

**FACILITY PERMIT TO OPERATE
LA COUNTY SANITATION DISTRICTS (SPADRA)**

**Facility Equipment and Requirements
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and 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.

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

PERMITTED EQUIPMENT LIST

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

Application number	Permit to Operate number	Equipment description	Page
218384	D23126	ICE (50-500 HP) EM ELEC GEN-NG & LPG	5
220689	R-D37810	STORAGE TANK OTHER W/CTL GASOLINE	7
316444	F00873	AIR STRIPPING	9
316453	F2633	LANDFILL CONDENSATE/LEACHATE COLLECTION SYSTEM	10
341017	F61741	BLR OTHER (>10 MMBTU/HR) NG-LFG-DIST	11
341023	F61739	LANDFILL GAS COLLECTION SYSTEM	13
440828	F79024	FLARE, ENCLOSED LANDFILL/DIGESTER GAS	17
497200	PROPOSED	BLR OTHER (>10 MMBTU/HR) NG-LFG-DIST	20

NOTE: EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER 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.

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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.
[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. THIS FACILITY IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

GASEOUS EMISSIONS: 1150.1
GASEOUS EMISSIONS: 40CFR63 SUBPART AAAA
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 COLLECTION 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 COLLECTION SYSTEM TO PREVENT THE CONCENTRATION OF TOC MEASURED AS METHANE FROM EXCEEDING 50 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 COLLECTION 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. 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]
- I. 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]

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PERMIT TO OPERATE

Permit No. D23126
A/N 218384

Equipment Description:

INTERNAL COMBUSTION ENGINE, FORD, LPG OR NATURAL GAS FUELED, EMERGENCY, ELECTRICAL GENERATION. MODEL LSG 875-6005A, TURBOCHARGED, 8 CYLINDERS, RICH BURN, FOUR CYCLE, 111 B.H.P., WITH 1 EXHAUST, AND A HOUSTON INDUSTRIAL DeNO_x SILENCER EMISSION CONTROL DEVICE.

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. AN ELAPSED TIME METER SHALL BE INSTALLED/MAINTAINED, SO AS TO INDICATE IN CUMULATIVE HOURS, THE AMOUNT OF TIME THE ENGINE HAS OPERATED.
[RULE 1110.2, RULE 1303(a)(4)-MODELING & OFFSET EXEMPTION]
4. THE ENGINE IS LIMITED TO AN ANNUAL OPERATING SCHEDULE OF NO MORE THAN 200 HOURS (CUMULATIVE).
[RULE 1110.2, RULE 1303(a)(4)-MODELING & OFFSET EXEMPTION]
5. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED AND CERTIFIED, AT A MINIMUM, ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND ACCORDING TO THE ENGINE MANUFACTURER'S PROCEDURES.
[RULE 1110.2, RULE 1303(a)(4)-MODELING & OFFSET EXEMPTION]
6. AN OPERATING RECORD OF THIS EQUIPMENT SHALL BE MAINTAINED AND SHALL INCLUDE AT A MINIMUM, THE HOURS AND DAYS OF OPERATION AND THE QUANTITY OF FUEL USED. THE OPERATING RECORD SHALL BE KEPT FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE UPON REQUEST OF AQMD PERSONNEL
[RULE 1110.2, RULE 1303(a)(4)-MODELING & OFFSET EXEMPTION]
7. THE EMISSIONS FROM THIS EQUIPMENT MAY NOT EXCEED THE FOLLOWING.

AIR CONTAMINANT	GRAMS/BHP HR
REACTIVE HYDROCARBONS	1.5
NITROGEN OXIDE	1.5
CARBON MONOXIDE	2.0

[RULE 1303 (a)(1)-BACT, 1303 (b)(2)-OFFSET]

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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
ROG 1.5 GR/BHP-HR, RULE 1303 (a)(1)-BACT
NOX 1.5 GR/BHP-HR, RULE 1303 (a)(1)-BACT
CO 2.0 GR/BHP-HR, RULE 1303 (a)(1)-BACT

**FACILITY PERMIT TO OPERATE
LA COUNTY SANITATION DISTRICTS (SPADRA)**

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**Permit No. R-D37810
A/N 220689**

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 DISPENSING NOZZLE, 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 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]

This Permit to Operate No. R-D37810 supersedes Permit to Operate No. D37810 issued on 4/25/91.

Periodic Monitoring:

6. THE OPERATOR SHALL HAVE A PERSON THAT HAS BEEN TRAINED IN ACCORDANCE WITH RULE (461)(d)(5) CONDUCT AN ANNUAL INSPECTION IN ACCORDANCE WITH 461 (d)(1)(B) OF THE GASOLINE TRANSFER AND DISPENSING EQUIPMENT. THE 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)]

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Emissions and Requirements:

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

VOC: RULE 461

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Permit No. F00873
A/N 316444

Equipment Description:

LANDFILL CANYON WATER TREATMENT SYSTEM CONSISTING OF:

1. TWO (2) STORAGE TANKS, EACH 6500 GALLONS.
2. STRIPPING TOWER, CANYON WATER, 40 GPM, 1'-7" DIA. X 2'-3" H. WITH ASSOCIATED PUMPS AND BLOWERS.

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 USE.
[RULE 204]
4. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS THE EXHAUSTS FROM THE STRIPPING TOWERS ARE VENTED TO AIR POLLUTION CONTROL OR COMBUSTION EQUIPMENT WHICH HAS BEEN ISSUED AN AOMD PERMIT TO CONSTRUCT OR OPERATE.
[RULE 1150.1, 1303 (a)(1)-BACT, 1401]

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Permit No. F2633
A/N 316453

Equipment Description:

LANDFILL GAS CONDENSATE AND LEACHATE COLLECTION AND STORAGE SYSTEM CONSISTING OF:

1. FOUR (4) STORAGE TANKS, EACH 6,400 GALLONS.
2. STORAGE TANK, 5,000 GALLONS.
3. TWO (2) STORAGE TANKS, EACH 1,050 GALLONS.
4. TWO (2) STORAGE TANKS, EACH 1,500 GALLONS.
5. STORAGE TANK, 1,600 GALLONS.
6. STORAGE TANK, 1,100 GALLONS.

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]
5. 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]
6. ALL GASES COLLECTED BY THE CONDENSATE/LEACHATE STORAGE TANKS SHALL BE VENTED TO A PROCESS WHICH 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]

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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Permit No. F61741
A/N 341017

Equipment Description:

LANDFILL GAS FIRED STEAM GENERATION SYSTEM CONSISTING OF:

1. THREE GAS COMPRESSORS, CENTRIFUGAL TYPE, EACH 300 HP, WITH ASSOCIATED EQUIPMENT.
2. STEAM GENERATOR, ZURN INDUSTRIES, KEYSTONE WATER TUBE BOILER, 120 MM BTU PER HOUR, LANDFILL GAS FIRED WITH NATURAL GAS AUGMENTATION, PROPANE PILOT, COEN DAF-36/275 WINDBOX BURNER, TWO 200 HP FORCED DRAFT FANS, A 60 HP FLUE GAS RECIRCULATION FAN AND A PLATE TYPE COMBUSTION AIR PREHEATER.
3. STEAM TURBINE, SHIN-NIPPON, MODEL C8-CR15-ER, HORIZONTAL IMPULSE MULTI-STAGE CONDENSING TURBINE WITH A 10,600 KW GENERATOR AND ASSOCIATED EQUIPMENT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMIT-FED 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. NATURAL GAS AUGMENTATION SHALL NOT EXCEED 25% OF THE TOTAL BTU CONTENT.
[RULE 1303(b)(2)- OFFSET]
5. A CONTINUOUS MONITORING SYSTEM SHALL BE MAINTAINED AND OPERATED TO MEASURE THE STEAM GENERATOR STACK EMISSIONS FOR NOX, CO AND O2 CONCENTRATIONS ON A DRY BASIS. IN ADDITION, THE SYSTEM WILL CONVERT THE ACTUAL NOX AND CO CONCENTRATION TO CORRECTED NOX AND CO CONCENTRATION AT 3 PERCENT O2 ON A DRY BASIS AND CONTINUOUSLY RECORD THE STACK NOX, CO AND O2 CONCENTRATIONS AND CORRECTED NOX AND CO CONCENTRATION AT 3% O2. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF RULE 218.
[RULE 1146, 218]

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6. THE EMISSIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED THE FOLLOWING:

ROG	1.1 LBS/HR
NOX	5.0 LBS/HR
SOX	7.6 LBS/HR
CO	3.4 LBS/HR
PM	2.8 LBS/HR

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

7. THE OXIDES OF NITROGEN CONCENTRATIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED 24 PPM BY VOLUME CALCULATED AT 3% O₂, DRY, AVERAGED OVER ONE HOUR, DURING NORMAL OPERATION.

[RULE 1303(a)(1)-BACT]

8. 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 FLAME IS STABILIZED. THE FLAME WILL BE STABILIZED WHEN THE FUEL VALVE IS APPROXIMATELY 15% OPEN.

[RULE 1303(a)(1)-BACT]

9. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN IS DEFINED AS BEING THE PERIOD FROM THE TIME THE LOAD IS AT MINIMUM LEVEL TO THE TIME THE FUEL VALVE IS COMPLETELY CLOSED.

[RULE 1303(a)(1)-BACT]

10. 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]

11. ALL RECORDS SHALL BE KEPT FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

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

Emissions and Requirements:

NO_x: 24 PPM, RULE 1303(a)(1)-BACT

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

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Permit No. F61739
A/N 341023

Equipment Description:

LANDFILL GAS COLLECTION SYSTEM CONSISTING OF:

1. VERTICAL LANDFILL GAS COLLECTION WELLS, SEVEN HUNDRED MAXIMUM, AND ASSOCIATED PIPING.
2. HORIZONTAL LANDFILL GAS COLLECTION WELLS, SEVENTY THOUSAND FEET MAXIMUM, AND ASSOCIATED PIPING.
3. FOUR (4) AIR STRIPPING TOWERS, CONDENSATE/LIQUID.

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. DURING VERTICAL 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.
[RULE 204]
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]

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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. 10, OR WHEN THE AQMD REQUIRES COMPANIES IN AREA NO. 10 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 VERTICAL 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 IS EXPOSED AT ANY TIME PRIOR TO BACKFILLING.
[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.
[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 401, 403, 1150]
13. ALL CONSTRUCTION SPOILS SHALL BE TRANSPORTED TO THE ACTIVE WORKING FACE OF THE LANDFILL BY THE END OF THE WORK DAY AS DEEMED NECESSARY BY AQMD PERSONNEL.
[RULE 402, 1150]

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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 EMISSION CAUSING THE COMPLAINTS IS MITIGATED AND 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]
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]

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24. ALL RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS 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 AN ADDITIONAL WELL OR SET OF WELLS AND THEIR ASSOCIATED PIPING WILL BE INSTALLED. THE PROPOSED WELL LOCATIONS AND CONNECTING PIPING SHALL BE IDENTIFIED ON A DRAWING, WHICH SHOWS THE ENTIRE GAS COLLECTION SYSTEM. ESTIMATED GAS COLLECTION VOLUME, WELL DEPTHS, PIPE LENGTHS, DIAMETERS AND LAYOUTS SHALL BE SUPPLIED TO THE AQMD IN THIS ADVANCE NOTIFICATION.
[RULE 1150.1]
28. WITHIN 180 DAYS AFTER CONSTRUCTION OF A GROUP OF WELLS AND THEIR ASSOCIATED PIPING IS COMPLETE, THE PERMITTEE SHALL KEEP ONSITE AS-BUILT DRAWINGS WHICH SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1]

Emissions and Requirements:

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

GASEOUS EMISSIONS: RULE 1150.1, 40CFR63 SUBPART AAAA

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

PERMIT TO OPERATE

**Permit No. F79024
A/N 440828**

Equipment Description:

LANDFILL GAS FLARING SYSTEM CONSISTING OF:

1. SIX FLARES, HEX DESIGN, EACH, 8'-0" DIA. X 16'-0"H, 31.6 MM BTU/HR WITH A PROPANE PILOT IGNITER, UV SCANNER, AUTOMATIC AIR LOUVERS, AUTOMATIC SHUTDOWN VALVE AND TEMPERATURE CONTROLLER VENTING A GAS COLLECTION SYSTEM.
2. TWO BLOWERS (ONE STANDBY) HAUCK, MODEL NO. TBGB9-091-311, EACH 75 HP.

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 BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. ALL LANDFILL GAS COLLECTED SHALL BE DIRECTED TO THE FLARES OR GAS TO ENERGY FACILITY FOR COMBUSTION OR OTHER AQMD APPROVED DISPOSAL OR TREATMENT SYSTEM.
[RULE 1150.1, 1303(a)(1)-BACT, 1401]
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 1150.1, RULE 1303(a)(1)-BACT]

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

6. THE COMBINED TOTAL FLOW RATE OF LANDFILL GAS TO THE FLARES AND THE GAS TO ENERGY FACILITY SHALL NOT EXCEED 8500 SCFM.
[RULE 1150.1, 1303(b)(2)-OFFSET]
7. THE TOTAL FLOW RATE OF LANDFILL GAS TO EACH FLARE SHALL NOT EXCEED 1300 SCFM.
[RULE 1303(b)(2)-OFFSET]
8. THE TOTAL FLOW RATE OF LANDFILL GAS TO THE FLARE STATION SHALL NOT EXCEED THE FOLLOWING:
- FLOW RATE (SCFM) = $\frac{189.60 \text{ MMBTU/HR}}{(\% \text{ METHANE}/100)(1012 \text{ BTU/SCF})(60 \text{ MIN/HR})}$
- [RULE 1303(b)(2)-OFFSET]
9. THE METHANE CONTENT, IN PERCENT, OF THE LANDFILL GAS COMBUSTED BY THE FLARE STATION SHALL BE MEASURED AT LEAST ONCE PER DAY WHENEVER THE FLARE STATION IS IN OPERATION.
[RULE 1150.1, 1303(b)(2)-OFFSET]
10. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE STATION AND SHALL OPERATE WHENEVER THE FLARE STATION IS IN OPERATION.
[RULE 1150.1, RULE 1303(b)(2)-OFFSET]
11. THE EMISSIONS FROM EACH FLARE SHALL NOT EXCEED THE FOLLOWING:
- | POLLUTANT | LBS/HR |
|-----------|--------|
| ROG | 0.16 |
| NOX | 1.29 |
| SOX | 1.45 |
| CO | 0.34 |
| PM10 | 0.71 |
- [RULE 1303(b)(2)-OFFSET]
12. EMISSIONS OF NOX AS NO2 FROM THE FLARE SHALL NOT EXCEED 0.06 LBS/MMBTU.
[RULE 1303(a)(1)-BACT]
13. A FLARE FAILURE ALARM WITH AN AUTOMATIC LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM SHALL BE MAINTAINED FOR EACH FLARE.
[RULE 1303(a)(1)-BACT]
14. A FLARE FAILURE ALARM WITH AN AUTOMATIC BLOWER SHUT-OFF SYSTEM SHALL BE MAINTAINED FOR THE FLARE STATION.
[RULE 1303(a)(1)-BACT]
15. A SUFFICIENT NUMBER OF PORTS SHALL BE MAINTAINED IN EACH FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME AND THERMOCOUPLE LOCATION WITHIN THE FLARE AT ALL TIMES. ADEQUATE AND SAFE ACCESS SHALL BE PROVIDED FOR ALL PORTS UPON REQUEST BY AQMD PERSONNEL.
[RULE 217, 1303(a)(1)-BACT]

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16. FOUR SAMPLING PORTS SHALL BE MAINTAINED 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 COUPLING . ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED BY THE APPLICANT WITHIN TWENTY FOUR HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]
17. A SAMPLING PORT SHALL BE MAINTAINED AT THE INLET LANDFILL GAS LINE TO THE FLARE STATION.
[RULE 217, 431.1, 1150.1]
18. THE SKIN TEMPERATURE OF THE FLARE SHROUD WITHIN FOUR FEET OF ALL THE SOURCE TEST PORTS SHALL NOT EXCEED 250 DEGREES F. AN APPROVED HEAT SHIELD, IF REQUIRED TO MEET THIS REQUIREMENT, SHALL BE IN PLACE WHENEVER A SOURCE TEST IS CONDUCTED BY THE AQMD.
[RULE 217]
19. ANY BREAKDOWN OR MALFUNCTION WHICH RESULTS IN EMISSIONS OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WITHIN ONE HOUR AFTER OCCURRENCE, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]
20. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO TIME OF DAY.
[RULE 1303(b)(2)-OFFSET]
21. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303(b)(2)-OFFSET]
22. 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]

Emissions and Requirements:

24. 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 COUNTY SANITATION DISTRICTS (SPADRA)

PERMIT TO OPERATE

Permit No.
A/N 497200

Equipment Description:

LANDFILL GAS FIRED STEAM GENERATION SYSTEM CONSISTING OF:

1. THREE GAS COMPRESSORS, CENTRIFUGAL TYPE, EACH 300 HP, WITH ASSOCIATED EQUIPMENT.
2. STEAM GENERATOR, ZURN INDUSTRIES, KEYSTONE WATER TUBE BOILER, 120 MM BTU PER HOUR, LANDFILL GAS FIRED WITH NATURAL GAS AUGMENTATION, PROPANE PILOT, COEN DAF-36/275 WINDBOX BURNER, TWO 200 HP FORCED DRAFT FANS, A 60 HP FLUE GAS RECIRCULATION FAN AND A PLATE TYPE COMBUSTION AIR PREHEATER.
3. STEAM TURBINE, SHIN-NIPPON, MODEL C8-CR15-ER, HORIZONTAL IMPULSE MULTI-STAGE CONDENSING TURBINE WITH A 10,600 KW GENERATOR AND ASSOCIATED EQUIPMENT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMIT-FED 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. NATURAL GAS AUGMENTATION SHALL NOT EXCEED 25% OF THE TOTAL BTU CONTENT.
[RULE 1303(b)(2)- OFFSET]
5. A CONTINUOUS MONITORING 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 WILL CONVERT THE ACTUAL NOX CONCENTRATION TO CORRECTED NOX CONCENTRATION AT 3 PERCENT O2 ON A DRY BASIS AND CONTINUOUSLY RECORD THE STACK NOX AND O2 CONCENTRATIONS AND CORRECTED NOX CONCENTRATION AT 3% O2. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF RULE 218.
[RULE 1146, 218]

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

6. THE EMISSIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED THE FOLLOWING:

ROG	1.1 LBS/HR
NOX	5.0 LBS/HR
SOX	7.6 LBS/HR
CO	3.4 LBS/HR
PM	2.8 LBS/HR

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

7. THE OXIDES OF NITROGEN CONCENTRATIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED 24 PPM BY VOLUME CALCULATED AT 3% O₂, DRY, AVERAGED OVER ONE HOUR, DURING NORMAL OPERATION.

[RULE 1303(a)(1)-BACT]

8. 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 FLAME IS STABILIZED. THE FLAME WILL BE STABILIZED WHEN THE FUEL VALVE IS APPROXIMATELY 15% OPEN.

[RULE 1303(a)(1)-BACT]

9. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN IS DEFINED AS BEING THE PERIOD FROM THE TIME THE LOAD IS AT MINIMUM LEVEL TO THE TIME THE FUEL VALVE IS COMPLETELY CLOSED.

[RULE 1303(a)(1)-BACT]

10. 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]

11. THE OWNER OR OPERATOR SHALL CONDUCT A TEST ANNUALLY. THE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AQMD APPROVED TEST PROCEDURES. WRITTEN TEST RESULTS SHALL BE FURNISHED TO THE AQMD WITHIN SIXTY DAYS AFTER TESTING. WRITTEN NOTICE OF THE TEST SHALL BE PROVIDED TO THE AQMD THIRTY DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TEST SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE EXHAUST FOR:

- A. TEMPERATURE, DEGREES F
- B. FLOW RATE, DSCFM
- C. NMOC, LBS/HR
- D. TNMOC, LBS/HR
- E. NOX, LBS/HR
- F. SOX, LBS/HR
- G. CO, LBS/HR
- H. TOTAL PARTICULATES, LBS/HR
- I. TOTAL SULFUR COMPOUNDS AS H₂S, PPMV (INLET)
- J. LANDFILL GAS COMPOSITION AND HEATING VALUE (INLET)
- K. LANDFILL GAS FLOW RATE, SCFM (INLET)

THE TEST SHALL BE CONDUCTED AT THE MAXIMUM FLOW RATE AVAILABLE AT THE TIME OF THE TEST BUT NOT TO EXCEED THE FLOW RATE ALLOWED BY THIS PERMIT.

[RULE 218, 1146, 1150.1, 1303 (b)(2)-OFFSET, 3004(a)(4)-PERIODIC MONITORING]

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

Emissions and Requirements:

NOx: 24 PPM, RULE 1303(a)(1)-BACT

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 COUNTY SANITATION DISTRICTS (SPADRA)

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 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 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 REGULATION:

VOC: RULE 1113, RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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 REGULATION:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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 REGULATION:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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
VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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 REGULATION:

VOC: RULE 1415

VOC: 40CFR 82 SUBPART F

FACILITY PERMIT TO OPERATE LA COUNTY SANITATION DISTRICTS (SPADRA)

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 REGULATION:

HALON: RULE 1418

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Applicant

County Sanitation Districts
of Los Angeles (CSDLA)
P.O.Box 4998
Whittier, California 90607

Equipment Location

2800 4125 Valley Blvd.
Pomona, California

Equipment Description

A/N 497200

LANDFILL GAS FIRED STEAM GENERATION SYSTEM CONSISTING OF:

1. THREE GAS COMPRESSORS, CENTRIFUGAL TYPE, EACH 300 HP, WITH ASSOCIATED EQUIPMENT.
2. STEAM GENERATOR, ZURN INDUSTRIES, KEYSTONE WATER TUBE BOILER, 120 MM BTU/HR, LANDFILL GAS FIRED WITH NATURAL GAS AUGMENTATION, PROPANE PILOT, COEN DAF-36/275 WINDBOX BURNER, TWO 200 H.P. FORCED DRAFT FANS, A 60 H.P. FLUE GAS RECIRCULATION FAN AND A PLATE TYPE COMBUSTION AIR PREHEATER.
3. STEAM TURBINE, SHIN-NIPPON, MODEL C8-CR15-ER, HORIZONTAL, IMPULSE MULTI-STAGE CONDENSING TURBINE WITH A 10,600 KW GENERATOR AND ASSOCIATED EQUIPMENT.

A/N 497201

TV REVISION APPLICATION

History/Background

CSDLA has filed this application (A/N 497200) requesting removal of the CO CEMS requirement from condition number 5 of their existing boiler permit (A/N 341017). The Boiler (located at the SPADRA Landfill) was installed to use the landfill gas for steam production and power generation. The maximum landfill gas burned in the boiler is 5000 cfm at 40% methane. Initially, LACSD installed the CO CEMS when they applied for a Rule 441 research permit to control NOx using urea injection. AQMD requested a CO CEMS to obtain more data during the research project. After the project was completed (results were unsuccessful) the CO CEMS was not removed. The CO CEMS has reached it's useful life and needs costly replacement. Data

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shows that the 99.57% of the time the CO has been below 20 ppm. See Table 1 submitted by applicant. Source test data since 1990 showed that the concentrations and mass emissions were way below the permit limits. See Table 2 submitted by applicant.

In addition to this application, CSDLA has also filed A/N 497201 to modify their existing Title V permit. The initial Title V permit was issued to this facility in May 23, 2006. This will be the first revision to this Title V permit.

Calculations

Existing emissions

ROG = 1.1 lbs/hr
= 26.4 lbs/day

NOx = 25.3 ppm x 27,099 dscfm x 60 min/hr x 46 lb/379 dscft
= 5.0 lbs/hr
= 120 lbs/day

SOx = 150 ppm x 5,000 scfm x 60 min/hr x 64 lb/379 dscft
= 7.6 lbs/hr
= 182 lbs/day

CO = 3.42 lbs/hr
= 82.1 lbs/day

PM10 = 2.83 lbs/hr
= 67.9 lbs/day

Evaluation

Rule 212: There is no emission increase, no increase in risk and no school within 1000 feet. Therefore, a public notice is not required.

Rule 218: This rule specifies standards for CEMS. Annual RATA testing is required. Compliance is expected.

Rule 401: No violations are expected

Rule 402: Nuisance is not expected.

Rule 407: Equipment meets the 2000 ppmv CO limit.

Rule 409: Equipment meets the limit of 0.1 gr/scf

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Rule 431.1: Equipment meets the 150 ppmv sulfur limit. Facility operates under an approved alternative monitoring plan.

Rule 476: Equipment meets the 125 ppmv NOx limit.

Rule 1146: Equipment meets 30 ppm NOx limit and has a NOx CEMS monitor. A CO CEMS is not required by this rule. CO emissions are verified by an AQMD approved source test. This rule requires compliance testing every three years.

Reg. XIII: BACT

Equipment was initially installed with BACT. Therefore a new BACT evaluation is not required.

Modeling is not required since there is no emission increase.

CEQA - EIR was previously approved.

Equipment is in compliance.

Rule 1401: Toxic Risk Assessment (From previous application)

There is no emission increase or change to the equipment.

$$\begin{aligned} \text{MICR} &= 1.1/0.29 \times 0.005 \times 10^{-6} \\ &= 0.019 \times 10^{-6} \end{aligned}$$

Cancer Burden:

Not required since MICR is less than one in a million

Equipment is in compliance.

Reg XXX: Title V Permits

The revision has been categorized as a significant permit revision to the Title V permit due a relaxation of a monitoring requirement. A 30 day public notice and a 45 day EPA review is required.

CAM (Compliance Assurance Monitoring): This is a significant permit revision, application received after 4/20/98. The post control PTE is less than 10 tons/yr for ROG Therefore, Cam evaluation is not required. A CO periodic monitoring condition will be included in the TV permit for the boiler.

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Conclusions and Recommendations

A CO CEMS is not required by AQMD rules. AQMD rules (Rule 1146) requires that CO emissions are verified by an AQMD approved source test. The equipment is in compliance with the Rules and Regulations of the SCAQMD. Therefore, recommend issuing a Permit to Operate with revised condition # 5 deleting the requirement for a CO CEMS, and adding condition #11 for an annual test (facility has conducted source testing for the past 10 years).

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Conditions

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMIT-FED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE QUANTITY OF LANDFILL GAS BURNED IN THE STEAM GENERATOR SHALL BE CONTINUOUSLY MONITORED AND RECORDED.
4. NATURAL GAS AUGMENTATION SHALL NOT EXCEED 25% OF THE TOTAL BTU CONTENT.
5. A CONTINUOUS MONITORING 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 WILL CONVERT THE ACTUAL NOX CONCENTRATIONS TO CORRECTED NOX CONCENTRATIONS AT 3 PERCENT O2 ON A DRY BASIS AND CONTINUOUSLY RECORD THE STACK NOX AND O2 CONCENTRATION AND CORRECTED NOX CONCENTRATIONS AT 3% O2. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF RULE 218.
6. THE EMISSIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED THE FOLLOWING:

ROG	1.1 LBS/HR
NOX	5.0 LBS/HR
SOX	7.6 LBS/HR
CO	3.4 LBS/HR
PM	2.8 LBS/HR
7. THE OXIDES OF NITROGEN CONCENTRATIONS FROM THE STEAM GENERATOR SHALL NOT EXCEED 24 PPM BY VOLUME CALCULATED AT 3% O2, DRY, AVERAGED OVER ONE HOUR, DURING NORMAL OPERATION.
8. 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 FLAME IS STABILIZED. THE FLAME WILL BE STABILIZED WHEN THE FUEL VALVE IS APPROXIMATELY 15% OPEN.

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9. FOR THE PURPOSE OF THIS PERMIT, A SHUTDOWN IS DEFINED AS BEING THE PERIOD FROM THE TIME THE LOAD IS AT MINIMUM LEVEL TO THE TIME THE FUEL VALVE IS COMPLETELY CLOSED.

10. THE OXIDES OF NITROGEN CONCENTRATION SHALL NOT EXCEED 60 PPM, BY VOLUME, AVERAGED OVER A ONE HOUR PERIOD, DURING START UPS AND SHUT DOWNS.

11. THE OWNER OR OPERATOR SHALL CONDUCT A TEST ANNUALLY. THE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AQMD APPROVED TEST PROCEDURES. WRITTEN TEST RESULTS SHALL BE FURNISHED TO THE AQMD WITHIN SIXTY DAYS AFTER TESTING. WRITTEN NOTICE OF THE TEST SHALL BE PROVIDED TO THE AQMD THIRTY DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TEST SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE EXHAUST FOR:

TEMPERATURE, DEGREES F
 FLOW RATE, DSCFM
 NMOC, LBS/HR
 TNMOC, LBS/HR
 NOX, LBS/HR
 SOX, LBS/HR
 CO, LBS/HR
 TOTAL PARTICULATES, LBS/HR
 TOTAL SULFUR COMPOUNDS AS H₂S, PPMV (INLET)
 LANDFILL GAS COMPOSITION AND HEATING VALUE (INLET)
 LANDFILL GAS FLOW RATE, SCFM (INLET)

THE TEST SHALL BE CONDUCTED AT THE MAXIMUM FLOW RATE AVAILABLE AT THE TIME OF THE TEST BUT NOT TO EXCEED THE FLOW RATE ALLOWED BY THIS PERMIT.