



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

AUTHORITY TO CONSTRUCT

C010719

If construction is not completed by the expiration date of this permit, it may be renewed for one additional year upon payment of applicable fees. Any additional extension will require the written approval of the Air Pollution Control Officer. This Authority to Construct may serve as a temporary Permit to Operate provided the APCO is given prior notice of intent to operate and the Permit to Operate is not specifically denied.

EXPIRES LAST DAY OF: JUNE 2026

OWNER OF OPERATOR (Co.#1021)

SBCo Solid Waste Management
222 West Hospitality Lane, 2nd Floor
San Bernardino, CA 92415-0017

EQUIPMENT LOCATION (Fac.#3122)

SBCo - Landfill/Barstow
32553 Barstow Road
Barstow, CA 92311

Description:

LANDFILL GAS CONTROL SYSTEM consisting of: associated Landfill identified as SWIS (Solid Waste Information System) Number 36-AA-0046 and Classified as Active; see: <http://www.calrecycle.ca.gov/SWFacilities/Directory/36-AA-0046/Detail/>; It has a maximum permitted capacity of 80,354,500 Cubic Yards (61.435 Million cubic meters (which is Greater than 2.5 Million cubic meters); facility area of 645 acres and a disposal area of 331 acres. Landfill is permitted to receive 1,500 tons/day of Waste Type: Agricultural, Construction/demolition, Industrial, Mixed municipal, Other designated, Sludge (BioSolids). Design Capacity of greater than 2.5 million megagrams; has a Waste in Place (WIP) and Heat Input Capacity (HIC) of > 450,000 tons and 0.13 MMBTU/hr respectively; LFG Processed in 2022 = 19,967,683 scf/yr. The 2022 HIC was last provided by Report dated March 4, 2021. Also, during four (4) consecutive quarters in 2022, San Bernardino County Solid Waste Management Division (SWMD) demonstrated that there were no surface methane emissions exceeding 200 ppmv. SWMD will continue to re-calculate the heat input capacity annually. This Landfill is categorized as NOT Controlled pursuant to the California Landfill Methane Regulation as this GCCS utilizes Carbon Adsorption which does not control Methane Gas emissions. Landfill is also Permitted under Federal Operating Permit Number 102103122. Facility elevation is 2959 feet above sea level.

EQUIPMENT

Capacity	Equipment Description
0	Vertical Extraction Wells - 76 divided between the following:
0	Soil Vapor Extraction (SVE) Well
0	Landfill Gas (LFG) Well
0	Manual Condensate Tanks - 2 each

Fee Schedule: 11 (N/A)

Rating: 1 device

SIC: 4953

SCC: 50100406

Location/UTM(Km): 498E/3862N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

SBCo Solid Waste Management
222 West Hospitality Lane, 2nd Floor
San Bernardino, CA 92415

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

Capacity	Equipment Description
0	Landfill Gas Filter and Knockout Vessel - 1 each -#V-1: Manufactured by: Real Environmental Products, Series 8000 Knockout Vessel with Demister Filter pad (rated at 99.9% removal efficiency on 6 micron or greater particle size), and design flow of 500 scfm LFG, or equivalent. Effective Capacity Range is 0-500 scfm.
0	Carbon Adsorption Vessels V-2A/B/C: Manufactured by: Tetra Solv, Model Kleenair- VFV-2000, carbon adsorption vessels, 3 canisters each containing 2000, lbs. of Granular Activated Carbon (GAC) to adsorb the non-methane contaminants in the LFG, design flow rate of up to 500 scfm LFG, or equivalent. Two canisters in series, one as back-up. Effective Capacity Range is 3-500 scfm.
25	Blower (B-1A/operating and B-1B/spare): Manufactured by: Gardner-Denver, Type: Multistage centrifugal with cast iron inlet and outlet heads, Model: 4206, Motor: 25 HP premium efficient electric motor, Class 1 Div. 2 inverter Duty with 10:1 turndown, 460 Volt/3 Phase/60 hertz with a Variable Frequency Drive (VFD), or equivalent. An identical Gardner-Denver Blower will be installed as a redundant blower to serve as back-up in the event of primary blower failure.
0	Flow Element/Flow Transmitter (FE/FT-1): Manufactured by: Sage; Model Prime, Thermal Mass Flow Meter, 0-500 scfm LFG at 0-100-inches Water Column (W.C.) vacuum, or equivalent. Effective Capacity Range is 0- 500 scfm.
0	Potassium Permanganate (KMn) Vessels V-3A/B: Manufactured by: Tetra Solv, Model VFV-1000, KMn vessels, 2 canisters each containing 1,000 lbs. of KMn media to remove by oxidation the lighter fraction of Non-Methane Non-Ethane Organic Compounds (NMNEOCs) (e.g., vinyl chloride) in the LFG, design flow rate of up to 500 scfm LFG, or equal. One in series, post GAC, and one as back-up. Effective Capacity Range is 0-500 scfm.

CONDITIONS:

1.This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.
[District Rule 204]

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[District Rule 204]

2.The owner/operator shall take the following samples;

(a) Initial operation or following the addition of wells, for first 6 months, on a weekly schedule:

(i) Gas composition and flow rate from each Vertical Soil Vapor Extraction (SVE) Wells.

(ii) Granular activated carbon (GAC) vessels - inlet and outlet - for total Gaseous NonMethane Organic Compounds (TGNMOC) using a photo ionization detector (PID) calibrated to hexane.

(b) Initial operation or add additional wells for first 6 months on a monthly schedule:

(i) Collect a sample in a Tedlar bag and analyze for TGNMOC and SCAQMD core group of Toxic Air Contaminates (TAC) compounds.

(c) After first 6 months on a quarterly schedule:

(i) Collect a sample in a Tedlar bag and analyze for TGNMOC and SCAQMD core group of TAC compounds. [District Rule 204]

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(c) After first 6 months on a quarterly schedule:

(i) Collect a sample in a Tedlar bag and analyze for TGNMOC and SCAQMD core group of TAC compounds. [District Rule 204]

3.The owner/operator shall maintain a log that contain at least the following items:

(a) Dates of measurements and analyses,

(b) Name of operator taking the data,

(c) All flow rates,

(d) Sample analyses,

(e) Inclusive of calibration gas concentrations,
(f) Date new SVE and/or LFG wells are added or relocated, and
(g) Location and identification name of new or relocated well.
The log shall be maintained current, kept for the duration of the project and made available to District personnel on request.
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The log shall be maintained current, kept for the duration of the project and made available to District personnel on request.
[District Rule 204]

4. The owner/operator shall conduct all required compliance and certification tests in accordance with a District approved test plan. Thirty (30) days prior to the compliance certification tests the operator shall provide a written test plan for District review and approval. Written notice of the test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such tests shall be submitted to the District within forty-five (45) days after testing. All protocols, notifications, and test results must be submitted electronically to reporting@mdaqmd.ca.gov.
[District Rule 204]

4. The owner/operator shall conduct all required compliance and certification tests in accordance with a District approved test plan. Thirty (30) days prior to the compliance certification tests the operator shall provide a written test plan for District review and approval. Written notice of the test shall be provided to the District ten (10) days prior to the tests so that an observer may be present. A written report with the results of such tests shall be submitted to the District within forty-five (45) days after testing. All protocols, notifications, and test results must be submitted electronically to reporting@mdaqmd.ca.gov.
[District Rule 204]

5. All reports, tests, results, and emissions information, shall be submitted electronically to the District at reporting@mdaqmd.ca.gov, and the California Air Resources Board (CARB) at: LMR@arb.ca.gov.
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[District Rule 204]

6. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]

6.A. This facility is subject to the Regulation to Achieve Greenhouse Gas Emission Reductions - Methane Emissions from Municipal Solid Waste Landfills [17 CCR 95460 - 95476]. Under this regulation, this facility is defined as an Active MSW Landfill Greater Than or Equal to 450,000 tons of Waste-in-Place [95463(b)]. This facility has a calculated landfill gas heat input capacity (HIC) less than 3.0 MMBtu/hr [95463(b)(1)].

The requirements of Part III, Section A of their Title V Permit (FOP 102103122) [17 CCR 95460 - 95476] apply at all times.

7.A. This facility is subject to the Regulation to Achieve Greenhouse Gas Emission Reductions - Methane Emissions from Municipal Solid Waste Landfills [17 CCR 95460 - 95476]. Under this regulation, this facility is defined as an Active MSW Landfill Greater Than or Equal to 450,000 tons of Waste-in-Place [95463(b)]. This facility has a calculated landfill gas heat input capacity (HIC) less than 3.0

MMBtu/hr [95463(b)(1)].

The requirements of Part III, Section A of their Title V Permit (FOP 102103122) [17 CCR 95460 - 95476] apply at all times.

7.A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.

[District Rule 107(b), H&S Code 39607, 44341 44342, 17 CCR 93400 et seq., and 40 CFR 51, Subpart A]

8.This facility is subject to the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills [40 CFR 63, Subpart AAAA]. Under this regulation, this facility is defined as an existing, area source, MSW landfill, that has a design capacity equal to greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m3) and has estimated uncontrolled emissions less than 50 megagrams per year (Mg/yr) NMOC as calculated according to 40 CFR 63.1959.

The requirements of Part III, Section B of their Title V Permit (FOP 102103122) [40 CFR 63, AAAA] apply at all times.