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VOTING MEMBERS

Laureen Turner City of Livermore

Karla Brown City of Pleasanton

Donna Cabanne Sierra Club

David Tam Northern California Recycling Association

<u>NON-VOTING</u> <u>MEMBERS</u>

Jamison Pfister, P.E. Waste Management Altamont Landfill and Resource Recovery Facility

Wing Suen Alameda County

Robert Cooper Altamont Landowners Against Rural Mismanagement (ALARM)

<u>STAFF</u>

Judy Erlandson City of Livermore Public Works Manager

COMMUNITY MONITOR COMMITTEE Altamont Landfill Settlement Agreement

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

AGENDA

DATE: Wednesday, October 8, 2014

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 (Minutes from July 9)
- 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 Question from Committee: LEA logging of litter complaints (LEA or ESA)
 - 6.2 Recent Actions by Regional Water Board (ESA)
 - 6.3 Reports from Community Monitor (ESA)
 - 6.4 Review of Reports Provided by ALRRF: Air Emissions Control, Groundwater Monitoring, (ESA)
 - 6.5 Topics for 2014 Annual Report (ESA)
 - 6.6 Scheduling Community Monitor Committee Meetings for 2015 (City)
 - 6.7 Stipend for Committee Members (Designated Members)

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 Monitor Committee meeting is tentatively scheduled to take place at 4:00 p.m. on **January 14, 2015** at 3500 Robertson Park Road, Livermore.

Informational Materials:

- · Community Monitor Roles and Responsibilities
- List of Acronyms
- Draft Minutes of July 9, 2014
- 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 AND28 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.

The Community Monitor Committee Agenda and Agenda Reports are prepared by City staff and are available for public review on the Thursday prior to the Community Monitor Committee meeting at the Maintenance Service Center, located at 3500 Robertson Park Road, Livermore. The Community Monitor Committee Agenda is available for public review at the Maintenance Service Center, 3500 Robertson Park Road, Livermore, and on the Community Monitor Committee web site, http://www.altamontcmc.org.

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 Roles and Responsibilities

Below is a summary of the duties and responsibilities of the Community Monitor Committee and related parties 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. The purpose of this document is to aid in determining if discussion items are within the scope of the Community Monitor Committee.

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 in 2015) 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).

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List of Acronyms

Below is a list of acronyms that may be used in discussion of waste disposal facilities. These have been posted on the CMC web site, together with a link to the CIWMB acronyms page: http://www.ciwmb.ca.gov/LEACentral/Acronyms/default.htm.

Updates will be provided as needed. This list was last revised on September 25, 2013; the most recent revisions are highlighted.

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

CDRRR - California Department of Resources Recycling and Recovery, or CalRecycle

CIWMB - California Integrated Waste Management Board (predecessor to CDRRR - see above)

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

FIT – Fine materials delivered to the ALRRF, measured by the ton.

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 (discontinued January 2010)

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

Water Quality Terminology

MCL – Maximum Contaminant Level – The legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act.

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

MEK - methyl ethyl ketone

MIBK - methyl isobutyl ketone

MTBE - methyl tertiary butyl ether, a gasoline additive

NMOC - Non-methane organic compounds

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

RL – reporting limit: in groundwater analysis, for a given substance and laboratory, the concentration above which there is a less than 1% likelihood of a false-negative measurement.

TCE - Trichloroethylene

TDS - total dissolved solids

TKN – total Kjeldahl nitrogen

TSS - Total Suspended Solids

VOC - volatile organic compounds

Documents

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

ColWMP - County Integrated Waste Management Plan

CUP - Conditional Use Permit

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

MMRP - Mitigation Monitoring and Reporting Program

RDSI - Report of Disposal Site Information

RWD - Report of Waste Discharge

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

SWPPP - Stormwater Pollution Prevention Plan

WDR - Waste Discharge Requirements (Water Board permit)

General Terms

ALRRF - Altamont Landfill and Resource Recovery Facility

ASP – Aerated Static Pile composting involves forming a pile of compostable materials and causing air to move through the pile so that the materials decompose aerobically.

BGS - below ground surface

BMP - Best Management Practice

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

ug/L - micrograms per liter, or parts per billion

PPE - personal protective equipment

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

RAC – Reclaimable Anaerobic Composter – a method developed by Waste Management, Inc., to place organic materials in an impervious containment, allow them to decompose anaerobically, and extract methane during this decomposition.

SCF – Standard cubic foot, a quantity of gas that would occupy one cubic foot if at a temperature of 60°F and a pressure of one atmosphere

SCFM – standard cubic feet per minute, the rate at which gas flows past a designated point or surface

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

TTLC – 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



COMMUNITY MONITOR COMMITTEE

Altamont Landfill Settlement Agreement

Minutes of July 9, 2014

DRAFT

1. Call to Order

Chairperson Turner called the meeting to order at 4:08 p.m.

2. Roll Call

Members Present: Laureen Turner; Karla Brown; David Tam; Wing Suen,

Alameda County Department of Environmental Health; Jamison Pfister, Waste Management Altamont Landfill and

Resource Recovery Facility (ALRRF)

Absent: Donna Cabanne, Sierra Club; Robert Cooper, Altamont

Landowners Against Rural Mismanagement

Others: Dan McIntyre, Livermore Public Works Director; Brian

Tarte, Waste Management

Staff: Judy Erlandson, City of Livermore Public Works

Department; and Kelly Runyon, ESA, Community Monitor

3. <u>Introductions</u>

Brian Tarte, a corporate trainee at Waste Management, introduced himself.

Committee Chairperson Turner reordered the agenda.

5. Open Forum

There was no Open Forum discussion.

- 6. Matters for Consideration
 - 6.1 Responses to Committee Members' Questions: Comparison of contamination levels; Monthly tonnage data; MRF fines. The Groundwater Quality topic was a continuation of the comparison of contamination levels in wells E-05, E-07 and E-20B. Mr. Runyon provided an explanation of the accuracy of groundwater concentration measurements in the parts-per-billion range at those wells, and added the data for the second half of 2013 to the graphs provided at a previous meeting. In discussion, he pointed out that the lab is certified by the State of California for these types of analyses.

Mr. Tam had asked what effect the additional tonnage from the Fremont transfer station had on overall refuse tonnage received. Mr. Runyon provided a graph and discussion of the increase, which was 12,000 – 13,000 tons per month at the beginning (mid 2010) and is 15,000 – 17,000 tons per month currently. Mr. Runyon also explained how the quarterly solid waste tonnage cap is graphed, and how it would be evaluated if the limit were to be approached.

At the previous meeting, Ms. Cabanne asked for an update on the acceptance of MRF fines as Alternative Daily Cover. Mr. Runyon advised the group that the LEA had accepted that recommendation. Ms. Suen added that CalRecycle had concurred, and the ALRRF is now preparing an amendment to its Report of Facility Information so that its permission to use this material, and the conditions governing its use, are explicitly stated in the facility's permit documents.

Committee Chairperson Turner reordered the agenda.

4. <u>Approval of Minutes</u>

The approval of minutes was moved by Ms. Brown and seconded by Mr. Tam. The motion passed 3 - 0.

6.2 Review of Reports From Community Monitor (ESA)

Mr. Runyon described the incident which came to light in May, regarding the February delivery of contaminated groundwater for solidification and disposal. Although the profile sheet for this material had stated that it was not a Federal or State hazardous waste, in late May a review of the data revealed that it contained the herbicide dinoseb at a concentration high enough to be considered a hazardous waste by Federal criteria. Mr. Pfister added that the ALRRF worked with the regulatory agencies to take samples and have them analyzed. One sample was taken from the mixed material and four additional samples were taken from the clay liner that covers the bottom and sides of the solidification basin.

Ms. Brown asked if the solidification process neutralizes the material. Mr. Pfister replied that solidification involves mixing a liquid with a dry material so that the resulting material is thick enough to move to the working face by truck and to spread during disposal operations.

Mr. Tam asked if the solidification involves evaporating the liquid or having it percolate down into the landfill. Mr. Pfister replied that the dry material mixes with the liquid and holds it during transport and spreading; and if some liquid moves downward through the landfill it will be captured by the liner, withdrawn, and used for dust control or recirculation; it would not leave the landfill. The

solidification basin itself is designed with a clay liner to prevent escape of the liquid during mixing and removal.

Ms. Suen mentioned that the USEPA had sent a letter to the State and local agencies involved, summarizing the situation and describing steps that have since been taken. She said that she will provide a copy to the Community Monitor.

Noting that windblown litter continues to be an issue, Mr. Tam mentioned that on his site visit (earlier the same day as the meeting) he was shown some new material that is being used to construct large portable screen panels for use near the truck unloading area. Mr. Pfister mentioned that the ALRRF continues to use several types of fencing, a crew of litter pickers, and mechanical devices including the "Trilo" to vacuum up litter on site. Ms. Suen mentioned that on Altamont Pass road west of the site, it appears that trucks carrying material to the landfill or returning after unloading are the primary source of roadside litter; but on the road east of the site, it is more likely that the source is the landfill itself. She also mentioned that she has worked with the Highway Patrol to observe traffic and cite trucks that are allowing litter to escape from their loads. Her observation is that trucks with solid tarps that tightly cover the top of the truck are the least likely to lose litter while traveling.

Mr. Tam asked the LEA and ALRRF if they log complaints from the public. Ms. Suen mentioned that her office keeps records of complaints on file. Mr. Pfister mentioned that the ALRRF does pro-active outreach with its neighbors, and he has not received any complaints during his tenure at the facility.

Returning to the report, Mr. Runyon mentioned that tonnage records have minor discrepancies from month to month

Ms. Brown asked about the use of water at the truck wash station, since there is a shortage currently. Mr. Pfister mentioned that the site uses some fresh water and some leachate for dust control.

6.3 2013 Annual Report

Mr. Runyon indicated a minor addition that has been made to the 2013 Annual Report, which is now considered final.

6.4 Stipend for Committee Members

Mr. Tam stated that he had assurance from Supervisor Scott Hagerty that the County could provide the requested stipend. Ms. Erlandson noted that the Committee will need to vote to accept the stipend, and a means of disbursement will need to be developed.

Ms. Brown made a motion that the stipend be accepted. Mr. Tam seconded the motion. The vote was 2 – 1 with Ms. Turner opposed; therefore the motion

failed since a majority of the full Committee is needed in order for a motion to pass. Ms. Turner, as the prevailing side, requested a revote at the next meeting.

7. Agenda Building

Items noted:

- Acceptance of the proposed stipend, possibly retroactive to a date to be determined.
- Logging of litter complaints by the LEA.
- Mr. Tam noted two news items related to disposal in the greater Bay Area region and provided copies of news articles, as well as a copy of the new flyer provided to interested persons visiting the ALRRF.

8. Adjournment

The meeting was adjourned at 5:12 p.m. The next meeting will be held on <u>Wednesday, October 8 at 4:00 p.m.</u> at the Livermore Maintenance Services Center at 3500 Robertson Park Road.



550 Kearny Street Suite 800 San Francisco, CA 94108 415.896.5900 phone 415.896.0332 fax

memorandum

date September 30, 2014

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 10/8/14 - Agenda Item 6.1 - Response to Committee Member's Question

During the July 9 Committee meeting, Mr. Tam and the LEA discussed the LEA's process for recording and tracking litter complaints. Near the end of the meeting, Committee members expressed interest in further information on this topic. After checking with Waste Management, email was used to explore the question, as shown below. The referenced page from the Solid Waste Facility Permit is on the following page.

From: Kelly Runyon

Sent: Wednesday, September 10, 2014 5:19 PM

To: 'Suen, Wing, Env. Health'

Cc: 'Pfister, Jamison'; Sanchez, Adrian; Nourot, Tianna; Nettz II, Marcus

Hello Wing –

At the end of the last Community Monitor Committee meeting, during Agenda Building, the Committee expressed interest in the logging of litter complaints by the LEA. So, I would like to respectfully suggest that you provide answers to these questions for the October 8 meeting:

- * Has the LEA's office received complaints about litter related to the ALRRF?
- * If so, how are they tracked, and how are they resolved?

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From: Suen, Wing, Env. Health [wing.suen@acgov.org]

Sent: Tuesday, September 16, 2014 9:23 AM

To: Kelly Runyon

Cc: Pfister, Jamison; Sanchez, Adrian; Nourot, Tianna; Nettz II, Marcus

hi Kelly,

Recently, LEA has not received litter complaints. If we receive a complaint, we'll log it in our database, conduct an investigation/inspection, and note it in the inspection report.

Referring to the box 16 (d), Self Monitoring on page 3 of SWFP, "Copies of all written complaints regarding this facility and the operator's actions taken to resolve these complaints", the operator shall follow. Its reporting frequency is on a quarterly basis.

SOLID WASTE FACILITY PERMIT

Facility Number:

01-AA-0009

16. Self Monitoring

The owner/operator shall submit all self monitoring programs to the Enforcement Agency within 30 days of the end of the reporting period

	Program Rej	porting Frequency
a.	The types and quantities (in tons) of waste, including separated or commingled recyclables, entering the facility per day.	Monthly*
b.	The number of refuse vehicles using the facility per day.	Monthly*
c.	Results of the hazardous waste load checking program, including the quantities and types of hazardous wastes, medical wastes or otherwise prohibited wastes found in the waste stream and the disposition of these materials.	Available on sit
d.	Copies of all written complaints regarding this facility and the operator's actions taken to resolve these complaints.	Quarterly*
e.	Results of the perimeter landfill gas migration monitoring program.	Quarterly*
f.	Remaining site capacity with aerial surveys.	Annual by June 3
g.	Annual mitigation monitoring program report.	Annually
h.	Type, source and quantity of alternative daily cover materials received.	Available on site
*All re	ports with monthly or quarterly frequency shall be due on the last day of the month following the reporting period.	



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memorandum

date September 30, 2014

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 10/8/14 - Agenda Item 6.2 - Recent Actions by Regional Water Board

Over the past several months, the Central Valley Regional Water Quality Control Board (Water Board) has taken several actions regarding the ALRRF. Each is described below, beginning with those that are fully resolved and concluding with those that are still in progress. Also, the memorandum from Langan Treadwell Rollo included in item 6.4 of this agenda discusses aspects of several of these items in more detail.

Groundwater Elevation Corrections – Water Board staff wrote a letter to ALRRF management on November 21, 2013 pointing out some apparent incorrect groundwater elevations recorded for one monitoring well, going back for an unstated amount of time. The ALRRF's consultant for this effort, SCS Engineers, reviewed the data and made corrections to the data and the groundwater elevation maps provided in prior reports, going back to the first quarter of 2012. Their December 30 letter also stated that "The overall flow direction of groundwater under Fill Area 1 remains consistent with earlier presented groundwater contour maps."

Monitoring of Valley Drain – The Valley Drain ("VD") sampling point receives liquids from beneath the Class 2 portion of Fill Area 1. The November 2013 letter pointed out that it was not monitored for two consecutive quarters in the first half of 2013 due to an inability to extract a sample, and the letter called for an evaluation of whether the sump was dry or the pump was inoperable. SCS Engineers' December 30 letter indicated that the sampling pump at VD was inoperable, so sampling was done by hand beginning with the fourth quarter of 2013.

Groundwater Monitoring Well E-20B – The Water Board's November 2013 letter also expressed concern that at least one of the VOC contaminants seen at well E-20B (tetrahydrofuran) is associated with leachate rather than landfill gas, and therefore landfill gas extraction may not be a complete solution to the contamination problems indicated at that well. ALRRF responded on February 4, 2014 with an updated evaluation of the situation at that well. This response, prepared by SCS Engineers, stated that "it remains our assessment that the source of VOC's in this well is landfill gas and not leachate" and proposed continuing the current monitoring protocol.

The Water Board replied in a May 23 letter that requested a revised Corrective Action Plan to address their concerns in more detail. The letter also called for replacement of LFG wells that had been decommissioned in the vicinity of well E-20B. The ALRRF provided a response on August 13 that proposed several additional measures, including several small-scale LFG wells in close proximity to well E-20B, more detailed monitoring, and an

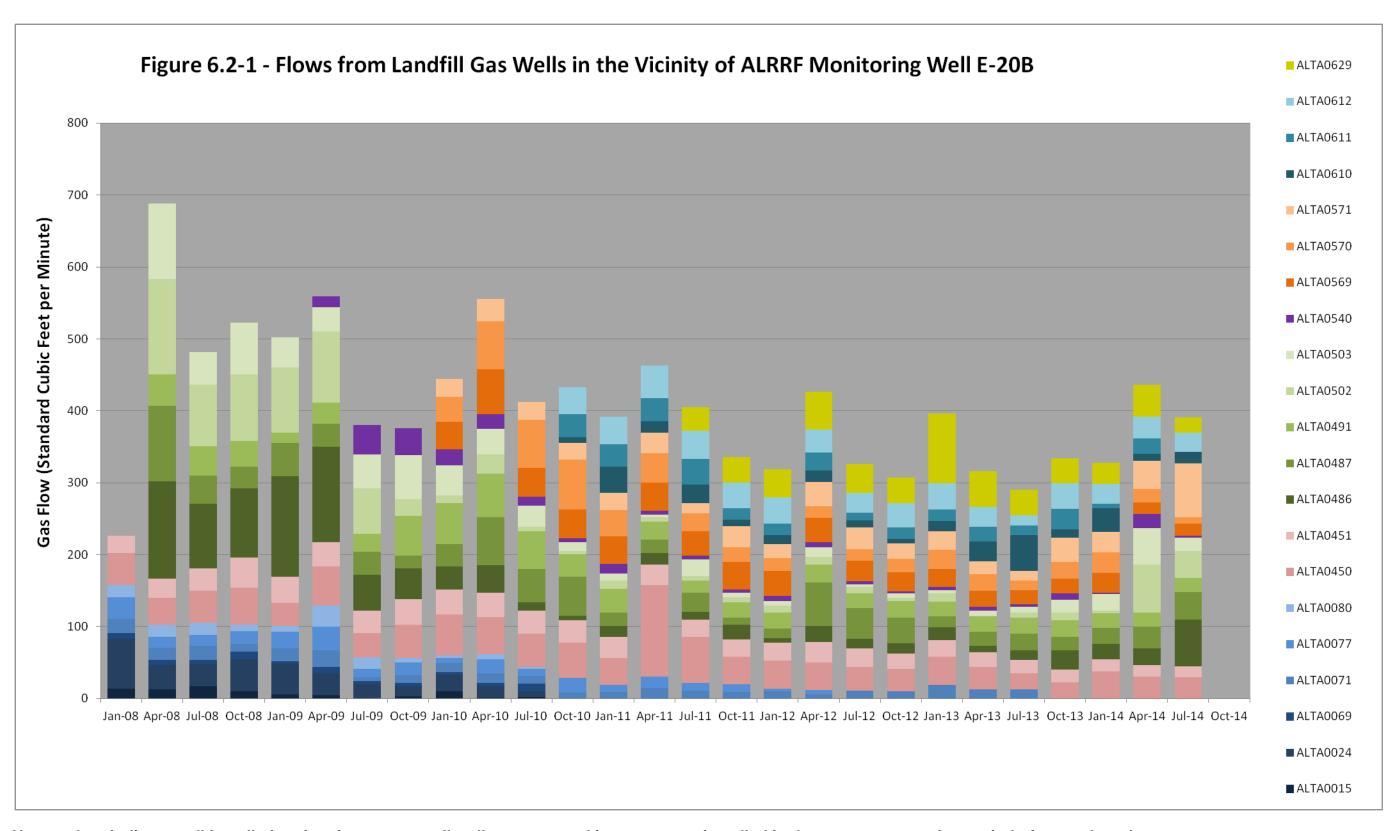
additional monitoring well to be installed at the first serviceable location downgradient of well E-20B. This response also included tables with landfill gas extraction data from each well in the vicinity of E-20B.

These data would indicate if there has been a change in landfill gas extraction over time in the vicinity of well E-20B. To understand if this is the case, we have graphed the flows from these wells over time, as shown in Figure 6.2-1 below. The month-by-month data for all active wells were sampled quarterly, to save time. The graph indicates some possible seasonal variation but gives no indication of a long-term declining (or increasing) trend in extracted gas volume, from mid 2010 to the present. The data also illustrate the highly variable performance of landfill gas wells on an active landfill, as well as the "aging" of some wells which leads to their eventual decommissioning.

At this time we do not know if the Water Board has accepted this proposed Corrective Action Plan.

Notice of Violation: Submittal of Plans for Fill Area 2 Excavation – The July 29, 2014 cover letter for the First Semiannual 2014 Groundwater Monitoring Report notes that the Water Board issued a Notice of Violation to the ALRRF after their November 15, 2013 inspection, for not submitting plans for Fill Area 2 grading work prior to commencing the work. The letter also notes that the ALRRF considered the rough grading to be distinct from the construction of the containment system; and it notes that ALRRF provided a written response on May 1 and met with Water Board staff on May 5 "to obtain greater clarity regarding the issue." ALRRF staff have since reported that "WM responded to all the Water Board's concerns in a formal letter and provided documents related to FA2; construction drawings, technical specifications, and CQA Plan." It is their understanding that this NOV is resolved.

Removal of Material Containing Dinoseb – The incident involving acceptance of contaminated groundwater containing dinoseb, to be blended for solidification, has been described previously. On August 1, 2014, the Water Board issued a Notice of Violation for Acceptance of Hazardous Waste to the ALRRF, with a requirement to remove the entire volume of that material by October 17, and provide a report describing the removal by November 14. The Notice also remarks that "Board staff will evaluate [ALRRF's] submittals in considering whether to propose issuance of an administrative civil liability complaint." We have seen no further correspondence on this matter, but our communication with ALRRF staff in recent site visits indicates that the site is planning to comply with these requirements.



Note: colors indicate well installation time frames, e.g., all wells represented in green were installed in the same construction period of several weeks.

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550 Kearny Street Suite 800 San Francisco, CA 94108 415.896.5900 phone 415.896.0332 fax

memorandum

date September 30, 2014

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 10/8/14 - Agenda Item 6.3- Reports from Community Monitor

Attached are our inspection reports for July through September of 2014.

The July inspection was announced and took place on July 23, after hours.

The August inspection was announced and took place on August 26.

The September inspection was announced and took place on September 17.

During these inspections, all landfill operating areas were observed. Recent LEA inspection reports were reviewed on-line, and the Special Occurrences Log was reviewed in detail on September 17.

In preparing these reports, issues that cause concern are marked with yellow rectangles in the monthly inspection reports. Windblown litter has been flagged in all three months, and an unusual detection of methane at a perimeter probe is noted in the September report..

Excavation work within Fill Area 2 appears to be largely complete, but work on the Fill Area 2 access road and the slopes north of Fill Area 2 is continuing.

Also attached are graphs showing monthly tonnages by type of material for the most recent 12-month period, as in prior reports. Figure 6.3-1 shows the breakdown of materials that make up Revenue-Generating Cover. Figure 6.3-2 shows these same quantities, plus the municipal solid waste tonnage on the lowest (and largest) part of each bar.

Reports Received

Monthly T	onnage Report for June 2014, received July 15, 2014		
Tonnage Summary:			
	Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	69,645.10	
1.2	Tons Disposed from City of San Francisco TS	29,102.73	
1.3	Other Out of County Disposal Tons	1,740.42	
	subtotal Disposed	100,488.25	
	Disposed, By Source Type		
2.1	C&D	177.04	
2.2	MSW	93,309.61	
2.3	Special Wastes	7,020.78	
	subtotal Disposed	100,507.43	
	Difference 19.18 tons logged as MSW was in fact sent to Davis St for recycling.	19.18	0.02%
	Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	26.51	
2.5	Revenue Generating Cover	32,012.29	
	Total, 2.1 - 2.5	132,546.23	
	Materials of Interest		
2.3.1	Friable Asbestos	650.44	
2.3.2	Class 2 Cover Soils	16,677.52	
2.5.1	Auto Shredder Fluff	12,796.74	
2.5.2	2.5.2 Processed Green Waste/MRF fines, Beneficial Use (GSET)		
2.5.3	MRF Fines for ADC	0.00	

Site Visits

Truck Count

□ The Community Monitor's semiannual truck count occurred on July 15, 6:45 to 8:45 AM. The Conditional Use Permit requirement (maximum of 50 refuse trucks per hour) was not exceeded. The maximum count during a one-hour period was approximately 25 refuse trucks. During the truck count, an arriving customer provided an unintentional demonstration of one way that film plastic escapes and litters along Altamont Pass Road; see photo below. The film plastic was being used to cover some materials, but the moving trailer created suction that pulled the plastic out over the top of the trailer. Fortunately, the driver noticed the problem and corrected it.



Site Inspection July 23, 2014, 7:30 PM to 8:45 PM

- ☐ Attended by K. Runyon. Escorted by Jamison Pfister. Announced.
- □ Filling with tippers continues southward on the east side of the landfill. Public area is separate, behind them (clean) contrasted with the area ahead of them (heavily littered).
- □ Two dozers operating, pushing from tippers downslope and to the west. Two compactors observed. Minor queuing of transfer trucks was occurring at the start of these observations but this cleared up as time passed. Both tippers were operating.
- □ No MRF fines stockpile seen.
- □ Both of the original solidification basins were in service.
- □ Plant debris and C&D stockpiles appeared normal. No prohibited materials were seen.

Observation of Environmental Controls

- □ Primary landfill gas devices (LNG plant, flare A-16, turbines) appear to be operating but it was not possible to determine the status of the IC engines.
- ☐ Bird deterrents were not in use. Very few birds were seen at the site. The gulls, in particular, must be roosting (or rafting) elsewhere for the night.
- Onsite litter continues to be an issue. Winds were mild in the early evening, but evidence of stronger wind was apparent from the amounts, and locations, of light plastic film litter.

Fill Area 2

☐ Excavation of the central part of the fill area appears to be nearly complete, with work focused on details at the sides and ends of the excavated area.

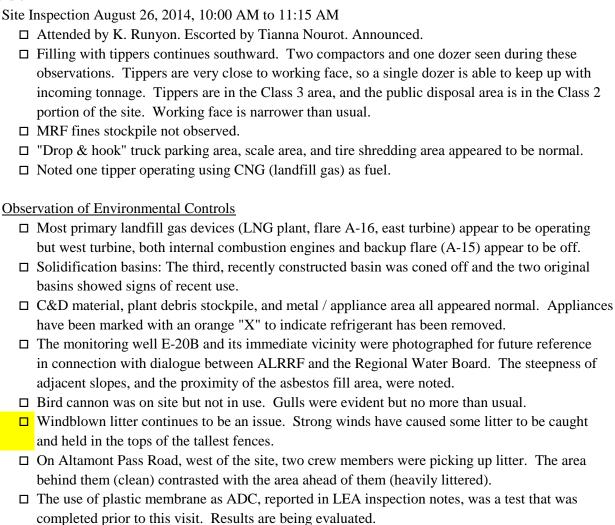
Stormwater Controls and Best Management Practices

- ☐ Basin A: same level as previous month. Basins B and C: dry. Truck wash overflow basin had some water, two to three feet.
- □ Ditches and drains appear normal for this time of year.
- □ Other than the gradual application of processed green material to outside slopes, no new stormwater BMP's appear to have been installed yet this year.

Reports Received

Monthly	Tonnag	e Report for July 2014, received August 15, 2014			
Tonnage Summary:				tons	
	Dispo	osed, By Source Location			
1	.1	Tons Disposed from Within Alameda County		66,821.35	
1	.2	Tons Disposed from City of San Francisco TS		31,355.75	
1	.3	Other Out of County Disposal Tons		1,806.62	
		SU	ubtotal Disposed	99,983.72	
	Dispo	osed, By Source Type			
2	.1	C&D		178.30	
2	.2	MSW		97,301.07	
2	.3	Special Wastes	_	2,504.35	
		SU	ubtotal Disposed	99,983.72	
Difference			0.00	0.00%	
	Other	Major Categories			
2	.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)		18.92	
2	.5	Revenue Generating Cover		53,244.95	
			Total, 2.1 - 2.5	153,247.59	
Materials of Interest					
2.3	.1	Friable Asbestos		818.51	
2.3	.2	Class 2 Cover Soils		34,225.59	
2.5	.1	Auto Shredder Fluff		13,440.29	
2.5	2.5.2 Processed Green Waste/MRF fines, Beneficial Use (GSET)		684.99		
2.5	.3	MRF Fines for ADC		1,480.99	

Site Visit



Fill Area 2

☐ The excavation of the refuse fill area appears to be complete. Earthwork is focused on the Fill Area 2 approach road and the area to the north of the refuse fill.

Valley Drain 2

□ To assist in understanding recent issued raised by the Regional Water Board, the location of the Valley Drain (VD) sampling point was directly observed. It is at the base of the south face of Fill Area 1.

Stormwater Controls and Best Management Practices

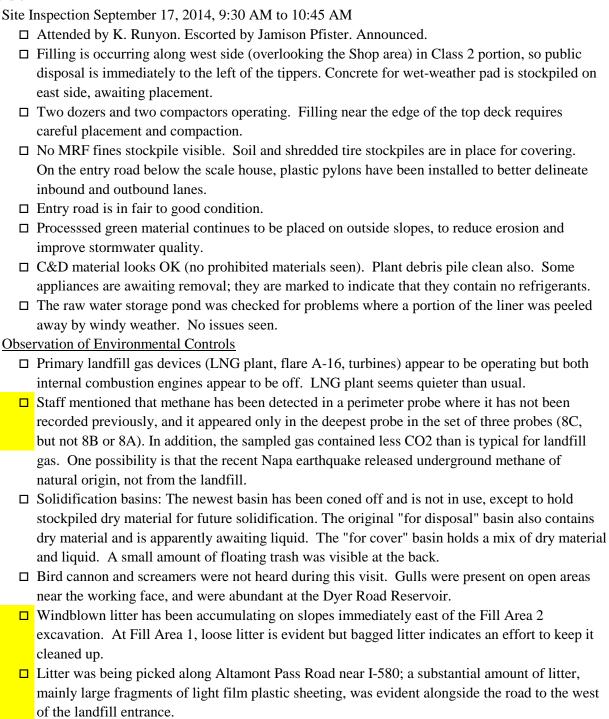
- □ Basin A: same level as previous month. Basin B is dry. The truck wash water holding basin is also dry. Basin C was not observed.
- □ Processed green material was being applied on west side, between shop and scale house, on outside slope of landfill.
- □ Wattle has been placed on southeast and southwest sides of Fill Area 1. Other stormwater related work such as cleaning out inlets has not yet been done.

September 2014

Reports Received

Tonnage Report for August 2014, received September 17, 2014	
inage Summary: tons	
Disposed, By Source Location	
1 Tons Disposed from Within Alameda County 67,112.89)
2 Tons Disposed from City of San Francisco TS 32,461.52	2
3 Other Out of County Disposal Tons 1,926.79)
subtotal Disposed 101,501.20)
Disposed, By Source Type	
1 C&D 265.80)
2 MSW 98,462.88	}
3 Special Wastes 2,772.52	<u>)</u>
subtotal Disposed 101,501.20)
Difference 0.00	0.00%
Other Major Categories	
4 Re-Directed Wastes (Shipped Off Site or Beneficially Used) 36.56	5
5 Revenue Generating Cover 47,564.64	1
Total, 2.1 - 2.5 149,102.40)
Materials of Interest	
Friable Asbestos 907.72	2
2 Class 2 Cover Soils 17,969.23	}
1 Auto Shredder Fluff 13,245.99)
.2 Processed Green Waste/MRF fines, Beneficial Use (GSET) 953.1	
3 MRF Fines for ADC 2,816.33	
	Name Name

Site Visit



Fill Area 2

□ Excavation of this phase is virtually complete. The slope and stormwater basin to the north of the fill area are being completed (shown below, looking southeast). The Fill Area 2 entry road is under construction.



Stormwater Controls and Best Management Practices

- ☐ In addition to spreading processed greem mateiral to reduce erosion, straw "blankets" have been placed in areas where landfill gas and stormdrain piping prevent a dozer from spreading.
- ☐ Basin A noticeably lower than usual. Earthquake effect? Basins B and C not checked. Bulrushes have begun to emerge from the center of Basin A, indicating that the drop in water level was fairly recent.

Special Occurrences Log

- □ July 10: A member of the public did not understand the correct disposal location and unloaded discarded furniture and other household goods in the asbestos area. Materials were found after customer had departed. After discussion with regulatory agencies, the materials were left in place and landfilled.
- □ July 18: A rolloff truck carrying a drop box was departing the site when the box door swung open and struck the scale house (unoccupied at the time) damaging a security camera, an awning, and the building.
- □ Aug 4: A Waste Management side-dump trailer carrying MRF fines tipped over while unloading. The cab remained upright. No injuries.
- □ Aug 24: Napa earthwquake occurred. Detailed site inspections, recorded on forms designed for the purpose, occurred on August 27 29. No sign of earthquake related damage.
- □ Sept 3: Landfill gas perimeter probe 8C exceeded allowable limits. Shallower probes, 8A and 8B, showed zero methane.

Figure 6.3-1 Monthly Volumes of Revenue-Generating Cover



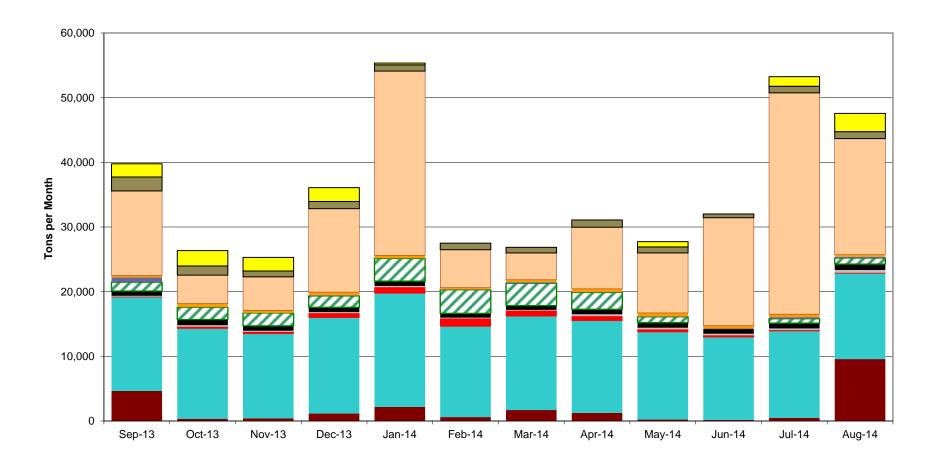
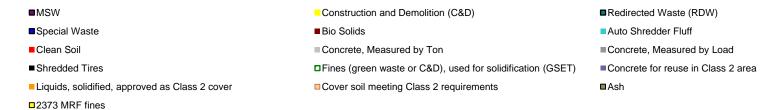
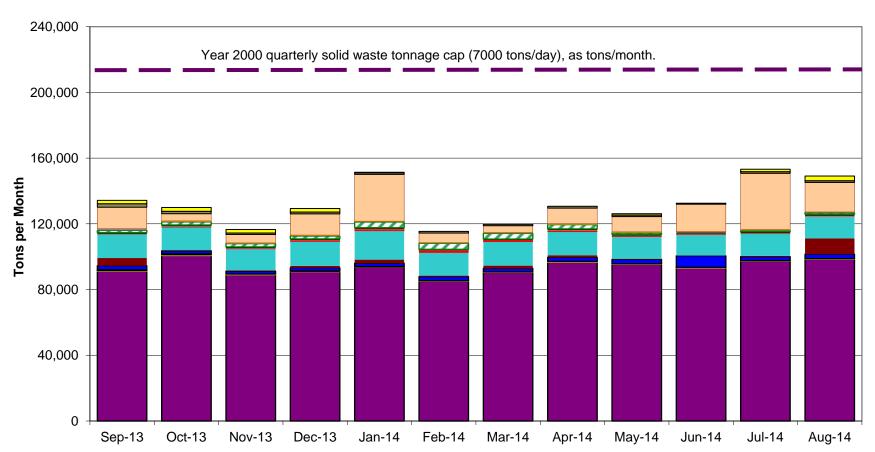


Figure 6.3-2 Monthly Volumes of Landfilled Materials







550 Kearny Street Suite 800 San Francisco, CA 94108 415.896.5900 phone 415.896.0332 fax

memorandum

date September 30,2014

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 10/8/14 - Agenda Item 6.4 - Review of Reports Provided by ALRRF

Title V (Air Quality) Report, December 1, 2013 - May 31, 2014

This semiannual report tracks all permit-compliance aspects of landfill gas control, emission sources such as engines, and other emissions such as the handling of contaminated soils. Key topics in this report are:

- Emissions testing
- Changes to the landfill gas extraction well system
- Surface Emissions Monitoring for methane escaping from the landfill
- Performance of landfill gas control devices (turbines, engines, etc.)

Emissions Testing

Annual testing is required for six devices that consume landfill gas: Two internal-combustion engines, two turbines and two flares. The larger flare, A-16, is tested alone and in conjunction with operation of the LNG plant; this is, in effect, a test of the LNG plant emissions.

Between early February and late May, all six of these devices were tested. Flare A-16 was tested too late in the reporting period for its results to be included. All of the other devices passed their emissions tests without apparent difficulty.

Changes to Landfill Gas (LFG) Extraction Wells

During the time frame for this report, two wells were decommissioned and no new wells were installed. One well (588) had higher-than-typical oxygen readings in monthly gas analyses for February and March. This condition did not continue past March. One well (637) had a high temperature reading during one monthly reading; the temperature then fell back to the normal range.

Surface Emissions Monitoring

Surface emissions monitoring (SEM) is required quarterly. SEM uses a hand-held instrument to check for methane emissions near the surface of the landfill, walking over a predetermined path to assure that all of the landfill (except

unsafe areas and the areas currently being filled) is being checked. This report summarizes results from the fourth quarter of 2013 and the first quarter of 2014. In the fourth quarter of 2013, no exceedances were found during initial testing. In the first quarter of 2014, seven exceedances were found during initial testing. After repairs to the landfill surface, these areas were rechecked after 10 days and no exceedances were found.

Performance of Control Devices

The report provides day-by-day volumes of gas consumed by each of the control devices. Figure 6.4-1, below, illustrates the general performance of the system and each of its major components (flares, LNG plant, IC engines and turbines). During this 6-month period, the LNG plant was quite reliable and was down for approximately two one-week periods for maintenance. Immediately after that, the installation and decommissioning of gas wells constrained landfill gas extraction, but the system easily remained in compliance with the required Target Gas Collection Rate. Limited gas supply continued to be a limiting factor in gas consumption and energy production, especially in May 2014. In managing for this constraint, the ALRRF appears to have changed tactics in late January: from that time forward, the IC engines were only operated when other devices were down, making additional gas available for energy production.

Landfill Gas Perimeter Probes

In January 2014, quarterly sampling of the landfill gas perimeter probes that surround Fill Areas 1 and 2 found high readings in probe 9B, approaching the regulatory limit. Increasing the gas extraction rate at the two gas wells closest to this probe reduced the concentration by about half, to 2.3% methane, in March.

limited gas supply *1015 ■LNG Plant S-210 A/A/C missing data for LNG plant ALOCK N Maintenance, LNG plant ■ Flare A-15 ×10x Power outage Figure 6.4-1 - ALRRF Daily LFG Flow (values derived from Title V Report) *I SCOPE ■Flare A-16 ×166 ■ Engine A-24 BAAQMD Target Gas Collection Rate (as SCFD) PG&E outage ×1/6/2 Engine A-23 ×1/02/1 in island mode A-7 down, A-6 Power outage: Turbine A-7 *LCL/I PG&E outage Turbine A-6 Maintenance, LNG plant E1/1/2/ SCF / day 12,000,000 4,000,000 2,000,000 10,000,000 6,000,000

First Semiannual 2014 Groundwater Monitoring Report

The attached Memorandum from Langan Treadwell Rollo (LTR) provides findings from their detailed review of groundwater monitoring as described in the Report cited above. The Memorandum is accompanied by a Technical Memorandum which describes LTR's independent review of the monitoring data. This was done due to concerns expressed by Committee members in the past, regarding the quality of the laboratory work done for the ALRRF by Test America. In the first half of 2014, there were several errors involving the presence of contaminants where none should have been (i.e. in blank samples used to check quality) or unexpected results from "spiked" samples. However, LTR has found these errors did not seriously affect the usability of the data that were derived from actual samples. As the Tech Memo states: "All data are considered to be usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%."

Please also note that the LTR memo begins with a discussion of the Water Board actions which are the subject of Item 6.2 on the October 8 Committee agenda.

To summarize the groundwater findings:

- VOC's were again detected at three groundwater wells, each of which has had similar detections in the past. The concentrations do not show an increasing trend. None of them is at a level that would trigger regulatory action. The regional Water Board's increased attention to conditions at Well E-20B is likely to lead to greater efforts to reduce contamination there; we will track those developments closely.
- In the previous semiannual report, we noted that in Valley Drain 2, which is the collection system for liquids beneath the liner in Unit 2, three substances (acetone, 2-butanone, and Tert-butyl alcohol) exhibited concentrations above their historical ranges. At VD2, these substances are sampled once a year, so we do not have further results at this time. In late 2013, none of them was at a level that would trigger regulatory action.
- Stormwater basin discharges did not occur during this reporting period, so sampling results are not discussed.

In general, continued monitoring is advised but no further action appears to be needed.

LANGAN TREADWELL ROLLO

Memorandum

555 Montgomery Street, Suite 1300 San Francisco, CA 94111 T: 415.955.5200 F: 415.955.5201

TO: Kelly Runyon, ESA

FROM: Mukta Patil, Project Engineer

Dorinda Shipman, PG, CHG, Principal

DATE: 25 September 2014

PROJECT: Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

SUBJECT: Groundwater and Storm Water Analysis for Community Monitor Progress

Report #14

750477406.02 MP

Langan Treadwell Rollo (Langan), has reviewed 2014 groundwater and stormwater data for the Altamont Landfill and Resource Recovery Facility in Livermore, California (ALRRF) and has examined the following reports and regulatory agency correspondence. Please note that the first five items in this list concern the first 2013 Groundwater report, about which the Regional Water Board raised several concerns.

- Groundwater Monitoring Report Review, Altamont Landfill and Resource Recovery Facility, Waste Discharge Requirements Order R5-2009-0055, Alameda County, prepared by Central Valley Regional Water Quality Control Board, dated 21 November 2013
- Response to November 21, 2013 Groundwater Monitoring Report, Altamont Landfill and Resource Recovery Facility, Alameda County (Order No. R5-2009-0055), prepared by SCS Engineers on behalf of ALRRF, dated 30 December 2013
- Response to November 21, 2013 Request for Evaluation of Well E-20B 2014 Update Altamont Landfill and Resource Recovery Facility, Alameda County (Order No. R5-2009-0055), prepared by SCS Engineers on behalf of ALRRF, dated 4 February 2014
- Request for Revised E-20B Corrective Action Plan, Altamont Landfill and Resource Recovery Facility, Alameda County, prepared by Central Valley Regional Water Quality Control Board, dated 23 May 2014
- Revised E-20B Corrective Action Plan Altamont Landfill and Resource Recovery Facility, Alameda County, California, prepared by SCS Engineers on behalf of ALRRF, dated 13 August 2014
- First Semiannual 2014 Groundwater Monitoring Report, Altamont Landfill and Resource Recovery Facility (WDR Order R5-2009-0055), prepared by SCS Engineers, Long Beach, California, dated 29 July 2014.
- 2013-2014 Annual Report for Storm Water Discharges Associated with Industrial Activities, prepared by SCS Engineers, Long Beach, California, dated June 27, 2013

MEMO

Groundwater and Storm Water Analysis for Community Monitor Progress Report #14 Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

Page 2

This memorandum describes the results of our evaluation and provides our opinions and recommendations for the Community Monitor Committee (CMC). The reports were reviewed for issues described in previous CMC meeting minutes and for potential trends in groundwater and storm water analytical data over recent years. This memo discusses Central Valley Regional Water Quality Control Board (Water Board) comments on the 2013 groundwater monitoring report and concerns about detections in well E-20B, ALRRF's response to Water Board comments, and the revised E-20B corrective action plan (CAP) prepared by ALRRF.

One groundwater sampling event, and visual monitoring of storm water basins, took place during the time frames documented in the 2014 reports. Groundwater monitoring activities and findings, as required by the Waste Discharge Requirements (WDR), were generally found to be in compliance during the June 2014 sampling event and are discussed below. After discussing these findings, this memo briefly reviews the storm water report.

Water Board Comments for the First Semiannual 2013 Groundwater Monitoring Report and ALRRF's Responses

Upon review of the First Semiannual 2013 Groundwater Monitoring Report, the Water Board identified issues related to the monitoring and corrective action program. The Water Board noted that the elevations calculated for well MW-1 were incorrect (the elevations reported over the last few events (since January 2012) were between 837 feet and 861 feet mean sea level [MSL] as opposed to the actual recorded casing elevation of 1,019.10 feet MSL). The Water Board requested that ALRRF re-submit the groundwater contour maps for each contour map generated since January 2012. In addition, the Water Board commented that the monitoring of the Valley Drain under Fill Area 1, Unit 1 (VD) was incomplete (not sampled) and that results from the VD investigation proposed in the report should be submitted to the Water Board.

The Water Board's last comment was in regards to the presence of VOCs in corrective action well E-20B (located adjacent to the southeastern portion of Fill Area 1 Unit 1), and potential VOC detections in the PC-1 (specifically PC-1B and PC-1C) monitoring wells. The Water Board indicated that the current corrective action program may not be addressing all the VOCs, specifically tetrahydrofuran, in E-20B. The Water Board associated the detection of tetrahydrofuran to leachate rather than the landfill gas (LFG). Since the corrective action plan (CAP) was designed to address only LFG impact, the Water Board requested re-evaluation of the monitoring program for well E-20B and preparation of a plan to address the continuing detections of VOCs in E-20B.

In a response letter dated 30 December 2013, SCS Engineers (on behalf of ALRRF) indicated that there was a formula error in calculating the groundwater elevation calculation for WM-1. Revised groundwater contour maps with corrected elevation values for MW-1 were submitted with the letter. The overall flow direction of groundwater under Fill Area 1 did not change based on the revised maps. Well MW-1 was abandoned in July 2013 to accommodate development of Fill Area 2.

MEMO

Groundwater and Storm Water Analysis for Community Monitor Progress Report #14 Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

Page 3

In regards to VD investigation, SCS indicated that the drain sample was not collected during first through third quarter 2013 due to an inoperable pump. SCS and ALRRF conducted an investigation on 16 December 2013 and sampled the location using a clean disposable bailer and the results were submitted to the Water Board.

Regarding the request for evaluation of well E-20B, in a letter dated 4 February 2014, SCS Engineers described in detail that the VOC species detected in E-20B were typical of LGF and are not indicative of leachate influence. In addition, the letter reiterated the lack of detections in downgradient wells PC-1B and PC-1C, other than those attributed to laboratory cross contamination. The letter also stated that since some of the LFG wells in the area have been decommissioned, ALRRF was planning to connect an LFG sump riser located in the vicinity of former extraction well EW-30 to the gas collection and control system (GCCS). ALRRF was also exploring the possibility of installing additional extraction wells in the vicinity of E-20B as part of the 2014 GCCS Improvements.

In a letter dated 23 May 2014, the Water Board requested for a 'Revised E-20B Corrective Action Plan' that addresses measures to be taken to prevent migration of VOCs beyond Fill Area 1 and to reduce VOC impacts in E-20B. In its concluding remarks, the Water Board stated that "although the Discharger continues to state that the VOC impacts to groundwater near E-20B are the results of LFG, not leachate, staff has reservations regarding this conclusion".

A revised E-20B CAP was prepared by SCS Engineers and submitted to the Water Board on 13 August 2014. The CAP noted that well E-20B was installed in place of original well E-20. The original well E-20 was monitored quarterly from October 1987 through March 1999, but no evidence of groundwater impacts were ever detected in the well. A review of well construction information for E-20 conducted as part of the 1998 Proposed Title 27 Detection Monitoring Program revealed that the first encountered groundwater would be expected to occur at shallower depth (in the weathered bedrock or alluvium) than the depth monitored by E-20. Therefore, E-20 was abandoned and shallower well E-20B was installed in 1999. Since then, low levels of VOCs have been detected in E-20B. However, all previous investigations have concluded that the impacts to groundwater at E-20B are associated with landfill gas.

The revised CAP discussed installation of new LFG wells to improve monitoring effectiveness and to address the source of the impacts detected in E-20B. The revised CAP discusses the challenges the area adjacent to E-20B presents for LFG well installation due to the physical conditions and operation of LFG extraction elements. The sloping conditions in the southeast area of Unit 1 are not conducive for installing 25 to 40 feet of solid pipe used in a LFG wells. SCS also indicated that the sloping conditions and the corresponding decrease in waste mass under sloping conditions would intercept atmospheric conditions and therefore, vertical wells of 2 to 3 feet diameter are also not feasible. Therefore, SCS has proposed installing three (3) smaller diameter (8 to 12 inch diameter) vertical LFG wells in the vicinity of E-20B. In addition, per Water Board's request to enhance the groundwater sampling program near E-20B, SCS has proposed the installation of a 45 feet (+/- 10 feet) deep well with a 10 to 15-foot long screened interval. The revised CAP also presents a timeline for the reduction of VOCs to non-detect levels in E-20B. According to the graphical trend evaluation presented in the revised CAP, the concentrations at E-20B will decline to non-detect in about 10 years. However, looking at the

MEMO

Groundwater and Storm Water Analysis for Community Monitor Progress Report #14

Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

Page 4

trend graph included in the revised CAP, it is Langan's opinion that the 'line of best fit' chosen for the data is not conclusive. The data has a high scatter and the linear regression model chosen to represent the trend produces a very low R-squared value¹ (0.0005 for 1,1-dichloroethane, and 0.001 for dichlorofluoromethane). Therefore, extrapolating the trend line obtained by the linear regression model is not convincingly predicting the future trend. Water Board's response to the revised E-20B CAP is currently pending/awaited.

First Semiannual 2014 Groundwater Sampling Results

<u>Detection and Corrective Action Well Inorganic and Volatile Organic Compound Concentrations</u>

Concentrations of inorganic compounds remained stable in detection and corrective action wells during the June 2014 monitoring event. VOCs not attributable to laboratory cross contamination were detected in three wells, as indicated in the table below. Acetone, a common laboratory contaminant, was detected in samples from two of these wells. The laboratory's methods for identifying laboratory contaminants were adequate. At these well locations, the VOCs detected and the respective concentrations were similar to historical data. In two instances (PC-1B and PC-1C, discussed below), detected VOCs appear to be due to laboratory cross contamination.

In well E-20B, vinyl chloride was detected at a concentration of 0.36 μ g/L 2 , which is below its MCL³ of 0.5 μ g/L. Vinyl chloride has been historically detected in well E-20B since 1999. The Updated Engineering Feasibility Study (EFS) completed by SCS Engineers (November 2004, Revised March 2005) and the reports noted above concluded that the VOC detections at E-20B do not appear to be indicative of leachate impacts, and the source of vinyl chloride has been attributed to landfill gas. The area surrounding E-20B is undergoing corrective action including landfill gas control and E-20B is monitored for natural attenuation parameters. As discussed above, three (3) new extraction wells and one (1) new monitoring well is proposed to be added to the program.

Detection wells PC-1B and PC-1C are currently used to monitor for potential migration of VOCs downgradient of E-20B. Wells PC-1B and PC-1C have not had any VOC detections since the start of monitoring in 2006, with the exception of those attributable to laboratory cross contamination.

R-squared is a statistical measure of how close the data are to the fitted regression line. It is always between 0 and 1. The higher the R-squared value, the better the model fits the data.

The detected concentration is flagged denoting that the concentration reported is estimated because it is below the reporting limit and above its method detection limit.

Maximum Contaminant Levels (MCLs) are standards that are set by the United States Environmental Protection Agency (EPA) for drinking water quality. An MCL is the legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act.



Groundwater and Storm Water Analysis for Community Monitor Progress Report #14

Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

Page 5

	Acetone	Chlorobenzene	1,4- Dichlorobenzene	Cis-1,2- dichloroethene	1,1,-Dichloroethane	1,2,- Dichloropropane	Dichlorodi- fluoromethane	Dichloro- flouromethane	Diethyl ether	Methyl tert-butyl ether (MTBE)	Tert-Butyl Alcohol	Tetrachloroethene	Tetrahydrofuran	Trichloroethene	Vinyl chloride	
E-03A																No VOCs detected
E-05									X	X						Matches historical data
E-07			X	X	Χ		X	X	X	Χ		Χ	Χ	Χ		Matches historical data
E-17																No VOCs detected
E-20B		Χ	Х	Х	X	Х		Х	X	Χ	Χ		X	Χ	Χ	Matches historical data
E-23																No VOCs detected
MW-2A																No VOCs detected
MW-5A																No VOCs detected
MW-6																No VOCs detected
MW-7																No VOCs detected
MW-11																No VOCs detected
PC-1B																No VOCs detected
PC-1C										_						No VOCs detected

During this monitoring period, the ALRRF received a Notice of Violation (NOV) from the Water Board on 11 April 2014. The violation was for failure to submit plans prior to the rough grading work started at Fill Area 2 construction. Due to the extent of the initial construction phase, ALRRF divided the project into two stages 1) rough earthwork and 2) containment system construction. It was ALRRF's view that the rough grading work would not require Water Board's approval apart from compliance with the construction storm water permit, which was obtained by ALRRF prior to construction. ALRRF met with the Water Board on 5 May 2014 to obtain clarity about the issue and resolved the matter. The discussions during the meeting also resulted in development of a plan for additional monitoring well installation in future Fill Area 2. A Work Plan was subsequently submitted to the Water Board.

<u>Unsaturated Zone Inorganic and VOC Concentrations</u>

During June 2014, inorganics and VOCs at VZM-A⁴, and VD⁵ were similar to historical concentrations and appear to be stable, i.e. concentrations have not shown an increasing trend.

⁴ VZM-A is a monitoring location in the vadose zone (unsaturated zone below the landfill liner, and above the groundwater table).

VD is the monitoring location for the valley drain system beneath the clay liner at Unit 1. This drain system is designed to collect and drain groundwater that accumulates beneath the liner, or any liquids that seep below the liner at Unit 1.

MEMO

Groundwater and Storm Water Analysis for Community Monitor Progress Report #14

Altamont Landfill (ALRRF)

Livermore, California Project: 750477406

Page 6

In VD2⁶, other than concentrations above historical ranges for acetone, 2-butanone, and tert-butyl alcohol, the concentrations of VOCs were consistent with historical results. Acetone is a common laboratory contaminant. 2-Butanone (also known as methyl ethyl ketone [MEK]) is not a common laboratory contaminant and has been historically detected in samples from VD2. 2-Butanone is a commonly used solvent in paints and glues, and is also released to the air from car and truck exhausts. It also occurs as a natural product and is found in some fruits and vegetables in small amounts⁷. Tert-butyl alcohol is a degradation product of methyl-tert-butyl ether, a commonly used gasoline additive. Tert-butyl alcohol has also been historically detected in VD2.

The VOC detections at VZM-A, VD, and VD2, have been attributed to landfill gas. Concentrations of VOCs and inorganics in unsaturated zone monitoring points will be evaluated in subsequent monitoring reports for any potential increasing trends.

Leachate Inorganic and VOC Concentrations

Inorganic and VOC concentrations at leachate monitoring point LS and LS2⁸ during June 2014 were similar to historical values.

Laboratory Quality Assurance:

The report mentions a number of cases of laboratory cross-contamination, above control limits incidents, and other anomalies. A number of detections have been attributed to laboratory cross-contamination. Therefore, the data generated from the analysis of groundwater samples were validated by Langan's Project Chemist to evaluate the usability of the data. The findings of the data validation are included as Attachment 1.

Storm Water Retention Basins

In accordance with the 2009 WDR, stormwater discharges are sampled at the points where they cross the facility boundary during times when discharge from the storm water retention basins is occurring. For the 2013-2014 rainy season, there was no surface water discharge from Basins A, B, and C. Therefore, no samples were collected during this monitoring period.

Recommendation

We recommend continuing review of groundwater and storm water data as it becomes available, and evaluating for trends in data, especially for groundwater monitoring wells where contaminants have previously been detected.

VD2 is the monitoring location for the subdrain beneath the engineered liner at Unit 2. This drain system is designed to collect and drain groundwater that accumulates beneath the liner, or any liquids that seep below the liner at Unit 2.

Agency for Toxic Substances and Disease Registry, Toxic Substances Portal – 2–Butanone. 25 October 2011. http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=342&tid=60

LS and LS2 are leachate sumps, where leachate is collected at the bottom of landfill prior to being pumped to a storage and recirculation system.

Attachment 1

Data Usability Summary Report for Altamont Landfill and Resource Recovery Facility
Groundwater Samples Collected May and June, 2014



Technical Memorandum

2700 Kelly Road, Suite 200 Warrington, PA 18976 T: 215.491.6500 F: 215.491.6501 Mailing Address: P.O. Box 1569 Doylestown, PA 18901

To: Mukta Patil, Project Engineer

From: Emily Strake, Langan Project Chemist/Risk Assessor

Date: 1 September 2014

Re: Data Usability Summary Report

For Altamont Landfill and Resource Recovery Facility Groundwater Samples Collected May and June, 2014

Langan Project No.: 750477406

This memorandum presents the findings of an analytical data validation of the data generated from the analysis of groundwater samples collected on May 13 through 16, and June 6, 2014 by SCS Engineers at the Altamont Landfill and Resource Recovery Facility. The groundwater samples were analyzed by Test America, Inc. located in Denver, Colorado (certification # 2513) for parameters and analytical methods specified below.

- Volatile Organic Compounds (VOCs) by SW-846 Method 8260B
- Semivolatile Organic Compounds (SVOCs) by SW-846 Method 8270C
- Ethylene Dibromide (EDB) and 1,2-Dibromo-3-chloropropane (DBCP) by SW-846 Method 8011
- Pesticides by SW-846 Method 8081A
- Organophosphorous Pesticides by SW-846 Method 8141A
- Herbicides by SW-846 Method 8151A
- Polychlorinated Biphenyls (PCBs) by SW-846 Method 8082
- Dissolved Metals by SW-846 Methods 6010B and 6020
- Mercury by SW-846 Method 7470A
- Anions by EPA 300.0
- Total Kjeldahl Nitrogen (TKN) by EPA 351.2
- Chemical Oxygen Demand (COD) by MCAWW 410.4
- Alkalinity by SM 2320B
- Total Dissolved Solids (TDS) by SM 2540C
- Cyanide (CN) by SW-846 Method 9012A
- Sulfide by SW-846 Method 9034
- Total Organic Carbon (TOC) by SM 5310B

Table 1, below, summarizes the laboratory and client sample identification numbers, and collection dates subject to review.

Page 2 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

Table 1
Sample Summary

SDG	Lab Sample ID	Client Sample ID	Sample Date	
280-55386	280-55386-1	Trip Blank	5/13/14	
280-55386	280-55386-2	E-07	5/13/14	
280-55386	280-55386-3	E17	5/13/14	
280-55386	280-55386-4	E23	5/13/14	
280-55386	280-55386-5	E03A	5/13/14	
280-55484	280-55454-1	Trip Blank	5/14/14	
280-55484	280-55454-3	MW-8B	5/14/14	
280-55484	280-55454-4	MW-9	5/14/14	
280-55484	280-55454-5	MW-4A	5/14/14	
280-55520	280-55520-1	MW-6	5/15/14	
280-55520	280-55520-2	DUP	5/15/14	
280-55520	280-55520-3	Trip Blank	5/15/14	
280-55520	280-55520-4	MW-2A	5/15/14	
280-55520	280-55520-5	MVV-7	5/15/14	
280-55527	280-55527-1	PC-1C	5/15/14	
280-55521	280-55521-1	PC1B	5/15/14	
280-55567	280-55567-1	Trip Blank	5/16/14	
280-55567	280-55567-2	E-05	5/16/14	
280-55567	280-55567-3	MW-5A	5/16/14	
280-55567	280-55567-4	MW-11	5/16/14	
280-55567	280-55567-5	E20B	5/16/14	
280-55565	280-55565-1	ME-8A	5/16/14	
280-55565	280-55565-2	FB	5/16/14	
280-56345	280-56345-1	Trip Blank	6/6/14	
280-56345	280-56345-2	MW-10	6/6/14	

Validation Overview

This data validation was performed in accordance with the USEPA Contract Laboratory Program "National Functional Guidelines for Superfund Organic Methods Data Review" (USEPA-540R-08-01, June 2008), the "National Functional Guidelines for Inorganic Superfund Data Review" (USEPA-540-R-10-011, January 2010), and the specifics of the analytical methods.

Validation includes reconstruction of the analytical data to verify that data are easily traceable and sufficiently complete to permit logical reconstruction by a qualified individual other than the originator. Items subject to review in this memorandum include holding times, sample preservation, sample extraction, laboratory blanks, laboratory control samples, system



Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406

> 1 September 2014 Page 3 of 8

monitoring compounds, matrix spike/spike duplicate recoveries, field blank, and trip blank sample results.

As a result of the review process, the following qualifiers may be assigned to the data in accordance with the USEPA's guidelines and best professional judgment:

- **R** The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
- **J** The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.
- **UJ** The analyte was not detected at a level greater than or equal to the reporting limit (RL); however, the reported RL is approximate and may be inaccurate or imprecise.
- **B** The sample concentration is impacted by blank contamination.
- **NJ** The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

If any validation qualifiers are assigned when applying the USEPA National Functional Guidelines, these qualifiers supersede any laboratory-applied qualifiers. Data that is not qualified as a result of this data validation is considered acceptable on the basis of the items subject to review. Data that is qualified as "R" are not sufficiently valid and technically supportable to be used for data interpretation. Data that is otherwise qualified due to minor data quality anomalies are usable, as qualified.

Table 2 Validator-applied qualification

Project Sample ID	Analyte	Validator Qualifier
MW-8B	Nitrate	J
MW-8B	TKN	UJ
MW-9	Nitrate	J
MW-9	TKN	UJ
MW-4A	Nitrate	UJ
MW-4A	TKN	UJ
MW-6	COD	В
DUP	COD	В
MW-2A	COD	В
MW-7	COD	В



Page 4 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

Project Sample ID	Analyte	Validator Qualifier	
PC-1C	Aluminum	J	
PC-1C	TOC	В	
PC-1C	COD	В	
PC1B	COD	В	
MW-5A	COD	В	
MW-8A	Copper	В	
MW-8A	TOC	В	
MW-10	Mercury	В	
MW-10	Nitrate	J	

Major Deficiencies:

Major deficiencies include those that grossly impact data quality and necessitate the rejection of results. No major deficiencies were identified.

Minor Deficiencies:

Minor deficiencies include anomalies that directly impact data quality and necessitate qualification, but do not result in unusable data. The section below describes the minor deficiencies that were identified.

Nitrate by EPA 300.0:

The laboratory sample duplicate associated with sample batch 280-225915 displayed a relative percent difference (RPD) greater than the control limit (i.e., 15%) for nitrate at 17%. The associated positive detections are potentially affected by laboratory imprecision and should be considered estimated.

Sample MW-10 was analyzed 30 hours outside of the holding time due to laboratory instrument failure. The reported positive detection may be biased low.

TKN by EPA 351.2:

Matrix spike/spike duplicate (MS/SD) sample 280-55484-3 exhibited recoveries less than the lower control limit (i.e., 90%) at 41% and 42%, respectively. The associated sample results may be biased low.

MS/SD sample 280-55484-3 exhibited recoveries less than the lower control limit at 24% and 24%, respectively. The associated sample results may be biased low.



Page 5 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

COD by EPA 410.4:

Method blank samples MB 280-227426/5 and MB 280-227554/5 exhibited positive detections for COD at 5.39 mg/L and 4.73 mg/L, respectively. The associated positive detections may be biased high.

Metals by SW-846 Method 6010B:

Laboratory Control Sample (LCS) 280-226254/2-A displayed a recovery greater than the upper control limit (i.e., 111%) for aluminum at 130%. The MS/SD also recovered above control limits at 130% and 128%, respectively. The associated positive detections may be biased high.

TOC by SM 5310B:

Method blank sample MB 280-228052/36 exhibited a positive detection for TOC at 0.175 mg/L. The associated positive detections may be biased high.

Mercury by SW-846 Method 7470A:

Method blank sample 280-229193/1-A displayed a positive detection for mercury at 0.049 μ g/L. The associated sample result for MW-10 may be biased high.

Other Deficiencies:

Other deficiencies include anomalies that do not directly impact data quality and do not necessitate qualification. The section below describes the other deficiencies that were identified.

VOCs by SW-846 Method 8260B:

The trip blank sample collected on 5/14/14 exhibited a positive response for chloroform at 0.21 μ g/L. The associated sample results were non-detect; no qualification is required.

Method blank sample 280-227359/6 displayed a positive detection for methylene chloride at 0.566 μ g/L. Several tentatively identified compound (TICs) and unknowns were also detected in the method blank. The associated sample results were non-detect; no qualification is required.

MS/SD sample 280-55560-U-2 displayed a recovery greater than the upper control limit for benzene at 147%. The initial sample concentration was greater than 4X the spiked amount; no qualification is required. The MS/SD also displayed recoveries greater than the control limit for trichloroethene at 197% and 182%, respectively. The spiked volume did not originate from the Altamont site; no qualification is necessary.

Method blank sample 280-227354/6 displayed a positive detection for methylene chloride at $0.626 \mu g/L$. The associated sample results were non-detect; no qualification is required.

Method blank sample 280-227678/7 displayed positive detections for diethyl ether and methylene chloride 0.327 μ g/L and 0.723 μ g/L, respectively. The associated sample results were non-detect; no qualification is required.



Page 6 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

Acetone was detected in the field blank sample collected on 5/16/14. Isopropyl alcohol was also detected as a TIC. The method blank sample analyzed in conjunction with the affected sample batch also displayed positive detections for acetone at 2.72 μ g/L, ethyl ether at 0.263 μ g/L, and methylene chloride at 0.612 μ g/L. The associated investigative sample results were non-detect; no qualification is necessary.

MS/SD sample 280-55565-1 exhibited RPDs greater than the control limit for 1,1,1-trichloroethane and carbon tetrachloride at 22% and 23%, respectively. The associated sample results were non-detect; no qualification is necessary.

Propane was detected as a TIC in the trip blank sample collected on 6/6/14. The associated sample result was non-detect; no qualification is necessary.

Method blank sample 280-231197/6 displayed a positive detection for acetone at 2.43 μ g/L. The associated sample results were non-detect; no qualification is required.

SVOCs by SW-846 Method 8270C:

MS/SD 280-55560-I-2-B/C exhibited recoveries outside of control limits for 4-nitrophenol, carbazole, n-nitrosodi-n-propylamine, and phenol. The spiked volume did not originate from the Altamont site; no qualification is necessary.

Method blank sample 280-229646/1-A displayed a positive detection for benzyl alcohol at 0.257 μ g/L. The associated sample results were non-detect; no qualification is required.

Pesticides by SW-846 Method 8081A:

MS/SD 280-55560-C-2-A/I-2-D displayed recoveries outside of control limits for 4,4'-DDT, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC, dieldrin, endrin, endosulfan I, endosulfan II, endosulfan sulfate, and endrin aldehyde. The spiked volume did not originate from the Altamont site; no qualification is necessary.

Metals by SW-846 Method 6010B:

Method blank 280-225859/1-A displayed a positive detection below the reporting limit for calcium at 0.256 mg/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.

Method blank MB 280-226070 displayed a positive detection for sodium at 109 μ g/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.

Method blank 280-226352/1-A displayed positive detections below the reporting limit for barium at 1.34 μ g/L and calcium at 1.91 μ g/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.



Page 7 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

Method blank 280-229242/1-A displayed a positive detection for manganese as 0.360 μ g/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.

CN by SW-846 Method 9012A:

Method blank sample MB 480-188522/1-A exhibited a positive detection for 0.0237 mg/L. The associated sample results were non-detect; no qualification is required.

TKN by EPA 351.2:

MS/SD sample 280-55383-F-1 exhibited recoveries less than the lower control limit (i.e., 90%) at 60% and 49%, respectively. The spiked volume did not originate from the Altamont site; no qualification is necessary.

MS/SD 280-55509-D-1-B exhibited recoveries less than the lower control limit at 58% and 58%, respectively. The spiked volume did not originate from the Altamont site; no qualification is necessary.

EDB and DBCP by SW-846 Method 8011:

A site MS/SD could not be completed for sample batch 280-226195 due to insufficient sample volume. Accuracy and precision were demonstrated through the acceptable analysis of a laboratory control sample and control sample duplicate; on the basis of professional judgment, no qualification is necessary.

Sample MW-4A exhibited a surrogate recovery for 1,2-dibromopropane greater than the upper control limit (i.e., 130%) at 134%. The associated sample results were non-detect; no qualification is required.

LCS/LCSD 280-230219/2-A displayed a RPD greater than the control limit for DBCP at 12%. The associated sample results were non-detect; no qualification is required.

Alkalinity by SM 2320B:

Method blank sample 280-226986/33 displayed a positive detection for bicarbonate alkalinity at 1.18 mg/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.

Method blank sample 280-227617/60 displayed a positive detection for bicarbonate alkalinity at 1.29 mg/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.

Method blank sample 280-227780/6 displayed a positive detection for bicarbonate alkalinity at 1.42 mg/L. The associated sample results were greater than 10X the blank concentration; no qualification is required.



Page 8 of 8

Technical Memorandum

Data Usability Summary Report For Altamont Landfill Groundwater Samples Collected May and June 2014 Langan Project No.: 750477406 1 September 2014

COD by EPA 410.4:

MS/SD sample 280-55205-A-23 displayed a RPD greater than the control limit (i.e., 11%) at 13%. The spiked volume did not originate from the Altamont site; no qualification is necessary.

MS/SD sample 280-56200-F-15 displayed a recovery greater than the upper control limit at 126% and a RPD greater than the control limit at 18%. The associated sample result was non-detect; no qualification is required.

Sulfide by SW-846 Method 9034:

LCS/LCSD 280-226146/1-A displayed a RPD greater than the control limit (i.e., 20%) for sulfide at 21%. The associated sample results were non-detect; no qualification is required.

MS sample 280-56299-AK-1-A displayed a recovery less than the lower control limit (i.e., 48%) at 44%. The spiked volume did not originate from the Altamont site; no qualification is necessary.

Chloride by EPA 300.0

SD sample 280-55567-5 displayed a recovery greater than the upper control limit (i.e., 120%) at 134%. The initial sample result was greater than 4X the spiked amount; no qualification is required.

Comments

Sample MW-8A arrived at the laboratory with a cooler temperature in exceedance of the preservation requirement. The analysis was cancelled and the sample was collected again on a subsequent sampling day.

On the basis of this evaluation, the laboratory appears to have followed the specified analytical methods with the exception of errors discussed above. If a given fraction is not mentioned above, that means that all specified criteria were met for that parameter.

All data are considered usable, as qualified. In addition, completeness, defined as the percentage of analytical results that are judged to be valid, is 100%.

Signed:

Emily Strake

Project Chemist/Risk Assessor



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memorandum

date September 30, 2014

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 10/8/14 - Agenda Item 6.5 - Topics for 2014 Annual Report

A draft of the Annual Report for 2014 will be provided at the January 2015 Community Monitor Committee meeting. As with prior reports, several topics unique to the reporting year will be addressed. The list below shows the topics for 2014 that we have identified, in no particular order. Input from Committee members regarding these or other topics to be discussed in the Annual Report is welcome at this time.

Proposed topics for 2014 Annual Report

Construction activity related to Fill Area 2

Projected startup of Fill Area 2

Windblown litter control

Cover on outside slopes

Effects of drought

Regional Water Board concern re Well E-20B contaminants, valley drain sampling, and groundwater elevation data

Receipt of load containing dinoseb: State agencies' actions

Decline in volume of extracted landfill gas

Conversion of tippers to CNG fuel

Possible effects of Napa earthquake



COMMUNITY MONITOR COMMITTEE STAFF REPORT

TO: Honorable Chairperson and Community Monitor Committee Members

FROM: Judy Erlandson, Public Works Manager

SUBJECT: Scheduling Community Monitor Committee Meetings for 2015

RECOMMENDED ACTION

Staff recommends the Community Monitor Committee establish and approve the Community Monitor Committee Meeting Calendar for 2015.

DISCUSSION

The Settlement Agreement, dated November 30, 1999, 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), describes the duties and obligations of the Community Monitor Committee, but does not require a minimum number of Committee meetings per year.

In November 2010, the Community Monitor Committee members determined that the Community Monitor Committee would meet quarterly on the second Wednesdays of January, April, July, and October at 4:00 pm at the Maintenance Service Center in the City of Livermore.

Suggested dates for the Community Monitor Committee meeting for calendar year 2015 are as follows:

- January 14
- April 8
- July 8
- October 14

The Maintenance Services Center lunchroom (where the meetings are currently held) is available for the dates listed above. If an alternative schedule of regular meeting dates is chosen, these can be established pending venue availability.

MEETING DATE:

10-8-2014

AGENDA ITEM:

CMC Agenda Packet Page 51 of 52

ATTACHMENTS

1. None

Approved by:

Judy Erlandson

Public Works Manager