas Recovery Systems, Inc.
Permit for Facility #: B1669

IX. PERMIT SHIELD

Not applicable.

X. REVISION HISTORY

Initial Title V Permit Issuance (Application #25927): **November 30, 2001**

Minor Revision (Application #25927): **July 15, 2002**

- Correct an erroneous future effective date for continuous temperature monitoring at landfill gas fired IC engines in Tables IV-A, IV-B, VII-A, and VII-B
- Correct the corresponding future effective dates for parametric monitoring requirements in Tables IV-A, IV-B, VII-A, and VII-B
- Correct the basis for the annual source testing requirement for landfill gas fired IC engines in Permit Condition # 17777, Part 7
- Correct the landfill name referenced in Permit Condition # 17777, Part 11
- Clarify in Tables VII-A and VII-B that the future IC engine temperature limits will be determined during the first performance test after permit issuance rather than during the District's review of the collection and control system design plan
- Correct an erroneous future effective date for the IC engine temperature limits in Tables VII-A and VII-B

Renewal (Application 14529): **[Insert Date]**

- Update the plant mailing address, Responsible Official, Facility Contact, APCO and District Engineer for this permit
- Update standard conditions, generally applicable requirements, dates of regulations and SIP references
- Remove obsolete abatement devices from Section II
- Delete expired sections, future effective dates which have passed, and obsolete monitoring requirements
- Correct citations for BAAQMD Regulation 1 and SIP Regulation 1
- Renumber Regulation 6 to Regulation 6, Rule 1
- Remove SIP version of Regulation 8, Rule 34
- Delete NSPS Subparts A and WWW, which do not apply to end users of treated landfill gas
- For engines, change the key emission control system operating parameter from exhaust gas temperature to exhaust gas CO concentration and replace temperature

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X. Revision History

monitoring with monitoring of exhaust gas CO and O₂ content

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- Change heat input compliance calculations to be based on energy produced at engines
- Include new NO_x, CO, and O₂ monitoring requirements and new future effective NO_x emission limits ~~in~~ for the engines from Regulation 9, Rule 8
- Make editorial corrections to permit conditions, the descriptions of these conditions, and the bases of these conditions
- Add symbols and text to clarify limits
- Add applicable EPA test methods to Table VIII
- Remove obsolete test methods (ST19B) from Table VIII
- Add test methods for new applicable NO_x, CO, and O₂ monitoring requirements
- Add terms to the Section XI Glossary
- Delete Section XII

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XI. GLOSSARY

ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

ARB

Air Resources Board

ATCM

Airborne Toxic Control Measure

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority that allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CARB

California Air Resources Board (same as ARB)

CCR

The California Code of Regulations

CEM

A “continuous emission monitor” is a monitoring device that provides a continuous direct measurement of some pollutant (e.g. NOx concentration) in an exhaust stream.

CEQA

California Environmental Quality Act

XI. Glossary

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CI

Compression Ignition

CO

Carbon Monoxide

CO₂

Carbon Dioxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

E6, E9, E12

Very large or very small number values are commonly expressed in a form called scientific notation, which consists of a decimal part multiplied by 10 raised to some power. For example, 4.53E6 equals $(4.53) \times (10^6) = (4.53) \times (10 \times 10 \times 10 \times 10 \times 10 \times 10) = 4,530,000$. Scientific notation is used to express large or small numbers without writing out long strings of zeros.

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

XI. Glossary

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60, (NSPS), Part 61, (NESHAPs), Part 63 (HAP), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

FR

Federal Register

Grains

1/7000 of a pound

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

H2S

Hydrogen Sulfide

H&SC

Health and Safety Code

Hg

Mercury

LFG

Landfill gas

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of any regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

XI. Glossary

Max
Maximum

MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

Min
Minimum

MOP

The District's Manual of Procedures.

NA
Not Applicable

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63

NMHC

Non-methane Hydrocarbons

NMOC

Non-methane Organic Compounds (same as NMHC)

NO₂
Nitrogen Dioxide

NO_x

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources are federal standards for emissions from new stationary sources that are mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

XI. Glossary

NSR

New Source Review is a federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

O₂

Oxygen

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM₁₀

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns.

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

XI. Glossary

SO₂

Sulfur dioxide

TAC

Toxic Air Contaminant

TBACT

Best Available Control Technology for Toxics

THC

Total Hydrocarbons include all non-methane hydrocarbons plus methane and are the same as TOC.

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds include all non-methane organic compounds plus methane and are the same as THC.

TRMP

Toxic Risk Management ~~Plan~~ Policy. The District's TRMP was replaced by Regulation 2, Rule 5 in 2005.

TRS

Total Reduced Sulfur, which is a measure of the amount of sulfur-containing compounds in a gas stream, typically a fuel gas stream, including, but not limited to, hydrogen sulfide. The TRS content of a fuel gas determines the concentration of SO₂ that will be present in the combusted fuel gas, since sulfur compounds are converted to SO₂ by the combustion process.

TSP

Total Suspended Particulate

TVP

True Vapor Pressure

VOC

Volatile Organic Compounds

XI. Glossary

Symbols:

<u><</u>	=	<u>less than</u>
<u>></u>	=	<u>greater than</u>
<u><=</u>	=	<u>less than or equal to</u>
<u>>=</u>	=	<u>greater than or equal to</u>

Units of Measure:

<u>atm</u>	=	<u>atmospheres</u>
bhp	=	brake-horsepower
<u>btu or BTU</u>	=	<u>British Thermal Unit</u>
<u>°C</u>	=	<u>degrees Centigrade</u>
cfm	=	cubic feet per minute
<u>dscf</u>	=	<u>dry standard cubic feet</u>
<u>°F</u>	=	<u>degrees Fahrenheit</u>
<u>ft³</u>	=	<u>cubic feet</u>
g	=	grams
gal	=	gallon
gpm	=	gallons per minute
<u>gr</u>	=	<u>grains</u>
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
<u>kW</u>	=	<u>kilowatt</u>
<u>lb</u>	=	<u>pound</u>
max	=	maximum
m ²	=	square meter
<u>m³</u>	=	<u>cubic meter</u>
min	=	minute
mm	=	<u>millimeter</u>
<u>MM</u>	=	<u>million</u>
<u>MM BTUBtu</u>	=	<u>million Btu</u>
<u>MW</u>	=	<u>megawatts</u>
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
<u>scf</u>	=	<u>standard cubic feet</u>
scfm	=	standard cubic feet per minute
<u>sdcf</u>	=	<u>standard dry cubic feet</u>

XI. Glossary

sdcfm = standard dry cubic feet per minute
yd³ = cubic yards
yr = year

Facility Name: Gas Recovery Systems, Inc.
Permit for Facility #: B1669

~~XII. APPLICABLE STATE IMPLEMENTATION PLAN~~

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~~The Bay Area Air Quality Management District's portion of the State Implementation Plan can be found at EPA Region 9's website. The address is:~~

~~<http://yosemite1.epa.gov/r9/r9sips.nsf/California?ReadForm&Start=1&Count=30&Expand=3.1>~~