

www.altamontcmc.org

VOTING MEMBERS

Robert Carling City of Livermore

Julie Testa City of Pleasanton

Donna Cabanne Sierra Club

David Tam Northern California Recycling Association

<u>NON-VOTING</u> MEMBERS

Enrique Perez
Waste Management
Altamont Landfill and
Resource Recovery
Facility

Arthur Surdilla / 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, April 10, 2019

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

PLACE: City of Livermore

Maintenance Services Center 3500 Robertson Park Road

- 1. Call to Order
- 2. Introductions
- 3. Roll Call
- 4. Approval of Minutes (From October 10, 2018 and January 9, 2019)
- 5. Open Forum

 This is an opportunity for audience members to comment on a subject not on the agenda. No action may be taken on these items.
- 6. Matters for Consideration
 - 6.1 Responses to Committee Member Questions:
 - Earthquake Faults near Fill Area 2
 - Advantages of Faircloth Skimmer
 - 6.2 Expansion Date; Applicable Tonnage Restrictions
 - 6.3 Five-Year Permit Review
 - 6.4 Review of Reports Provided by ALRRF
 - 6.5 Information from Documents on GeoTracker web site
 - 6.6 Reports from Community Monitor
 - 6.7 2018 Annual Report
 - 6.8 Community Monitor RFP Process (Livermore staff) Section 5.11 of the Settlement Agreement states in part that "... notice and public meeting requirements shall not apply to meetings of the Community Monitor Committee to (a) review proposals from bidders for the position of Community Monitor; (b) to interview any such bidders; (c) to discuss and select the Community Monitor..." or (d) to discuss personnel matters or performance evaluations relating to the Community Monitor..." (Closed Session)
 - 6.9 Stipend Update (Livermore Staff)
 - 6.10 Announcements (Committee 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 **July 10**, **2019**, at 3500 Robertson Park Road, Livermore.

Informational Materials:

- Roles and Responsibilities; List of Acronyms; Site Map
- Draft Minutes of October 10, 2018 and January 9, 2019
- Reports from City staff, ESA and subcontractors CMC Agenda Packet Page 1 of 96

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).

AND SECTION OF THE PROPERTY OF

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. 1

Updates will be provided as needed. This list was last revised on April 4, 2017.

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)

CVRWQCB, RWQCB or Water Board – Central Valley Regional Water Quality Control Board, unless otherwise noted.

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

IDL – Instrument Detection Limit – The smallest concentration of a specific chemical, in reagent grade water, that can be detected, with 99% confidence, with the detection instrument (e.g. the mass spectrometer).

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.

MDL – Method Detection Limit – The smallest concentration of a specific chemical, in a sample that contains other non-interfering chemicals, that can be detected by the prescribed method, including preparatory steps such as dilution, filtration, digestion, etc.

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

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.htm1

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

Rev. 4/4/2017

¹ This link may need to be typed into your search bar to work correctly.

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

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, which 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

CASP - Same as ASP, above; but the "C" denotes that the pile is covered.

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

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 October 10, 2018

DRAFT

1. Call to Order

Chairperson Pentin called the meeting to order at 4:03 p.m.

2. Roll Call

Members Present: Jerry Pentin, City of Pleasanton; Robert Carling, City of

Livermore; David Tam, NCRA; Arthur Surdilla, Alameda County Department of Environmental Health (LEA); Audrey

Lundin, Waste Management Altamont Landfill and

Resource Recovery Facility (ALRRF)

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

Landowners Against Rural Mismanagement

Staff: Judy Erlandson, City of Livermore Public Works

Department; Kelly Runyon, Community Monitor

Others: Marisa Gan, Livermore Recycling Specialist

3. <u>Introductions</u>

All those present introduced themselves.

4. Approval of Minutes

Mr. Carling moved approval, Mr. Pentin seconded, and the minutes were approved 3-0 with no abstentions.

5. Open Forum

There was no Open Forum discussion.

- 6. Matters for Consideration
 - 6.1 Responses to Committee Member Questions

<u>Five Year Permit Review: LEA Comments</u>: Mr. Runyon provided a copy of the LEA comments and noted that the ALRRF had responded. He also stated that the LEA had made further comments, to which the ALRRF had also responded. His estimate was that the permit could be issued by the end of October.

<u>County Planning staff for ALRRF CUP</u>: Mr. Runyon reported that according to ALRRF staff, the County Planning staff member who is the primary point of contact for matters related to the Conditional Use Permit is Bruce Jensen.

<u>Fault Zones at ALRRF</u>: Mr. Runyon provided a diagram showing the spatial relationship between earthquake faults at the site and the monitoring well MW-4, noting that the fault, between Fill Area 1 and MW-4, is not recent or active. He also indicated that the earlier request by Water Board staff to address the possible role of the nearby fault in the spread of contaminants near MW-4 has not had a formal response from the ALRRF.

Decision to fill above disposed paint chips: Mr. Runyon noted that the Water Board has not taken issue with the landfill's decision to continue to fill above the disposed chips. Mr. Carling asked if there is a way to prevent this type of incident in the future, and Mr. Pentin expressed similar concern. Mr. Runyon stated that the landfill does have an active load checking program, but it has been impractical to check all loads, and in this case the contaminant was a very small part of the load and might have been missed. He also noted that in this case the generator of the waste did notify the landfill, indicating that at least some waste generators understand their obligations. Mr. Tam noted that the Alameda County District Attorney's office has had a history of pursuing environmental crimes, and he asked Mr. Surdilla if the LEA's office works with the DA on such incidents. Mr. Surdilla responded that in his experience the DA gets involved in illegal dumping incidents that involve hazardous material in public areas such as streets, but not at disposal sites. Mr. Pentin asked what the charge would be for hazardous waste disposal at the ALRRF, and Mr. Runyon replied that the Water Board sends a Notice of Violation to the landfill, whereupon the landfill usually has the generator pay for removal of the material. Mr. Pentin expressed some interest in knowing the level of the charge (misdemeanor, felony, etc.) but stated that he was not asking the Community Monitor to look into that question. Mr. Tam asked about the size of the load that contained that bucket, and Mr. Runyon stated that it was probably on the order of 20 cubic yards.

- 6.2 Status of Wetland Mitigation Construction Mr. Runyon reported that the mitigation pond excavation has been completed, and excavation work on the sedimentation basin immediately upslope of the pond is under way. He also noted that planting in the mitigation pond has not yet begun.
- 6.3 Five Year Permit Review Mr. Runyon referred to item 6.1, which provides an update on the progress of this permit.
- 6.4 Review of Reports Provided by ALRRF Mr. Runyon began with the air emissions report, reporting that the Air District issued two violations in past months: one due to a gas well access problem, and the other caused by power outages that limited the landfill's ability to process landfill gas. He mentioned that the ALRRF is contesting the second of these, because there is a provision

in Air District regulations that, according to ALRRF, exempts the landfill when incidents like power outages occur. Ms. Lundin concurred with this summary.

Other aspects of the air emissions report were similar to prior reports. All emission control devices passed their annual tests, and Mr. Runyon noted that the internal combustion engines which use landfill gas to generate electricity have been decommissioned.

In reviewing the groundwater monitoring report, Mr. Runyon pointed out that for the May sampling the rate of purging (extracting water for a sample) was significantly reduced, to assure that samples represent groundwater at the wells and are not skewed by aeration or the presence of sediment, which can be caused by rapid purging.

He also presented an analysis of VOCs in groundwater from several wells, concluding that while many VOCs have been diminishing, MTBE concentrations (although very low) have not declined. He stated that VOC concentrations will continue to be tracked carefully, watching for trends.

Mr. Tam asked that this topic be continued to the next meeting when Ms. Cabanne is present.

Mr. Runyon also summarized stormwater monitoring reports from the prior two rainy seasons. He stated that some contaminants were found, indicating that additional measures need to be taken to intercept silt and remove hydrocarbons. The reports also recommended specific methods and equipment to be applied.

6.5 Review of Documents on GeoTracker web site

The following topics, documented in GeoTracker, were discussed:

<u>Identifying Sources of VOCs in Storm Water</u> – Mr. Runyon summarized the effort to determine the sources of pollutants in stormwater, and the sampling refinements proposed to the Water Board.

<u>ET Cover Planning, Design and Installation</u> – Mr. Runyon reported that grading work is proceeding as recommended by the ALRRF's consultant, and the project is on track to begin its test in the next few months, after plants are seeded and established.

<u>Fill Area 1 Leachate and Underdrain Liquids Management</u> – Mr. Runyon reviewed the Water Board's requirement that leachate and underdrain water be managed separately, and he reported that the system that will accomplish this was being installed currently.

NOV and Work Request: Monitoring Well MW-4A – Mr. Runyon stated that it appears that the Water Board is willing to accept that landfill gas may be a cause of contaminants reaching well MW-4A, but they will rely on data from samples of landfill gas and groundwater near MW-4A to reach a firm conclusion in that regard. He also noted that, because the proposed method for drilling new sampling points near MW-4 ("sonic drilling") creates heat that can interfere with accurate sampling, the Water Board is requiring that samples be taken after the borehole has cooled. Mr. Carling asked if the proposed change of

deadline has been approved; Mr. Runyon said that he had no information about that.

<u>Notice of Violation – Disposal of Lead Based Paint Chips</u> – Mr. Runyon stated that there has been no new information on this topic in some time, so he plans to remove it from future versions of this report unless new developments are documented in GeoTracker.

Revised Configuration and Phasing Schedule for Fill Area 2 – Mr. Runyon mentioned that a revised Fill Area 2 development plan has been brought to the Water Board, showing fill proceeding in increments from north to south. This minimizes stormwater management and traffic management difficulties, which would be severe if fill were to proceed from south to north. It also enables the fill to be developed with higher stability – less likelihood of a landslide within the fill. Mr. Runyon also reported that a more refined version of this development plan has been provided to the Water Board, but those documents did not reach GeoTracker in time for this agenda packet, and he said that the refined phasing diagram will be in the next packet.

Solidification Basin Operations – Mr. Runyon conveyed the Water Board's concern that liquids from the solidification basins are causing the landfill to exceed its moisture holding capacity; and to address that concern, the Water Board is requiring that the basins be, essentially, liquid-tight. He also noted that in a document released on GeoTracker just prior to the Committee meeting, the ALRRF has put forth a plan that it believes addresses that concern. He stated that this newest report will be summarized in the next Committee meeting.

Monitoring Downgradient from Well E-20B – Mr. Runyon explained that the latest Geotracker information documents the installation of a monitoring well downslope of MW-20, which is downgradient of E-20B and has detected some of the same contaminants as E-20B, generally at lower concentrations.

6.6 Reports from Community Monitor – Mr. Runyon indicated the July photo of an end-dump trailer that had overturned, and he noted that coincidentally, during the October inspection, two such overturned trailers were seen in the same area. Mr. Pentin asked about the procedure for relocating salamanders (as noted in the July inspection report), and Ms. Lundin replied that a consulting biologist, approved to handle these animals, comes to the site and does the relocating. For August, Mr. Runyon made note of the large amount of soil being imported in connection with preparation for Fill Area 1 closure. He also described the fire that took place east of Fill Area 1. Mr. Tam asked him to estimate the area burned by the fire. Mr. Runyon gave a rough estimate of 10 to 15 acres, and he stated that he would provide a better estimate at the next meeting. Ms. Lundin then described how ALRRF personnel and equipment worked to control the fire, together with the County Fire Department and CalFire resources. For September, Mr. Runvon described work on basin SB-H. There were no questions about the September report.

- 6.7 2018 Draft Annual Report Topics Mr. Runyon presented a list of topics, unique to 2018, that he proposed to include in the Annual Report. Committee members had nothing to add. Mr. Pentin asked that Ms. Cabanne be contacted to learn if she had any topics to add or other feedback.
- 6.8 2018 Committee Meeting Schedule Committee members reviewed the proposed schedule and had no changes. Mr. Tam moved for adoption, Mr. Carling seconded, and the motion passed 3-0.
- 6.9 Announcements There were no announcements.

Agenda Building

Mr. Tam raised several questions related to the lead paint chip incident:

- Was the incident a civil or criminal matter?
- What is the liability for the generator, the operator, and the regulatory agencies?
- What has been done in other similar cases in the Central Valley Water Board's region?
- What does the Alameda County DA, and the Calif Atty General's office, consider to be an effective deterrent in such cases?
- What are the basic facts of the matter: source of load (generator), size of load, type of source (single site or possible "community" (multiple) sources)?

After some discussion about the Committee's limited purview, Mr. Tam stated that he feels the Committee has a legitimate concern that the acceptance of wastes at the ALRRF is being adequately regulated by the LEA, and the Water Board. He suggested a letter to the Alameda County DA, and possibly others, including the City of Livermore City Attorney's office, to ask what the typical practice is regarding this issue.

Ms. Erlandson then suggested that the Committee receive a description of the pertinent laws & regulations, and what can be accepted at Class 2 versus Class 1 facilities. Mr. Tam stated that he was willing to start with that and then find out how that is applied, in practice, to incidents like the lead paint chip incident.

Ms. Erlandson also noted that when questions like this are brought to the City Attorney, they generally ask for Waste Management's opinion on the matter. Mr. Runyon stated that the ground rule for questions to outside agencies is that such questions first be brought to Waste Management.

Ms. Erlandson mentioned that at the next meeting, she plans to initiate the process for selecting a Community Monitor contractor before the end of 2019, which is when the current contract term ends.

The meeting was adjourned at 5:17 p.m. The next meeting will be held on <u>Wednesday</u>, <u>January 9, 2019, at 4:00 p.m.</u> at the Livermore Maintenance Services Center at 3500 Robertson Park Road.



COMMUNITY MONITOR COMMITTEE

Altamont Landfill Settlement Agreement

Minutes of January 9, 2019

DRAFT

1. Call to Order

The meeting came to order at 4:00 PM.

2. Roll Call

Members Present: Robert Carling, City of Livermore; Julie Testa, City of

Pleasanton; Donna Cabanne, Sierra Club; David Tam, NCRA; Arthur Surdilla, Alameda County Department of Environmental Health (LEA) (arrived 4:25 PM); Marcus Nettz II, Waste Management Altamont Landfill and

Resource Recovery Facility (ALRRF)

Absent: Robert Cooper, Altamont Landowners Against Rural

Mismanagement

Staff: Judy Erlandson, City of Livermore Public Works

Department: Kelly Runyon, Community Monitor

Others: Marisa Gan, Livermore Recycling Specialist

3. Introductions

All those present introduced themselves.

4. Approval of Minutes of October 10, 2018 meeting

Mr. Tam moved approval, and Mr. Carling seconded. Ms. Cabanne and Ms. Testa abstained because they had not been present for the October 10 meeting. Ms. Erlandson stated that she would look into the correct approach for approval when a majority of current members had not attended a prior meeting.

5. Open Forum

There was no Open Forum discussion.

6. <u>Matters for Consideration</u>

6.1 Election of Chairperson

Mr. Tam moved to nominate Mr. Carling to serve as Chair. Ms. Cabanne seconded the motion. The motion was approved unanimously, 4-0.

6.2 Responses to Committee Member Questions

<u>VOCs in Groundwater:</u> This item from the October meeting of the Community Monitor Committee (CMC) was summarized for the benefit of Ms. Cabanne and Ms. Testa, who had not attended that meeting. Mr. Runyon noted the continued presence of very low levels of MTBE at certain groundwater monitoring wells, and he stated that the Community Monitor team would continue to track this. Ms. Cabanne asked if the fast-moving nature of MTBE made it harder to track. Mr. Runyon replied that iit did not, and in some cases such as a leaking fuel tank, it could be easier to track because it tends to arrive at monitoring wells ahead of other substances.

<u>Fault Zones at ALRRF</u>: Mr. Runyon reviewed a diagram showing the spatial relationship between earthquake faults at the site and the monitoring well MW-4, noting that the fault, between Fill Area 1 and MW-4, is not recent or active. Ms. Cabanne asked if the other faults shown near Fill Area 2 (West Fault, Huey Fault) are more likely to be active. Mr. Runyon said that he would research that and respond at the next meeting.

Acreage of August 2018 Fire Above Fill Area 2: Mr. Runyon reported an estimated area of 14 acres, based on ground-level photographs. Mr. Tam asked if this area was large enough to require a high level of response by fire control agencies. Mr. Runyon replied that with windy conditions and the high sensitivity of fire control agencies to wildfire events, there had been a strong response from the County and State fire agencies. In response to a question from Mr. Carling, Mr. Nettz explained that the fire appeared to have been caused by a windblown piece of metal-coated film plastic that contacted power lines in the area.

CMC Purview and Disposal of Lead Paint Chips: Ms. Erlandson summarized the situation (bucket of lead paint chips included in disposed load of construction debris; ALRRF continuing to fill above this material). Mr. Carling noted that the generator did notify the landfill the day after the disposal had occurred. Ms. Erlandson stated that at the October Committee meeting, prompted by several questions raised by Committee Member Tam, the Committee asked City staff to determine if those questions are within the purview of the Committee. She further stated that since the Committee's role is to oversee the Community Monitor (CM), and the CM did not need to take any action on this matter, the questions are outside the Committee's purview. She added that the Settlement Agreement specifically excludes payment for legal services that might be provided by the CM, and the Settlement Agreement does not require the CM to have legal expertise.

Mr. Tam stated a concern that the staff report did not address the specific questions that he had raised, so he is considering taking the questions to a private attorney skilled in environmental law enforcement. He expressed general satisfaction with the way this incident has been handled, and stated that he may ask to revisit the topic on a future agenda.

Ms. Cabanne noted that in spite of being cooperative after the fact, the generator is at fault; they should have prevented the incident from occurring in the first place. She stated the opinion that generators that have improperly sent hazardous materials to the ALRRF in the past should be scrutinized to assure that they will not do so in the future.

Mr. Nettz noted that generators in Northern California are well aware of the need to comply and the potential high cost of failing to do so.

Mr. Tam expressed a wider concern about landfills other than the ALRRF, where scrutiny and awareness may not be as thorough. He also expressed concern that his questions, as stated in the minutes of the previous Committee meeting, had not been answered.

Mr. Nettz noted that within Waste Management's 293 US landfill operations, the ALRRF is the most highly regulated of all.

6.3 Status of Wetland Mitigation and Basin SB-H
Mr. Runyon reported that planting at the mitigation pond was under way in
December, and excavation work on the sedimentation basin appears to be
complete.

Mr. Surdilla arrived at 4:25 PM.

- 6.4 Five Year Permit Review Mr. Surdilla stated that work on the review is actively continuing and should be concluded by the next Committee meeting, and possibly within the next month. In response to Committee members' concern about how long this review has taken, he explained the process and offered to advise the Committee when a completion date is determined.
- 6.5 Review of Reports Provided by ALRRF –

Mr. Runyon described the current stormwater reporting process and the documents associated with it. He also described the types of actions that need to be taken at the ALRRF to comply with current requirements. In essence this involves controlling suspended solids by various means, including the use of "Faircloth skimmers" at stormwater basins.

Ms. Cabanne asked what happens if the landfill's actions don't fully correct a level 2 contaminant problem (in this case, iron). Mr. Runyon replied that additional measures may be taken, such as adding flocculant (to reduce suspended solids) as needed. He also clarified that the remediation plans are prepared by a qualified independent consultant, with oversight from the Regional Water Quality Control Board.

Mr. Carling asked for a more detailed explanation of the advantages of the Faircloth skimmer device; Mr. Runyon said that he would provide this at the next meeting.

6.6 Review of Documents on GeoTracker web site

Due to the length of this report, covering 11 distinct topics, discussion was confined to the six topics that were newest and/or most active:

Naphthalene Detections at Monitoring Well PC-1B – Mr. Runyon noted that, unlike other ALRRF wells with naphthalene, detections of this substance have persisted beyond the first detection. This item will continue to be monitored and will be reported at the next Committee meeting.

<u>Leak at Condensate Tank S -12</u> – Mr. Nettz described the incident; Mr. Runyon noted that the contaminated soil was properly disposed on site.

Concentration Limits for Certain Phase 2 Monitoring Wells – Mr. Runyon described the need to establish background levels for eight parameters (primarily minerals) that are commonly present in groundwater. He noted that this had been done for six wells near Fill Area 2, but that the Water Board rejected seven of the proposed background levels because some of the data used for those seven included outliers – unusual readings that probably do not reflect typical concentrations or conditions. He also noted that for two of those seven, it was not possible to duplicate the Water Board's results, and they had not shown their findings and calculations.

Mr. Runyon noted the map included with the packet and pointed out that the Water Board is requiring that several additional Fill Area 2 also have their concentration limits established. Mr. Tam suggested that the map be reviewed further, for better understanding, at the next meeting.

Revised Configuration and Phasing Schedule for Fill Area 2 – Mr. Runyon provided and described a more recent diagram showing how the Fill Area 2 footprint will increase over time. Ms. Cabanne noted that the Water Board is requiring that concentration limits be established for numerous monitoring wells prior to placing refuse in Fill Area 2, and she asked if that is achievable. Mr. Nettz replied that the ALRRF is working with the Water Board on this question, and he feels that it is realistic.

<u>Solidification Basin Operations</u> – Mr. Runyon explained the Water Board's criterion for determining if the landfill is "at capacity" for liquids and mentioned that the ALRRF is relocating and rebuilding the solidification basins so that they (a) will be liquid tight and (b) will include lysimeters to confirm that liquid is not penetrating the landfill. Mr. Nettz confirmed this and added that by moving the basins, more space for refuse will be made available in Fill Area 1.

Monitoring Downgradient from Well E-20B – Ms. Cabanne asked if the additional downgradient well (MW-27) has been installed. Mr. Runyon replied that a 7-month time extension has been requested by the ALRRF to avoid unsafe conditions during the rainy season, but he did not yet know if that had been granted. He stated that he would keep the Committee informed about that.

6.7 Reports from Community Monitor – Mr. Runyon called attention to the following details within the Community Monitor inspection reports for October, November and December 2018:

- There was an unusual incident involving two end-dump trucks overturning on the same day.
- The October report mentions 17 litter crew workers. This is due to a brief overlap of outgoing and incoming temporary crews. The normal number is approximately 8 workers collecting windblown litter.
- A surge in tonnage was seen in October and November, due to the delivery of excavation wastes (classified as Special Wastes) from San Francisco.
- Hydroseeding was completed on the ET cover test area, as shown in a photo.
- Risers have been installed over monitoring wells in the basin SB-H.
- The December Class 2 soil file review found 10 incomplete files.
- Shallow ponding was noted near the wastewater plant (not on refuse).
 Mr. Nettz explained that traffic from heavy equipment causes ruts and depressions that continually need to be filled and graded.
- 6.8 2018 Draft Annual Report Mr. Runyon invited comments on the draft. He stated that he will need any comments by the end of February. Ms. Cabanne mentioned a concern that although several violations occurred in 2018, the report states that the "severity score for 2018 is slightly lower than in 2017," which downplays the seriousness of the issues and violations that did occur.
- 6.9 Community Monitor RFP Process The Committee discussed the RFP process in closed session. At the conclusion of the closed session there was nothing to publicly report. Mr. Runyon raised a concern about how the RFP and background documents would be disseminated: The Committee's web site would be a convenient repository, but since it is managed by the current Community Monitor, who might respond to the RFP, there could be a perceived conflict of interest. Mr. Carling asked where the RFP would be posted. Ms. Erlandson stated that it would be posted on the City of Livermore's web site, and possibly Pleasanton's as well. Mr. Carling suggested that the CMC web site simply announce that the RFP for CM services is available at the City web site(s).
- 6.10 Announcements There were no announcements.

7. Agenda Building

Mr. Tam stated that he may report back on the lead paint chip issue (item 6.2 above) at the next meeting.

Mr. Tam also asked if an agenda item could be reserved for compensation procedures (claiming the stipend that the County has agreed to provide). Ms. Erlandson suggested that this would require City staff time and should be brought to Livermore City Council, through CM Carling. He agreed to look into the matter.

The meeting was adjourned at 5:52 p.m. The next meeting will be held on **Wednesday**, **April 10, 2019**, at 4:00 p.m. at the Livermore Maintenance Services Center at 3500 Robertson Park Road.

memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 4/10/19 - Agenda Item 6.1 - Responses to Committee Members' Questions

Earthquake Faults Near Fill Area 2

At the January 9, 2019 Committee meeting, in discussion of the "East Perimeter" fault along the east side of Fill Area 1, Ms. Cabanne asked if other faults in or near Fill Area 2, specifically the West Fault and Huey Fault, are more likely to be active than the East Perimeter fault.

The answer is no. All three of the aforementioned faults are very similar, in that they have been identified by fractures in deep bedrock but are quite indistinct near the surface. Also, at depth, the bedrock is very similar across the entire area.

Advantages of Faircloth Skimmer

At the January 9 Committee meeting, Mr. Carling asked for clarification of the advantages of the Faircloth Skimmer device for controlling discharge from stormwater sedimentation basins, versus traditional vertical "mushroom head" risers.

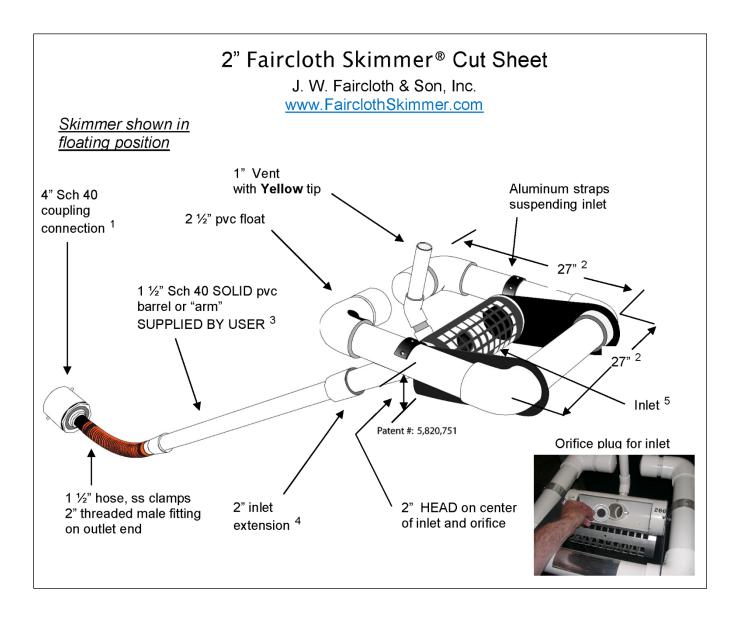
The vertical riser is typically a large-diameter metal or plastic pipe, set vertically in the basin, with its bottom opening leading to a discharge line, and its top opening set at the desired discharge elevation for the basin. The basin fills until the water level reaches the top of the riser, and any additional inflow causes a discharge via the top of the riser, **during the runoff event**. Most basins are also fitted with a drain valve, which may be a separate pipe or a valve in the side of the vertical riser, at the elevation of the bottom of the basin.

The Faircloth skimmer is a plastic pipe with one end attached to the basin drain valve, using a flexible hose, and the other end suspended from a float so that it is close to, but slightly below, the surface. The upper end rises and falls with the water level and is always able to drain the basin, **during and after the runoff event**. The valve at the lower end is normally open, and flow through the skimmer is limited by an orifice so that the basin will drain gradually. Discharge from the basin can also be controlled by closing the drain valve. The skimmer is often paired with a vertical riser that can prevent overtopping of the basin.

The main advantage of the skimmer is that it releases water only from the top of the water column, where there is the least suspended sediment. If managed passively, it does this continuously as long as there is water in the basin, and in so doing it provides storage volume for the next rain event. If managed actively, closing the drain valve will enable the basin to hold water longer, thereby settling more sediment before the next release. By draining the basin just before the next runoff event, the basin manager can discharge the cleanest water possible and

then close the drain valve so the basin will store new runoff for an extended period, enabling still more sediment to settle. Using the skimmer most effectively requires active planning and involvement by management, checking forecasts, estimating the timing and volume of inflow, and draining the basin only when necessary.

The manufacturer's drawing of the skimmer is shown below. The drain valve, if any, would be located at the coupling connection on the left-hand side of the drawing.



memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 4/10/19 - Agenda Item 6.2 - Expansion Date; Applicable Tonnage Restrictions

Expansion Date

Exhibit A in the 1999 Settlement Agreement defined Conditions of Approval that were then included in the ALRRF's Conditional Use Permit. Condition 1.3 defines the Expansion Date as the "date of the first deposit of solid waste in the expansion area of the ALRRF authorized by this permit." On Monday March 25, 2019, ALRRF Senior District Manager Marcus Nettz II sent an email to staff at the Central Valley Regional Water Quality Control Board, the Bay Area Air Quality Management District, the LEA, the Alameda County Planning Department, and the Community Monitor, stating:

This is a notification that active disposal operations started today in Fill Area 2 at the Altamont Landfill and Resource Recovery Facility. We have implemented the various changes in recordkeeping and operations as required by the permit conditions associated with Fill Area 2.

Related Tonnage Restrictions

Use Permit Conditions 1.4 and 1.5 limit the acceptance of certain wastes after the Expansion Date.

Per Condition 1.4, "...sludges, inert waste, and special waste ... from outside Alameda County and San Francisco shall not exceed 25,000 tons per calendar year, and no such waste shall be accepted from outside the Nine Bay Area Counties."

Per Condition 1.5, "The operator may continue to accept self-haul wastes from Contra Costa County ... up to an annual tonnage cap of 25,000 tons per year after the Expansion Date."

Condition 1.6 provides guidance for applying these limitations in a partial calendar year, on a pro rata basis.

HIS PACE MILITARY

memorandum

March 29, 2019 date

ALRRF Community Monitor Committee to

Kelly Runyon from

CMC Meeting of 4/10/19 - Agenda Item 6.3 - Five-Year Permit Review subject

Five-Year Review of Solid Waste Facilities Permit

In an email dated March 22, 2019, Arthur Surdilla stated that "The LEA in conjunction with CalRecycle will be requiring that Altamont LF will go through a Permit Modification." This occurs when changes at a facility are either nonmaterial or do not necessitate "further restrictions, prohibitions, mitigations, terms, conditions or other measures to adequately protect public health, public safety, ensure compliance with State minimum standards or to protect the environment." Mr. Surdilla will provide more information at the April 10 Committee meeting.

¹ California Code of Regulations Title 27, Environmental Protection, § 21665(d) Modified Solid Waste Facilities Permit.

HIS PACE MILITARY

memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon, Mukta Patil (Langan)

subject CMC Meeting of 4/10/19 - Agenda Item 6.4 - Review of Reports Provided by ALRRF

Air Emissions Report

The most recent Semi-Annual Report to the Bay Area Air Quality Management District (BAAQMD) covers the period from June 1, 2018 through November 30, 2018. The key points from this document are:

- <u>Violations</u> The BAAQMD served the ALRRF with two Notices of Violation in 2018 that are documented in this Semi-Annual Report. The first of these was due to a lack of wellhead monitoring data for well 702 during September 2017. The second of these, for down time due to power outages beyond the ALRRF's control, was contested by the ALRRF. The result was that the BAAQMD stated that no further action would be taken, and Waste Management was "released from liability for penalty."
- New gas wells brought on line During the reporting period, 24 vertical gas wells were brought on line (#751 #774). Many of the new wells were positioned close to recently-decommissioned well locations. Well 687, one of two wells that had been installed to reduce gas migration near groundwater monitoring well E-20B, was decommissioned due to low flow and replaced by well 765, a short distance farther north.
- <u>High temperature wells</u> During the reporting period, a total of 15 wells showed high temperature (131 F or higher) in at least one month, and six of these had high temperatures in at least three months of the six month reporting period. Carbon monoxide was monitored in these wells, and it remained low throughout the reporting period. This indicates that a high rate of biological decomposition, rather than a subsurface fire, was the likely cause of the high temperatures. The previously-noted high temperature well cluster in the east central part of the site was still evident, though some of its wells have cooled.
- Recent gas well decommissions During the reporting period, a total of 18 gas wells were decommissioned, i.e., shut down and disconnected from the gas extraction system because they had become unproductive.
- <u>Surface emissions monitoring</u> for the second quarter of 2018 took place in June; for the third quarter, it took place in August. In June, there were 11 exceedances of the 500 ppmv methane threshold. In August, that number rose to 14; only one of the August locations (near well 667) was a repeat from June. All of the corrective actions to block these emissions were successful and passed their 10-day and 30-day follow-up tests.
- Emission Control Device Source Tests Currently the operating emission control devices for landfill gas at the ALRRF consist of two turbines and two flares. However, one of the flares, A-15, is used so infrequently that the BAAQMD agreed to reduce its source test requirement from annual to every three years. Flare A-15 was not used at all during this reporting period. The two turbines were tested for

compliance with emission limits in January 2018, and the main flare, A-16, was tested in April 2018; all three devices passed. The two internal combustion engines, S-23 and S-24, have been decommissioned and were last tested in 2017.

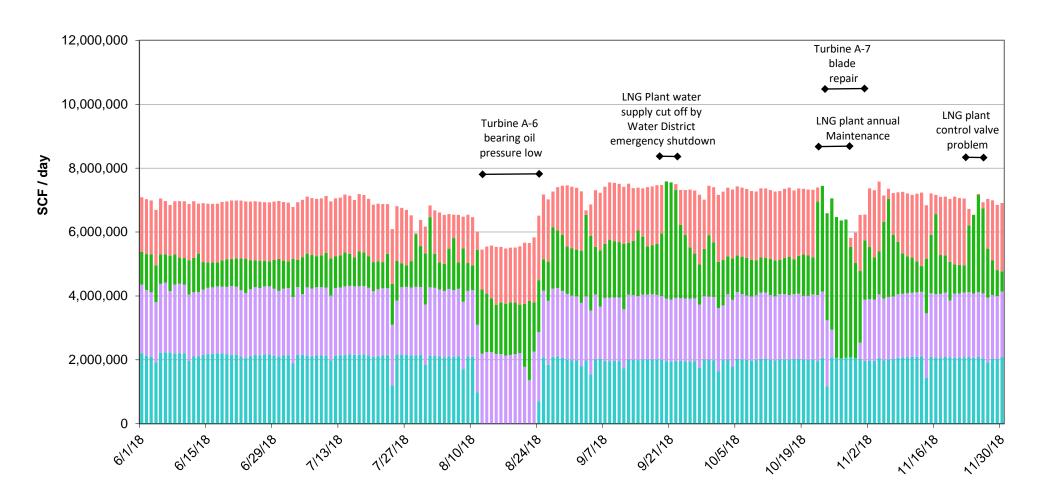
- Gas Migration at Perimeter Probes In this reporting period, significant levels of methane were found in three of the 26 perimeter probes installed around Fill Areas 1 and 2 for methane detection purposes. Probe GP-1B, southeast of future Fill Area 2, had 11.4% methane in June only; GP-8C, on the east side of Fill Area 1, had 39.4% methane in June, 41.1% in September and 19.3% in October; and GP-20C, north of Fill Area 2, had 36.9% methane in June and 1% in September. Methane at all of these locations previously had been shown to be of natural origin, not from landfill decomposition.
- Throughout this monitoring period, the landfill gas wells nearest to groundwater monitoring wells E-20B and MW-4Awere operated with as much vacuum as they would tolerate without pulling in air from above the ground surface. This was an effort to prevent landfill gas from reaching those wells, where low concentrations of VOCs have been detected.

Figure 6.4-1 shows the amounts of landfill gas consumed by each of the gas-consuming devices at the ALRRF. As shown in the figure, the gas system ran smoothly for most of the six-month reporting period. There were uncharacteristically long down times (several days) for each of the two turbines, and a unique incident in September involved a shutdown of the water supply to the LNG Plant for more than two days. Other unplanned interruptions were few, and brief, and were confined to a single gas control device at any given time.

Figure 6.4-1 - ALRRF Daily LFG Flow (values derived from Title V Report)



Engines A-23 and A-24 have been decommissioned



First Semi-Annual 2018 Groundwater Monitoring Report

This Report, by SCS Engineers, covers July through December of 2018.

The Community Monitor team has carefully reviewed the ALRRF's Groundwater Monitoring Report for the second half of 2018. The report of this review consists of the following three sections:

- Langan's general summary and evaluation of the ALRRF groundwater report
- Comments from Langan staff regarding the sample analysis process and laboratory quality control
- Tracking of trends in specific contaminants at wells with a history of contamination

Key points from the Langan summary and evaluation are:

- VOC occurrences at groundwater monitoring wells were consistent with historical observations; wells and monitoring points were generally found to be in compliance.
- In the vadose zone (below the liner but above groundwater) at the Fill Area 2 leachate pond, several inorganic parameters (pH, alkalinity and others) were higher than their historical averages; however, the historical record for this area only began in 2016, when this pond was constructed.
- The first data from below the Fill Area 1 South surface impoundment, which is outside the refuse footprint of Fill Area 1, presented detections of five VOC's that have also been detected beneath Fill Area 1. The liquid from these two monitoring points (FA1 South VZM and FA1 South LD) was residual from construction testing at the pond. It has been extracted and the points will be resampled when they recharge.
- The leachate and condensate within the Fill Area 1 South surface impoundment were sampled in June for Constituents of Concern, as required, and the herbicide Silvex was detected above the reporting level. The impoundment was sampled again in December and Silvex was detected again. Groundwater throughout the ALRRF will be sampled for Constituents of Concern in 2019, and this will indicate the extent of this issue.
- In the stormwater basins, several VOCs were detected in Basin C. The stormwater plan for the site indicates that runoff from the maintenance shop and the western 2/3 of the surface of Fill Area 1 drains to Basin C. Basin A had no VOCs; Basin B contained no stormwater for the season.

Langan's full summary is attached to this memo. Their general recommendation is: "We recommend continuing review of ... data as it becomes available, and evaluating for trends in data, especially for groundwater monitoring wells where VOCs have previously been detected."

Data Quality

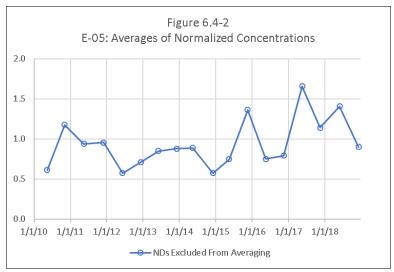
Because of continuing concern about laboratory-contaminant and sampling-procedure issues, a Langan staff member with expertise in water quality sample analysis was asked to review the groundwater report to identify any areas that the ALRRF, their sampling contractor, or the laboratory should address. Langan staff's response included the following:

Field duplicate samples are apparently not being sent to the laboratory as blind (Section 3.5). Please consider asking for an adjustment here; submitting as blind is important.

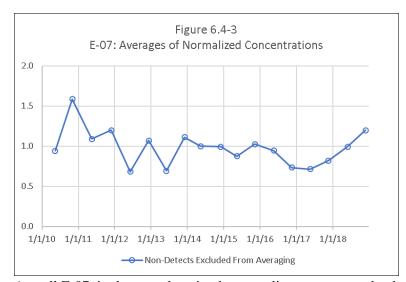
I would characterize the number of affected analytes and magnitude of contamination as normal, though there is no harm in asking TAL to investigate and take corrective actions. This is what we would do if contracting with them directly. Often labs allow systemic problems to persist even though they're capable of making improvements.

Trends in VOC Data

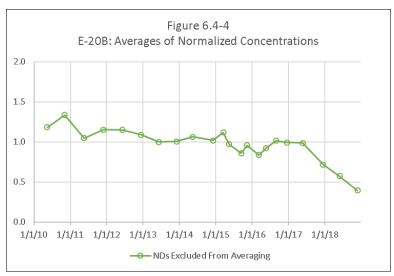
The Community Monitor team has continued to review the trends in data from monitoring wells where VOCs have been detected, to evaluate the ALRRF's position that VOC concentrations have been decreasing. We have taken the further step of graphing the data over time for each contaminant in each such well. We have normalized the concentration data (dividing each data point by the average for that substance at that well, with non-detects excluded) in order to pool all of the VOC data at a well and look for trends. We offer the following observations:



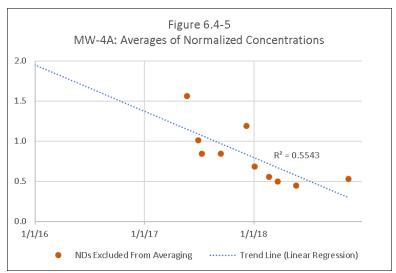
At Well E-05, at the toe of Fill Area 1, the data vary too widely to provide a clear trend.



At well E-07, in the same location but sampling at a greater depth, the most recent VOC data appears to present an upward trend.



At well E-20B on the east side of Fill Area 1, the average across all VOC's shows a clear decline in the past 18 months. Aggressive landfill gas extraction near this well may be the reason for this change.



At well MW-4A, at the northeast corner of Fill Area 1, although the data cover a shorter time span there appears to be a downward trend in average VOC concentrations.

Landfill Gas and Groundwater

The January – June Semiannual Groundwater Monitoring Report included data from the new soil gas probe UGP-1, close to groundwater well E-20B. These data, from January and February 2018, showed methane concentrations of 38% to 43% at that probe. Subsequently, a sample from November 2018 has been found to contain 63.1% methane, which is more concentrated than typical landfill gas. Additional sampling, over time, will provide greater understanding of these findings.

With the new soil gas probe AL-6 near groundwater wells E-05 and E-07, previous data showed very low levels of methane (0.1%); and the most recent sample data, from November 2018, indicate 0.0% methane and 0.1% CO2. In general the results from AL-6 appear to indicate that the soil gas there is, essentially, air.

Stormwater Reports

ALRRF updated its Storm Water Pollution Prevention Plan and the related Numeric Action Level reports at the end of 2018 but have not yet provided those reports to us for review. We anticipate receiving them shortly and will summarize them for the next Community Monitor Committee meeting.



Memorandum

135 Main Street, Suite 1500 San Francisco, CA 94105 T: 415.955.5200 F: 415.955.5201

To: Kelly Runyon

Michael Burns, ESA

From: Mukta Patil, PE, Senior Project Engineer

Dorinda Shipman, PG, CHG, Principal

Date: 20 March 2019

Re: Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407

Langan Engineering and Environmental Services (Langan) has reviewed hydrogeologic data for the Altamont Landfill and Resource Recovery Facility (ALRRF) located near Livermore, California. The work and resulting data were conducted by SCS Engineers, and presented in the following report:

• SCS Engineers, Second Semiannual-Annual 2018 Groundwater Monitoring Report, Altamont Landfill and Resource Recovery Facility (WDR Order No. R5-2016-0042-1), Long Beach, California dated 8 February 2019.

The report addresses the monitoring and reporting requirements of the Central Valley Regional Water Quality Control Board (Water Board) Waste Discharge Requirements (WDR) Order No. R5-2016-0042 and the related Monitoring and Reporting Program (MRP), adopted on 27 October 2016 for the ALRRF, which is owned and operated by Waste Management of Alameda County, Inc. This memorandum describes the results of the above effort and provides Langan's opinions and recommendations for the Community Monitor Committee (CMC). The report was reviewed for issues described in previous CMC meeting minutes and for potential trends in groundwater analytical data over recent years.

No waste has been placed in Fill Area 2 and ALRRF anticipates Phase I of Fill Area 2 may begin receiving wastes in 2019. The second semiannual 2018 groundwater sampling activities for Fill Area 1 and Fill Area 2 were conducted in November and December 2018. Wells associated with future Fill Area 2 are monitored on a semiannual basis to establish baseline conditions. Wells and monitoring points were generally found to be in compliance during the Second Semiannual 2018 sampling event.

Second Semiannual 2018 Groundwater Sampling Results

<u>Detection and Corrective Action Well¹ Inorganic and Volatile Organic Compound Concentrations</u>

The 2016 MRP identifies two sets of corrective action wells: 1) well E-20B along the east side of Fill Area 1 and downgradient (detection) well MW-12, and 2) wells E-05 and E-07 in the main canyon south of Fill Area 1 and their downgradient (detection) well E-03A. Additional detection wells have been added to the MRP, due to indications of possible groundwater impacts at other locations on site. Based on the analytical results of the second semiannual monitoring event, detected concentrations of inorganic compounds

¹ Monitoring wells included in the Corrective Action Program (CAP) and Detection Monitoring Program (DMP) of the MRP, used for compliance monitoring.

Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 2 of 7

remain stable in the detection and corrective action wells sampled. Volatile organic compounds (VOCs) not attributable to laboratory cross contamination were detected in five wells, as indicated in the table below. At these well locations, the VOCs detected and the respective concentrations were similar to historical data.

In monitoring well E-20B, 1,1-dichloroethane (1,1-DCA) and dichlorofluoromethane were detected at concentrations above reporting limit (RL)². These VOCs have been detected in E-20B since 1999. Several other VOCs have also been detected at lower concentrations. Below RL concentrations of 1,4-dichlorobenzene (1,4-DCB), cis-1,2-DCE and diethyl ether were also detected in E-20B during the Second Semiannual 2018 monitoring event. The Updated Engineering Feasibility Study (EFS), completed by SCS Engineers (November 2004, Revised March 2005), and the Revised E-20B Corrective Action Plan (CAP), dated 13 August 2014, prepared by Waste Management of Alameda County, Inc. (WMAC) concluded that the VOC detections at E-20B do not appear to be indicative of leachate impacts. However, in a letter dated 23 May 2014, the Central Valley Regional Water Quality Control Board (Water Board) remarked about its reservations regarding this conclusion. As discussed below, the area surrounding E-20B is currently undergoing corrective action, including landfill gas control; and E-20B is also sampled for natural attenuation parameters to monitor conditions favorable for VOC degradation. Well MW-12 (installed in September 2014), located 650 feet downgradient of E-20B, did not have any detections of VOCs during second semiannual 2018 sampling event.

Corrective action well E-07 had detections of eight VOCs; 1,1-DCA, cis-1,2-DCE, dichlorofluoromethane and dichlorodifluoromethane were detected above RL and the remaining four VOCs were detected at concentrations below their reporting limits. The corrective action well E-05 had above RL concentrations of tetrahydrofuran, and below RL concentrations of three additional VOCs. With the exception of tetrahydrofuran in E-05, which has been detected at a slightly higher concentration than in the past since 2017, all other VOC concentrations in these two wells were within the historical range. Evaluation well E-21 located downgradient of E-05 and E-07 had detections below the RL of three VOCs, similar to historical concentrations, but had they not been detected in 2017 or First Semiannual 2018. Other wells downgradient of E-05 and E-07 (E-18, E-23, E-17 and E-03A) had no detections of VOCs other than laboratory attributed acetone.

LANGAN

Please see the Acronyms list in this agenda packet for definitions of "Reporting Limit" and related terms.

Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 3 of 7

Area	Well	Acetone	2-Butanone	Chlorobenzene	1,4-Dichlorobenzene	Cis-1,2-dichloroethene	1,1,-Dichloroethane	1,1,-Dichloroethene	1,2,-Dichloropropane	Dichlorodi- fluoromethane	Dichloro-flouromethane	Diethyl ether	Methylene Chloride	Methyl tert-butyl ether (MTBF)	Tert-Butyl Alcohol	Tetrachloroethene	Tetrahydrofuran	Trichloroethene	Vinyl chloride	Carbon Disulfide	Comments
Canyon South of Fill Area 1	E-05											Χ		Χ	Χ		Χ				Corrective Action Well Matches historical data
	E-07					Х	Х			Х	Х	Х		Х		Х		Х			Corrective Action Well Matches historical data
	E-23																				Corrective Action Well No VOCs detected
	E-21						х									х		х			Evaluation Well Matches historical data of upgradient wells
	E-03A																				Downgradient Detection Well No VOCs detected
East of Fill Area 1	E-20B				Х	Х	Х				Χ	Х									Corrective Action Well Matches historical data
	MW-20 ³						х					Х								Х	Downgradient Corrective Action Well Matches historical data since October 2017
	MW-12																				Downgradient Corrective Action Well No VOCs detected
West of FA 1	MW-2A																				Monitoring Well No VOCs detected
	MW-6																				Monitoring Well No VOCs detected
South of FA1	MW-5A																				Monitoring Well No VOCs detected
	MW-7																				Monitoring Well No VOCs detected
	MW-11																				Monitoring Well No VOCs detected
Downgradient of MW-12 (FA2)	PC-1B																				Monitoring Well No VOCs detected
	PC-1C																				Monitoring Well No VOCs detected

³ MW-20 was added to the corrective action wells in September 2017 and was sampled in September 2018 and November 2018. The results noted in the table are from the November 2018 sampling event. The September sample also had detections of cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethane (1,1-DCA) and diethyl ether.

Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 4 of 7

Well E-20B

At the Water Board staff's request, to improve monitoring effectiveness and to address the source of VOC impacts detected in the corrective action well E-20B, one groundwater monitoring well (MW-12, installed 650 feet downgradient of E-20B in September 2014) and two new landfill gas extraction wells (687 and 688, installed in the vicinity of E-20B in January 2015) were installed by WMAC. MW-12 has been sampled since installation to track the effectiveness of enhancements made to the LFG collection system in January 2015. Starting December 2014, VOCs diethyl ether, cis-1,2-DCE, and 1,1-DCA were detected occasionally in MW-12. During the year 2018, no VOCs were detected in this well. Based on the E-20B VOC time series, and operation of the LFG control system, corrective measures are performing as expected and groundwater VOCs are continuing to decrease over time.

As a consequence of VOCs in MW-12 groundwater, another well, MW-20, was installed downgradient of E-20B in September 2017 at the request of the Water Board. Below RL concentrations of five VOCs were detected in the initial sample collected from MW-20 in October 2017. Two of the five VOCs, 1,1-DCA and diethyl ether were detected in subsequent sampling events, confirming the initial sampling results. During the September 2018 and November 2018 sampling, MW-20 had below RL detections of cis-1,2-DCE, 1,1-DCA, diethyl ether and carbon disulfide. Due to the detections of VOCs in MW-20, during a meeting with the Water Board on 17 July 2018, a new monitoring well was proposed to be installed downgradient of MW-20. A Work Plan dated 3 August 2018 for the installation of well MW-27 has been submitted to the Water Board. MW-27 will be installed in the center of the canyon, approx. 400 feet downgradient from MW-20, in the first encountered groundwater. The installation of MW-27 has been postponed until safe conditions for installation in the spring of 2019. The Water Board accepted the timeline an email on October 31, 2018, but requested that the new well be sampled during the first half of 2019 and the data included in the First Semiannual 2019 report.

Detection wells PC-1B and PC-1C were added to the monitoring network, at the request of Water Board, to monitor for potential migration of VOCs further downgradient of E-20B. Wells PC-1B and PC-1C, located approximately 2,000 feet from E-20B and approximately 1,500 feet downgradient of MW-12 have not had any VOC detections since the start of monitoring in 2006 with the exception of those attributable to laboratory cross contamination (acetone and methylene chloride). VOCs that are consistently detected in E-20B also have not been detected in the deeper groundwater zone monitoring wells MW-3B and MW-3C during the 2018 monitoring events.

The first semiannual 2018 sample from PC-1B had an above RL detection of naphthalene at $2.1~\mu$ g/L. Given the fact that no landfilling has occurred within 1,750 feet of PC-1B, the detection of naphthalene was deemed anomalous and resampling events conducted on 26 July and 27 August 2018 detected naphthalene at concentrations equal to the RL and below the RL, respectively. In a letter dated 12 October 2018, WM concluded that the source of the naphthalene was unknown but may be cross-contamination from components of the dedicated pump used for sampling the well. The Water Board concurred with the findings in a letter dated 11 January 2019 and requested continued quarterly sampling of PC-1B.

Fill Area 2

Waste placement in Fill Area 2 is currently due to begin in late March of 2019. According to the 2016 MRP, Fill Area 2 wells MW-8A, MW-8B, MW-9, MW-10, MW-13B, MW-14, PC-1B, PC-1C, PC-2A, and WM-2 will

Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 5 of 7

be assessed when filling begins in 2019. However, to establish background water quality, most of these and several other Fill Area 2 wells have been sampled since 2014. Newly installed well MW-17R of Fill Area 2 was sampled monthly between September and December 2018. During the Second Semiannual 2018 period, no VOCs were detected in samples from Fill Area 2 wells MW-13B, MW-14, MW-14R⁴, MW15B, MW-16, MW-17R, MW-18, MW-19, MW-21, PC-1C, and PC-6B(R), aside from laboratory attributed acetone.

Summary of Groundwater Results

VOCs detected in corrective action monitoring wells E-05, E-07, E-21, E-20B, and MW-20 were generally consistent and within the ranges of previous detections observed at these wells. However, due to the continued detections of VOCs in MW-20, a new downgradient well MW-27 is awaiting safe site conditions for installation in the next dry season. VOCs detected in E-20B and MW-20 were not detected in downgradient wells MW-12, PC-1B and PC-1C. No VOCs were detected in E-23 and E-03A located downgradient of E-05 and E-07. Naphthalene detected in PC-1B will continue to be monitored quarterly at the request of the Water Board.

Unsaturated Zone Inorganic and VOC Concentrations

The 2016 WDR/MRP (Waste Discharge Requirements/Monitoring and Reporting Plan) requires VZM-A⁵, VD⁶, and VD2⁷ in Fill Area 1 and UD-1⁸, LD-1⁹, SI-1¹⁰, and VZM-B¹¹ in Fill Area 2 to be monitored monthly for presence of liquid. In addition, two Class II Surface Impoundments have been constructed southeast of Fill Area 1 Unit 1. The two new impoundments are called Fill Area 1 North LSI and Fill Area 1 South LSI. Through the second half of 2018, Fill Area 1 North LSI has only held water from rainfall into the impoundment. Fill Area 1 South LSI has been used to hold comingled leachate and unsaturated zone liquids from Fill Area 1 since 9 March 2018.

According to the 2016 WDR/MRP, if liquid is present in any of the monitoring points listed above, samples are to be collected on a semi-annual basis. Fill Area 1 and 2 monitoring points were checked monthly for the presence of liquid between July and December 2018. Fill Area 1 locations VD, VD2, and VZM-A and Fill Area 2 location VZM-B contained liquids during the monthly visits. Fill Area 2 locations UD-1 and LD-1 were dry during all visits between July and December 2018.

Wells that have an "R" after their number are replacement wells, installed because the original well became dry.

⁵ 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 Fill Area 1 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

VD2 is the monitoring location for the subdrain beneath the engineered liner at Fill Area 1 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.

Phase I Unsaturated zone Underdrain

⁹ Leak Detection

¹⁰ Surface Impoundment

Vadose zone monitoring sump

Groundwater and Storm Water Analysis for Community Monitor Progress Report #23

Altamont Landfill and Resource Recovery Facility (ALRRF)

Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 6 of 7

Semiannual samples were collected from VZM-B on 7 December 2018; VD, LD AND VZM on 10 December 2018; and VD2 and VZM-A on 11 December 2018. The inorganic parameters were generally within the historical ranges, with the exception of pH, specific conductance, bicarbonate alkalinity, chloride, and manganese in VZM-B detected above historical ranges, but which has a limited historical record. The 2016 MRP requires sampling of VD for acetophenone on a semiannual basis and VD, VD2, and VZM-A for dinoseb on an annual basis. No acetophenone or dinoseb were detected in the December 2018 sampling event from VD and VD2. Location VZM-A was not sampled during the December sampling event due to insufficient liquid.

In the Second Semiannual 2018 report, detected concentrations of inorganics and VOCs at VZM-A, VD, and VD2 were consistent with historical concentrations and appeared to be stable, i.e. concentrations have not shown an increasing trend. The VOC detections at VZM-A, VD, and VD2, have been attributed to landfill gas. Detected concentrations of VOCs and inorganics in unsaturated zone monitoring points will be evaluated in subsequent monitoring reports for potential increasing trends.

Newly established monitoring points FA1 South VZM and FA1 South LD (at the newly completed surface impoundment FA1 South LSI) presented detections of five VOCs below the RL. These VOCs had been previously detected in VZM-A, VD and VD2. The Water Board was notified on August 30, 2018. ALRRF staff is in the process of removing the liquid, determined to be residual water from the construction testing, from both of these sumps and checking on recharge.

Leachate Inorganic and VOC Concentrations

The leachate monitoring network in the 2016 MRP includes Fill Area 1 Unit 1 Leachate Sump (LS), Fill Area 1 Unit 2 Leachate Sump (LS-2), and Fill Area 2 Surface Impoundment SI-1 Leachate Sump (LS-3). Additionally, monitoring location Fill Area 1 South Leachate Surface Impoundment (FA1 South LSI) was first sampled on June 2018. The 2016 MRP requires semi-annual sampling of the leachate sumps.

Twelve VOCs were detected above the RL concentrations and six VOCs were detected below the RL concentrations in the leachate monitoring points LS and LS2 in 2018. FA1 South LSI detections below the RL for 1,4-Dichlorobenzene were found in December 2018. Laboratory derived acetone was detected in all leachate samples in December 2018. No other VOCs were detected in LS3. Inorganics and VOCs at leachate monitoring point LS, LS2 and LS3 for December 2018 were similar to historical values.

The 2016 MRP requires sampling of LS for acetophenone on a semiannual basis and LS, LS-2 sampling for dinoseb on an annual basis. Acetophenone was detected during the December 2018 sampling event in LS-2 at concentrations below the RL. Acetophenone was not detected in LS and it was not sampled in FA1 South LSI. Dinoseb was not detected in any of the three samples during the annual 2018 sampling event.

The June 2018 sample for FA1 South LSI was also sampled for Contaminants of Concern (COCs). Herbicide 2,4,5-TP (silvex) was detected above the RL, this was a new detection, and therefore FA1 South LSI was sampled again for this chemical on December and detected again. Silvex is included in each five-year cycle of COC sampling at groundwater. The landfill will be performing a COC event in 2019 and each point will be sampled for silvex.



Groundwater and Storm Water Analysis for Community Monitor Progress Report #23
Altamont Landfill and Resource Recovery Facility (ALRRF)
Livermore, California

Langan Project No.: 750477407 20 March 2019 - Page 7 of 7

Stormwater Sedimentation Basins

In accordance with the 2016 MRP/WDR, water inside sedimentation basins is to be sampled on a semiannual basis. During the first semiannual period of each year, samples are to be collected between January and May and for the second semiannual period the samples are to be collected in October and December. During the second semiannual 2018 period, samples were collected from water inside Basin A and Basin C on 19 December 2018. Basin B was not sampled because it had not received Fill Area 1 generated stormwater for the 2018-2019 wet season. Other than the laboratory contaminant acetone, no VOCs were detected in Basin A. In addition to acetone, methyl isobutyl ketone (MIBK) and styrene were detected in Basin C below the RL. Both VOCs have been detected previously in Basin C.

Per 2016 MRP/WDR, surface water samples are to be collected to evaluate sporadically detected VOCs in stormwater retention basins. Therefore, in accordance with the Water Board approved Work Plan dated 1 December 2016, surface water samples were collected from six stormwater sampling points on November 2017 and March 2018. The samples were analyzed for field, inorganic parameters and VOCs. Acetone, ethanol, methyl ethyl ketone (MEK), MIBK, toluene and tetrahydrofuran were detected in one or more of the surface water samples. No significant correlation is noted between the inorganic concentrations and VOC detections. Continued sampling of the storm water monitoring points was recommended because of relatively dry conditions to that point. During the July through December 2018 period, no stormwater location samples were collected. Sufficient storm runoff occurred in January 2019, and samples were collected from several SW points, which will be reported in the next semiannual report.

Recommendation

We recommend continuing review of groundwater, unsaturated zone, leachate, and stormwater data as it becomes available, and evaluating for trends in data, especially for groundwater monitoring wells where VOCs have previously been detected.

20190329LanganMemo2ndSemiFinal.docx

memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 4/10/19 - Agenda Item 6.5 - Information from Documents on Geotracker Web Site

With the first use of Fill Area 2 imminent, the ET Cover Test Area in progress, and a very wet winter causing stormwater management difficulties, the number of topics and documents appearing on the Geotracker web site has dramatically increased in the past three months. It has reached a level of complexity that requires using a table format, rather than plain text, to summarize the issues for the Committee.

In this memo, each topic is given its own table that summarizes the relevant documents in chronological order. For ease of reference, the topics are grouped under five major headings, and in the electronic version (PDF file) <u>links</u> enable the reader to skip to a topic of interest and return to the top of the list when finished.

In the list, those topics that include a Violation or a recent important development are marked with a special bullet:

- This topic name links to a list of documents that contains a violation or a recent important development.
- This topic name links to a list of documents that is less noteworthy.

Violations or important Areas of Concern are highlighted in pink and yellow, respectively. Other noteworthy items are highlighted in blue. Committee Members' comments on this layout and its ease-of-use are welcome. The topic list begins on the following page.

Topic List

Landfill Operations

- Refuse Disposal Operations
- Windblown Litter
- ET Cover Planning, Design and Installation
- Revised Configuration and Phasing Schedule for Fill Area 2

Liquids Management

- Fill Area 1 Leachate and Liquids Management
- Fill Area 2 Leachate Management
- **Solidification Basins**
- ➤ Leak at Landfill Gas Condensate Tank S-12

Stormwater Management

- > Stormwater Controls
- VOCs in Storm Water

Monitoring Wells

- Concentration Limits for Monitoring Wells
- New or Pending Monitoring Wells
- Notice of Violation and Work Request: Monitoring Well MW-4A
- ➤ Monitoring Well Locks and Labels
- Naphthalene Detections in Future Fill Area 2 Monitoring Well PC-1B
- Gas Probes

Other Topics

• Testing for PFA Compounds

LANDFILL OPERATIONS

Refuse Disposal Operations

Topics

From	Format Date	Key Point(s)
CVRWQCB	Letter Dec 5, 2018	Area of Concern for lack of control of runoff from working face.
ALRRF	Letter Feb 1, 2019	Explained the ALRRF's standard operating practices for containing runoff within the working face. Did not refute the stated concern.

Windblown Litter Topics

From	Format Date	Key Point(s)
CVRWQCB	Letter Dec 5, 2018	Notice of Violation for windblown trash outside of FA1 and beyond final fences east of FA2.
ALRRF/ Geosyntec	Letter Feb 1, 2019	Disagreed with sighting of windblown trash beyond final fences: during inspection, WM staff saw no trash there. Listed litter control practices and noted that CVRWQCB staff have previously acknowledged the difficulty of removing all litter at once.

ET Cover Planning, Design and Installation

Topics

From	Format Date	Key Point(s)
ALRRF/	Letter	Notified CVRWQCB staff that delay is needed until late 2018
Geosyntec	Sep 25, 2017	due to unexpected differential settlement, which must be
		corrected.
CVRWQCB	Meeting Notes	Noted that a decision about ET Cover location is expected
	May 17, 2018	shortly after next aerial topography survey, end of June 2018.
ALRRF/	Letter, Plans	Recommendation from Geosyntec to proceed; drawings and
Geosyntec	and Specs	specifications included.
	Jul 24, 2018	
CVRWQCB	Letter	Notice of Violation for failure to notify Water Board staff 14
	Dec 5, 2018	days prior to beginning construction of the ET cover
		demonstration project.
ALRRF	Letter	Refuted Violation #6, noting that CVRWQCB compliance and
	Feb 1, 2019	permitting staff were kept informed prior to construction.
ALRRF/	Construction	The Construction Quality Assurance report was transmitted. It
Geosyntec	Report	documents the placement of soil (including thickness and
	Feb 12, 2019	compaction), hydroseed, and monitoring devices. The scope
		of this report had been approved by the CVRWQCB on July
		27, 2018.

Revised Configuration and Phasing Schedule for Fill Area 2

From	Format Date	Key Point(s)
CVRWQCB	Meeting Notes May 17, 2018	ALRRF proposed a modified phasing schedule for Fill Area 2. Total refuse footprint area was unchanged; Conservation Plan Area was not impacted. However, placement and installation dates for Fill Area 2 monitoring wells would be revised extensively. FA2 Phase 1 would begin receiving waste in April 2019 (the "Expansion Date").
CVRWQCB	Meeting Notes July 17, 2018	ALRRF proposed an enlarged sedimentation basin between Fill Area 2 and the mitigation pond. A formal proposal for these changes is needed. ALRRF proposed to submit work plans for FA2 monitoring well locations by Jul 27, 2018.
ALRRF	Letter Jul 27, 2018	Submitted proposed plans to move monitoring wells PC 2A/B, PC-2C, MW-8A and MW-8B, replacing them with MW-8AR and MW-17R in locations outside of the SB-H sedimentation basin.
CVRWQCB	Letter Dec 5, 2018	Rejected moving wells as proposed. Required a report by 22 Feb 2019, prior to placement of waste in FA2, proposing concentration limits for all FA2 monitoring wells.
CVRWQCB	Letter Jan 15, 2019	Requirements for slope stability analysis, financial assurance for closure/post-closure, monitoring well concentration limits, freeboard markings at ponds, landslide removal (by FA2 phases), monitoring well placement (by FA2 phases), and soil gas probes (by FA2 phases) prior to placement of waste in Fill Area 2.

From	Format Date	Key Point(s)
CVRWQCB	Meeting Notes Feb 11, 2019	 In this meeting between ALRRF and CVRWQCB representatives, ALRRF stated the following: A revised slope stability analysis will be submitted for FA2 Phase 1. Financial assurance for closure/post-closure will be provided phase by phase, per Title 27 Section 21820(a)(1)(A), and a cost estimate to close all of Fill Area 2 will be provided. For each Phase of FA2, ALRRF would like to place downgradient monitoring wells 150 meters from the edge of the phase, as allowed by Federal (but not State) regulations. CVRWQCB will allow this subject to certain conditions, and ALRRF will submit a revised phasing plan by March 11. ALRRF will either install a soil gas probe for Phase 1 or use the FA2 leak detection system to sample soil gas. CVRWQCB accepted this subject to certain specified conditions.

LIQUIDS MANAGEMENT Fill Area 1 Leachate and Liquids Management

Thi Area I Deachate and Edulus Management		
From	Format Date	Key Point(s)
ALRRF/ Golder	Work Plan Jun 30, 2017	Proposed changes to Fill Area 1 leachate and underdrain handling system to keep leachate separate from underdrain water. Underdrain water proposed to be used in compost process.
CVRWQCB	Letter Sep 13, 2017	Response added several design requirements in order to better protect water quality. Prohibited the use of underdrain water for composting or dust control.
ALRRF	Letter Oct 13, 2017	Acknowledged CVRWQCB requirements and stated that ALRRF intended to use underdrain water in composting at ALRRF.
CVRWQCB	Letter Nov 2, 2017	Stated that use of underdrain water for composting would require separate Waste Discharge Requirements for this activity.
ALRRF	Letter Nov 21, 2017	Stated that ALRRF would continue to work on the separation project and would also continue to use combined liquids for dust control and reinjection.
CVRWQCB	Letter Jan 17, 2017	Pointed out that such uses violate regulations but the WDRs allow time to correct this. Also set deadline for separation system construction plans (April 27, 2018) and full compliance with liquid separation (Feb 1, 2019).

From	Format Date	Key Point(s)
CVRWQCB	Meeting Notes May 17, 2018	Noted that if underdrain water is to be used in composting, it will first have to be remediated to remove VOCs, with that process permitted through the Water Reclamation General Order process.
ALRRF	Letter Oct 2, 2018	Reported leachate pipe damage and repair that occurred during installation of the liquids management system.
CVRWQCB	Letter Dec 5, 2018	Notice of Violation for release of leachate from leachate sump LS2.
CVRWQCB	Letter Dec 5, 2018	Notice of Violation for discharge of liquids into FA1 surface impoundments without (a) receiving approval of construction, and (b) submitting, and receiving approval of, financial assurances for corrective action and closure.
CVRWQCB	Letter Dec 5, 2018	Notice of Violation for lack of means to record liquid level in LSI-North and South (FA1).
CVRWQCB	Letter Jan 15, 2019	Reminder of requirements for leachate pumping system.
ALRRF	Letter Feb 1, 2019	Noted that Violation #2 has been addressed; Violation #4 is in the process of being addressed; and Violation #5 has been addressed.
ALRRF/ Golder	Letter Feb 1, 2019	Submitted report documenting completion of the liquids separation project construction work.
CVRWQCB	Meeting Notes Feb 11, 2019	CVRWQCB staff called for prompt compliance with a 2017 requirement that the leachate pumps automatically switch from primary to backup as needed. ALRRF agreed to work on this. ALRRF also stated that they are working on amended financial assurance documents as required.
CVRWQCB	Letter Feb 22, 2019	Notice of Violation for Discharge of CASP Runoff to FA1 Surface Impoundment. In mid-February, runoff due to wet weather was threatening to exceed the capacity of the CASP stormwater basin, and temporary portable tank capacity was not immediately available. As an emergency measure, the ALRRF transferred a total of approximately 600,000 gallons from the CASP basin to one of the two ponds at FA1. This was done prior to the approval of the required financial assurance documents for closure of the ponds.
CVRWQCB	Letter Mar 18, 2019	Water Board staff approved the estimated amounts for ALRRF's proposed FA1 and FA2 pond closure financial assurance surety bonds.

Fill Area 2 Leachate Management

Topics

From	Format Date	Key Point(s)
CVRWQCB	Letter	Notice of Violation for lack of means to record liquid level in
	Dec 5, 2018	LSI-1 (FA2).
ALRRF	Letter	Noted that Violation #5 has been addressed.
	Feb 1, 2019	
CVRWQCB	Meeting Notes	ALRRF stated that they are working on amended financial
	Feb 11, 2019	assurance documents as required.

Solidification Basins <u>Topics</u>

Solidification Dashis		
From	Format Date	Key Point(s)
CVRWQCB	Waste Disch Req'ts Sep 23, 2016	Discharge Specification B2 on page 58 of the WDRs required the ALRRF to develop Standard Operating Procedures for its solidification process to meet Title 27 regulatory requirements for landfilling liquid-content wastes.
ALRRF	Letter Report Sep 29, 2016	Transmitted the ALRRF's internal Standard Operating Procedure, updated September 2016, for the solidification process.
CVRWQCB	Letter Jan 24, 2017	Expressed concerns re possible leakage from the solidification pits or free liquid escaping from solidified wastes. Required submittal of a technical report by April 1, 2017.
ALRRF/ Golder	Letter Report Mar 31, 2017	Submitted technical report by Golder Associates providing procedural details, water balance calculations, and other supporting information.
CVRWQCB	Letter Jul 17, 2018	Expressed concern that the moisture holding capacity of the waste in Unit 2 of Fill Area 1 has already been exceeded. Required submittal, by Sep 1 2018, of a work plan to demonstrate that the solidification basins comply, or a proposal to use an impervious containment.
ALRRF	Letter Aug 21, 2018	Stated that Golder Associates will prepare the work plan, and requested an extension of the deadline to Sep 7.
ALRRF/ Golder	Letter Report Sep 7, 2018	Transmitted Golder's work plan, which included a conceptual design and a monitoring plan. It stated that the "generation and collection of leachate from a landfill is not an indication that the moisture holding capacity of the refuse has been reached or exceeded."
CVRWQCB	Letter Oct 4, 2018	Cited the regulatory definition of moisture holding capacity: "The amount of liquid which can be held against gravity by waste materials without generating free liquid." Thus in FA1 Unit 2, the moisture holding capacity has already been exceeded. Also required a work plan by Nov 22, 2018 to demonstrate that basins are liquid tight.

From	Format Date	Key Point(s)
CVRWQCB	Letter Jan 15, 2019	Reminder of requirements for solidification basins.
CVRWQCB	Meeting Notes Feb 11, 2019	ALRRF will submit a plan by May 11, 2019 to remove the current basins and use new basins that are outside the waste footprint by spring of 2020. Water Board staff conditionally agreed to let the existing basins continue to operate until spring of 2020.

Leak at Landfill Gas Condensate Tank S-12

	•	
 N	nı	CC
 v	J.	Lo

Leak at Landini (zeak at Landini Gas Condensate Tank S-12	
From	Format Date	Key Point(s)
ALRRF	Letter Report	Leak through wall of condensate tank secondary containment
	Oct 16, 2018	found during Water Board inspection October 9; cleaned up and repaired that day, as documented with photos and
		narrative.
CVRWQCB	Letter	Notice of Violation for release of condensate outside of
	Dec 5, 2018	disposal unit.
ALRRF	Response Letter	Initial response to Violation 1 of 6 refers to cleanup of a
	Feb 1, 2019	condensate leak that occurred Sep 2018. It appears that this
		Violation is not being contested and has been addressed.
ALRRF	Letter Report Feb 6, 2019	Report of a leak from piping outside of secondary containment at S-12 on January 22, 2019. This report states that it is being provided "within 7 days of the incident" but it is dated February 6. Landfill gas condensate from the leak reached the storm drain system and may have reached Basin A. All water was removed from Basin A and used for dust control in the Class 2 unit of Fill Area 1. Potentially contaminated soil was also removed from the perimeter of Basin A and disposed in the Class 2 unit of Fill Area 1.

STORMWATER MANAGEMENT

Stormwater Controls

From	Format Date	Key Point(s)
CVRWQCB	Letter	Area of Concern for inadequate stormwater controls in FA2
	Dec 5, 2018	excavations and ET Cover Test Area.
ALRRF	Letter	Stated that all measures described in the Construction
	Feb 1, 2019	Stormwater Plan had been installed, and that field inspections
		found them to be effective.

VOCs in Storm Water

Topics

From	Format Date	Key Point(s)
ALRRF/ SCS	Letter Report	Provided Work Plan to evaluate potential VOC sources
	Dec 1, 2016	affecting storm water quality.
CVRWQCB	Letter	Required initial report of investigations by Jun 30, 2018
	Sep 13, 2017	
ALRRF/ SCS	Letter	Submitted Jun 29, 2018 report from SCS recommending 1
	Jul 23, 2018	year extension and 2 more monitoring points
CVRWQCB	Letter	Accepted Jun 29, 2018 report with several conditions,
	Aug 8, 2018	including one requiring that program and results be added to
		stormwater monitoring plan and reports. Also required
		summary report by Jun 28, 2019.
ALRRF	Letter	Agreed but asked to hold off on changes to stormwater plan
	Oct 3, 2018	until the initial investigation is complete.
CVRWQCB	Letter	Referenced Aug 8 letter (listed above) and requested the
	Jan 8, 2019	updated stormwater monitoring plan by Feb 8, 2019.
ALRRF	Letter	Noted that the updated report requested in the CVRWQCB
	Feb 14, 2019	letter of Jan 8, 2019 had been submitted on December 21,
		2018. Also stated that the BMPs referenced in the
		CVRWQCB letter of Jan 8, 2019 were reflected in the Dec 21
		submittal.

MONITORING WELLS

Concentration Limits for Monitoring Wells

From	Format Date	Key Point(s)
ALRRF/	Report	For six monitoring wells near Fill Area 2, data on background
Geochem	September, 2018	levels of certain mineral compounds were used to calculate
Applications		Concentration Limits ¹ (CLs). Exceedance of these limits
		would trigger requirements to resample and possibly take
		corrective action.
ALRRF/	Report	For 18 monitoring wells in or near Fill Areas 1 and 2, data on
Geochem	October, 2018	background levels of certain mineral compounds were used to
Applications		revise Concentration Limits (CLs).
CVRWQCB	Review Letter	Letter accepted all but 7 of the proposed CLs in the September
	Dec 5, 2018	report. Those 7 were judged to be too high due to small data
		sets and outliers in the data. CVRWQCB staff recalculated
		and gave corrected CLs. Also required a report by Feb 22,
		2019 that gives limits for all remaining FA2 monitoring wells.
ALRRF	Letter	Requested meeting to resolve confusion about need for
	Dec 17, 2018	additional proposed CLs. Noted that reports in 2016 and 2018
		gave proposed CLs for remaining FA2 monitoring wells.
CVRWQCB	Letter	Concurred with most of the limits proposed in the October
	Jan 11, 2019	report but noted that for wells PC-2A and WM-2, not enough
		samples were taken. Prior limits to remain until four samples
		taken from each well. Also adjusted downward 17 limits at 7
		different wells, excluding outliers in historical data.

 $^{^{1}\,} Concentration\, Limit:\, Maximum\, permitted\, concentration,\, based\,\, on\,\, statistical\,\, analysis\,\, of\,\, historical\,\, data.$

From	Format Date	Key Point(s)
ALRRF	Letter	Provided a summary table of agreed-upon concentration limits
	Feb 15, 2019	for monitoring wells in FA1 and FA2.

New or Pending Monitoring Wells

Topics

From	Format Date	Key Point(s)
CVRWQCB		Requested installation of monitoring well MW-27,
		downgradient of MW-20, due to VOC detections in MW-20.
ALRRF/	Letter	Transmitted a work plan for installation of MW-27, about
Geosyntec	Aug 3, 2018	400ft down-canyon from MW-20.
CVRWQCB	Letter	Accepted proposed Plan on condition that the well be surged
	Oct 4, 2018	during installation, to settle the filter pack.
ALRRF	Letter	Requested a 7 month extension to the dry season because of
	Oct 29, 2018	safety issues caused by wet weather on steep slopes with low
		traction.
ALRRF/	Report	Described installation and development of well MW-17R,
Geosyntec	Nov 2, 2018	replacing MW-17 near FA2 leachate pond. MW-17 had
		become dry.
CVRWQCB	Letter	Responded to Nov 2, 2018 installation report for well MW-
	Jan 11, 2019	17R. Required quarterly sampling for 2 years before
		proposing water quality protection limits by 1 March 2021.

Notice of Violation and Work Request: Monitoring Well MW-4A

From	Format Date	Key Point(s)	
CVRWQCB	Letter Oct 19, 2017	Notice of Violation for VOC contamination at well MW-4A. Noted recurring VOC contamination in tests on May 23, Jun 29, July 11 2017. Referred to the contamination as a "release along the northern limit of Fill Area 1." Required a work plan for an evaluation monitoring program by Dec 22, 2017 that addresses "the entire 3,500 foot long northern boundary."	
ALRRF / Geosyntec	Work Plan Dec 21, 2017	Submitted an Amended Report of Waste Discharge/ Proposed Evaluation Monitoring Plan. Attributed the contamination to landfill gas, not leachate; proposed to increase gas extraction.	
CVRWQCB	Letter Feb 8, 2018	Order issued to ALRRF explicitly requiring sampling of groundwater along northern boundary of Fill Area 1.	
CVRWQCB	Meeting Notes Apr 30, 2018	Noted that ALRRF had petitioned (appealed) the February 8 Order, believing that it required groundwater sampling along the entire 3,500-foot northern boundary of Fill Area 1. Water Board staff replied that the Order was worded broadly in order to enable Waste Management to focus on the release identified in MW-4A. Also agreed to re-review and comment on the previously submitted Amended Report of Waste Discharge.	

From	Format Date	Key Point(s)	
CVRWQCB	Letter May 7, 2018	Issued an Amended Work Plan, with six specific components to be submitted by June 15.	
CVRWQCB	Meeting Notes May 17, 2018	Reported that Waste Management is preparing the Work Plan. Also reported that Water Board staff said that the work plan must consider the potential for contaminants to migrate along the fault zone between MW-04A and Fill Area 1.	
ALRRF / Geosyntec	Letter Jun 14, 2018	Submitted a revision of the December 21 Amended Report of Waste Discharge/ Proposed Evaluation Monitoring Plan that provides the six required components.	
CVRWQCB	Letter Jul 3, 2018	Approved the revised Report/Plan, with several conditions, including submittal of a report by Nov 2, 2018, documenting implementation.	
ALRRF	Letter Jul 26, 2018	Agreed to conditions except: due to lack of available drill rig, requested a deadline of Dec 14.	
CVRWQCB	Letter Oct 4, 2018	Accepted the ALRRF's approach, including the Dec 14 change of deadline, with conditions regarding the CVRWQCB's use of data.	
ALRRF	Letter Nov 30, 2018	Because of delays due to difficulty drilling with the originally preferred method (sonic), requested a second time extension of the report deadline, to Jan 14, 2019.	
ALRRF / Geosyntec	Report Jan 14, 2019 See map, below	Provided results of initial round of sampling from new borings near MW-4A, and further sampling at MW-4A. Other than acetone, the only VOC in groundwater in the new borings was 2-butanone in one boring. Regarding gas samples, very low levels of methane and CO2 were found in seven of the nine initial samples, at concentrations that (per Geosyntec) "are not indicative of a current ongoing landfill gas release and may be residual concentrations from historic releases prior to the	
		recent adjustments made to the gas extraction system."	

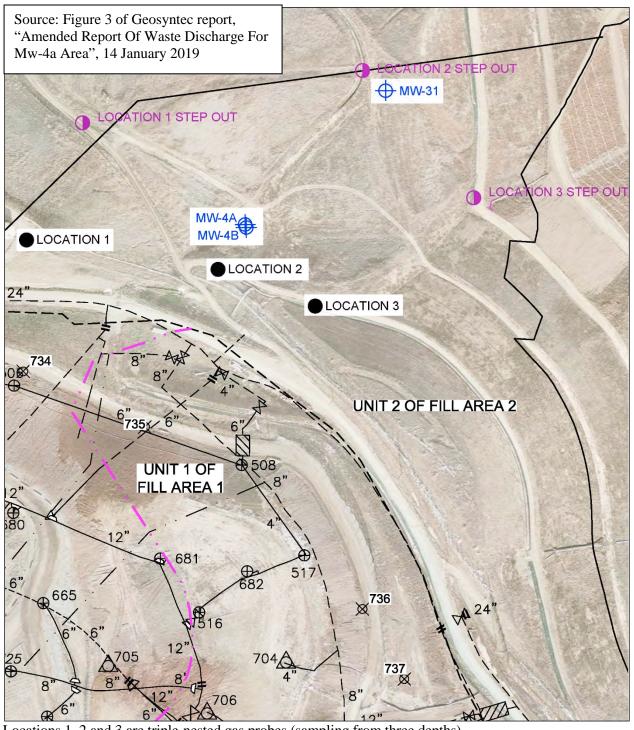


Figure 6.5-1 Soil Gas Borings and Wells Near MW-4A

Locations 1, 2 and 3 are triple-nested gas probes (sampling from three depths)

"Step out" locations are future gas probe locations, if needed.

MW-31 is a newly-installed groundwater monitoring well.

Locations with 3-digit numbers (e.g. 734, 735, 506, etc.) are landfill gas wells in Fill Area 1.

Monitoring Well Locks and Labels

Topics

From	Format Date	Key Point(s)
CVRWQCB	Letter Dec 5, 2018	Area of Concern for lack of locks and labels on various monitoring wells.
ALRRF	Letter Feb 1, 2019	Noted that a missing lock has been replaced, and wells have been relabeled.

Naphthalene Detections in Future Fill Area 2 Monitoring Well PC-1B

Topics

From	Format Date	Key Point(s)
ALRRF/SCS	Report Aug 2018	Naphthalene first found in well PC-1B, May 2018.
ALRRF/SCS	Letter Oct 12, 2018	Naphthalene diminishing but still present, Jul & Aug 2018. Resampling proposed, with a summary report by Feb 1, 2019.
ALRRF/SCS	Letter Report Jan 3, 2019	Well PC-1B was overhauled and resampled, Nov and Dec 2018. Naphthalene continued to be detected but in diminishing trace concentrations. Source of the naphthalene is uncertain; could be the pump inside the well. Continued sampling and monitoring for naphthalene proposed, semiannually.
CVRWQCB	Letter Jan 11, 2019	Responded to ALRRF Oct 12, 2018 letter; concurred with proposed actions and required quarterly sampling.

Gas Probes Topics

From	Format Date	Key Point(s)
ALRRF	Letter Dec 17, 2018	Requested approval of two previously proposed gas probe locations (UGP-2 and UGP-3) for FA2 Phase 1.

OTHER TOPICS

Testing for PFA Compounds

From	Format Date	Key Point(s)
CVRWQCB	Letter	Statewide survey: Requirement to provide a work plan by May
	March 20, 2019	19 for the one-time testing of groundwater samples for 23
		designated types of polyfluoroalkyl substances.

memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 4/10/19 - Agenda Item 6.6 - Reports From Community Monitor

Attached are inspection reports for January through March of 2019.

The January inspection was unannounced and took place on January 17 with the LEA.

The February inspection was announced and took place on February 8.

The March inspection was announced and took place on March 18.

During these inspections, all landfill operating areas were observed. Recent LEA inspection reports were reviewed on-line.

Details about operations-related matters are provided in the attached reports. Issues that cause special concern are marked with yellow rectangles in the monthly inspection reports. For this quarter, stormwater-related erosion was the principal concern. Windblown litter and the bird population during stormy weather continue to be issues.

Other noteworthy items are marked with <u>blue</u> highlighter. These are unusual occurrences that provide some insight into operations but do not present a risk to the environment or human health.

Also attached are graphs showing monthly tonnages by type of material for the most recent 12-month period. Figure 6.6-1 shows the breakdown of materials that make up Revenue-Generating Cover. Figure 6.6-2 shows these same quantities, plus the Municipal Solid Waste (MSW) and Special Waste tonnage for each month.

January 2019

Tonna	nnage Report for December 2018, received January 15, 2019 ge Summary: Disposed, By Source Location Tons Disposed from Within Alameda County Other Out of County Disposal Tons subtotal Disposed	tons 76,641.97 6,252.47 82,894.44	
I	Disposed, By Source Type		
2.1	C&D	683.57	
2.2	MSW	74,872.18	
2.3	Special Wastes	7,338.69	
	subtotal Disposed		
		0.00	0.00%
(Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	7,993.68	
2.5	Revenue Generating Cover	61,327.45	
	Total, 2.1 - 2.5	152,215.57	
I	Materials of Interest		
2.3.1	Friable Asbestos	1,029.63	
2.3.2	Class 2 Cover Soils	43,461.05	
2.5.1	Auto Shredder Fluff	11,994.46	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00	
2.5.3	MRF Fines for ADC	1,932.74	

Site Inspection January 17, 2019, 1:00 - 2:45 PM

- □ Attended by K. Runyon, accompanying LEA Arthur Surdilla. Escorted by Enrique Perez. Unannounced. Cloudy skies, winds mild, cool temperatures (~50F).
- ☐ There was a power outage at the site during this inspection, due to maintenance work being done by PG&E at their nearby substation.
- □ Refuse fill operations were taking place in the north central portion of the site. Transfer truck traffic was light, with no waiting; only trucks from Fremont were seen unloading. One tipper was operating, with one dozer and one compactor spreading and compacting wastes.
- Several thousand gulls were on site; most were resting, but some were scavenging at the working face. This is a typical number of gulls during winter weather.
- ☐ The bird cannon had malfunctioned and was being repaired. During this inspection the operations manager called for the spare bird cannon to be brought on line. Bird-scare "screamers" were not in use because, due to a vacation, the site did not have an operations manager available to fire them.
- □ To address Water Board concerns about stormwater flowing to the drainage system after contacting refuse, the ALRRF has begun to use earthen berms below the active face.
- ☐ The C&D and plant debris bunkers were empty.
- □ Small areas of standing water were seen in wheel ruts in soft soil in several locations around Fill Area 1. Wet weather had occurred the previous day (Jan 16) with an inch of rainfall.. The LEA did not express concern re ponding.
- □ Windblown litter on Fill Areas 1 and 2 had increased slightly compared to the previous site visit. ALRRF staff told the LEA that the current litter crew currently consists of 6 full time staff plus several others who are assigned to pick litter on an as-needed basis. A crew of 3 litter collectors was seen at work during this inspection. ALRRF staff also mentioned that bid documents for the repair of a section of tall litter fence, damaged several months ago, had just been issued.
- □ Both solidification basins were available, and the replacement solidification basins were also examined from a distance (muddy conditions prevented direct access). The new basins are located on top of a mound of soil in the highest ground on Fill Area 1.
- On the steep south face of Fill Area 1, below the ET Cover Test Area and above the closed portion of Unit 1, two substantial erosion gullies were seen from the Admin area parking lot They are marked with red circles in the photo below. Within the closed area, a small mound of soil was also seen (marked "?" in the photo below).



ET Cover Test Area

☐ The area was not directly accessible due to wet conditions, but through binoculars it was obvious that plants were beginning to grow within the area.

Fill Area 2

- ☐ There was a substantial amount of windblown litter on the side slopes of the Phase 1 portion of Fill Area 2.
- ☐ Apart from the litter issue, the Phase 1 portion of Fill Area 2 appeared to be in good condition.
- ☐ The seep, on the west side of Fill Area 2 and south of the Phase 1 portion, appeared active (wet).

Stormwater Controls and Best Management Practices

- ☐ Basins A and B were not full. The water in these basins was quite turbid, probably due to runoff from rainfall the previous day. Basin C was not observed. The northwest runoff area was observed in order to note the locations of rock check dams and wattle.
- ☐ In Fill Area 2, a small area of exposed soil may have been due to a minor landslide or disturbance from heavy equipment.

See photo at right.



□ South of Fill Area 2, the west side of the canyon had stormwater controls (primarily wattle) that had been damaged by cattle and appeared to be less than fully effective. Erosional damage was minor because hydroseeded plants were germinating and helping to hold soil in place. Photo below.



□ ALRRF staff stated that stormwater samples were taken the previous day (Jan 16).

Mitigation Pond

☐ The mitigation pond was filled with water and was not directly accessible due to soft soil in roadways. It can be seen at the left edge of the photo immediately above.

February 2019

Tonnage	nage Report for January 2019, received February 15, 2019 e Summary: sposed, By Source Location Tons Disposed from Within Alameda County Other Out of County Disposal Tons subtota	82,263.46 33,574.32 al Disposed 115,837.78	
2.1 2.2 2.3	sposed, By Source Type C&D MSW Special Wastes subtota	859.00 80,735.79 34,242.99 al Disposed 115,837.78 0.00 0.00%	%
Ot 2.4 2.5	her Major Categories Re-Directed Wastes (Shipped Off Site or Beneficially Us Revenue Generating Cover	sed) 6,814.63 39,390.57 ral, 2.1 - 2.5 162,042.98	
M 2.3.1 2.3.2 2.5.1 2.5.2 2.5.3	aterials of Interest Friable Asbestos Class 2 Cover Soils Auto Shredder Fluff Processed Green Waste/MRF fines, Beneficial Use (GSE MRF Fines for ADC	1,303.02 25,523.83 7,064.97 ET) 0.00 2,091.40	

Site Inspection February 8, 2019, 8:15 - 9:45 AM

- □ Attended by K. Runyon. Escorted by Enrique Perez. Announced.

 This visit took place during clear cool weather, but two inches of rain had fallen the week before.
- □ Refuse fill operations were taking place in the east central portion of the site. Transfer truck traffic was light. Two tippers were operating, with one dozer and one compactor spreading and compacting wastes.
- □ At the toe of the working face, a small berm was in place to direct runoff to a low point within the active area.
- ☐ More than a thousand gulls were on site; most were resting, but some were scavenging the working face. Others could be seen in the CASP area. No gulls were seen at the reservoir near Dyer Road.
- ☐ The bird cannon was not in service. During this inspection the operations manager was using bird-scare "screamers" to disrupt gull activity.
- ☐ The C&D and plant debris bunkers were not observed during this visit.
- ☐ Small areas of standing water were seen in wheel ruts in soft soil in Fill Area 1, due to recent wet weather.
- ☐ Windblown litter appeared to be somewhat reduced, on and east of Fill Area 1
- ☐ The replacement solidification basins at the top of Fill Area 1 were observed. Grading work for their foundation is complete but they have not yet been lined.
- On the steep south face of Fill Area 1, below the ET Cover Test Area and above the closed portion of Unit 1, the erosion gullies seen on January 17 from the Admin area parking lot were closely observed. It was clear from the erosional patterns at the top of this gully that a large volume of water was traveling at high velocity on the bench road and simply overwhelmed the silt fence along the edge of that road, at the low point of the road. See photo below.



ET Cover Test Area

□ Along the toe of the sloping portion of the ET Cover Test Area, several species of grasses and forbs had germinated and were growing. Species ID was difficult this early, but California poppies were obvious and a few yarrow and lupine were seen among the grasses.

Fill Area 1 Ponds

☐ The sidewalls of the two Leachate Surface Impoundment ponds were marked with white paint to indicate the unused depth (freeboard) at each pond.

Fill Area 1 Liquids Containment

☐ The containment area, below the base of Fill Area 1, was being worked on to resolve prior loss-of-containment issues. Two portable tanks were handling liquids during this activity.

Fill Area 2

□ In FA2 Phase 1, the ALRRF will need to remove a protective soil cover from the gravel "windows" that will direct leachate from waste into the leachate collection system. The photo to the right shows one set of these windows, marked with a red circle. This view of Fill Area 2 is from the west.



- ☐ The amount of windblown litter on the side slopes of Fill Area 2 appeared to be less than in January. ALRRF staff noted that wet weather had caused the litter crew truck to get stuck recently.
- □ Apart from the litter issue, the Phase 1 portion of Fill Area 2 appeared to be in good condition.
- □ A damaged area on the west side of Fill Area 2 was closely inspected. Rather than a small landslide, as initially suspected, it was caused by firefighting in this area in mid 2018.

Stormwater Controls and Best Management Practices

□ All stormwater basins were partially or completely full. The water in these basins was quite turbid, probably due to runoff from recent rains. See photo of Basin A below.



□ ALRRF staff explained that the damage to wattle seen in our January inspection was caused by cattle grazing in the area. The wattle had not yet been repaired due to wet conditions / difficult access. This did not appear to be causing serious erosional problems.

Mitigation Pond

☐ The mitigation pond was filled with water and was not directly accessible due to soft soil.

Monthly Ton	nage Report for February 2018, received March 15, 2019				
Tonnage Summary:		<u>tons</u>			
	isposed, By Source Location	77.001.26			
1.1	Tons Disposed from Within Alameda County	75,081.36			
1.2	Other Out of County Disposal Tons subtotal Disposed	12,925.75 88,007.11			
	subtotal Disposed	. 88,007.11			
D	isposed, By Source Type				
2.1	C&D	578.14			
2.2	MSW	73,317.30			
2.3	Special Wastes	14,111.67			
	subtotal Disposed	88,007.11			
		0.00	0.00%		
O	ther Major Categories				
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	5,787.41			
2.5	Revenue Generating Cover	31,304.66			
	Total, 2.1 - 2.5	125,099.18			
•					
	Interials of Interest	(20.65			
2.3.1 2.3.2	Friable Asbestos	630.65			
2.5.2	Class 2 Cover Soils Auto Shredder Fluff	17,341.73 7,952.53			
2.5.1	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00			
2.5.2	MRF Fines for ADC	1,966.08			
2.3.3	WIRT TIMES TOT TABLE	1,700.00			
_	rrences Log (last summarized Dec 2018)				
	A third-party hauler drove off of the paved landfill access road, ran over	r 5 light			
•	osts and got stuck. When a customer pulled forward as requested by the ALRRF loader ope	erator a			
	elper on the back of the customer's truck fell off.	Autor, a			
☐ Jan 17: Annual high-voltage maintenance for the substation and turbine plant caused power					
	be out for most of the day.	F			
☐ Jan 22: A condensate spill at the lower lift station flowed to the storm drain leading to Basin A.					
A	ll water from Basin A was removed and not discharged.				
☐ Feb 5: An employee tripped and fell while climbing the stairs to the scale house. Injuries					
included a fractured vertebra, knee contusion and sprained finger.					
☐ Feb 13: One inch of rainfall occurred between 6 and 9 AM. Some erosion occurred on the					
	ont face of the landfill.				
☐ Mar 15: Road work on the paved access road to Fill Area 2 required a detour for vehicles					
eı	ntering the CASP operation and Fill Area 2.				

Site Inspection March 18, 2019, 1:00 - 3:15 PM

- □ Attended by K. Runyon, and M. Patil (Langan). Escorted by Enrique Perez. Announced. Clear skies, winds very light, warm temperatures (~65F).
- □ Refuse fill operations were taking place in the northeast portion of the site. Transfer truck traffic was light, with no waiting. One tipper was operating, with one dozer and one compactor spreading and compacting wastes.
- □ Several hundred gulls were on site; most were resting, but some were scavenging at the working face. Roughly 1,000 gulls were seen resting at the adjacent Dyer Road reservoir immediately after this site visit.
- ☐ The bird cannon was not heard during this inspection. Bird-scare "screamers" were not in use.
- ☐ The plant debris bunker was empty. The C&D bunker held very little material but was soon to be emptied due to the requirement to hold material no more than 30 days.
- ☐ The only ponding seen was a small area of standing water off of the refuse footprint, next to the former wastewater plant.
- □ Windblown litter on Fill Areas 1 and 2 appeared to have decreased since the previous visit. There was substantial litter visible immediately east of Fill Area 1, and pockets of litter concentrated in several places where it had been carried by wind or stormwater.
- □ Both solidification basins were available, and the "yellow" basin (which provides cover material) was busy with two rolloff tank customers just finishing their unloading. The recently-constructed replacement basins on Fill Area 1 will not be completed; instead, the ALRRF will construct basins that are off of the refuse footprint, immediately northeast of Fill Area 2 Phase 1.
- The erosion gullies on the steep south face of Fill Area 1, first noted in the January visit, did not appear to have been repaired. Some filling of eroded areas in a nearby roadway had been done, but the continuing wet weather had damaged that also.



- □ The Fill Area 1 Leachate Surface Impoundment (South) continued to hold a mixture of leachate and underdrain water from both Units within Fill Area 1.
- □ The Fill Area 1 Leachate Surface Impoundment (North) has been placed into service to hold runoff from the CASP operation. In recent very heavy rains, the CASP stormwater basin was at risk of being filled beyond its safe capacity, so the ALRRF transferred at least 600,000 gallons of that runoff to Leachate Surface Impoundment (North). As a consequence, staff of the Regional Water Board have issued Violations to the ALRRF, for accepting liquid from a separate operation, and to the CASP, for discharging its liquid to an adjoining property.

ET Cover Test Area

☐ The base of the sloping portion of the test area was closely inspected. There was no sign of erosion in the Test Area. Herbaceous plants, mostly hydroseeded species but also some local native and invasive plants, were growing. Growth was most vigorous near the base of the slope, where precipitation can accumulate. The photo below was taken from Altamont Pass Road.



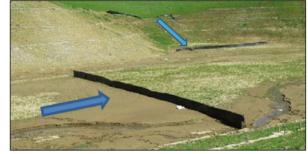
Fill Area 2

□ A small dozer was preparing the base of the landfill for solid waste by stripping protective soil away from the gravel "windows" that will enable leachate to flow to the leachate control system.

Stormwater Controls and Best Management Practices

☐ Basin SB-H, which was installed to protect the mitigation pond from silt originating in Fill Area 2, has performed well in its first rainy season. Although the flow from a side canyon (top center of

canyon (top center of photo) damaged the silt fence at that canyon outlet, sediment remained in the basin and did not visibly impact the pond.



Mitigation Pond

□ The mitigation pond was full, with some vegetation evident in the water. Six waterfowl (Mallard and Bufflehead) were using the pond. At the pond inlet, shown below, the soil in the photo was not transported from upstream but was exposed by cattle trampling the area. Water flowing to the pond was only slightly turbid.



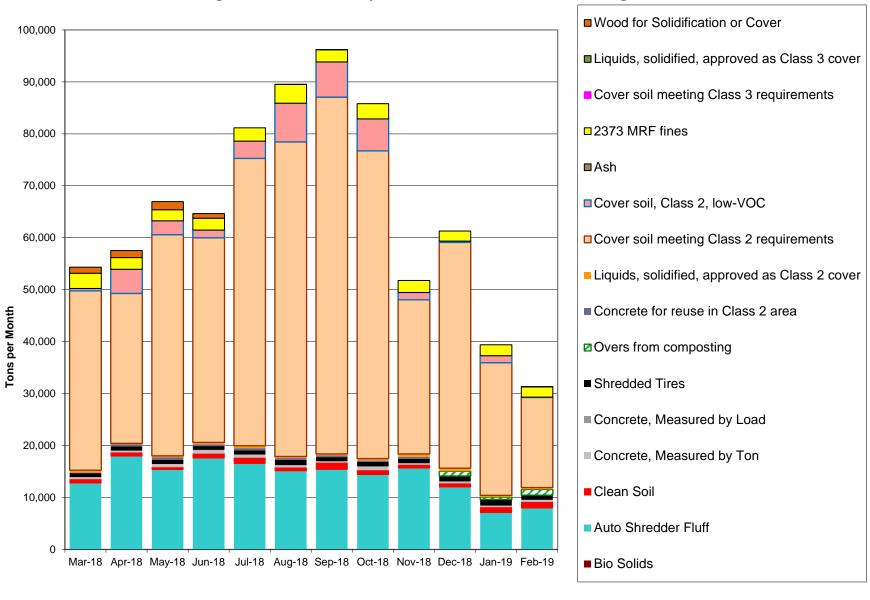
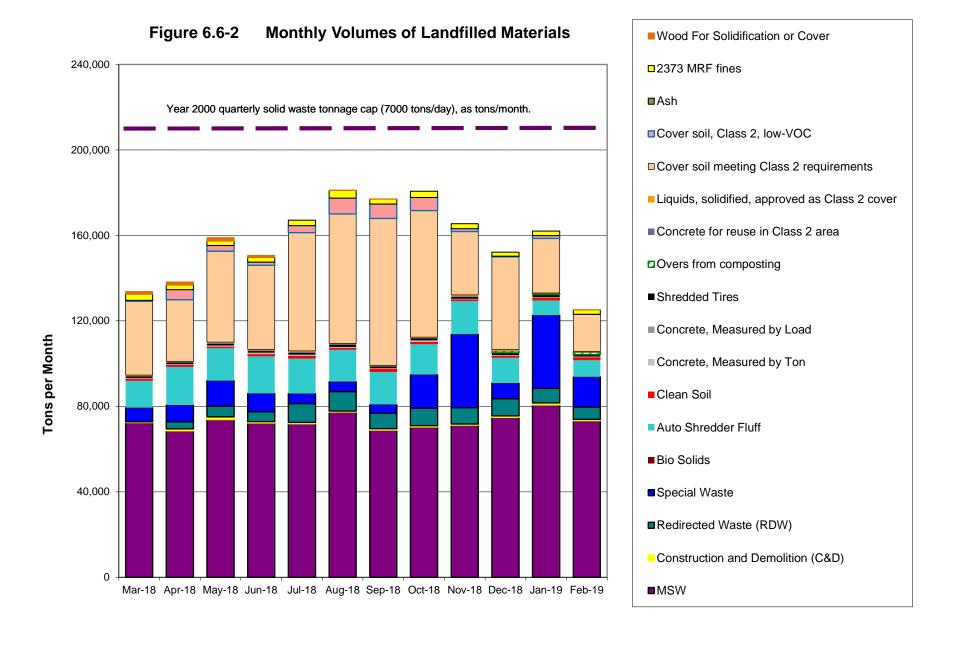


Figure 6.6-1 Monthly Volumes of Revenue-Generating Cover



memorandum

date March 29, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 4/10/19 - Agenda Item 6.7 - Approval of 2018 Annual Report

The finalized Annual Report for 2018 is attached for Committee review and approval. The list below shows the special topics for 2018 that were addressed in the appropriate section within the December draft.

Evapotranspiration (ET) cover installation (Sections 2.2, 3.1)

Mitigation pond and new basin SB-H (1.5.2.3, 2.2)

Landfill gas VOC's in groundwater (2.4.1)

Changes to Fill Area 2 footprint and phasing (2.3.2.2)

Windblown litter incidents and controls (1.4, 2.3.3.4, 2.5.4) Requirements to be triggered by disposal in Fill Area 2 (3.2.4)

Natural-resource permit requirements

Tonnage limitations in Conditional Use Permit

In the previous Committee meeting (January 9, 2019), Committee members expressed concern that a statement within the Annual Report underemphasized issues and violations that had occurred in 2018: "The total severity score for 2018 is slightly lower than in 2017." This concern no longer applies, because in early 2019, the Central Valley Regional Water Quality Control Board (Water Board) made public its December 5 2018 letter conveying a Notice of Violations to the ALRRF, for the following six points, most of which were identified during a Water Board inspection on October 9, 2018:

- 1. A release of condensate via a leak through the secondary containment of the condensate tank, which is situated south of the refuse footprint of Fill Area 1.
- 2. A release of leachate through a leaking flange at Leachate Sump 2.
- 3. Windblown litter occurring beyond the final trash fences located east of Fill Area 2.
- 4. Disposal of leachate and underdrain water into the Fill Area 1 south pond prior to Water Board staff approval of financial assurances for the clean closure of the pond.
- 5. The lack of a means to clearly record liquid elevation within each of the three Class II ponds at the ALRRF.
- 6. Failure to notify Water Board staff 14 days prior to beginning construction of the ET Cover Demonstration Project.

The ALRRF provided a written response to each of these points in a February 1, 2019 letter. As noted in Item 6.5 of this CMC meeting agenda, that letter responded constructively to points 1 through 5 but refuted point 6. The Annual Report has been updated to reflect this new information. Please see highlighted text on pages 2-3 – 2-5.

HIS PACE MILITARY

ALRRF COMMUNITY MONITOR ANNUAL REPORT 2018

Prepared for ALRRF Community Monitor Committee April 10, 2019





The photo on the cover of this report shows the Phase 1 portion of Fill Area 2, viewed from the roadway on the hill immediately to the east. The photo was taken on April 26, 2018.

ALRRF COMMUNITY MONITOR ANNUAL REPORT 2018

Prepared for April 10, 2019

ALRRF Community Monitor Committee



1425 N. McDowell Blvd Suite 200 Petaluma, CA 94954 707.795.0900 www.esassoc.com

San Francisco

Los Angeles

Oakland

Orlando

Palm Springs

Portland

Sacramento

San Diego

Santa Cruz

Seattle

Tampa

Woodland Hills

D130276.00

OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

SECTION 1

Introduction

1.1 Background: Settlement Agreement

In December 1999, a Settlement Agreement was reached among parties involved in a lawsuit regarding the proposed expansion of the Altamont Landfill and Resource Recovery Facility (ALRRF). The settlement limited the expansion to a second permitted operational area, known as Fill Area 2, adjacent to the existing Fill Area 1. The Settlement Agreement established the Community Monitor Committee (CMC) and a funding mechanism for its technical consultant, the Community Monitor (CM).

The Settlement Agreement defines the purview of the CMC and the CM. The CM's scope of work is further defined in a contract between the CM and the CMC. The City of Livermore provides staff and administrative support to the CMC, as well as management of the CM contract and space for CMC meetings. The City also acts as financial agent for the CMC, pursuant to a letter agreement dated July 6, 2004.

In broad terms, the CM is to review certain reports and information, as defined; monitor incoming traffic by conducting truck counts, as described in the Settlement Agreement; and inspect the ALRRF site no more than twelve times each year. The Settlement Agreement describes the CM's Scope of Work to include "issuing a written report each year summarizing the ALRRF's compliance record for the period since the last such report with respect to all applicable environmental laws and regulations." This Annual Report provides that summary for 2018.

The Settlement Agreement also requires that the ALRRF operator, Waste Management of Alameda County (WMAC), pay invoices submitted by the CM to the CMC, if the work represented in those invoices is consistent with the CM's scope of work and role as defined in the Settlement Agreement.

1.2 Prior Community Monitor Work

Records indicate that the CMC retained a technical consultant as the CM from 2005 through part of 2007.

In mid-2007, the CMC selected the current CM team of Environmental Science Associates and Langan (formerly Treadwell & Rollo). This team began work in February 2008. From 2008 through 2018, the team has carried out report reviews, Class 2 soil analysis file review, and site inspections as defined in the Settlement Agreement.

• In 2008, the primary concern was the rate at which groundwater monitoring wells were purged during sampling. This was resolved satisfactorily.

- In 2009, the CM team took a close look at the methodology used by ALRRF and its
 consultants to track variations in groundwater quality. No areas of concern were
 identified.
- In 2010, landfill gas perimeter probes were installed to comply with new regulations, and one of those probes detected landfill gas at levels that exceeded regulatory limits. This was abated by installing several gas extraction wells close to those probes.
- In 2011, the ALRRF sought to use fine material from the Davis Street Material Recovery Facility (MRF) as Alternative Daily Cover. The use of this material was approved by the LEA through a special study in 2013.
- In 2012, two ongoing problems, windblown litter and seagull activity, became more severe; and while the gull problem has varied seasonally, the litter problem has continued as Fill Area 1 approaches its maximum permitted elevation.

Since mid-2013, the CM's observations and document reviews have included the construction of Fill Area 2 and related mitigation measures. The excavation and preparation of the Phase 1 portion of Fill Area 2, together with related improvements, were monitored in 2014 and 2015.

In 2015, the Five-Year Permit Review process began when the Local Enforcement Agency (LEA), which is the Alameda County Department of Environmental Health, requested the ALRRF to submit an application and a revised draft of its Joint Technical Document²(JTD), which contains a detailed description of Fill Area 2 development plans, design details, and operating procedures. On July 31, 2015, the revised JTD was submitted to the LEA and the Central Valley Regional Water Quality Control Board (Water Board). Waste Discharge Requirements (WDRs) were issued by the Water Board in mid 2016.

Throughout this process, the LEA held its permit review in abeyance while Water Board issues were resolved. Subsequently, the LEA's review has required more than two years to complete, and it was still in progress in late 2018.

1.3 Regional Context and Landfill Capacity Needs

Events in the landfill disposal industry and demographic shifts within the greater Bay Area have affected, and may continue to affect, operations and future developments at the ALRRF. Prior Annual Reports have discussed impending landfill capacity changes and changes in landfill usage that could directly affect the life expectancy of regional landfills including the ALRRF.

Those issues have largely abated, but legislative and regulatory developments have resulted in new implications for landfill life in the region and statewide. The bellwether for this trend was AB 1594, which was passed in 2014. It stipulates that beginning in 2020, green material alternative daily cover (ADC) will no longer count as diversion under the 50 percent diversion mandate for local jurisdictions established by AB 939. Green material ADC will instead count as disposal from that year forward.

The 2015-16 legislative session in California gave rise to several new laws that are intended to dramatically reduce the disposal to landfill of organic wastes (plant debris, food scraps and

Altamont Landfill Community Monitor 1-2 130276.00 2018 Annual Report April 2019

¹ MRF fines: Fine material produced by sorting systems that recover materials at the Davis Street Transfer Station.

² Under California regulations, a Joint Technical Document (JTD) is a detailed description of all of the means and methods by which a disposal site will satisfy State requirements to protect water resources and safely dispose of permitted wastes.

similar materials that readily decompose and produce methane, a potent greenhouse gas). In Alameda County, this material is approximately 30% of the waste stream³⁴.

These new laws are now being implemented, with regulations in the final stages of approval, to be issued in 2019. The two pieces of 2016 legislation with the most direct effect are SB 1383 and AB 901. SB 1383 establishes targets to achieve a 50 percent reduction in the statewide disposal of organic waste from the 2014 level by 2020, and a 75 percent reduction by 2025. AB 901 changes how disposal and recycling is reported to CalRecycle. The intended effect is to provide a more accurate assessment of progress toward State goals.

One result of this activity has been a tangible commitment by waste industries in California to provide additional organics diversion facilities. In Alameda County, the largest-scale examples are the proposed development of the 500 ton per day CASP facility at the ALRRF, and the proposal to add approximately 100 tons per day of anaerobic digestion and subsequent composting capacity to the Davis Street Transfer Station. Taken together, this could eventually lead to a reduction of roughly 600 tons per day disposed at the ALRRF, which would be a 25% reduction in the current rate of disposal there. These improvements are at issue, however, because the improvements at Davis Street are the subject of a lawsuit alleging that the environmental studies required for permitting were inadequate. This suit was dismissed in Alameda County Superior Court, but the dismissal has been appealed.

Related State legislation passed in the 2017-2018 session provides further support for waste reduction through product stewardship, packaging, and enhanced organics-diversion requirements.

1.4 Site-Specific Constraints and Opportunities

The 1999 Settlement Agreement added constraints on operations, by adding new conditions to the Use Permit for the ALRRF. Solid wastes from out-of-county sources are strictly limited to those covered by existing disposal agreements. During peak traffic hours, the number of refuse trucks entering the landfill is limited. Numerous conditions intended to protect natural resources on the ALRRF property were imposed. These were extensively refined during the development of permit conditions from the State and Federal natural resource agencies with permit authority: The US Army Corps of Engineers, the US Fish and Wildlife Service, the California Department of Fish and Wildlife, and the Central Valley Regional Water Quality Control Board. This process required several years and concluded in 2012.

Some of these conditions do not take effect until Fill Area 2 begins to receive refuse. These include limitations on the amounts of Sludges, Inert Waste and Special Waste accepted from certain Bay Area counties, as well as self-hauled wastes from Contra Costa County.

Also, the size of the future expansion area was limited to 40 million tons of capacity, with a footprint of approximately 250 acres. In addition to Use Permit conditions, the Settlement Agreement establishes the CMC and the CM role, as described above; and it establishes mitigation funding related to the landfill expansion.

³ CalRecycle 2014 Waste Characterization Study: https://www2.calrecycle.ca.gov/WasteCharacterization/, accessed December 2017.

⁴ Alameda County 2017-2018 Waste Characterization Study: http://www.stopwaste.org/sites/default/files/2017-18%20Alameda%20County%20Waste%20Characterization%20Study.pdf, accessed December 2018.

The physical setting of the ALRRF site also presents certain constraints and opportunities. Canyons provide convenient high-volume fill sites, but hilly terrain and local high winds in the Altamont area require constant attention to windblown litter, especially film plastic. As Fill Area 1 nears its final elevation, windblown litter has continued to be a problem due to the exposure of the landfill's active face to wind. That problem has increased through 2018. The landfill has added staff dedicated to litter cleanup and has taken other steps to reduce the exposure of refuse to the wind. In the fall of 2018, litter control staff reportedly numbered 17 people. Their efforts were often focused on areas where expansion-related construction was occurring in Fill Area 2, and the Evapotranspiration Cover Test Area within Fill Area 1; but the crew has also gradually been able to reduce litter throughout the site.

1.5 Overview of Operations, Regulations and Permits

1.5.1 Operational Functions and Requirements

Like most large landfills throughout California, the ALRRF performs a variety of functions that support the region's management of solid wastes. These functions continue to evolve as increasing emphasis is placed on reducing and recovering wastes, but the primary function of the site continues to be the safe disposal of solid wastes by placing, compacting and covering these materials. Federal, State and local regulations require that at the ALRRF:

- Wastes are covered to control litter, prevent fire, and prevent the spread of disease.
- Wastes are placed and compacted to be physically stable.
- Plant debris is not to be disposed; if received, it must be separated and reclaimed by composting or other methods. The CASP (covered aerated static pile) compost system adjacent to the landfill provides a convenient location for plant debris that is inadvertently delivered to the landfill.
- A liner and liquid recovery system is in place to prevent groundwater contamination by leachate.
- Landfill gas (LFG) is controlled by an extraction system. Currently the gas is used to produce fuel (liquefied and compressed natural gas, LNG/CNG) and electrical energy.
- Emissions from combustion and processing (diesel engines and landfill gas systems) are controlled to meet Bay Area Air Quality Management District standards.
- Other air pollutants and nuisances (dust, odor, litter, etc.) are prevented.
- Stormwater erosion is controlled and stormwater runoff is tested for pollutants.

Compliance with these requirements protects the environment and public health, and it also presents opportunities to develop and support innovative methods for improved waste management. Currently, such activities at the ALRRF include:

- Using LFG to produce electricity and fuel (LNG/CNG);
- Using CNG fuel for on-site operations, as fuel for tipper engines;
- Stockpiling and processing materials for beneficial use on site, such as using waste concrete for wet-weather roads and access pads;
- Blending liquids with dry materials in a solidification process to make a product that can be landfilled or used as cover:
- Using contaminated soils and other wastes (biosolids, shredded tires, MRF fines, treated auto shredder fluff, etc.) for cover material, as permitted;

- Stockpiling construction and demolition (C&D) materials and scrap metal for processing elsewhere:
- Providing an area for the separation of plant debris from other wastes, to avoid landfilling plant debris; and
- Hosting site visits, by prior arrangement, for public education.

The ALRRF property covers more than three square miles. Within that area, the portion that is delineated as landfill is divided into Fill Area 1 (currently active) and Fill Area 2 (not yet active). The active parts of Fill Area 1 cover approximately 211 acres. This includes an Asbestos-Containing Waste landfill operation which occupies several acres within the Fill Area 1 footprint.

In 2010, design revisions to the top surface of Fill Area 1 increased its capacity, further increasing its expected lifetime. Settlement of in-place refuse has also added to the life of Fill Area 1, so that Fill Area 2 is not expected to receive refuse until April 2019.

Lands surrounding Fill Areas 1 and 2 are managed primarily as grazing land. These surrounding lands also provide suitable habitat for several special status species.

Much of the work done by the CM involves the review of data and reports required of the ALRRF by regulatory and permitting agencies, as described below.

1.5.1.1 Water

In California, the State Water Resources Control Board and its Regional Water Quality Control Boards (RWQCBs) protect groundwater and surface water resources through laws, regulations and permit requirements. Because most of the ALRRF property drains into the Central Valley, the Central Valley RWQCB (Water Board) issues and administers the Waste Discharge Requirements (WDRs) for the site. These WDRs set various operating requirements, and they also define the programs that monitor water quality by periodically testing groundwater wells as well as storm water basin contents and discharges. The Water Board also requires the ALRRF to address incidents that increase risk to groundwater, such as the inadvertent receipt of wastes that contain unpermitted levels of hazardous materials. The CM reviews semiannual groundwater monitoring reports, the stormwater pollution prevention plan, annual stormwater monitoring reports, and the annual Winterization Plan update, as well as correspondence and required reports that the Water Board posts on its GeoTracker web site.

1.5.1.2 Air

The Bay Area Air Quality Management District (BAAQMD) administers its own regulations, including Regulation 8 Rule 34 regarding landfill gas control, as well as relevant State and Federal regulations. At the Federal level these are referred to as Title V requirements. The operation of (and especially the air emissions from) the landfill gas control systems, various diesel engines, and other processes that produce air emissions are regulated through permit requirements. Every six months the ALRRF submits a comprehensive "Title V report" to the BAAQMD. This report summarizes emission test results and landfill gas control system performance as required. The CM reviews these reports as they are issued. The landfill also produces an annual estimate of greenhouse gas emissions, as required by Federal regulations.

1.5.1.3 Disposed Wastes

There are two agencies that regulate solid waste disposal in Alameda County. The Alameda County Department of Environmental Health is the Local Enforcement Agency (LEA), and at the

State level, the California Department of Resources Recycling and Recovery (CalRecycle) supports and oversees the LEA. The LEA is the main enforcement agency for the Solid Waste Facility Permit (SWFP) that governs many aspects of operations at the ALRRF, such as operating hours, landfill cover materials and cover frequency, types of materials that are allowed to be disposed, etc. The SWFP is reviewed and updated every five years, and the CMC and CM closely follow that process, as delineated in the Settlement Agreement. The CM also reviews ALRRF inspection reports made by the LEA, as those reports become publicly available; and each year at least four of the monthly CM site inspections are done in conjunction with the LEA, as required in the CM's Scope of Work.

1.5.1.4 Land Use

Concurrently with the Settlement Agreement, Land Use Permit C-5512 for the ALRRF site was updated to incorporate mitigations specified by the Settlement Agreement. These modifications include restrictions on waste quantities, limits on truck traffic, and other operational constraints, as well as certain biological resource protection measures discussed in Section 1.5.2 below. The CM tracks compliance through direct inspection, review of data from ALRRF operations, and review of periodic reports submitted to regulatory agencies by the ALRRF, including the annual Mitigation Monitoring Report submitted to County Planning. Annual monitoring surveys of the on-site Conservation Plan Area are also reviewed by the CM.

An additional Land Use Permit (PLN 2010-00041) was approved by Alameda County in March of 2013 for the future development and use of composting and material recovery operations at the ALRRF. Currently, Waste Management's position is that this permit is not within the purview of the CMC. However, the CMC has taken the position that the additional permit *is* within its purview. In April 2018, the ALRRF began operation of its Covered Aerated Static Pile (CASP) compost facility northeast of Fill Area 1.

1.5.1.5 Waste Diversion Requirements

Section 1.3 of this Annual Report describes recent State legislation that requires increased solid waste diversion (or reduction) and more comprehensive reporting of disposed and diverted quantities. Currently, CalRecycle is finalizing regulations to implement these requirements. The regulations are expected to take effect in 2019.

At the local level, the Alameda County Waste Management Authority and the Source Reduction and Recycling Board (StopWaste) waste-diversion goal is continuing to be pursued, most recently through the implementation of mandatory separation of recyclables and compostables at businesses and multifamily accounts. These requirements are implemented at the local level by each of StopWaste's member agencies except Dublin; in most cases StopWaste provides monitoring and enforcement. In addition, StopWaste has developed, and all of its member agencies have adopted, a single-use bag ban ordinance; and StopWaste has adopted a countywide ban on the disposal of plant debris in local landfills.

1.5.2 Requirements For Fill Area 2 Development and Use

1.5.2.1 Background

In 2011, the last major permits for the development of Fill Area 2 were obtained after agreement was reached between regulatory agencies and Waste Management regarding mitigation for the loss of a wetland channel and the loss of habitat for special status species. Mitigations were

established through Alameda County Use Permit C-5512 and permits from several State and Federal agencies:

- US Army Corps of Engineers, which had jurisdiction over wetlands.
- US Fish and Wildlife Service, which consulted on wildlife protective measures.
- Central Valley RWQCB, which certified that the mitigations would protect water quality.
- California Department of Fish and Game (now Fish and Wildlife), which concurred with the USFWS' Biological Opinion and placed specific conditions on work in the stream bed.

The fundamental requirements of these permits are:

- The dedication of 991.6 acres of ALRRF land as a Conservation Easement, in perpetuity.
- The creation of additional wetland, in the form of a new pond between Fill Area 2 and the Eastern Alkali Wetland.
- The enhancement of a riparian channel approximately the same size as the channel to be displaced by Fill Area 2.

To guide these efforts and many related requirements, the ALRRF and its consultants prepared the following documents:

- Conservation Management Plan
- Pest Management Plan
- Grazing Plan
- Waters and Wetlands Mitigation Plan

The ALRRF dedicated the 991.6-acre Conservation Easement in 2012 and built the mitigation wetland pond in 2013. In late 2017, the ALRRF executed an agreement with the Cosumnes Floodplain Mitigation Bank to fund river channel restoration and preservation in southern Sacramento County. The current status of these efforts is described in Section 1.5.2.3 below.

1.5.2.2 Corridors and Connectivity

The Biological Opinion from the USFWS describes the need for wildlife connectivity and wildlife corridors in eastern Alameda County, to provide for wildlife movement and thereby enhance species health by preventing inbreeding. The Biological Opinion states that this need exists for three of the four protected species in the area: San Joaquin Kit Fox, California Red-Legged Frog, and California Tiger Salamander. The ALRRF's Conservation Management Plan contains the following requirements in the Minimization and Mitigation sections of the document:

MIN-31 – The project proponent will contribute funding to conduct a research study of wildlife passage at local over- and under- crossings to determine if these conduits provide conductivity [sic] for wildlife through the Interstate 580 corridor. The study will entail the periodic placement of motion-activated camera station, track plates, and other approved sampling method. The project proponent will provide the Service and/or CDFG with as much as \$50,000 to perform the study. With the approval of the Service and CDFG, the project proponent may contract the study to an approved third party.

MIT-7 – The mitigation pond/wetland will be constructed in an upland area... immediately upstream from the Eastern Alkali Wetland. ... This area provides suitable upland refugial habitat for tiger salamanders and suitable dispersal habitat for red-legged frogs to the Eastern Alkali Wetland and the Southern Alkali Wetland.

These requirements are also stated in the USFWS Biological Opinion, which in turn is referenced by the CDFG Consistency Determination.

CMC Agenda Item 6.7 Section 1 - Introduction

1.5.2.3 Current Status

Unfortunately, the wetland mitigation pond built in 2013 was badly damaged by sediment inflow due to unusually heavy rainfall in early 2014. Also, the channel enhancement was put on hold due to the drought that occurred between 2011 and 2016. To remedy this situation, the ALRRF has purchased off-site wetland channel mitigation credits from the Cosumnes Floodplain Mitigation Bank in southern Sacramento County and is having the pond rebuilt and replanted. In 2018, rebuilding was completed in April and planting was begun in December. Also, to protect the pond from sediment inflow, in late 2018 the very extensive sedimentation basin SB-H was constructed between the pond and Fill Area 2.

In 2017, the CM reviewed a summary of wetland and wildlife mitigation activities and issues. Wetland and wildlife mitigation activities continued in 2018, with monitoring of construction areas and wildlife protection measures (e.g., relocating sensitive species such as California Tiger Salamander, when encountered) but no formal reports were provided to the CM for review.

The CM also reviews the ALRRF annual mitigation monitoring report, which briefly summarizes the status of compliance with each of the 106 Conditions in Conditional Use Permit C-5512.

The final version of the Joint Technical Document for the ALRRF states that "Fill Area 1 is expected to reach capacity in about 2019. FA2 is currently being designed to be operational when FA1 approaches its final capacity.⁵" The estimated start date for Fill Area 2 has been refined to April of 2019, though this should still be considered as tentative.

⁵ JTD section 4.1.1.2, page 32.

SECTION 2

Community Monitor Activities and Issues

2.1 Introduction

Under the Settlement Agreement, the Community Monitor (CM) has three ongoing duties:

- Review reports, data and information that are required to be submitted by Waste
 Management of Alameda County to regulatory agencies, or that provide information
 regarding the ALRRF's compliance with applicable environmental laws and regulations
 (Settlement Agreement Sections 5.7.1.- 5.7.3)
- Conduct inspections of the ALRRF facility up to 12 times per year (Sections 5.7.7, 5.8)
- Review the records of testing and acceptance of "Class 2 soils", i.e. soils known to come from a contaminated site (Section 5.7.9)

Throughout 2018, the CM was active in each of these areas, as described below.

2.2 Monitoring of Improvements and Changes

Through report reviews and site visits, several new developments in ALRRF facilities and operations were monitored in 2018:

- In the 12 months from June 2017 through May 2018, 37 poorly-performing landfill gas wells were decommissioned and 17 were brought on line. Several wells with higher than normal gas temperatures, previously identified, continued to be monitored for possible subsurface combustion.
- The two Fill Area 1 ponds, intended to hold leachate and underdrain water separately, were completed in 2017, and installation of the liquids separation equipment and piping was begun in the latter part of 2018.
- Several improvements were made to reduce stormwater pollution. Fill Area 1 stormwater basins A and C were fitted with "skimmer" discharge devices to discharge water from the surface of the ponds, to reduce the suspended solids being discharged. Riprap was added at the pond inlets to minimize soil erosion there. Special "Filtrexx" wattles were placed in ditches and along the bases of slopes, to trap hydrocarbons and other pollutants.
- Stormwater was sampled upstream of the Fill Area 1 stormwater basins, in an effort to identify the sources of contaminants that have previously been detected in the basins. This was inconclusive, so additional stormwater sampling points were identified for use in 2018.
- The 10-acre Evapotranspirative (ET) Cover Test area was regraded and hydroseeded, and instrumentation was installed. The four-year test has begun.
- The litter collection crew was increased, reaching a peak of 17 workers in the fall. At the end of 2018, there were eight full-time plus several part-time litter crew members.
- As the landfill is preparing for closure of Fill Area 1, the ratio of **Class 2 cover soil**, compared to municipal solid waste, grew to 68% in the period from January through November 2018. In 2017 it had been 43%.

- In August, a grass fire occurred on the west slope above Fill Area 2, and approximately 14 acres were burned before it was extinguished by landfill and fire department crews, including an air crew that dropped fire retardant. Fortunately, the Fill Area 2 liner was not damaged. The cause was believed to be windblown litter contacting power lines.
- The mitigation pond below Fill Area 2 was regraded to restore the original design, and planting began in December 2018. A very large stormwater detention basin, SB-H, was constructed immediately upstream to protect the pond from a recurrence of the siltation that occurred in 2014.
- The internal-combustion engines that produced electricity from landfill gas were decommissioned. These engines produced much less electricity than the on-site turbine plant, and they were costly to maintain, with frequent down time.

2.3 Compliance and Significant Incidents

As noted above, the Settlement Agreement defines the CM's Scope of Work to include "issuing a written report each year summarizing the ALRRF's compliance record for the period since the last such report with respect to all applicable environmental laws and regulations." This Annual Report provides that summary. The regulatory agencies that administer these laws and regulations, as well as the environmental permits held by the ALRRF, include the following:

- Alameda County Planning Department
- Alameda County Department of Environmental Health
- Bay Area Air Quality Management District
- US Environmental Protection Agency
- California Department of Resources Recycling and Recovery (CalRecycle)
- Central Valley Regional Water Quality Control Board
- California Department of Fish and Wildlife
- US Army Corps of Engineers
- US Fish and Wildlife Service

To determine if there are trends in the compliance record, a list of compliance issues has been compiled; it is shown in Table 2-1, below. Persistent issues appear in the upper part of the table, followed by infrequent or one-time issues. Issues from 2011 - 2013 are shown in the 2017 Annual Report.

To compile this table, the CM reviewed publicly available data from the regulatory agencies listed above, ALRRF correspondence with those agencies, and the CM's monthly site inspection reports. The severity of the issues was rated subjectively by the CM using the 1 to 5 scale shown below Table 2-1. Issues that were judged to be beyond the control of the ALRRF are not included in the annual total of severity scores but are listed below the total line.

For the purposes of this report and table, incidents involving the delivery of hazardous materials with incorrect profiles (showing them as non-hazardous) are considered to be beyond ALRRF's control; but the Water Board's position appears to be that ALRRF is responsible nevertheless. There was one such issue in 2018, involving a bucket of lead paint chips in a truckload of demolition waste. This was reported to the landfill by the generator shortly after it occurred. ALRRF management reported this to Water Board staff, and after further discussion, the material was left in place.

The total severity score for 2018 is considerably higher than in 2017, primarily due to a set of six violations that were issued on December 5, based on findings from an October 9 site inspection by Water Board staff.

Five types of incidents that are of special concern occurred in 2018:

- End-dump Truck Overturns. The ALRRF has increased its oversight of end-dump truck unloading in 2018, and although the landfill received many more loads of cover material in 2018 than 2017, the number of reported overturn incidents in 2018 was the same as in 2017. Nevertheless, this continues to be of concern. In a first-of-its-kind incident, two trucks overturned on the same day, within a short distance of each other. Fortunately, they were far enough apart so that they did not collide, and there were no injuries reported from this or any of the other overturns.
- **Fire**. There was a 14-acre grass fire above the developed portion of Fill Area 2, as described in Section 2.2 above. The cause was believed to be windblown litter contacting overhead power lines.
- Condensate Leak. The ALRRF's landfill gas system produces condensate that consists of water containing high concentrations of VOCs, and dissolved gases. This material is destroyed by burning in Flare A-16, after it is collected and accumulated using a network of pipes and tanks. In October 2018, at condensate tank S-12, condensate escaped from a leaking pipe and seeped through a crack in the concrete secondary containment. Contaminated soil was contained and properly disposed, and the leak was patched; but this issue is concerning because the area is somewhat secluded, and the leak could have continued for an extended period of time.
- **Incomplete Reporting**. Both the BAAQMD and the Water Board issued violations for incomplete reporting. The BAAQMD cited missing monitoring data for one landfill gas well in one month; the ALRRF explained that the well was temporarily inaccessible due to nearby grading work. The Water Board found that the ALRRF's *First Semiannual 2017 Groundwater Monitoring Report* was missing two well-purging logs and two maps of ponding in March 2017. The ALRRF subsequently amended the report by adding the purge logs, but the maps were not available.
- Lack of Prior Notification When Operations Change. Two of the violations imposed by the Water Board on December 5 refer to actions taken by the ALRRF without providing the required notice to Water Board staff. One of those, regarding construction of the Evapotranspirative (ET) Cover Test Area, has been refuted by the ALRRF in their subsequent response letter. Indeed, there is a record of ongoing communication between the ALRRF and the Water Board prior to and during the ET Cover Test Area installation, but it may not have included a formal notification and request for approval, as implied in the Water Board's Notice of Violation. The final resolution of this issue is not known as of this writing, but for reporting purposes, this violation has not been included in the upper portion of Table 2-1, below.

Table 2-1: Compliance Issues Ranked by Severity

	Severity				
Issue	2014	2015	2016	2017	2018
Contamination at E-05, E-07, E-20B	2	2	2	2	2
Stormwater contamination		3	3	3	3
Windblown Litter	3 2	2	4	2	3
Birds	2	2	2	2	2
Erosion	-	3	2	1	-
Cover thin / absent	3	4	-	-	-
Worker injury	-	1	2	1	-
Condensate/Leachate Leakage	1	3	-	3	3
Ponding in low-lying area of landfill	2	-	-	-	1
Sediment in Wetland Mitigation Area	1	3	3	2	-
Odor, on site	-	-	1	-	-
Leachate Seeps	-	1	1	2	-
Late Annual Report to Water Board	-	4	-	-	-
Sampling Pump Problem: well E-05	-	2	-	-	-
Stormwater monitoring compliance (FA2 pond, tire			4	2	2
and wood operations)	-	-	4	2	2
Material out of bounds (wood operation)		-	4	-	-
Erosion control (sitewide)		-	4	-	-
Waste outside active area (trash, pallets)		-	4	-	-
Leachate Leak Disposal		-	-	4	-
Contaminants at monitoring well MW-4A		-	-	4	-
Release of condensate from secondary containment		ı	-	-	4
Release of leachate at leaking flange		ı	-	-	4
Windblown litter beyond last litter fence		-	-	-	4
Disposal of liquid into pond without prior approval		-	-	-	4
Lack of means to record liquid level in ponds		-	-	-	4
Failure to monitor landfill gas well	-	-	-	-	4
Incomplete groundwater monitoring report	-	-	-	-	4
Totals	16	30	36	28	44
Issues Beyond Control of / Refuted by ALRRF					
Truck overturn	1	1	3	3	3
Dinoseb solidification & disposal (later removed)	4	-	-	-	-
Methane Gas at Perimeter Probe(s) [cleared, 2016]	4	4	4	-	-
Liquid high in chromium, nickel received (removed			4		
before being disposed)	_	_	+	_	_
Soil high in benzene received, disposed		-	4	-	-
Fire in refuse &/or stored material		-	3	1	-
Fire on ALRRF property, outside active areas		-	-	2	2
Hazardous material delivered (high in lead)		-	-	-	4
Water Board not notified before ET Cover area		_	_	_	4
constructed					•

indicates that a violation was issued by a regulatory agency.

Severity Criteria

- 1: Minor or ongoing issue having little potential to harm environmental or public health; below regulatory thresholds.
- 2: Issue having some potential to harm environmental or public health; below regulatory thresholds; being addressed.
- 3: Issue having potential to harm environmental or public health; below regulatory thresholds; not improving, or new.
- 4: Issue having significant potential to harm environmental or public health, or resulting in a violation being issued.
- 5: Issue having significant potential to harm environmental or public health; violation issued; willful non-compliance.

2.3.1 Compliance Issues Documented by the LEA

In 2018, several Area of Concern notices were issued by the Local Enforcement Agency (LEA). LEA inspection reports indicate concerns about the following:

- Intermittent need for litter control on site and on Altamont Pass Road
- Wood bunker not emptied within required time limit

The LEA did not issue any Notices of Violation in 2018.

2.3.2 Water Board Violations and Concerns

2.3.2.1 2018 Violations

Disposal of hazardous material (lead paint chips) – As noted above in Section 2.3, a load of waste containing paint chips with hazardous levels of lead was disposed at the ALRRF in early February.

Incomplete Semi-Annual Monitoring Report – As noted above in Section 2.3, the ALRRF was able to produce the two missing purge logs but could not provide the missing maps of ponded areas.

Six Additional Violations – On December 5, 2018, Water Board staff issued a letter to the ALRRF conveying a Notice of Violation to the ALRRF for the following six points, most of which were noted during a Water Board inspection on October 9, 2018:

- 1. A **release of condensate** via a leak through the secondary containment of the condensate tank, which is situated south of the refuse footprint of Fill Area 1.
- 2. A **release of leachate** through a leaking flange at Leachate Sump 2.
- 3. Windblown litter occurring beyond the final trash fences located east of Fill Area 2.
- 4. Disposal of leachate and underdrain water into the **Fill Area 1 south pond** prior to Water Board staff approval of financial assurances for the clean closure of the pond.
- 5. The lack of a means to clearly record **liquid elevation within each of the three Class II ponds** at the ALRRF.
- 6. Failure to notify Water Board staff 14 days prior to beginning construction of the ET Cover Demonstration Project.

The ALRRF provided a written response to each of these points in a February 1, 2019 letter. That letter responded constructively to points 1 through 5 but refuted point 6. The final status of point 6 is not yet known.

2.3.2.2 Other Concerns

There are several open issues that have arisen between the ALRRF and the Water Board since the current Waste Discharge Requirements (WDRs) were finalized in July 2016. They are briefly described below.

Identifying Sources of VOCs in Storm Water –The ALRRF's 2017-2018 stormwater sampling detected VOCs in several locations, but the data did not clearly indicate specific sources. For the 2018-2019 rainy season, several sampling points have been added and more has been done to prevent contamination by VOCs. This may enable the ALRRF to clearly identify sources and implement effective preventive measures.

Use of Underdrain Liquids as Compost Quench – The ALRRF is installing a system to keep Fill Area 1 leachate separate from underdrain water and is seeking to use underdrain water in its nearby CASP composting operation. The Water Board is requiring separate permitting for that use, and possibly pretreatment of the underdrain water. This unresolved issue will continue to be tracked in 2019.

Solidification Basin Compliance – The Water Board is requiring the ALRRF to redesign its solidification basins to assure that no liquid can escape from them into the landfill below. Although the ALRRF has made a credible case for the impermeability of the existing basins, Water Board staff are bound by regulations that prevent them from accepting that approach. A final resolution of this issue has not been documented in the Water Board's public GeoTracker files, but it appears that the landfill is planning to build new, permanent, impervious solidification basins in Fill Area 1.

Fill Area 2 Phasing Plan – In mid-2018, the ALRRF brought a revised phased development plan for Fill Area 2 to Water Board staff for review. It appears that Water Board staff have conditionally accepted this plan but are requiring the ALRRF to preserve certain monitoring wells that the ALRRF had planned to replace, and to develop background data for all existing FA2 monitoring wells as soon as possible, rather than phasing them in with later phases of Fill Area 2.

2.3.3 Other Incidents

The following information is based on reports filed in the site's Special Occurrences Log and on Community Monitor site inspections.

2.3.3.1 Spills of Fluids from Customer Trucks

During 2018, from January through October (November and December records are not yet available), there were three incidents that resulted in the release of substantial amounts of coolant or hydraulic oil from customers' trucks. In one case, the landfill was able provide absorbent and have the customer remove it for proper disposal. In the other two cases, which took place in Fill Area 1, the soil was disposed in the Class 2 portion of the site.

2.3.3.2 Fire

The August 2018 grass fire near Fill area 2 is described above. That is the only fire on record for 2018.

2.3.3.3 Vehicular Accidents

No collisions were recorded in 2018, but there are numerous records of end-dump trailers overturning; there were 10 from January through October (November and December records are not yet available).

2.3.3.4 High Wind Incidents

Although the ALRRF does not formally record high wind incidents, there was one noteworthy period on May 30-31 that featured sustained high winds of 20-30 MPH, gusting to 50 MPH, for approximately 36 hours. A large amount of litter was blown from the working face near the top of Fill Area 1, eastward into Fill Area 2 and the landfill's open space property beyond. Windblown paper and trash built up so quickly on litter fences that they were completely covered, and then the wind carried litter over the top of them. This litter impacted the east-side stormwater basins and the small ravines and drainages in that area. The only way to collect litter in these areas is by hand. Months later, at the end of 2018 the site still has not fully recovered.

2.4 Review of Reports

2.4.1 Groundwater

Two groundwater monitoring reports were reviewed in 2018. The first covered the period from July through December of 2017; the second covered January through June of 2018.

The 2017 Community Monitor Annual Report notes that in 2017, VOCs were detected for the first time at well MW-4, which is near the northeast corner of Fill Area 1. Initially, the ALRRF and Water Board staff did not agree on the probable source of these VOCs. Water Board staff were more inclined to assume that the VOCs originated from leachate or other contaminated waters, while ALRRF staff and consultants attributed them to landfill gas. After much communication, a monitoring program was devised that would determine the extent of the contamination regardless of the type of source, without requiring the ALRRF to explore its entire northern boundary.

In most other respects, groundwater monitoring results were similar to those from prior years. Contaminants, when present, were below regulatory limits that would require immediate corrective action. For most contaminants, trends in the data were indistinct. Some VOCs appear to be diminishing, but the fuel additive MTBE and its degradation product tert-butyl alcohol continued to be found in wells E-5, E-7 and E-20B, in varying concentrations that did not show a clear trend.

2.4.2 Storm Water

A new set of annual requirements for industrial storm water monitoring and reporting took effect throughout California on July 1, 2015. Stormwater samples are to be taken when a "qualifying storm event" (QSE) occurs. Up to four such QSE's are to be sampled at each discharge point during a stormwater year (July through June). For each type of industrial facility, certain key pollutants must be monitored; and if concentrations of those pollutants exceed specified Numerical Action Levels (NALs), the facility must make a plan that describes Exceedance Response Actions (ERAs) to be implemented. In the first year of exceedance, "Level 1" ERAs are selected. These are low-cost measures such as improving housekeeping, cleaning drain pipes, etc. If the exceedance continues into its second consecutive year, more costly Level 2 ERAs must be applied.

⁶ a precipitation event that: (1) produces a discharge for at least one drainage area; and, (2) is preceded by 48 hours with no discharge from any drainage area.

The annual storm water reports for 2015-2016 and 2016-2017 were submitted to the State Water Resources Control Board under the facility ID of 5S01I000600. The ALRRF is implementing Level 1 ERAs for copper, nitrate, and Chemical Oxygen Demand (COD), and Level 2 ERAs for iron. The Level 2 ERAs include (a) the use of Filtrexx wattle to adsorb organics while reducing Total Suspended Solids (TSS), which typically transport iron, and (b) the installation of "skimmer" outlets on Fill Area 1 stormwater basins A and C, as well as the new basin SB-H, which will handle the discharge from basin B.

It is important to note that under these stormwater regulations, a Violation is not triggered by the exceedance of an NAL. Rather, an industry will receive a violation if it fails to (a) sample its stormwater discharges or (b) plan and implement any necessary ERAs. ALRRF has exceeded several NALs but has not received any Notices of Violation.

2.4.3 Air Quality

Title V is one of several programs authorized by the U. S. Congress in the 1990 Amendments to the federal Clean Air Act. The Bay Area Air Quality Management District (BAAQMD) administers Title V requirements for the ALRRF. Title V operating permits incorporate the requirements of all applicable air quality regulations. Hence, the semi-annual Title V reports provide a comprehensive review of compliance with BAAQMD permits and regulations.

In 2018, the CM received the Title V reports for the periods June – November 2017, and December 2017 – May 2018. These reports describe landfill gas control operations and source testing, and they also document new or unique developments at the site that can have an effect on air emissions. Results from the current reporting year are similar to those from the previous year:

- The required surface emissions monitoring (checking for methane leaks through the landfill cap) continued to occur, and although exceedances of methane were found, they were typically remedied on the first try, without the need for repeated repairs.
- From June 2017 May 2018, 37 landfill gas wells were decommissioned, and 17 new wells were installed. The new wells began operation in November 2017, January 2018 and May 2018.
- The LNG plant continued to operate at a fairly steady production rate. There were a substantial number of short term unscheduled down-time events in the second half of 2017, but after each of those problems was resolved, the gas plant returned to steady production.
- Several PG&E power outages shut down the LNG plant and all other landfill gas combustion devices for a total of 9.8 hours during the 2017-2018 reporting period.
- In May of 2018, the Bay Area Air Quality Management District issued a Notice of Violation for excessive off-line time in March, April and May of 2017. This violation was later rescinded because the off-line time was due to PG&E power outages that were beyond the control of the ALRRF.
- All control devices passed their 2018 emissions tests without incident.

2.4.4 Mitigation Monitoring

The Mitigation Monitoring and Reporting Program Annual Progress Report, covering calendar year 2017, was completed on January 31, 2018 and was received by the CM that day. It is a table that lists each of the conditions described in the current Conditional Use Permit (CUP-5512), followed by a description of the implementation status of that condition or mitigation. The status

descriptions together with the verification notes generally reflected the current status of each mitigation measure. Updates to this table from the previous year are listed below, with reference to the applicable CUP Condition number.

- 4.6 This requirement, to adjust tonnage limits for partial years, was annotated by ALRRF staff to indicate that the expected start date for Fill Area 2 operations would be in March 2019 (revised from the previous report, which stated the first quarter of 2019).
- 32 This Condition requires the ALRRF to avoid existing ponds in Fill Area 2 until replacement wetlands have been established and the California Tiger Salamander has been resettled. The update states that CTS surveys are conducted prior to Fill Area 2 construction activities in previously undisturbed areas.

In addition to the Annual Progress Report described above, the ALRRF has prepared reports to inform the natural-resource agencies about progress on their permit requirements for Fill Area 2 expansion: establishing the Conservation Plan Area, constructing the wetland mitigation project, protecting existing wetlands and surface waters, etc. Reports covering 2014 – 2015 were discussed in the 2017 Annual Report. In 2016-2017, the ALRRF and its mitigation consultants focused on the need to restore the mitigation wetland and complete other mitigation requirements (channel enhancements), resulting in a plan that was outlined in a memo from ALRRF's consultants to the natural-resource agencies and was carried out as described in Section 1.5.2.3 above. Evidently, the agencies have viewed this as a constructive approach. The Community Monitor did not receive any formal reports on mitigation activities in 2018.

2.5 Review of Records

Several types of site records were reviewed by the CM in 2018. The CM's scope of work requires the periodic review of files that contain lab analyses and other descriptions of Class 2 soils (considered hazardous by California standards, but not by Federal standards) that are brought to the site for use as cover soil. These reviews were conducted twice in 2018. The Special Occurrences Log for the ALRRF was examined four times during the year; also, the Site Training Log was examined in December, and the required stormwater training for employees was documented in March 2018. The LEA's weekly inspection reports are publicly available on the CalRecycle web site and were checked by the CM every few weeks, to note any new issues that may have been identified by the LEA.

2.5.1 Class 2 Soils

An ongoing CM task is the periodic review of files containing profiles (sample analyses) for Class 2 soils that are imported for use as cover soil in the Class 2 portion of the ALRRF. For efficiency, this is currently conducted two to three times per year, and it requires a full day for a qualified specialist from Langan to review each file to be sure that it is complete and within the regulatory limits for Class 2 materials. In 2018, these reviews were conducted in July and December. The files were made accessible electronically from Waste Management's Oakland office.

A total of 201 files were reviewed in 2018, 14% less than in the previous year. No out-of-compliance profiles were found, but there were 10 files in the December review that appeared to be incomplete. Waste Management staff are looking into this issue and will update the CM team when more is known.

2.5.2 Other Materials

In 2016 and 2017, unusual surges in the daily tonnage of cover soil and special wastes occurred due to major excavation and environmental restoration projects in the East Bay. In 2018, a similar surge was noted in the fall, involving special wastes, especially nonfriable asbestos containing wastes, from San Francisco. ALRRF staff have indicated that most of this material originated from a mass excavation project for new buildings in San Francisco. Also, they have stated that contaminated soil from the development of the Hunters Point Shipyard has not been delivered to the ALRRF.

2.5.3 Special Occurrences Log

Each permitted solid waste disposal site in California must keep a Log of Special Occurrences to document unusual and potentially disruptive incidents, including fires, injury and property damage, accidents, explosions, receipt or rejection of prohibited wastes, lack of sufficient number of personnel, flooding, earthquake damage and other unusual occurrences. The ALRRF log was checked by the CM four times during 2018. As in prior years, the most common incident involved large end-dump semi-trailers that became unbalanced while the bed was elevated, causing the bed to fall to one side. Fortunately, there were no injuries associated with these incidents, despite their being numerous in 2018 (a total of 10, the same as in 2017). In their reporting, ALRRF staff attributed many of these overturns to driver inexperience and unbalanced loads, which can occur when a truck is loaded from one side only.

Other logged incidents included one grass fire, three leaks of coolant or hydraulic oil from customer trucks, and four incidents involving leakage of piped liquids (leachate or condensate).

2.5.4 LEA Inspection Reports

In 2018, there were five Areas of Concern noted in these reports. Four involved windblown litter, and one made note of waste wood that had been stored too long on site. These Areas of Concern were consistent with Community Monitor observations.

2.6 Monthly Inspections

Twelve site inspections were held during 2018. The inspection day and time were as shown in Table 2-2 below. Off-hours inspections, outside of the hours that the landfill is open to the public, are shown with gray highlighter.

Table 2-2 Site Inspection Summary

Date	Day of	Inspection	Announced	With LEA
	Week	Time	in Advance?	staff?
Jan 15	Mon	10:00 AM	yes	no
Feb 27	Tues	5:30 PM	yes	no
Mar 28	Wed	1:00 PM	no	yes
Apr 26	Thurs	10:30 AM	yes	no
May 31	Thurs	1:00 PM	yes	no
Jun 15	Fri	12:00 PM	no	yes
Jul 26	Thurs	10:00 AM	yes	no
Aug 14	Tues	7:30 PM	yes	no
Sep 14	Fri	2:45 PM	yes	no
Oct 10	Wed	11:00 AM	no	yes
Nov 13	Tues	5:45 AM	yes	no
Dec 13	Thurs	2:00 PM	yes	no

In general, satisfactory conditions were observed, although windblown litter and bird (seagull) presence were persistent issues. Minor problems generally were rectified prior to the next inspection. Details are available in the monthly site visit reports provided in CMC meeting packets. Distinct operations, such as the stockpiling and processing of specific materials, took place in well-defined areas. No instances of unpermitted activities were noted. There were no new problems seen regarding refuse placement, public safety or traffic management, although three end-dump truck overturns were seen this year for the first time. Throughout these inspections, staff and management were forthcoming regarding operating practices and current conditions.

In 2018, observations by the CM focused on:

- Completion of improvements that are prerequisites for operation of Fill Area 2:
 - o Reconstruction of the mitigation pond.
 - o Construction of sedimentation basin SB-H, adjacent to the mitigation pond.
 - o Construction of the liquids separation system and related ponds.
- Completion of the evapotranspirative cover test area.
- Storm drainage and erosion control, including the installation of Level 2 stormwater Best Management Practices and the status of the Fill Area 1 stormwater basins.
- Observation of issues of ongoing concern, including the presence of large numbers of seagulls and management of windblown litter.
- Any changes at the site that could harm the environment or public health.

The Scope of Work for the CM specifies that at least three inspections be performed off hours, and that approximately four to six be performed jointly with the LEA. As shown in Table 2-2 above, three off-hour and three joint inspections were conducted in 2018.

No truck traffic counts were conducted in 2018, because ALRRF data on tonnage and traffic made it clear that the traffic volume requirements of the Conditional Use Permit were being met.

In April 2018 the Covered Aerated Static Pile (CASP) began operation at the ALRRF, adjacent to Fill Areas 1 and 2. The CASP has a permitted capacity of 500 tons per day and was designed to be fully self-contained. In 2018 the CM inspections and record reviews did not include the CASP operation, to respect the ALRRF's position that the CASP is outside of the Community Monitor Committee's purview. During landfill site inspections by the CM, no instances of conflict or interference between landfill-related operations and CASP operations were observed; nor were any such issues found in report reviews.

SECTION 3

Looking Ahead: Anticipated Efforts and Issues

3.1 Introduction

In the 2019 contract year, the CM team will continue to perform report reviews, site inspections and Class 2 soils file reviews. As Fill Area 1 continues to be used, its increasing volume may lead to new problems, such as seepage incidents or landfill gas impacts; and existing issues such as windblown litter and bird activity are likely to persist.

With the opening of Fill Area 2 planned for April 2019, the CM will review compliance with tonnage restrictions and mitigation requirements. The four-year test of evapotranspirative (ET) cover methods will be ongoing; the liquids separation system should begin to operate; and the mitigation pond with new stormwater basin SB-H will be functioning. The ALRRF may also be installing and operating new solidification basins that meet recent Water Board prescriptive requirements.

3.2 Issues to be Tracked in 2019

3.2.1 Ongoing Review

The following issues will continue to be monitored in the coming year:

- Implementation of requirements of the 2016 Waste Discharge Requirements.
- Completion of the Five Year Permit Review.
- Concurrence of natural-resource agencies with off-site wetland mitigations.
- Groundwater monitoring methods and data quality.
- Groundwater quality, including the vadose zone below the landfill liner.
- Stormwater quality and management practices.
- Performance of landfill gas handling equipment.
- Effects of any composting or material recovery development or operations on the landfill.
- Refuse truck traffic counts.
- Performance of the 10-acre ET cover test site.

3.2.2 Site Inspections

All operations will continue to be observed, with close attention to the following areas.

3.2.2.1 Landfill Gas Control System

This system protects both air and groundwater quality, and it operates within a complex regulatory framework involving Federal permits, local permits, State regulations, and ALRRF CUP conditions. Physical changes to this system are likely to include the further addition of

landfill gas extraction wells, decommissioning of wells that are no longer productive, and ongoing operation of the LNG plant, turbines, flares, etc. In 2018, four topics will be of special interest:

- The effect of the gas system on the concentrations of contaminants in wells E-20B and MW-4A.
- The landfill gas data reported to the Water Board, and Water Board staff's understanding of how those data relate to groundwater quality.
- Gas temperatures, particularly in the high-temperature cluster of wells in Fill Area 1 Unit 2.
- Implementation of gas collection in Fill Area 2.

3.2.2.2 Stormwater Controls and Monitoring

Throughout the year, and especially during wet weather months, the CM will monitor conditions at all stormwater basins. The effects of the newest additions to stormwater pollution controls – skimmers, Filtrexx check dams, and changes to monitoring points – will be of special interest.

3.2.2.3 Windblown Litter

This will continue to be an issue for Fill Area 1 and downwind areas, including the stormwater system that will serve Fill Area 2.

3.2.2.4 New Systems

The CM will directly observe, and review available performance data, for:

- The ET cover test area
- The newly reconstructed wetland mitigation pond
- New sedimentation basin SB-H
- Tipper and truck wash equipment in Fill Area 2
- The liquids separation system
- The improved landfill gas condensate collection system
- Modifications to solidification operations

In addition, monitoring reports on the Mitigation Wetland and the Conservation Plan Area, will continue to be reviewed.

3.2.2.5 Groundwater Contaminants and Groundwater Data

The CM team will continue to check concentrations of MTBE, tert-butyl alcohol, and tetrahydrofuran, which showed an increase in 2015 but not since then. The team will also watch data from wells E-20B, MW-4, MW-12, MW-20 and other wells that have shown traces of contamination. The quality of the groundwater sampling and analyses, especially the occurrence of contaminants in quality-control samples and field samples, will also continue to be monitored.

3.2.2.6 Responses to Notices of Violation

Available data regarding the evaluation of contamination at well MW-4A will be reviewed, with special interest in the Water Board's understanding of the cause(s) of contamination at that well.

3.2.3 Class 2 Soils File Review

As required by the Scope of Work, the CM will conduct this review at least twice during 2019.

3.2.4 Permit Requirements Triggered by Expansion Date

In the Settlement Agreement, Section 4.3 defines the Expansion Date as "the date of the first deposition of solid waste in [Fill Area 2]." Currently, that is projected to occur in April of 2019. It will trigger specific requirements in Conditional Use Permit C-5512, and in the resource-protection permit conditions that were imposed through the mitigations in the landfill-expansion EIR and the associated natural-resource-agency permits (Army Corps wetland permit, USFWS Biological Opinion, etc.; see Section 1.5.2, above).

3.2.4.1 Tonnage Limitations

Section 4 of the Settlement Agreement contains numerous restrictions on the types and source jurisdictions of wastes that can be brought to the ALRRF during specified time frames prior to and after the Expansion Date. Specifically:

- After the Expansion Date, the amounts of Sludges, Inert Waste and Special Waste from outside San Francisco and Alameda Counties is limited to 25,000 tons per year, and these materials may only originate within the nine Bay Area counties.
- Self-Hauled wastes (of all types) from Contra Costa County are limited to 25,000 tons per year.

3.2.4.2 Natural Resource Protections and Reporting

The natural resource permits issued in connection with the ALRRF expansion contain over 80 explicit permit conditions, too many to enumerate here. In the near term, the following monitoring and reporting conditions are especially significant for the Community Monitor Committee:

- Every four years after the start of construction of Fill Area 2 (which began in 2015), the California Department of Fish and Wildlife (CDFW) is to receive a status report on the required periodic surveys of the Conservation Plan Area. The wildlife surveys focus on Western Burrowing Owl, San Joaquin Kit Fox, California Red-legged Frog, and California Tiger Salamander.
- Annual wetland monitoring reports are required by the Lake and Streambed Alteration Agreement, which was issued by the CDFW, for the first five years of operation of the wetland mitigations, i.e. the constructed pond.
- Reconnaissance survey reports for the Conservation Plan Area are also required by the CDFW. These include baseline and periodic surveys for sensitive wildlife species (see list above), and annual rangeland and general reconnaissance surveys. These are due on January 15 of the calendar year following the survey.

3.3 Project Management Considerations

The final year of the current Community Monitor contract is 2019. Based on recent years' experience, the 2019 budget is expected to be sufficient. In 2019 Kelly Runyon will continue with the lead role as Community Monitor, as a subcontractor to ESA. Michael Burns will continue to serve as ESA's Project Manager and will provide his own expertise, that of other ESA staff, and the environmental consulting firm Langan Engineering. Langan's work will focus on reviewing groundwater monitoring reports and Class 2 soil files.

HIS PAGE INTERNAL OF THE PROPERTY OF THE PROPE



COMMUNITY MONITOR COMMITTEE STAFF REPORT

TO: Community Monitor Committee Members

FROM: Judy Erlandson, Public Works Manager

SUBJECT: Community Monitor Committee Stipend Disbursement

RECOMMENDED ACTION

Staff recommends the Community Monitor Committee receive the update on stipend disbursement.

DISCUSSION

At the January 9, 2019 meeting of the Community Monitor Committee, Committee Member Tam requested that Livermore staff contact Alameda County staff to request the status of the stipend for Community Monitor Committee Members.

According to Supervisor Haggerty's Chief of Staff, Shawn Wilson, the process Alameda County established in 2016 for a \$100 stipend remains in place.

Attached, please find the forms Alameda County requires for payment of a stipend. If you are interested in receiving a stipend, please complete the attached forms and submit them with a meeting agenda and meeting minutes to:

Alex Martin
Financial Services Specialist II
Alameda County Health Care Services Agency
Administration and Indigent Health
1000 San Leandro Blvd. Ste 300
San Leandro, CA 94577

04-10-2019

Questions regarding the stipend can be directed to Alameda County staff member Alex Martin at (510) 667-7570 or email Alexander.Martin@acgov.org

Approved by:

Judy Erlandson

Public Works Manager

redy Gelanden

MEETING DATE:

AGENDA ITEM:

6.9

CMC Agenda Packet Page 91 of 96

REQUEST TO ADD/MODIFY ALCOLINK VENDOR RECORD

E-Mail/FAX to: VendorCreator.Auditor@acgov.org FAX: (510) 272-6502 or 26502, QIC 20111

Sent by:	Name:					
•	Department Name:					
	QIC:	Telephone:		Fax:		
Request to	Add: New vendo	r. Is this a result of merg	ger or acquisition?	Yes No		
Modify Ex		ovide previous vendor in business-as (DBA) name		or ID, vendor name)		
Widding La	Name Chan	ge DBA Name Cha				
	 New address for existing vendor Replacement Address for existing Vendor, Address Sequence # Is this the Remit To address? ☐ Yes ☐ No 					
IMPOI	RTANT					
	Is the vendor an Alameda County Employee/Board Member/Commissioner and/or affiliated with this business? Yes No If "Yes", there may be a conflict of interest pursuant to "Section 66 of the Alameda County Charter"					
Vendor Inf						
	NK Vendor Number (if known)	:				
Full Legal						
DBA Nan	DBA Name:					
Type of En	Type of Entity: Individual Sole Proprietor Partnership Corporation Tax-Exempted Government or Trust					
Check the boxes that apply to Alameda County payments you may receive: Goods Only Goods and Services Rents/Leases Rents/Leases paid to you as the agent Legal Services Other Services (describe) Settlement, Judgment, Refunds (If checked, skip Composition of Ownership section below) Court-Appointed Services (If checked, skip Composition of Ownership section below)						
Federal Tax ID Number (required):						
PO Box/Street Address:						
City:		State:		Zip Code:		
Is the business located in Alameda County? Yes No If yes, how long? Yr Mo						
Vendor Contact's Name:						
Vendor C	Vendor Contact's Telephone: Fax:					
Vendor Contact's Email address:						
Are you a n If "Yes" to o	oublicly traded entity, a public son-profit or a church? Yes	No Gender below. The collect	Yes No	Section. nder data is for statistical and demographic		
Ethnicity	African American or Black (> American Indian or Alaskan N Asian (> 50%) Caucasian / White (> 50%) Filipino (> 50%)	ative (> 50%) \square I	Multi-ethnic minority of	er Pacific Islander (> 50%)		
Gender	Female (> 50% ownership)	☐ Male ((> 50% ownership)			

List the Product and/or Services Vendor is interested in providing: include North American Industry Classification System (NAICS) Code (available at http://www.naics.com/search.htm)

All payees, including employees, must be set up as vendors in ALCOLINK Financials before they are paid. This form is used to add or modify the vendor information.

To set up a vendor in ALCOLINK Financials, send the completed form to the Auditor Vendor Creator. The email address is in the global address book under: Auditor, Vendor Creator. Completion of the ethnicity and gender information is required.

After the vendor is set up, ALCOLINK Financials generates a 10-digit vendor number.

Vendors are initially set up as "approved" with "one-time" persistence when there's no Substitute W-9 on file with the Auditor. After the first payment, the ALCOLINK system changes the status from "approved" to "inactive." This helps to prevent further payments to the vendor without their Substitute W-9 on file with the county.

For more information, contact the central vendor creator in the Auditor's Office.

I

COUNTY OF ALAMEDA

1221 OAK STREET, ROOM 249, OAKLAND, CA 94612

Substitute IRS Form W-9

Request for Taxpayer Identification Number and Certification

The purpose of this form is to obtain or verify the accuracy of information regarding Alameda County's payees. ALL, payees must have W-9 on file in the Auditor-Controller's office in order to be paid. If you fail to furnish your correct TIN, you could be subject to a penali The form must be completed, even if the information shown at the bottom of the form is accurate.

Please print or type. Do not send to IRS. Return to Alamee Name on record with IRS or Social Security Administration:	da County in the envelope provided. if necessary:
	or's C
All DBA(s) or Invoice Name(s) (If different from above name) – use attachments	if necessary:
Address for Correspondence or 1099 (we will take the remittance address if difference address and the control of the control o	rent, from the invoice)
TAX PAYER IDENTIFY You may enter only one TIN and it must be the type of TIN (SSN or EIN) that is information, see the instruction on the second page.	TICATION NUMBER (TIN) appropriate to your type of entity. If you do not have a TIN, or for further
SOCIAL SECURITY NUMBER:	ONLY <u>ONE</u>
OR	NUMBER WILL BE ACCEPTED
EMPLOYER ID NUMBER:	BE ACCEI TED
TIN $\underline{\text{MUST}}$ BE ENTERED REGARDLESS OF TYPE OF ENTITY (I.E., NON-I	PROFIT, RETAIL CORPORATION, ETC.)
Type of Entity (P	lease check only one)
INDIVIDUAL	SOLE PROPRIETOR
PARTNERSHIP	CORPORATION
TAX-EXEMPT ORGANIZATION UNDER SECTION 501(C)	GOVERNMENT OR TRUST (SPECIFY)
CHECK THE BOXES THAT APPLY TO Alameda County's PAYMENT TO	YOU:
GOODS ONLY GOODS AND SERVICES RENTS / LE MEDICAL AND HEALTH CARE SERVICES LEGAL SER OTHER SERVICES - DESCRIBE:	
CHECK THIS BOX if you are exempt from backup withholding. Entities e.	xempt from backup withholding are listed on the second page.
subject to back up withholding as a result of failure to report all into to backup withholding.(3) I am a U.S. citizen or other U.S. person. For federal tax purposes, y	om backup withholding, or (b) I have not been notified by the IRS that I am erest of dividends, or (c) the IRS has notified me that I am no longer subject you are considered a U.S. person if you are: (a) an individual who is a U.S. ny, or association created or organized in the United States or under the laws
The purpose of this form is to verify the accuracy of the information we currently have on our records and to obtain your certification for our files. PLEASE DON' MARK THE LABEL BELOW; WE USE IT TO VERIFY THE ACCURACY OF OUR CURRENT INFORMATION.	T Check if this signature applies to Certification (1) only □
	e-mail address

INSTRUCTIONS

Purpose of Form. To furnish your correct TIN to the County and, when applicable, to (1) certify that the TIN you are furnishing is correct (or that you are waiting for a TIN), (2) certify that you are not subject to backup withholding, and (3) to claim exemption from backup withholding.

How to obtain a TIN. Individuals should obtain Form SS-5 from their local Social Security Administration. Businesses and all other entities obtain Form SS-4 from their local IRS office. If you do not have a TIN, write "Applied For" in the TIN space on the front of this form and send it to us, keeping a photocopy of the blank form. You will have 60 days to receive your TIN and send it on the photocopy to the address at the top of this form. If we do not receive your TIN within 60 days, backup withholding, if applicable, will begin and continue until you furnish your TIN.

What is Backup Withholding? Unless you are exempt (see next section), payments you receive will be subject to 30% withholding if: (1) You do not furnish your TIN, or

(2) IRS notifies us that the TIN/Name combination your furnished is incorrect.

All amounts withheld will be sent to IRS. Under no circumstances will the withheld amount later be sent directly to you. The total amount withheld will be reported in Box 4 of your 1099-Misc.

Who is exempt from backup withholding of payments made by the County?

- (1) A corporation, except a corporation which provides medical, health care, or legal services.
- (2) An organization exempt from tax under Internal Revenue Code Section 501 (a)(c).
- (3) A government.
- (4) A real estate investment trust, a common trust fund operated by a bank under section 584 (a), and a trust exempt from tax under section 664 or described in section 4947.
- (5) A financial institution.

Penalties for failure to furnish TIN. You are subject to a penalty of \$50 for each failure to furnish your correct TIN/Name combination unless your failure is due to reasonable cause and not to willful neglect. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a penalty of \$500. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

What TIN/name combination should be reported:

What II whall combination should be reported.			
For this type of payee:	Give the name* and SOCIAL SECURITY NUMBER (SSN) of:		
Individual	The individual, (Individuals' names may never be used in combination with employers' TINs)		
Two or more individuals (such as two individuals who own rental property)	One of the individuals. Choose one name to list first and circle and show his/her SSN (payments will be reported on 1099 for that name and SSN only). The invoice must match the names and order chosen.		
For this type of payee:	Give the name and EMPLOYER IDENTIFICATION NUMBER (EIN) of:		
Corporation	The corporation.		
Partnership	The partnership.		
Association, club, tax-exempt organization	The organization.		
A valid trust, estate, or pension trust	The legal entity.		
For this type of payee:	Give the name and SSN or EIN of:		
Sole proprietorship	The owner. (If the owner is a married couple, choose one name to list first and circle and show his/her SSN.) Sole proprietors must show the owner's name on the first line as the "Name on record." On the second line, show the business name as a "dba" if that is the name on the invoice. Sole Proprietors may choose to give either an SSN or EIN.		

[•] If you are an individual, you must generally provide the name shown on your social security card. However, if you have changed your last name (e.g. due to marriage) without informing the Social Security Administration of the name change, please enter your first name, the last name shown on your social security card, and the new last name.

Signing the certification. You are required to furnish your correct TIN/name combination, but you are not required by the IRS to sign the certification unless you have been notified of an incorrect TIN/name combination. However, the County requires that you sign Certification (1). If two individuals are listed, only the one whose SSN is reported may sign the certification.

Privacy Act Notice. Section 6109 requires you to furnish your correct TIN. The IRS uses the numbers for identification purposes and to help verify the accuracy of your tax return. You must provide your TIN whether or not you are required to file a tax return. Payers must generally withhold 30% of taxable payments to a payee who does not furnish a TIN. Certain penalties may also apply. If we disclose or use your TIN in violation of Federal law, we may be subject to penalties.

HIS RACE INTERNAL STATE OF THE RESERVENCE OF THE PARTY OF