



AUG 19 2014

Mr. Douglas Landon
Kern County Waste Management Department (Bena Landfill)
2700 M Street, Suite 500
Bakersfield, CA 93301-2370

**Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # S-3232
Project # S-1130214**

Dear Mr. Landon:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. To add California Air Resources Board requirements relating to methane gas emission reductions from municipal solid waste landfills and explicitly list the re-injection of condensate as an approved disposal option.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authority to Construct with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Seyed Sadredin
Executive Director/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 93726-0244
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

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Mr. Douglas Landon
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Thank you for your cooperation in this matter.

Sincerely,



AM Arnaud Marjollet
Director of Permit Services

Enclosures

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

San Joaquin Valley Air Pollution Control District

Application Review for Methane Emissions from Municipal Solid Waste Landfills

Facility Name: Kern County Waste Management Department -- Bena Sanitary Landfill
Mailing Address: 2700 M Street Ste 500 Bakersfield, CA 93301
Contact Person: Douglas Landon
Telephone: 661-862-8900
Fax:
Application #(s): S-3232-1-3
Project #: S-1130214
Deemed Complete: March 6, 2014

Date: May 9, 2014
Engineer: Dan Klevann
Lead Engineer: Allan Phillips *ABWR AQE*
AUG 04 2014

I. PROPOSAL:

Kern County Waste Management Department (KCWMD) is requesting that an Authority to Construct (ATC) be issued for their existing municipal solid waste (MSW) landfill. The California Air Resources Board (CARB) regulation (Methane Emissions from Municipal Solid Waste Landfills - California Code of Regulations Title 17, Subchapter 10, Article 4, Subarticle 6, sections 95460 through 95476) went into effect on June 17, 2010. The District entered into a Memorandum of Understanding (MOU) with CARB on October 20, 2011 to implement and enforce the methane emission regulation. This regulation is being enforced through the District's permitting program.

Based on the information provided by the applicant, the District has determined that the MSW facilities landfill gas collection and control system (GCCS) was installed prior to the date of the ARB regulation. An ATC will be issued which incorporates the CARB requirements for controlling methane emissions from the existing MSW landfill facility.

KCWMD has also requested a change to the existing permit conditions. The change is to add re-injection of condensate into the landfill as an approved alternative disposal option. The landfill is currently allowed to by the Regional Water Quality Control Board but KCWMD would like the re-injection explicitly listed on the permit. The re-injection of condensate is not expected to increase the emissions from the landfill.

KCWMD has received their Title V Permit on December 31, 2002. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. KCWMD must apply to administratively amend their Title V permit.

II. APPLICABLE RULES:

Rule 2010: Permits Required (12/17/92)
Rule 2201: New and Modified Stationary Source Review Rule (4/21/11)
Rule 2520: Federally Mandated Operating Permits (6/21/01)
Rule 4101: Visible Emissions (2/17/05)
Rule 4102: Nuisance (12/17/92)
Rule 4642: Solid Waste Disposal Sites (4/16/98)
California Health & Safety Code Section 41700 (Public Nuisance)
California Health & Safety Code Section 42301.6 (School Notice)
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines
California Code of Regulations Title 17, Subchapter 10, Article 4, Subarticle 6, sections 95460 through 95476: Methane Emissions from Municipal Solid Waste Landfills

III. PROJECT LOCATION:

The facility is located at 2951 Neumarkel Road in Edison, California.

IV. PROCESS DESCRIPTION:

The facility operates a MSW landfill. The facility has provided information to indicate that the quantity of waste in place is greater than 450,000 tons.

The landfill is equipped with a landfill gas collection and control system (S-3232-1).

V. EQUIPMENT LISTING:

Current PTO:

S-3232-1-2: MUNICIPAL SOLID WASTE LANDFILL, 40.5 MILLION CUBIC METER CAPACITY (229 ACRES) INCLUDING LANDFILL GAS COLLECTIONS AND CONTROL SYSTEM, WITH VAPOR EXTRACTION WELLS, VAPOR COLLECTION PIPING, CONDENSATE TANK, BLOWERS, AND 30.0 MMBTU/HR ENCLOSED GROUND FLARE

ATC:

S-3232-1-3: MODIFICATION OF MUNICIPAL SOLID WASTE LANDFILL, 40.5 MILLION CUBIC METER CAPACITY (229 ACRES) INCLUDING LANDFILL GAS COLLECTIONS AND CONTROL SYSTEM, WITH VAPOR EXTRACTION WELLS, VAPOR COLLECTION PIPING, CONDENSATE TANK, BLOWERS, AND 30.0 MMBTU/HR ENCLOSED GROUND FLARE: ADD CONDITIONS TO COMPLY WITH CARB LANDFILL METHANE REGULATIONS AND ALLOW RE-INJECTION OF CONDENSATE TO THE LANDFILL

VI. EMISSION CONTROL TECHNOLOGY EVALUATION:

The landfill is equipped with a landfill gas collection and control system.

VII. CALCULATIONS:

Since the project is not a modification per District Rule 2201, calculations needed to demonstrate compliance with various sections of the Rule (e.g. BACT, offset, and public notification) are not required. No calculations are required for daily and annual potential to emit (PE) along with the stationary source potential to emit (SSPE) calculations.

VIII. COMPLIANCE

Rule 2010 – Permits Required

The provisions of this rule apply to any person who plans to or does operate, construct, alter, or replace any source operation, which may emit air contaminants or may reduce the emission of air contaminants.

Pursuant to Section 4.0, a written permit shall be obtained from the APCO. No Permit to Operate shall be granted either by the APCO or the Hearing Board for any source operation described in Section 3.0 constructed or installed without authorization as required by Section 3.0 until the information required is presented to the APCO and such source operation is altered, if necessary, and made to conform to the standards set forth in Rule 2070 (Standards for Granting Applications) and elsewhere in these rules and regulations.

Municipal Solid Waste landfills with more than 450,000 tons of waste in place are required to obtain a District permit to allow the District to implement and enforce the CARB landfill methane regulation.

Rule 2201 - New and Modified Stationary Source Review Rule

An emissions unit that was installed at a time when permits were not required is exempt from District Rule 2201 for the initial permitting action, per District Rule 2020, Section 9.0. Therefore, as shown above, this facility is not subject to the requirements of this rule until they modify their operation.

Rule 2520 - Federally Mandated Operating Permits

MSW landfills, other than those subject to NSPS Subpart WWW or Cc are not required to obtain a Title V permit. KCWMD has received their Title V Operating Permit. This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit.

In accordance with Rule 2520, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC). Therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

Rule 4101 - Visible Emissions

District Rule 4101, Section 5.0, indicates that 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 dark or darker than Ringelmann 1 or equivalent to 20% opacity. Opacity is expected to be less than 20% provided that these operations are properly performed. The following conditions will be listed on each permit:

- {15} 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]

Compliance is expected with this Rule.

Rule 4102 - Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected provided that these operations are properly performed. The following condition will be placed on each permit:

- {98} No air contaminant shall be released into the atmosphere, which causes a public nuisance. [District Rule 4102]

Compliance is expected with this Rule.

California Health & Safety Code 41700 (Health Risk Assessment)

The District's Risk Management Policy for Permitting New and Modified Sources requires that a risk management review be performed for all projects that result in any increases in emissions of hazardous air pollutants. This project is to issue permits for existing organic waste processing operations with no increase in hazardous air pollutants. Therefore, a risk management review is not required.

Rule 4642 – Solid Waste Disposal Sites

The purpose of this rule is to limit the emissions of volatile organic compounds (VOC) from solid waste disposal sites. Per Section 2.0, this rule applies to any facility which has a gas collection system and/or control device in operation, or undergoing maintenance or repair.

The facility is currently in compliance with this rule, continued compliance is expected.

California Code of Regulations Title 17, Subchapter 10, Article 4, Subarticle 6, sections 95460 through 95476: Methane Emissions from Municipal Solid Waste Landfills

The purpose of this CARB regulation is to reduce methane emissions from municipal solid waste landfills pursuant to the California Global Warming Solutions Act of 2006. Facilities that have MSW landfills with greater than 450,000 tons waste-in-place are required to calculate the landfill gas heat input capacity per section 95471(b) of the regulation. The facility has submitted documentation of the waste-in-place as well as the landfill gas heat input capacity see appendix I. The current average heat input rate for landfill gas collected from this site is 19.4 MMBtu/hour.

KCWMD is an active landfill with a gas collection and control system installed. They have provided records of annual SEM testing data that show no exceedances of the previous methane SEM limit. The facility has submitted an alternative compliance request as shown in Appendix IV. As an alternative to complying with all the requirements of the CARB regulation, KCWMD has requested to perform surface emission monitoring(SEM) showing that there are no measured concentration of methane of 500 ppmv or greater using the instantaneous surface emission monitoring procedures in sections 95471(c)(1) and 95471(c)(2). A surface emission reading of over 200 ppmv that can not be remediated within 10 days will require integrated monitoring of the landfill surface. KCWMD's demonstration of methane emissions less than 200 ppmv would be an equivalent level of methane control from the landfill. KCWMD will be required to perform annual SEM of the landfill.

KCWMD has also provided records of surface monitoring demonstrating compliance since 2006. The historical compliance demonstrates that KCMWD can conduct the SEM based on a 100 foot spacing until an exceedance is observed at which point the facility will be subject to 25 foot monitoring spacing.

KCWMD has also shown they have not had SEM exceedances and should be subject to annual SEM monitoring per section 95469.

Records:

The landfill is required to keep records of the surface emission monitoring results.

Reporting:

The landfill must submit the following reports as required. Equipment removal, Waste-in-place report, Annual report, and Landfill gas heat input capacity report. Any reports must be accompanied by a certification of truth, accuracy, and completeness signed by a responsible official.

The landfill is expected to comply with these new requirements.

California Environmental Quality Act (CEQA)

The District performed an Engineering Evaluation (this document) for the proposed project and determined that the project qualifies for ministerial approval for an existing operation, which did not require District permits at the time of installation. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. RECOMMENDATION

Issue permit S-3232-1-3 subject to the permit conditions on the attached draft ATC. (Appendix III)

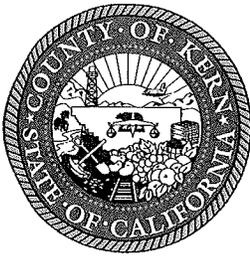
X. BILLING INFORMATION

Permit Number	Fee Schedule	Fee Description	Fee
S-3232-1-3	3020-12-U	229 Acres	\$4,927

XI. APPENDICES

- Appendix I: Facility Waste-in-place report/ Landfill gas heat input
- Appendix II: Current PTO
- Appendix III: Draft Authority to Construct
- Appendix IV: Alternative Compliance Request
- Appendix V: Title V Compliance Certification

APPENDIX I
**Facility Waste-in-place report/
Landfill gas heat input report**



KERN COUNTY WASTE MANAGEMENT DEPARTMENT

Douglas E. Landon, Director
2700 "M" Street, Suite 500
Bakersfield, CA 93301-2372
(661) 862-8900
(800) 552-KERN (option 6)
Fax: (661) 862-8905
<http://www.co.kern.ca.us/wmd/>

September 15, 2010

Mr. Renaldo Crooks
California Air Resources Board
P.O. Box 2815
Sacramento, CA 95812

STU ✓ ZC

RE: Landfill Gas Heat Input Capacity and Surface Emissions Monitoring Report for Bakersfield Metropolitan (Bena) Sanitary Landfill (SWIS No. 15-AA-0273)

Dear Mr. Crooks:

The Kern County Waste Management Department (KCWMD) submits this Landfill Gas (LFG) Heat Input Capacity (HIC) Report, as required by California Code of Regulations, Title 17, Subchapter 10, Article 4, Subarticle 6, §95463(b) for the Bena Sanitary Landfill (Site), Kern County, California (Solid Waste Information System [SWIS] No. 15-AA-0273). In addition, KCWMD will demonstrate that surface emissions monitoring (SEM) on inactive areas of the landfill is only required annually as allowed by §95469(a)(3).

Based on site-specific data for the landfill, the LFG heat input capacity is greater than 3.0 million British thermal units per hour (MMBTU/hr). Therefore, in accordance with §95463(b)(1)(B), the landfill is required to either comply with §95464 through §95476, of the regulation, or demonstrate it is exempt from those sections through SEM or other means.

KCWMD has historical surface emissions data, for both the inactive (Phase 1) and active (Phase 2) portions of the landfill. The Phase 1 portion of the landfill is not contiguous with the other areas of the landfill. Moreover, the last three years of SEM events has indicated no emission above the 500 ppmv limit set in §95465 (SEM Data Attached). Hence, as permitted by §95469(a)(3) SEM of Phase 1 of the Bena Sanitary Landfill will be performed annually. Based on a history of compliance Phase 2 will be monitored quarterly with a walking pattern spacing of 100-foot intervals.

Site Information

The Bena Sanitary Landfill is a municipal solid waste (MSW) landfill, which accepted waste after January 1, 1977, accepted degradable waste, and contains more than 450,000 tons of waste-in-place. Therefore, the Site is subject to §95463 and must submit a LFG HIC Report. Critical Site information used in the development of the HIC Report is shown in **Table 1**.

Table 1 – Site Information

Site Name	Bena Sanitary Landfill
Operator	Kern County Waste Management Department
Owner	Kern County Waste Management Department
Solid Waste Information System (SWIS) Identification Number	15-AA-0273
Status	Phase 1 Inactive (2005) Phase 2 Active
Waste-in-Place	6,706,901 tons (July 2010)
Landfill Gas Collection System	Active with flare

Heat Input Capacity Determination

The HIC was determined using site-specific LFG collection data, in accordance to §95471(b)(1). The regulation states, "Site-specific data may be substituted when available" [§95471(b)(1)]. LFG heat input capacity was calculated according to the equation in Appendix I of the Final Regulation Order for *Methane Emissions from Municipal Solid Waste Landfills* as follows:

$$\text{Heat Input Capacity (MMBtu/hr)} = \text{Methane Gas Generation (scfm)} \times 60 \text{ minutes/1 hour} \times \text{Percent of Operation} \times \text{GHV} \times 1 \text{ MMBtu/1,000,000 Btu}$$

Where:

Percent of Operation = the portion of time the landfill gas collection system operates. The LFG collection system at the Bena Sanitary Landfill operates continuously, which is an operational time of 100%.

GHV (Gross Heating Value) = Gross heating value of methane, which is 1,012 in units of British thermal units per standard cubic feet, or Btu/scf; source: <http://epa.gov/lmop/res/converter.htm>.

Table 2 shows the measured values and resulting LFG heat input capacity.

Table 2- Measured Data and Calculated LFG Heat Input Capacity

<i>Average Measured LFG Flow (scfm)</i>	<i>Percent of Operation (%)</i>	<i>Average 2010 Methane Concentration (%)</i>	<i>LFG Heat Input Capacity (MMBTU/hr)</i>
721	100	44.4	19.4

Conclusion

The Bena Sanitary Landfill has a LFG heat input capacity of 19.4 MMBTU/hr, which is greater than the 3.0 MMBTU/hr threshold. KCWMD will either comply with §95464 through §95476 or demonstrate that it is exempt from those sections through SEM or other means. However, SEM on Phase 1 (inactive area) of the landfill will be performed annually and the active area will be monitored quarterly with 100-foot intervals.

By signature of this transmittal letter, I certify that the information and data submitted in and with this application are true, accurate and complete, based on information and belief formed after reasonable inquiry.

If you have any questions regarding this submittal, please do not hesitate to contact me at (661) 862-8855.

Sincerely,



Timothy Reed, P.G.
Engineer

APPENDIX II
Current PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-3232-1-2

EXPIRATION DATE: 07/31/2015

EQUIPMENT DESCRIPTION:

MUNICIPAL SOLID WASTE LANDFILL, 40.5 MILLION CUBIC METER CAPACITY (229 ACRES) INCLUDING LANDFILL GAS COLLECTIONS AND CONTROL SYSTEM, WITH VAPOR EXTRACTION WELLS, VAPOR COLLECTION PIPING, CONDENSATE TANK, BLOWERS, AND 30.0 MMBTU/HR ENCLOSED GROUND FLARE

PERMIT UNIT REQUIREMENTS

1. 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)(1)(ii)(A), 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 60.757, 60.758, 60.759, 62.14353 and 62.14354(b)] Federally Enforceable Through Title V Permit
2. For PSD purposes, the NMOC emission rate shall be estimated and compared to the PSD major source and significance levels in 40 CFR 51.166 or 52.21, using AP-42 or EPA-approved procedures. [40 CFR 60.754(c)] Federally Enforceable Through Title V Permit
3. 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) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
4. 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
5. 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
6. The gas collection and control system shall be designed and operated to reduce NMOC of the collected gas by 98 weight percent or to an NMOC outlet concentration of less than 20 ppmv, dry basis as hexane at 3% O₂. The reduction efficiency or ppmv concentration shall be established no later than 180 days after the initial startup of the approved control system using the test methods specified in 60.754 (d). [40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
7. The operator shall maintain all records of required monitoring data and support information. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
8. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

9. Flare shall be operated with a flame present at all times except when landfill gas line is shut off and condensate pan contains no liquids. The presence of a flame shall be monitored using a thermocouple or another equivalent device to detect the presence of a flame. [40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
10. Gas line to flare shall be equipped with an operational volumetric flow rate indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Collected condensate shall only be disposed of by injection into the flame of the flare, by evaporation from a pan within the flare stack or offsite at an approved waste disposal facility. Except for that which qualifies as clean produced water as defined in Rule 1020, no condensate may be transferred into any leachate tank. [District NSR Rule, District Rule 1020, and 40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
12. Landfill gas sulfur content shall not exceed 120 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Landfill gas VOC content shall not exceed 1134 ppmv, measured as hexane. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Gas combusted in the flare shall be tested at least annually for sulfur content using suitable, hand-held, sampling tubes or other District-approved test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
15. Gas combusted in the flare shall be tested at least annually for VOC content, measured as hexane, by sample analysis by independent testing laboratory or other District-approved test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
16. No more than 1,584,000 scf/day of landfill gas shall be introduced to flare. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Emissions shall not exceed the following: PM10 - 0.017 lb/MMBtu, NOx (as NO2) - 0.048 lb/MMBtu and CO - 0.249 lb/MMBtu. [District Rule 2201]
18. Permittee shall maintain accurate records of volume of gas flared per day and of the annual measurements of the landfill gas sulfur and VOC contents. [District NSR Rule and 2520, 9.3.2] Federally Enforceable Through Title V Permit
19. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
20. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
22. Each owner or operator, required by 40 CFR 60.752(b)(2) of subpart WWW to install a collection and control system, shall comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in table 1 of 40 CFR 63 subpart AAAA. [40 CFR 63.1955(b)] Federally Enforceable Through Title V Permit
23. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, owner or operator must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW, these alternatives can be used to comply with 40 CFR 63 subpart AAAA, except that all affected sources must comply with the startup, shutdown, and malfunction (SSM) requirements in subpart A of 40 CFR 63 as specified in Table 1 of 40 CFR 63 subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

APPENDIX III
Draft Authority to Construct

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

PERMIT NO: S-3232-1-3

LEGAL OWNER OR OPERATOR: BAKERSFIELD METROPOLITAN LANDFILL @BENA
MAILING ADDRESS: 2700 "M" ST, SUITE 500
BAKERSFIELD, CA 93301

LOCATION: 2951 NEWMARKEL ROAD
EDISON, CA 93220

SECTION: 3 TOWNSHIP: 30S RANGE: 30E

EQUIPMENT DESCRIPTION:

MODIFICATION OF MUNICIPAL SOLID WASTE LANDFILL, 40.5 MILLION CUBIC METER CAPACITY (229 ACRES) INCLUDING LANDFILL GAS COLLECTIONS AND CONTROL SYSTEM, WITH VAPOR EXTRACTION WELLS, VAPOR COLLECTION PIPING, CONDENSATE TANK, BLOWERS, AND 30.0 MMBTU/HR ENCLOSED GROUND FLARE: ADD CONDITIONS TO COMPLY WITH CARB LANDFILL METHANE REGULATIONS AND ALLOW RE-INJECTION OF CONDENSATE TO THE LANDFILL

CONDITIONS

1. {1830} 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. {1831} 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. 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)(1)(ii)(A), 60.752(b)(2)(ii), 60.753, 60.755, 60.756, 60.757, 60.758, 60.759, 62.14353 and 62.14354(b)] Federally Enforceable Through Title V Permit
4. For PSD purposes, the NMOC emission rate shall be estimated and compared to the PSD major source and significance levels in 40 CFR 51.166 or 52.21, using AP-42 or EPA-approved procedures. [40 CFR 60.754(c)] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 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

S-3232-1-3, Aug 4 2014 1:25PM - KLEVANNND : Joint Inspection NOT Required

5. 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) and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. 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
7. 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
8. The gas collection and control system shall be designed and operated to reduce NMOC of the collected gas by 98 weight percent or to an NMOC outlet concentration of less than 20 ppmv, dry basis as hexane at 3% O₂. The reduction efficiency or ppmv concentration shall be established no later than 180 days after the initial startup of the approved control system using the test methods specified in 60.754 (d). [40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
9. The operator shall maintain all records of required monitoring data and support information. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
10. The flare shall be operated according to the manufacturer's specifications, a copy of which shall be maintained on site. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
11. Flare shall be operated with a flame present at all times except when landfill gas line is shut off and condensate pan contains no liquids. The presence of a flame shall be monitored using a thermocouple or another equivalent device to detect the presence of a flame. [40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
12. Gas line to flare shall be equipped with an operational volumetric flow rate indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Collected condensate shall only be disposed of by injection into the flame of the flare, by evaporation from a pan within the flare stack, re-injection into lined landfill or offsite at an approved waste disposal facility. Except for that which qualifies as clean produced water as defined in Rule 1020, no condensate may be transferred into any leachate tank. [District NSR Rule, District Rule 1020, and 40 CFR 60.752 (b)(2) (iii) (B)] Federally Enforceable Through Title V Permit
14. Landfill gas sulfur content shall not exceed 120 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Landfill gas VOC content shall not exceed 1134 ppmv, measured as hexane. [District NSR Rule] Federally Enforceable Through Title V Permit
16. Gas combusted in the flare shall be tested at least annually for sulfur content using suitable, hand-held, sampling tubes or other District-approved test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
17. Gas combusted in the flare shall be tested at least annually for VOC content, measured as hexane, by sample analysis by independent testing laboratory or other District-approved test methods. [District Rule 1081] Federally Enforceable Through Title V Permit
18. No more than 1,584,000 scf/day of landfill gas shall be introduced to flare. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Emissions shall not exceed the following: PM₁₀ - 0.017 lb/MMBtu, NO_x (as NO₂) - 0.048 lb/MMBtu and CO - 0.249 lb/MMBtu. [District Rule 2201]

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CONDITIONS CONTINUE ON NEXT PAGE

20. Permittee shall maintain accurate records of volume of gas flared per day and of the annual measurements of the landfill gas sulfur and VOC contents. [District NSR Rule and 2520, 9.3.2] Federally Enforceable Through Title V Permit
21. Sampling facilities for source testing shall be provided in accordance with the provisions of Rule 1081 (Source Sampling). [District Rule 1081] Federally Enforceable Through Title V Permit
22. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
23. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
24. Each owner or operator, required by 40 CFR 60.752(b)(2) of subpart WWW to install a collection and control system, shall comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in table 1 of 40 CFR 63 subpart AAAA. [40 CFR 63.1955(b)] Federally Enforceable Through Title V Permit
25. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, owner or operator must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW, these alternatives can be used to comply with 40 CFR 63 subpart AAAA, except that all affected sources must comply with the startup, shutdown, and malfunction (SSM) requirements in subpart A of 40 CFR 63 as specified in Table 1 of 40 CFR 63 subpart AAAA and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)] Federally Enforceable Through Title V Permit
26. Landfill collection and control system shall be operated such that landfill surface VOC emissions shall not exceed instantaneous surface emission limit of 500 ppmv as methane. [17 CCR 95464, 95468]
27. Instantaneous surface emissions readings over 200 ppmv as methane that can not be remediated within 10 days shall result in the landfill implementing integrated surface emission monitoring consistent with 17 CCR 95469. [17 CCR 95468, 95469]
28. Instantaneous surface emissions measurements shall be done quarterly. Any exceedances that can not be remediated will require modification to the landfill gas system(i.e. installation of a new well). If there are no exceedances after 4 consecutive quarterly measurements, in a closed or inactive area of the landfill, the area may be measured annually. [17 CCR 95469]
29. Instantaneous surface emissions measurements shall be done using a walking pattern with 100-foot spacing intervals. Any exceedances that can not be remediated within 10 days or any exceedances during compliance inspection will result in a return to 25-foot spacing intervals. If there are no exceedances after 4 consecutive quarterly measurements or during the three years prior to the adoption of the CARB landfill methane regulation being effective, the facility may increase the walking pattern to 100-foot spacing intervals. [17 CCR 95471]
30. Permittee shall keep records of all instantaneous surface readings of 200 ppmv or greater; including the location of the leak, 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, 95468]
31. 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 specifically 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]

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CONDITIONS CONTINUE ON NEXT PAGE

32. Permittee shall submit the following reports as required in section 95470(b): Equipment removal report, Heat input capacity 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]

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APPENDIX IV
Alternative Compliance Request



KERN COUNTY WASTE MANAGEMENT DEPARTMENT

Douglas E. Landon, Director
2700 "M" Street, Suite 500
Bakersfield, CA 93301-2372
(661) 862-8900
(800) 552-KERN (option 6)
Fax: (661) 862-8905
<http://www.co.kern.ca.us/wmd/>

February 18, 2011

Mr. Renaldo Crooks
California Air Resource Board/SSD
1001 I Street
Sacramento, CA 95814

SEM

RE: REQUEST FOR ALTERNATIVE COMPLIANCE - LANDFILL METHANE RULE, BAKERSFIELD METROPOLITAN (BENA) SANITARY LANDFILL, KERN COUNTY, CALIFORNIA

Dear Mr. Crooks:

Kern County Waste Management Department (KCWMD) requests alternative compliance monitoring pursuant with Title 17 California Code of Regulations (CCR) §95460 through §95476 (Landfill Methane Rule) for the Bakersfield Metropolitan (Bena) Sanitary Landfill. The KCWMD is seeking approval of alternative compliance monitoring for surface emissions monitoring (SEM) per §95468(a).

Background

The site (SWIS No. 15-AA-0273) is located at 2951 Neumarkel Road in Bakersfield, California and is owned and operated by the KCWMD. The site is an active landfill that operates seven days per week. The landfill boundary comprises approximately 2,285 acres of which 229 acres are permitted for waste disposal. The site has an estimated 6.4 million tons of refuse in place.

A landfill gas collection and control system was installed at the site in 2004. KCWMD first conducted quarterly surface emission monitoring (SEM) under the New Source Performance Standards (NSPS) program in November 2005. Monitoring has been performed on a quarterly basis since 2005. During the last five years of quarterly SEM at the site, there have been no instances of recorded emissions greater than 288 ppmv; and there have been no recorded emissions greater than 200 ppmv during the last four quarters of monitoring. Testing is performed by KCWMD personnel using a Landtec SEM 500 or Thermo Scientific TVA 1000 portable flame-ionization detector (FID).

Basis for Request

Surface Emissions Monitoring

The Landfill Methane Rule §95465 requires a demonstration that uncontrolled surface methane emissions are under 500 ppmv via SEM. It is KCWMD's opinion that methane

emissions at the Site have been and are being sufficiently controlled to meet the stated purpose of the rule. The previous four quarters of SEM data have demonstrated that there have not been any exceedances above 200 ppmv. Therefore the KCWMD requests the following alternative compliance options for this site:

- Limit SEM to instantaneous monitoring only. Integrated SEM would be initiated if there is a detection above 200 ppmv that cannot be remediated within 10 calendar days. Instantaneous surface monitoring will continue as required under §95465. This alternative monitoring plan is consistent with the original regulations proposed by CARB on March 20, 2008.
- SEM data for the site adequately demonstrates that the site has been in compliance with §95465 and should not be subject to a 25-foot spacing interval for monitoring pursuant to §95471(c)(1)(B)(2).

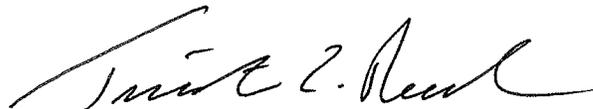
Conclusions

Based on the information presented, it is requested that the Executive Officer approve the listed alternative compliance options for surface emissions monitoring for the Bena Sanitary Landfill. SEM data for the site can be provided upon request.

By signature of this transmittal letter, I certify that the information and data submitted in this document are true, accurate and complete, based on information and belief formed after reasonable inquiry.

Should you have any questions, or desire additional information, please feel free to contact me at (661) 862-8855.

Sincerely,



Timothy C. Reed, P.G.
Engineer

APPENDIX V
Title V Compliance Certification



**San Joaquin Valley
Unified Air Pollution Control District**

RECEIVED
JUN 06 2014

SJVAPCD
Southern Region



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: Kern County Waste Management Department	FACILITY ID: S- 3232
1. Type of Organization: <input type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input checked="" type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Bakersfield Metropolitan (Bena) Sanitary Landfill	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Douglas E. Landon
Signature of Responsible Official

6/6/14
Date

Douglas E. Landon

Name of Responsible Official (please print)

Director

Title of Responsible Official (please print)