



COMMUNITY MONITOR COMMITTEE

Altamont Landfill Settlement Agreement

*** The Public is Welcome to Attend***

VOTING MEMBERS

Chair
Marj Leider
City of Livermore

Cindy McGovern
City of Pleasanton

Donna Cabanne
Sierra Club

Arthur Boone
Member
NCRA

NON-VOTING MEMBERS

Tianna Nourot
Waste Management
Altamont Landfill
Resource and Recovery
Facility

Eva Chu
Alameda County

Robert Cooper
Altamont Landowners
Against Rural
Mismanagement (ALARMA)

STAFF

Dan McIntyre
City of Livermore
Public Works Director

Judy Erlandson
City of Livermore
Public Works Manager

AGENDA

DATE: **Wednesday, November 5, 2008**

TIME: **4:00 p.m.**

PLACE: **City of Livermore**
Maintenance Services Division
3500 Robertson Park Road

1. Call to Order
2. Introductions
3. Roll Call
4. Approval of Minutes (May 14, 2008)
5. Open Forum This is an opportunity for members of the audience to comment on a subject not listed on the agenda. No action may be taken on these items.
6. Matters for Consideration
 - 6.1 **Review Scope of Work of the Community Monitor Committee (Livermore Staff)**
 - 6.2 **Regularly Scheduled Meeting Times (no written report)**
 - 6.3 **List of Acronyms (ESA)**
 - 6.4 **Correspondence from Waste Management – Customer Privacy (ESA; Livermore Staff)**
 - 6.5 **Committee Member Activities: Contact with County Planning staff or others (no written report)**
 - 6.6 **Material Quantities for Beneficial Use (ESA)**
 - 6.7 **Review of Reports from Community Monitor (ESA)**
 - 6.8 **Update on Groundwater Monitoring and Soil Testing Documents (ESA)**

7. Agenda Building

This is an opportunity for the Community Monitor Committee Members to place items on future agendas.

8. Adjournment

The next regular Community Monitoring Committee meeting will take place at 3500 Robertson Park Road, Livermore.

Informational Materials:

- May 14, 2008 Draft Minutes
- Reports from ESA and City of Livermore Staff

City of Livermore
TDD (Telecommunications for the Deaf)
(925) 960-4104

PURSUANT TO TITLE II OF THE AMERICANS WITH DISABILITIES ACT (CODIFIED AT 42 UNITED STATES CODE SECTION 12101 AND 28 CODE OF FEDERAL REGULATIONS PART 35), AND SECTION 504 OF THE REHABILITATION ACT OF 1973, THE CITY OF LIVERMORE DOES NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, RELIGION, NATIONAL ORIGIN, ANCESTRY, SEX, DISABILITY, AGE OR SEXUAL ORIENTATION IN THE PROVISION OF ANY SERVICES, PROGRAMS, OR ACTIVITIES. TO ARRANGE AN ACCOMMODATION IN ORDER TO PARTICIPATE IN THIS PUBLIC MEETING, PLEASE CALL (925) 960-4586/4582 (VOICE) OR (925) 960-4104 (TDD) AT LEAST 72 HOURS IN ADVANCE OF THE MEETING.

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Under Government Code §54957.5, any supplemental material distributed to the members of the Community Monitor Committee after the posting of this Agenda will be available for public review upon request at 3500 Robertson Park Road., Livermore or by contacting us at 925-960-8000.

If supplemental materials are made available to the members of the Community Monitor Committee at the meeting, a copy will be available for public review at the Maintenance Service Center, at 3500 Robertson Park Road, Livermore



COMMUNITY MONITOR
COMMITTEE

Altamont Landfill Settlement Agreement

Minutes of May 14, 2008

DRAFT

1. Call to Order

Ms. Leider called the meeting to order at 4:06 p.m.

2. Roll Call

Members Present: Marj Leider, Chair; Cindy McGovern; Donna Cabanne; Arthur Boone; Karen Moroz, Alameda County Local Enforcement Agent ; Robert Cooper, Altamont Landowners Against Rural Mismanagement (ALARM);and Tianna Nourot, Waste Management Altamont Landfill Resource and Recovery Facility

Members Absent: none

3. Approval of Minutes

On the motion of Ms. Cabanne, seconded by Ms. McGovern, and carried by a vote of 4-0, the minutes of the meeting of March 12, 2008 were approved.

4. Open Forum

No items were brought to the Committee's attention.

5. Matters for Consideration

5.1 Committee member activities

Ms. McGovern and Mr. McIntyre recently visited the ALRRF site, and Ms. McGovern gave a brief description of the visit. The tour was conducted by Neil Wise and Tianna Nourot. Refuse fill operations, and stockpiles of construction and demolition materials, as well as recyclable materials, were observed. They also observed the future expansion area, groundwater monitoring wells, landfill gas wells, tire processing, and the litter fence. Ms. McGovern made note of windblown litter attributable to plastic shopping bags.

5.2 Information Request From A.L.A.R.M.

Mr. McIntyre reviewed the memo from ESA listing each of the items of interest.

1 – The C.U.P. has been adopted, and the adopted version is now available via the CMC web site.

2 – Mr. McIntyre stated that the current Land Use Plan has not been provided because staff are not sure what document is being requested.

3 – Regarding the location of the 750-acre Conservation Easement, Mr. McIntyre stated that it is Waste Management's position that this is a "floating" easement that does not yet have a definite location. Mr. Cooper said that he believed the easement location was defined. Mr. Kenneth Lewis, General Manager of the ALRRF, responded that the 750 acres are not yet defined. Mr. McIntyre asked if there is a point in time or a certain activity at the landfill that triggers the need for the easement. Mr. Lewis responded that the easement needs to be defined before Fill Area 2 can open. Ms. Cabanne asked when the public would know the location of the easement. Mr. Lewis replied that the easement location would be public information when it is recorded. The timing is uncertain but is intended to be this year. Ms. McGovern asked if easement sites off of the ALRRF property are being considered. Mr. Lewis replied that this concept is being considered informally but is not the preferred solution. He further stated that the condemnation of a portion of the landfill property by the State for a reservoir has complicated the situation by removing some available land. Ms. McGovern asked about public use of the easement. Mr. Lewis responded that certain uses would be allowed, such as grazing.

4 – Status of the eminent domain action for Dyer Reservoir – Mr. Lewis stated that the State Department of Water Resources has obtained eminent domain. The location of the reservoir, immediately east of Dyer Road in Section 17, was discussed

5 – Installation of groundwater wells – Will be discussed later in this meeting under item 5.3.

6 – "Map 1" from the Settlement Agreement – City staff distributed a map believed to be Exhibit 1 as cited in the Settlement Agreement.

In discussion of the one outstanding item (the Land Use Plan), Mr. Cooper asked if the expansion area is being developed now. Mr. Lewis said no, but the intent is to begin work on the expansion in 2009. Several permits need to be completed and the Fish and Game permit is the critical item. Fish and Game is attaching certain conditions to the permit that the ALRRF may not be able to satisfy directly, so alternate mitigations are under discussion.

Regarding item 1 above, Ms. McGovern asked about Condition #69 requiring truck traffic to remain on interstate highways "except for certain defined situations," Mr. Runyon was asked to clarify what those situations are. He stated that he believed the exceptions had to do with highway

closures or similar contingencies, and he would respond fully at the next CMC meeting.

Regarding item 3 above, Ms. McGovern asked if the conservation easement was the only pending item before the expansion area can be developed. Mr. Lewis replied that there are several other agency permits also being developed, but these are generally simpler; however the Air District permit(s) have become more complex than they were previously, which is adding to the effort.

5.3 Review of reports from Community Monitor

Mr. Runyon explained the format of the written reports and discussed each of the areas that were marked with yellow to indicate an item of some concern to the Community Monitor. These were as follows:

January 2008 –

The December 2007 tonnage report shows a very minor discrepancy in the accounting for tonnage delivered to the ALRRF. In discussion of the tonnage data, Ms. Cabanne asked if there is a way to break down the Special Wastes category by source, i.e. in-County or out-of-County. Mr. Runyon stated that he was uncertain but would look at the original reports to see if that is possible.

The Second Semi-Annual Groundwater Monitoring Report shows that VOC's were detected in the third quarter, but not the fourth, and that vinyl chloride was found in well E-20B in the third quarter, but not the fourth. Mr. Runyon remarked that these variations may be due to changes in the performance of the landfill gas extraction system.

Mr. Boone noted that the monthly tonnage of revenue generating cover varies more than the monthly tonnage of refuse, and asked if the constituents of revenue generating cover are known. Mr. Runyon gave some examples. Mr. Boone asked if it is possible to determine if source-separated organics that are being delivered to the landfill are being used as alternative daily cover (ADC) or for other beneficial uses; and if materials that are being delivered as revenue generating cover are being used as ADC. Mr. Lewis described four uses of green material: approximately 20% stockpiled for cover; approximately 50% used for erosion protection (and to promote plant growth) on outside slopes; another substantial fraction used as "extender for solidification"; and the green waste (also containing food waste) that is received from Livermore is shipped to Grover for further processing. Mr. Runyon responded that he would try to determine the quantities of interest, using the monthly tonnage report. In further discussion, Mr. Lewis mentioned that the green material received from Santa Clara County is not used as ADC.

Ms. Cabanne asked if there is a way to quantify the "substantial amount of windblown litter" that is mentioned in the January report. A direct answer to this question was not provided, but subsequent discussion raised these points:

- Landfill crews are picking up litter all the time, so the situation varies,
- Windy weather exacerbates the problem,
- Consumer use of plastic bags is the primary source of that litter,

- When Fill Area 2 opens, it will be shielded from wind and litter will be reduced.

February 2008 –

The variance in tonnage was noted. Ms. Nourot mentioned that there were revisions in the tonnage reports, and that corrected reports would be available.

Mr. Runyon noted that the ALRRF's Mitigation and Monitoring Report's Annual Update states that the Fill Area 2 excavation work need not take precautions for the discovery of cultural materials, because it has been surveyed for these items. He stated that ordinarily, for excavation of a previously undisturbed area, precautions are written into the specifications to protect such items if found; and he suggested that even though the area has been surveyed, it would be prudent to include such a requirement in the specifications for construction of Fill Area 2. Mr. Lewis provided assurance that if something of value were discovered, the ALRRF would comply with regulatory requirements.

Mr. Runyon also mentioned that the requirement to fence the alkali sinks appears to require that the sinks be fenced now. Mr. Lewis stated that the ALRRF's interpretation differs (i.e., that the sinks need not be fenced until Fill Area 2 is developed). Ms. Cabanne asked if the County could provide an interpretation. Mr. Runyon replied that he did not believe that the Community Monitor could directly raise that question with County staff, under the scope defined in the Settlement Agreement. Mr. McIntyre and Ms. Lieder discussed the option of a Committee member pursuing that question, and concluded that a member of the public, including a Committee Member, should be able to pursue the question through discussion with County Planning. Ms. McGovern stated that she would contact County Planning. Mr. Lewis pointed out that the specific requirements for how and where to fence have not yet been put forward by Fish and Game as part of their Biological Opinion [which is necessary to permit the development of Fill Area 2].

Discussion of the locations and configurations of alkali wetlands and natural ponds followed.

A statement in the report, regarding complete combustion by the landfill gas flare, was questioned by Mr. Boone. Mr. Lewis discussed standards for various landfill gas control devices, and the way that the Bay Area Air Quality Management District sets those standards. He stated that those standards are based on the use of natural gas, which places engines powered by landfill gas at a disadvantage.

March 2008 –

A truckload with a substantial amount of cardboard was noted during the inspection. Photos of this load were shown to the Committee at Committee members' request. Mr. Lewis questioned the right of the Community Monitor to take these photos, under the Settlement Agreement. He expressed concern about the protection of disposal customers' privacy.

Other photos from the March inspection were shown to illustrate how a GPS unit was used to check activities on each side of the Class 2 / Class 3 line. Mr. Runyon reported that all activities were taking place in appropriate locations.

April 2008 –

Ms. Cabanne asked about the variation in tonnage of revenue generating cover, and whether the sources of those materials can be identified. Mr. Runyon stated that the Community Monitor team would be looking at that prior to the next meeting, as part of the review of contaminated-soil reports.

Monitoring in April focused on groundwater monitoring procedures. Eric Morita explained the tasks that he had undertaken, which were described in the memos provided in the agenda packet. He noted that the Water Board permit for the landfill does not state a specific requirement regarding purge rates; and the current document that specifies groundwater monitoring procedures had not yet been reviewed; but the procedures that were followed for groundwater sampling generally conformed to standard practice.

Ms. Cabanne asked that the CM continue to track the recording of the number of readings taken to determine if purging has been sufficient.

In further discussion of the groundwater monitoring procedures documents from 1994 and 1996, Ms. Nourot stated that she had found both documents and could make them available.

Ms. McGovern asked if the Committee could be provided with a list of acronyms in order to better understand documents related to the ALRRF. Mr. Runyon said that he would check the SWANA library to see what might be available.

5.4 Update Regarding Topics Raised at January 9 Meeting

The chair asked if members wished to discuss this item. No discussion was requested.

5.5 Press Release From Waste Management Regarding Landfill Gas

Ms. Cabanne asked if the development of the proposed gas plant would be in the purview of the Community Monitor, and if the plant would require permits. Mr. Lewis stated that it would require an Air District permit, and a Fire Marshal permit, but it has been determined not to require a change in the Use Permit. It is expected to enable the flare to be shut down. He went on to describe some details of the technology.

Ms. Cabanne asked about Linde's operations of similar plants elsewhere in the US. Mr. Lewis stated that this plant would be the first of its kind.

Mr. Boone asked if the LNG plant would shut down the electrical generating capacity. Mr. Lewis said no; the power produced by the IC engines (about 2 megawatts) would be needed to run the LNG plant. He further stated that this project was focused on Fill Area 1 and would not be drawing on gas from Fill Area 2. There was some discussion of the length of time that landfills produce gas; Mr. Lewis stated that this depends on the moisture content of the wastes; higher moisture leads to high production rates and a shorter time frame.

5.6 Approval of Items for Web Site Posting

It was the consensus of the Committee that all reports to the Committee should be available on the web site, in a format that makes it easy to identify individual items.

6. Agenda Building

Mr. Boone introduced the subject of proper handling and disposal of household hazardous waste and asked if the CMC is an appropriate forum for discussion of household hazardous waste management and public education on this issue. It was the sense of the Committee that that subject would be more suitable for another venue.

7. Adjournment

The meeting was adjourned at 6:02 p.m. The next meeting will be held on **Wednesday, July 9 at 4:00 p.m.** at the Livermore Maintenance Services Division at 3500 Robertson Park Road.



COMMUNITY MONITOR COMMITTEE STAFF REPORT

TO: Community Monitor Committee Members

FROM: Judy Erlandson, Public Works Manager

SUBJECT: Review of Duties and Responsibilities of the Community Monitor Committee

RECOMMENDED ACTION

The purpose of this report is to provide a summary of the duties and responsibilities of the Community Monitor Committee (CMC) as defined by the Settlement Agreement between the County of Alameda, the City of Livermore, the City of Pleasanton, Sierra Club, Northern California Recycling Association, Altamont Landowners Against Rural Mismanagement, and Waste Management of Alameda County, Inc. (Settlement Agreement).

This item is for information only, and no action is required.

BACKGROUND

At several recent meetings, Committee members have asked for interpretations of the CMC's purview as defined by the Settlement Agreement. In response to this inquiry, staff is providing a summary of the CMC's duties and responsibilities for the Committee members' reference.

Waste Management of Alameda County owns and operates the Altamont Landfill and Resource Recovery Facility (Altamont Landfill) under the Alameda County Conditional Use Permit #C-6395 and other prior use permits. The Altamont Landfill accepts franchise and non-franchise waste from Alameda County and the City and County of San Francisco. The Alameda County Local Enforcement Agency (LEA) is responsible for ensuring that the Altamont Landfill meets the terms of its Conditional Use Permit on behalf of the Alameda County Planning Department.

The Community Monitor Committee (CMC) was established by the Settlement Agreement dated November 30, 1999. The Settlement Agreement discusses the duties and responsibilities of the CMC and defines the Committee's scope.

As required in the Settlement Agreement, the CMC is comprised of one member appointed from the City of Livermore, the City of Pleasanton, the Sierra Club, and the Northern

MEETING DATE:

November 5, 2008

AGENDA ITEM:

6.1

California Recycling Association. Non-voting members may include representatives from Altamont Landowners Against Rural Mismanagement, Waste Management of Alameda County, and staff from the Cities of Livermore and Pleasanton, and Alameda County.

DISCUSSION

Community Monitor's Responsibilities

The CMC is tasked with the responsibility to retain a Community Monitor who has expertise in environmental compliance monitoring and landfill operations (section 5.4). The Community Monitor supplements and confirms the enforcement efforts of the County Local Enforcement Agency. The Community Monitor is primarily responsible for:

- A. Reviewing any relevant reports and environmental compliance documents submitted to any regulatory agency (sections 5.7.1, 5.7.2, and 5.7.3);
- B. Advising the public and the Cities of Livermore and Pleasanton about environmental and technical issues relating to the operation of the Altamont Landfill via the CMC (section 5.7.4);
- C. Presenting an annual written report summarizing the Altamont Landfill's compliance record for the year to the CMC and submitting the report to Alameda County and the Cities of Livermore and Pleasanton (section 5.7.5);
- D. Notifying the County Local Enforcement Agency and Waste Management of Alameda County of any substantial noncompliance findings or environmental risk (section 5.7.6);
- E. Monitoring and accessing the Altamont Landfill site and conducting inspections (section 5.7.7);
- F. Counting trucks arriving at the Altamont Landfill (section 5.7.8); and
- G. Reviewing waste testing data and source information (section 5.7.9).

Community Monitor Committee's Responsibilities

Under Settlement Agreement section 5.1.2, the CMC is responsible for supervising and evaluating the performance of the Community Monitor as follows:

- A. Interviewing, retaining, supervising, overseeing the payment of, and terminating the contract with the Community Monitor;
- B. Reviewing all reports and written information prepared by the Community Monitor; and
- C. Conferring with the Community Monitor and participating in the Five Year Compliance Reviews (next due 8/22/2010) and the Mid-Capacity Compliance Review (due when the new cell is constructed and capacity is close to 50%, unlikely to occur before 2028) (Condition number 6 of Exhibit A of the Agreement).

It should be noted that the following activities are not included within the scope of the Settlement Agreement, and would be beyond the purview of the CMC:

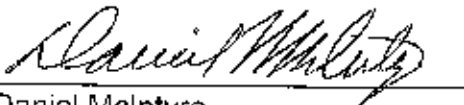
- A. Advocating for legislation;
- B. Providing policy or operational recommendations to Waste Management of Alameda County;
- C. Making recommendations on recycling programs or energy programs;
- D. Suggesting or funding new programs; or
- E. Expanding the Community Monitor's scope of work.

Waste Management of Alameda County's Responsibilities

- A. Paying for the services of the Community Monitor, based on an annual cost estimate (section 5.3.3). For 2008, this amount is \$85,000.
- B. Paying an additional 20% over the annual cost estimate if warranted based on "credible evidence" (section 5.3.3).

It is important to note that Waste Management of Alameda County is not obligated to pay for work beyond the 20% cap. Therefore, if the CMC requires additional work of the monitor, a cost-sharing agreement would need to be negotiated by the individual CMC members. Also, any additional work must be warranted or within the scope as defined in the agreement.

Approved by:



Daniel McIntyre
Public Works Director

Community Monitor Roles and Responsibilities

Community Monitor Committee's Responsibilities

Under Settlement Agreement section 5.1.2, the CMC is responsible for supervising and evaluating the performance of the Community Monitor as follows:

- A. Interviewing, retaining, supervising, overseeing the payment of, and terminating the contract with the Community Monitor;
- B. Reviewing all reports and written information prepared by the Community Monitor; and
- C. Conferring with the Community Monitor and participating in the Five Year Compliance Reviews (next due 8/22/2010) and the Mid-Capacity Compliance Review (due when the new cell is constructed and capacity is close to 50%, unlikely to occur before 2028) (Condition number 6 of Exhibit A of the Agreement).

Community Monitor's Responsibilities

The Community Monitor supplements and confirms the enforcement efforts of the County Local Enforcement Agency. The Community Monitor is primarily responsible for:

- A. Reviewing any relevant reports and environmental compliance documents submitted to any regulatory agency (sections 5.7.1, 5.7.2, and 5.7.3);
- B. Advising the public and the Cities of Livermore and Pleasanton about environmental and technical issues relating to the operation of the Altamont Landfill via the CMC (section 5.7.4);
- C. Presenting an annual written report summarizing the Altamont Landfill's compliance record for the year to the CMC and submitting the report to Alameda County and the Cities of Livermore and Pleasanton (section 5.7.5);
- D. Notifying the County Local Enforcement Agency and Waste Management of Alameda County of any substantial noncompliance findings or environmental risk (section 5.7.6);
- E. Monitoring and accessing the Altamont Landfill site and conducting inspections (section 5.7.7);
- F. Counting trucks arriving at the Altamont Landfill (section 5.7.8); and
- G. Reviewing waste testing data and source information (section 5.7.9).

Waste Management of Alameda County's Responsibilities

Per the settlement agreement, Waste Management is responsible for:

- A. Paying for the services of the Community Monitor, based on an annual cost estimate (section 5.3.3).
- B. Paying an additional 20% over the annual cost estimate if warranted based on "credible evidence" (section 5.3.3).



225 Bush Street
Suite 1700
San Francisco, CA 94104
415.896.5900 phone
415.896.0332 fax

memorandum

date October 23, 2008
to ALRRF Community Monitor Committee
from Kelly Runyon
subject CMC Meeting of 11/5/08 - Agenda Item 6.3 - List of Acronyms

In response to a concern expressed by Community Monitor Committee (CMC) Member McGovern, below is a list of acronyms that may be used in discussion of waste disposal facilities. With the approval of the CMC, these will be posted on the CMC web site, together with a link to the CIWMB acronyms page:
<http://www.ciwmb.ca.gov/LEACentral/Acronyms/default.htm>.

Agencies

ACWMA – Alameda County Waste Management Authority
ANSI – American National Standards Institute
ARB or CARB – California Air Resources Board
ASTM – American Society for Testing and Materials
BAAQMD – Bay Area Air Quality Management District
CDFG or DFG – California Department of Fish and Game
CIWMB – California Integrated Waste Management Board
CMC – Community Monitor Committee
DWR – Department of Water Resources
LEA – Local Enforcement Agency (i.e., County Environmental Health)
RWQCB – Regional Water Quality Control Board
SWRCB – State Water Resources Control Board

Waste Categories

C&D – construction and demolition
CDI – Construction, demolition and inert debris

GSET – Green waste and other fine materials originating at the Davis Street Transfer Station, for solidification, externally processed.

GWRGCT – Green waste that is ground on site and used for solidification or cover

GWSA – Green waste slope amendment (used on outside slopes of the facility)

MSW – Municipal solid waste

RDW – Redirected wastes (received at ALRRF, then sent to another facility)

RGC – Revenue generating cover

Substances or Pollutants

ACM – asbestos-containing material

ACW – asbestos-containing waste

ADC – Alternative Daily Cover. For more information: <http://www.ciwmb.ca.gov/lgcentral/basics/adcbasic.htm>

BTEX – benzene, toluene, ethylbenzene, and xylene (used in reference to testing for contamination)

CH₄ – methane

CO₂ – carbon dioxide

DO – dissolved oxygen

HHW – household hazardous waste

LFG – landfill gas

LNG – liquefied natural gas

MTBE – methyl tertiary butyl ether, a gasoline additive

NMOC – Non-methane organic compounds

NTU – nephelometric turbidity units, a measure of the cloudiness of water

TCE - Trichloroethylene

TDS – total dissolved solids

TKN – total Kjeldahl nitrogen

VOC – volatile organic compounds

Documents

CCR – California Code of Regulations (includes Title 14 and Title 27)

CoIWMP – County Integrated Waste Management Plan

JTD – Joint Technical Document (contains detailed descriptions of permitted landfill operations)

RDSI – Report of Disposal Site Information

RWD – Report of Waste Discharge

SRRE – Source Reduction and Recycling Element (part of CoIWMP)

SWPPP – Stormwater Pollution Prevention Plan

WDR – Waste Discharge Requirements (Water Board permit)

General Terms

ALRRF – Altamont Landfill and Resource Recovery Facility

BGS – below ground surface

CEQA – California Environmental Quality Act

CQA – Construction Quality Assurance (relates to initial construction, and closure, of landfill Units)

CY – cubic yards

GCL – geosynthetic clay liner

GPS – Global Positioning System

IC engine – Internal combustion engine

LCRS – leachate collection and removal system

LEL – lower explosive limit

mg/L – milligrams per liter, or (approximately) parts per million

µg/L – micrograms per liter, or parts per billion

PPE – personal protective equipment

ppm, ppb, ppt – parts per million, parts per billion, parts per trillion

STLC – Soluble Threshold Limit Concentration, a regulatory limit for the concentrations of certain pollutants in groundwater

TTLIC – Total Threshold Limit Concentration, similar to STLC but determined using a different method of analysis

TPD, TPM, TPY – Tons per day, month, year

WMAC – Waste Management of Alameda County

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San Francisco, CA 94104
415.896.5900 phone
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memorandum

date October 23, 2008

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 11/5/08 - Agenda Item 6.4 - Correspondence from Waste Management re Customer Privacy

For Committee Members' information, a letter from Waste Management is attached. For the record, we submit the following correction and update:

- The first sentence refers to a CMC meeting on June 11. That meeting actually took place on May 14.
- The second paragraph refers to a review of soil data anticipated for May 29. That review was rescheduled for June 26 and took place on that date. A subsequent, more detailed review is under way, and the data are being kept anonymous through the use of ID numbers rather than customer names.



May 28, 2008

ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY

10840 Altamont Pass Road
Livermore, CA 94550-9745
(925) 455-7300
(925) 455-7381 Fax

Mr. Kelly Runyon
ESA
225 Bush Street, Suite 1700
San Francisco, CA 94104

Subject: Waste Management's Position on Customer Privacy during Site Visits and Document Review


Dear Mr. Runyon,

Waste Management (WM) would like to provide their position on WM customers' right to privacy in response to the photos presented during the Community Monitor Committee (CMC) meeting on June 11, 2008. The disposal of potentially recyclable material witnessed by ESA during the site visit on March 25, 2008 is not a violation of Altamont Landfill & Resource Recovery Facility (ALRRF) local, state, or federal requirements. Unless there is a concern with regulatory compliance, WM customer information should be kept confidential and not reported in a manner that allows for the information to become public record. WM agrees that the CMC may be interested in this information but providing this information in a public meeting when no regulatory or compliance issues are in question is not within the scope of the Settlement Agreement.

We look forward to your visit on May 29, 2008, which is to include a review of analytical data for Class II soil profiles. WM believes the review of the information to determine our compliance with applicable acceptance and disposal/reuse regulations is within the scope of the Settlement Agreement but we do not agree this includes reporting information (i.e., individual customer name, location, and tonnage amounts) to the CMC from customers complying with applicable regulations.

We appreciate your cooperation in limiting the scope of work to those issues identified in the Settlement Agreement.

Thank you,



Ken Lewis
District Manager

Cc:
Ms. Marj Leider, CMC Chair, City of Livermore
Ms. Cindy McGovern, City of Pleasanton
Ms. Donna Cabanne, Sierra Club
Mr. Arthur Boone, NCRA
Mr. Dan McIntyre, City of Livermore



INTEROFFICE MEMORANDUM

Date: July 29, 2008
To: Judy Erlandson, Public Works Supervisor
From: Amara Morrison, Special Counsel
Subject: CMC Photographs

Question Presented

You inquired whether the terms of the Altamont Settlement Agreement would permit the photographing of the Altamont Landfill property and materials deposited there. The short answer is that it probably does depend upon the context in which the photos were taken.

Background

My understanding is that, at the May Community Monitor Committee meeting, the Community Monitor presented photographs to the Committee showing portions of the landfill, including cell boundaries and fenced areas. Also amongst the photos was a photo showing a large load of cardboard being landfilled as well as an item displaying a mailing label with generator information clearly displayed.

Following the meeting, Waste Management evidently expressed some concern about the taking of the photos generally and the display of generator information specifically, citing customer privacy concerns. Upon receipt of a letter from Waste Management, the Committee requested clarification as to whether the taking of photographs was within the scope of the Altamont Settlement Agreement.

Terms of the Settlement Agreement

Section 5 of the Altamont Settlement Agreement governs the activities of the Community Monitor. A copy of Section 5 of the Agreement is attached. Pursuant to Section 5.8, the Community Monitor is authorized to conduct periodic inspections of the landfill, provided notice is given to Waste Management (5.8); to accompany any authorized government or regulatory inspectors on their inspections (5.8.1); and to

July 29, 2008

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conduct up to 6 additional inspections if substantial non-compliance with environmental regulations is suspected (5.8.2).

While there is no express authority in the Agreement to take photographs, a reasonable method of accomplishing inspection and monitoring, which is authorized by the Scope of Work (see Section 5.7.7), could arguably include the taking of photographs to document, for example, existing site conditions and disposal of materials in the appropriate cells within the landfill.

If photographs are taken, however, the Monitor may only do so in conjunction with a properly noticed inspection. It appears as though Waste Management was notified of the inspection at which the photos were taken but not of the fact that photographs would be taken during the inspection.

Claims of Customer Privacy

In reviewing the letter from Waste Management to ESA, the Community Monitor, Mr. Ken Lewis indicates that "WM customer information should be kept confidential and not reported in a manner that allows for the information to become public record." And, further, that "we do not agree this [a review of information to determined WM's compliance with applicable acceptance and disposal/reuse regulations] includes reporting information (i.e. individual customer name, location and tonnage amounts) to the CMC."

If Waste Management is attempting to assert that it may claim proprietary ownership, on behalf of the customer, over the waste that they manage, such a position is not generally supported by existing case law. In a California appellate court decision, the court found that documents which have been placed in an outdoor trash barrel no longer retain their character as the personal property of the one who has discarded it. By placing them into the garbage, the owner renounces the key incidents of ownership-title, possession, and the right to control. Ananda Church of Self-Realization v. Massachusetts Bay Ins. Co., 95 Cal.App. 4th 1273.

Further, our research concludes that the customer may not assert privacy claims over the waste that comes into control of the garbage franchisee. The California Supreme Court has stated that discarding garbage by putting it out on a public street renounces an expectation of privacy in the contents of a garbage bin. Customers place their refuse at the curb for the express purpose of conveying it to a third party. California v. Greenwood, 486 U.S. 35 (1988). As a general matter, the overwhelming weight of authority rejects the proposition that a reasonable expectation of privacy exists with respect to trash discarded outside the home." People v. Ayala, 24 Cal.4th 243.

It appears as though the courts have generally concluded that, once the customer has given away the garbage, they lose all privacy rights over the contents of the garbage and all ownership of it. With that in mind, Waste Management itself may, as the garbage

July 29, 2008

Page 3 of 3

franchisee, assert ownership over the materials and would then be held to its own policies/guidelines for protecting the privacy of the customers.

I would offer, however, that if the photos are being offered to verify whether Waste Management's *customers* are complying with applicable regulations, then I would conclude the display of photos containing generator information is beyond the scope of the Agreement. The Community Monitor's scope of work involves a review and analysis of Waste Management's activities and the ALRRF's compliance with environmental laws and regulations, not with individual customer's compliance.

Conclusion

Absent some additional compelling legal authority or formal policy from Waste Management that it has the right to claim privacy rights over the customer waste it is disposing of, I would conclude that the Community Monitor has the right to take photographs of the landfill to assist in the documentation of its periodic inspections and reports, provided the Monitor gives notice to Waste Management about the planned inspections. I would also recommend that the Monitor provide notice to Waste Management of its intent to take photos and the general subject matter of the photos it intends to take.

C: Dan McIntyre

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225 Bush Street
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 San Francisco, CA 94104
 415.896.5900 phone
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memorandum

date October 23, 2008
 to ALRRF Community Monitor Committee
 from Kelly Runyon
 subject CMC Meeting of 11/5/08 - Agenda Item 6.6 - Material Quantities for Beneficial Use

At the May 14 CMC meeting, Committee members asked several questions regarding the monthly tonnage data submitted by ALRRF. Those questions are listed below, and each question is addressed in the paragraphs that follow.

1. Ms. Cabanne: Is there a way to break down the Special Wastes category by source, in terms of In-County vs. Out-of-County?
2. Mr. Boone: Is it possible to determine if source-separated organics are being used as alternative daily cover (ADC) or for other beneficial uses?
3. Mr. Boone: Are materials delivered as revenue-generating cover being used as ADC?
4. Ms. Cabanne: Can the sources of revenue-generating cover materials be identified?

* * * * *

1. Is there a way to break down the Special Wastes category by source, in terms of In-County vs. Out-of-County?

Answer: not with the available information. The Monthly Tonnage Report provides the following sets of subtotals within the Special Wastes category:

- For friable asbestos and nonfriable asbestos only, monthly tonnage by source jurisdiction. These two materials have generally been less than 30% of all Special Wastes, month by month.
- Daily tons delivered, but with no subcategories of any kind, nor any In-County / Out-of-County distinction.
- Monthly tons by Material Name (e.g., Class 2 Disposal Special Waste) with no subcategory for In-County / Out-of-County, except for “Treated Wood Out-of-County”, which is a minuscule portion of the total.

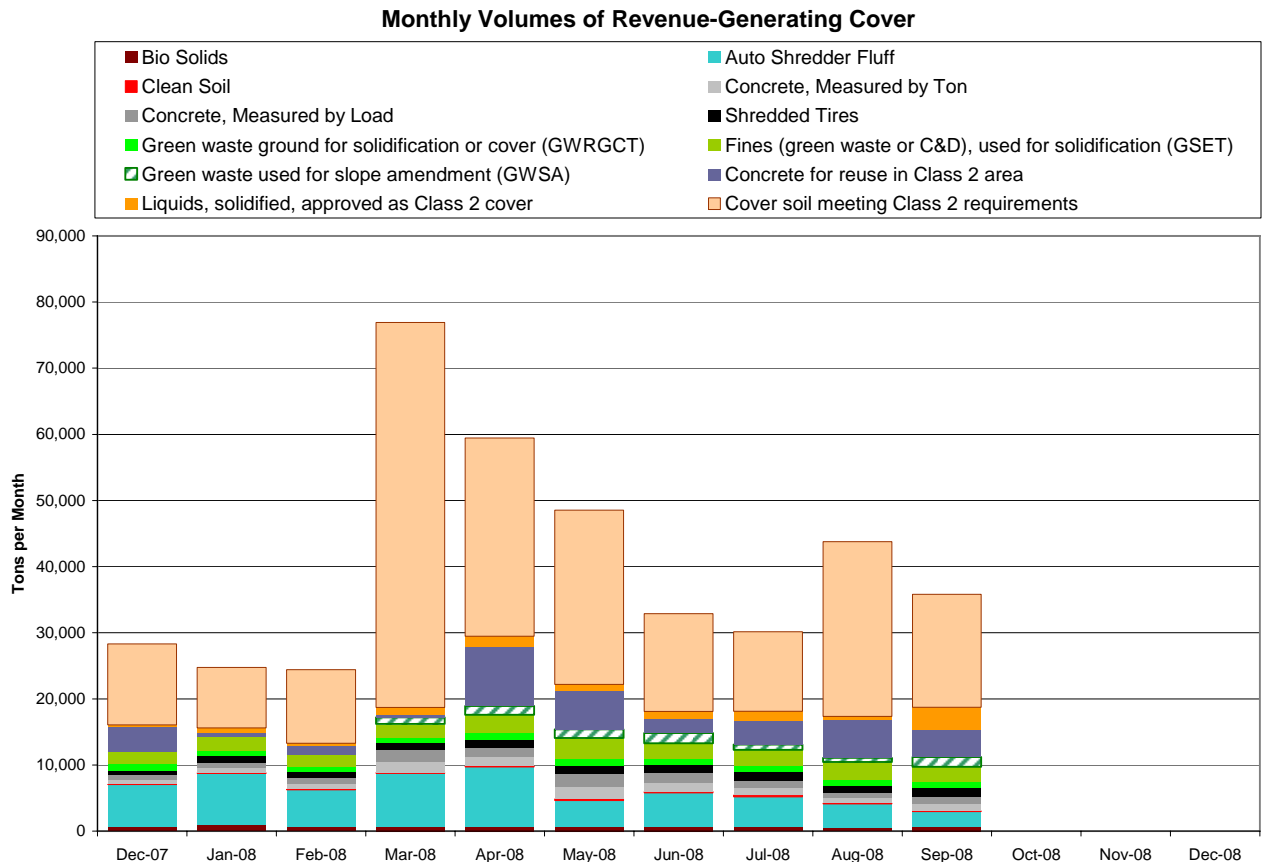
2. Is it possible to determine if source-separated organics are being used as alternative daily cover (ADC) or for other beneficial uses?

Answer: qualitatively, yes; quantitatively, no. The Monthly Tonnage Report includes three materials, containing source-separated organics, which are not disposed but remain on site:

- GSET – Fine materials, originating at Davis Street, intended for solidification. Loads may contain coarse fines from the C&D recovery operation (not green waste), fines from green waste processing, or possibly a blend of the two.
- GWRGCT – Green waste that is ground and used for solidification or cover. (Typically, solidification products become ADC.)
- In discussion at the May 14 CMC meeting, Mr. Ken Lewis, General Manager of the ALRRF, explained that roughly 50% of the green waste that is received is used for erosion protection on outside slopes of the facility. This is currently tracked as a Redirected Waste, not a Revenue-Generating Cover, under the code GWSA. In recent months its tonnage has been about 1,300 tons per month.

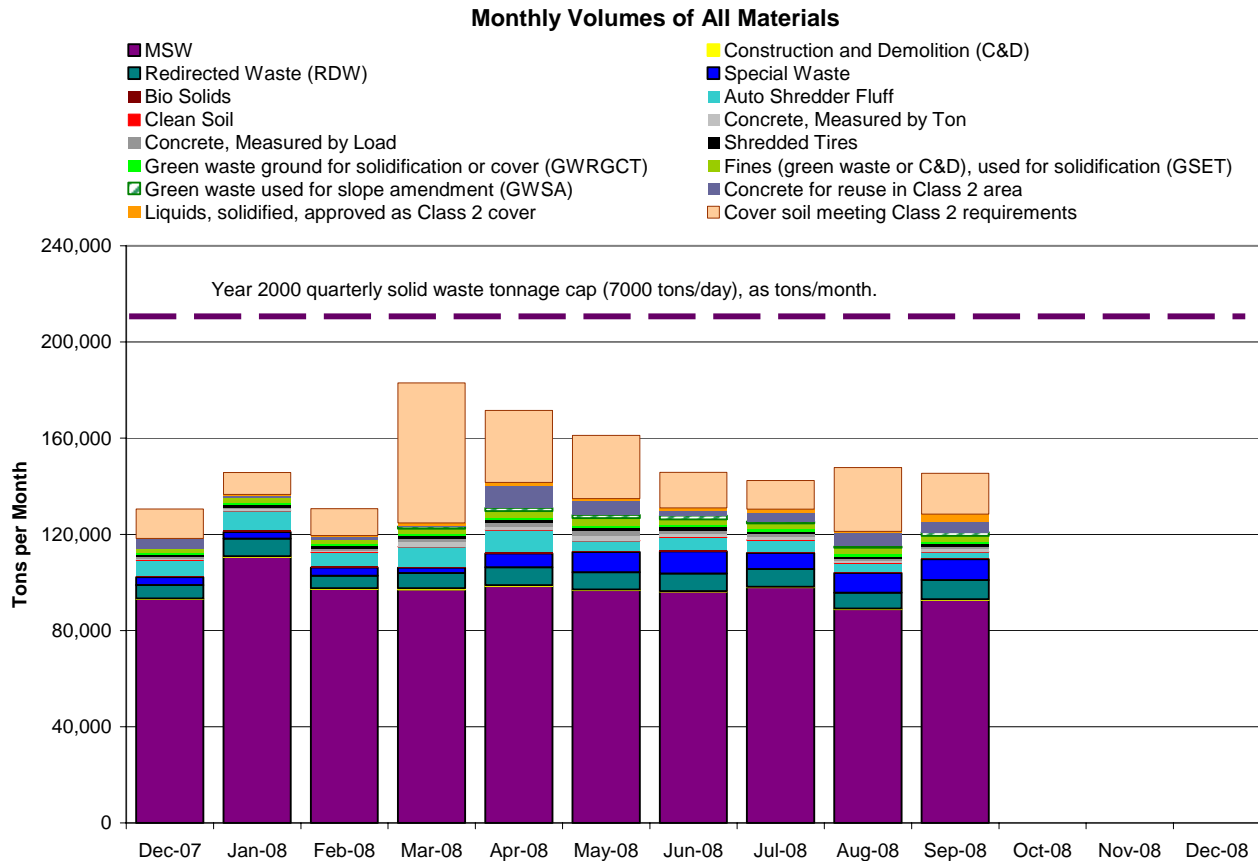
The first two of these materials are in the Revenue-Generating Cover category. In 2008, the volume of GWRGCT has been 750 to 1,000 tons per month; and the volume of GSET has been roughly 2,000 to 3,000 tons per month. The fraction of GSET that is green waste is unknown. Taken together, in 2008 GSET and GWRGCT have been approximately 5% to 10% of all Revenue-Generating Cover materials received each month. Figure 1 below shows the proportions of RGC materials, plus GWSA, as reported month by month.

Figure 1



As additional background, Figure 2, below, illustrates the amount of refuse received each month (the purple bars) versus the refuse tonnage cap (purple dashed line).

Figure 2



County Planning is permitted to increase the tonnage cap each year, based on (1) CIWMB annual growth indices; (2) new contracts providing for disposal of Alameda County, San Francisco or San Ramon wastes. However, no official adjustment of the tonnage cap has occurred as yet.

3. Are materials being delivered as revenue-generating cover being used as ADC?

Answer: Yes. These include some green wastes, as described above; auto shredder fluff; and some biosolids.

4. Can the sources of revenue-generating cover materials be identified?

Answer: Yes, but not by the Community Monitor’s review of the ALRRF’s submitted reports. Those reports provide summaries that regulatory agencies use to determine permit compliance. Determining the exact sources, or the source jurisdictions, of RGC materials would require a special report from the ALRRF or the review of individual customer records of delivered quantities. Under the Settlement Agreement, the Community Monitor is not entitled to do this unless such records become part of a submittal to a regulatory agency. That would be an extraordinary circumstance.

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memorandum

date October 23, 2008
to ALRRF Community Monitor Committee
from Kelly Runyon
subject CMC Meeting of 11/5/08 - Agenda Item 6.7 - Review of Reports from Community Monitor

Attached are our inspection reports for May through October of 2008. The thrust of each inspection is summarized below.

May – A routine inspection of operations.

June – Emphasis was on understanding the systems that handle landfill gas collection, use and destruction.

July – Unannounced inspection, in conjunction with the LEA (who was also unannounced). A routine inspection, and stormwater monitoring locations were noted.

August – Early morning observations (5:30 AM to 8:00 AM) to observe transition from night-time to day-time operations. LEA Inspection Reports and the Log of Special Occurrences were reviewed.

September – A routine inspection of operations, in conjunction with the LEA. Gas probe locations were identified. Special Occurrences Log was reviewed.

October – An unannounced inspection. A routine inspection, plus observations of preparations for winter operation and stormwater management. LEA Inspection Reports were reviewed.

Issues that raised some concern are marked with yellow rectangles in the left-hand margins of the monthly reports. The issue that is not fully resolved and that may persist for several more months, is the need to revise the landfill gas monitoring plan and install probes in approved locations that conform to new regulations. Staff at ALRRF have been actively working on this issue with the LEA and CIWMB staff.

Also, several photos that illustrate specific features of interest at the ALRRF are attached at the end of this Memorandum.

Truck Count Data; Recommendation to Suspend Truck Counts

Recent refuse truck count data are listed below. Counts were taken from 6:45 to 8:45 AM, and the maximum number of refuse trucks in a continuous 60-minute period is shown for each date:

May 20 – 7:31 to 8:30 AM – 23 refuse trucks
June 20 – 6:47 to 7:46 AM – 21 refuse trucks
August 15 – 6:54 to 7:53 AM – 28 refuse trucks
September 26 – 7:27 to 8:26 AM – 24 refuse trucks
October 16 – 7:45 to 8:44 AM – 16 refuse trucks

The Use Permit limits the number of refuse trucks to 50 per hour during the period 6:45 to 8:45 AM. Paragraph 5.9 of the Settlement Agreement states that “The Community Monitor *may* conduct periodic independent counts of trucks...” (emphasis added). Based on these findings, **it is recommended that the truck counts be suspended**, until a substantial increase in refuse tonnage, or an unforeseen event such as direct haul by collection trucks in lieu of current transfer truck service, indicates a need to check traffic levels.

Also, at a previous CMC meeting, a Committee member asked the Community Monitor to clarify the special conditions associated with Use Permit Condition 69, that would allow refuse trucks to travel to the landfill without using the “...state or interstate freeway system.” Those special conditions are:

1. An emergency involving individual transfer vehicles;
2. At the direction of a safety officer or a Caltrans-mandated detour; or
3. For direct access on local streets to a transfer station (e.g., Davis Street)

Features of Interest at ALRRF



Litter Fence Prior to Cleaning – July 21, 2008



Solidification Area – July 21, 2008



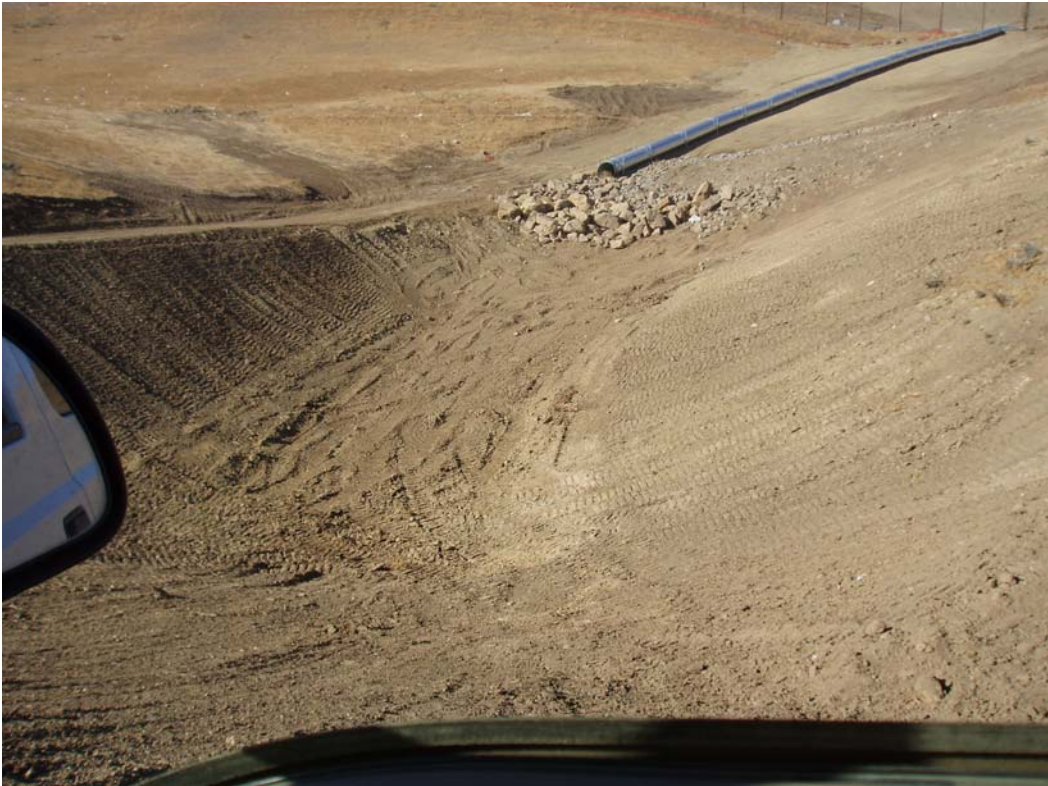
Landfill Gas Probe – September 8, 2008



Winter Pad Preparation, Looking South – August 15, 2008



Drainage and Culvert Repair Viewed from Above, Looking East – September 8, 2008



Drainage and Culvert Repair Viewed From Below – October 16, 2008

ALRRF Community Monitor Monthly Report

Reports Received

Monthly Tonnage Report for April 2008, dated May 12, 2008

Tonnage Summary:		<u>tons</u>
By Source Location		
1.1	Tons Disposed from Within Alameda County	61,921.61
1.2	Tons Disposed from City of San Francisco TS	39,668.52
1.3	Other Out of County Disposal Tons	<u>3,013.26</u>
	subtotal Disposed	104,603.39
By Source Type		
2.1	C&D	313.60
2.2	MSW	98,517.36
2.3	Special Wastes	<u>5,772.43</u>
	subtotal Disposed	104,603.39
	Difference Not Yet Reconciled	0.00 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	7,488.54
2.5	Revenue Generating Cover	56,872.21
	Total, 2.1 - 2.5	168,964.14
Materials of Interest		
2.3.1	Friable Asbestos	934.98
2.3.2	Class 2 Cover Soils	29,968.19
2.5.1	Auto Shredder Fluff	9,051.46
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	2,788.54

ALRRF Community Monitor Monthly Report

Site Visit(s)

Site Inspection May 29, 2008, 9 AM to 11 AM

- Attended by Kelly Runyon
- Escorted by Neal Wise and Tianna Nourot
- Recent high winds have pushed litter (primarily plastic bags) down the front of the site, i.e. on the grassy slope covering the closed area. Cleanup is in progress.
- A drive to the northeast corner of the property revealed less litter than in previous observations (January 2008).
- Observed large gopher snake in roadway east of site. Snake was unharmed.
- LEA Inspection reports were reviewed for January through May. They generally show no concerns except as noted:
 - January 23 - Need for more traffic cones during foggy conditions.
 - February 13 - Some erosion in closed area of Unit 1 - no exposed refuse.
 - February 19 - New trench for landfill gas pipe was dug through asbestos area, exposing material. Exposed material is being re-covered.
 - April 1 - Asbestos load had improper sticker, was held aside until contents could be verified with source.
- Special Occurrences Log was reviewed for March through May. No incidents logged in May.
 - Three instances of end-dump trucks falling over while unloading. Causes (all different) were noted in each case.
 - One truck and full transfer trailer fell on its side while driving to the unloading point. Cause believed to be excessive speed.

Observation of Environmental Controls

- Litter generally low on site, except as noted above. Minimal bird and insect activity.
- Some odor detectable at solidification operation.
- No slides, seeps, slumps or other indication of slope failure observed.
- Minor but noticeable amount of windblown litter visible from Altamont Pass Road, east of the site, looking north.

Truck Traffic Counts, May 20, 2008, 6:45 to 8:45 AM

- The busiest one-hour period was from 7:31 through 8:30 AM. During this time 33 trucks were observed entering the landfill site. Ten of these trucks were hauling material other than refuse, primarily soil. The one-hour count of 23 refuse trucks is well below the permit limit of 50.

ALRRF Community Monitor Monthly Report

Other Observations

- Fill operations occurring in narrow area near "front" of site (near scales).
- A load of green waste, tipped at the working face, was pushed aside for later removal to an appropriate location.
- Landfill operations crew is excavating and re-compacting refuse placed the previous evening. Night crew had placed material incorrectly and obtained poor compaction.
- Landfill gas system upgrade is substantially complete.

ALRRF Community Monitor Monthly Report

Reports Received

Monthly Tonnage Report for May 2008, dated June 9, 2008

Tonnage Summary:		<u>tons</u>	
By Source Location			
1.1	Tons Disposed from Within Alameda County	59,903.10	
1.2	Tons Disposed from City of San Francisco TS	38,986.44	
1.3	Other Out of County Disposal Tons	6,623.74	
	subtotal Disposed	105,513.28	
By Source Type			
2.1	C&D	252.40	
2.2	MSW	96,857.23	
2.3	Special Wastes	8,403.65	
	subtotal Disposed	105,513.28	
	Difference Not Yet Reconciled	0.00	0.00%
Other Major Categories			
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	7,150.69	
2.5	Revenue Generating Cover	45,477.74	
	Total, 2.1 - 2.5	158,141.71	
Materials of Interest			
2.3.1	Friable Asbestos	770.72	
2.3.2	Class 2 Cover Soils	26,359.25	
2.5.1	Auto Shredder Fluff	4,011.27	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	3,141.17	

ALRRF Community Monitor Monthly Report**Site Visit(s)**Site Inspection June 9, 2008, 10 AM to noon

- Attended by Kelly Runyon and (beginning 11:30) by Matt Hall of Treadwell and Rollo
- Escorted by Neal Wise and Tianna Nourot
- Emphasis was on landfill gas systems: flare, engines, turbines, wells, and piping.
- At the turbine plant, oxygen levels were slightly elevated due to a puncture in LFG collection pipe. The site of the leak was found this morning and repairs were planned for the afternoon.
- Noteworthy facts:
 - There are 88 gas collection points in the system. Most are vertical wells, a few are horizontal trenches. The leachate collection system is the single most productive collection point.
 - There are two turbines on site. Their control systems are being upgraded, one at a time. While one turbine is down, the flare and both IC engines are absolutely for gas control.
 - At this site the typical lifespan of a vertical well is 5 years. Leachate pumps are not needed in the wells because the site and the materials are relatively dry.
 - Condensate from the gas system is high in hydrocarbons. It is injected into the gas flare, where the hydrocarbons are destroyed.
 - In terms of electrical generating capacity, each turbine is rated at 3 MW. Each of the two IC engines is rated at 1.1 MW.
 - The future liquid natural gas plant will be sited adjacent to the IC engines, which will provide power to the plant.
 - Gas system condensate is piped from sumps 1 and 2 to low point at former flare site (tank S12) then to tank S19 in same general location, then is pumped to flare for destruction.
 - Regulations limit the number of wells off line to 5. Typically, there are 5 wells off line in order to allow space for landfill operations. Wells are continually being taken off & on line as refuse placement moves around the site.
 - Wells are checked for performance monthly; site walkovers (seeking escaping gas) are 1/4'ly.

Truck Traffic Counts, June 20, 2008, 6:45 to 8:45 AM

- The busiest one-hour period was from 6:47 through 7:46 AM. During this time 23 trucks were observed entering the landfill site. Two of these trucks were hauling material other than refuse, probably soil. The one-hour count of 21 refuse trucks is well below the permit limit of 50.

ALRRF Community Monitor Monthly Report

Observation of Environmental Controls

- Solidification operation operating normally, well contained.
- No bird activity near refuse; no noticeable insect activity at Livermore organic waste pile.
- No landfill gas or other strong odor noted.
- No slides, seeps, slumps or other indication of slope failure observed.
- Asbestos area fence appears intact
- No appreciable litter on or within view of Altamont Pass Road near the site.
- Litter fences appear to need cleaning but are still effective.
- Gas controls: One turbine, both IC engines, and the flare were operating.

Other Observations

- Some pallets and other clean wood in C&D pile.
- Landfill operations at working face proceeding normally; traffic light.

ALRRF Community Monitor Monthly Report

Reports Received

Monthly Tonnage Report for June 2008, dated July 10, 2008

Tonnage Summary:		<u>tons</u>
By Source Location		
1.1	Tons Disposed from Within Alameda County	62,341.78
1.2	Tons Disposed from City of San Francisco TS	36,704.04
1.3	Other Out of County Disposal Tons	<u>6,560.88</u>
	subtotal Disposed	105,606.70
By Source Type		
2.1	C&D	217.98
2.2	MSW	96,222.44
2.3	Special Wastes	<u>9,166.28</u>
	subtotal Disposed	105,606.70
	Difference Not Yet Reconciled	0.00 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	7,359.97
2.5	Revenue Generating Cover	30,174.13
	Total, 2.1 - 2.5	143,140.80
Materials of Interest		
2.3.1	Friable Asbestos	450.07
2.3.2	Class 2 Cover Soils	14,785.66
2.5.1	Auto Shredder Fluff	5,155.01
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	2,262.33

First Semiannual 2008 Groundwater Monitoring Report, dated July 10, 2008

Paraphrasing from cover letter:

VOC's detected in 2007-Q3 monitoring of well E-22 have not been detected at significant levels since that time.

Chloroform was found at E-18 in Q1 but not Q2.

Traces of organics continue to appear in well E-20B but trend is decreasing and future improvements to landfill gas system should remedy this.

No increasing trends for VOC's or inorganic parameters.

No violations during this monitoring period.

Nitrogen and ammonia compounds are being detected at low levels in the Vadose Zone monitoring well VZMA. This should be watched in the future.

A more detailed evaluation of this report is provided in item 6.7 of the September 25, 2008 CMC Meeting Agenda.

ALRRF Community Monitor Monthly Report

Reports Received (cont'd)

2007-2008 Annual Report for Stormwater Discharges, dated June 24, 2008

- Two samples of stormwater are generally required each wet season, but only one sample was taken in this wet season. Due to generally dry weather there were only two storm / discharge events that satisfied sampling criteria in the entire rainy season, and one of those took place on a Saturday night when sampling apparently could not be done.
- Discharges from Basin B had elevated inorganics (metals) concentrations, and extremely high Total Suspended Solids. The report concludes that additional stormwater Best Management Practices BMP's will need to be implemented prior to October 15. Certain BMP's are specified in the report.

Site Visit(s)

Site Inspection July 21, 2008, 10 AM to noon

- Attended by Kelly Runyon and Eva Chu, L.E.A.
- Escorted by Neal Wise and Tianna Nourot
- Inspection was unannounced. It was a routine inspection with no special emphasis.
- Review of the Log of Special Occurrences noted several fires on site in June and July.
 - These fires were extinguished by on-site staff, very quickly in most cases.
 - All fires were extinguished in the same day that they were found.
 - One fire in July had no obvious cause but landfill gas was thought to be a contributing factor.
 - Adjustments were made to nearby gas extraction equipment and the fire has not recurred.
- An end-dump vehicle containing auto shredder fluff had tipped over earlier in the day and was being righted as our inspection took place.

Truck Traffic Counts did not take place in July

ALRRF Community Monitor Monthly Report

Observation of Environmental Controls

- Solidification operation operating normally, well contained.
- No bird activity near refuse; no noticeable insect activity at Livermore organic waste pile.
- No landfill gas or other strong odor noted.
- No slides, seeps, slumps or other indication of slope failure observed.
- Asbestos area fence appears intact
- No appreciable litter on or within view of Altamont Pass Road near the site.
- Litter fences appear to need cleaning but are still effective.
- Gas controls: Both turbines, both IC engines, and the flare were operating.

Other Observations

- Landfill operations at working face proceeding normally.
- No Class 2 materials were seen in the Class 3 portion of the site.

ALRRF Community Monitor Monthly Report

Reports Received

Monthly Tonnage Report for July 2008, dated August 11, 2008

Tonnage Summary:

	<u>tons</u>	
By Source Location		
1.1	58,736.76	Tons Disposed from Within Alameda County
1.2	41,015.69	Tons Disposed from City of San Francisco TS
1.3	5,103.15	Other Out of County Disposal Tons
	<u>104,855.60</u>	subtotal Disposed
By Source Type		
2.1	239.36	C&D
2.2	97,999.22	MSW
2.3	6,617.02	Special Wastes
	<u>104,855.60</u>	subtotal Disposed
	0.00	Difference Not Yet Reconciled
	0.00%	
Other Major Categories		
2.4	7,424.31	Re-Directed Wastes (Shipped Off Site or Beneficially Used)
2.5	27,719.71	Revenue Generating Cover
	<u>139,999.62</u>	Total, 2.1 - 2.5
Materials of Interest		
2.3.1	848.07	Friable Asbestos
2.3.2	12,007.08	Class 2 Cover Soils
2.5.1	4,610.53	Auto Shredder Fluff
2.5.2	2,410.93	Processed Green Waste/MRF fines, Beneficial Use (GSET)

ALRRF Community Monitor Monthly Report

Site Visit(s)

Site Inspection August 15, 5:30 to 8:30 AM

- Attended by Kelly Runyon
- Escorted by Neal Wise
- Emphasis was on transition in operations from night mode (refuse transfer only) to day mode.
- Observations:
 - Although signage for customers is minimal, there was no evidence of confusion among customers regarding how to find their destination.
 - Roadway widths and road conditions on the unpaved landfill were adequate for traffic.
 - Separate unloading area for transfer trucks helps reduce confusion at the public unloading area.
 - Spotters were present to maintain safe unloading in proximity to end-dump vehicles.
 - Repair work is under way for some slope and drainage problems that became apparent in late 2007 / early 2008. These areas are not close to current waste receiving activity.
 1. Downdrains on south side of site (alongside road leading to turbine / flare plant).
 2. Slope below leachate treatment plant.
 3. Slope and culverts leading to stormwater basin B.
- Review of LEA inspection reports indicated that recent checks of on-site landfill gas probes found gas levels exceeding regulatory limits. However, the probes are located well within the landfill boundary, not at the point of compliance (which is the boundary). Waste Management is addressing this issue concurrently with its plan for compliance with new State landfill gas regulations, which require that sites submit gas monitoring plans by September 21, 2008. Those plans are expected to take full effect by the end of 2009.
- Review of Log of Special Occurrences found an issue on Aug 14 with an asbestos load that was poorly wrapped prior to delivery; wrapping came undone during unloading. The load was immediately covered and the incident was reported in writing to the BAAQMD and the LEA.

Truck Traffic Counts, August 15, 2008, 6:45 to 8:45 AM

- The busiest one-hour period was from 6:54 through 7:53 AM. During this time 31 trucks were observed entering the landfill site. Three of these trucks were hauling material other than refuse. The one-hour count of 28 refuse trucks is well below the permit limit of 50.

ALRRF Community Monitor Monthly Report

Observation of Environmental Controls

- Solidification operation not active on Fridays.
- Minimal bird activity near refuse; no noticeable insect activity at Livermore organic waste pile.
- No landfill gas or other strong odor noted.
- No slides, seeps, slumps or other indication of slope failure observed.
- Asbestos area fence appeared intact. Asbestos area not active on Fridays.
- Minor amount of litter next to Altamont Pass Road to the east of the site. To the west, road-side litter had been bagged and was awaiting pickup.
- Litter fences appear be effective but some litter visible on steep slope above landfill entrance, as refuse is being placed in that vicinity and wind from northeast carry litter in that direction. There are no litter fences along that edge of the site, nor is there enough space to install them. Workers were seen removing litter from this area, which is well within the site perimeter.

Other Observations

- Landfill operations at working face were proceeding normally.
- No Class 2 materials were seen in the Class 3 portion of the site.

ALRRF Community Monitor Monthly Report

September 2008

Reports Received

Monthly Tonnage Report for August 2008, dated September 11, 2008

Tonnage Summary:		<u>tons</u>
By Source Location		
1.1	Tons Disposed from Within Alameda County	54,063.72
1.2	Tons Disposed from City of San Francisco TS	36,865.82
1.3	Other Out of County Disposal Tons	<u>6,474.31</u>
	subtotal Disposed	97,403.85
By Source Type		
2.1	C&D	335.04
2.2	MSW	88,854.48
2.3	Special Wastes	<u>8,214.33</u>
	subtotal Disposed	97,403.85
	Difference Not Yet Reconciled	0.00 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	6,557.02
2.5	Revenue Generating Cover	41,702.76
	Total, 2.1 - 2.5	145,663.63
Materials of Interest		
2.3.1	Friable Asbestos	948.32
2.3.2	Class 2 Cover Soils	26,442.42
2.5.1	Auto Shredder Fluff	3,540.22
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	2,589.68

ALRRF Community Monitor Monthly Report

September 2008

Site Visit(s)

Site Inspection September 8, 2008, 10 AM to 11:30 AM

- Attended by Kelly Runyon and Eva Chu, Alameda County Dept of Environmental Health
- Escorted by Tianna Nourot
- Routine inspection observing all aspects of refuse receiving and handling
- In asbestos area, two loose bags of asbestos-containing material had blown away from their original location. They were at the bottom of the adjacent slope, against (but within) the asbestos area perimeter fence. They were undamaged. Landfill personnel stated that they would be promptly retrieved.
- Solidification area had no customers during this inspection.
- In the area reserved for green waste from Dublin / San Ramon, a tub grinder was processing the green waste material.
- On the upper level of the landfill, along the north side, preparation of winter pad areas was under way. Concrete was being crushed and rebar was being removed, to be recycled as scrap metal.
- Refuse fill was occurring along the south side of the landfill, in a relatively narrow band, with separate unloading areas for transfer trucks and the general public.
- Private customer (not franchised hauler) was unloading C&D waste into C&D stockpile. This practice is uncommon; if it increases it will increase local diversion of wastes.

Truck Traffic Counts September 25, 2008, 6:45 to 8:45 AM

- The busiest one-hour period was from 7:27 through 8:26 AM. During this time 26 trucks were observed entering the landfill site. At least two of these trucks were hauling material other than refuse. The one-hour count of no more than 24 refuse trucks is below the permit limit of 50.

ALRRF Community Monitor Monthly Report

September 2008

Observation of Environmental Controls

- Locations of the landfill gas probes that had exhibited high gas concentrations were identified.
- No bird activity near refuse; no noticeable insect activity on site.
- No landfill gas odor noted. Biosolids odor was apparent near the public unloading area.
- No slides, seeps, slumps or other indication of slope failure observed.
- Asbestos area fence was intact.
- No appreciable litter on or within view of Altamont Pass Road near the site.
- Litter fences within the site had recently been cleaned. Litter was present beyond the fences but was being picked up by workers.
- Litter was visible on the S face of the closed portion of the landfill, but it was being collected.
- Gas controls: Both turbines, both IC engines, and the flare were operating.
- Gas probe locations were noted for future reference.

Other Observations

- Landfill operations at working face were proceeding normally; traffic was light.
- No Class 2 materials were seen in the Class 3 portion of the site.

ALRRF Community Monitor Monthly Report

October 2008

Reports Received

Monthly Tonnage Report for Seprtember 2008, dated October 9, 2008

Tonnage Summary:		<u>tons</u>
By Source Location		
1.1	Tons Disposed from Within Alameda County	57,362.77
1.2	Tons Disposed from City of San Francisco TS	38,179.60
1.3	Other Out of County Disposal Tons	<u>6,080.68</u>
	subtotal Disposed	101,623.05
By Source Type		
2.1	C&D	314.82
2.2	MSW	92,718.21
2.3	Special Wastes	<u>8,590.00</u>
	subtotal Disposed	101,623.03
	Difference Not Yet Reconciled	-0.02 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	8,030.26
2.5	Revenue Generating Cover	32,474.75
	Total, 2.1 - 2.5	142,128.04
Materials of Interest		
2.3.1	Friable Asbestos	851.26
2.3.2	Class 2 Cover Soils	17,053.93
2.5.1	Auto Shredder Fluff	2,328.53
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	2,242.15

Site Visit(s)Site Inspection October 16, 2008, 9 AM to 11 AM

- Attended by Kelly Runyon; inspection was unannounced.
- Escorted by Tianna Nourot
- Routine inspection observing all aspects of refuse receiving and handling
- Also discussed and inspected preparations for wet weather
- Refuse fill was occurring along the south side of the landfill, in a relatively narrow band, with separate unloading areas for transfer trucks and the general public.
- Signs that direct vehicles to unloading areas are having color-coded stripes added, to reduce the likelihood of customers becoming lost or unloading in the wrong area.
- The solidification area had no customers during this inspection.

Wet Weather Preparations

- About 26 skids of straw wattle, for erosion control, were observed to be on hand.
- Many V-ditches have been cleaned out, others are in progress. Some will need shotcrete or gunite at their inlets; this has been planned but has not yet occurred.
- Stormwater detention basin 1 and its inlet have been thoroughly cleaned out and appear to have design capacity available. Other basins reportedly have also been cleaned & prepared.
- Mulch has been applied to some exposed soil surfaces along the steep slopes on the south-facing portion of the filled area. Some bare areas have mulch stockpiled above for placement in the near future.
- On the upper level of the landfill, along the north side, preparation of winter pad areas was nearly complete. Crushed concrete has been graded, and a topping layer of pulverized concrete has been placed and compacted for a smooth surface. No metal was seen protruding.
- Fill area will relocate and change orientation in the near future, and will build out from the winter pad, extending southward. Spare concrete rubble is stored at the north end of the
- C&D areas, solidification, and green waste areas will be moved in the near future to make areas that have been prepared for wet weather.
- Regrading of slopes above Basin B, and replacement of culvret, is nearly complete.

Truck Traffic Counts October 16, 2008, 6:45 to 8:45 AM

- The busiest one-hour period was from 7:45 through 8:44 AM. During this time 22 trucks were observed entering the landfill site. At least 6 of these trucks were hauling material other than refuse. The one-hour count of no more than 16 refuse trucks is below the permit limit of 50.

Observation of Environmental Controls

- Substantial seagull activity on the top deck and active areas of the landfill; propane cannons were in use throughout the inspection.
- No slides, seeps, slumps or other indication of slope failure were observed.
- Asbestos area fence was intact.
- Minor amounts of litter were on the shoulder of Altamont Pass Road near the site.
- Litter fences within the site had recently been cleaned. Litter was present beyond the fences but was being picked up by workers.
- Gas controls: Both turbines, and the flare were operating, but neither IC engine was operating. The IC engines appeared to be under repair.
- In reviewing LEA inspection reports, the need for a revised gas monitoring workplan was noted as an "Area of Concern" by the LEA in late September and early October. However the most recent LEA inspection report had no Areas of Concern.
- It was reported that landfill gas probe #14 was recently destroyed during the construction of stormwater control improvements. A new plan for probes surrounding all of the current and future fill areas has been submitted to the LEA / CIWMB and is under review.

Other Observations

- Landfill operations at working face were proceeding normally; traffic was light.
- No Class 2 materials were seen in the Class 3 portion of the site.
- There were no new entries in the Special Occurrences Log since the previous inspection.

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225 Bush Street
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415.896.5900 phone
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memorandum

date October 23, 2008

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 11/5/08 - Agenda Item 6.8 - Update on Groundwater Monitoring and Class II Soil Testing Documents

At the March 12, 2008 Community Monitor Committee meeting, Committee Member Cabanne expressed several concerns regarding groundwater quality and groundwater monitoring at the Altamont Landfill and Resource Recovery Facility (ALRRF). Treadwell and Rollo, part of the Community Monitor team, began looking into these concerns and have continued to pursue them, in addition to reviewing the Semiannual Groundwater Monitoring Report for the first half of 2008. Their findings are attached and are summarized below.

In addition, Treadwell and Rollo staff has begun a thorough examination of the “testing data and source information submitted to WMAC... with regard to the acceptance of soil at the ALRRF.”¹ Initial findings are attached.

Summary of Treadwell & Rollo Groundwater Analysis Memorandum dated 26 August 2008

Groundwater monitoring activities and findings were in compliance with the Regional Water Board’s permit for the ALRRF during the first half of 2008.

The monitoring well sampling methods used at the ALRRF appear to comply with permit requirements. Traditional “high flow” sampling methods apparently are impractical because the wells recharge quite slowly, so some low flow sampling techniques are used; but the ASTM² standard for low-flow sampling is not applied (nor is it required). The ALRRF uses an internal guidance document, the *Proposed Title 27 Detection Monitoring Program for the Existing Fill Area 1 and Proposed Expansion Area*, dated June 1998 (“1998 Monitoring Program”). Water is slowly withdrawn from a well and several parameters (pH, temperature, etc.) are monitored; when those parameters are steady, samples are taken.

¹ Settlement Agreement, Paragraph 5.7.9.

² American Society for Testing and Materials. ASTM-D-6771-02, Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Groundwater Quality Investigations

To the best of our knowledge no violations of permit requirements are occurring, but we have concerns about several aspects of current groundwater monitoring techniques:

- During purging, water depth is not monitored. Ideally, it would be monitored and pumping rate would be adjusted for minimal drawdown, to prevent turbulence that can affect VOC sampling results.
- Purging rates are generally higher than those recommended in the ASTM standard; this may lower the VOC concentrations in samples.
- The 1998 Monitoring Program calls for the last four sets of field parameter measurements to be recorded, but in most cases, only the last three sets have been recorded.
- State guidance for sampling³ specifies that one casing volume should be removed prior to purging and also that one casing volume should be removed after sampling is complete. All of the purge logs from the 1st and 2nd Quarters of 2008 document that approximately one casing volume was purged *during* stabilization of field parameters, but there is no documentation in the purge logs about whether one casing volume was removed *prior* to purging for stabilization of field parameters, and there was also no documentation about whether one casing volume was purged *after* sampling. We are not aware of a document that shows Water Board approval of this variation from the SPRR.

In 2008, Vadose zone⁴ monitoring well VZMA contained the highest concentrations of ammonia and Total Kjeldahl Nitrogen since monitoring of VZMA began in 2001. Concentrations of ammonia and TKN should be monitored during subsequent sampling events to evaluate potential increasing trends. Under some circumstances, these compounds can indicate the presence of landfill leachate.

³ Standard Provisions and Reporting Requirements for Title 27 and Part 258, dated August 1997.

⁴ The unsaturated zone above the water table, where the soil pores are only partially filled with water.



MEMORANDUM

TO: Kelly Runyon, ESA

FROM: Jeremy Gekov, Senior Staff Geologist
Matthew Hall, PE, Senior Project Engineer

DATE: 26 August 2008

PROJECT: Altamont Landfill (ALRRF)
Livermore, California
4774.01

SUBJECT: Groundwater Analysis for Community Monitor Progress Report #2 No. of Pages: 6

Treadwell & Rollo, Inc. (Treadwell & Rollo) has reviewed hydrogeologic data for the Altamont Landfill and Resource Recovery Facility in Livermore, California (ALRRF). Treadwell & Rollo performed the following tasks:

- Reviewed *First Semiannual Groundwater Monitoring Report for the Altamont Landfill and Resource Recovery Facility* by SCS Engineers in 2008
- Reviewed "WDRs": *Waste Discharge Requirements* (R5-2002-0119) issued by the State Water Resources Control Board (SWRCB) for requirements concerning purge rate limits for low-flow groundwater sampling
- Reviewed "SPRR's": *Standard Provisions and Reporting Requirements for Title 27 and Part 258*, dated August 1997
- Performed research concerning purge rate limits for low-flow groundwater sampling
- Purchased and reviewed ASTM-D-6771-02, *Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Groundwater Quality Investigations*
- Reviewed purging and sampling methods outlined in "1996 Monitoring Plan": *Site-Specific Groundwater Monitoring Plan, Altamont landfill and Resource Recovery Facility*, dated June 1996 (RUST Environment & Infrastructure)
- Reviewed "1998 Monitoring Program": *Proposed Title 27 Detection Monitoring Program for the Existing Fill Area 1 and Proposed Expansion Area*, dated June 1998 (RUST Environment & Infrastructure) ALRRF staff have indicated that this is the current guidance document for groundwater monitoring. The WDRs do not cite this document, and their guidance is more general.

The following memorandum describes the results of the above tasks and provides our opinions and recommendations for the Community Monitor Committee (CMC).

Groundwater monitoring activities and findings as required by the WDR's were generally found to be in compliance during the 1st and 2nd Quarters of 2008. In addition, these reports were reviewed for issues described in previous meeting minutes and for potential trends in groundwater analytical data over recent years.

Groundwater Monitoring and Quality

Typical ("traditional") groundwater sampling methods include the removal of three casing volumes of water before sampling to ensure the removal of standing water, and to establish a differential for inflow of formation water through the well screen. Purging is usually performed using a bailer or down-hole purge-pump. Water quality indicator parameters are measured and documented at sequential time



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intervals during purging to verify that field parameters have stabilized and that formation water has entered the well casing. Sampling is performed after three casing volumes have been purged and field parameters have stabilized. A groundwater sample is usually collected with a bailer.

Low-flow sampling is different from traditional sampling in the following ways:

- Does not require purging of three casing volumes;
- Purging is usually performed utilizing a peristaltic pump or gas bladder pump at a rate lower than that used during traditional purge and sample methods;
- Field parameters are continuously monitored
- Sample bottles are filled at a low flow rate to minimize turbulence and potential volatilization of VOCs.

The 1998 Monitoring Program does not stipulate low-flow sampling. It is an internal guidance document that specifies a site-specific purge and sample protocol that considers the low well-recharge rates at the ALRRF.

Field Parameter Stabilization Concerns

Groundwater can remain within monitoring wells between sampling events and may not be representative of groundwater in nearby rock and soil (formation water). To ensure samples are representative of formation water, wells are purged before sampling. To verify that formation water has fully entered the well, water-quality indicator parameters (field parameters) such as pH, specific conductance, dissolved oxygen (DO), and oxygen-reduction (redox) potential are measured at select time-intervals, or continuously, until values stabilize.

The field parameters listed in the 1998 Monitoring Program are pH, specific conductance, temperature, and turbidity. The Monitoring Program outlines procedures as follows:

1. One casing volume will be removed using a dedicated down-hole Wizard™ pump prior to purging for stabilization of field parameters.
2. A flow-cell will be connected to the pump effluent port and a volume (of water) sufficient to produce stabilized field parameter values will be purged. Field parameters will be considered stabilized after sequential readings show a change of ± 0.2 for pH, ± 1.0 degree Celsius ($^{\circ}\text{C}$), a percent difference of $\pm 5\%$ for specific conductance, and turbidity is within ± 10 NTU (or lowest attainable value) after 30 minutes.
3. The last four sequential pH and specific conductance measurements taken during the well purging and the last temperature and turbidity measurements taken prior to sample collection are to be recorded on the purge logs.
4. After sampling, one casing volume will be evacuated from the well (this is a requirement from the SPRR).

Jeremy Gekov of Treadwell & Rollo reviewed all Field Information Forms (purge logs) from the 1st and 2nd Quarter 2008 groundwater monitoring events to evaluate whether sequential field parameter measurements were collected and whether they stabilized before sampling. At least three sequential measurements were observed on each purge log, with the exception of the 10 April 2008 E-21 purge log,



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which is missing the second interval value for specific conductance, although this is not a great concern because the initial and final specific conductance values were within $\pm 5\%$.

Discrepancies between Past/Current Practices and 1998 Monitoring Program

The 1998 Monitoring Program states that the last four sequential field parameter measurements taken during purging are to be recorded on the purge logs. This protocol was not followed during the first and second quarter monitoring events of 2008; only one purge log (E-20B of 1st Quarter 2008) contains documentation of four sequential field parameter measurements.

The SPRR specifies that one casing volume should be removed prior to purging for stabilization of field parameters and also that one casing volume should be removed after sampling is complete. All of the purge logs from the 1st and 2nd Quarters of 2008 document that approximately one casing volume was purged *during* stabilization of field parameters, but there is no documentation in the purge logs about whether one casing volume was removed *prior* to purging for stabilization of field parameters, and there was also no documentation about whether one casing volume was purged *after* sampling. We are not aware of a document that shows Water Board approval of this variation from the SPRR.

Sampling Frequency: Discrepancy between 1998 Monitoring Program and WDR's

The sampling frequency for Groundwater, Leachate, and Vadose Zone wells is listed as "semi-annually" in the 1998 Monitoring Program Table 8-4, but in Table 1 of the WDR's the required frequency is "quarterly". ALRRF is currently sampling these wells quarterly as stipulated in the WDR's.

Concerns about Purge Rate Limits and Volatilization of VOCs

Before discussing the specifics of low-flow purging, it is important to note that the approved 1998 Monitoring Program does not include instructions requiring methods specific to low-flow purging and sampling procedures, nor do the WDR's require low-flow purging. However, low-flow purging and sampling is often used in monitoring wells with low recharge rates to more accurately represent the concentrations of VOCs.

Review of ASTM D-6771-02

According to ASTM D-6771-02, low-flow purging involves pumping the well at a low enough flow rate to maintain minimal drawdown of the water column within the well as determined through water-level measurement during pumping. Pumping at low rates, in effect, hydraulically isolates the column of water in the well and negates the need for its removal prior to sample collection.

- Minimal drawdown of the water column while purging indicates that recharge is approximately equal to the purge rate. Purge logs from previous monitoring events at ALRRF do not indicate that water levels were continuously measured to verify minimal drawdown of the water column during purging and sampling, *but this is not a requirement according to the 1998 Monitoring Program.*

Typically, flow rates on the order of 0.1 to 0.5 liters per minute (L/min) are used; however, this is dependent on site-specific and well-specific factors. Some very coarse textured formations have been successfully purged and sampled in this manner at flow rates up to 1 L/min. Pumping water levels in the well and water-quality indicator parameters (such as pH, temperature, specific conductance, DO, and



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 ESA
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redox potential) should be monitored during pumping, with stabilization indicating that purging is completed and sampling can begin.

To determine the appropriate pumping rate for any given well, the following procedure is recommended. After the pump intake is properly set in the well, the pump should be started at a low pumping rate, generally 100 milliliters per minute (mL/min) or less. For pumps that cannot achieve a flow rate this low, start the pump at the lowest flow rate possible. From the time the pump is started, the water level in the well should be measured to determine the amount of drawdown caused by pumping. The pumping rate should be lowered until drawdown decreases and stabilizes. If drawdown is very slow or imperceptible, the pumping rate may be raised slowly and adjusted to the point at which drawdown stabilizes.

Previous CMC concerns about the sampling purge-rates were based upon the potential for lower reported concentrations of volatile organic compounds (VOCs) due to volatilization from the purge rate being too great. The purge rates documented in the purge logs from the 1st and 2nd Quarter 2008 sampling events range from 570 to 950 mL/min. *According to ASTM D-6771-02, sampling rate for VOCs should generally be less than 250 mL/min in order to minimize volatilization of VOCs.*

Method Detection Limit (MDL) vs. Reporting Limit (RL)

An MDL is the minimum concentration of a compound that can be measured and reported with 99% confidence that the value is above zero. In other words, laboratories reporting at the detection limit are 99% certain the compound is present in the sample, but the quantity is statistically estimated.

The RL is defined as the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. The RL is often determined by multiplying the MDL by some factor which may be decided upon by the particular laboratory. The RL is supposed to represent the level where reliable quantitative information is routinely reported.

1st and 2nd Quarter 2008 Concentrations and Trends

Groundwater Wells

Monitoring well E-20B is the only well with VOCs (vinyl chloride) detected above background concentrations in groundwater. SCS Engineers stated that the vinyl chloride detected in groundwater is from the elevated concentrations in the vadose zone (soil gas) and not from a groundwater source. The RWQCB has concurred with the assessment and mandated that ALRRF increase the amount of soil vapor extraction (methane recovery system) to reduce the concentrations of vinyl chloride in soil gas and groundwater. The vinyl chloride concentration in well E-20B decreased from 2.9 micrograms per liter ($\mu\text{g/L}$) in the 2nd Quarter 2007, to 0.87 $\mu\text{g/L}$ in the 3rd Quarter of 2007, to below laboratory detection limits (less than 0.5 $\mu\text{g/L}$) in the 4th Quarter 2007 and 1st Quarter 2008. The concentration increased slightly to 1.5 $\mu\text{g/L}$ during the 2nd Quarter 2008, but is consistent with historical levels.

During the 1st Quarter 2008, well E-18 contained 30 $\mu\text{g/L}$ chloroform, which exceeds the RL of 5 $\mu\text{g/L}$. Verification sampling was performed during the 2nd Quarter 2008 and chloroform was not detected above the laboratory reporting limit in the primary or duplicate samples from this well.

Vadose Zone Inorganic Concentrations

Vadose zone monitoring well VZMA contained 3.2 milligrams per liter (mg/L) ammonia as nitrogen (ammonia) and 7.6 mg/L Total Kjeldahl Nitrogen (TKN) during the 2nd Quarter 2008 monitoring event.



Kelly Runyon
 ESA
 26 August 2008
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Although still relatively low, these are the greatest concentrations since monitoring of VZMA began in 2001. Concentrations of ammonia and TKN should be monitored during subsequent sampling events to evaluate potential increasing trends. See table below:

Ammonia and TKN Analytical Results in Vadose Zone Monitoring well VZMA		
Date	Ammonia	TKN
15-Feb-06	0.034j	0.46j
9-Mar-06	0.15	0.4j
13-Jun-06	1.0	2.0
28-Sep-06	0.2	0.81
6-Dec-06	0.66	1.6
13-Feb-07	0.4	1.5
6-Jun-07	1.7	5.0
7-Sep-07	0.84	3.8
8-Nov-07	1.8	4.8
29-Feb-08	1.8	1.9
10-Apr-08	3.2	7.6

Notes:
 j = Concentration is estimated because it is below the reporting limit
 Concentrations reported in milligrams per liter

Vadose Zone VOC Concentrations

During the 1st Quarter 2008, 2-butanone was detected in well VZMA at a concentration of 40 µg/L. The concentration decreased to 5.2 µg/L during the 2nd Quarter 2008 sampling event. 2-butanone was not detected above the method detection limit (MDL) in the method or trip blank.

Acetone, 1,2-dichlorobenzene, and methylene chloride were not detected in VZMA at concentrations exceeding the RL. Trace values of the compounds were statistically estimated to exceed the MDL. Trace values of these compounds were estimated at concentrations exceeding MDLs in the method and/or trip blanks.

In the 2nd Quarter 2008 sample, three VOCs were detected in VZMA at concentrations above their respective RLs. These detections include 6.8 µg/L methylene chloride, 10 µg/L tetrahydrofuran, and 0.78 µg/L vinyl chloride. These detections were just slightly greater than the RLs and should be monitored during future events.



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ESA
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Trace Detections in Samples and Trip/Method Blanks

Trace concentrations that were detected in samples, and that were also detected in trip blanks or method blanks associated with these samples are often a result of laboratory cross-contamination. Jeremy Gekov, of Treadwell & Rollo discussed these trace detections with Betsy Sara, Test America Laboratory Project Manager for the ALRRF project, in a 20 August 2008 phone conversation. Jeremy asked Ms. Sara if she knew of the common laboratory contaminants and she provided the following list:

- Xylene, styrene, phthalates, iron, tin, zinc, copper, toluene, 2-butanone, acetone, and methylene chloride.

A trace value of 1,2 dichlorobenzene was detected in the 2nd Quarter 2008 laboratory method blank, which indicates laboratory cross-contamination. No corrective actions were taken by Test America Laboratory because the detected value was below the RL and was an estimated value.



MEMORANDUM

TO: Kelly Runyon, ESA

FROM: Jeremy Gekov, Senior Staff Geologist
Matthew Hall, PE, Senior Project Engineer

DATE: 26 August 2008

PROJECT: Altamont Landfill (ALRRF)
Livermore, California
4774.01

SUBJECT: Review of Class II Cover Soil Files

No. of Pages: 1

Review of Class II Cover Soil Files

On 26 June 2008, Matthew Hall of Treadwell & Rollo visited the ALRRF to review the files for Class II cover soil. Given the large quantity of files, one file was selected at random from each file drawer bin (24 total). Information documented from the files included: 1) File ID Number; 2) laboratory analyses and results; 3) description of the soil material; 4) whether or not additional deliveries were expected; and 5) frequency and total quantity expected.

The file ID number is a unique identifier assigned to each accepted profile. The analytical results were compared to the Waste Management Acceptance Criteria dated 31 March 2004. The description, total quantity, and shipment frequency of the material was documented from the information stated on the waste profile sheet.

During the file review, one file (File ID No. 55473600) was discovered to be missing documentation, as follows. Based on the total chromium, vanadium, and mercury concentrations, additional Soluble Threshold Limit Concentration (STLC) testing was required for each analysis. A note was found in the file stating that STLC testing should be performed. Laboratory reports documenting the analyses were not located in the file. Treadwell & Rollo inquired about the missing documentation. ALRRF informed Treadwell & Rollo by telephone within the next few days that the STLC analytical result documentation was erroneously omitted from the files and the error has been corrected. During the next review, this file should be checked to verify that the STLC analytical results have been included. Otherwise, no significant findings or omissions were discovered during the file review.

A summary of the file review information is attached to this memo in Table 1.

The filing system that includes laboratory analytical reports for Class II cover soil was not set up with selective, independent review in mind. Procedures to efficiently review these files have been under discussion with ALRRF staff and the following review method has been agreed upon. We will review all existing Class II cover soil files maintained by ALRRF. Each file will be marked with a sticker to indicate the review has been performed. Periodic file reviews will occur in the future and new files will be identified and reviewed. We will conduct the full file review in September 2008.

ALTAMONT LANDFILL FILE REVIEW MATRIX
Class II Cover Files
Livermore, CA

	File ID number	Analyses performed? Analytical results meet Waste Criteria?	Description of Material	More deliveries coming?	Expected material to deliver in total (quarter/month/year)
1	55469000	Analyzed arsenic, lead, vanadium, TPH-d, TPH-mo. Meets acceptance criteria.	2,000 Tons of excavated soil for construction	No. One Event	Total. One Event
2	55422001	CAM-17 metals, TPH-g, TPH-d, TPH-mo, BTEX, & TPH. Meets acceptance criteria. B (ND), E (1,361ppb), T (1,295ppb), M-P-xylene (3,892ppb), O-xylene (1,208 ppb). Calculated total VOC = 7.76 ppm. No set concentration limits for VOC's, but must remain below BAAQMD permit daily limits.	Excavated soil near pump slump sludge from washing of heavy equipment	Yes.	On-going deliveries frequency and tonnage "To be determined."
3	55441300	VOCs, SVOCs, CAM-17, TPH-d, TPH-mo, O & G. Meets acceptance criteria.	25 Tons of soil and gravel excavated from around sewer lines	No. One Time	Total. One Event
4	55473600	CAM-17 (TTLC & TCLP). TTLC concentrations require STLC testing reg. for chromium and vanadium. Note in file saying needs STLC for chromium, vanadium & mercury. No documentation of STLC. TCLP performed. TCLP okay for all metals. Peggy Friddle called back a couple of days later to say that records found and put in file. Should verify during next review.	32 Tons of semi-solid sludge from fertilizer wash down. (Pond sludge.)	No. One Time	Total. One Event
5	55480800	CAM-17, TPH-g, TPH-d, TPH-mo, BTEX, Fish Bio Assay, TPH-waste oil (22,068 ppm) LC50 Bioassy >750 mg/L. Meets acceptance criteria.	25 Tons of soils from oil spill clean up at construction site	No. One Time	Total. One Event
6	55472900	Lead TTLC (63mg/kg), Lead STLC (3.2 mg/L) rejected at Tri-Cities	700 yd ³ of site grading and excavated soil from construction 90 - 95 % soil 5 -10% gravel	No. One Time	Total. One Event
7	55440500	TPH-g, TPH-d, TPH-mo, VOCs, CAM-17 Meets acceptance criteria.	"Soil borings"	Yes.	500 Tons/Year 20 yd ³ /Month
8	55485200	CAM-17 & organochlorine pesticides. Samples collected from nine locations. Two locations rejected from landfill for high pesticide concentrations.	150 Tons of soil with vegetative matter from agricultural activities	No.	Total. One Event
9	55451600	TPH-g/BTEX and Lead Meets acceptance criteria. Profile states only soil represented by sample will be accepted.	40 Tons of soil cuttings and well material from over drill	No.	Total. One Time
10	55488700	TPH-d, TPH-mo, TPH-g, BTEX/Luft 5 metals. One STLC analysis fails. TCLP was not detected. Meets acceptance criteria.	80 yd ³ of soil removed from abandoned fuel distribution line.	No.	Total. One Time
11	55479000	CAM-17, TPH-d, TPH-mo, VOCs, Fish Bioassay, STLC chromium and lead. Meets acceptance criteria. Bioassay or WET tests were performed, but not required.	Soil near washing equipment.	Yes.	10 yd ³ /Year
12	55461700	No testing, just includes MSDS.	16 Tons of water with latex emulsion. Part of shutdown of a jacket and sleeping bag filling operation.	No.	Total. One Time
13	55488300	TPH-d, BTEX and Oxygenates. Meets acceptance criteria. Explanation for no metals	180 yd ³ of soil/gravel fill from UST excavation	No.	Total. One Time
14	55492600	TPH-g/BTEX, TPH-d, CAM-17 STLC - Chromium, due to 59 mg/kg in TTLC scan. Meets acceptance criteria.	20 yd ³ of soil from waste oil tank removal.	No.	Total. One Time
15	55339401	Water/sediment sample for CAM-17, but results in mg/L *Note saying results are OK. Concentrations are below the STLC criteria.	80 Tons of water with suspended sediment from cleanout of drinking reservoir.	Yes.	20 Tons/Quarter
16	55137100	No Lab. MSDS shows flash point acceptable.	Bentonite, by-product of kitty litter production	Yes.	20yd ³ /Month (10,000 lb/ 2x Year)
17	55431400	CAM-17, TPH-d, TPH-mo, SVOC. Meets acceptance criteria.	300 yd ³ of waste soil for retrofit of installed equipment	Yes.	300 yd ³ Every Other Day For a Month
18	55488000	O & G, TPH-d, BTEX, TPH-g, VOCs, SVOCs, CAM-17. STLC performed for chromium. Meets acceptance criteria.	20 yd ³ of soil from diesel fuel spill	No.	Total. One Time
19	55484600	TPH-g, TPH-d, TPH-mo, VOCs, SVOCs, Luft-5 metals. Meets acceptance criteria.	20 yd ³ of soil cuttings from well installation at gas station	No.	Total. One Time
20	55458900	TPH-g, BTEX, Lead. Meets acceptance criteria.	1.5 yd ³ of soil from well installation	No.	Total. One Time
21	55476900	TPH-d, TPH-mo, TPH-g, BTEX, CAM-17. Meets acceptance criteria.	5 yd ³ Pea gravel from electrical trenching	No.	Total. One Time
22	55405700	Moisture content, CAM-17 (STLC/TCLP), BTEX, and MTBE. Meets acceptance criteria.	150 yd ³ Pond sediment	Yes.	150 yd ³ /Year
23	55405400	General Chemistry analysis (pH, cyanide, flash point, sulfide, corrosivity) TPH-g, TPH-d, VOCs, CAM-17, STLC Lead TTLC = 220 mg/kg, STLC = 4.25 mg/L onone sample pass. TCLP on really high lead samples - pass TTLC = 1,500 mg/kg, TCLP = 0.561 mg/L.	14.5 yd ³ Soil excavated to remediate lead	No.	Total. One Time
24	55225300	TPH-d, TPH-g, O & G, CAM-17. Meets acceptance criteria.	40 yd ³ of soil from "clean up"	Yes.	2 Times Per Quarter

TPH - Total petroleum hydrocarbons
 TPH-d - Total petroleum hydrocarbons as diesel
 TPH-mo - Total petroleum hydrocarbons as motor oil
 TPH-g - Total petroleum hydrocarbons as gasoline
 BTEX - Benzene, Toluene, Ethylbenzene, Xylene
 o, m, & p xylenes - ortho, meta, and para isomers of xylene.
 BAAQMD - Bay Area Air Quality Management District
 VOCs - Volatile organic compounds
 SVOCs - Semivolatile organic compounds
 O&G - Oil and Grease
 TTLC - Total Threshold Limit Concentration (mg/kg)
 STLC - Soluble Threshold Limit Concentration (mg/L).
 TCLP - Toxicity Characteristic Leaching Procedure (mg/L)
 CAM-17 - Suite of metals analysis including: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, and Zinc.
 LUFT-5 - Suite of metals analysis including: Cadmium, Chromium, Nickel, Lead, and Zinc.
 MTBE - Methyl Tert Butyl Ether