FACILITY PERMIT TO OPERATE
LA CNTY SANITATION DISTRICT-PUENTE HILLS

PERMIT TO CONSTRUCT/OPERATE

Permit No. TBD
A/N 537802

Equipment Description:

LANDFILL GAS COLLECTION SYSTEM CONSISTING OF:

1. ONE THOUSAND EIGHT HUNDRED EIGHTEEN (1818), MAXIMUM, VERTICAL GAS COLLECTION WELLS, MAXIMUM, AND ASSOCIATED PIPING.

2. FIVE HUNDRED SEVENTY THOUSAND (570,000), MAXIMUM, LINEAR FEET OF HORIZONTAL GAS COLLECTION TRENCHES, EITHER PERIPHERAL OR PARALLEL STYLE AND ASSOCIATED PIPING.

3. TWO (2) AIR STRIPPING TOWERS, CONDENSATE, EACH 1'-7" DIA. X 13'-0" H.

4. THREE (3) AIR STRIPPING TOWERS, MAXIMUM, CONDENSATE/LEACHATE.

<u>With the removal of:</u>

5. FIVE HUNDRED SEVENTY THOUSAND (570,000), MAXIMUM, LINEAR FEET OF HORIZONTAL GAS COLLECTION TRENCHES, EITHER PERIPHERAL OR PARALLEL STYLE AND ASSOCIATED PIPING.

6. THREE (3) AIR STRIPPING TOWERS, MAXIMUM, CONDENSATE/LEACHATE.

<u>With the addition of:</u>

7. SIX HUNDRED THOUSAND (600,000), MAXIMUM, LINEAR FEET OF HORIZONTAL GAS COLLECTION TRENCHES, EITHER PERIPHERAL OR PARALLEL STYLE AND ASSOCIATED PIPING.

8. LANDFILL GAS H2S TREATMENT SYSTEM, CONSISTING OF UP TO FOUR CARBON ADSORBERS AS LISTED BELOW TO BE CONNECTED TO THE LANDFILL GAS COLECTION 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 TO12,000 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:

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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 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]

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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 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]

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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]

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]

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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]

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 ADSORBTION SYSTEM USING THE PITOT TUBES

    B. INLET TEMPERATURE, AND PRESSURE TO THE ADSORBTION 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]

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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 AAAA