



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

August 2, 2013

Mr. Charles Boehmke
Departmental Engineer
Los Angeles County Sanitation Districts
P.O. Box 4998, Whittier, CA 90607

Subject: Los Angeles County Sanitation Districts, Puente Hills Landfill
(Facility ID # 25070), Title V Facility Permit, Revision No. 4

Dear Mr. Boehmke,

Enclosed please find the revised Title page, Table of Contents, and Section D, & H of your Title V Facility Permit. The revised sections reflect the approval of a Minor Permit Revision of the Title V permit. The South Coast Air Quality Management District (AQMD) issued a draft permit for Environmental Protection Agency (EPA) review on April 29, 2013, and no comments were received from the EPA. No Public Notice was required for the Revision.

The revisions to Section D & H are as shown below:

Section D: Permits to Operate (Added/Removed)

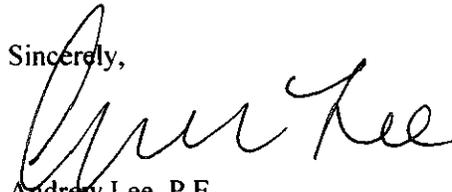
Appl. No./Permit No.	Equipment	Previous Permit/Application No.	Description
537802/G25958	Landfill Gas Collection System	F39724/341079 (Removed from Section D)	Alteration/Modification application to include Carbon Adsorbers for H2S removal from collected landfill gas, removal of three stripping towers (no longer in operation), & revising landfill gas collectors to reflect current operation of collection system
501721/G24806	Landfill gas to energy system – ICE 1 (> 500 hp)	G3774/394362 (Removed from Section D)	Modify Combustion Chamber to allow NG supplementation, Incorporate ECF factor in NOx limit Condition # 21.
501722/G24807	Landfill gas to energy system – ICE 2 (> 500 hp)	G3775/394363 (Removed from Section D)	
501723/G24808	Landfill gas to energy system – ICE 3 (> 500 hp)	G3776/394364 (Removed from Section D)	

Section H: Permits to Construct (Removed)

Appl. No.	Equipment	Previous Permit/Application No.	Description
501721	Landfill gas to energy system – ICE 1 (> 500 hp)	486508/(PC)	PC was cancelled prior to issuance of A/N 501721 PC and A/N 501721 PC has been moved to Section D
501722	Landfill gas to energy system – ICE 2 (> 500 hp)	486509/(PC)	PC was cancelled prior to issuance of A/N 501722 PC and A/N 501722 PC has been moved to Section D
501723	Landfill gas to energy system – ICE 3 (> 500 hp)	486511/(PC)	PC was cancelled prior to issuance of A/N 501723 PC and A/N 501723 PC has been moved to Section D

Please review the attached pages and then insert the enclosed sections in you Title V Facility Permit, and discard the earlier versions. If you have any questions concerning changes to your permit, or if you determine any administrative error, please contact Atul Kandhari (909) 396-2477, within 30 days of the receipt of your permit.

Sincerely,



Andrew Lee, P.E.
Senior Air Quality Engineering Manager
Energy/Public Services/Waste Mgmt/Terminals
Engineering & Compliance

AL: CDT: AK

Attachments

cc: w/ enclosure
Gerardo Rios, EPA Region IX
Compliance
Title V Central File



FACILITY PERMIT TO OPERATE

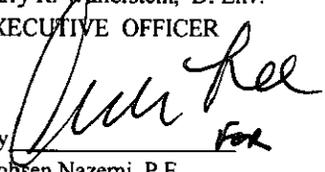
**LA CNTY SANITATION DISTRICT-PUENTE HILLS
13130 CROSSROADS PKY SOUTH
CITY OF INDUSTRY, CA 91745**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By 
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

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**Facility Equipment Requirements
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.



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PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO OPERATE AT THIS FACILITY:

Application Number	Permit to Operate Number	Equipment Description	Page
203908	D20371	STORAGE TANK MISC INORGANIC CHEMICALS	5
220688	D37972	GASOLINE DISPENSING	6
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258184	D87539	LANDFILL GAS TREATING	10
312300	F4970	EMERGENCY ELEC GEN-DIESEL ICE (< 500 HP)	12
312961	F5294	LANDFILL GAS TREATING	13
341060	F51926	BOILER (>50 MMBTU/HR) LANDFILL GAS	15
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394206	F48265	EMERGENCY WATER PUMP, DIESEL (50-500 HP)	24
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NOTE: APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

FACILITY WIDE CONDITION(S)

Condition(s):

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
 - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGLEMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
 - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.
[RULE 401]
2. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT. ON AND AFTER JUNE 1, 2004, DIESEL FUEL SHALL NOT BE PURCHASED FOR USE IN ANY STATIONARY SOURCE APPLICATION IN THE DISTRICT, UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.
[RULE 431.2]
3. THE OPERATOR SHALL NOT USE LANDFILL GAS CONTAINING SULFUR COMPOUNDS IN EXCESS OF 150 PPMV CALCULATED AS HYDROGEN SULFIDE AVERAGED DAILY.
[RULE 431.1]
4. THE DAILY EMISSIONS OF SULFUR DIOXIDE FROM THE EQUIPMENT AT THIS FACILITY SHALL NOT EXCEED 1,223 LBS/DAY.
[RULE 1303]
5. THE OWNER/OPERATOR OF A MSW LANDFILL SHALL COMPLY WITH THE FOLLOWING:
 - A. INSTALL AND OPERATE A WIND SPEED AND DIRECTION MONITORING SYSTEM WITH A CONTINUOUS RECORDER. FOR WIND SPEED, USE A 3 CUP ASSEMBLY WITH A RANGE OF 0 TO 50 MILES AN HOUR, WITH A THRESHOLD OF 0.75 MILE PER HOUR OR LESS. FOR WIND DIRECTION, USE A VANE WITH A RANGE OF 0 TO 540 DEGREES AZIMUTH, WITH A THRESHOLD OF PLUS-MINUS 2 DEGREES. AN APPROVED ALTERNATIVE MAY BE USED IN LIEU OF THE ABOVE.
[RULE 1150.1]
 - B. MONITOR AND COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES.
[RULE 1150.1]
 - C. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 5% BY VOLUME IN THE SUBSURFACE REFUSE BOUNDARY SAMPLING PROBES.
[RULE 1150.1]



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- D. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, INTEGRATED SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE LANDFILL SURFACE.
[RULE 1150.1]
- E. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 25 PPMV AS DETERMINED BY INTEGRATED SAMPLES TAKEN ON NUMBERED 50,000 SQUARE FOOT LANDFILL GRIDS OR AS PER THE APPROVED 1150.1 ALTERNATIVE
[RULE 1150.1]
- F. MONITOR QUARTERLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, THE LANDFILL SURFACE FOR TOC.
[RULE 1150.1]
- G. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 500 PPMV ABOVE BACKGROUND AS DETERMINED BY INSTANTANEOUS MONITORING AT ANY LOCATION ON THE LANDFILL, EXCEPT AT THE OUTLET OF ANY CONTROL DEVICE.
[RULE 1150.1]
- H. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM SO THAT THERE ARE NO LEAKS THAT EXCEED 500 PPMV TOC MEASURED AS METHANE AT ANY COMPONENT UNDER POSITIVE PRESSURE.
[RULE 1150.1]
- I. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, LANDFILL GAS SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE MAIN GAS COLLECTION HEADER LINE ENTERING THE GAS TREATMENT AND/OR GAS CONTROL SYSTEM.
[RULE 1150.1]
- J. COLLECT MONTHLY, OR AS PER THE APPROVED 1150.1 ALTERNATIVE, AMBIENT AIR SAMPLES FOR ANALYSIS OF TOC AND TAC FROM THE LANDFILL PROPERTY BOUNDARY.
[RULE 1150.1]
- K. OPERATE THE GAS COLLECTION AND CONTROL SYSTEM AT ALL TIMES FOR LANDFILLS WITH ACTIVE COLLECTION SYSTEMS.
[RULE 1150.1]
- L. OPERATE ALL WELLHEADS SO THE GAUGE PRESSURE IS UNDER A CONSTANT VACUUM, EXCEPT DURING WELL HEAD RAISING AND/OR REPAIR AND TEMPORARY SHUTDOWN DUE TO A CATASTROPHIC EVENT.
[RULE 1150.1]



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PERMIT TO OPERATE

**Permit No. D20371
A/N 203908**

Equipment Description

STORAGE TANK NO. 9732, DISPERSANT, 5'-4" DIA. X 6'-0" L., 800 GALLON CAPACITY

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]



**FACILITY PERMIT TO OPERATE
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PERMIT TO OPERATE

**Permit No. R-D37972
A/N 220688**

Equipment Description:

FUEL STORAGE AND DISPENSING FACILITY CONSISTING OF:

1. GASOLINE ABOVE-GROUND STORAGE TANK, CONVAULT, 1000-GALLONS CAPACITY, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.
2. GASOLINE ABOVE-GROUND STORAGE TANK, CONVAULT, 500 GALLONS CAPACITY, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.
3. TWO GASOLINE DISPENSING NOZZLES, EQUIPPED WITH A PHASE II VAPOR RECOVERY SYSTEM.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. PHASE I VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO THE STORAGE TANKS.
[RULE 461]
4. PHASE II RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO MOTOR VEHICLES AS DEFINED IN RULE 461.
[RULE 461]
5. ALL PHASE I AND PHASE II VAPOR RECOVERY EQUIPMENT AT THIS FACILITY SHALL BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CALIFORNIA AIR RESOURCES BOARD CERTIFICATION REQUIREMENTS.
[RULE 461]



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Periodic Monitoring:

6. THE OPERATOR SHALL HAVE A PERSON THAT HAS BEEN TRAINED IN ACCORDANCE WITH RULE (461)(d)(4) CONDUCT AN ANNUAL INSPECTION IN ACCORDANCE WITH 461 (D)(1)(B) OF THE GASOLINE TRANSFER AND DISPENSING EQUIPMENT. INSPECTION SHALL BE IN ACCORDANCE WITH RULE 461, ATTACHMENT C. THE OPERATOR SHALL KEEP RECORDS OF THE INSPECTION AND THE REPAIRS IN ACCORDANCE WITH RULE 461 AND SECTION K OF THIS PERMIT.
[RULE 3004(a)(4)]

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC EMISSIONS: RULE 461

This Permit to Operate No. R-D37972 supersedes Permit to Operate No. D37972 issued on 5/01/91.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

PERMIT TO OPERATE

Permit No. D69891
A/N 250133

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, MODEL NO. 8065-7416, SERIAL NO. 6VF-179531, DIESEL FUELED, EMERGENCY, ELECTRICAL GENERATOR DRIVER, TURBOCHARGED, AFTERCOOLED, 6 CYLINDERS, 474 BHP.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL NOT BE USED IN CONJUNCTION WITH ANY UTILITY VOLUNTARY DEMAND REDUCTION PROGRAM.
[1304(a)(4)-MODELING & OFFSET EXEMPTION]
4. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 200 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
7. THE FUEL INJECTION TIMING OF THIS ENGINE SHALL BE SET AND MAINTAINED AT 4 DEGREES RETARDED RELATIVE TO STANDARD TIMING.
[RULE 1303 (a)(1)-BACT]
8. THIS ENGINE SHALL NOT BE OPERATED BEYOND 20 HOURS PER YEAR FOR MAINTENANCE AND TESTING.
[RULE 1470]
9. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE UTILITY DISTRIBUTION COMPANY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN



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TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1470]

Emissions and Requirements:

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
CO 2000 PPM, RULE 407



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LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. D87539
A/N 258184**

Equipment Description:

LANDFILL GAS TREATMENT SYSTEM CONSISTING OF:

1. TWO (2) FIVE MICRON PARTICULATE FILTERS
2. TWO (2) COOLING COILS, STAINLESS STEEL CONSTRUCTION, 450,000 BTU/HR, EACH WITH A CHILLER, AIR COOLED CONDENSER, 44,000 BTU/HR AT 105 DEGREES F AND A COMPRESSOR, 6 KW MAXIMUM.
3. TWO (2) CENTRIFUGAL BLOWERS FOR LANDFILL GAS BOOSTER, 700 CFM AT 3 1/2 PSIG TOTAL PRESSURE WITH A 20 H.P. MOTOR.
4. PIPING SYSTEM TO DELIVER LANDFILL GAS FROM THE EXISTING FLARE STATION AND/OR POWER PLANT TO THE GAS TREATMENT SYSTEM AND FROM THE GAS TREATMENT SYSTEM TO THE HOT WATER HEATERS AT THE JOINT ADMINISTRATION BUILDING.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS THE EXHAUST IS VENTED ONLY TO THE HOT WATER HEATER WHICH IS IN FULL AND HAS BEEN ISSUED A VALID PERMIT FROM THE AQMD.
[RULE 1303(a)(1)-BACT]
5. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY ODOROUS VAPOR OR CONDENSATE INTO THE ATMOSPHERE.
[RULE 402]



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6. ANY BREAKDOWN OR MALFUNCTION OF THIS EQUIPMENT RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WASTE MANAGEMENT MANAGER WITHIN ONE HOUR AFTER OCCURENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 402, 430]

7. ALL RECORDS SHALL BE KEPT FOR FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303 (b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

PERMIT TO OPERATE

Permit No. F4970
A/N 312300

Equipment Description:

INTERNAL COMBUSTION ENGINE, CATERPILLAR, MODEL 3208, 235 BHP, 8 CYLINDER, DIESEL FIRED, TURBOCHARGED, DRIVING AN EMERGENCY FIRE PUMP.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE INSTALLED SO AS TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. AN ENGINE OPERATING LOG, LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. THIS ENGINE SHALL NOT BE OPERATED BEYOND 20 HOURS PER YEAR FOR MAINTENANCE AND TESTING.
[RULE 1470]
7. OPERATION BEYOND THE 20 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF AN EMERGENCY FIRE FIGHTING OPERATION OR NFPA REQUIRED TESTING.
[RULE 1470]

Emissions and Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
CO 2000 PPM, RULE 407



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PERMIT TO OPERATE

**Permit No. F5294
A/N 312961**

Equipment Description:

LANDFILL GAS TREATING AND DISPENSING SYSTEM CONSISTING OF:

1. STRAINER
2. KNOCKOUT DRUM
3. COMPRESSOR, A-C COMPRESSOR CORP., MODEL NO. 10GC, SINGLE STAGE, 75 H.P.
4. COMPRESSOR, CORKEN, MODEL NO. HG602AD, TWO STAGE 75 H.P.
5. FILTER/COALESCER, 0.3uM MESH
6. TWO CARBON BEDS, 14'-0" BED HEIGHT, 1'-8" BED I.D., EACH WITH 1,100 POUNDS OF 8'-0" X 1'-4" MESH ACTIVATED CARBON AND SILICA GEL
7. PARTICULATE FILTER
8. HEATER, GAS FIRED, INDIRECT, 250,000 BTU/HR
9. THREE MEMBRANE SEPARATION TUBES, SPIRAL WOUND, IN SERIES
10. COMPRESSOR, CORKEN, MODEL NO. HG604RU, TWO STAGE, 30 H.P.
11. SIX STORAGE TANKS, COMPRESSED LANDFILL GAS, EACH 10,000 CUBIC FEET
12. TWO DISPENSERS, COMPRESSED LANDFILL GAS, ONE 3000 PSI AND ONE 3600 PSI.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]



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4. ALL VENT GASES AND EXCESS PROCESSED GAS FROM THIS SYSTEM SHALL BE DIRECTED TO A COMBUSTION OR PROCESSING FACILITY WHICH IS IN FULL USE, CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED AND HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.
[RULE 1150.1, 1303(a)(1)-BACT]
5. THE TWO CARBON BEDS AND THE GAS FIRED HEATER, AS DESCRIBED IN THE EQUIPMENT DESCRIPTION, SHALL BE OPERATED WHENEVER DEEMED NECESSARY BY THE APPLICANT.
[RULE 204]
6. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY GAS OR CONDENSATE INTO THE ATMOSPHERE.
[RULE 402, 1401]
7. UPON NOTIFICATION BY THE AQMD THAT THE USE OF THE COMPRESSED LANDFILL GAS IN VEHICLES HAVE OR MAY HAVE ENDANGERED THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC, THE CSDLAC SHALL IMMEDIATELY CEASE THE OPERATION UNTIL SUCH TIME THAT ADDITIONAL MITIGATION MEASURES HAVE BEEN IDENTIFIED BY THE CSDLAC AND APPROVED BY THE AQMD.
[RULE 402]



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PERMIT TO OPERATE

**Permit No. F51926
A/N 341060**

Equipment Description:

LANDFILL GAS RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

1. THREE LANDFILL GAS COMPRESSORS, HOFFMAN, MODEL NO. 78103D1, EACH 400 H.P., (COMMON TO RESOURCE RECOVERY SYSTEM NO. 2).
2. STEAM GENERATOR, NUMBER 300, ZURN KEYSTONE, WATER TUBE O TYPE, SERIAL NO. 100902, 335 MM BTU PER HOUR, LANDFILL GAS FIRED WITH A 6'-6" DIA. X 50'-0" HIGH STACK, FLUE GAS RECIRCULATION, AIR PREHEATER AND ASSOCIATED EQUIPMENT.
3. STEAM TURBINE, FUJI, SINGLE PASS, CONDENSING TYPE, 50,000 KILOWATTS, WITH FIVE FEED WATER HEATERS, A DEAERATOR AND A WATER COOLED CONDENSER (COMMON TO RESOURCE RECOVERY SYSTEM NO. 2).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE QUANTITY OF LANDFILL GAS BURNED IN THE STEAM GENERATOR SHALL BE CONTINUOUSLY MONITORED AND RECORDED.
[RULE 1303 (b)(2)-OFFSET]
4. THE EMISSIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED THE FOLLOWING:
 - A. HYDROCARBONS, AS CH₄, 7 LBS PER HOUR MEASURED USING SCAQMD MODIFIED METHOD 25.3 WITH A WATER KNOCKOUT IN PLACE OF THE TRAP.
 - B. NOX, 12 LBS/HR.
 - C. CO, 11.5 LBS/HR.
 - D. SOX, 18.2 LBS/HR.
 - E. PM, 10 LBS/HR.[RULE 1303(b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

5. A CONTINUOUS SYSTEM SHALL BE MAINTAINED AND OPERATED TO MEASURE THE STEAM GENERATOR STACK EMISSIONS FOR NOX AND O2 CONCENTRATIONS ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 3% O2 ON A DRY BASIS AND CONTINUOUSLY RECORD THE STACK NOX CONCENTRATION, STACK O2 CONCENTRATION AND CORRECTED NOX CONCENTRATION AT 3% O2.
[RULE 218]
6. FOR THE PURPOSE OF THIS PERMIT, A START UP IS DEFINED AS BEING THE PERIOD FROM THE TIME THE GAS BURNER IS INITIALLY FIRED TO THE TIME WHEN THE FORCED DRAFT FAN OPERATES AT HIGH SPEED AND THE FLUE GAS RECIRCULATION (FGR) FAN IS PLACED INTO SERVICE.
[RULE 1303(a)(1)-BACT]
7. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN IS DEFINED AS BEING THE PERIOD FROM THE TIME WHEN THE FORCED DRAFT FAN IS OPERATED AT HIGH SPEED AND THE FORCED DRAFT FAN INLET DAMPER POSITION IS AT 30% AND CLOSING AND THE FGR FAN IS READY TO BE STOPPED TO THE TIME THE GAS BURNER IS NO LONGER FIRING.
[RULE 1303(a)(1)-BACT]
8. THE OXIDES OF NITROGEN CONCENTRATION SHALL NOT EXCEED 60 PPM, BY VOLUME, AVERAGED OVER A ONE HOUR PERIOD, DURING START UPS AND SHUT DOWNS.
[RULE 1303(a)(1)-BACT]
9. ALL RECORDS MUST BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303(b)(2)-OFFSET]
10. THE RANGE OF O2 CONTINUOUS EXHAUST RECORDING AND MEASUREMENT SYSTEMS SHALL BE ESTABLISHED AS PER 40 CFR PART 64.3.

CONTINUOUS EXHAUST O2 MONITORING AND RECORDING SYSTEM SHALL BE MAINTAINED PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.3 AND 40 CFR PART APPENDIX F. SUCH A SYSTEM SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN THE HOURLY AVERAGE O2 CONCENTRATION IN THE STACK EXCEEDS 8% BY VOLUME EXCEPT DURING STARTUPS OR SHUTDOWNS AS DEFINED IN PERMIT CONDITIONS NO. 6 & 7. THE EXHAUST HOURLY AVERAGE O2 SHALL BE SHALL BE COMPUTED FROM O2 RECORDINGS MADE ATLEAST EVERY 15 MINUTES. THE OPERATOR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS. [40CFR PART 64]

Emissions and Requirements:

11. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NOx: 24 PPM, RULE 1303(a)(1)-BACT
SOX: 150 PPM, RULE 431.1
CO: 2000 PPM, RULE 407
NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
NOX: 30 PPMV, RULE 1146
CO: 400 PPMV, RULE 1146
NOX: 125 PPMV, RULE 476
PM: 11 LBS/HR, 0.01 GR/DSCF, RULE 476
PM: 0.1 GR/DSCF, RULE 409



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F51927
A/N 341062**

Equipment Description:

LANDFILL GAS RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

1. THREE LANDFILL GAS COMPRESSORS, HOFFMAN, MODEL NO. 78103D1, EACH 400 H.P (COMMON TO RESOURCE RECOVERY SYSTEM NO. 1).
2. STEAM GENERATOR, NUMBER 400, ZURN KEYSTONE, WATER TUBE O TYPE, SERIAL NO. 100901, 335 MM BTU PER HOUR, LANDFILL GAS FIRED WITH A 6'-6" DIA. X 50'-0" HIGH STACK, FLUE GAS RECIRCULATION, AIR PREHEATER AND ASSOCIATED EQUIPMENT.
3. STEAM TURBINE, FUJI, SINGLE PASS, CONDENSING TYPE, 50,000 KILOWATTS, WITH FIVE FEED WATER HEATERS, A DEAERATOR AND A WATER COOLED CONDENSER (COMMON TO RESOURCE RECOVERY SYSTEM NO. 1).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE QUANTITY OF LANDFILL GAS BURNED IN THE STEAM GENERATOR SHALL BE CONTINUOUSLY MONITORED AND RECORDED.
[RULE 1303(b)(2)-OFFSET]
4. THE EMISSIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED THE FOLLOWING:
 - A. HYDROCARBONS, AS CH₄, 7 LBS PER HOUR MEASURED USING SCAQMD MODIFIED METHOD 25.3 WITH A WATER KNOCKOUT IN PLACE OF THE TRAP.
 - B. NOX, 12 LBS/HR
 - C. CO, 11.5 LBS/HR
 - D. SOX, 18.2 LBS/HR
 - E. PM, 10 LBS/HR[RULE 1303(b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

5. A CONTINUOUS SYSTEM SHALL BE MAINTAINED AND OPERATED TO MEASURE THE STEAM GENERATOR STACK EMISSIONS FOR NOX AND O2 CONCENTRATIONS ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 3% O2 ON A DRY BASIS AND CONTINUOUSLY RECORD THE STACK NOX CONCENTRATION, STACK O2 CONCENTRATION AND CORRECTED NOX CONCENTRATION AT 3% O2.
[RULE 218]
6. FOR THE PURPOSE OF THIS PERMIT, A START UP IS DEFINED AS BEING THE PERIOD FROM THE TIME THE GAS BURNER IS INITIALLY FIRED TO THE TIME WHEN THE FORCED DRAFT FAN OPERATES AT HIGH SPEED AND THE FLUE GAS RECIRCULATION (FGR) FAN IS PLACED INTO SERVICE.
[RULE 1303(a)(1)-BACT]
7. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN IS DEFINED AS BEING THE PERIOD FROM THE TIME WHEN THE FORCED DRAFT FAN IS OPERATED AT HIGH SPEED AND THE FORCED DRAFT FAN INLET DAMPER POSITION IS AT 30% AND CLOSING AND THE FGR FAN IS READY TO BE STOPPED TO THE TIME THE GAS BRUNER IS NO LONGER FIRING.
[RULE 1303(a)(1)-BACT]
8. THE OXIDES OF NITROGEN CONCENTRATION SHALL NOT EXCEED 60 PPM, BY VOLUME, AVERAGED OVER A ONE HOUR PERIOD, DURING START UPS AND SHUT DOWNS.
[RULE 1303(a)(1)-BACT]
9. ALL RECORDS MUST BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303(b)(2)-OFFSET]
10. THE RANGE OF O2 CONTINUOUS EXHAUST RECORDING AND MEASUREMENT SYSTEMS SHALL BE ESTABLISHED AS PER 40 CFR PART 64.3.

CONTINUOUS EXHAUST O2 MONITORING AND RECORDING SYSTEM SHALL BE MAINTAINED PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.3 AND 40 CFR PART APPENDIX F. SUCH A SYSTEM SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN THE HOURLY AVERAGE O2 CONCENTRATION IN THE STACK EXCEEDS 8% BY VOLUME EXCEPT DURING STARTUPS OR SHUTDOWNS AS DEFINED IN PERMIT CONDITIONS NO. 6 & 7. THE EXHAUST HOURLY AVERAGE O2 SHALL BE SHALL BE COMPUTED FROM O2 RECORDINGS MADE ATLEAST EVERY 15 MINUTES. THE OPERATOR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[40CFR PART 64]

Emissions and Requirements:

11. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NO_x: 24 PPM, RULE 1303(a)(1)-BACT
SO_x: 150 PPM, RULE 431.1
CO: 2000 PPM, RULE 407
NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
NO_x: 30 PPMV, RULE 1146
CO: 400 PPMV, RULE 1146
NO_x: 125 PPMV, RULE 476
PM: 11 LBS/HR, 0.01 GR/DSCF, RULE 476
PM: 0.1 GR/DSCF, RULE 409



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F51928
A/N 341073**

Equipment Description:

LANDFILL GAS TREATING AND ENERGY RECOVERY SYSTEM CONSISTING OF:

1. LANDFILL GAS PRETREATMENT UNIT WITH A SCRUBBER, COOLING SYSTEM AND ASSOCIATED EQUIPMENT.
2. GAS TURBINE, SOLAR CENTAUR, MODEL NO. T4001, 39 MM BTU/HR, LANDFILL GAS FUELED, DRIVING A 2800 KW ELECTRIC GENERATOR WITH AN ELECTROSTATIC PRECIPITATOR AND ASSOCIATED EQUIPMENT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. EMISSIONS FROM THE GAS TURBINE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
ROG	0.40
NOx	5.7
SOx	3.03
CO	10.8
PM	1.9

 [RULE 1303(b)(2)-OFFSET]
5. A CONTINUOUS MONITORING SYSTEM, IN ACCORDANCE WITH RULE 431.1, SHALL BE MAINTAINED AND OPERATED TO MEASURE THE FUEL SULFUR CONCENTRATION AS H2S.
[RULE 431.1]
6. ALL RECORDS SHALL BE MAINTAINED AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 3004]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

- I. THE THIRD STAGE INLET TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 800 DEGREES FAHRENHEIT WHENEVER THE EQUIPMENT IS IN OPERATION.

CONTINUOUS THIRD STAGE INLET TEMPERATURE MONITORING AND RECORDING SYSTEM SHALL BE MAINTAINED PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN $\pm 1\%$ OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN THE THIRD STAGE INLET TEMPERATURE DROPS BELOW 800 DEGREES FAHRENHEIT DURING OPERATION EXCEPT DURING START UP AND SHUTDOWN EVENTS LASTING FOR MAXIMUM ONE HOUR, MULTIPLE START UP AND SHUTDOWN EVENTS CAN OCCUR CONSECUTIVELY.

THE THIRD STAGE INLET TEMPERATURE SHALL BE RECORDED ATLEAST EVERY 15 MINUTES, AND HOURLY AVERAGE SHALL BE COMPUTED FROM SUCH DATA POINTS. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER A DEVIATION OCCURS FROM 800 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[40CFR PART 64]

Emissions and Requirements:



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
NOx: 25 PPMV @15% O2, Rule 1134
NOx: 150 PPMV, 40 CFR 60 SUBPART GG
SOx: 0.015% BY VOLUME @ 15% O2 DRY OR FUEL SULFUR 0.8% BY WEIGHT, 40 CFR 60
SUBPART GG
SOx: 150 PPMV, RULE 431.1
CO: 2000 PPM, RULE 407
PM: 0.1 GR/DSCF, RULE 409



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F48265
A/N 394206**

Equipment Description:

INTERNAL COMBUSTION ENGINE, EMERGENCY, JOHN DEERE, MODEL 4045DF150, DIESEL FUELED, NATURALLY ASPIRATED DRIVING, 72 BHP DRIVING A WATER PUMP.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE INSTALLED SO AS TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. AN ENGINE OPERATING LOG, LISTING THE DATE AND HOURS OF OPERATION, SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. THIS ENGINE SHALL NOT BE OPERATED BEYOND 20 HOURS PER YEAR FOR MAINTENANCE AND TESTING.
[RULE 1470]

Emissions and Requirements:

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
CO 2000 PPM, RULE 407



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F82205
A/N 440820**

Equipment Description:

LANDFILL GAS FLARING SYSTEM CONSISTING OF:

1. TWO FLARES, EACH 12'-0" DIA. X 45'-0" H., EACH 4,500 SCFM WITH A PROPANE PILOT IGNITER, UV FLAME SCANNER. AUTOMATIC AIR LOUVERS, AUTOMATIC SHUTDOWN VALVE AND TEMPERATURE CONTROLLER.
2. THREE BLOWERS, EACH, HOFFMAN, MODEL NO. 79102B3, 450 HP, 15,000 SCFM (COMMON TO THE FACILITY).
3. BLOWER, LAMSON, MODEL NO. 1804-GD, 450 HP, 15,000 SCFM (COMMON TO THE FACILITY).
4. THREE BLOWERS, EACH, LAMSON, MODEL NO. 1274-04-000AD, 150 HP, 4,500 SCFM (COMMON TO THE FACILITY).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. EACH FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE (IN DEGREES F) IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (a)(1)-BACT]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F, 15 MINUTE AVERAGE, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER, SHALL BE MAINTAINED IN THE FLARE STACK ABOVE THE FLAME ZONE AT LEAST 3 FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1400 DEGREES F IS ACHIEVED, NOT TO EXCEED 30 MINUTES. SHUTDOWN IS THE PERIOD FROM WHEN THE GAS VALVE BEGINS TO BE SHUT AND COMPLETELY SHUTS OFF, NOT TO EXCEED 30 MINUTES.
[RULE 1303 (a)(1)-BACT]
6. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE, AND SHALL BE OPERATED WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (b)(2)-OFFSET]
7. THE TOTAL VOLUME OF LANDFILL GAS BURNED IN EACH FLARE SHALL NOT EXCEED 4,500 CUBIC FEET PER MINUTE.
[RULE 1303 (b)(2)-OFFSET]
8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)-OFFSET]
9. EMISSIONS FROM EACH FLARE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
ROG	1.54
NOX	7.0
SOX	6.84
CO	7.32
PM10	5.73

[RULE 1303 (b)(2)-OFFSET]
10. NOX EMISSIONS SHALL NOT EXCEED 0.06 LBS/MM BTU.
[RULE 1303 (a)(1)-BACT]
11. THE TOTAL SO_x EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 250 TONS IN ANY ONE YEAR.
[RULE 1303 (b)(2)-OFFSET]
12. A CONTINUOUS MONITORING SYSTEM, IN ACCORDANCE WITH RULE 431.1, SHALL BE MAINTAINED AND OPERATED TO MEASURE THE FUEL SULFUR CONCENTRATION AS H₂S.
[RULE 431.1]
13. EACH FLARE SHALL BE EQUIPPED WITH A FLARE FAILURE ALARM WITH AN AUTOMATIC LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM. FREE VENTING OF COLLECTED LANDFILL GAS SHALL NOT OCCUR.
[RULE 1303 (a)(1)-BACT]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

14. A SUFFICIENT NUMBER OF VIEW PORTS SHALL BE INSTALLED IN EACH FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME AND THERMOCOUPLE LOCATION WITHIN THE FLARE AT ALL TIMES. SAFE AND ADEQUATE ACCESS SHALL BE PROVIDED FOR ALL VIEW PORTS UPON REQUEST BY AQMD PERSONNEL.
[RULE 217, 1303 (a)(1)-BACT]
15. A SET OF FOUR SAMPLING PORTS SHALL BE INSTALLED IN EACH FLARE SHROUD AND LOCATED AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST THREE FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL BE INSTALLED AT 90 DEGREES APART AND SHALL CONSIST OF A FOUR-INCH COUPLINGS WITH PLUGS. ADEQUATE AND SAFE ACCESS TO ALL SAMPLING PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]
16. A SAMPLING PORT, OR OTHER METHOD APPROVED BY THE AQMD, SHALL BE INSTALLED AT THE INLET GAS LINE TO THE FLARE TO ALLOW THE COLLECTION OF A LANDFILL GAS SAMPLE.
[RULE 217, 431.1, 1150.1]
17. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE AQMD PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A SOURCE TEST IS CONDUCTED BY THE AQMD.
[RULE 217]
18. ANY BREAKDOWN OR MALFUNCTION OF THE LANDFILL GAS FLARE RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD IN ACCORDANCE WITH RULE 430 AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]
19. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE (5) YEARS TO VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303 (b)(2)-OFFSET]
20. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY AQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC, SHALL BE IMPLEMENTED UPON REQUEST.
[RULE 1150.1]
21. THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,400 (FOR ALL FLARES) DEGREES FAHRENHEIT AVERAGED OVER 15-MINUTE PERIOD WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION, EXCLUDING START UP AND SHUTDOWN.

EACH FLARE SHALL BE EQUIPPED WITH A CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7 AND THE RECORDING SYSTEM SHALL BE IN



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OPERATION WHEN THE FLARE IS OPERATING. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN $\pm 1\%$ OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A 15-MINUTE AVERAGE TEMPERATURE OF LESS THAN 1,400 DEGREES FAHRENHEIT OCCURS DURING OPERATION EXCLUDING START UP AND SHUTDOWN. THE EXHAUST TEMPERATURE SHALL BE RECORDED ATLEAST ONCE IN EVERY 15-MINUTE PERIOD. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM 1,400 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATION EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[40CFR PART 64]

Emissions and Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
CO: 2000 PPMV, RULE 407
PM: 0.1 GR/DSCF, RULE 409
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F82207
A/N 440822**

Equipment Description:

LANDFILL GAS FLARING SYSTEM CONSISTING OF:

1. FLARE, 16'-4" DIA. X 60'-0" H WITH A PROPANE PILOT IGNITER, UV FLAME SCANNER, AUTOMATIC LOUVERS AND TEMPERATURE CONTROLLER.
2. LANDFILL GAS PARTICULATE FILTER WITH SIX HEPA FILTERS, EACH 2'-0" W X 2'-0" L X 1'-0" H.
3. COMBUSTION AIR PARTICULATE FILTER ENCLOSURE 18'-0" W X 18'-0" L X 17'-0" H.
4. THREE BLOWERS, EACH HOFFMAN, MODEL NO. 79102B3, 450 HP, 15,000 CFM (COMMON TO THE FACILITY).
5. BLOWER, LAMSON, MODEL NO. 1804-GD, 450 HP, 15,000 CFM (COMMON TO THE FACILITY).
6. THREE BLOWERS, EACH LAMSON, MODEL NO. 1274-04-000A, 150 HP, 4,500 CFM (COMMON TO THE FACILITY)

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THE FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE (IN DEGREES F) IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (a)(1)-BACT]



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5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F, 15 MINUTE AVERAGE, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER, SHALL BE MAINTAINED IN THE FLARE STACK ABOVE THE FLAME ZONE AT LEAST 3 FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1400 DEGREES F IS ACHIEVED, NOT TO EXCEED 30 MINUTES. SHUTDOWN IS THE PERIOD FROM WHEN THE GAS VALVE BEGINS TO BE SHUT AND COMPLETELY SHUTS OFF, NOT TO EXCEED 30 MINUTES.
[RULE 1303 (a)(1)-BACT]
6. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE, AND SHALL BE OPERATED WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (b)(2)-OFFSET]
7. THE TOTAL VOLUME OF LANDFILL GAS BURNED IN THE FLARE SHALL NOT EXCEED 6,800 CUBIC FEET PER MINUTE.
[RULE 1303 (b)(2)-OFFSET]
8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)-OFFSET]
9. EMISSIONS FROM THE FLARE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
ROG	2.7
NOX	5.2
SOX	10.3
CO	8.8
PM10	4.2

[RULE 1303 (b)(2)-OFFSET]
10. NOX EMISSIONS SHALL NOT EXCEED 0.06 LBS/MM BTU.
[RULE 1303 (a)(1)-BACT]
11. THE TOTAL SO_x EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 250 TONS IN ANY ONE YEAR.
[RULE 1303 (b)(2)-OFFSET]
12. A CONTINUOUS MONITORING SYSTEM, IN ACCORDANCE WITH RULE 431.1, SHALL BE MAINTAINED AND OPERATED TO MEASURE THE FUEL SULFUR CONCENTRATION AS H₂S.
[RULE 431.1]
13. THE FLARE SHALL BE EQUIPPED WITH A FLARE FAILURE ALARM WITH AN AUTOMATIC LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM. FREE VENTING OF COLLECTED LANDFILL GAS SHALL NOT OCCUR.
[RULE 1303 (a)(1)-BACT]



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14. A SUFFICIENT NUMBER OF VIEW PORTS SHALL BE INSTALLED IN THE FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME AND THERMOCOUPLE LOCATION WITHIN THE FLARE AT ALL TIMES. SAFE AND ADEQUATE ACCESS SHALL BE PROVIDED FOR ALL VIEW PORTS UPON REQUEST BY AQMD PERSONNEL.
[RULE 217, 1303 (a)(1)-BACT]
15. A SET OF FOUR SAMPLING PORTS SHALL BE INSTALLED IN THE FLARE SHROUD AND LOCATED AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST THREE FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL BE INSTALLED AT 90 DEGREES APART AND SHALL CONSIST OF A FOUR-INCH COUPLINGS WITH PLUGS. ADEQUATE AND SAFE ACCESS TO ALL SAMPLING PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]
16. A SAMPLING PORT, OR OTHER METHOD APPROVED BY THE AQMD, SHALL BE INSTALLED AT THE INLET GAS LINE TO THE FLARE TO ALLOW THE COLLECTION OF A LANDFILL GAS SAMPLE.
[RULE 217, 431.1, 1150.1]
17. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE AQMD PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A SOURCE TEST IS CONDUCTED BY THE AQMD.
[RULE 217]
18. ANY BREAKDOWN OR MALFUNCTION OF THE LANDFILL GAS FLARE RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD IN ACCORDANCE WITH RULE 430 AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]
19. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE (5) YEARS TO VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303 (b)(2)-OFFSET]
20. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY AQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC, SHALL BE IMPLEMENTED UPON REQUEST.
[RULE 1150.1]
21. THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,400 (FOR ALL FLARES) DEGREES FAHRENHEIT AVERAGED OVER 15-MINUTE PERIOD WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION, EXCLUDING START UP AND SHUTDOWN.

EACH FLARE SHALL BE EQUIPPED WITH A CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM PURSUANT TO THE OPERATION AND MAINTENANCE



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REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7 AND THE RECORDING SYSTEM SHALL BE IN OPERATION WHEN THE FLARE IS OPERATING. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN $\pm 1\%$ OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A 15-MINUTE AVERAGE TEMPERATURE OF LESS THAN 1,400 DEGREES FAHRENHEIT OCCURS DURING OPERATION EXCLUDING START UP AND SHUTDOWN. THE EXHAUST TEMPERATURE SHALL BE RECORDED ATLEAST ONCE IN EVERY 15-MINUTE PERIOD. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM 1,400 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATION EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[40CFR PART 64]

Emissions and Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
CO: 2000 PPM, RULE 407
PM: 0.1 GR/DSCF, RULE 409
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



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LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. F82208
A/N 440823**

Equipment Description:

LANDFILL GAS FLARING SYSTEM CONSISTING OF:

1. TWENTY FOUR FLARES, EACH 8'-0" DIA. X 16'-0" H., EACH 1,000 SCFM WITH
A PROPANE PILOT IGNITER, UV FLAME SCANNER, AUTOMATIC AIR LOUVERS, AUTOMATIC SHUTDOWN VALVE AND TEMPERATURE CONTROLLER.
2. THREE BLOWERS, EACH, HOFFMAN, MODEL NO. 79102B3, 450 HP, 15,000 SCFM (COMMON TO THE FACILITY).
3. BLOWER, LAMSON, MODEL 1804-GD, 450 HP, 15,000 SCFM (COMMON TO THE FACILITY).
4. THREE BLOWERS, EACH, LAMSON, MODEL NO. 1274-04-000AD, 150 HP, 4,500 SCFM (COMMON TO THE FACILITY).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. EACH FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE (IN DEGREES F) IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (a)(1)-BACT]



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5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F, 15 MINUTE AVERAGE, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER, SHALL BE MAINTAINED IN THE FLARE STACK ABOVE THE FLAME ZONE AT LEAST 3 FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1400 DEGREES F IS ACHIEVED, NOT TO EXCEED 30 MINUTES. SHUTDOWN IS THE PERIOD FROM WHEN THE GAS VALVE BEGINS TO BE SHUT AND COMPLETELY SHUTS OFF, NOT TO EXCEED 30 MINUTES.
[RULE 1303 (a)(1)-BACT]
6. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE, AND SHALL BE OPERATED WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303 (b)(2)-OFFSET]
7. THE TOTAL VOLUME OF LANDFILL GAS BURNED IN EACH FLARE SHALL NOT EXCEED 1,000 CUBIC FEET PER MINUTE.
[RULE 1303 (b)(2)-OFFSET]
8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)-OFFSET]
9. EMISSIONS FROM EACH FLARE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
ROG	0.14
NOX	1.44
SOX	1.52
CO	0.51
PM10	1.23

[RULE 1303 (b)(2)-OFFSET]
10. NOX EMISSIONS SHALL NOT EXCEED 0.06 LBS/MM BTU.
[RULE 1303 (a)(1)-BACT]
11. THE TOTAL SO_x EMISSIONS FROM THIS FACILITY SHALL NOT EXCEED 250 TONS IN ANY ONE YEAR.
[RULE 1303 (b)(2)-OFFSET]
12. A CONTINUOUS MONITORING SYSTEM, IN ACCORDANCE WITH RULE 431.1, SHALL BE MAINTAINED AND OPERATED TO MEASURE THE FUEL SULFUR CONCENTRATION AS H₂S.
[RULE 431.1]
13. EACH FLARE SHALL BE EQUIPPED WITH A FLARE FAILURE ALARM WITH AN AUTOMATIC LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM. FREE VENTING OF COLLECTED LANDFILL GAS SHALL NOT OCCUR.
[RULE 1303 (a)(1)-BACT]



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14. A SUFFICIENT NUMBER OF VIEW PORTS SHALL BE INSTALLED IN EACH FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME AND THERMOCOUPLE LOCATION WITHIN THE FLARE AT ALL TIMES. SAFE AND ADEQUATE ACCESS SHALL BE PROVIDED FOR ALL VIEW PORTS UPON REQUEST BY AQMD PERSONNEL.
[RULE 217, 1303 (a)(1)-BACT]
15. A SET OF FOUR SAMPLING PORTS SHALL BE INSTALLED IN EACH FLARE SHROUD AND LOCATED AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST THREE FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL BE INSTALLED AT 90 DEGREES APART AND SHALL CONSIST OF A FOUR-INCH COUPLINGS WITH PLUGS. ADEQUATE AND SAFE ACCESS TO ALL SAMPLING PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]
16. A SAMPLING PORT, OR OTHER METHOD APPROVED BY THE AQMD, SHALL BE INSTALLED AT THE INLET GAS LINE TO THE FLARE TO ALLOW THE COLLECTION OF A LANDFILL GAS SAMPLE.
[RULE 217, 431.1, 1150.1]
17. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. IF A HEAT SHIELD IS REQUIRED TO MEET THIS REQUIREMENT, ITS DESIGN SHALL BE APPROVED BY THE AQMD PRIOR TO CONSTRUCTION. THE HEAT SHIELD, IF REQUIRED TO MEET THE TEMPERATURE REQUIREMENT, SHALL BE IN PLACE WHENEVER A SOURCE TEST IS CONDUCTED BY THE AQMD.
[RULE 217]
18. ANY BREAKDOWN OR MALFUNCTION OF THE LANDFILL GAS FLARE RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD IN ACCORDANCE WITH RULE 430 AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]
19. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE (5) YEARS TO VERIFY COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303 (b)(2)-OFFSET]
20. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY AQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC, SHALL BE IMPLEMENTED UPON REQUEST.
[RULE 1150.1]
21. THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,400 (FOR ALL FLARES) DEGREES FAHRENHEIT AVERAGED OVER 15-MINUTE PERIOD WHENEVER THE EQUIPMENT IT SERVES IS IN OPERATION, EXCLUDING START UP AND SHUTDOWN.

EACH FLARE SHALL BE EQUIPPED WITH A CONTINUOUS EXHAUST TEMPERATURE MONITORING AND RECORDING SYSTEM PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7 AND THE RECORDING SYSTEM SHALL BE IN



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OPERATION WHEN THE FLARE IS OPERATING. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN $\pm 1\%$ OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN ANNUAL BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN A 15-MINUTE AVERAGE TEMPERATURE OF LESS THAN 1,400 DEGREES FAHRENHEIT OCCURS DURING OPERATION EXCLUDING START UP AND SHUTDOWN. THE EXHAUST TEMPERATURE SHALL BE RECORDED ATLEAST ONCE IN EVERY 15-MINUTE PERIOD. THE OPERATOR SHALL REVIEW THE RECORDS OF TEMPERATURE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM 1,400 DEGREES FAHRENHEIT, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATION EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.
[40CFR PART 64]

Emissions and Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
CO: 2000 PPM, RULE 407
PM: 0.1 GR/DSCF, RULE 409
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. G24806
A/N 501721**

Equipment Description:

LANDFILL GAS TO ENERGY SYSTEM NO. 1 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE NO. 1, CATERPILLAR, MODEL G3616, SIXTEEN CYLINDER, 4261 BHP, LEAN BURN, LANDFILL GAS/NATURAL GAS FIRED, TURBOCHARGED AND AFTERCOOLED, DRIVING A 3 MW ELECTRICAL GENERATOR.
2. COMPRESSOR, 1468 CFM, 300 HP
3. ANCILLARY RADIATOR AND AFTERCOOLER WITH ELECTRIC FANS
4. ANCILLARY MUFFLER EXHAUST STACK.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE EMISSION OF RAW LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150.1]
4. A SAMPLING PORT SHALL BE INSTALLED IN THE LANDFILL GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A GAS SAMPLE.
[RULE 431.1]
5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE GAS SUPPLY LINE FOR ALL FUELS TO THE ENGINE.
[RULE 1303 (b)(2)-OFFSET]
6. THE COMBINED TOTAL LANDFILL GAS FLOW RATE AT PUENTE HILLS LANDFILL SHALL NOT EXCEED 39,800 SCFM.
[RULE 1303 (b)(2)-OFFSET]



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7. THE HEAT INPUT OF GAS TO THE ENGINE SHALL NOT EXCEED 34 MM BTU PER HOUR. A WEEKLY LOG OF THE GAS HEAT INPUT, BASED ON THE RECORDED FLOW RATE (SCFM) AND HIGHER HEATING VALUE, SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303 (b)(2)-OFFSET]
8. READINGS OF THE HIGHER HEATING VALUE OF THE GAS AT THE INLET TO THE ENGINE SHALL BE TAKEN WEEKLY WITH AN AQMD APPROVED INSTRUMENT AND THE RESULTS RECORDED.
[RULE 1303 (b)(2)-OFFSET]
9. THE ENGINE SHALL ONLY USE LANDFILL GAS OR A COMBINATION OF LANDFILL GAS AND NATURAL GAS.
[RULE 204]
10. THE TOTAL NATURAL GAS USAGE SHALL NOT EXCEED 25 PERCENT OF THE TOTAL ENGINE HEAT INPUT ON AN AVERAGE DAILY BASIS AND 10 PERCENT ON A MONTHLY BASIS.
[RULE 1303 (b)(2)-OFFSET]
11. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL NOT BE USED IN THIS ENGINE TO GENERATE ELECTRICITY FOR DISTRIBUTION IN THE STATE GRID SYSTEM.
[RULE 1303 (b)(2)-OFFSET]
12. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL ONLY BE FIRED IN THIS ENGINE TO PROVIDE ELECTRICITY TO THE SANITATION DISTRICTS' OPERATED FACILITIES AT THE PUENTE HILLS LANDFILL, SAN JOSE CREEK WATER RECLAMATION PLANT AND THE JOINT ADMINISTRATION OFFICE.
[RULE 1303 (b)(2)-OFFSET]
13. SAMPLING PORTS SHALL BE PROVIDED IN THE ENGINE EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM AND TWO DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE, AND SHALL CONSIST OF TWO PROPERLY SIZED WELD NIPPLES WITH PLUGS, 90 DEGREES APART. AN EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON APPROVAL OF THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE SUPPLIED BY THE APPLICANT.
[RULE 217]



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

14. APPLICANT SHALL CONDUCT ANNUAL PERFORMANCE TEST OF THE ENGINE IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TEST. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A TEST PROTOCOL SHALL BE SUBMITTED FOR APPROVAL AT LEAST 60 DAYS PRIOR TO TESTING.

THE PERFORMANCE TEST SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO A TEST OF THE INLET AND EXHAUST GASES, FOR THE FOLLOWING:

- A. METHANE
- B. TOTAL NON-METHANE HYDROCARBONS
- C. OXIDES OF NITROGEN (EXHAUST ONLY)
- D. CARBON MONOXIDE (EXHAUST ONLY)
- E. PARTICULATES (EXHAUST ONLY)
- F. TOTAL SULFUR COMPOUNDS AS H₂S (INLET ONLY)
- G. FLOW RATE
- H. OXYGEN
- I. NITROGEN
- J. CARBON DIOXIDE
- K. MOISTURE
- L. TEMPERATURE
- M. TOXIC AIR CONTAMINANTS INCLUDING BENZENE, CHLOROBENZENE, 1,2-DICHLOROETHANE, 1,1-DICHLOROETHANE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE AND XYLENES (EXHAUST ONLY).

[RULE 1303 (b)(2)-OFFSET, 1401]

15. THE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/HR
NON-METHANE HYDROCARBONS	1.69
NITROGEN OXIDE	4.79
SULFUR DIOXIDE	1.86
CARBON MONOXIDE	23.5
PARTICULATES	1.58

[RULE 1303 (b)(2)-OFFSET]

16. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) SHALL BE INSTALLED AND OPERATED TO MEASURE THE ENGINE EXHAUST CONCENTRATION FOR NOX AND O₂ ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 15% O₂. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF AQMD RULE 218.

[RULE 218]

17. ALL RECORDS, SUCH AS FUEL USAGE, MAINTENANCE RECORDS AND PERFORMANCE TEST RESULTS, SHALL BE MAINTAINED FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 1150.1, 1303 (b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

18. THIS ENGINE SHALL NOT BE OPERATED IN SUCH A MANNER AS TO INTERFERE WITH THE OWNER'S/OPERATOR'S ABILITY TO COMPLY WITH AQMD RULE 1150.1 OR ANY OTHER AQMD RULE LIMITING LANDFILL GAS MIGRATION OR SURFACE EMISSIONS.
[RULE 1150.1]
19. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF 40CFR PART 63, SUBPART ZZZZ - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.
[40CFR PART 63, SUBPART ZZZZ]
20. THE EXHAUST OXYGEN SHALL BE MAINTAINED IN THE RANGE OF 8% TO 12% AVERAGED OVER 1-HOUR WHENEVER THE ENGINE IS IN OPERATION, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN.

CONTINUOUS EXHAUST OXYGEN MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN QUARTERLY BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN 1-HOUR AVERAGE OXYGEN PERCENTAGE OF LESS THAN 8% OR GREATER THAN 12% OCCURS DURING OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. STARTUP OR SHUTDOWN PERIOD SHALL NOT EXCEED 30 MINUTES. THE OPERATOR SHALL REVIEW THE RECORDS OF OXYGEN PERCENTAGE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM THE OXYGEN RANGE, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

[40CFR PART 64]

Emissions and Requirements:

21. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA

NMOC: 196 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (AS METHANE, 1 - HR AVG.)

NMOC: 40 PPMV@ 15% O₂ AS METHANE, RULE 1110.2

NOX: 51 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1- HR AVG.)

NOX: 54 PPMV@ 15% O₂, RULE 1110.2 (ECF = 1.49)

CO: 351 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1 - HR AVG.)

CO: 2000 PPMV@ 15% O₂, RULE 1110.2

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

CH₄: 3000 PPMV@ 15% O₂, RULE 1150.1



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. G24807
A/N 501722**

Equipment Description:

LANDFILL GAS TO ENERGY SYSTEM NO. 2 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE NO. 2, CATERPILLAR, MODEL G3616, SIXTEEN CYLINDER, 4261 BHP, LEAN BURN, LANDFILL GAS/NATURAL GAS FIRED, TURBOCHARGED AND AFTERCOOLED, DRIVING A 3 MW ELECTRICAL GENERATOR.
2. COMPRESSOR, 1468 CFM, 300 HP
3. ANCILLARY RADIATOR AND AFTERCOOLER WITH ELECTRIC FANS
4. ANCILLARY MUFFLER EXHAUST STACK.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE EMISSION OF RAW LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150.1]
4. A SAMPLING PORT SHALL BE INSTALLED IN THE LANDFILL GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A GAS SAMPLE.
[RULE 431.1]
5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE GAS SUPPLY LINE FOR ALL FUELS TO THE ENGINE.
[RULE 1303 (b)(2)-OFFSET]
6. THE COMBINED TOTAL LANDFILL GAS FLOW RATE AT PUENTE HILLS LANDFILL SHALL NOT EXCEED 39,800 SCFM.
[RULE 1303 (b)(2)-OFFSET]



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

7. THE HEAT INPUT OF GAS TO THE ENGINE SHALL NOT EXCEED 34 MM BTU PER HOUR. A WEEKLY LOG OF THE GAS HEAT INPUT, BASED ON THE RECORDED FLOW RATE (SCFM) AND HIGHER HEATING VALUE, SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303 (b)(2)-OFFSET]
8. READINGS OF THE HIGHER HEATING VALUE OF THE GAS AT THE INLET TO THE ENGINE SHALL BE TAKEN WEEKLY WITH AN AQMD APPROVED INSTRUMENT AND THE RESULTS RECORDED.
[RULE 1303 (b)(2)-OFFSET]
9. THE ENGINE SHALL ONLY USE LANDFILL GAS OR A COMBINATION OF LANDFILL GAS AND NATURAL GAS.
[RULE 204]
10. THE TOTAL NATURAL GAS USAGE SHALL NOT EXCEED 25 PERCENT OF THE TOTAL ENGINE HEAT INPUT ON AN AVERAGE DAILY BASIS AND 10 PERCENT ON A MONTHLY BASIS.
[RULE 1303 (b)(2)-OFFSET]
11. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL NOT BE USED IN THIS ENGINE TO GENERATE ELECTRICITY FOR DISTRIBUTION IN THE STATE GRID SYSTEM.
[RULE 1303 (b)(2)-OFFSET]
12. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL ONLY BE FIRED IN THIS ENGINE TO PROVIDE ELECTRICITY TO THE SANITATION DISTRICTS' OPERATED FACILITIES AT THE PUENTE HILLS LANDFILL, SAN JOSE CREEK WATER RECLAMATION PLANT AND THE JOINT ADMINISTRATION OFFICE.
[RULE 1303 (b)(2)-OFFSET]
13. SAMPLING PORTS SHALL BE PROVIDED IN THE ENGINE EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM AND TWO DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE, AND SHALL CONSIST OF TWO PROPERLY SIZED WELD NIPPLES WITH PLUGS, 90 DEGREES APART. AN EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON APPROVAL OF THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE SUPPLIED BY THE APPLICANT.
[RULE 217]



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

14. APPLICANT SHALL CONDUCT ANNUAL PERFORMANCE TEST OF THE ENGINE IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TEST. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A TEST PROTOCOL SHALL BE SUBMITTED FOR APPROVAL AT LEAST 60 DAYS PRIOR TO TESTING.

THE PERFORMANCE TEST SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO A TEST OF THE INLET AND EXHAUST GASES, FOR THE FOLLOWING:

- A. METHANE
- B. TOTAL NON-METHANE HYDROCARBONS
- C. OXIDES OF NITROGEN (EXHAUST ONLY)
- D. CARBON MONOXIDE (EXHAUST ONLY)
- E. PARTICULATES (EXHAUST ONLY)
- F. TOTAL SULFUR COMPOUNDS AS H₂S (INLET ONLY)
- G. FLOW RATE
- H. OXYGEN
- I. NITROGEN
- J. CARBON DIOXIDE
- K. MOISTURE
- L. TEMPERATURE
- M. TOXIC AIR CONTAMINANTS INCLUDING BENZENE, CHLOROBENZENE, 1,2-DICHLOROETHANE, 1,1-DICHLOROETHANE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE AND XYLENES (EXHAUST ONLY).

[RULE 1303 (b)(2)-OFFSET, 1401]

15. THE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/HR
NON-METHANE HYDROCARBONS	1.69
NITROGEN OXIDE	4.79
SULFUR DIOXIDE	1.86
CARBON MONOXIDE	23.5
PARTICULATES	1.58

[RULE 1303 (b)(2)-OFFSET]

16. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) SHALL BE INSTALLED AND OPERATED TO MEASURE THE ENGINE EXHAUST CONCENTRATION FOR NOX AND O₂ ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 15% O₂. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF AQMD RULE 218.

[RULE 218]

17. ALL RECORDS, SUCH AS FUEL USAGE, MAINTENANCE RECORDS AND PERFORMANCE TEST RESULTS, SHALL BE MAINTAINED FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 1150.1, 1303 (b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

18. THIS ENGINE SHALL NOT BE OPERATED IN SUCH A MANNER AS TO INTERFERE WITH THE OWNER'S/OPERATOR'S ABILITY TO COMPLY WITH AQMD RULE 1150.1 OR ANY OTHER AQMD RULE LIMITING LANDFILL GAS MIGRATION OR SURFACE EMISSIONS.
[RULE 1150.1]
19. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF 40CFR PART 63, SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.
[40CFR PART 63, SUBPART ZZZZ]
20. THE EXHAUST OXYGEN SHALL BE MAINTAINED IN THE RANGE OF 8% TO 12% AVERAGED OVER 1-HOUR WHENEVER THE ENGINE IS IN OPERATION, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN.

CONTINUOUS EXHAUST OXYGEN MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN QUARTERLY BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN 1-HOUR AVERAGE OXYGEN PERCENTAGE OF LESS THAN 8% OR GREATER THAN 12% OCCURS DURING OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. STARTUP OR SHUTDOWN PERIOD SHALL NOT EXCEED 30 MINUTES. THE OPERATOR SHALL REVIEW THE RECORDS OF OXYGEN PERCENTAGE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM THE OXYGEN RANGE, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

[40CFR PART 64]

Emissions and Requirements:

21. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAA
NMOC: 196 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (AS METHANE, 1 - HR AVG.)
NMOC: 40 PPMV@ 15% O₂ AS METHANE, RULE 1110.2
NOX: 51 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1- HR AVG.)
NOX: 54 PPMV@ 15% O₂, RULE 1110.2 (ECF = 1.49)
CO: 351 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1 - HR AVG.)
CO: 2000 PPMV@ 15% O₂, RULE 1110.2
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
CH₄: 3000 PPMV@ 15% O₂, RULE 1150.1



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. G24808
A/N 501723**

Equipment Description:

LANDFILL GAS TO ENERGY SYSTEM NO. 3 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE NO. 3, CATERPILLAR, MODEL G3616, SIXTEEN CYLINDER, 4261 BHP, LEAN BURN, LANDFILL GAS/NATURAL GAS FIRED, TURBOCHARGED AND AFTERCOOLED, DRIVING A 3 MW ELECTRICAL GENERATOR.
2. COMPRESSOR, 1468 CFM, 300 HP
3. ANCILLARY RADIATOR AND AFTERCOOLER WITH ELECTRIC FANS
4. ANCILLARY MUFFLER EXHAUST STACK.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE EMISSION OF RAW LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150.1]
4. A SAMPLING PORT SHALL BE INSTALLED IN THE LANDFILL GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A GAS SAMPLE.
[RULE 431.1]
5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE GAS SUPPLY LINE FOR ALL FUELS TO THE ENGINE.
[RULE 1303 (b)(2)-OFFSET]
6. THE COMBINED TOTAL LANDFILL GAS FLOW RATE AT PUENTE HILLS LANDFILL SHALL NOT EXCEED 39,800 SCFM.
[RULE 1303 (b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

7. THE HEAT INPUT OF GAS TO THE ENGINE SHALL NOT EXCEED 34 MM BTU PER HOUR. A WEEKLY LOG OF THE GAS HEAT INPUT, BASED ON THE RECORDED FLOW RATE (SCFM) AND HIGHER HEATING VALUE, SHALL BE KEPT FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303 (b)(2)-OFFSET]
8. READINGS OF THE HIGHER HEATING VALUE OF THE GAS AT THE INLET TO THE ENGINE SHALL BE TAKEN WEEKLY WITH AN AQMD APPROVED INSTRUMENT AND THE RESULTS RECORDED.
[RULE 1303 (b)(2)-OFFSET]
9. THE ENGINE SHALL ONLY USE LANDFILL GAS OR A COMBINATION OF LANDFILL GAS AND NATURAL GAS.
[RULE 204]
10. THE TOTAL NATURAL GAS USAGE SHALL NOT EXCEED 25 PERCENT OF THE TOTAL ENGINE HEAT INPUT ON AN AVERAGE DAILY BASIS AND 10 PERCENT ON A MONTHLY BASIS.
[RULE 1303 (b)(2)-OFFSET]
11. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL NOT BE USED IN THIS ENGINE TO GENERATE ELECTRICITY FOR DISTRIBUTION IN THE STATE GRID SYSTEM.
[RULE 1303 (b)(2)-OFFSET]
12. OTHER THAN IN THE ENRICHED PRE-COMBUSTION CHAMBER, NATURAL GAS SHALL ONLY BE FIRED IN THIS ENGINE TO PROVIDE ELECTRICITY TO THE SANITATION DISTRICTS' OPERATED FACILITIES AT THE PUENTE HILLS LANDFILL, SAN JOSE CREEK WATER RECLAMATION PLANT AND THE JOINT ADMINISTRATION OFFICE.
[RULE 1303 (b)(2)-OFFSET]
13. SAMPLING PORTS SHALL BE PROVIDED IN THE ENGINE EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM AND TWO DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE, AND SHALL CONSIST OF TWO PROPERLY SIZED WELD NIPPLES WITH PLUGS, 90 DEGREES APART. AN EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON APPROVAL OF THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE SUPPLIED BY THE APPLICANT.
[RULE 217]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

14. APPLICANT SHALL CONDUCT ANNUAL PERFORMANCE TEST OF THE ENGINE IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TEST. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A TEST PROTOCOL SHALL BE SUBMITTED FOR APPROVAL AT LEAST 60 DAYS PRIOR TO TESTING.

THE PERFORMANCE TEST SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO A TEST OF THE INLET AND EXHAUST GASES, FOR THE FOLLOWING:

- A. METHANE
- B. TOTAL NON-METHANE HYDROCARBONS
- C. OXIDES OF NITROGEN (EXHAUST ONLY)
- D. CARBON MONOXIDE (EXHAUST ONLY)
- E. PARTICULATES (EXHAUST ONLY)
- F. TOTAL SULFUR COMPOUNDS AS H₂S (INLET ONLY)
- G. FLOW RATE
- H. OXYGEN
- I. NITROGEN
- J. CARBON DIOXIDE
- K. MOISTURE
- L. TEMPERATURE
- M. TOXIC AIR CONTAMINANTS INCLUDING BENZENE, CHLOROBENZENE, 1,2-DICHLOROETHANE, 1,1-DICHLOROETHANE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE AND XYLENES (EXHAUST ONLY).

[RULE 1303 (b)(2)-OFFSET, 1401]

15. THE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/HR
NON-METHANE HYDROCARBONS	1.69
NITROGEN OXIDE	4.79
SULFUR DIOXIDE	1.86
CARBON MONOXIDE	23.5
PARTICULATES	1.58

[RULE 1303 (b)(2)-OFFSET]

16. A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) SHALL BE INSTALLED AND OPERATED TO MEASURE THE ENGINE EXHAUST CONCENTRATION FOR NOX AND O₂ ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 15% O₂. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF AQMD RULE 218.

[RULE 218]

17. ALL RECORDS, SUCH AS FUEL USAGE, MAINTENANCE RECORDS AND PERFORMANCE TEST RESULTS, SHALL BE MAINTAINED FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 1150.1, 1303 (b)(2)-OFFSET]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

18. THIS ENGINE SHALL NOT BE OPERATED IN SUCH A MANNER AS TO INTERFERE WITH THE OWNER'S/OPERATOR'S ABILITY TO COMPLY WITH AQMD RULE 1150.1 OR ANY OTHER AQMD RULE LIMITING LANDFILL GAS MIGRATION OR SURFACE EMISSIONS.
[RULE 1150.1]
19. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF 40CFR PART 63, SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.
[40CFR PART 63, SUBPART ZZZZ]
20. THE EXHAUST OXYGEN SHALL BE MAINTAINED IN THE RANGE OF 8% TO 12% AVERAGED OVER 1-HOUR WHENEVER THE ENGINE IS IN OPERATION, EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN.

CONTINUOUS EXHAUST OXYGEN MONITORING AND RECORDING SYSTEM SHALL BE PURSUANT TO THE OPERATION AND MAINTENANCE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.7. SUCH A SYSTEM SHALL BE INSPECTED, MAINTAINED, AND CALIBRATED ON AN QUARTERLY BASIS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS USING AN APPLICABLE AQMD OR EPA APPROVED METHOD.

FOR THE PURPOSE OF THIS CONDITION, A DEVIATION SHALL BE DEFINED AS WHEN 1-HOUR AVERAGE OXYGEN PERCENTAGE OF LESS THAN 8% OR GREATER THAN 12% OCCURS DURING OPERATION EXCEPT DURING STARTUPS OR SHUTDOWNS. STARTUP OR SHUTDOWN PERIOD SHALL NOT EXCEED 30 MINUTES. THE OPERATOR SHALL REVIEW THE RECORDS OF OXYGEN PERCENTAGE ON A DAILY BASIS TO DETERMINE IF A DEVIATION OCCURED OR SHALL INSTALL AN ALARM SYSTEM TO ALERT THE OPERATOR WHEN A DEVIATION OCCURS.

FOR EACH SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K, WHENEVER AN DEVIATION OCCURS FROM THE OXYGEN RANGE, THE OPERATOR SHALL TAKE IMMEDIATE CORRECTIVE ACTION, AND KEEP RECORDS OF THE DURATION AND CAUSE (INCLUDING UNKNOWN CAUSE, IF APPLICABLE) OF THE DEVIATION AND THE CORRECTIVE ACTION TAKEN.

ALL DEVIATIONS SHALL BE REPORTED TO THE AQMD ON A SEMI-ANNUAL BASIS PURSUANT TO THE REQUIREMENTS SPECIFIED IN 40 CFR PART 64.9 AND CONDITION NOS. 22 AND 23 IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL SUBMIT AN APPLICATION WITH A QUALITY IMPROVEMENT PLAN (QIP) IN ACCORDANCE WITH 40 CFR PART 64.8 TO THE AQMD IF AN ACCUMULATION OF DEVIATIONS EXCEEDS 5 PERCENT DURATION OF THIS EQUIPMENT'S TOTAL OPERATING TIME FOR ANY SEMI-ANNUAL REPORTING PERIOD SPECIFIED IN CONDITION NO. 23 IN SECTION K OF THIS PERMIT. THE REQUIRED QIP SHALL BE SUBMITTED TO THE AQMD WITHIN 90 CALENDAR DAYS AFTER THE DUE DATE FOR THE SEMI-ANNUAL MONITORING REPORT.

THE OPERATOR SHALL KEEP ADEQUATE RECORDS IN A FORMAT THAT IS ACCEPTABLE TO THE AQMD TO DEMONSTRATE COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS SPECIFIED IN THIS CONDITION AND 40 CFR PART 64.9 FOR A MINIMUM OF FIVE YEARS.



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[40CFR PART 64]

Emissions and Requirements:

21. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR63 SUBPART AAAAA

NMOC: 196 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (AS METHANE, 1 - HR AVG.)

NMOC: 40 PPMV@ 15% O₂ AS METHANE, RULE 1110.2

NOX: 51 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1- HR AVG.)

NOX: 54 PPMV@ 15% O₂, RULE 1110.2 (ECF = 1.49)

CO: 351 PPMV@ 15% O₂, RULE 1303 (a)(1)-BACT (1 - HR AVG.)

CO: 2000 PPMV@ 15% O₂, RULE 1110.2

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

CH₄: 3000 PPMV@ 15% O₂, RULE 1150.1



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO OPERATE

**Permit No. G10889
A/N 501724**

Equipment Description:

LANDFILL CONDENSATE/LEACHATE COLLECTION/STORAGE SYSTEM CONSISTING OF:

1. FOUR STORAGE TANKS, CONDENSATE/LEACHATE INFLUENT, EACH 7,000 GALLON CAPACITY.
2. STORAGE TANK, CONDENSATE, 2,000 GALLON CAPACITY.
3. STORAGE TANK, CONDENSATE, 2,000 GALLON CAPACITY.
4. STORAGE TANK, CONDENSATE/LEACHATE, 1,200 GALLON CAPACITY.
5. TWO STORAGE TANKS, CONDENSATE, EACH 11,300 GALLON CAPACITY.
6. STORAGE TANK, CONDENSATE, 5,000 GALLON CAPACITY.
7. STORAGE TANK, CONDENSATE/LEACHATE, 6,000 GALLON CAPACITY.
8. STORAGE TANK, CONDENSATE, 5,000 GALLON CAPACITY WITH A CARBON FILTER
9. STORAGE TANK, CONDENSATE, 3,000 GALLON CAPACITY
10. STORAGE TANK, CONDENSATE, 500 GALLON CAPACITY WITH A CARBON FILTER
11. TEN TEMPORARY STORAGE TANKS, LEACHATE, EACH UP TO 20,000 GALLON CAPACITY.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THE OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE DISCHARGE OF UNTREATED, ODOROUS LIQUID INTO THE ATMOSPHERE.
[RULE 402]



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5. THE VACUUM TRUCK WHICH EMPTIES THE CONDENSATE/LEACHATE FROM THE CONDENSATE/LEACHATE STORAGE TANKS SHALL NOT VENT ODOROUS VAPORS INTO THE ATMOSPHERE.
[RULE 402]
6. ANY LIQUID USED FOR DUST CONTROL OR OTHER PURPOSES SHALL BE ODORLESS AND SHALL NOT CONTAIN TOTAL VOLATILE ORGANIC COMPOUNDS IN EXCESS OF 45 UG/L.
[RULE 402]
7. ALL CONDENSATE AND LEACHATE STORAGE TANKS, WITH THE EXCEPTION OF TANKS AS DESCRIBED IN EQUIPMENT DESCRIPTION NO. 8 AND 10, SHALL BE VENTED TO A LANDFILL GAS COLLECTION SYSTEM WHICH HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.
[RULE 1150.1, 1303 (a)(1)-BACT]



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

PERMIT TO CONSTRUCT/OPERATE

**Permit No. G25958
A/N 537802**

Equipment Description:

LANDFILL GAS COLLECTION SYSTEM CONSISTING OF:

1. ONE THOUSAND THREE HUNDRED EIGHTY SEVEN (1387), VERTICAL GAS COLLECTION WELLS, THREE HUNDRED NINETY SEVEN (397) HORIZONTAL GAS COLLECTION TRENCHES, EITHER PERIPHERAL OR PARALLEL STYLE AND ASSOCIATED PIPING IN FOLLOWING LANDFILL AREAS:

AREA	VERTICAL WELLS	HORIZONTAL TRENCHES
CANYON 9	97	22
EASTERN CANYON	117	216
MAIN CANYON	1173	159

MISCELLANEOUS LANDFILL GAS COLLECTORS IN VARIOUS LANDFILL AREAS: 206

2. ADDITIONAL OPTIONAL VERTICAL COLLECTORS IN VARIOUS LANDFILL AREAS: 431
3. ADDITIONAL OPTIONAL HORIZONTAL TRENCHES IN VARIOUS LANDFILL AREAS: 150
4. TWO (2) AIR STRIPPING TOWERS, CONDENSATE, EACH 1'-7" DIA. X 13'-0" H.
5. LANDFILL GAS H2S TREATMENT SYSTEM, CONSISTING OF UP TO FOUR CARBON ADSORBERS AS LISTED BELOW TO BE CONNECTED TO THE LANDFILL GAS COLLECTION SYSTEM FOR THE PURPOSE OF H2S REMOVAL.
 - A) ADSORBER UNIT, TIGG, MODEL NB-15, 22' LONG. X 7'-10" WIDE X 8'-11" HEIGHT, CONTAINING UP TO 12,000 POUNDS OF ADSORBENT, COAL OR COCONUT SHELL BASE OR EQUIVALENT.
 - B) ADSORBER UNIT, CARBON ACTIVATED, MODEL VAP-RB20, 20' LONG. X 8'-4" WIDE X 7'-10" HEIGHT, CONTAINING UP TO 12,000 POUNDS OF ADSORBENT, COAL OR COCONUT SHELL BASE OR EQUIVALENT.
 - C) ADSORBER UNIT, CYLINDRICAL TYPE 12'DIA, 8'-6" HIGH, CONTAINING UP TO 12,000 POUNDS OF ADSORBENT, COAL OR COCONUT SHELL BASE OR EQUIVALENT.
 - D) ADSORBER UNIT, CYLINDRICAL TYPE 10' DIA, 11' HIGH, CONTAINING UP TO 16,000 POUNDS OF ADSORBENT, COAL OR COCONUT SHELL BASE OR EQUIVALENT.

CONDITIONS:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

[RULE 204]

3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. DURING WELL DRILLING, AN APPROVED EMISSION CONTROL BOX SHALL BE PLACED OVER THE WELL HOLE TO COLLECT LANDFILL GAS. THE COLLECTED GAS SHALL EITHER BE DIRECTED TO AN OPERATING FLARE SYSTEM WHICH HAS A VALID PERMIT ISSUED BY THE AQMD, OR VENTED TO A CARBON ADSORPTION UNIT WHICH HAS SUFFICIENT CAPACITY TO REMOVE ODORS WHEN THERE IS NO OPERATIONAL GAS COLLECTION/FLARING SYSTEM AVAILABLE NEARBY.
[RULE 402]
5. WELL DRILLING, DRIVING AND/OR TRENCHING SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 6 P.M. AND 7 A.M. OR ON SATURDAYS, SUNDAYS OR LEGAL HOLIDAYS, UNLESS OTHERWISE APPROVED BY THE AQMD.
[RULE 402, 1150]
6. WELL DRILLING, DRIVING, AND/OR TRENCHING SHALL NOT BE CONDUCTED ON DAYS WHEN THE AQMD FORECASTS SECOND OR THIRD STAGE EPISODES FOR AREA NO. 11, OR WHEN THE AQMD REQUIRES COMPANIES IN AREA NO. 11 TO IMPLEMENT THEIR SECOND OR THIRD STAGE EPISODE PLANS. EPISODE FORECASTS FOR THE FOLLOWING DAY CAN BE OBTAINED BY CALLING (800) 288-7664.
[RULE 402, 1150]
7. WELL DRILLING, DRIVING AND/OR TRENCHING SHALL NOT BE CONDUCTED WHEN THE WIND SPEED IS GREATER THAN 15 M.P.H. AVERAGE (OVER 15 MINUTES) OR THE WIND SPEED INSTANTANEOUSLY EXCEEDS 25 M.P.H.
[RULE 402, 403, 1150]
8. EACH WELL SHALL BE COMPLETED AND CAPPED THE SAME DAY ITS CONSTRUCTION COMMENCES UNLESS THE WELL HOLE IS COMPLETELY SEALED AND THE WELL CASING IS CONNECTED TO THE GAS COLLECTION HEADER TO PREVENT ANY LANDFILL GAS FROM ESCAPING INTO THE ATMOSPHERE.
[RULE 1150.1]
9. THE CONSTRUCTION OF ANY PIPING OR WELL TRENCH WHICH EXPOSES LANDFILL TRASH TO THE ATMOSPHERE SHALL BE STAGED SUCH THAT NO MORE THAN ONE HUNDRED (100) LINEAR FEET OF TRENCH PER EXCAVATION SITE IS EXPOSED AT ANY TIME PRIOR TO BACKFILLING. THE NUMBER OF EXCAVATION SITES SHALL NOT EXCEED TWO.
[RULE 402, 1150]
10. WELL HOLES, TRENCHES, AND EXPOSED LANDFILL TRASH SHALL BE COMPLETELY COVERED TO PREVENT ANY EMISSIONS OF LANDFILL GAS TO THE ATMOSPHERE WHENEVER WORK IS NOT ACTIVELY IN PROGRESS. THE COVER SHALL INCLUDE, BUT MAY NOT BE LIMITED TO A MINIMUM OF 6 INCHES OF CLEAN DIRT, APPROVED FOAM, OR HEAVY-DUTY PLASTIC SHEETING. FOAM BY ITSELF SHALL NOT BE USED AS A NIGHT COVER IF IT IS RAINING OR RAIN IS PREDICTED BY THE NATIONAL WEATHER SERVICE PRIOR TO THE NEXT SCHEDULED WORKING DAY.



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[RULE 402, 1150.1]

11. FOR PURPOSES OF THIS PERMIT, CONSTRUCTION SPOILS ARE LANDFILL TRASH, MATERIAL THAT IS MIXED WITH LANDFILL TRASH, MATERIAL THAT HAS BEEN IN CONTACT WITH LANDFILL TRASH, OR ODOROUS MATERIAL THAT IS REMOVED FROM WELL HOLES OR TRENCHES.
[RULE 402, 403, 1150]
12. CONSTRUCTION SPOILS AND ALL WORKING AREAS BEING ACTIVELY USED FOR TRUCK AND CONSTRUCTION EQUIPMENT TRAFFICKING SHALL BE MAINTAINED IN A MOIST CONDITION TO MINIMIZE DUST AND EMISSIONS.
[RULE 402, 403, 1150]
13. ALL CONSTRUCTION SPOILS SHALL BE TRANSPORTED TO THE ACTIVE WORKING FACE OF THE LANDFILL WITHIN ONE HOUR OF GENERATION OR AS DEEMED NECESSARY BY AQMD PERSONNEL.
[RULE 402, 1150]
14. DURING TRANSPORT OF THE CONSTRUCTION SPOILS, NO MATERIAL SHALL EXTEND ABOVE THE SIDES OR REAR OF THE VEHICLE HAULING THE MATERIAL.
[RULE 1150]
15. THE EXTERIOR OF THE VEHICLE (INCLUDING THE TIRES) HAULING THE CONSTRUCTION SPOILS SHALL BE CLEANED OFF PRIOR TO LEAVING THE WORKING SITE.
[RULE 1150]
16. IF A DISTINCT ODOR LEVEL (LEVEL III OR GREATER) RESULTING FROM THE CONSTRUCTION IS DETECTED AT OR BEYOND THE PROPERTY LINE, ALL WORK SHALL CEASE UNTIL THE ODOR SOURCES ARE DETERMINED AND ELIMINATED. ODOR LEVELS SHALL BE DETERMINED BY AQMD PERSONNEL OR ON-SITE SAFETY COORDINATOR IN THE ABSENCE OF AQMD PERSONNEL.
[RULE 402, 1150]
17. DURING CONSTRUCTION, IF A CONSIDERABLE NUMBER OF COMPLAINTS ARE RECEIVED, ALL WORK SHALL CEASE AND APPROVED MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL THE EMISSIONS CAUSING THE COMPLAINTS IS MITIGATED AND THE APPROVAL TO RESUME WORK IS RECEIVED FROM THE AQMD.
[RULE 402, 1150]
18. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY AQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC SHALL BE IMPLEMENTED UPON REQUEST.
[RULE 1150.1]
19. EACH GAS COLLECTION WELL SHALL BE CONNECTED TO AN OPERATING LANDFILL GAS HEADER OR THE ENDS OF THE WELL SHALL BE SEALED WITH BLIND FLANGES OR OTHER TYPES OF SEALS APPROVED BY THE AQMD AS SOON AS THE WELL IS INSTALLED.
[RULE 1150.1]



**FACILITY PERMIT TO OPERATE
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20. EACH VERTICAL AND HORIZONTAL WELL HEAD SHALL BE EQUIPPED WITH A SHUT-OFF VALVE AND A SAMPLING PORT.
[RULE 1150.1]
21. UNTIL CONNECTED TO AN OPERATING LANDFILL GAS COLLECTION SYSTEM, EACH COMPLETED WELL SHALL BE CAPPED AND ITS GAS CONTROL VALVE CLOSED TO AVOID VENTING LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150, 1150.1]
22. EACH WELL SHALL BE SECURELY SEALED TO PREVENT ANY EMISSIONS OF LANDFILL GAS FROM AROUND THE WELL CASING.
[RULE 402, 1150.1]
23. ALL OPENINGS OF THIS SYSTEM INCLUDING CONDENSATE REMOVAL EQUIPMENT SHALL BE PROPERLY COVERED AND SEALED TO PREVENT ANY VAPORS FROM ENTERING INTO THE ATMOSPHERE.
[RULE 402, 1150]
24. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS IN A FORM APPROVED BY THE AQMD AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[[RULE 1150.1, 1303 (B)(2)-OFFSET]
25. ALL GASES COLLECTED BY THIS SYSTEM SHALL BE VENTED TO A COMBUSTION OR PROCESSING FACILITY WHICH IS IN FULL USE, CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED, AND HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.
[RULE 1150.1, 1303(A)(1)-BACT, 1401]
26. THE OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY RAW LANDFILL GAS OR CONDENSATE INTO THE ATMOSPHERE.
[RULE 402, 1150]
27. THE AQMD SHALL BE NOTIFIED IN WRITING AT LEAST ONE (1) WEEK IN ADVANCE WHEN ADDITIONAL WELLS OR TRENCHES AND THEIR ASSOCIATED PIPING WILL BE INSTALLED. THE PROPOSED WELL OR TRENCH LOCATIONS AND CONNECTING PIPING SHALL BE IDENTIFIED ON A DRAWING WHICH SHOWS THE ENTIRE GAS COLLECTION SYSTEM. ESTIMATED GAS COLLECTION VOLUME, WELL DEPTHS, TRENCH LENGTHS, PIPE LENGTHS, DIAMETERS AND LAYOUTS SHALL BE SUPPLIED TO THE AQMD IN THIS ADVANCE NOTIFICATION.
[RULE 1150.1]
28. SHORT NOTICE CONSTRUCTION PROJECTS IN RESPONSE TO NOTICE-TO-COMPLY OR MITIGATION OF EXCEEDANCES PURSUANT TO RULE 1150.1 ARE EXEMPT FROM ONE (1) WEEK ADVANCE WRITTEN NOTICES. TELEPHONE, ELECTRONIC MAIL OR OTHER MEANS OF ADVANCE NOTIFICATION SHALL BE SUFFICIENT FOR PROJECT STARTUP. SUCH COMMUNICATION SHALL INCLUDE THE LOCATION AND A BRIEF DESCRIPTION OF THE PROJECT, THE CURRENT PROPOSED AND PERMIT LIMITS FOR WELL COUNTS AND HORIZONTAL TRENCH LENGTHS. WRITTEN NOTIFICATION REQUIREMENTS SHALL BE PROVIDED TO THE SCAQMD AS SOON AS POSSIBLE BUT NOT LATER THAN 30 DAYS OF THE PROJECT STARTUP DATE.
[RULE 1150.1]



FACILITY PERMIT TO OPERATE LA CNTY SANITATION DISTRICT-PUENTE HILLS

29. WITHIN 180 DAYS AFTER CONSTRUCTION OF A GROUP OF WELLS OR TRENCHES AND THEIR ASSOCIATED PIPING IS COMPLETE, THE PERMITTEE SHALL KEEP ON FILE AND SUBMIT UPON REQUEST, AS-BUILT DRAWINGS TO THE AQMD, WASTE MANAGEMENT UNIT.
[RULE 1150.1]
30. THE CARBON ADSORBER SYSTEMS SHALL BE INSTALLED AND OPERATED TO TREAT LANDFILL GAS AND PRIMARILY TO REDUCE SITE WIDE AVERAGE H₂S PRIOR TO COMBUSTION.
[RULE 204, 431.1]
31. OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS FOR EACH OF THE CARBON ADSORBER SYSTEM AT LEAST ONCE A WEEK ONLY, WHILE THE UNIT IS IN SERVICE;
- A. INLET FLOW RATE TO THE ADSORPTION SYSTEM USING THE PITOT TUBES
 - B. INLET TEMPERATURE, AND PRESSURE TO THE ADSORPTION SYSTEM
 - C. INLET AND OUTLET H₂S CONCENTRATION IN PPMV FOR EACH ADSORBER USING COLORIMETRIC TUBES OR OTHER APPROPRIATE DEVICE OR METHOD.

OPERATOR SHALL CALCULATE THE AMOUNT OF HYDROGEN SULFIDE ADSORBED IN LBS/DAY FOR THE OVERALL SYSTEM ON THE BASIS OF THE READINGS TAKEN ABOVE. OPERATOR SHALL KEEP LOG OF THE DATE AND AMOUNT OF FRESH CARBON ADDED AT EACH COMPLETE/PARTIAL CARBON CHANGE-OUT FOR EACH CARBON ADSORBER UNIT. OPERATOR SHALL KEEP LOG OF THE DATE, AMOUNT OF FRESH CARBON ADDED WHENEVER FRESH CARBON IS ADDED IN ANY CARBON ADSORBER.

[RULE 204, 431.1]

32. ANY BREAKDOWN OR MALFUNCTION OF ANY OF THE CARBON ADSORBER SYSTEMS WHICH RESULTS IN EMISSIONS OF RAW OR TREATED LANDFILL GAS PRIOR TO COMBUSTION SHALL BE REPORTED TO THE AQMD WITHIN ONE HOUR AFTER OCCURRENCE, OR WITHIN ONE HOUR OF DISCOVERY OF THE OCCURRENCE, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]
33. OPERATION OF ANY OF THE CARBON ADSORBER SYSTEMS SHALL BE ON AS NEEDED BASIS TO KEEP THE SITE-WIDE DAILY AVERAGE CONCENTRATION OF SULFUR CONTAINING COMPOUNDS NOT TO EXCEED RAW LANDFILL GAS SULFUR COMPOUNDS LIMITS SPECIFIED IN RULE 431.1.
[RULE 204]

Emissions and Requirements:

34. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

GASEOUS EMISSIONS: RULE 1150.1, 40CFR63 SUBPART AAAAA



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF:

- A. COATING TYPE,
- B. VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS'
- C. VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF:

- A. COATING TYPE,
- B. VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS'
- C. VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.
[RULE 3004 (a) (4)]

Emissions and Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

Emissions and Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL UNHEATED, NON-CONVEYORIZED.

Emissions and Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, ADHESIVE APPLICATION OPERATION, LOW USE OR EMISSIONS.

Emissions and Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
VOC: RULE 109, RULE 1168, RULE 1171 SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS.

Emissions and Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1415

VOC: 40CFR 82 SUBPART F



**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT.

Emissions and Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

HALON: RULE 1418

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

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**FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS**

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

NONE