



NCT 1 4 2014

Benjamin Gray Avenal Regional Landfill P.O. Box 189 Avenal, CA 93204

Final - Authority to Construct / Certificate of Conformity (Significant

Modification)

Facility Number: C-3839 Project Number: C-1132849

Dear Mr. Gray:

The Air Pollution Control Officer has issued the Authority to Construct permit to Avenal Regional Landfill for a landfill gas collection and control system served by a flare, at 201 Hydril Rd, Avenal, CA. Enclosed are the Authority to Construct permit and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permit was published on August 11, 2014. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on August 6, 2014. All comments received following the District's preliminary decision on this project were considered.

Comments received by the District during the public notice period resulted in grammatical revisions in the evaluation and ATC permit. These changes were minor and did not trigger additional public notification requirements, nor did they have any impact upon the Best Available Control Technology determination or on the amount of offsets required for project approval.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

> Seved Sadredin **Executive Oirector/Air Pollution Control Officer**

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93728-0244 Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: 661-392-5500 FAX: 661-392-5585

Mr. Benjamin Gray Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Jim Swaney at (559) 230-6000.

Sincerely,

Amaud Marjollet

Director of Permit Services

AM:st

Enclosures

Mike Tollstrup, CARB (w/enclosure) via email CC:

Gerardo C. Rios, EPA (w/enclosure) via email CC:





ISSUANCE DATE: 10/09/2014

AUTHORITY TO CONSTRUCT

PERMIT NO: C-3839-1-5

LEGAL OWNER OR OPERATOR: AVENAL REGIONAL LANDFILL

MAILING ADDRESS: PO BOX 189

AVENAL, CA 93204

LOCATION: 201 HYDRIL RD

AVENAL, CA 93204

EQUIPMENT DESCRIPTION:

MODIFICATION OF MUNICIPAL SOLID WASTE LANDFILL, 28.8 MILLION CUBIC YARD CAPACITY (123 ACRES) WITH GAS COLLECTION AND CONTROL SYSTEM SERVED BY TWO (2) BAKER FILTRATION MODEL KLEEN AIR 55 200 LB CANISTERS CONNECTED IN SERIES: INSTALLATION OF A 1,000 GALLON CONDENSATE STORAGE TANK AND GAS COLLECTION AND CONTROL SYSTEM SERVED BY A 45.5 MMBTU/HR FLARE FOR 40 CFR 60 SUBPART WWW RULE COMPLIANCE

CONDITIONS

- 1. This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
- 3. All new off-road equipment at the landfill shall meet USEPA Tier 3 emission standards and be equipped with CARB certified add-on controls for diesel particulate matter with a control efficiency of at least 82% or shall meet USEPA Tier 4 emission standards. On and after the USEPA Tier 4 compliance deadline, all new off-road equipment at the landfill shall meet the appropriate USEPA Tier 4 emission standard in effect at that time. [California Environmental Quality Act]
- 4. The landfill facility, associated equipment, and surrounding Avenal Regional Landfill property shall be operated and maintained in such a manner as to prevent the generation of odors which may constitute a nuisance. [District Rule 4102]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE OISTRICT COMPLIANCE DIVISION AT (559) 230-5950 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

- 5. Air pollution control equipment shall be maintained in good operating condition and shall be operated in accordance with the manufacturer's instructions. [District Rule 4102]
- 6. Equipment shall be operated in such a manner as to not constitute a nuisance or annoyance to a considerable number of people. [District Rule 4102]
- 7. Refuse delivery trucks shall be unloaded within a reasonable amount of time after entering the property. [District Rule 4102]
- 8. All refuse trucks shall be maintained in condition to prevent leakage of solid or liquid material. [District Rule 4102]
- 9. Refuse shall not be stockpiled anywhere outside of the designated refuse disposal areas. Trucks waiting their turn to unload within the 2 hour unload time limitation are not considered stockpiled outside the designated refuse disposal areas. [District Rule 4102]
- 10. All trucks delivering refuse shall not be leaking liquid or solid material prior to exiting the landfill site. Trucks shall be cleared of any debris to minimize nuisance emissions. [District Rule 4102]
- 11. The designated refuse disposal areas shall be covered at the end of each operating day and maintained as necessary to prevent the emission of nuisance odors. [District Rule 4102]
- 12. Permittee shall maintain an updated odor control plan detailing all methods of nuisance odor control as it applies to the facility. The odor control plan shall be made available to all employees and shall be used as a training aid for new employees. The odor control plan shall be made available for District inspection upon request. [District Rule 4102]
- 13. The District shall have authority to investigate possible odors alleged to originate from the facility and to make a determination of whether or not a nuisance exists, either in response to a complaint or on its own initiative. [District Rules 1070 and 4102] Federally Enforceable Through Title V Permit
- 14. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101] Federally Enforceable Through Title V Permit
- 15. The exhaust stack of the flare shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 16. The flare minimum stack height must be at least 40 feet high. [District Rule 4102]
- 17. The flare maximum stack diameter may be no greater than 8 feet. [District Rule 4102]
- 18. Total Class III waste material rate shall not exceed any of the following: 6,013 tons per day or 2,194,602 ton/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 19. Emission rate from the enclosed flare shall not exceed any of the following limits: 0.05 lb-NOx/MMBtu; 0.084 lb-SOx/MMBtu (250 ppmv H2S in fuel); 0.2 lb-CO/MMBtu; or 0.008 lb-PM10/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. VOC emissions (as hexane) from the landfill and flare shall not exceed any of the following: 145.8 lb/day or 53,217 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. The heat input of collected landfill gas into the flare shall not exceed any of the following: 45.5 MMBtu/hr or 398,580 MMBtu/year. Heat input shall be calculated daily using monthly methane measurements (%), landfill gas flow into the flare (cubic feet per minute), and the annually tested landfill gas heat content (Btu/cubic foot). [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Permittee shall operate the enclosed flare at all times when the collected gas is routed to it. [District Rule 2201 and 40 CFR 60.753(f)] Federally Enforceable Through Title V Permit
- 23. The flare shall reduce the inlet NMOC emissions by at least 98% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. NMOC collection efficiency shall be at least 85% by weight. [District Rule 2201] Federally Enforceable Through Title V Permit

- 25. Total soil cover usage rate shall not exceed 3,523 tons per day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 26. Total PM10 emissions from handling of soil cover shall not exceed 0.0023 lb-PM10 per ton of material handled. [District Rule 2201] Federally Enforceable Through Title V Permit
- 27. The owner or operator shall maintain a non-resettable, totalizing volumetric flow meter to continuously measure the amount of landfill gas condensate injected in the flare. [District Rule 2201] Federally Enforceable Through Title V Permit
- 28. The landfill gas condensate injection rate shall not exceed 5 gallons per minute. [District Rule 2201] Federally Enforceable Through Title V Permit
- 29. Source testing on the flare shall be performed to demonstrate compliance with the flare NOx and CO limits, and the NMOC destruction efficiency of 98% or less than 20 ppmv dry basis as hexane NMOC outlet concentration at 3 percent oxygen as required by this permit shall be conducted within 180 days of startup. [District Rule 2201 and 40 CFR 60.752(b)(2)(iii)(B)] Federally Enforceable Through Title V Permit
- 30. Source testing to demonstrate compliance with the flare VOC, NOx, and CO emission limits and VOC control efficiency requirements shall be conducted at least once every 12 months. [District Rule 2201] Federally Enforceable Through Title V Permit
- 31. Source testing for NOx shall be conducted using EPA Test Method 7E or CARB Method 100. [District Rule 1081] Federally Enforceable Through Title V Permit
- 32. Source testing for CO shall be conducted using EPA Test Method 10 or 10B, CARB Methods 1-5 with 10 or CARB Test Method 100. [District Rule 1081] Federally Enforceable Through Title V Permit
- 33. Gas combusted in the flares shall be tested for H2S content on a quarterly basis using draeger tubes. If compliance is shown for two consecutive quarters, the testing frequency may be changed to annual. Quarterly testing shall resume if any annual test shows noncompliance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 34. Sulfur content of the landfill gas being combusted in the flare shall be determined using ASTM D 1072, D 3031, D 4084, D 3246 or double GC for H2S and mercaptans, or draeger tubes for H2S, or an equivalent method approved by the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 35. VOC emissions shall be measured by USEPA Test Method 18, 25, 25A, or 25C. [District Rule 1081 and 40 CFR 60.754(d)] Federally Enforceable Through Title V Permit
- 36. Source sampling to determine the compliance status of an emissions source shall be witnessed or authorized by District personnel. [District Rule 4651] Federally Enforceable Through Title V Permit
- 37. The operator of the facility shall maintain a copy of the source test protocol. A copy of the source test results must be maintained for at least five years and be readily available to the APCO upon written or oral request. [District Rule 4651] Federally Enforceable Through Title V Permit
- 38. For surface emissions monitoring, once an area has reached final grade or within 90 days when the LFG system in the area is commissioned, whichever comes first, surface emissions shall not exceed a methane concentration of 500 parts per million above background at the surface of the landfill. [District Rule 2201] Federally Enforceable Through Title V Permit
- 39. For surface emissions monitoring, surface monitoring for the landfill area shall be performed quarterly. [District Rule 2201] Federally Enforceable Through Title V Permit

- 40. For surface emissions monitoring, after an exceedance, the permittee shall initiate correction action within five days and conduct remonitoring within ten days from the initial exceedance. If compliance is shown, an additional remonitoring event is required within one month of the initial exceedance. If the ten day event shows an exceedance, the permittee shall initiate correction action within five days and conduct remonitoring within ten days from the second exceedance. If compliance is shown, an additional remonitoring is required within one month of the initial exceedance. If the second ten day event shows an exceedance, the permittee shall permit and install additional landfill gas wells to correct the problem within 120 days of the initial exceedance. The permittee may utilize an alternative corrective action with prior approval from the APCO or alternative compliance actions as detailed in the Avenal Regional Landfill NSPS/AB32 GCCS Design Plan, Appendices B and F (December 2013). [District Rule 2201] Federally Enforceable Through Title V Permit
- 41. For surface emissions monitoring, permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals (or a site-specific established spacing) and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage.

 [District Rule 2201] Federally Enforceable Through Title V Permit
- 42. For surface emissions monitoring, surface testing shall be performed using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d). [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. For surface emissions monitoring, the portable analyzer shall meet the instrument specifications of Method 21, section 3 (except that "methane" shall replace all references to VOC). The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. To meet the performance evaluation requirements of Method 21, section 3.1.3, the instrument evaluation procedures of Method 21, section 4.4. The calibration procedures provided in Method 21, section 4.2 shall be followed immediately before commencing a surface monitoring survey. [District Rule 2201] Federally Enforceable Through Title V Permit
- 44. The provisions of this permit apply at all times, except during periods of start-up, shutdown, or malfunction (as defined in 40 CFR 60.755(e)). [District Rule 2201] Federally Enforceable Through Title V Permit
- 45. Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [District Rule 2201] Federally Enforceable Through Title V Permit
- 46. Gas collection system shall be operated in a manner which maximizes the amount of landfill gas extracted while preventing overdraw that can cause fires or damage the gas collection system. [District Rule 2201] Federally Enforceable Through Title V Permit
- 47. During maintenance of the gas collection system or incineration device, emissions of landfill gas shall be minimized during shutdown. [District Rule 2201] Federally Enforceable Through Title V Permit
- 48. Maintenance is defined as work performed on a gas collection system and/or control device in order to ensure continued compliance with District rules, regulations, and/or Permits to Operate, and to prevent its failure or malfunction. [District Rule 2201] Federally Enforceable Through Title V Permit
- 49. The permittee shall notify the APCO by telephone at least 24 hours before performing any scheduled maintenance work that requires the system to be shutdown. The notification shall include a description of work, the date work will be performed and the amount of time needed to complete the maintenance work. Shutdown of the system due to commissioning criteria not being met does not constitute maintenance work. [District Rule 2201] Federally Enforceable Through Title V Permit
- 50. Permittee shall maintain records of system inspections including: date, time and inspection results. [District Rule 1070] Federally Enforceable Through Title V Permit
- 51. Permittee shall maintain records of maintenance related or other collection system and control device downtime, including individual well shutdown. [District Rule 1070] Federally Enforceable Through Title V Permit
- 52. The operator shall record emission control device source tests for VOC destruction/treatment efficiency. [District Rule 1081] Federally Enforceable Through Title V Permit

- 53. Permittee shall maintain records of the daily weight of materials received (cubic yards converted to tons) including Class II waste material and soil cover, landfill gas H2S measurements, and quantity of landfill gas condensate injected into the flare (in gallons). [District Rule 1070] Federally Enforceable Through Title V Permit
- 54. The District shall be notified in writing ten days prior to the acceptance of new types of waste streams, or waste streams with significant malodorous qualities. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 55. A District approved anemometer shall be continuously operated on site with permanent data available to the District. [District Rule 2201] Federally Enforceable Through Title V Permit
- 56. Wastes with the potential to release hazardous gases, mists, or vapors in excess of existing air quality standards shall not be exposed to the atmosphere, and combustion of flammable wastes in the landfill shall be prevented. [District Rule 2201] Federally Enforceable Through Title V Permit
- 57. Vehicle speeds on all on-site roads shall be limited to fifteen miles per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 58. Materials handling operations associated with landfill construction and operation shall be curtailed when wind and moisture conditions make it likely that any resulting visible emissions will exceed 40% opacity at an elevation of 25 feet. [District Rule 2201] Federally Enforceable Through Title V Permit
- 59. The permittee shall comply with the following when excavating on-site contaminated soil: 1) Submit a written notice according to Section 6.1 prior to commencement of excavation on-site of known contaminated soil; 2) Monitor operation for VOC contamination at least once every 15 minutes unless the excavated soil is treated according to Section 5.2.1; 3) on-site excavated soil that has been detected as contaminated shall be placed in storage piles or handled as required by Section 5.2 and; 4) on-site excavated contaminated soil shall be decontaminated, recycled, disposed of in an approved facility, returned to excavation and permanently covered with at least six (6) inches of uncontaminated soil, or transported to a location outside of the SJVAB within thirty (30) calendar days from the time of excavation or as directed by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized state or local government officer having jurisdiction. [District Rule 4651] Federally Enforceable Through Title V Permit
- 60. When handling on-site excavated contaminated soil with VOC concentration measuring at 1,000 ppm or greater, the contaminated soil shall be sprayed with water or vapor suppressant and contaminated soil placed in sealed containers as soon as possible, but no more than 30 minutes after excavation, and handle pursuant to Section 5.1.4, or the contaminated soil loaded into trucks as soon as possible but no more than 30 minutes after excavation, moisten with additional water, cover as required in Section 5.3, and transport immediately to an approved facility, or implement other approved alternative storage methods and handle pursuant to Section 5.1.4. [District Rule 4651] Federally Enforceable Through Title V Permit
- 61. When handling storage piles of on-site excavated contaminated soil the piles shall be clearly isolated and identifiable from storage piles of uncontaminated soil according to Section 6.3.2. [District Rule 4651] Federally Enforceable Through Title V Permit
- 62. When handling storage piles of on-site excavated contaminated soil that have been inactive for more than 60 consecutive minutes, the piles shall be treated with water or a vapor suppressant and cover with heavy-duty plastic sheeting to reduce VOC emissions and the covering shall have at least a six-feet overlap of adjacent sheets, be securely anchored, and have minimal headspace where vapors may accumulate, or covered with a layer of uncontaminated soil no less than six (6) inches deep. [District Rule 4651] Federally Enforceable Through Title V Permit
- 63. When handling on-site excavated contaminated soil, a visual inspection of all storage piles of contaminated soil shall be conducted at least once every 24 hours, except when operators do not report to the facility for a given 24-hour period, to ensure the integrity of the covered surfaces and compliance with Section 5.2.5. [District Rule 4651] Federally Enforceable Through Title V Permit
- 64. When handling on-site excavated contaminated soil, aeration of contaminated soil shall not be allowed except that which occurs during removal or addition of contaminated soil to a storage pile and this includes the use of contaminated soil in daily, intermediate, or final cover operations at disposal sites. [District Rule 4651] Federally Enforceable Through Title V Permit

- 65. The permittee shall comply with the following when transporting on-site excavated contaminated soil: 1) Any truck or trailer transporting on-site excavated contaminated soil shall be filled such that contaminated soil does not extend above the sides or rear of the truck; 2) on-site excavated contaminated soil shall be treated with water or vapor suppressant and covered with an continuous heavy duty plastic sheeting or other covering to prevent spillage of contaminated soil during transport, and; 3) Chain-of-custody records shall be maintained according to Section 6.3.1 by the operators to document transfer of the transported contaminated soil. [District Rule 4651] Federally Enforceable Through Title V Permit
- 66. When decontaminating on-site excavated contaminated soil, VOC emissions from the decontamination of contaminated soil shall be controlled by installation and operation of a VOC collection and control device with a VOC destruction or removal efficiency of at least 95%, or any other approved VOC control device demonstrated to be equivalent. [District Rule 4651] Federally Enforceable Through Title V Permit
- 67. When decontaminating on-site excavated contaminated soil, permittee shall monitor temperature, pressure, and flow rates of VOC control device. [District Rule 4651] Federally Enforceable Through Title V Permit
- 68. When decontaminating on-site excavated contaminated soil, VOC control device shall be operated and maintained in accordance with the manufacturer's recommendations. [District Rule 4651] Federally Enforceable Through Title V Permit
- 69. When decontaminating on-site excavated contaminated soil, permittee shall monitor soil for contamination using the test method in Section 6.5.2 and record all VOC concentration readings according to Section 6.3.4. [District Rule 4651] Federally Enforceable Through Title V Permit
- 70. Permittee shall comply with one of the following regarding on-site excavated contaminated soil: 1) Return the contaminated soil to the excavation and permanently cover with six (6) inches or more of uncontaminated soil, or; 2) Decontaminate the contaminated soil to the extent that the soil is no longer considered contaminated as defined in Section 3.17, or; 3) Transport the contaminated soil to an approved disposal facility, or; 4) Transport the contaminated soil to a location outside of the SJVAB. [District Rule 4651] Federally Enforceable Through Title V Permit
- 71. When decontaminating on-site excavated contaminated soil, decontaminated soil that is to be treated as uncontaminated soil shall require soil samples to be obtained from each storage pile of according to Section 6.6 and tested using the applicable test methods in Section 6.5.3 or Section 6.5.4. [District Rule 4651] Federally Enforceable Through Title V Permit
- 72. Permittee shall include the following information in the notice of on-site contaminated soil excavation activities: names and addresses of operator(s) performing and responsible for excavation, location of site where excavation will occur, scheduled starting date of excavation (if the excavation does not commence on the start date, renotification is required), estimated volume of soil to be excavated, estimated volume (in gallons) of VOC liquid spilled in the soil, if known, and where emergency excavation is conducted at the direction of an authorized officer, pursuant to Section 4.3: name, title and contact information of the authorized officer, and a copy of the signed emergency declaration from the authorized officer. [District Rule 4651] Federally Enforceable Through Title V Permit
- 73. Permittee shall include the following information in the written notice when on-site excavating contaminated soil as required by Section 5.1: names and addresses of operator(s) performing and responsible for excavation, address of site where excavation occurred, date(s) of excavation, estimated volume of contaminated soil excavated, estimated average VOC content of the contaminated soil or estimated volume of VOC contaminant, and final disposition of the on-site excavated contaminated soil. [District Rule 4651] Federally Enforceable Through Title V Permit
- 74. Permittee shall maintain the following records of on-site excavated contaminated soil at the time custody is transferred off-site: the identities and business addresses of the relevant parties such as the generator, transporter, and storage/treatment facilities, the volume of contaminated soil generated or received, all analytical data associated with the contaminated soil (this section does not apply to Section 4.3), the date and location of on-site excavation of the contaminated soil, and the date and signatures of the operators at the time custody is transferred. [District Rule 4651] Federally Enforceable Through Title V Permit
- 75. Permittee shall identify each storage pile of on-site excavated contaminated soil with the following information: location of storage pile, unique identification of storage pile, date that soil storage pile was excavated. [District Rule 4651] Federally Enforceable Through Title V Permit

- 76. Permittee shall maintain visual inspection records at least once every 24 hours except when operators do not report to the facility for that given 24 hours and the records shall include location and unique identification of each specific pile of on-site excavated contaminated soil and name, date, and signature of operator inspecting the storage piles. [District Rule 4651] Federally Enforceable Through Title V Permit
- 77. Permittee shall maintain the following records for VOC concentration readings of on-site excavated contaminated soil: the identities and business addresses of the relevant parties such as the generator or storage/treatment facilities, the volume of contaminated or decontaminated soil, date of contaminated or decontaminated soil, VOC concentration reading, and the origin of the contaminated or decontaminated soil. [District Rule 4651] Federally Enforceable Through Title V Permit
- 78. Permittee shall maintain records of calibrations for all approved monitoring instruments. [District Rule 4651] Federally Enforceable Through Title V Permit
- 79. The operator of a VOC control device used to decontaminate on-site excavated contaminated soil shall demonstrate compliance with the requirements of Section 5.4.1 before operation of such system. [District Rule 4651] Federally Enforceable Through Title V Permit
- 80. The initial boiling point of a liquid from samples of on-site excavated contaminated soil shall be measured in accordance with ASTM D86 for soil contaminated with petroleum liquid or ASTM D-1078-93 for soil contaminated with known organic chemical. [District Rule 4651] Federally Enforceable Through Title V Permit
- 81. The VOC concentration of on-site excavated contaminated soils shall be measured as hexane using an organic vapor analyzer, complying with EPA Reference Method 21. [District Rule 4651] Federally Enforceable Through Title V Permit
- 82. The VOC content of the on-site excavated soil that can be reasonably demonstrated to be contaminated only with petroleum shall be determined by using EPA Reference Method 8015 or EPA Test Method 25D. [District Rule 4651] Federally Enforceable Through Title V Permit
- 83. The VOC content of on-site excavated soil that is contaminated by unknown VOC-containing liquids, or that cannot be reasonably demonstrated to be contaminated only with petroleum, shall be determined by using EPA Reference Method 8015 or EPA Test Method 25D. In addition to one of the aforementioned methods, the operator shall use EPA Reference Method 8260B or the gas chromatographic method in the Leaking Underground Fuel Tank (LUFT) Manual (October 1989). [District Rule 4651] Federally Enforceable Through Title V Permit
- 84. An operator may use an equivalent alternative test method to those listed in Sections 6.5.1 through 6.5.4 for which APCO and EPA approval has been obtained. [District Rule 4651] Federally Enforceable Through Title V Permit
- 85. When more than one test method or set of test methods is specified for any testing of on-site excavated contaminated soil, a violation of any requirement of this rule established by any one of the specified test methods or set of test methods shall constitute a violation of this rule. [District Rule 4651] Federally Enforceable Through Title V Permit
- 86. One composite sample shall be collected and analyzed for VOC for every 50 cubic yards of on-site excavated contaminated soil that has been determined to be uncontaminated by the test method in Section 6.5.2. At least one (1) composite sample shall be collected from each storage pile of on-site excavated contaminated soil within 12 hours of soil decontamination. [District Rule 4651] Federally Enforceable Through Title V Permit
- 87. A composite sample shall consist of one sample taken from the center of each of four (4) equal sectors from each storage pile of on-site excavated contaminated soil using the procedures described in Section 6.6.3 or other approved methods. [District Rule 4651] Federally Enforceable Through Title V Permit
- 88. Samples shall be taken from at least twelve (12) inches below the surface of the storage pile of on-site excavated contaminated soil using a driven-tube type sampler, capped and sealed with inert materials, and extruded in the lab in order to reduce the loss of volatile materials; or by using a clean brass or stainless steel tube (at least twelve (12) inches long) driven into the soil with a suitable instrument. The ends of the brass tube shall then be covered with aluminum foil, then plastic end caps, and finally wrapped with a suitable tape. The samples shall then be immediately placed on ice, or dry ice, for transport to a laboratory. [District Rule 4651] Federally Enforceable Through Title V Permit
- 89. Chain-of-custody records shall be kept by the operators for all samples from storage piles of on-site excavated contaminated soil to document possession of a sample from the time it is taken in the field until it is analyzed. [District Rule 4651] Federally Enforceable Through Title V Permit

- 90. Each owner or operator shall keep for at least 5 years up-to-date, readily accessible, on-site records of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. [40 CFR 60.758(a)] Federally Enforceable Through Title V Permit
- 91. This operating permit may be cancelled with APCO approval when the landfill is closed, pursuant to the requirements of this permit, if the landfill is not otherwise subject to the requirements of either 40 CFR part 70 or part 71 and if either 1) it was never subject to the requirement for a control system under 40 CFR 60.752(b)(2); or 2) the owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v). [40 CFR 60.752(d)] Federally Enforceable Through Title V Permit
- 92. If the landfill is permanently closed, a closure notification shall be submitted to the APCO within 30 days of waste disposal cessation. A permanent closure must take place in accordance with 40 CFR 258.60. If a closure report has been submitted, no additional waste may be placed in the landfill without filing a notification of modification to the APCO, pursuant to 40 CFR 60.7(a)(4). [40 CFR 60.752(b)(1)(ii)(B), 60.757(d)] Federally Enforceable Through Title V Permit
- 93. An active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment, collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active; or 2 years or more if closed or at final grade, collect gas at a sufficient extraction rate, and be designed to minimize off-site migration of subsurface gas. [40 CFR 60.752(b)(2)(ii)(A)] Federally Enforceable Through Title V Permit
- 94. Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the procedures in 60.759(a)(1), (2), and (3) unless alternative procedures have been approved by the APCO as provided in 60.752(b)(2)(i)(C) and (D). [40 CFR 60.759(a)] Federally Enforceable Through Title V Permit
- 95. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 60.752(b)(2)(ii)(A)(1), one of the equations in Section 60.755(a)(1)(i) or (iii) shall be used. [40 CFR 60.755(a)(1)] Federally Enforceable Through Title V Permit
- 96. For the purposes of determining sufficient density of gas collectors for compliance with 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the APCO, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. [40 CFR 60.755(a)(2)] Federally Enforceable Through Title V Permit
- 97. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the APCO for approval. Alternative compliance actions as prepared by the permittee are detailed in the Avenal Regional Landfill NSPS/AB32 GCCS Design Plan, Appendix B (December 2013). [40 CFR 60.755(a)(3)] Federally Enforceable Through Title V Permit
- 98. Owners or operators are not required to expand the system as required in paragraph 60.755(a)(3) during the first 180 days after gas collection system startup. [40 CFR 60.755(a)(4)] Federally Enforceable Through Title V Permit

- 99. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedance of other operational or performance standards. The permittee may utilize an alternative corrective action and timeline with prior approval from the APCO or alternative compliance actions as detailed in the Avenal Regional Landfill NSPS/AB32 GCCS Design Plan, Appendix B (December 2013). [40 CFR 60.755(a)(5)] Federally Enforceable Through Title V Permit
- 100. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)] Federally Enforceable Through Title V Permit
- 101. Surface testing to measure the methane concentration at the surface of the landfill shall be conducted around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [District Rule 2201, 40 CFR 60.753(d), and 40 CFR 60.755(c)(1)] Federally Enforceable Through Title V Permit
- 102. Surface testing to measure the methane concentration at the surface of the landfill shall be conducted on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d). [40 CFR 60.755(c)(1)] Federally Enforceable Through Title V Permit
- 103. The collection system shall be operated such that the methane concentration is less than 500 parts per million above background at the surface of the landfill. Compliance with this surface methane operational standard shall be demonstrated using the procedures outlined in 40 CFR 60.755(c) within 180 days of installation and startup of the collection and control system and quarterly thereafter. [District Rule 2201, 40 CFR 60.753(d), 40 CFR 60.755(c), and 40 CFR 60.8] Federally Enforceable Through Title V Permit
- 104. Permittee shall calculate the NMOC emission rate for purposes of determining when the collection and control system can be removed as provided in 40 CFR 60.752(b)(2)(v) by using the equation found in 40 CFR 60.754(b). [40 CFR 60.754(b)] Federally Enforceable Through Title V Permit
- 105. Permittee shall operate the landfill gas collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: (1) five years or more if active; or (2) two years or more if closed or at final grade. [40 CFR 60.753(a)] Federally Enforceable Through Title V Permit
- 106. Permittee shall operate the landfill gas collection system with negative pressure at each wellhead except under the following conditions: (1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 60.757(f)(1); (2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; (3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the APCO. Alternative compliance actions prepared by the permittee are detailed in the Avenal Regional Landfill NSPS/AB32 GCCS Design Plan, Appendix B (December 2013). [40 CFR 60.753(b)] Federally Enforceable Through Title V Permit
- 107. Permittee shall operate each interior wellhead in the collection system with a landfill gas temperature less than 55 C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decompositions by killing methanogens. [40 CFR 60.753(c)] Federally Enforceable Through Title V Permit
- 108. If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of section 60.753 are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3 5) or (c). If corrective actions are taken as specified in 60.755, the monitored exceedance is not a violation of the operational requirements in this section. [40 CFR 60.753(g)] Federally Enforceable Through Title V Permit

- 109. Each wellhead shall have a sampling port and a thermometer, other temperature-measuring device, or an access port for temperature measurements. [40 CFR 60.756(a)] Federally Enforceable Through Title V Permit
- 110. When monitoring interior wellheads for operation for a nitrogen level, the nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by 60.752(b)(2)(i) of this subpart. [40 CFR 60.753(c)(1)] Federally Enforceable Through Title V Permit
- 111. For each interior wellhead, unless an alternative test method is established as allowed by 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that: (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; (ii) A data recorder is not required; (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; (iv) A calibration error check is not required; (v) The allowable sample bias, zero drift, and calibration drift are +-10 percent. Oxygen monitoring at wellheads will be done with a portable meter such as a GEM-2000 or equivalent which have been approved by the EPA. [40 CFR 60.753(c)(2)] Federally Enforceable Through Title V Permit
- 112. The background concentration of methane shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [40 CFR 60.755(c)(2)] Federally Enforceable Through Title V Permit
- 113. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i-v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 60.753(d). [40 CFR 60.755(c)(3), (4)] Federally Enforceable Through Title V Permit
- 114. For the performance test required in 60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of Appendix A must be used to determine compliance with the 98 weight percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the APCO as provided by 60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency: (NMOCin NMOCout)/NMOCin. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081; 40 CFR 60.754(d)] Federally Enforceable Through Title V Permit
- 115. Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)] Federally Enforceable Through Title V Permit
- 116. The portable analyzer shall meet the instrument specifications of Method 21, section 3 (except that "methane" shall replace all references to VOC). The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. To meet the performance evaluation requirements of Method 21, section 3.1.3, the instrument evaluation procedures of Method 21, section 4.4. The calibration procedures provided in Method 21, section 4.2 shall be followed immediately before commencing a surface monitoring survey. The provisions of this condition apply at all times, except during periods of start-up, shutdown, or malfunction (as defined in 40 CFR 60.755(e)). [40 CFR 60.755(d), (e)] Federally Enforceable Through Title V Permit
- 117. The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collections systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)] Federally Enforceable Through Title V Permit
- 118. Operator shall measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5). [40 CFR 60.756(a)] Federally Enforceable Through Title V Permit
- 119. Permittee shall submit an equipment removal report to the District 30 days prior to removal or cessation of operation of the control equipment. The report shall conform to the requirements of 40 CFR 60.757(e)(1). [40 CFR 60.757(e)] Federally Enforceable Through Title V Permit

- 120. Each owner or operator seeking to comply with 40 CFR 60.752(b)(2)(iii) shall include information specified in 40 CFR 60.757(g)(1-6) with the initial performance test report required under 40 CFR Part 60.8. [40 CFR 60.757(g)] Federally Enforceable Through Title V Permit
- 121. The following constitute exceedances that also shall be recorded and reported under 40 CFR 60.757(f): all 3-hour periods of operation during which the average combustion temperature was more than 28 degrees C below the average combustion temperature during the most recent performance test (flare source test). [40 CFR 60.758(c)] Federally Enforceable Through Title V Permit
- 122. Except as provided in 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)] Federally Enforceable Through Title V Permit
- 123. Permittee shall keep the following records: (1)(i) the maximum expected gas generation flow rate as calculated in 60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the APCO; (ii) the density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 60.759(a)(1); (2)(i) the average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test; (ii) the percent reduction of NMOC determined as specified in 60.752(b)(2)(iii)(B) achieved by the control device. [40 CFR 60.758(b)(1) and (2)] Federally Enforceable Through Title V Permit
- 124. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep, for the life of the collection system, an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. Permittee shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as well as any nonproductive areas excluded from collection. [40 CFR 60.758(d)] Federally Enforceable Through Title V Permit
- 125. Except as provided in 60.752(b)(2)(i)(B), permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)] Federally Enforceable Through Title V Permit
- 126. The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandibility, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat. [40 CFR 60.759(a)(1)] Federally Enforceable Through Title V Permit
- 127. The placement of gas collection devices determined in paragraph 60.759(a)(1) shall control all gas producing areas, except as provided by paragraphs 60.759(a)(3)(i) and (a)(3)(ii). [40 CFR 60.759(a)(3)] Federally Enforceable Through Title V Permit
- 128. The sufficient density of gas collection devices determined in paragraph 60.759(a)(1) shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior. [40 CFR 60.759(a)(2)] Federally Enforceable Through Title V Permit
- 129. Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under 60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request. [40 CFR 60.759(a)(3)(i)] Federally Enforceable Through Title V Permit

- 130. Any nonproductive area of the landfill may be excluded from control provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the equation in Section 60.759(a)(3)(ii). [40 CFR 60.759(a)(3)(ii)] Federally Enforceable Through Title V Permit
- 131. The values for k and CNMOC in equation in Section 60.759(a)(3)(ii) determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, Lo, and CNMOC provided in 60.754(a)(1) or the alternative values from 60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph 60.759(a)(3)(i). [40 CFR 60.759(a)(3)(iii)] Federally Enforceable Through Title V Permit
- 132. Each owner or operator seeking to comply with 60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures: (1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration; (2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations; (3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness. [40 CFR 60.759(b)] Federally Enforceable Through Title V Permit
- 133. Each owner or operator seeking to comply with 60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with 60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures: (1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph 60.759(c)(2) shall be used; (2) For new collection systems, the maximum flow rate shall be in accordance with 60.755(a)(1). [40 CFR 60.759(c)] Federally Enforceable Through Title V Permit
- 134. The gas collection and control system shall comply with the operational standards of 40 CFR 60.753, the compliance provisions of 40 CFR 60.755, the monitoring provisions of 40 CFR 60.756, the reporting and record keeping requirements of 40 CFR 60.757 and 60.758, and the requirements of 40 CFR 60.759 (for active collection systems). [40 CFR 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 60.757, 60.758 and 60.759] Federally Enforceable Through Title V Permit
- 135. In the event that the collection or control system becomes inoperable, the gas mover equipment (as defined in 40 CFR 60.751) shall be shut down and all valves in the collection and control system contributing to venting of the landfill gas to the atmosphere shall be closed within one hour. [40 CFR 60.753(e)] Federally Enforceable Through Title V Permit
- 136. The owner/operator shall install, calibrate, maintain, and operate a meter that measures and records the landfill gas flow rate into the flare at least once every 15 minutes. This meter shall also be capable of measuring the landfill gas flow rate that might bypass the flare in the event of equipment malfunction or maintenance. [40 CFR 60.756(c)(2)] Federally Enforceable Through Title V Permit

- 137. The flare shall be operated with a flame present at all times while gas is being vented to it. The presence of a flame shall be continuously monitored using a thermocouple, ultraviolet sensor, or any other equivalent device located at the pilot light or the flame itself. [40 CFR 60.18(c)(2) and 40 CFR 60.756(c)(1)] Federally Enforceable Through Title V Permit
- 138. The enclosed flare shall be equipped with an accurate temperature indicator/recorder that continuously measures and records the operating temperature. [District Rule 2201; 40 CFR 60.756(b)(1)] Federally Enforceable Through Title V Permit
- 139. The enclosed flare shall be equipped with either a device that records flow to the control device at least every 15 minutes; or secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration of the control device. [40 CFR 60.756(b)(2] Federally Enforceable Through Title V Permit
- 140. Any closed landfill that has demonstrated compliance in three consecutive quarterly monitoring periods may perform annual monitoring. Quarterly monitoring shall resume if any methane readings of 500 ppm or more above background are detected during annual monitoring. [40 CFR 60.756(f)] Federally Enforceable Through Title V Permit
- 141. Permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the enclosed flare, or the indication of bypass flow, or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines. [40 CFR 60.758(c) and 60.34c] Federally Enforceable Through Title V Permit
- 142. Landfill collection and control system must be operated such that methane emissions from the landfill surface do not exceed instantaneous or integrated limit requirements. [17 CCR 95464]
- 143. Landfill gas collection system wellheads must be operated under vacuum. Monthly monitoring of wellheads is required. Landfill gas collection system wellheads may be operated under neutral or positive pressure when there is a fire or during other times as allowed in sections 95464(c), 95464(d), and 95464(e). [17 CCR 95464]
- 144. Landfill gas collection system components downstream of blower have a leak limit of 500 ppmv as methane. Components must be checked quarterly. [17 CCR 95464]
- 145. The flare must have automatic dampers, an automatic shutdown device, a flame arrester, and temperature sensors which record at least every 15 minutes. [17 CCR 95464]
- 146. The flare must operate within the parameter ranges established during the initial or most recent source test. [District Rule 2201 and 17 CCR 95464]
- 147. Landfill surface methane emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane or integrated surface emission limit of 25 ppmv as methane. [17 CCR 95464]
- 148. The owner or operator must conduct an annual source test for methane for any gas control device(s) subject to the requirements of sections 95464(b)(2)(A) or 95464(b)(3)(A) using the test methods identified in 95471(f). An initial source test must be conducted within 180 days of initial start up of the gas collection and control system. Each succeeding complete annual source test must be conducted no later than 45 days after the anniversary date of the initial source test. If a gas control device remains in compliance after three consecutive source tests the owner or operator may conduct the source test every three years. If a subsequent source test shows the gas collection and control system is out of compliance the source testing frequency will return to annual. [17 CCR 95464(b)(4)(A)]
- 149. Instantaneous and integrated landfill surface emissions measurements shall be done quarterly. The landfill may monitor annually provided they comply with requirements of 17 CCR 95469 (a)(1). [17 CCR 95469]
- 150. Permittee shall keep records of all gas collection system downtime exceeding five days, including individual well shutdown and disconnection times and the reason for downtime. [17 CCR 95470]
- 151. Permittee shall keep records of all gas control system downtime in excess of one hour, the reason for the downtime and the length of time the gas control system was shutdown. [17 CCR 95470]
- 152. Permittee shall keep records of the expected gas generation flow rate calculated pursuant to section 95471(e). [17 CCR 95470]

- 153. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater and all exceedances of the limits in sections 95464(b)(1)(B) or 95465, including the location of the leak (or affected grid), leak concentration in ppmv, date and time of measurement, the action taken to repair the leak, date of repair, any required re-monitoring and the re-monitored concentration in ppmv, and wind speed during surface sampling; and the installation date and location of each well installed as part of a gas collection system expansion. [17 CCR 95470]
- 154. Permittee shall keep records of any positive wellhead gauge pressure measurements, the date of the measurements, the well identification number, and the corrective action taken. [17 CCR 95470]
- 155. Permittee shall keep records of the annual solid waste acceptance rate and the current amount of waste-in-place. [17 CCR 95470]
- 156. Permittee shall keep records of the nature, location, amount, and date of deposition of non-degradable waste for any landfill areas excluded from the collection system. [17 CCR 95470]
- 157. Permittee shall keep records of any source tests conducted pursuant to section 95464(b)(4). [17 CCR 95470]
- 158. Permittee shall keep records describing the mitigation measures taken to prevent the release of methane or other emissions into the atmosphere during the following activities: 1. When solid waste was brought to the surface during the installation or preparation of wells, piping, or other equipment; 2. During repairs or the temporary shutdown of gas collection system components; or, 3. When solid waste was excavated and moved. [17 CCR 95470]
- 159. Permittee shall keep records of any construction activities pursuant to section 95466. The records must contain the following information: 1. A description of the actions being taken, the areas of the MSW landfill that will be affected by these actions, the reason the actions are required, and any landfill gas collection system components that will be affected by these actions. 2. Construction start and finish dates, projected equipment installation dates, and projected shut down times for individual gas collection system components. 3. A description of the mitigation measures taken to minimize methane emissions and other potential air quality impacts. [17 CCR 95470]
- 160. Permittee shall keep records of the equipment operating parameters specified to be monitored under section 95469(b)(1) as well as records for periods of operation during which the parameter boundaries established during the most recent source test are exceeded. The records must include the following information: 1. For enclosed flares, all 3-hour periods of operation during which the average temperature difference was more than 28 degrees Celsius (or 50 degrees Fahrenheit) below the average combustion temperature during the most recent source test at which compliance with sections 95464(b)(2) was determined and a gas flow rate device which must record the flow to the control device at least every 15 minutes. [17 CCR 95470]
- 161. Permittee shall submit the following reports as required in section 95470(b): Closure notification, Equipment removal report and Annual report. All reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official. [17 CCR 95470]
- 162. Permittee may comply with the CARB regulation for landfill methane control measures by using approved alternative compliance options. The permittee shall obtain written District approval for the use of any alternative compliance options not approved by this permit. Changes to the approved alternate compliance options must be made and approved in writing. Documentation of approved alternative compliance options shall be available for inspection upon request. [17 CCR 95468]
- 163. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit