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NORCAL WASTE SYSTEMS, INC.

January 9, 2009

Via electronic mail and Fed Ex

Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670

Attn: Mr. Jeff Huggins

RE: Comments on Tentative Revised Waste Discharge Requirements – Norcal Waste Systems Ostrom Road Landfill, Inc.

Dear Mr. Huggins,

On behalf of the Norcal Waste Systems Ostrom Road Landfill, Inc. ("NWSORL"), we are submitting the attached comments in response to the Tentative Waste Discharge Requirements for the subject facility. The attached are:

- Comments on Tentative WDR's for NWSORL
- January 8, 2009 letter from SCS Engineers regarding the proposed elimination of monitoring points and revisions to the Waste Discharge Requirements and Monitoring and Reporting Program.

We hereby incorporate both of these attached documents as our comments to the Tentative Revised Waste Discharge Requirements for NWSORL. These written comments are due by close of business on January 9, 2009.

Thank you for your attention to this project. If you have any questions, please contact me at (415) 875-1245, or Phil Graham at (530) 743-6321

Sincerely,

Erin Merrill
Planner

Attachments

Cc: Phil Graham, NWSORL
Bryan Clarkson, Alta Environmental Services
Ken Haskell, Golder Associates

Comments on Tentative WDRs for NWSORL

WDR Findings:

Site Description.

Finding 3. States landfill will reach capacity by the year 2060. Revise to be year *2066.*

Finding 4.d. The Finding states that the Discharger "proposes" to dispose of treated wood wastes and friable asbestos. The disposal of treated wood wastes and friable asbestos are already approved through the Solid Waste Facilities Permit. Revise to state that the RWD/JTD provided information on management and disposal of treated wood waste and friable asbestos.

Finding 12. The Finding states that groundwater is pumped and used for dust control on the facility's roads. Revise to indicate that groundwater is also used for other purposes including dust control during construction activities.

Waste Classification and Unit Classification.

Finding 16. The Discharger is not "proposing" to use various ADC's. The JTD discusses already-approved ADC materials. Finding should reference JTD Section 5.5 or list materials that are already approved. Also, the finding is written as if plastic tarps are a form of waste used as ADC. Clarify that tarps are an approved ADC.

Water Quality Degradation and Corrective Action Program.

Finding 36. States that PL-1A contained 1,4-dichlorobenzene in July 2008 at a concentration of "1,4 µg/L, above the practical quantitation limit." The July 2008 reported value for 1,4-dichlorobenzene in PL-1A was 2.5 µg/L, above the practical quantitation limit. The value in the WDR may be a typo.

Finding 42. States that "...gas samples are obtained from the designated extraction and corrective action monitoring points..." Delete the words "*extraction and* " as there are no designated extraction monitoring points in the gas monitoring program detailed in the attached MRP.

Liner Performance Demonstration.

Finding 47. Revise description for the low-permeability soil layer to be 30-inches thick, of which the upper 24-inches is required to have a permeability of 1×10^{-7} cm/s or less.

Construction and Engineered Alternative.

Finding 59. Requires semi-annual collection of gas samples from the leak detection monitoring sumps. This monitoring requirement is vague, so recommend deleting the sentence in the WDR. The details of the monitoring requirements are addressed in the MRP.

Landfill Modules.

Finding 61. There are several corrections required to the table that describes liner systems:

- Cell 1, Phase 4 listed twice – suggest deleting the portion that only references Cell 1, Phase 4; the grouping of Cell 1, Phase 4 with Cell 3, Phase 1 and Cell 2, Phase 4 is correct.
- Note 3 is incorrectly tagged to all geomembranes – suggesting that they are not required at all. This is only true for the secondary HDPE geomembrane on the side-slope.
- Futures cells – clarify that it will be same as Cell 1, Phase 4, except that the LCRS thickness shall be 9-inches.

Facilities Operation.

Finding 69.

- Delete 2nd sentence regarding soil use during wet weather (consistent with language recently accepted for the Hay Road Landfill WDRs).
- The Discharger is not "proposing" to use various ADC's. The JTD includes approved ADC material. Finding should reference JTD Section 5.5 and/or list materials that are approved. Again, clarify that tarps are an approved ADC (as opposed to a waste used for ADC).

Finding 71. This states that the design leachate flow rate is 350 gpad. This is actually the maximum historical leachate generation rate and the JTD showed that the LCRS had a capacity of 60 times this maximum historical flow rate for a 12-inch thick LCRS and 45 times the maximum historical flow rate for a 9-inch thick LCRS.

Finding 81. The manufactured operations layer mixtures are approximate. Insert "*approximately*" to clarify the ratios.

Leachate and Condensate Management.

Finding 85. Limits leachate flows from Cells 1A/2A to 5,000 gpd based on information provided in the JTD for the current pump system. Revise to say "*If leachate flows from Cells 1A/2A approach or exceed 5,000 gpd, the Discharger shall immediately* ***install a larger pump such that the leachate flows are less than 85 percent of the pump capacity, or*** *leachate recirculation in these cells should cease immediately and leachate pumped to the on-site storage tanks.*"

A. Prohibitions.

16. Discharger requests that this prohibition is deleted. Wastes are required to be offset at least 75 feet from the property boundary. The term "surface waters" is not adequately defined.

B. Discharge Specifications.

6. The site is already approved to use a number of materials as ADC and intermediate soil cover. Clarify to state that *"Prior to the use of wastes or materials not already approved as ADC or intermediate soil cover, the Discharger shall demonstrate....."*

C. Facility Specifications.

17. The Discharger requests deletion of the requirement of up to two feet of intermediate soil cover over Cells 1A, 1B, and 2A. This exceeds the requirements of Title 27.

D. Construction Specifications.

5. This specification restricts the maximum monthly leachate flow to the monthly historical maximum of 350 gpad, which was shown to result in a leachate head build up of only ¼-inch. The Discharger requests the RWQCB delete reference to the 350 gpad value. It is unreasonable to expect historical rates to be a cap for a site that is now recirculating leachate. The remainder of this paragraph triggers cessation of recirculation if the leachate levels in D.4 are exceeded, which are reasonable and consistent with the JTD and Title 27.

8. Delete language referring to use and maintenance of flow meters. Insert the following statement: *"The leachate volume from each unit shall be recorded monthly based on accumulated volumes in dedicated tanks."*

9. This finding lists the prescriptive standard design low permeability soil layer as having a permeability of 1×10^{-6} cm/s instead of 1×10^{-7} cm/s. This appears to be a typo for a Class II Landfill.

MRP Comments:

C. WQPS and Compliance Period.

3. Concentration Limits. The draft text states that concentration limits shall be updated semi-annually. To be consistent with the groundwater and surface water requirements, unsaturated zone concentration limits should be updated annually. Semi-annual updates are not warranted.

D. Monitoring.

1. Groundwater. The fifth paragraph states groundwater flow rate, direction, and water-levels shall be reported quarterly. This is inconsistent with the semi-annual reporting schedule outlined in section *B. Reporting*. Revise text to state *"...report the results semi-annually."*

2. Unsaturated Zone Monitoring. The second paragraph states "All monitoring parameters shall be graphed so as to show historical trends..." Insert the word *"annually"* after "graphed" to create consistency with Section *E. Reporting Requirements, Item 5.*

3. Gas Monitoring.

- The first paragraph states the following regarding quarterly monitoring for gases: "If the photoionization detector indicates the presence of methane in a monitoring probe, leak detection sump, or pan lysimeter at a concentration greater than 1.0 percent by volume, then a gas sample shall be obtained and analyzed for specific VOCs using EPA Method TO-15." A photoionization detector cannot detect a specific gas such as methane. This conditional sampling requirement should be revised to include the following: "*If methane is detected with a gas meter in a perimeter probe, pan lysimeter, or leak detection sump at a concentration greater than 1.0 percent AND organic vapors are detected with a PID at a concentration greater than 1.0 ppm, then a gas sample shall be obtained and analyzed for specific VOCs using EPA Method TO-15.*"
- The second paragraph requires gas samples to be collected from perimeter probes, leak detection sumps, and pan lysimeters on a semi-annual basis and analyzed for methane, carbon dioxide, oxygen content, and VOCs using EPA Method TO-15. In the previous paragraph, quarterly analysis for methane, carbon dioxide, oxygen content is required. The semi-annual monitoring requirement written here for methane, oxygen, and organic vapors is redundant and should be deleted. Given the conditional requirement for collecting a sample for TO-15 analysis based on methane and organic vapor monitoring results, a semi-annual requirement for TO-15 analysis is excessive. Collection of samples for TO-15 analysis should be required only if methane and organic vapors are detected in the quarterly event. Therefore, the mandatory semi-annual TO-15 requirement should be removed. Alternatively, require the collection of at least one gas sample per event, independent of the methane and organic vapor monitoring results.

4. Leachate Monitoring/Seeps. The second paragraph should be modified as follows: "Leachate which seeps to the surface from the Unit *and extends out of the disposal area, that has the potential to impact surface water, or that may have impacted surface water,* shall be sampled and analyzed for the Monitoring Parameters and Constituents of Concern listed in *Table IV* upon detection. This modification will make the seep sampling consistent with the associated seep notification requirements (Section E.4.) and surface water sampling requirements (Section D.6.). Note that current sentence incorrectly refers to Table III, Gas Monitoring.

5. Leak Detection Monitoring. Remove the second paragraph which pertains to gas monitoring. The gas monitoring requirements for leak detection sumps are addressed in Section *3. Gas Monitoring.* The requirements provided here are redundant and inconsistent.

6. Surface Water Monitoring.

- In the fourth paragraph, insert "*annually*" after "... monitoring parameters shall be graphed" to maintain consistency with sampling frequency (annual) and to create consistency with Section *E. Reporting Requirements, Item 5.*
- After the first sentence of the sixth paragraph, insert: "*Analysis for 5-year COCs occurred in first quarter 2007 when flow was present.*"

- Insert a reference to section *D.4. Leachate Monitoring/Seeps* to ensure consistency.

8. Semi-Solid Waste Monitoring. The MRP text refers to Table VII, which does not contain any analytical monitoring requirements to address unsaturated zone water and/or groundwater quality for the LTU. An environmental monitoring program addressing water quality was provided in the JTD and should be incorporated in to the MRP.

9. Facility Monitoring. Revise the date by which a facility inspection should occur to be 15 August, rather than 30 September. This will allow for the required Winterization Plan to be submitted by 15 September, and any necessary control measures or repairs to be completed by 15 October.

MRP Tables.

Tables I-A, I-B, and II. The following parameters should have a footnote in the table indicating that concentration limits are not required: calcium, magnesium, potassium, and sodium.

Table III.

- The note at the bottom of the table should allow for the use of a GEM 2000 in addition to a GEM 500.
- The asterisk note in Table III should be revised to state, *"If methane is detected with a gas meter at a concentration greater than 1.0 percent by volume AND organic vapors are detected with a PID at a concentration greater than 1.0 ppm, then a gas sample shall be obtained and analyzed for specific VOCs using EPA Method TO-15."* This provides reasonable criteria for triggering the collection a gas sample for laboratory analysis by EPA Method TO-15.
- Remove the last note requiring the site to obtain gas samples semi-annually for VOC analysis using EPA Method TO-15. Quarterly sampling with specific monitoring criteria that triggers sample collection for TO-15 analysis is being conducted. Collecting samples for TO-15 analysis when methane or organic vapors are detected at specified concentrations is sufficient. Semi-annual collection of samples for TO-15 analysis regardless of whether or not methane and/or organic vapors are detected is not warranted. Alternatively, require that at least one gas sample per event is obtained and analyzed for specific VOCs by EPA Method TO-15.

Table V.

- Replace "*Quarterly*" in the Table heading to "*Semi-annually*" to make consistent with WDR Finding 59 and MRP section D.5., which specify semi-annual monitoring.
- The last column containing "Gas Analysis" requirements and the associated asterisk note should be deleted. Gas monitoring of leak detection sumps is specified in Table III. The requirements put forth in Table V are redundant and inconsistent with the Gas Monitoring Program.

Table IX. Atrazine and simazine cannot be analyzed using EPA Method 8141A and should be removed from the table.

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January 8, 2009
File No. 07202049.00, Task 05

Mr. Phil Graham
Norcal Waste Systems Ostrom Road Landfill, Inc.
5900 Ostrom Road
Wheatland, California 95692

SUBJECT: PROPOSED ELIMINATION OF MONITORING POINTS AND REVISIONS TO THE WASTE DISCHARGE REQUIREMENTS AND MONITORING AND REPORTING PROGRAM, NORCAL WASTE SYSTEMS OSTROM ROAD LANDFILL, WHEATLAND, CALIFORNIA

Dear Phil:

SCS Engineers (SCS) is pleased to present to Norcal Waste Systems Ostrom Road Landfill, Inc. (NWSORLI) this letter proposing the elimination of certain landfill gas (LFG) monitoring points at the Ostrom Road Landfill (site) as well as revisions to the draft Waste Discharge Requirements (WDRs) and Monitoring and Reporting Program (MRP) for the site.

ELIMINATION OF MONITORING AND EXTRACTION POINTS

The corrective active measures implemented through the LFG control system have been effective in controlling gas migration to date. Some of the corrective action points from which LFG has been extracted and/or monitored are no longer needed, as detailed below.

Therefore, SCS believes that LFG extraction points GEONET-1, GEONET-2, GP-1, PZ-12, and LFG monitoring points PZ-11 and PZ-13 should be eliminated from the site monitoring program, including specific monitoring required by the WDRs and MRP. SCS feels that the listed extraction points are no longer useful, as they contribute little or no value regarding the necessary extraction of LFG, and are currently exempt from all New Source Performance Standards (NSPS) under 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW. Excluding them from the WDR requirements would make their status consistent under the federal NSPS and the State Title 27 Code of Regulations (CCR) programs.

The extraction point control valves are already mostly closed at these points, as the vacuum is extracting little or no LFG from these points. There is concern that continued operation of these extraction points will draw more ambient air into the landfill thereby increasing subsurface fire risk. Also, the other extraction points nearby are serving the same function and purpose; and, as you can see in the attached Table 1, very little or no

LFG is even detected at these locations. Now that the site has a comprehensive LFG system in compliance with the NSPS, extraction from these points is no longer necessary for compliance with federal or state requirements. In addition, GP-1 is a former compliance probe for LFG migration and PZ-12 is a dry piezometer, so they are not designed for proper LFG extraction. The same issue exists with the GEONET points, which are merely artificial connections into access points to the geonet portion of the liner system.

For the monitoring points, little or no LFG or volatile organic compounds (VOCs) are ever detected, rendering these points no longer necessary for detection monitoring; and numerous other monitoring points exist to adequately assess for LFG releases from the waste management units, including the leak detection sumps, pan lysimeters, probes, and leak detection layers. As such, these points are redundant elements of the vadose zone monitoring requirements. For instance, the VOC content at these points is either below 1.0 parts per million by volume (ppmv) or non-detect, making their VOC impact non-existent (as shown in Table 2) over the last year. Also, the methane content of these points has been at 0 percent over the last year, and the oxygen data suggest they contain only ambient air (i.e., $\geq$ 20% oxygen).

REVISIONS REQUESTED FOR MRP AND WDR

SCS believes that some sections of the site's draft MRP and tentative WDR should be modified due to confusing or outdated language, and unnecessary or costly monitoring requirements that is currently proposed.

Section D.3 of MRP

In Section D.3. of the MRP, it is currently stated in the first paragraph that perimeter probes, leak detection sumps, and pan lysimeters must be monitored on a quarterly basis for the presence of methane, carbon dioxide, and oxygen. Further, if the presence of methane is detected at these monitoring points greater than 1.0 percent by volume, a gas sample shall be obtained and analyzed for specific VOCs using U.S. Environmental Protection Agency (EPA) Method TO-15. We propose that an allowance be made to reduce the frequency of monitoring for the sumps and lysimeters from a quarterly basis to an annual basis following the monitoring of 4 non-exceedance quarterly cycles with a concentration under 1.0 percent methane by volume, with the understandable requirement of going back to quarterly monitoring following the recording of an exceedance greater than 1.0 percent. The probes would continue to be monitored quarterly per Title 27 requirements.

In the second paragraph of Section D.3., it currently states that "gas samples shall be collected from perimeter probes, leak detection sumps, and pan lysimeters on a semi-annual basis as a part of the unsaturated zone landfill gas detection monitoring program and analyzed for methane, carbon dioxide, oxygen content and VOCs using EPA Method TO-15". SCS requests that this semi-annual sample collection and subsequent laboratory (lab) analysis work requirement be removed, as SCS feels that this is duplicative and redundant of the requirement in the first paragraph of Section D.3. In addition, this requirement would be costly to implement (approximately $750 per sample for the lab

work, report, etc., for a total cost of approximately $19,500 per year). Instead, this sampling collection/analysis can be accomplished as part of Section D.3's requirement that a sample must be obtained and analyzed by EPA Method TO-15 if there is a methane concentration greater than 1.0 percent by volume. In that way, expensive laboratory analyses are only performed when LFG is actually present in the first place.

SCS also noticed an error in the first paragraph of Section D.3. It is currently stated that a photo ionization detector is used to indicate the presence of methane by volume in the monitoring points, when in fact this is incorrect, and a CES Landtec GEM unit is used, so we request the sentence be changed to read *"If the ~~photoionization detector~~ GEM indicates the presence of methane in a monitoring probe, leak detection sump, or pan lysimeter at a concentration greater than 1.0 percent by volume, then a gas sample shall be obtained and analyzed for specific VOCs using EPA Method TO-15".* SCS would also like the first paragraph to clarify that any samples tested for methane can be done with field instruments in accordance with Table III of the MRP. Regarding Table III, SCS requests that the first sentence on the bottom of the table be changed from "GEM 500" to "*GEM 500 or 2000*" to accurately reflect the newer model of the instrument being used. SCS also requests that the next sentence on the bottom of the table be edited to read "*Gas samples shall be obtained ~~semi-annually~~ quarterly (and subsequently annually following 4 quarters of less than 1% methane) and analyzed for VOCs using EPA Method TO-15 only if greater than 1% methane.*"

Section D.5 of MRP

In Section D.5. and Table V of the MRP, SCS proposes that they both be edited to eliminate any reference to gas monitoring for the leak detection layer, as SCS feels that this is duplicative and redundant of the requirement stated in the first paragraph of Section D.3 and Table III. SCS proposes that the entire second paragraph of Section D.5 be removed, and that only information contained in it that is not already stated in Section D.3. regarding the actual collecting and analyzing of the gas sample shall be transferred to Section D.3. (e.g., the stated "inclusion of both VOC concentration and methane concentration as a trigger for Method TO-15", which is not currently in Section D.3.).

Further, SCS recommends that laboratory samples for Method TO-15 only be required when the concentration of methane is over 1.0 percent **AND** the concentration of VOCs is over 1.0 ppmv. SCS suggests that the current condition (1.0 percent per methane **OR** 1.0 ppmv) be combined to be a dual requirement as this will help prevent a false positive on one of the instruments resulting in unnecessary laboratory analysis and ensure that a greater level of accuracy is achieved. By testing for the methane level first, and then taking a field sample for VOCs, a more effective approach to evaluating VOC impacts can be employed. If the methane level is over 1.0 percent, then a sample would be sent to the laboratory for analysis only if the field VOC concentration is over 1.0 ppmv; which could help reduce the number of lab samples. Therefore, by lowering the amount of lab samples collected, a reasonable amount of money can be saved due to the high cost of roughly $750 per sample for the lab work, report, etc. (for a total cost of approximately $3000 per year if sampled semi-annually and $6000 per year if quarterly), without compromising the integrity of the monitoring program.

In Table V of the MRP, in accordance with our proposal above, SCS suggests that the line reading "*Quarterly*" under the title "*Leak Detection Monitoring*" be changed to read "*Semi-annually*" in regards to the liquid analysis, and that the column titled "*Gas Analysis*" be completely removed per the proposed changes to Section D.5. detailed above. SCS also proposes that the first sentence underneath this table be deleted and transferred over to Table III and integrated properly per our previous suggestion that Section D.5.'s leak detection layer monitoring be deleted because it is already included in Section D.3.

Page 14 of WDR

Finally, SCS proposes that on Page 14 of the WDR, the last sentence of Section 59 be edited to read "*Gas samples will be obtained from the leak detection monitoring sump via the slope riser pipe on a ~~semi-annual~~ quarterly basis, with an allowance for annual sampling in accordance with the MRP*".

CLOSING

SCS is hopeful the information provided herein is helpful in establishing a clearer set of MRP/WDRs, including a reasonable LFG monitoring program. If you have any questions in regard to this submittal or should need any further information regarding this matter, please contact the undersigned at (916) 361-1297.

Sincerely,

Collin Pavelchik
Staff Scientist

Patrick S. Sullivan, R.E.A., C.P.P
Senior Vice President
SCS ENGINEERS

CC: Bryan Clarkson, Alta Environmental Services
Erin Merrill, Norcal Waste Systems

Tables:
1. LFG Extraction Monitoring Points
2. LFG Monitoring Point Results

Table 1. LFG Extraction Monitoring Points
Ostrom Road Landfill, Wheatland, California
January-December 2008

GEM ID	Name	Date Time	CH4 % by vol	CO2 % by vol	O2 % by vol	Bal Gas % by vol	CO ppm	Temp	Init Stat Press In. H2O	Adj Stat Press In. H2O
ORGEONT1	GEONET 1**	1/22/2008 11:42	22.7	15.9	12.3	49.1		43	-1.6	-1.6
ORGEONT1	GEONET 1**	2/27/2008 10:57	25	16	11.4	47.6		64	-1.8	-1.7
ORGEONT1	GEONET 1**	2/27/2008 11:02	26.4	17.2	10.8	45.6		64	-2.1	-2
ORGEONT1	GEONET 1**	3/20/2008 8:51	24.4	19	10.6	46		59	-1.2	-1.1
ORGEONT1	GEONET 1**	3/20/2008 8:54	24	18.7	10.9	46.4		59	-0.8	-0.8
ORGEONT1	GEONET 1**	4/7/2008 8:06	3.7	4.6	17.6	74.1		60	-0.7	-0.7
ORGEONT1	GEONET 1**	4/7/2008 8:07	3.7	4.6	17.6	74.1		60	-0.7	-0.6
ORGEONT1	GEONET 1**	5/13/2008 10:58	5.9	6.6	15.1	72.4		91	-0.4	-0.3
ORGEONT1	GEONET 1**	5/13/2008 10:59	5.9	6.6	15.1	72.4		91	-0.4	-0.2
ORGEONT1	GEONET 1**	6/11/2008 8:53	7.1	7.3	15.4	70.19		76	-0.3	-0.2
ORGEONT1	GEONET 1**	6/18/2008 14:30	28.5	17.1	9.3	45.1	0	94	-0.1	-0.1
ORGEONT1	GEONET 1**	7/15/2008 13:44	17.1	12.2	11.6	59.1		105	-0.2	-0.1
ORGEONT1	GEONET 1**	8/6/2008 13:10	14	9.1	13.9	63		99	-0.1	-0.2
ORGEONT1	GEONET 1**	8/13/2008 13:40	11.3	7.2	14.4	67.1		108	-0.1	-0.2
ORGEONT1	GEONET 1**	9/24/2008 9:49	0	0	19.9	80.1	0.2	79	-0.3	-0.2
ORGEONT1	GEONET 1**	9/24/2008 9:49	0	0	19.9	80.1		79	-0.3	-0.1
ORGEONT1	GEONET 1**	10/28/2008 11:01	0	0.1	20.1	79.8		89	-0.1	-0.1
ORGEONT1	GEONET 1**	10/28/2008 11:01	0	0.1	20.1	79.8		89	-0.1	-0.1
ORGEONT1	GEONET 1**	11/18/2008 13:41	0.4	1.5	18.9	79.19		69	-0.2	-0.2
ORGEONT1	GEONET 1**	12/22/2008 14:34	3.5	3.5	18.8	74.19		51	-0.4	-0.2
ORGEONT1	GEONET 1**	12/22/2008 14:35	3.5	3.5	18.8	74.19		51	-0.4	-0.7
ORGEONT2	GEONET-2**	1/22/2008 12:16	1.1	2.6	19.6	76.7		42	-4.8	-4.8
ORGEONT2	GEONET-2**	2/19/2008 15:09	5.6	5.8	16.6	72		56	-3.3	-3.3
ORGEONT2	GEONET-2**	2/19/2008 15:12	5.4	5.4	16.9	72.29		56	-3.1	-3.1
ORGEONT2	GEONET-2**	3/19/2008 7:58	3.4	5.3	16.6	74.69		57	-2.6	-2.6
ORGEONT2	GEONET-2**	3/19/2008 7:59	3.4	5.3	16.7	74.59		59	-2.2	-2.3
ORGEONT2	GEONET-2**	4/7/2008 8:33	0.6	2.1	18.9	78.4		67	-2.3	-2.2
ORGEONT2	GEONET-2**	4/7/2008 8:33	0.6	2.1	18.9	78.4		67	-2.3	-1.9
ORGEONT2	GEONET-2**	5/13/2008 11:18	14.4	13.3	11.7	60.59		92	-2.7	-2.7
ORGEONT2	GEONET-2**	5/13/2008 11:20	14.4	13.3	11.7	60.59		92	-2.7	-1.9
ORGEONT2	GEONET-2**	6/11/2008 9:00	0	1.2	19.9	78.9		78	-1.8	-1.8
ORGEONT2	GEONET-2**	6/11/2008 9:01	0	1.2	19.9	78.9		78	-1.8	-1.3
ORGEONT2	GEONET-2**	6/18/2008 14:04	0.5	2.6	17.6	79.3	0	87	-1.2	-1.1
ORGEONT2	GEONET-2**	6/18/2008 14:05	0.5	2.6	17.6	79.3		87	-1.2	-1
ORGEONT2	GEONET-2**	7/15/2008 13:19	0	2.5	18.6	78.9		94	-1	-1
ORGEONT2	GEONET-2**	7/15/2008 13:28	0	2.2	18.3	79.5		94	-0.7	-0.7
ORGEONT2	GEONET-2**	8/6/2008 12:50	0.1	1.4	19	79.5		103	-0.7	-0.7
ORGEONT2	GEONET-2**	8/6/2008 12:51	0.1	1.4	19	79.5		103	-0.7	-0.7
ORGEONT2	GEONET-2**	8/13/2008 13:15	0	1.4	18.2	80.39		101	-0.8	-0.8
ORGEONT2	GEONET-2**	8/13/2008 13:16	0	1.4	18.2	80.39		101	-0.8	-0.6

ORGEONT2	GEONET-2**	9/24/2008 9:20	0.3	0.8	19.7	79.19	0.9	83	-0.9	-0.9
ORGEONT2	GEONET-2**	9/24/2008 9:21	0.3	0.8	19.7	79.19		83	-0.9	-0.3
ORGEONT2	GEONET-2**	10/28/2008 10:43	0	1.4	19.5	79.1		87	-0.1	0
ORGEONT2	GEONET-2**	10/28/2008 10:44	0	1.4	19.5	79.1		87	-0.1	0
ORGEONT2	GEONET-2**	11/18/2008 13:23	0	0.3	19.8	79.89		77	-0.1	-0.1
ORGEONT2	GEONET-2**	12/22/2008 14:12	33.1	35.3	1.8	29.8		57	0	-0.1
ORGEONT2	GEONET-2**	12/22/2008 14:14	33.1	35.3	1.8	29.8		57	0	-0.7
ORGP1S1D	GP-1S & 1D**	1/22/2008 12:07	37.6	29.1	4.9	28.4		43	-8	-8.1
ORGP1S1D	GP-1S & 1D**	2/27/2008 10:51	47	31.8	2.3	18.9		64	-5.4	-5.4
ORGP1S1D	GP-1S & 1D**	3/20/2008 8:45	50.3	33.5	2.6	13.6		53	-4.9	-4.9
ORGP1S1D	GP-1S & 1D**	4/7/2008 7:59	44.4	31.4	3.3	20.9		60	-5.3	-5.4
ORGP1S1D	GP-1S & 1D**	5/29/2008 16:03	17.6	15.4	8.2	58.8		81	-4.9	-4.9
ORGP1S1D	GP-1S & 1D**	6/18/2008 11:04	14	20.9	4	61.1		88	-6.2	-6.2
ORGP1S1D	GP-1S & 1D**	6/18/2008 11:05	14	20.9	4	61.1	0.9	88	-6.2	-4.9
ORGP1S1D	GP-1S & 1D**	7/15/2008 13:38	24.2	27	1.9	46.9		90	-4.2	-4.2
ORGP1S1D	GP-1S & 1D**	8/6/2008 13:21	17.4	23.4	1.5	57.69		99	-2.9	-6.6
ORGP1S1D	GP-1S & 1D**	8/13/2008 13:33	24.5	26.9	2.1	46.5		100	-8.4	-8.4
ORGP1S1D	GP-1S & 1D**	9/24/2008 9:47	0	18.5	6.7	74.8	2.2	86	-3.8	-3.8
ORGP1S1D	GP-1S & 1D**	9/24/2008 9:47	0	18.5	6.7	74.8		86	-3.8	-3.7
ORGP1S1D	GP-1S & 1D**	10/28/2008 11:04	0	9	9.4	81.6		88	-1.6	-1.4
ORGP1S1D	GP-1S & 1D**	10/28/2008 11:05	0	9	9.4	81.6		88	-1.6	0
ORGP1S1D	GP-1S & 1D**	11/18/2008 13:38	0	8.2	10.2	81.6		73	-1.7	-1.5
ORGP1S1D	GP-1S & 1D**	11/18/2008 13:38	0	8.2	10.2	81.6		73	-1.7	-1.3
ORGP1S1D	GP-1S & 1D**	12/2/2008 9:18	0	14	2.5	83.5		48	-0.3	-0.2
ORGP1S1D	GP-1S & 1D**	12/15/2008 11:20	0	14.4	1.6	84		50	-10.9	-11.2
ORLFPZ12	PZ-12**	1/22/2008 13:24	28.4	27.7	4.6	39.3		45	-3.1	-3.2
ORLFPZ12	PZ-12**	2/19/2008 15:24	48.1	33.9	2.3	15.7		54	-3.2	-3.2
ORLFPZ12	PZ-12**	3/19/2008 8:02	28.6	21.1	9.2	41.1		58	-3.3	-3.4
ORLFPZ12	PZ-12**	4/7/2008 8:37	37.6	28.1	5.5	28.8		75	-3.3	-3.3
ORLFPZ12	PZ-12**	4/7/2008 8:38	37.6	28.1	5.5	28.8		75	-3.3	-3.3
ORLFPZ12	PZ-12**	5/29/2008 15:50	0	0.1	19.7	80.19		80	-0.1	-0.1
ORLFPZ12	PZ-12**	6/11/2008 9:08	7.3	5.9	18.1	68.69		90	-4.9	-4.9
ORLFPZ12	PZ-12**	6/18/2008 14:00	0	0	20.7	79.3	0	89	-0.8	-0.8
ORLFPZ12	PZ-12**	7/15/2008 13:22	0	0.5	19.9	79.6		101	-0.3	-0.4
ORLFPZ12	PZ-12**	8/6/2008 12:43	0.1	0.6	19.9	79.4		100	-0.4	-0.4
ORLFPZ12	PZ-12**	8/13/2008 13:10	0	0.7	19.2	80.1		101	-0.6	-0.7
ORLFPZ12	PZ-12**	8/13/2008 13:10	0	0.7	19.2	80.1		101	-0.6	-0.1
ORLFPZ12	PZ-12**	9/24/2008 9:18	0	0	20.5	79.5		85	-0.6	-0.6
ORLFPZ12	PZ-12**	9/24/2008 9:19	0	0	20.5	79.5	0	85	-0.6	-0.2
ORLFPZ12	PZ-12**	10/28/2008 10:37	0	0.1	20.4	79.5		86	0	0
ORLFPZ12	PZ-12**	11/18/2008 13:17	0	0	20.1	79.9		70	0	0
ORLFPZ12	PZ-12**	12/15/2008 12:33	0	0.1	20.7	79.19		49	-0.2	-0.2

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** = Exempt from NSPS Requirements

Table 2. LFG Monitoring Point Results
Ostrom Road Landfill, Wheatland, California
January-December 2008

GEM ID	Name	Date Time	CH4 % by vol	CO2 % by vol	O2 % by vol	Bal Gas % by vol	CO ppm	Temp	Init Stat Press In. H2O	Adj Stat Press In. H2O
ORLFPZ11	PZ-11	1/22/2008 14:22	0	0.2	20.8	79		0	0	0
ORLFPZ11	PZ-11	6/18/2008 14:10	0	0	20	80	0.9	0	0	0
ORLFPZ11	PZ-11	9/17/2008 12:53	0	0	20.6	79.4	3.6	0	0	0
ORLFPZ11	PZ-11	12/15/2008 12:29	0	0.2	20.7	79.1	0	0	0	0
ORVWPZ13	PZ-13	9/30/2008 11:10	0	0	20.8	79.2	0			0
ORVWPZ13	PZ-13	12/1/2008 11:28	0	0.1	20.8	79.1	0			

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