ERRATA SHEET

Redwood Landfill Final Environmental Impact Report Response to Comments Amendment

The following errata were discovered in the .pdf version of the document, and have been corrected in the version now available on the County's website and in the attached CD-ROM. These errata are not found in the printed (paper) version of the document, but do appear in the .pdf on the CD-ROM found in the pocket inside the back cover of the printed version. Readers are asked to discard the old version of the CD-ROM and replace it with the attached version. Those readers who downloaded the document from the County's website prior to April 2, 2008 are asked to download the corrected version and delete the old one.

Corrections to the text are indicated with ~~strikeout~~ for deletions and underline for additions.

Table of Contents

Page i, first line, the following text has been revised as follows:

> **1. Introduction: Purpose and Use of the FEIR ~~Supplement~~ Response to Comments Amendment**

Page ii, last line, the following text has been revised as follows:

> **5. FEIR ~~Supplement~~ Response to Comments Amendment Preparers**

Chapter 1 – Introduction: Purpose and Use of the FEIR Response to Comments Amendment

Page 1-2, first partial paragraph, the following text has been revised as follows:

> certification of the document by the LEA, as Lead Agency, and for the LEA and Responsible ~~Agency's~~ Agencies' decisions to approve or disapprove the project.

Chapter 2 – Master Responses

Page 2-4, paragraph 5, the following text have been revised as follows:

The Mitigated Alternative, as described in Master Response 104 in the current document, includes a 200-foot minimum horizontal setback from San Antonio Creek for future operations, which would add additional protection to marsh wildlife. The setback would be maintained all year (i.e., not just during nesting season).

Page 2-16, eighth sentence of the fourth bulleted paragraph has been revised as follows:

~~Prior to issuance of ATC permits; t~~The BAAQMD would require the landfill gas-fired turbines to comply with applicable BAAQMD, State, and federal rules and regulations, including implementation of best available control technology, emission offsets, and prevention of significant deterioration requirements.

Page 2-19, first partial paragraph, the following text has been revised as follows:

would receive the maximum daily volume permitted for disposal each operating day and other assumptions stated in the table, the landfill's remaining life would be about 18 years from October 2006, ~~9,~~ and the earliest closure date for the facility would be 2024. See Master Response 107 for further discussion of the site life calculations contained in the table.

Page 2-20, first paragraph, the following text has been revised as follows:

Based on additional analysis of greenhouse gas (GHG) emissions associated with the Mitigated Alternative and the facility as currently permitted (see Master Response 112) and further consideration of the effectiveness of the leachate collection and recovery system (see Master Response 105), the Mitigated Alternative is further refined to include a requirement for the applicant to maintain the landfill gas collection system (including power production engines or turbines), the LCRS, and associated groundwater, surface water, and air emission monitoring and reporting programs for ~~a period of at least 100 years~~ an indefinite period after landfill closure, unless it can be conclusively demonstrated to the relevant regulatory agencies that the landfill no longer poses a threat to the environment. Prior to issuance of a revised solid waste facility permit, the applicant shall provide cost estimates and financial assurances for ~~the 100-year~~ indefinite post-closure maintenance ~~period~~ as part of a revised Preliminary Post-Closure Maintenance Plan.~~.~~

Page 2-24, first sentence of the first full paragraph, the following text has been revised:

Follow-up investigations at the Area D piezometers showed that the trench and outboard ~~(~~piezometers (LW-16 and LW-18) consistently had less than 1 foot of fluid in the bottom of the casings (as was the case with the initial measurement showing the apparent outward gradient).

Page 2-58, first partial paragraph, the following text has been revised as follows:

Regulations Title 27. The selection of the Maximum Probable Earthquake and the analyses themselves shall be subject to peer review by a Registered ~~g~~Geotechnical ~~e~~Engineer. If the results of the analyses indicate an insufficient factor of safety or an excessive degree of seismically-induced deformation, the applicant shall prepare and submit a revised design for the landfill and demonstrate that the design meets the seismic stability requirements of

Title 27. The revised design shall be subject to peer review by a Registered ~~g~~Geotechnical e~~E~~ngineer.

Page 2-73, Table MR112-1 has been revised as shown below:

TABLE MR112-1
GREENHOUSE GAS EMISSIONS FROM LANDFILL GAS, 2008 THROUGH 2098

	Unit	Existing Permit	Mitigated Alternative	Increase or (Decrease)	Percent Increase or (Decrease)
A. Waste in Place	Short Tons	16,560,382	20,775,054	4,214,672	25.5%
B. LFG Generation	m3	1,924,392,558	2,658,511,468	734,118,911	38.1%
C1. LFG Capture[a]	m3	1,072,899,301	1,837,863,324	764,964,023	71.3%
C2. LFG Capture	Mg	715,783	1,226,128	510,345	71.3%
D. LFG Capture Rate	Percent	56%	69%	13%	
E. Methane Captured	Mg	357,892	613,064	255,172	71.3%
F. Methane not Captured	Mg	284,036	273,747	(10,289)	-3.6%
G. Methane Oxidized Through Cover	Mg	28,404	27,375	(1,029)	-3.6%
H. Net Fugitive Methane From Landfill	Mg	255,633	246,372	(9,260)	-3.6%
I. Fugitive Methane From Flare/Engines	Mg	7,059	11,079	4,020	56.9%
J. Total Fugitive Methane – Flare/Engines and Landfill (H+I)	Mg	262,692	257,451	(5,241)	-2.0%
K. GWP of Fugitive Methane Emissions (J * 25)	Mg eCO2	6,567,289	6,436,272	(131,017)	-2.0%
L. Power Production Potential of Captured LFG[b]	kWH	–	5,641,926,696	5,641,926,696	–
M. Electricity Generation Emission Offset – CO2 equivalent ~~[ftnote of parens indicating how this is calculated?]~~	Mg eCO2	–	(2,062,179)	(2,062,179)	–
N. Global Warming Potential – Net Emissions less Offset	Mg eCO2	6,567,289	4,374,093	(2,193,196)	-33.4%

[a] Landfill gas system capture based on Redwood Landfill reports to BAAQMD for 2002-2006, and estimated for 2007 and future years.
[b] Power production potential derived by multiplying: landfill gas captured x energy content of landfill gas x thermal efficiency of power production equipment

Key:

Mg	Million grams (1 million grams = 1 metric ton)	kWH	Kilowatt Hour
m3	cubic meter	Btu	British Thermal Unit
eCO2	carbon dioxide equivalent	MMBtu	Million Btu
GWP	Global Warming Potential	CO2	Carbon dioxide
Short ton	U.S. ton (2,000 pounds)	CH4	Methane

Factors used in Calculations:

Description	Factor	Source
LFG System Destruction Efficiency: Flare	99%	See text
LFG System Destruction Efficiency: Gas-Fired Engines	98%	See text
LFG System Capture Percentage (future, pre-closure)	60%	Average of 2002-2006 reported capture divided by modeled generation
LFG System Capture Percentage (future, 30-year closure period)	75%	See text
CH4 Oxidation in Cover:	10%	See text
CH4 Global Warming Potential	25	Forster et al, 2007
Energy content of landfill gas (Btu/standard ft3)	502.5	From CA Climate Action Registry, 2005
kWH per Btu	0.000293071	onlineconversion.com
kWH per MMBtu	293.071	calculated
Mg eCO2 emissions per kWH electricity generation	0.00036551	For California, calculated from factors in CA Climate Action Registry, 2007
Thermal efficiency for natural gas-fired turbine	60%	On-line literature survey, assumes combined cycle configuration
minutes per year	525,600	Calculated
ft3 per m3	35.31466672	onlineconversion.com
Methane density: Mg per m3	0.000667148	Calculated from LandGEM output
lbs/Mg	2,204.62	onlineconversion.com

SOURCE: ESA, Others

Page 2-74, Figure MR112-1 has been reformatted to clarify the labeling of the Y-axis of the figure.

Page 2-75, footnote a of Table MR112-2 has been revised as follow:

[a] Measured flow rate refers to landfill gas flow through the collection system, and ~~have~~ has been corrected to 50% methane content for comparative purposes.

Page 2-76, last sentence of the first full paragraph, the following text has been revised as follows:

The Mitigated Alternative calculations assume that the flares will be replaced by gas-fired engines in 2009~~, and~~ that would continue to operate as long as the landfill is producing methane; under the existing permit, no engines would be installed.

Page 2-87, the following references has been revised as follows:

GeoSyntec Consultants ~~(GeoSyntec)~~, *Leachate Management and Monitoring Annual Report October 2005 - September 2006*, Redwood Landfill, Novato California, March 26, 2007b.

GeoSyntec Consultants ~~(GeoSyntec)~~, Evaluation of Exterior Levee Construction Failure, Redwood Landfill, Marin County, California, April 3, 2007d.

GeoSyntec et al., Conference call meeting, 8 March 2002, involving representatives of Waste Management, Inc., GeoSyntec Consultants, Inc., Treadwell & Rollo, and Environmental Science Associates; minutes prepared by Environmental Science Associates and confirmed by meeting participants, 2002.

Chapter 3 – Comments on the FEIR and Responses to Comments

Page 3-54, the last sentence of response to Comment J-5 has been revised as follows:

Please also refer to the ~~R~~response to Comment I-5, and to Master Response 105.

Page 3-88, response to Comment N-4 has been revised as follows:

This comment primarily summarizes information presented in Chapter 2, Project Description, of the FEIR. Regarding the increase in the landfill footprint refer to individual responses to Comments D-1 and D-3 in Section 6.4 of the FEIR. See also Master Response 106 of this FEIR ~~Supplement~~ Response to Comments Amendment.

Page 3-89, third sentence of first partial paragraph, the following text has been revised as follows:

FEIR responses to Comments D-12 and Q-7 address comments about liquefaction potential at the site.

Page 3-118, eighth sentence of response to Comment O-7 has been revised as follows:

Section 3.2 also incorporates comments from the BAAQMD on the Draft ~~Supplemental~~ Subsequent EIR.

Page 3-165, second sentence of response to Comment V-10 has been revised as follows:

As described in that response ~~V-7~~, either the use of diesel particulate filters (which also require the use of ultra low sulfur fuel) or alternatively fueled engines (electric or natural gas) would reduce the incremental health risk below 10 in a million.

Page 3-172, first sentence of response to Comment W-3 has been revised as follows:

Regarding sea level rise, please refer to ~~response to comment~~ Master Response 106. Regarding elevations of the landfill site, as stated in the FEIR (p. 3.4. 1) elevations in areas not overlain by refuse range from -3 to +5 feet relative to mean sea level.

Chapter 4- Text Changes to the FEIR

Page 4-1, Mitigation Measure 3.1.6e has been underlined to indicate that the text is added to the FEIR.

Chapter 5 – FEIR Response to Comments Amendment Preparers

Page 5-1, the following text under Section 5.1 has been revised:

Cynthia Barnard, ~~Sr. R.E.H.S.~~ Supervising Environmental Health Specialist
Rebecca Ng, Supervising Environmental Health Specialist
Mark Janofsky, Senior Environmental Health Specialist

Appendix D – Revised Mitigated Alternative Air Quality

The first two pages of Appendix D have been deleted and Tables 1 through 4 have been reordered.

Appendix E – Greenhouse Gas Emissions Calculations

Table MR112-1 has been deleted from Appendix E. The table marked "Methane Generation and Fugitive Emissions" has been replaced with two tables (Appendixes E-1 and E-2) that are properly formatted and include additional information in the table headers.