

<b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b>  <b>ENGINEERING AND COMPLIANCE DIVISION</b>  <b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b>	PAGES 8	PAGE 1
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**PERMIT TO CONSTRUCT**

(Alteration/Modification to LFG Collection, F38717 / A/N 384568)

**APPLICANT'S NAME:** ORANGE CO., WASTE & RECYCLING, PRIMA  
(Previously ORANGE CO. IWMD, PRIMA)

**MAILING ADDRESS:** 300 NORTH FLOWER STREET, SUITE 400  
SANTA ANA, CA 92703-5000

**EQUIPMENT ADDRESS:** 32250 LA PATA AVENUE  
(Prima Deshecha Landfill)  
SAN JUAN CAPISTRANO, CA 92675

**FACILITY ID.:** 052753

**EQUIPMENT DESCRIPTION:**

MODIFICATIONS TO EXISTING LANDFILL GAS COLLECTION SYSTEM, PERMIT TO OPERATE F38717, CONSISTING OF:

- I. WASTE MANAGEMENT UNIT NO. 1 (WMU1):
  1. PHASE I AND IA:
 

TEN (10) HORIZONTAL COLLECTORS, WITH ALTERNATING 10'-0" LENGTHS OF 12" DIAMETER AND 15" DIAMETER POLYETHYLENE COATED CORRUGATED STEEL PIPE.
  2. PHASE 2:
    - A. TEN (10) HORIZONTAL COLLECTORS, WITH ALTERNATING 10'-0" LENGTHS OF 12" DIAMETER AND 15" DIAMETER POLYETHYLENE COATED CORRUGATED STEEL PIPE.
    - B. SIXTEEN (16) VERTICAL COLLECTORS, 24" DIA., RANGING FROM 40' TO 100' DEPTH. EACH WITH 4" DIA. CASING CONNECTED TO A 4" TO 6" DIA. SLOTTED CASING.
  3. PHASE 3:
    - A. FIVE (5) HORIZONTAL COLLECTORS, 0'-8" DIA., HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER.
    - B. TWENTY (20) VERTICAL COLLECTORS, 24" DIA., RANGING FROM 40' TO 100' DEPTH. EACH WITH 4" TO 6" DIA. CASING CONNECTED TO A 4" TO 6" DIA. SLOTTED CASING.

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**BY THE ADDITION OF:**

4. FIFTY (50) VERTICAL LANDFILL GAS COLLECTION WELLS, 24" DIA., RANGING FROM 40' TO 100' DEPTH, EACH WITH 4" TO 6" DIA. CASING CONNECTED TO A 4" TO 6" DIA. SLOTTED CASING, TO BE ADDED AS NEEDED.

II. ZONE-1

1. PHASE 1:

FOURTEEN (14) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER.

2. PHASE 2:

A. FOURTEEN (14) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER.

B. THIRTY-ONE (31) VERTICAL COLLECTORS, 4" TO 6" DIA., HDPE.

3. PHASE 3:

FIFTEEN (15) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER

4. PHASE 4:

A. FIFTEEN (15) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER

B. THIRTY-SIX (36) VERTICAL COLLECTORS, 4" TO 6" DIA., HDPE PIPING

5. PHASE 5:

A. SIX (6) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER

B. ONE (1) VERTICAL COLLECTOR, 4" TO 6" DIA., HDPE PIPING.

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**BY THE ADDITION OF:**

III. WASTE MANAGEMENT UNIT NO. 2 (WMU2)

PHASE 1:

- A. TEN (10) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER.
- B. THIRTY (30) VERTICAL COLLECTORS, 4' TO 6' DIA., HDPE.

PHASE 2:

- A. FIFTEEN (15) HORIZONTAL COLLECTORS, 0'-8" DIA. HDPE PIPING, PERFORATED WITH FOUR ROWS OF 3/4 INCH DIA. HOLES, THREE INCH ON CENTER.
- B. THIRTY-SEVEN (37) VERTICAL COLLECTORS, 4' TO 6' DIA., HDPE.

IV. LATERAL AND HEADERS CONNECTING THE HORIZONTAL AND VERTICAL COLLECTORS AND DIRECTING THE COLLECTED GAS TO A GAS TREATMENT/PROCESSING FACILITY.

V. SIXTY SEVEN (67) VERTICAL LANDFILL GAS COLLECTION WELLS, 24" DIAMETER, RANGING FROM 40' TO 100' DEPTH, EACH WITH 4" TO 6" DIAMETER CASING CONNECTED TO A 4" TO 6" DIAMETER SLOTTED CASING, TO BE ADDED AS NEEDED.

**Conditions:**

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

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4. OC WASTE & RECYCLING (OCWR) SHALL MAKE A WRITTEN REQUEST FOR AND OBTAIN AN EXTENSION OF TIME TO CONSTRUCT THIS EQUIPMENT ON AN ANNUAL BASIS UNTIL SUCH TIME CONSTRUCTION IS COMPLETED AND THE EQUIPMENT IS PUT INTO OPERATION. AT LEAST 30 DAYS PRIOR TO THE EXPIRATION DATE OF THE PERMIT TO CONSTRUCT, OCWR SHALL PROVIDE IN THE WRITTEN REQUEST, VERIFIABLE DATA TO AQMD IN ORDER TO SHOW COMPLIANCE WITH THE CONSTRUCTION AS PROVIDED IN THE APPLICATION UNDER WHICH THIS PERMIT TO CONSTRUCT IS GRANTED. IF THERE ARE CHANGES TO THE INCREMENTS OF PROGRESS AND/OR CONSTRUCTION SCHEDULE, THEY WILL NOT BECOME EFFECTIVE UNTIL OCWR RECEIVES WRITTEN CONFIRMATION OF SUCH CHANGES FROM AQMD.  
[RULE 204]
5. ALL GASES COLLECTED BY THIS SYSTEM SHALL BE VENTED TO 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 SCAQMD.  
[RULE 1150.1, 1303(a)(1)-BACT]
6. 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 A GAS PROCESSING SYSTEM WHICH IS IN FULL USE, CAN ADEQUATELY PROCESS THE VOLUME OF GAS COLLECTED, AND HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE FROM THE SCAQMD.  
[RULE 402, 1150.1]
6. EACH HORIZONTAL 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 SCAQMD AS SOON AS THE WELL IS INSTALLED TO PREVENT GAS FROM ESCAPING FROM THE LINE TO THE ATMOSPHERE.  
[RULE 1150, 1150.1]
7. EACH VERTICAL AND HORIZONTAL WELL HEAD SHALL BE EQUIPPED WITH A SHUT-OFF VALVE AND A SAMPLING PORT.  
[RULE 1150.1]
8. 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]
9. EACH WELL SHALL BE SECURELY SEALED TO PREVENT ANY EMISSIONS OF LANDFILL GAS FROM AROUND THE WELL CASING.  
[RULE 402, 1150, 1150.1]

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10. CONSTRUCTION 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 SCAQMD.  
[RULE 402, 1150]
11. CONSTRUCTION SHALL NOT BE CONDUCTED ON DAYS WHEN THE SCAQMD FORECASTS FIRST, SECOND OR THIRD STAGE EPISODES FOR AREA NO. 21, OR WHEN THE SCAQMD REQUIRES COMPANIES IN AREA NO. 21 TO IMPLEMENT THEIR FIRST SECOND OR THIRD STAGE EPISODE PLANS. EPISODE FORECASTS FOR THE FOLLOWING DAY CAN BE OBTAINED BY CALLING (800) CUT-SMOG.  
[RULE 402, 1150]
12. CONSTRUCTION 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]
13. 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]
14. 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 SCAQMD PERSONNEL OR ON-SITE SAFETY COORDINATOR IN THE ABSENCE OF SCAQMD PERSONNEL.  
[RULE 402, 1150]
15. 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]
16. THE CONSTRUCTION OF ANY PIPING OR WELL TRENCH WHICH EXPOSES LANDFILL TRASH TO THE ATMOSPHERE SHALL BE STAGED SO THAT NO MORE THAN ONE HUNDRED (100) LINEAR FEET OF TRENCH SHALL BE EXPOSED AT ANY TIME PRIOR TO BACKFILLING.  
[RULE 402, 1150]
17. EXCAVATED REFUSE MAY BE PLACED ALONG THE TRENCH EDGE UPON REMOVAL FROM THE TRENCH. ALL EXCAVATED REFUSE SHALL BE TRANSFERRED TO THE WORKING FACE WITHIN ONE HOUR OF REMOVAL FROM THE TRENCH, UNLESS OTHERWISE NOTED BELOW.  
[RULE 402, 1150]

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18. 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 ARE MITIGATED AND THE APPROVAL TO RESUME WORK IS RECEIVED FROM THE SCAQMD.  
[RULE 402, 1150]
19. THE EXTERIOR OF THE VEHICLE (INCLUDING THE TIRES) HAULING EXCAVATED MATERIAL SHALL BE CLEANED OFF PRIOR TO LEAVING THE WORKING SITE.  
[RULE 1150]
20. ALL CONSTRUCTION SPOILS SHALL BE BURIED AT THE WORKING FACE OF THE LANDFILL BY THE END OF EACH DAY.  
[RULE 402, 1150]
21. THE SCAQMD SHALL BE NOTIFIED IN WRITING AT LEAST ONE 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 DESCRIBES AND SHOWS THE ENTIRE GAS COLLECTION SYSTEM. ESTIMATED GAS COLLECTION VOLUME, WELL DEPTHS, PIPE LENGTHS, DIAMETERS, AND LAYOUTS SHALL BE SUPPLIED TO THE SCAQMD IN THIS ADVANCE NOTIFICATION.  
[RULE 1150.1]
22. WITHIN 90 DAYS AFTER CONSTRUCTION OF A GROUP OF WELLS AND THEIR ASSOCIATED PIPING IS COMPLETE, THE PERMITEE SHALL SUBMIT AS-BUILT DRAWINGS SHOWING THE TRENCH LOCATIONS, VERTICAL WELL LOCATIONS, AND LINE SIZES TO THE SCAQMD.  
[RULE 1150.1]
23. THE OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY RAW LANDFILL GAS OR CONDENSATE INTO THE ATMOSPHERE.  
[[RULE 402, 1150.1]
24. MITIGATION MEASURES, OTHER THAN THOSE INDICATED IN THESE CONDITIONS, WHICH ARE DEEMED APPROPRIATE BY SCAQMD PERSONNEL AS NECESSARY TO PROTECT THE COMFORT, REPOSE, HEALTH OR SAFETY OF THE PUBLIC SHALL BE IMPLEMENTED UPON REQUEST.  
[RULE 402, 1150]
25. A COPY OF THIS PERMIT SHALL BE KEPT AT THE SITE OFFICE AT ALL TIMES.  
[RULE 206]

**EMISSIONS AND REQUIREMENTS:**

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

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GASEOUS EMISSIONS: RULE 1150.1  
GASEOUS EMISSIONS: 40 CFR 60 SUBPART WWW  
GASEOUS EMISSIONS: 40 CFR 63 SUBPART AAAA

**BACKGROUND:**

On November 5, 2008, OC Waste & Recycling –Prima (previously Orange County IWMD) submitted this A/N 492235 for a modification to an existing landfill gas (LFG) collection system permitted under PO F38717 / A/N 384568. Facility proposes to install new horizontal and vertical wells for future expansion of the landfill operations. The proposed modification is for Waste Management Unit No. 1 (WMU1) and addition of Waste Management Unit No. 2 (WMU2), Phase I & II.

This is a Title V facility.

Initial Title V Facility Permit (TVFP) was issued on April 26, 2004 to Orange County, IWMD. Title V revision (No. 1) was issued on April 25, 2008 to OC Waste & Recycling.

New A/N 491771 is also filed for Title V Renewal (TV permit expiration date- 4/27/2009) to include this modified LFG collection system and A/N 499317 for modification to existing LFG condensate permit F83427/ A/N 456274.

**CEQA:** Notice of Exemption (NOE) with Categorical Exemption was filed October 23, 2008 for the proposed modification to the existing LFG collection system. Copy of NOE is included in folder.

**PROCESS DESCRIPTION:**

Prima Deshecha landfill is an active landfill site. The facility has proposed for modifications to the existing LFG collection system (F38717) for future expansion of the LFG system to install;

- Fifty (50) new vertical LFG collection wells (WMU1) – Equip. description Item I-4.
- Addition of Waste Management Unit No. 2 (WMU2) – Equip. description Item III
  - Phase 1.
    - A. Ten (10) horizontal wells
    - B. Thirty (30) vertical wells (or collectors)
  - Phase 2.
    - A. Fifteen (15) horizontal wells (or collectors)
    - B. Thirty seven (37) vertical wells

The proposed wells will be installed on as needed basis. Collected LFG will be directed to the combustion or processing facility/equipment, which is in full use and can adequately process the volume of LFG, and has been issued a valid permit from the SCAQMD.

Originally proposed PC-PO evaluation (June 2009) has been revised to be issued as PC (?).

**VOC Emissions:**

No emissions are expected from the proposed modifications to the LFG collection system. LFG emissions will be controlled by air pollution equipment per current operating practice.

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For this application, R1 = R2 = 0 lbs/hr.

No impact on health risk as emissions controlled by the existing APC equipment (flare station).

**RULES EVALUATION**

Compliance with all applicable rules and regulations is expected.

**RECOMMENDATIONS:**

Issue a Permit to Construct/~~Operate~~ as shown above.