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VIA FAX (415) 749-5030

November 19, 2004

Carol Allen, P.E.  
Senior Air Quality Engineer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

RE: Title V Permit Application  
Application Number: 8583  
Plant Number: 2066  
Equipment Location: Altamont Landfill and Resource  
Recovery Facility  
10840 Altamont Pass Road  
Livermore, CA 94550

Dear Ms. Allen:

EMCON/OWT, Inc. (EMCON/OWT), on behalf of Waste Management of Alameda, Inc. (WMAC), is pleased to submit comments to the draft Significant Revision of Title V Permit Number A2066 for the Altamont Landfill and Resource Recovery Facility (ALRRF) in Livermore, California (Plant Number 2066). This draft Significant Revision resulted from Application Number 8583 and was released on October 5, 2004. WMAC requests changes to two of the provisions in the draft permit. WMAC believes that the requirements to test the turbines (S-6 and S-7) at less than 70 percent load are unnecessary. In addition, WMAC requests that the throughput limit for the non-retail gasoline dispensing facility (S-99) be updated to reflect the increase that the Bay Area Air Quality Management District (BAAQMD) has already approved.

In support of this Application the following supporting information is attached:

- Summary of September 8, 2004 Turbine Source Test Results
- December 9, 2003 Letter for Gasoline Increase

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**Condition No. 18773, Part 11  
S-6 and S-7 Gas Turbines**

The S-6 and S-7 turbines have been tested annually and have been shown to meet all emission limitations listed in the Title V permit. A summary of the results of the most recent source test that demonstrate compliance with these limitations are attached.

The draft Title V permit contains new provisions in Condition No. 18773, Part 11 that mandates testing of the turbine under four separate load conditions (30, 50, 75, and 90-100 percent load). This requirement is similar to requirements for initial source tests for turbines included in Subpart GG of the New Source Performance Standards. The permit references 40 CFR 60.335(b)(2) as the basis for the four load testing requirement. However, as written in the permit, the requirements go beyond those included in Subpart GG. The NSPS requires one-time source tests with 180 days of initial start-up of the equipment. The initial source test requirement was fulfilled for the turbines shortly after their installation. In addition, Subpart GG requires only testing for nitrogen oxide (NO<sub>x</sub>) emissions at the four specified loads. Condition No. 18773, Part 11 requires testing for multiple parameters including NO<sub>x</sub>, non-methane organic compound (NMOC), and carbon monoxide (CO) concentrations; NMOC destruction efficiency; and emission rates in pounds per million British thermal units (lbs/MMBTU).

In addition to the above, close examination of the 2004 annual turbine source test results demonstrates that both units operate in compliance at reduced loads. The minimum operating temperature allowed under our key operating parameter limitations also sets a lower limit on the turbine load since the combustion zone temperature decreases with decreasing load. It is not reasonable to require testing at loads where the combustion temperature would be less than the current limit.

The additional testing scenarios are not necessary to ensure compliance since low load operations are not anticipated. The turbines operate at or near full load except under unusual circumstances such as a leak in the gas collection system. The turbines are designed to operate most efficiently at full load. To minimize maintenance requirements and maximize turbine performance, the turbines are turned off if the supply of landfill gas (LFG) decreases to the point where a turbine would be operated at less than 75 percent load. Any surplus LFG would be routed to one of the other LFG control devices such as the A-15 flare or the S-23 and S-24 internal combustion (IC) engines.

Since testing at four separate loads on an annual basis is neither required by Subpart GG or necessary to ensure compliance with emission limits, WMAC requests the following revision to the proposed Condition No. 18773, Part 11.

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11 *In order to demonstrate compliance with Regulations 8-34-301.4, 8-34-412, 8-34-509, and 9-9-301.1; Parts 1, 2, and 8 above; and 40 CFR 60.332(a)(2); the Permit Holder shall ensure that a District approved source test is conducted annually on each Gas Turbine (S-6 and S-7). ~~The annual source test shall be conducted at the four loads (30%, 50%, 75%, and 90% - 100% of full load, ± 5%) specified in 40 CFR 60.335(b)(2).~~ The annual source test shall determine the following (for each test load):*

**Condition No. 20813, Part 1  
S-99 Non-Retail Gasoline Dispensing Facility G No. 7123**

On December 9, 2003, WMAC surrendered 0.02 tons per year of precursor organic compound (POC) emission reduction credits to offset the increase in emissions associated with the higher gasoline throughput limit requested in Application Number 2653. WMAC requested an increase in the throughput limit of the gasoline dispensing station from 8,100 gallons per year to 30,000 gallons per year. The BAAQMD has verbally approved the increase but has not provided a revised permit. WMAC requests that Condition No. 20813 Part 1 be changed to reflect the already approved throughput limit of 30,000 gallons. WMAC requests the following revision to Condition No. 20813, Part 1:

*1. This facility's annual gasoline throughput shall not exceed ~~8,100~~ 30,000 gallons in any consecutive 12-month period. (Basis: Offsets)*

In addition, please incorporate this change into Table VII-F on page 111 of the draft permit.

WMAC appreciates this opportunity to comment on the draft Title V permit and anticipates that the requested changes will be incorporated into the final permit. If you have any questions regarding our comments, please do not hesitate to contact me at 209-321-1690.

Sincerely,



Paul Stout  
Project Manager

Cc:  
Ken Lewis, WMAC ALRRF  
Melissa St. John, WMAC ALRRF  
Guy Petraborg, WMAC

## **2004 ANNUAL SOURCE TEST REPORT**

***Altamont Landfill and Resource Recovery Facility  
Landfill Gas Turbines - Sources S-6 & S-7  
Facility Number 2066***

***Test Date: September 8, 2004***

***Submittal Date: November 5, 2004***

Prepared for:

Altamont Landfill  
Waste Management of Alameda County  
10840 Altamont Pass Road  
Livermore, California 94550

For submittal to:

Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, California 94109

Prepared by:

EMCON/OWT, Inc.  
2360 Bering Drive  
San Jose, CA 95131-1121

***Project 109893.01000000***

**Table 1**  
**Compliance Summary, Turbine 1 (S-6)**  
**Full Load**

Condition	Average Result	Permit to Operate or Regulation 8-34 Limit	Compliance Status
Exhaust			
NO <sub>x</sub> (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	31 0.121	42 0.157	In Compliance
CO (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	33.4 0.079	128 0.223	In Compliance
NMOC Concentration (ppmv @ 3% O <sub>2</sub> , dry as CH <sub>4</sub> ) (% destruction efficiency)	9.3 98.0	120 98.0	In Compliance In Compliance

*Notes:**NO<sub>x</sub> = nitrogen oxides**ppmv = parts per million by volume**O<sub>2</sub> = oxygen**MMBtu = million British thermal units**CO = carbon monoxide**NMOC = non-methane organic compounds**CH<sub>4</sub> = methane*

**Table 2**  
**Compliance Summary, Turbine 1 (S-6)**  
**Low Load**

Condition	Average Result	Permit to Operate or Regulation 8-34 Limit	Compliance Status
Exhaust			
NO <sub>x</sub> (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	31 0.120	42 0.157	In Compliance
CO (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	26.4 0.062	128 0.223	In Compliance
NMOC Concentration (ppmv @ 3% O <sub>2</sub> , dry as CH <sub>4</sub> ) (% destruction efficiency)	11.8 98.2	120 98.0	In Compliance In Compliance

**Table 3**  
**Compliance Summary, Turbine 2 (S-7)**  
**Full Load**

Condition	Average Result	Permit to Operate or Regulation 8-34 Limit	Compliance Status
Exhaust			
NO <sub>x</sub> (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	32.4 0.125	42 0.157	In Compliance
CO (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	28.1 0.066	128 0.223	In Compliance
NMOC Concentration (ppmv @ 3% O <sub>2</sub> , dry as CH <sub>4</sub> ) (% destruction efficiency)	17.5 97.1	120 98.0	In Compliance

**Table 4**  
**Compliance Summary, Turbine 2 (S-7)**  
**Low Load**

Condition	Average Result	Permit to Operate or Regulation 8-34 Limit	Compliance Status
Exhaust			
NO <sub>x</sub> (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	31.8 0.123	42 0.157	In Compliance
CO (ppmv @ 15% O <sub>2</sub> , dry) (lb/MMBtu)	26.3 0.062	128 0.223	In Compliance
NMOC Concentration (ppmv @ 3% O <sub>2</sub> , dry as CH <sub>4</sub> ) (% destruction efficiency)	22.7 96.3	120 98.0	In Compliance

The source test data including results and calculations results are presented in Appendix C. Triplicate 30-minute runs were performed on each turbine exhaust to assess the total hydrocarbons (THC), methane (CH<sub>4</sub>), non-methane organic compounds (NMOC), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO) emissions. Concurrent with each run, the oxygen (O<sub>2</sub>) content was also measured at each turbine exhaust. The continuous emission monitoring (CEM) data are presented in Appendix D and the analytical results presented in Appendix E. Tables 5, 6, 7, and 8 present the landfill gas analysis for turbine 1 (S-6) full and low load conditions and turbine 2 (S-7) full and low load conditions, respectively. Tables 9, 10, 11, and 12 summarize the analysis and the temperature of the turbines, fuel flow rate emissions for turbine 1 (S-6) full and low load and turbine 2 (S-7) full and low load conditions, respectively. Concentrations of NMOC, CO and NO<sub>x</sub> are reported corrected to 3 percent O<sub>2</sub> and 15 percent O<sub>2</sub>, respectively.

EMCON/OWT, Inc.  
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EMCON/OWT, Inc.

December 9, 2003

Ms. Carol Allen, P.E.  
Senior Air Quality Engineer  
Bay Area Air Quality Management District  
939 Ellis Street  
San Francisco, CA 94109

RE: Plant Number 2066 - Altamont Landfill and Resource Recovery Facility,  
Livermore, California  
S-99 - Gasoline Dispensing Facility

Dear Ms. Allen,

EMCON/OWT, Inc. on behalf of Waste Management of Alameda County, Inc. (WMAC) is notifying the Bay Area Air Quality Management District (BAAQMD) of the recent purchase of the following precursor organic compound (POC) emission reduction credit (offset) certificate:

Banking Certificate No. 905  
Amount: 0.716 Tons of POC  
Owner: Waste Management of Alameda County  
Issue Date: October 29, 2003  
Application No. 8439  
Emission reduction location: Louis Roesch Company, San Francisco, CA  
Date of Original Deposit: May 25, 1993  
Conditions: None

As required by the BAAQMD for Authority to Construct (ATC), Application Number 2653, for the Gasoline Dispensing Station (S-99), WMAC has acquired Emission Reduction Credits as indicated on the enclosed certificate. With this notification, WMAC is surrendering 0.02 tons per year (tpy), or 40 pounds, of POC offsets in order to increase the existing gasoline annual throughput. The current permit limit for S-99, as listed in the Final Title V Permit Condition Number 20813, Part 1, is 8,100 gallons per 12-month period. WMAC requests that this limit be increased to 30,000 gallons per 12-month period. The amount of offsets required was communicated to us during prior conversations with the BAAQMD.

APR-06-04 07:32 FROM: WMDIVISION

1D: 5105132838

WMAC requests that the Title V permit be revised using the minor modification procedure in Regulation 2 Rule 6. Enclosed are Stationary Summary Forms 1 and 2, requesting a Minor Modification of the Title V Permit to reflect the increased gasoline throughput of S-99.

WMAC further requests that the BAAQMD issue a new certificate in the amount of 0.898 tpy to Waste Management of Alameda County, Inc. for the remaining offset credits.

If you have any questions, please contact me at 209-321-1690.

Sincerely,

EMCON/QWT, Inc



Paul Stout, P.E.  
Project Manager

Attachments: BAAQMD Emission Reduction Credit Certificate Number 905  
Stationary Summary Forms 1 and 2