

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
1947 Galileo Court, Suite 103; Davis, CA 95618
Phone (530) 757-3650 Fax (530) 757-3670

FACILITY NUMBER: 01392
SIC CODE: 4953

**AUTHORITY TO CONSTRUCT
C-07-164
IS HEREBY GRANTED TO**

**YOLO COUNTY CENTRAL LANDFILL
292 West Beamer Street
Woodland, CA 95695**

EQUIPMENT LOCATION: 44090 County Road 28H; Woodland, CA

TO CONSTRUCT

PROCESS DESCRIPTION: Municipal solid waste (MSW) landfill fugitive emissions; Proposed modification of P-15-05 to increase the overall design capacity of the landfill to 49,035,200 cubic yards; increase the overall capture and control efficiency of the landfill from 75.0% to 75.5%; increase the number of waste management units operated as bioreactors; install a landfill-based anaerobic digester for the specific composting of green-, food-, and other organic wastes; mine landfill waste located in bioreactor cells that have reached the end of their methane generation cycle; use biocover as intermediate soil cover for new waste cells; and install a permanent household hazardous waste collection facility (currently exempt from air district permitting).

EQUIPMENT INVENTORY: MSW landfill not to exceed a total maximum design capacity of 49.0352 million cubic yards of waste

- Total Billing: Schedule 8, Misc. -

CONTROL EQUIPMENT INVENTORY:

Negative pressure landfill gas collection system serving the conventional (non-bioreactor) and bioreactor portions of the landfill and LFG Specialties, F-2000 enclosed flare (shared with P-26-98)

PERMITTED EMISSION LIMITS:

Pollutant	Daily [lb]	Qtr #1 (Jan 1-Mar 31) [lb]	Qtr #2 (Apr 1-June 30) [lb]	Qtr #3 (July 1-Sept 30) [lb]	Qtr #4 (Oct 1-Dec 31) [lb]	Yearly [tons]
VOC	133.7	12,032	12,165	12,299	12,299	24.40

PERMITTED PROCESS LIMITS:

	Daily [tons]	Qtr #1 (Jan 1-Mar 31) [tons]	Qtr #2 (Apr 1-June 30) [tons]	Qtr #3 (July 1-Sept 30) [tons]	Qtr #4 (Oct 1-Dec 31) [tons]	Yearly [tons]
Municipal Solid Waste Received	1,800	161,550	161,550	161,550	161,550	646,200

The following information is included to inform and assist the Permit Holder in achieving compliance with applicable provisions of Federal, State, and District Rules and Regulations. The following set of referenced regulations are not intended to be either comprehensive or exclusive, nor are they intended to be emission limiting permit conditions, but they are still applicable rules of the District. Occasionally laws are amended. The amended versions of the referenced rules shall be deemed to be in effect. **It is the Permit Holder's responsibility to comply with all applicable Rules and Regulations.**

PROPOSED

1. After construction of all listed process and control equipment is complete, as determined by the District, the ATC Holder shall have 45 calendar days to conduct tests and perform other necessary initial adjustments on the equipment. During this time, this Authority to Construct and its conditions shall function as a temporary Permit to Operate. Any operation of the equipment beyond this period without either District receipt of a valid Permit to Operate Notification Card or written extension from the District, will be considered operation without a permit and subject to enforcement action. The ATC Holder shall provide the District, in writing, a notice prior to commencing the 45-day start-up period. [District Rule 3.1, §402]
2. The District requires an inspection of the equipment after completion of the construction and prior to the issuance of the Permit to Operate. [District Rule 3.1, §402]
3. An authorization to construct shall remain in effect only until the application for Permit to Operate is granted or denied; however, such an authorization shall not remain in effect beyond two years from the date of issuance unless the District finds that the time required for construction requires an extension and grants one or more extensions, for a total time not to exceed five years from the date of issuance. [District Rule 3.1, §407]

The following set of conditions are established by the District to provide enforceable operating parameters as authorized by California Health and Safety Code Section 42301 and District Rule 3.1, Section 402. If any of the rules and regulations referenced below are amended subsequent to the issuance date of this permit, resulting in the amended rule differing from or superseding the corresponding condition, then the Permit Holder shall be required to

comply with the amended rule or regulation and shall no longer be required to comply with the superseded condition.

4. The Permit Holder 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 (3) minutes in any one (1) hour which is:
 - a. As dark or darker in shade than No. 1 on the Ringelmann Chart; or
 - b. Greater than 20% opacity. [District Rule 3.4]
5. Except for active disposal areas, or areas undergoing maintenance, repair, modification or closure, the surface emissions at any point on the surface of the landfill or along the gas transfer path of the gas collection system shall not exceed a non-methane organic compound (NMOC) concentration of 500 ppmv (measured as methane). Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR Part 60.755(c)(4)(i) through (c)(4)(v) shall be taken by the owner or operator of the gas collection system. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of this permit or 40 CFR Part 60.753(d). [District Rule 3.4 and 40 CFR Part 60.755(c)(4)]
6. The Permit Holder shall perform surface emission testing using a portable hydrocarbon detection test instrument to measure the surface emission concentrations of the landfill and gas collection system. The instrument shall be calibrated before and after each test using zero air and an approximately 500 ppmv methane based standard calibration gas in accordance with the manufacturer's recommendations. The instrument serial number and instrument calibration data shall be recorded for each calibration and maintained as a permanent record. [District Rule 3.4]
7. The Permit Holder or operator shall perform the surface emission monitoring using the following procedure:
 - a. The detector is to be held within three (3) inches of the surface while walking a pattern of parallel paths not more than 90 feet apart over:
 - i. the entire surface area of the landfill site which contains buried refuse;
 - ii. the gas transfer path of the gas collection system;
 - iii. cracks, holes and other breaches in the solid waste disposal site cover; and
 - iv. the Waste Management Unit (WMU) perimeters (i.e. accessible areas where buried waste interfaces with undisturbed native soil).
 - b. The operator shall monitor the instrument readings at least once every 30 seconds, at normal walking speed (approximately 2 miles per hour), record only the readings that exceed 500 ppmv, and geographically locate the specific area on the landfill surface where the exceedances occur.
 - c. Sampling is not required on steep slopes or other areas posing an unavoidable hazard to testing personnel.
 - d. Average wind speed shall be determined on a ten-minute average using an on-site anemometer.
 - e. Testing shall be terminated when the average wind speed exceeds five (5) miles per hour, or the instantaneous wind speed exceeds ten (10) miles per hour.

- f. Testing shall be conducted when there has been no rain for 72 hours prior to the testing event and no rain is falling. [District Rule 3.4]
8. The Permit Holder shall perform surface emission testing at the landfill at least once every six (6) consecutive calendar months. The Permit Holder may reduce the testing frequency to a twelve (12) consecutive calendar month period, after the completion of two (2) successive semi-annual tests without an exceedance of the 500 ppmv standard, other than non-repeatable momentary readings. Subsequent exceedances of the 500 ppmv emission concentration shall result in the re-establishment of the six (6) month testing frequency. A non-resettable momentary reading shall be defined as a portable hydrocarbon detection test instrument reading which persist for less than five (5) seconds and does not recur when the sampling probe is placed in the same location. [District Rule 3.4]
9. The Permit Holder shall operate the anaerobic bioreactor portions of the landfill with an average moisture content of less than 40% by weight. [District Rule 3.4]
10. The Permit Holder shall submit a moisture report to the District for the anaerobic bioreactor portions of the landfill documenting the average moisture content by weight using the procedures specified in 40 CFR Part 63.1980(g) and (h) or other District approved methods. [40 CFR Part 63.1947]
11. The Permit Holder shall submit the moisture report to the District for the anaerobic portions of the landfill, in accordance with 40 CFR 63.1980, at least once every six (6) months until such time that liquid addition has permanently ceased. [District Rule 3.4]
12. The Permit Holder shall install and operate a biofilter that serves the anaerobic digester cell located on WMU 6D-Phase 2 during aerobic composting phase of the waste. [District Rule 3.4]
13. The Permit Holder shall only mine (e.g. excavate, reclaim, etc.) and sort waste from the aerobic bioreactor cell located in WMU 6D-Phase 1 (WMU 6D-1) and anaerobic digester cell located in WMU 6D-Phase 2 (WMU 6D-2). The mining operations shall only be allowed for waste cells that meet the following criteria:
- Waste cells not used in the disposal of asbestos-containing materials;
 - Waste cells that have achieved the end of their landfill gas production cycle as determined through long term gas sampling and/or emission modeling using U.S. EPA's LandGEM program or other approved modeling software;
 - Waste cells that have not had leachate or other liquids circulated within the cell for more than one (1) calendar year; and
 - Any other specifications determined significant by the District. [District Rule 3.4]
14. Whenever buried solid waste is brought to the surface during the installation or preparation of wells, trenches, piping, or other equipment or when landfill solid waste is excavated or moved, the Permit Holder shall cover the excavated solid waste using fresh soil, plastic sheeting, or vapor retarding foam as necessary in order to prevent odorous emissions and to minimize the release of landfill gas. [District Rule 3.4]

15. The Permit Holder shall monitor the landfill gas emissions from any open faces, active mining surfaces, and/or any liquids present during the mining of a waste cell in order to determine that the NMOC surface emission concentration limit of 500 ppmv (measured as methane) is not exceeded. [District Rule 3.4]
16. The Permit Holder shall perform surface emission monitoring of the mined cells using the methods contained in 40 CFR Part 60.755(c)(3) at start-up and at least once every fourteen (14) days thereafter. [District Rule 3.4]
17. The Permit Holder shall submit a NMOC report to the District using the procedures specified in 40 CFR Part 60.754(a) at least once every twelve (12) months, except as provided in 40 CFR Part 60.757(b)(1)(ii) or 40 CFR Part 60.757(b)(3). [District Rule 3.4 and 40 CFR Part 60.752(b)]
18. The District must be notified prior to any NMOC related sampling event and a protocol must be submitted for approval fourteen (14) days prior to sampling. The results of a sampling event shall be submitted to the District within sixty (60) days of the sample date. The protocol and report shall be mailed to the attention of the Supervising Air Quality Engineer. [District Rule 3.4]
19. Upon achieving a calculated NMOC emission rate of 50 megagrams or greater per year, the Permit Holder shall comply with the requirements of 40 CFR Part 60.752(b)(2). [District Rule 3.4 and 40 CFR Part 60.752(b)(2)]
20. The Permit Holder shall comply with the applicable requirements for active disposal sites for asbestos-containing materials as set forth in 40 CFR Part 61, Subpart M - National Emission Standard for Asbestos. [40 CFR Part 61.140]
21. The Permit Holder shall comply with the applicable requirements for the handling and the disposal of the affected appliances and equipment containing ozone depleting substances, as set forth in 40 CFR Part 82, Subpart F - Recycling and Emission Reduction. [40 CFR Part 82.150]
22. The Permit Holder shall maintain records of all surface emissions tests that include the time, weather conditions, areas sampled, areas not sampled due to steep slopes or other safety hazards, portable hydrocarbon detection test instrument calibration records, and emission test results. [District Rule 3.4]
23. The Permit Holder shall maintain daily records (in tons) of the total amount of MSW accepted at the landfill. [District Rule 3.4]
24. The Permit Holder shall maintain daily records (in tons) of the amount of MSW placed in the anaerobic bioreactor portions of the landfill until such time that placement has permanently ceased. [District Rule 3.4]
25. The Permit Holder shall maintain all records on site for a period of five (5) years from the date of entry and these records shall be made readily available to District personnel upon request. [District Rule 3.8, §302.6(b)]

This permit does not authorize the emission of air contaminants in excess of those allowed by Division 26, Part 4, Chapter 3, of the Health & Safety Codes of the State of California or the Rules and Regulations of the Yolo-Solano Air Quality Management District.

Mat Ehrhardt, P.E.
AIR POLLUTION CONTROL OFFICER

By:

Date of Issuance:

PROPOSED