FACILITY PERMIT TO OPERATE

SUNSHINE CANYON LANDFILL
14747 SAN FERNANDO RD
SYLMAR, CA 91342

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

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FACILITY PERMIT TO CONSTRUCT
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Permit to Construct and Temporary Permit to Operate
(Section H)

This section consists of a table listing all equipment with Permit to Construct and copies of all individual Permits to Construct issued to various equipment at the facility subject to source-specific requirements. Each permit 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 CONSTRUCT AT THIS FACILITY:

Application No.	Equipment description	Page
526972	LANDFILL GAS FLARING SYSTEM NO. 9	6
541300	LANDFILL GAS FLARING SYSTEM NO. 10	13

NOTE: ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT 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 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]

   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]

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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]

3. THE OWNER/OPERATOR OF A MSW LANDFILL SHALL COMPLY WITH THE FOLLOWING:

A. OPERATE THE COLLECTION SYSTEM SUCH THAT THE GAS IS COLLECTED FROM EACH AREA, CELL OR GROUP OF CELLS OF THE LANDFILL IN WHICH THE INITIAL SOLID WASTE HAS BEEN IN PLACE FOR A PERIOD OF;
(1). 5 YEARS OR MORE IF ACTIVE; OR
(2) 2 YEARS OR MORE IF CLOSED OR AT FINAL GRADE

B. OPERATE THE COLLECTION SYSTEM WITH NEGATIVE PRESSURE AT EACH WELL-HEAD EXCEPT UNDER THE FOLLOWING CONDITIONS:
(1). DURING A FIRE OR INCREASED WELL TEMPERATURE - THE OWNER/OPERATOR SHALL RECORD THE INSTANCES WHEN POSITIVE PRESSURE OCCURS IN EFFORTS TO PREVENT A FIRE. THIS REPORT SHALL BE SUBMITTED WITH THE ANNUAL REPORTS AS PROVIDED IN §60.757(f)(1).
(2). WHENEVER A GEOMEMBRANE OR SYNTHETIC COVER IS IN PLACE- THE OWNER/OPERATOR SHALL DEVELOP ACCEPTABLE PRESSURE LIMITS IN THE DESIGN PLAN.
(3). WHEN A WELL IS DECOMMISSIONED – A WELL MAY EXPERIENCE A STATIC POSITIVE PRESSURE AFTER SHUT DOWN TO ACCOMMODATE FOR DECLINING FLOWS.

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C. OPERATE EACH INTERIOR WELLHEAD IN THE COLLECTION SYSTEM WITH A LANDFILL GAS TEMPERATURE LESS THAN 55 DEGREES C AND WITH EITHER A NITROGEN LEVEL LESS THAN 20% OR AN OXYGEN LEVEL LESS THAN 5% AS DETERMINED BY METHODS DESCRIBED IN §60.753(c).

D. OPERATE THE COLLECTION SYSTEM SO THAT THE METHANE CONCENTRATION IS LESS THAN 500 PPM ABOVE BACKGROUND AT THE SURFACE OF THE LANDFILL AS DETERMINED IN ACCORDANCE WITH MONITORING PROCEDURES SPECIFIED IN §60.753 AND 60.754.

E. OPERATE THE COLLECTION SYSTEM SUCH THAT ALL COLLECTED GASES ARE VENTED TO A CONTROL SYSTEM DESIGNED AND OPERATED IN COMPLIANCE WITH §60.752(b)(2)(iii).

F. OPERATE THE COLLECTION AND CONTROL SYSTEM IN COMPLIANCE WITH TEST METHODS AND PROCEDURES OF §60.754

G. OPERATE THE COLLECTION AND CONTROL SYSTEM IN COMPLIANCE WITH COMPLIANCE PROVISIONS OF §60.755

H. OPERATE THE COLLECTION AND CONTROL SYSTEM IN COMPLIANCE WITH MONITORING PROCEDURES OF §60.756

I. OPERATE THE COLLECTION AND CONTROL SYSTEM IN COMPLIANCE WITH REPORTING REQUIREMENTS OF §60.757

J. OPERATE THE COLLECTION AND CONTROL SYSTEM IN COMPLIANCE WITH RECORD KEEPING REQUIREMENTS OF §60.758

[GASEOUS EMISSIONS: 40CFR60 SUBPART WWW]

4. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE MITIGATION MEASURES STIPULATED IN THE SUBSEQUENT ENVIRONMENTAL IMPACT REPORT DATED DECEMBER, 1999.
[CA PRC CEQA, 11-23-1970]

5. THE OPERATOR SHALL COMPLY WITH ALL OF THE CONDITIONS SET FORTH IN THE FINDINGS AND DECISION FOR AN ORDER OF ABATEMENT (STIPULATED) DATED APRIL 22, 2010 AND ITS SUBSEQUENT AMENDMENTS.
[RULE 3004(a)(10)(C)]

6. THE TOTAL LANDFILL GAS COMBUSTED AT THIS FACILITY AND THE EQUIPMENT OPERATING AT THE SUNSHINE GAS PRODUCERS SHALL NOT EXCEED 16,100 STANDARD CUBIC FEET PER MINUTE, CALCULATED AT 50 % METHANE CONCENTRATION IN LANDFILL GAS OVER A 24-HOUR PERIOD. THE OWNER OR OPERATOR SHALL MAINTAIN ADEQUATE RECORDS TO DEMONSTRATE COMPLIANCE WITH THIS CONDITION.
[CA PRC CEQA, 11-23-1970]

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GRANTED: 04/27/2012
A/N 526972

EQUIPMENT DESCRIPTION:

LANDFILL GAS FLARE NO. 9 CONSISTING OF:

1. ONE (1) SKID MOUNTED HDPE MOISTURE SEPARATOR, ZMS, WITH DEMISTER PAD ELEMENT FOR MOISTURE COLLECTION.

2. THREE (3) LANDFILL GAS EXTRACTION BLOWERS (ONE STAND-BY), MAKE/MODEL TBD, EACH WITH A TBD HP MOTOR VENTING LANDFILL GAS FROM COLLECTION WELLS AND TRENCHES.

3. THREE (3) LANDFILL GAS BLOWER VFD'S WITH PRESSURE TRANSMITTER FOR VFD VACUUM CONTROL.

4. COMBUSTION AIR BLOWER, MAKE/ MODEL TBD, MAX AIR FLOW TBD SCFM, CONTROL WITH INLET SILENCER AND FILTER.

5. ONE (1) COMBUSTION AIR BLOWER VFD.

6. TWO (2) INSERTION TYPE THERMAL MASS FLOW METERS, ONE EACH FOR LANDFILL GAS FLOW AND COMBUSTION AIR FLOW.

7. ONE (1) 10" DIAMETER, MAKE ENARDO, FLARE INLET FLAME ARRESTOR.

8. YOKOGAWA DIGITAL PAPERLESS CHART RECORDER FOR RECORDING VARIOUS PARAMETERS.

9. ENCLOSED A-36 CARBON STEEL FLARE, JOHN ZINK, MODEL ZULE, 13'-0" DIA. X 50'-0" H., RATED AT 5000 SCFM CAPACITY, 136.7 MMBTU PER HOUR WITH A FLAME ARRESTOR, TWO COMBUSTION AIR DAMPERS, AND FLARE ALARM SYSTEM.

10. IGNITION CONTROL STATION AUTOMATED IGNITION SYSTEM WITH PROPANE GAS PILOT ASSEMBLY, ONE (1) SELF CHECKING ULTRAVIOLET FLAME SCANNER, ONE (1) HIGH TEMPERATURE SHUTDOWN THERMOCOUPLE, THREE (3) BURNER THERMOCOUPLES, FOUR (4) FLARE TEMPERATURE MONITORING THERMOCOUPLES AT DIFFERENT ELEVATIONS, IGNITION TRANSFORMER, AND TWO 5 GALLON CAPACITY PROPANE TANKS.

CONDITIONS:

1. CONSTRUCTION AND 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]

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3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]

4. 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 SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL CONSIST OF A FOUR-INCH COUPLING WITH PLUG. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]

5. A SAMPLING PORT SHALL BE MAINTAINED AT THE INLET GAS LINE TO THE FLARE TO ALLOW LANDFILL GAS SAMPLING AND FLOW MEASUREMENT.
[RULE 217, 431.1, 1150.1]

6. THE FLARE SHALL BE EQUIPPED WITH A CONTINUOUS TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION. THE THERMOCOUPLE USED TO MEASURE THE TEMPERATURE SHALL BE AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER.
[RULE 1150.1, 1303 (a)(1)-BACT, 40CFR 60.756(b)(1)]

7. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1600 DEGREES F, 15 MINUTE AVERAGE, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER SHALL BE MAINTAINED EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1600 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]

8. 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]

9. A SUFFICIENT NUMBER OF SIGHT GLASS WINDOWS SHALL BE MAINTAINED IN THE FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME WITHIN THE FLARE AT ALL TIMES. PERMANENT AND SAFE ACCESS SHALL BE PROVIDED FOR ALL SIGHT GLASS WINDOWS.
[RULE 217, 1303(a)(1)-BACT]

10. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE TO MEASURE AND RECORD THE GAS FLOW RATE (IN SCFM) TO THE FLARE AT LEAST EVERY FIFTEEN MINUTES AND SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.

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[RULE 1150.1, 1303 (b)(2)-OFFSET, 40CFR 60.756(b)(2)(i)]

11. EMISSIONS RESULTING FROM THE FLARE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HOUR
NOX	3.42
SOX	7.60
CO	8.20
PM	1.50
ROG	0.82

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

12. THE OPERATOR SHALL CONDUCT AN INITIAL SOURCE TEST ON FLARE WITHIN 60 DAYS AFTER THE FLARE IS COMPLETELY OPERATIONAL BUT NOT LATER THAN 180 DAYS AFTER INITIAL STARTUP, IN ACCORDANCE WITH AQMD APPROVED SOURCE TEST PROCEDURES. A SOURCE TEST PROTOCOL SHALL BE PROVIDED TO THE AQMD FOR APPROVAL AT LEAST 30 DAYS PRIOR TO THE SCHEDULED TESTING. WRITTEN NOTIFICATION OF THE SCHEDULED TEST DATE SHALL BE PROVIDED TO THE AQMD AT LEAST SEVEN (7) DAYS PRIOR TO THE DATE SO THAT THE TESTING MAY BE OBSERVED BY AQMD PERSONNEL. THE TESTING SHALL BE CONDUCTED WHEN THE EQUIPMENT IS IN FULL OPERATION, AND SHALL INCLUDE, BUT NOT LIMITED TO, A TEST OF THE INLET TO THE FLARE AND THE FLARE EXHAUST FOR:

A. METHANE
B. TOTAL NON-METHANE ORGANIC COMPOUNDS (TNMOC)
C. TOXIC AIR CONTAMINANTS (TAC) INCLUDING, BUT NOT LIMITED TO, ACROLEIN, ACETALDEHYDE, FORMALDEHYDE, TOTAL PAHS, NAPHTHALENE, BENZENE, CHLOROBENZENE, ETHYL BENZENE, 1,1,2,2–TETRACHLOROETHANE, ACRYLONITRILE, 1,2-DICHLOROETHANE, 1,1-DICHOROETHENE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUNE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE, AND XYLENE ISOMERS (EXHAUST ONLY).
D. NOX, AS NO2 (EXHAUST ONLY)
E. SOX, AS S02 (EXHAUST ONLY)
F. CO (EXHAUST ONLY)
G. TOTAL PARTICULATES PM10 (EXHAUST ONLY)
H. OXYGEN & CARBON DIOXIDE
I. MOISTURE CONTENT
J. TEMPERATURE
K. FLOWRATE
L. TOTAL SULFUR COMPOUNDS AS HYDROGEN SULFIDE (INLET ONLY)

[RULE 1303(b) (1) AND (b) (2)–MODELING AND OFFSET, 1150.1, 1401, 3004 (a) (4), 40 CFR 60 SUBPART WWW]

13. THE INITIAL SOURCE TEST REPORT, FOR THE FLARE SHALL INCLUDE:

A. EMISSIONS OF CO, NOx, TNMOCs, METHANE, PM10, AND SOx, IN UNITS OF LBS/HR AND PPMV (EXCEPT PARTICULATES/PM10 WHICH SHALL BE IN LBS/HR AND GR/SCF), OVERALL TNMOC & METHANE DESTRUCTION EFFICIENCY (WT%), FORMALDEHYDE,

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TOTAL PAH'S, & NAPTHALENE EMISSION (LBS/HR AND PPMV), OXYGEN AND CARBON DIOXIDE (IN PERCENTAGE VOLUME), SULFUR COMPOUNDS AS H2S (IN PPMV), AND TNMOC EMISSIONS (PPMV), DRY BASIS, AS HEXANE AT 3% OXYGEN.

B. THE TEST SHALL BE PERFORMED BY A TESTING LABORATORY CERTIFIED TO MEET THE CRITERIA IN AQMD RULE 304(l) (CONFLICT OF INTEREST).

C. SAMPLING FACILITIES SHALL COMPLY WITH AQMD "GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES" PURSUANT TO RULE 217.

D. IF THE SOURCE TEST INDICATES ADDITIONAL TOXIC AIR CONTAMINANTS (TAC) COMPOUNDS ARE EMITTED OR THE RATES ARE SIGNIFICANTLY DIFFERENT THAN USED IN PREVIOUSLY EVALUATED RISK ASSESSMENT, THE OWNER OR OPERATOR SHALL CALCULATE THE MAXIMUM INDIVIDUAL CANCER RISK (MICR), ACUTE HAZARD INDEX (HIA) AND CHRONIC HAZARD INDEX (HIC), BASED ON THE SOURCE TEST RESULTS USING AQMD PUBLISHED RISK ASSESSMENT PROCEDURES FOR RULES 1401 AND 212 (VERSION 7.0) TO DETERMINE COMPLIANCE WITH RULE 1401. RESULTS SHALL BE SUBMITTED TO AQMD WITHIN 90 DAYS AFTER INITIAL TESTING IS COMPLETED.
[RULE 204, 217, RULE 1150.1, 1401, 40CFR60 SUBPART WWW]

14. THE OWNER OR OPERATOR SHALL CONDUCT A SOURCE TEST ANNUALLY OR PER THE APPROVED 1150.1 COMPLIANCE PLAN. THE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AQMD APPROVED TEST PROCEDURES AND 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. IN ADDITION TO THE TEST REQUIREMENTS OF RULE 1150.1 AND THE APPROVED 1150.1 COMPLIANCE PLAN FOR NONMETHANE ORGANIC COMPOUNDS AND TOXIC COMPOUNDS, THE TEST SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE FLARE FOR:

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

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 204, 1303 (b)(2)-OFFSET, 3004(a)(4)-PERIODIC MONITORING, 1150.1, 40 CFR PART 60 SUBPART WWW]

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15. THE FLARE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-DOWN SYSTEM WITH A FAILURE ALARM, WHICH HAS BEEN APPROVED BY THE SCAQMD, TO AUTOMATICALLY ISOLATE THE FLARE FROM THE LANDFILL GAS SUPPLY LINE, SHUT OFF THE BLOWER AND IMMEDIATELY NOTIFY A RESPONSIBLE PARTY OF THE SHUT-DOWN.
[RULE 1303 (a) (1) – BACT]

16. THE DESTRUCTON EFFICIENCY FOR METHANE SHALL BE ATLEAST 99% ON THE BASIS OF MASS OF METHANE ENTERING THE FLARE.
[RULE 1150.1]

17. THE AUTOMATIC SHUTDOWN SAFETY SYSTEM SHALL BE TESTED MONTHLY FOR PROPER OPERATION OF THIS FLARE AND THE RESULTS RECORDED.
[RULE 1303(a) (1)-BACT]

18. THE FOLLOWING FLARE FAILURE ALARMS WHICH SHALL INCLUDE AN AUTOMATIC NOTIFICATION SYSTEM, AN AUTOMATIC BLOWER AND A LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM APPROVED BY THE AQMD, SHALL BE MAINTAINED AND TESTED EVERY SIX MONTHS FOR PROPER OPERATION AND THE RESULTS RECORDED:

    A. FLARE FLAME OUT
    B. LOW FLARE STACK TEMPERATURE
    C. HIGH FLARE STACK TEMPERATURE
    D. EXCESSIVE VIBRATION
    E. LOW BLOWER DISCHARGE PRESSURE.

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

19. A PRESSURE SENSING DEVICE WITH AN AUTOMATIC BLOWER SHUT OFF SYSTEM SHALL BE MAINTAINED IN THE BLOWER DISCHARGE LINE TO DETECT PRESSURE DROP DUE TO LANDFILL GAS LEAKS AND SHALL BE TESTED EVERY SIX MONTHS FOR PROPER OPERATION AND THE RESULTS RECORDED.
[RULE 1303 (a)(1)-BACT]

20. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE PARTICULATE FILTER.
[RULE 1303 (a)(1)-BACT]

21. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE FLAME ARRESTOR.
[RULE 1303 (a)(1)-BACT]

22. LANDFILL GAS ENTERING THE FLARE SHALL BE ANALYZED WEEKLY FOR HEATING VALUE AND METHANE CONCENTRATION. RESULTS SHALL BE RECORDED AND PROVIDED TO THE AQMD UPON REQUEST.
[RULE 1303 (b)(2)- OFFSET]

23. THE MAXIMUM WEEKLY HEAT INPUT RATE TO FLARE SHALL NOT EXCEED 136.7 MMBTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF LANDFILL GAS BURNED IN EACH FLARE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST WEEKLY BTU CONTENT (BTU/SCF) READING.

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[RULE 1303(b) (1) AND (b) (2)–MODELING AND OFFSET, 1401]

24. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)- OFFSET]

25. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO THE AQMD UPON REQUEST. A RECORD OF THE HOURS OF FLARE OPERATION SHALL BE INCLUDED.
[RULE 1150.1, 1303 (b)(2)- OFFSET]

26. THIS PEMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 204]

27. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF RAW LANDFILL GAS INTO THE ATMOSPHERE. ANY BREAKDOWN OR MALFUNCTION OF THIS EQUIPMENT RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WITHIN TWENTY FOUR HOURS AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]

28. THE APPLICANT SHALL CONDUCT A GAS LEAK DETECTION PROGRAM WITH A COMBUSTIBLE DETECTOR CALIBRATED FOR METHANE BY INSPECTING THE BLOWERS AND ALL EQUIPMENT DOWNSTREAM OF THE BLOWERS. THIS INSPECTION PROGRAM SHALL BE CONDUCTED ONCE A MONTH. ALL LEAKS DETECTED ABOVE 500 PPM SHALL BE REPORTED TO THE AQMD WITHIN 24 HOURS OF DETECTION AND REPAIRED WITHIN 3 WORKING DAYS OF DETECTION. A LOG SHOWING THE RESULTS OF EACH INSPECTION SHALL BE MAINTAINED AND SHALL BE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303(a) (1)-BACT, RULE 402]

29. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL PROVIDE TO THE SCAQMD FOR PRE-INSTALALTION APPROVAL FINAL FLARE SYSTEM P & I DIAGRAMS, CONTROL DIAGRAMS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, DIMENSIONS, SIZE AND MAXIMUM CAPACITY) AND OTHER VENDOR DATA, AT LEATS 30 DAYS PRIOR TO INSTALALTION OF THIS EQUIPMENT.
[RULE 1303 (a)(1)-BACT]

30. THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,600 (FOR ALL FLARES) DEGREES FAHRENHEIT AVERAGED OVER 15-MINUTE PERIOD WHENEVER THE EQUIPMENT IS IN OPERATION, EXCLUDING START UP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1,600 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.

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 OPERATION WHEN THE FLARE IS OPERATING. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN ± 1% OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED,

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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 1,600 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 1,600 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:

31. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR60 SUBPART WWW, 40CFR63 SUBPART AAAA

CO:	2000 PPMV, RULE 407
NOX	0.025 LB/MMBTU, RULE 1303 - BACT/LAER
SOX AS H2S	150 PPMV IN INLET (RULE 431.1)
PM-10	5 LBS/MMCFM, RULE 1303 - BACT/LAER
PM:	0.1 GR/DSCF, RULE 409
PM:	RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
VOC:	0.006 LB/MMBTU, RULE 1303 – BACT/LAER
CO:	0.06 LB/MMBTU, RULE 1303 – BACT/LAER

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GRANTED: 05/23/2013
A/N 541300

EQUIPMENT DESCRIPTION:

LANDFILL GAS FLARE NO. 10 CONSISTING OF:

1. ONE (1) SKID MOUNTED HDPE MOISTURE SEPARATOR, ZMS, WITH DEMISTER PAD ELEMENT FOR MOISTURE COLLECTION.

2. THREE (3) LANDFILL GAS EXTRACTION BLOWERS (ONE STAND-BY), MAKE/MODEL TBD, EACH WITH A TBD HP MOTOR VENTING LANDFILL GAS FROM COLLECTION WELLS AND TRENCHES.

3. THREE (3) LANDFILL GAS BLOWER VFD'S WITH PRESSURE TRANSMITTER FOR VFD VACUUM CONTROL.

4. COMBUSTION AIR BLOWER, MAKE/ MODEL TBD, MAX AIR FLOW TBD SCFM, CONTROL WITH INLET SILENCER AND FILTER.

5. ONE (1) COMBUSTION AIR BLOWER VFD.

6. TWO (2) INSERTION TYPE THERMAL MASS FLOW METERS, ONE EACH FOR LANDFILL GAS FLOW AND COMBUSTION AIR FLOW.

7. ONE (1) 10" DIAMETER, MAKE ENARDO, FLARE INLET FLAME ARRESTOR.

8. YOKOGAWA DIGITAL PAPERLESS CHART RECORDER FOR RECORDING VARIOUS PARAMETERS.

9. ENCLOSED A-36 CARBON STEEL FLARE, JOHN ZINK, MODEL ZULE, 13'-0" DIA. X 50'-0" H., RATED AT 5000 SCFM CAPACITY, 136.7 MMBTU PER HOUR WITH A FLAME ARRESTOR, TWO COMBUSTION AIR DAMPERS, AND FLARE ALARM SYSTEM.

10. IGNITION CONTROL STATION AUTOMATED IGNITION SYSTEM WITH PROPANE GAS PILOT ASSEMBLY, ONE (1) SELF CHECKING ULTRAVIOLET FLAME SCANNER, ONE (1) HIGH TEMPERATURE SHUTDOWN THERMOCOUPLE, THREE (3) BURNER THERMOCOUPLES, FOUR (4) FLARE TEMPERATURE MONITORING THERMOCOUPLES AT DIFFERENT ELEVATIONS, IGNITION TRANSFORMER, AND TWO 5 GALLON CAPACITY PROPANE TANKS.

CONDITIONS:

1. CONSTRUCTION AND 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]

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3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]

4. 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 SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD. EACH PORT SHALL CONSIST OF A FOUR-INCH COUPLING WITH PLUG. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED WITHIN 24 HOURS OF A REQUEST BY THE AQMD TO CONDUCT A TEST.
[RULE 217]

5. A SAMPLING PORT SHALL BE MAINTAINED AT THE INLET GAS LINE TO THE FLARE TO ALLOW LANDFILL GAS SAMPLING AND FLOW MEASUREMENT.
[RULE 217, 431.1, 1150.1]

6. THE FLARE SHALL BE EQUIPPED WITH A CONTINUOUS TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. THE TEMPERATURE INDICATOR AND RECORDER SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION. THE THERMOCOUPLE USED TO MEASURE THE TEMPERATURE SHALL BE AT LEAST TWO FEET ABOVE THE FLAME ZONE AND AT LEAST SIX AND ONE HALF FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER.
[RULE 1150.1, 1303 (a)(1)-BACT, 40CFR 60.756(b)(1)]

7. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1600 DEGREES F, 15 MINUTE AVERAGE, AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER SHALL BE MAINTAINED EXCEPT DURING PERIODS OF STARTUP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1600 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]

8. 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]

9. A SUFFICIENT NUMBER OF SIGHT GLASS WINDOWS SHALL BE MAINTAINED IN THE FLARE TO ALLOW VISUAL INSPECTION OF THE FLAME WITHIN THE FLARE AT ALL TIMES. PERMANENT AND SAFE ACCESS SHALL BE PROVIDED FOR ALL SIGHT GLASS WINDOWS.
[RULE 217, 1303(a)(1)-BACT]

10. A FLOW INDICATOR AND RECORDER SHALL BE MAINTAINED IN THE LANDFILL GAS SUPPLY LINE TO THE FLARE TO MEASURE AND RECORD THE GAS FLOW RATE (IN SCFM) TO THE FLARE AT LEAST EVERY FIFTEEN MINUTES AND SHALL OPERATE WHENEVER THE FLARE IS IN OPERATION.
[RULE 1150.1, 1303 (b)(2)-OFFSET, 40CFR 60.756(b)(2)(i)]

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11. EMISSIONS RESULTING FROM THE FLARE SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HOUR
NOX	3.42
SOX	7.60
CO	8.20
PM	1.50
ROG	0.82

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

12. THE OPERATOR SHALL CONDUCT AN INITIAL SOURCE TEST ON FLARE WITHIN 60 DAYS AFTER THE FLARE IS COMPLETELY OPERATIONAL BUT NOT LATER THAN 180 DAYS AFTER INITIAL STARTUP, IN ACCORDANCE WITH AQMD APPROVED SOURCE TEST PROCEDURES. A SOURCE TEST PROTOCOL SHALL BE PROVIDED TO THE AQMD FOR APPROVAL AT LEAST 30 DAYS PRIOR TO THE SCHEDULED TESTING. WRITTEN NOTIFICATION OF THE SCHEDULED TEST DATE SHALL BE PROVIDED TO THE AQMD AT LEAST SEVEN (7) DAYS PRIOR TO THE DATE SO THAT THE TESTING MAY BE OBSERVED BY AQMD PERSONNEL. THE TESTING SHALL BE CONDUCTED WHEN THE EQUIPMENT IS IN FULL OPERATION, AND SHALL INCLUDE, BUT NOT LIMITED TO, A TEST OF THE INLET TO THE FLARE AND THE FLARE EXHAUST FOR:

A. METHANE
B. TOTAL NON-METHANE ORGANIC COMPOUNDS (TNMOC)
C. TOXIC AIR CONTAMINANTS (TAC) INCLUDING, BUT NOT LIMITED TO, ACROLEIN, ACETALDEHYDE, FORMALDEHYDE, TOTAL PAHS, NAPHTHALENE, BENZENE, CHLOROBENZENE, ETHYL BENZENE, 1,1,2,2–TETRACHLOROETHANE, ACRYLONITRILE, 1,2-DICHLOROETHANE, 1,1-DICHOROETHENE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUNE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE, AND XYLENE ISOMERS (EXHAUST ONLY).
D. NOX, AS NO2 (EXHAUST ONLY)
E. SOX, AS S02 (EXHAUST ONLY)
F. CO (EXHAUST ONLY)
G. TOTAL PARTICULATES PM10 (EXHAUST ONLY)
H. OXYGEN & CARBON DIOXIDE
I. MOISTURE CONTENT
J. TEMPERATURE
K. FLOWRATE
L. TOTAL SULFUR COMPOUNDS AS HYDROGEN SULFIDE (INLET ONLY)

[RULE 1303(b) (1) AND (b) (2)–MODELING AND OFFSET, 1150.1, 1401, 3004 (a) (4), 40 CFR 60 SUBPART WWW]

13. THE INITIAL SOURCE TEST REPORT, FOR THE FLARE SHALL INCLUDE;

A. EMISSIONS OF CO, NOx, TNMOCs, METHANE, PM10, AND SOx, IN UNITS OF LBS/HR AND PPMV (EXCEPT PARTICULATES/PM10 WHICH SHALL BE IN LBS/HR AND GR/SCF), OVERALL TNMOC & METHANE DESTRUCTION EFFICIENCY (WT%), FORMALDEHYDE, TOTAL PAH'S, & NAPTHALENE EMISSION (LBS/HR AND PPMV), OXYGEN AND CARBON DIOXIDE (IN

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PERCENTAGE VOLUME), SULFUR COMPOUNDS AS H2S (IN PPMV), AND TNMOC EMISSIONS (PPMV), DRY BASIS, AS HEXANE AT 3% OXYGEN.

B. THE TEST SHALL BE PERFORMED BY A TESTING LABORATORY CERTIFIED TO MEET THE CRITERIA IN AQMD RULE 304(l) (CONFLICT OF INTEREST).

C. SAMPLING FACILITIES SHALL COMPLY WITH AQMD "GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES" PURSUANT TO RULE 217.

D. IF THE SOURCE TEST INDICATES ADDITIONAL TOXIC AIR CONTAMINANTS (TAC) COMPOUNDS ARE EMITTED OR THE RATES ARE SIGNIFICANTLY DIFFERENT THAN USED IN PREVIOUSLY EVALUATED RISK ASSESSMENT, THE OWNER OR OPERATOR SHALL CALCULATE THE MAXIMUM INDIVIDUAL CANCER RISK (MICR), ACUTE HAZARD INDEX (HIA) AND CHRONIC HAZARD INDEX (HIC), BASED ON THE SOURCE TEST RESULTS USING AQMD PUBLISHED RISK ASSESSMENT PROCEDURES FOR RULES 1401 AND 212 (VERSION 7.0) TO DETERMINE COMPLIANCE WITH RULE 1401. RESULTS SHALL BE SUBMITTED TO AQMD WITHIN 90 DAYS AFTER INITIAL TESTING IS COMPLETED.
[RULE 204, 217, RULE 1150.1, 1401, 40CFR60 SUBPART WWW]

14. THE OWNER OR OPERATOR SHALL CONDUCT A SOURCE TEST ANNUALLY OR PER THE APPROVED 1150.1 COMPLIANCE PLAN. THE TEST SHALL BE PERFORMED IN ACCORDANCE WITH AQMD APPROVED TEST PROCEDURES AND 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. IN ADDITION TO THE TEST REQUIREMENTS OF RULE 1150.1 AND THE APPROVED 1150.1 COMPLIANCE PLAN FOR NONMETHANE ORGANIC COMPOUNDS AND TOXIC COMPOUNDS, THE TEST SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE FLARE FOR:

A. LANDFILL GAS COMPOSITION AND HEATING VALUE (INLET)
B. LANDFILL GAS FLOW RATE, SCFM (INLET)
C. TOTAL SULFUR COMPOUNDS AS H2S, PPMV (INLET)
D. TEMPERATURE, DEGREES F (EXHAUST)
E. FLOW RATE, DSCFM (EXHAUST)
F. NOX, LBS/HR (EXHAUST)
G. SOX, LBS/HR (EXHAUST)
H. CO, LBS/HR (EXHAUST)
I. TOTAL PARTICULATES, LBS/HR (EXHAUST)
J. OXYGEN & CARBON DIOXIDE
K. RULE 1150.1 COMPOUNDS (CORE LIST, INLET/EXHAUST)

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 204, 1303 (b)(2)-OFFSET, 3004(a)(4)-PERIODIC MONITORING, 1150.1, 40 CFR PART 60 SUBPART WWW]

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15. THE FLARE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-DOWN SYSTEM WITH A FAILURE ALARM, WHICH HAS BEEN APPROVED BY THE SCAQMD, TO AUTOMATICALLY ISOLATE THE FLARE FROM THE LANDFILL GAS SUPPLY LINE, SHUT OFF THE BLOWER AND IMMEDIATELY NOTIFY A RESPONSIBLE PARTY OF THE SHUT-DOWN.
[RULE 1303 (a) (1) – BACT]

16. THE DESTRUCTON EFFICIENCY FOR METHANE SHALL BE ATLEAST 99% ON THE BASIS OF MASS OF METHANE ENTERING THE FLARE.
[RULE 1150.1]

17. THE AUTOMATIC SHUTDOWN SAFETY SYSTEM SHALL BE TESTED MONTHLY FOR PROPER OPERATION OF THIS FLARE AND THE RESULTS RECORDED.
[RULE 1303(a) (1)-BACT]

18. THE FOLLOWING FLARE FAILURE ALARMS WHICH SHALL INCLUDE AN AUTOMATIC NOTIFICATION SYSTEM, AN AUTOMATIC BLOWER AND A LANDFILL GAS SUPPLY VALVE SHUT-OFF SYSTEM APPROVED BY THE AQMD, SHALL BE MAINTAINED AND TESTED EVERY SIX MONTHS FOR PROPER OPERATION AND THE RESULTS RECORDED:

    A. FLARE FLAME OUT
    B. LOW FLARE STACK TEMPERATURE
    C. HIGH FLARE STACK TEMPERATURE
    D. EXCESSIVE VIBRATION
    E. LOW BLOWER DISCHARGE PRESSURE.

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

19. A PRESSURE SENSING DEVICE WITH AN AUTOMATIC BLOWER SHUT OFF SYSTEM SHALL BE MAINTAINED IN THE BLOWER DISCHARGE LINE TO DETECT PRESSURE DROP DUE TO LANDFILL GAS LEAKS AND SHALL BE TESTED EVERY SIX MONTHS FOR PROPER OPERATION AND THE RESULTS RECORDED.
[RULE 1303 (a)(1)-BACT]

20. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE PARTICULATE FILTER.
[RULE 1303 (a)(1)-BACT]

21. A PRESSURE DIFFERENTIAL INDICATOR SHALL BE MAINTAINED ACROSS THE FLAME ARRESTOR.
[RULE 1303 (a)(1)-BACT]

22. LANDFILL GAS ENTERING THE FLARE SHALL BE ANALYZED WEEKLY FOR HEATING VALUE AND METHANE CONCENTRATION. RESULTS SHALL BE RECORDED AND PROVIDED TO THE AQMD UPON REQUEST.
[RULE 1303 (b)(2)- OFFSET]

23. THE MAXIMUM WEEKLY HEAT INPUT RATE TO FLARE SHALL NOT EXCEED 136.7 MMBTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF LANDFILL GAS BURNED IN EACH FLARE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST WEEKLY BTU CONTENT (BTU/SCF) READING.

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[RULE 1303(b) (1) AND (b) (2)–MODELING AND OFFSET, 1401]

24. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303 (b)(2)- OFFSET]

25. ALL RECORDS SHALL BE KEPT FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO THE AQMD UPON REQUEST. A RECORD OF THE HOURS OF FLARE OPERATION SHALL BE INCLUDED.
[RULE 1150.1, 1303 (b)(2)- OFFSET]

26. THIS PEMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 204]

27. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF RAW LANDFILL GAS INTO THE ATMOSPHERE. ANY BREAKDOWN OR MALFUNCTION OF THIS EQUIPMENT RESULTING IN THE EMISSION OF RAW LANDFILL GAS SHALL BE REPORTED TO THE AQMD WITHIN TWENTY FOUR HOURS AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430]

28. THE APPLICANT SHALL CONDUCT A GAS LEAK DETECTION PROGRAM WITH A COMBUSTIBLE DETECTOR CALIBRATED FOR METHANE BY INSPECTING THE BLOWERS AND ALL EQUIPMENT DOWNSTREAM OF THE BLOWERS. THIS INSPECTION PROGRAM SHALL BE CONDUCTED ONCE A MONTH. ALL LEAKS DETECTED ABOVE 500 PPM SHALL BE REPORTED TO THE AQMD WITHIN 24 HOURS OF DETECTION AND REPAIRED WITHIN 3 WORKING DAYS OF DETECTION. A LOG SHOWING THE RESULTS OF EACH INSPECTION SHALL BE MAINTAINED AND SHALL BE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303(a) (1)-BACT, RULE 402]

29. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL PROVIDE TO THE SCAQMD FOR PRE-INSTALALTION APPROVAL FINAL FLARE SYSTEM P & I DIAGRAMS, CONTROL DIAGRAMS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, DIMENSIONS, SIZE AND MAXIMUM CAPACITY) AND OTHER VENDOR DATA, AT LEATS 30 DAYS PRIOR TO INSTALALTION OF THIS EQUIPMENT.
[RULE 1303 (a)(1)-BACT]

30. THE EXHAUST TEMPERATURE SHALL BE MAINTAINED AT A MINIMUM OF 1,600 (FOR ALL FLARES) DEGREES FAHRENHEIT AVERAGED OVER 15-MINUTE PERIOD WHENEVER THE EQUIPMENT IS IN OPERATION, EXCLUDING START UP AND SHUTDOWN. STARTUP IS DEFINED AS THE PERIOD FROM FLARE IGNITION TO THE TIME WHEN 1,600 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.

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 OPERATION WHEN THE FLARE IS OPERATING. SUCH A SYSTEM SHALL HAVE AN ACCURACY OF WITHIN ± 1% OF THE TEMPERATURE BEING MONITORED AND SHALL BE INSPECTED,

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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 1,600 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 1,600 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:

31. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NMOC: 20 PPMV OR 98% WEIGHT REDUCTION, RULE 1150.1, 40CFR60 SUBPART WWW, 40CFR63 SUBPART AAAA

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SOX AS H2S	150 PPMV IN INLET (RULE 431.1)
PM-10	5 LBS/MMCFM, RULE 1303 - BACT/LAER
PM:	0.1 GR/DSCF, RULE 409
PM:	RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
VOC:	0.006 LB/MMBTU, RULE 1303 – BACT/LAER
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