



# COMMUNITY MONITOR COMMITTEE

## Altamont Landfill Settlement Agreement

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

### AGENDA

[www.altamontcmc.org](http://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

#### NON-VOTING 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)

#### STAFF

Judy Erlandson  
City of Livermore  
Public Works Manager

DATE: **Wednesday, January 15, 2020**  
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 9, 2019)
5. Open Forum This is an opportunity for members of the audience to comment on a subject not listed on the agenda. No action may be taken on these items.
6. Matters for Consideration
  - 6.1 **Election of Chair (City of Livermore staff)**
  - 6.2 **Responses to Committee Member Questions:**
    - **Submittal of Concentration Limits**
    - **Proximity of Residences**
    - **Laboratory Quality Assurance**
    - **Possible Source of Tetrahydrofuran at Well MW-8B**
    - **Analysis Method for Chemical Oxygen Demand (COD)**
  - 6.3 **Five-Year Permit Review**
  - 6.4 **Review of Reports From ALRRF (Stormwater)**
  - 6.5 **Review of Documents on GeoTracker web site**
  - 6.6 **Reports from Community Monitor**
  - 6.7 **2019 Draft Annual Report**
  - 6.8 **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 **April 8, 2020**, at 3500 Robertson Park Road, Livermore.

#### Informational Materials:

- Community Monitor Roles and Responsibilities
- List of Acronyms
- Draft Minutes of October 9, 2019
- Reports from ESA and subcontractors

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

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

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

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

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

## **Community Monitor Committee Roles and Responsibilities**

Below is a summary of the duties and responsibilities of the Community Monitor Committee and related parties as defined by the Settlement Agreement between the County of Alameda, the City of Livermore, the City of Pleasanton, Sierra Club, Northern California Recycling Association, Altamont Landowners Against Rural Mismanagement, and Waste Management of Alameda County, Inc. The purpose of this document is to aid in determining if discussion items are within the scope of the Community Monitor Committee.

### **Community Monitor Committee's Responsibilities**

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

- A. Interviewing, retaining, supervising, overseeing the payment of, and terminating the contract with the Community Monitor;
- B. Reviewing all reports and written information prepared by the Community Monitor; and
- C. Conferring with the Community Monitor and participating in the Five Year Compliance Reviews (next due in 2015) and the Mid-Capacity Compliance Review (due when the new cell is constructed and capacity is close to 50%, unlikely to occur before 2028) (Condition number 6 of Exhibit A of the Agreement).

### **Community Monitor's Responsibilities**

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

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

### **Waste Management of Alameda County's Responsibilities**

Per the settlement agreement, Waste Management is responsible for:

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

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## List of Acronyms

Below is a list of acronyms that may be used in discussion of waste disposal facilities. These have been posted on the CMC web site, together with a link to the CIWMB acronyms page:

<http://www.ciwmb.ca.gov/LEACentral/Acronyms/default.htm>.

Updates will be provided as needed. This list was last revised on December 30, 2019.

### Agencies

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

### Waste Categories

C&D – construction and demolition  
CDI – Construction, demolition and inert debris  
FIT – Fine materials delivered to the ALRRF, measured by the ton.  
GSET – Green waste and other fine materials originating at the Davis Street Transfer Station, for solidification, externally processed.  
GWRGCT – Green waste that is ground on site and used for solidification or cover (discontinued January 2010)  
GWSA – Green waste slope amendment (used on outside slopes of the facility)  
MSW – Municipal solid waste  
RDW – Redirected wastes (received at ALRRF, then sent to another facility)  
RGC – Revenue generating cover

### Water Quality Terminology

BMP – Best Management Practice – A general term to identify effective means of pollution control, especially in the contexts of stormwater and air quality.  
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.  
NAL – Numeric Action Level – A concentration of a stormwater pollutant above which, the discharger must plan to reduce this concentration.  
RL – reporting limit: in groundwater analysis, for a given substance and laboratory, the concentration above which there is a less than 1% likelihood of a false-negative measurement.  
SWPPP – Storm Water Pollution Prevention Plan

### Substances or Pollutants

ACM – asbestos-containing material  
ACW – asbestos-containing waste  
ADC – Alternative Daily Cover. For more information: <http://www.ciwmb.ca.gov/lgcentral/basics/adcbasic.htm>  
BTEX – benzene, toluene, ethylbenzene, and xylene (used in reference to testing for contamination)  
CH<sub>4</sub> – methane  
CO<sub>2</sub> – carbon dioxide  
COD – Chemical Oxygen Demand – A measure of the degree to which a wastewater discharge can deplete the oxygen in a body of water.  
DO – dissolved oxygen

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HHW – household hazardous waste  
LFG – landfill gas  
LNG – liquefied natural gas  
MEK – methyl ethyl ketone  
MIBK – methyl isobutyl ketone  
MTBE – methyl tertiary butyl ether, a gasoline additive  
NMOC – Non-methane organic compounds  
NTU – nephelometric turbidity units, a measure of the cloudiness of water  
PFAS – Per- and polyfluoroalkyl substances  
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)  
CoIWMP – 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 CoIWMP)  
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.  
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 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 (arrived 4:03 PM); Donna Cabanne, Sierra Club; David Tam, NCRA; Arthur Surdilla, Alameda County Department of Environmental Health (LEA); Luis Rocha, Environmental Protection Specialist, Altamont Landfill and Resource Recovery Facility (ALRRF); Marcus Netz II, Senior District Manager, ALRRF (arrived 4:10 PM)
Absent:	Robert Cooper, Altamont Landowners Against Rural Mismanagement
Staff:	Judy Erlandson, City of Livermore Public Works Department; Kelly Runyon, Community Monitor
Others:	Mukta Patil and Maria Lorca, staff at Langan Engineering (Community Monitor subcontractors)
  
3. Introductions  
All those present introduced themselves.
  
4. Approval of Minutes of July 10, 2019 meeting  
At the request of Mr. Tam, the Chair reordered the Agenda to postpone the approval of the minutes until later in the meeting.
  
5. Open Forum  
There was no Open Forum discussion.
  
6. Matters for Consideration  
At the request of Ms. Erlandson, the Chair reordered the agenda to begin with the first part of item 6.9, the signing of the Community Monitor contract for services in 2020 – 2022. The voting members of the Committee signed the contract where indicated. While doing so, Mr. Runyon presented item 6.1 (see below). Ms. Testa arrived at 4:03 PM and also signed the contract at that time.

## 6.1 Response to Committee Member Questions

Submittal of Concentration Limits

Mr. Runyon stated that the written response to this question, as presented in the agenda packet, contained errors. He asked that this response be disregarded. He explained that in Fill Area 2, there are five difficult-to-sample groundwater monitoring wells that do not have concentration limits on record. He said that he would inquire about their status with ALRRF staff and would provide a summary at the next Committee meeting.

Use of Underdrain Water

Ms. Cabanne noted that Waste Management staff (T. Nourot) has stated that the CASP composting system at the ALRRF will not use landfill underdrain water as quench (processing) water until this use has been approved by the Regional Water Quality Control Board. Ms. Cabanne then asked what the landfill would be using as quench water. Mr. Netz responded that the CASP uses fresh water (Zone 7 Water, drawn from the nearby canal) currently. Although it would be preferable to use water from the CASP's "CWP" (Contaminated Water Pond, which captures runoff from the compost operation), CWP water alone cannot be used because it contains suspended solids that clog sprinklers. However, the excessive rainwater that was diverted from CASP to the Fill Area 1 underdrain water pond (LSI-2) last February is now being pumped back to the CWP; and with the return of that rainwater from LSI-2, the CWP is able to supply quench water to the CASP.

Fill Area 2 Liner Depth Below Ground Surface

In response to Mr. Tam's question, Mr. Runyon reported that the depth from the soil surface to the liner material, on Fill Area 2 side slopes, is two feet. Later in the meeting, Mr. Tam asked if that meant two feet vertically, or two feet measured perpendicular to the sloped liner. Mr. Netz responded that it is two feet perpendicular to the liner.

- 6.2 Status of Wetland Mitigation – Mr. Runyon stated that the mitigation pond is being actively managed, with irrigation and other maintenance; however the presence of non-native plants, and the apparent dieback of some of the installed plants, indicate that the pond is not yet stable. Mr. Carling asked if invasive plants would be removed. Mr. Runyon stated that he assumed that such plants might not be removed if they do not interfere with the intended function of the pond (as habitat). Mr. Netz indicated that this assumption was correct. Mr. Carling asked who decides on removal. Mr. Runyon responded that the landfill could do that on its own initiative, or the permitting agencies could require it. Ms. Cabanne asked if this issue (the presence of non-native, invasive plants) is, or could become, significant. Mr. Runyon replied that this is a judgment that ultimately rests with the permitting agencies, based on site conditions.

- 6.3 Five-Year Permit Review – Mr. Surdilla summarized recent developments:

- The LEA and the ALRRF are working on the final set of corrections to the permit documents.



- CalRecycle has agreed that the review should be treated as a Permit Modification (as opposed to a Revision) and thus a public notice is required but a public meeting is not. Mr. Surdilla provided a handout showing the timeline for noticing.

Ms. Cabanne asked what constitutes a Modification, as opposed to a Revision. Mr. Surdilla explained that a Revision would involve a material change to the description of operations that appears on the permit. Ms. Cabanne then asked when public noticing would occur. Mr. Surdilla replied that noticing would occur within 60 days of the date when the application is accepted as complete and correct. This has not yet occurred; some discussion is needed with a consultant who will not be available until Friday [October 11] before that determination (of completeness and correctness) can be made. He also stated that the public notice would indicate how the public can comment on the Permit Modification.

Ms. Testa asked how close residences are to the landfill. Mr. Runyon stated that the residences on Dyer Road are the closest, being immediately adjacent to ALRRF property and  $\frac{1}{4}$  to  $\frac{1}{2}$  mile from the landfill operations.

Mr. Tam asked about the locations where notices will be posted. Mr. Surdilla replied that notices would be posted at the LEA's office and web site, and at the ALRRF itself.

- 6.4 Review of Reports Provided by ALRRF – Regarding the air emissions report, Mr. Runyon began by noting that although no new wells had been installed during the reporting period (December 2018 – May 2019), this is normal for the ALRRF. Mr. Netzt added that he expected new wells to be installed before the end of 2019 in Fill Area 1, but that none would be installed in Fill Area 2 for approximately another 6 to 8 months, when the tonnage of refuse in place reaches 1 million tons (the regulatory threshold above which gas control is required). He also said that there are plans to install a landfill gas header pipe into Fill Area 2 later this year, with wells to be added when required.

Mr. Runyon also noted that during the reporting period:

- There was only one high-temperature gas well identified in Fill Area 1, and five gas wells were decommissioned because they had become unproductive.
- Surface emissions at Fill Area 1 were unusual in that there were few emissions detected in December but many more in February, largely occurring around the edge of the top surface of Fill Area 1. All detected emissions were repaired, the repairs were tested after 10 and 30 days, and no additional repair was needed.
- The testing of emission control devices had been carried out as required, and none failed, but the test results for the two gas turbines were not included in the report. These results should appear in the next semiannual report and will be discussed in that review.

- Methane was detected at one of the gas probes on the landfill perimeter. The report states that this gas is assumed to be of natural origin, because that has been found in previous samples taken at this probe.
- Near certain groundwater monitoring wells where volatile organic compounds (VOCs) were found in groundwater samples, the adjacent landfill gas extraction wells were being operated aggressively, withdrawing as much gas as possible without also pulling in air from above the ground surface.

Reviewing the graph of day-by-day gas consumption, Mr. Runyon reported that an apparent brief increase in gas consumption coincided with repair work and may have been due to an air leak; and a more gradual trend is apparent in the latter months of the reporting period (April and May) as wells were becoming less productive and were being taken off line.

Mr. Runyon gave an overview of the groundwater monitoring report, noting that the problem of laboratory quality control appears to be worsening, with more occurrences of contamination within the laboratory, and additional instances of apparent contamination during sampling or shipping, as well as delays in performing analyses. Mr. Carling asked why the samples were being processed in Colorado; Ms. Cabanne noted that for certain recent tests, the plan was to analyze those in West Sacramento, which might be a better place to run all of the ALLRF groundwater analyses. Ms. Lorca from Langan noted that one sample was delayed in shipment, and another sample reached the Colorado lab in time but was not analyzed within the required time period. Mr. Carling asked Mr. Runyon to ask ALLRF (a) what is being done to prevent these problems going forward, and (b) if the West Sacramento lab can be used for these analyses. Mr. Runyon stated that he would report back at the next meeting.

Mr. Runyon then summarized trends at four wells with a history of VOC contamination. Each was unique, but in general, the concentrations remained in the same order-of-magnitude as in previous semiannual reports. He also noted that at well MW-4, the number of VOC substances found has declined from five (in 2017) to one.

Ms. Patil noted that in general, there were more detections of VOCs than in past reports. Many of these were attributed to laboratory contamination, but a few were clearly first-time detections in groundwater, as noted in the summary table provided. Ms. Cabanne stated her ongoing concern about the possibility of leachate contamination, particularly at well E-20B.

Ms. Patil and Mr. Runyon also noted that there had been a very high concentration of tetrahydrofuran at well MW-8B, downgradient of Fill Area 2; and Mr. Runyon mentioned that this may have resulted from work on a protective plastic-pipe sleeve that was installed around MW-8B during the construction of stormwater basin SB-H, which is immediately adjacent to MW-8B. He explained that tetrahydrofuran is a primary ingredient in plastic pipe cement, and he stated that he would confirm the type of sleeve used at that well, by the next Committee meeting.

Mr. Carling asked for an explanation of how COD (Chemical Oxygen Demand) is analyzed. Mr. Runyon stated that he would provide an explanation at the next Committee meeting.

- 6.5 Review of Documents on GeoTracker Web Site – Mr. Carling asked about the format of the document, expressing some concern about the length of many of the topics. Mr. Runyon stated that the start dates for most of the topics were somewhat arbitrary and could be adjusted to reduce the amount of background information in the packet.

The discussion of **Fill Area 1 Leachate and Liquids Management** focused on the past use of the Fill Area 1 underdrain-water pond to contain unanticipated stormwater from the adjacent CASP operation, and the planned remedy for that, which is a second pond at the CASP site. Mr. Carling expressed concern about the delay in construction of that pond due to interfering PG&E utility lines which will take 6 months or more to be relocated. Mr. Netz explained that PG&E has a backlog of work and cannot prioritize the ALRRF's needs, so the ALRRF has looked at a different alternative – a filtration system to allow discharge of the CASP stormwater runoff – but this would require an NPDES permit that could take a couple of years to obtain. He also mentioned that the underdrain water pond can continue to be used for CASP stormwater, if necessary, because the transfer pipe between the underdrain pond and the CASP pond will continue to be in place.

Ms. Cabanne asked if the removal of CASP stormwater from the underdrain water pond had been completed by the ALRRF's proposed September 2019 deadline. Mr. Netz responded that the pond was emptied by October 4 and will need to be cleaned to satisfy the Central Valley Water Quality Control Board (Water Board).

Regarding the Water-Board-required study of **VOC stormwater contaminants**, Mr. Runyon noted that such contaminants appear to have been diminishing, if one accepts the study's assertion that certain common VOCs (such as acetone) are laboratory contaminants not actually present in stormwater.

Other topics from the GeoTracker documents list were verbally summarized by Mr. Runyon, with no discussion from Committee members or other attendees. Mr. Runyon also mentioned that very recently, the Water Board has provided feedback and additional direction to the ALRRF on the sampling points and sampling methods to be used for PFAS samples. With those additions, they have accepted the ALRRF's sampling plan. Regarding sampling methods, Ms. Testa also noted that in the testing of Pleasanton water wells for per- and polyfluoroalkyl substances (PFAS), the inspector is not allowed to purchase fast food for 48 hours beforehand, because PFAS present on the food wrappers can contaminate a sample. She also noted that PFAS substances are in fire retardant, and she asked when the results of the landfill testing would be available. Mr. Runyon said that there is not yet a firm timeline, but he would expect results to be available in 2020. Ms. Patil added that PFAS compounds are nearly ubiquitous and take many forms, some of which can interfere with lab analyses.

- 6.6 Reports from Community Monitor – Mr. Carling began with a general question about windblown litter: What has changed, to make this such a major issue? Mr. Netzt responded that the Water Board’s view of this issue has changed, becoming much more stringent than the ALRRF’s prior operating practices. He also noted that in the last Water Board inspection, there was no violation related to windblown litter. Mr. Runyon also noted that in the valley where Fill Area 2 is situated, wind is stronger than had been anticipated.

In the July site visit summary, Mr. Runyon noted that Fill Area 2 operations had reached the toe of the lined (Phase 1) area, providing plenty of space for operations.

In the August summary, Mr. Runyon pointed out that the tonnage disposed from Alameda County was about 15,000 tons above normal, most of which appeared to have come from Newark where salt pond reclamation work has involved the removal and disposal of salty soil. Mr. Netzt confirmed that this was the most likely source; this material was being disposed in August, September, and October. Also regarding the August summary, Ms. Cabanne asked if the plants noted as “senescent or dead, ... dry and brown” indicated a problem for the Evapotranspirative (ET) Cover Test area. Mr. Runyon replied that this is normal for the chosen mix of plants and does not indicate a problem. The plants are expected to regrow and take up moisture when winter rains occur. Ms. Cabanne asked that the ET Cover Test area continue to be checked. Mr. Netzt stated that the condition of the ET Cover Test area will be reported as required.

Regarding the September summary, Mr. Carling expressed concern that the Special Occurrences Log included a dump truck overturn. In discussion, Mr. Netzt gave examples of dump truck driver errors that have resulted in overturns. Mr. Runyon mentioned that some plants seen in a stormwater basin are suspected to be tamarisk, a hard-to-control invasive plant. He also described litter management along the eastern border of the property. Mr. Tam asked if neighboring property owners had any objection to landfill staff collecting litter from adjoining properties, and Mr. Netzt replied that they do not.

Ms. Testa left the meeting at 5:35 PM.

- 6.7 Topics for 2019 Annual Report – Mr. Carling asked what would be reported regarding windblown litter. Mr. Runyon stated that the current status of litter management would be summarized, including a description of the ways that litter is dispersed from, and managed at, Fill Area 2 and surroundings.

Ms. Cabanne asked that the PFAS investigation be described in the Annual Report. Mr. Runyon agreed to do so.

Mr. Carling mentioned his concern about dump truck overturns, and Mr. Runyon offered to include an analysis of dump truck overturn frequency over the past several years.

Mr. Tam asked if tonnage was being delivered from the City of Milpitas. Mr. Netzt stated that he did not know of deliveries to the ALRRF from Milpitas. Ms.

Erlandson reported that by referendum, Milpitas voters had chosen to deliver refuse to the Guadalupe Landfill in San Jose, in 2016.

- 6.8 Scheduling Community Monitor Committee Meetings for 2020 – The Committee modified the January meeting date to January 15. A motion to approve the modified 2020 schedule was introduced by Ms. Cabanne and seconded by Mr. Tam. It was approved with a vote of 3 – 0.
- 6.9 Community Monitor Contract and Transition – Mr. Runyon asked that in future site visits in 2019, he be joined by Ms. Patil so that she can become more familiar with the site and the usual observations. Mr. Netz approved that approach. Mr. Carling asked if Ms. Patil would be presenting at the Committee meeting in January. Ms. Patil said that she would, with Mr. Runyon also participating, since he would have prepared the meeting packet.
- 4 Approval of Minutes – The Chair reordered the agenda to complete the approval of the July 10, 2019 Minutes. Mr. Tam moved for approval and Ms. Cabanne seconded. There was no discussion. The minutes were approved 3-0.
- 6.10 Announcements – Mr. Tam mentioned that the Alameda County Board of Supervisors would take up the issue of stipends for Community Monitor Committee members in their October 15 meeting.

#### 7. Agenda Building

No new topics were suggested.

The meeting was adjourned at 6:05 p.m. The next meeting will be held on **Wednesday, January 15, 2020, at 4:00 p.m.** at the Livermore Maintenance Services Center at 3500 Robertson Park Road.

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## COMMUNITY MONITOR COMMITTEE STAFF REPORT

TO: Community Monitor Committee Members  
FROM: Judy Erlandson, Public Works Manager  
SUBJECT: Community Monitor Committee Election of Chair

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### RECOMMENDED ACTION

Staff recommends the Community Monitor Committee elect a Committee Chairperson.

### DISCUSSION

The Settlement Agreement, dated November 30, 1999, between the County of Alameda, the City of Livermore, the City of Pleasanton, Sierra Club, Northern California Recycling Association, Altamont Landowners Against Rural Mismanagement, and Waste Management of Alameda County, Inc. (Settlement Agreement), describes the duties and obligations of the Community Monitor Committee, but does not require the selection of a Committee Chairperson.

Although not required by the Settlement Agreement, staff recommends the Community Monitor Committee select a Chairperson to preside at all regular meetings and decide upon all points of order and procedure during the meeting.

If the Committee chooses to appoint a Chairperson, election shall be by majority vote of the Committee. If a quorum of three of the four Committee members is present, all three committee members would have to vote, and vote unanimously, in order to take this action.

Approved by:

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Judy Erlandson  
Public Works Manager

<b>MEETING DATE:</b> <b>01-15-2019</b>
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<b>AGENDA ITEM:</b> <b>6.1</b>
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# memorandum

date December 27, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 1/15/20 - Agenda Item 6.2 - Responses to Committee Members' Questions

## Submittal of Concentration Limits

At the July 10, 2019 Committee meeting, Ms. Cabanne asked if the ALRRF had responded to the Central Valley Regional Water Quality Control Board (CVRWQCB, or Water Board) requirement, in a December 5, 2018 letter, to propose concentration limits for all Fill Area 2 monitoring wells by February 22, 2019. The update that appeared in the October 9, 2019 Committee agenda packet was inaccurate and is superseded by the following.

The ALRRF provided several proposed sets of concentration limits in the months prior to the opening of Fill Area 2, and the Water Board accepted these, with some adjustments (which the ALRRF accepted). By the time of the July 10 Committee meeting, there were five groundwater monitoring wells that apparently still did not have concentration limits set: P-2, ARC-2, MW-15A, MW-17, and MW-17R.

ALRRF staff were asked about these wells, and they provided partial responses from two sources.

SCS Engineers stated that:

- There are currently insufficient data for P-2 to calculated concentrations [sic] limits, but the well is being sampled routinely to acquire sufficient data.
- MW-15A and ARC-2 are typically dry and no limits have been established.

Waste Management regional environmental staff sent a table showing all of the wells that do have concentration limits. MW-17 and MW-17R were not listed. This leaves open the question of whether the ALRRF is pursuing the matter. From the location of these wells and the groundwater elevation reports, it is clear that MW-17 has been nearly dry at times, and its replacement, MW-17R, has only been functioning long enough to provide two or three quarterly samples, not enough to calculate concentration limits.

## Proximity of Residences

At the October 9, 2019 Committee meeting, Ms. Testa asked how close residences are to the landfill. Mr. Runyon replied that the closest residences are  $\frac{1}{4}$  to  $\frac{1}{2}$  mile away, on Dyer Road, west of the landfill. A subsequent check of a regional map has found that in fact, the Dyer Road residences are one mile west of the landfill, but there are other residences, on Altamont Pass Road, that are about  $\frac{1}{2}$  mile from the southern boundary of Fill Area 1.

## Laboratory Quality Assurance

At the October 9, 2019 Committee meeting, Mr. Carling asked two questions related to apparent quality control problems at the TestAmerica Colorado laboratory that analyzes groundwater samples from the ALRRF. The questions were conveyed to ALRRF staff, who then forwarded them to the firm that prepares the groundwater monitoring reports, SCS Engineers. The questions and SCS's responses are shown below, verbatim. As background, we note that ten different analytical methods are used for groundwater sample analyses, plus another eight when testing for more exotic chemicals (the 5-year Constituents of Concern analyses):

**What has Waste Management done recently to encourage TestAmerica to reduce hold-time errors, reduce lab contamination, or otherwise improve their results?** Test of America<sup>1</sup> is one of the best labs around. The issues with hold time, lab cross contamination, etc. are normal for all laboratories. Hold times are either issues with FedEx delivery and less infrequently instrument breakdown or analyst error. It is good to see cross contamination because it helps identify species that are common to the laboratory and not necessarily caused by operations of the landfill.

**Can the ALRRF submit samples to the West Sacramento TestAmerica lab, or another in northern or central California, rather than Colorado? (Pleasanton, for example.)** Denver is better equipped with management staff and variety of ASTM and EPA methods than the other two locations noted. Truthfully, Denver results and service are superior to the more local California Pleasanton and West Sacramento locations. In some case the Test of America PMs are located in West Sacramento for the Pleasanton location. Hands on is better.

## Possible Source of Tetrahydrofuran at Well MW-8B

At the October 9, 2019 Committee meeting, Mr. Runyon described a test result that showed an unusually high concentration of tetrahydrofuran (THF), a known carcinogen, in a sample from well MW-8B. He suggested that this may have been due to the use of pipe cement containing THF, if the recently installed protective sleeve around that wellhead was made of PVC pipe. Mr. Runyon stated that he would check on the type of pipe used for the sleeve. In fact, it is PVC pipe.

## Analysis Method for Chemical Oxygen Demand (COD)

At the October 9, 2019 Committee meeting, Mr. Carling asked for an explanation of how Chemical Oxygen Demand (COD) is determined in water samples. COD is a measure of the oxidizable substances found in a water sample. COD provides a metric to determine the effect an effluent will have on a receiving water body. COD is measured by observing a change in the color of a water sample that has been dosed with potassium dichromate, which is bright yellow-orange in color. The dosed sample is placed in a sealed tube and heated to 150°C for two hours. After cooling, the intensity of the yellow-orange color is measured using a spectrophotometer set for the yellow-orange wavelength (600-nanometers). The change in color indicates the concentration of chemicals in the sample that can be oxidized chemically. Such chemicals can deplete oxygen in the receiving water body, favoring anaerobic decomposition of organic matter and reducing the amount of dissolved oxygen available to plants and animals in the water.

### References:

National Environment Methods Index (NEMI), [Method 410.4 page](#), accessed December 9, 2019.  
Wikipedia [definition](#), accessed December 9, 2019.

<sup>1</sup> TestAmerica is part of Eurofins Scientific, a worldwide scientific testing and technology company.

# memorandum

date December 27, 2019  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 1/15/20 - Agenda Item 6.3 - Five-Year Permit Review

## **Five-Year Review of Solid Waste Facilities Permit**

Mr. Surdilla will provide a verbal update at the January 15, 2020 Committee meeting.

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# memorandum

date December 27, 2019  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 1/15/20 - Agenda Item 6.4 - Review of Reports Provided by ALRRF

## **Stormwater Monitoring and Reporting**

### **Overview**

Complex State stormwater regulations, combined with additional requirements from the Central Valley Regional Water Quality Control Board (CVRWQCB), have created an unusually complex and potentially confusing regulatory situation at the ALRRF. This is further compounded by the inherent characteristics of the landfill, with its constantly changing topography and its ongoing construction projects as Fill Area 2 expands to its full footprint. By meeting regulatory requirements for sampling, reporting and addressing exceedances, the ALRRF is avoiding Notices of Violation and is identifying the stormwater pollutants that must be reduced. However, more improvement is needed to reduce certain pollutants below regulatory action levels.

The sources of VOCs in stormwater have not yet been clearly identified, but problem areas are coming into focus. Additional sampling during rain events, for perhaps several more years, will be needed to understand the VOC sources well enough to take measures toward prevention and control.

### **Background: Stormwater Regulations, Plans and Reports**

The Federal Clean Water Act regulates discharges of stormwater from three types of sources: Municipal separate storm sewer systems (“MS4’s”), industrial activities and construction activities. In California, the State Water Resources Control Board (SWRCB) and its Regional Boards are authorized by the USEPA to regulate these dischargers and issue permits for them. The SWRCB has established a statewide Industrial General Permit (IGP) that can be applied to most major industries, and a Construction General Permit for construction projects that could impact the waters of the state. In this context, the ALRRF is a regulated industrial activity, and it also conducts construction activity from time to time, such as excavating and lining the next Phase of Fill Area 2. This review will be limited to the ALRRF’s industrial activity because it is the landfill’s practice to have their construction contractors prepare permit documents and monitor compliance related to construction work.

The current suite of California IGP regulations took effect in 2015. The IGP regulations require specified industrial activities, including landfills, to:

- inform the SWRCB of their activity
- limit the concentrations of pollutants in stormwater runoff
- monitor their stormwater discharges for the presence of specific pollutants
- make plans to limit pollution, and
- take corrective actions if pollutants exceed regulatory thresholds.

The SWRCB administers this program, but the CVRWQCB can inspect, enforce, and make further requirements related to stormwater as needed.

**Stormwater Plan**

The backbone of any industrial stormwater program is the Stormwater Pollution Prevention Plan or SWPPP. The SWPPP is required by the Industrial General Permit. The SWPPP describes the operation in enough detail to support planning and evaluation of stormwater pollution prevention measures. It also describes Best Management Practices (BMPs) that are appropriate for the facility. “Minimum” BMPs, such as employee training and good housekeeping procedures, are required to be implemented. If they are not sufficient to control stormwater pollution, “advanced” BMPs must also be planned and implemented. These typically require some capital expense and may require active involvement by facility staff to monitor and adjust control devices.

**ALRRF Geography for Stormwater Reporting**

The SWPPP for any facility is based on its terrain. Stormwater should be sampled where it leaves the facility, and those locations are the low points in the on-site drainage system. At the ALRRF, the original layout included three basins, A, B and C, where stormwater from operating areas was collected prior to discharge. With the development of Fill Area 2 and new regulatory requirements, the current SWPPP has defined six drainage zones and a zero-discharge area as shown in Figure 6.4-1 below. This schematic is based on “Figure C-2 Site Map: Drainage Overview” in Appendix C of the June 2019 SWPPP.

Figure 6.4-2 provides a cropped version of the map in Figure C-2 of the SWPPP. This map and the associated text delineate the industrial activity area with orange dashed lines. The associated text states that it occupies 311 acres (SWPPP page 10). This should be corrected to include the active portion of Fill Area 2.

Figure 6.4-1  
Schematic of ALRRF Stormwater Drainage Zones

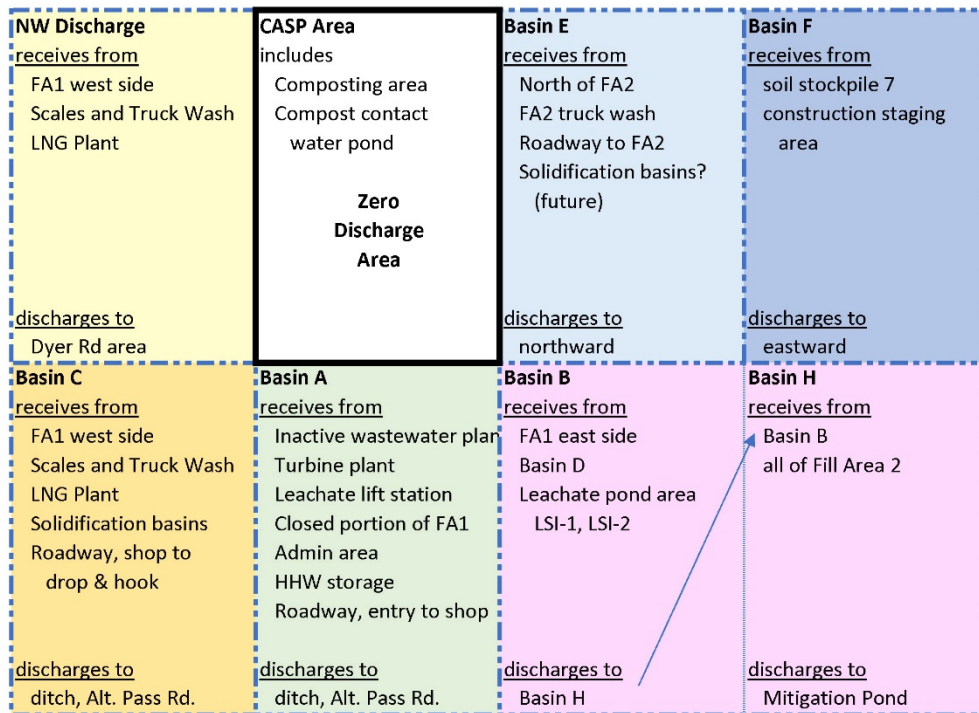
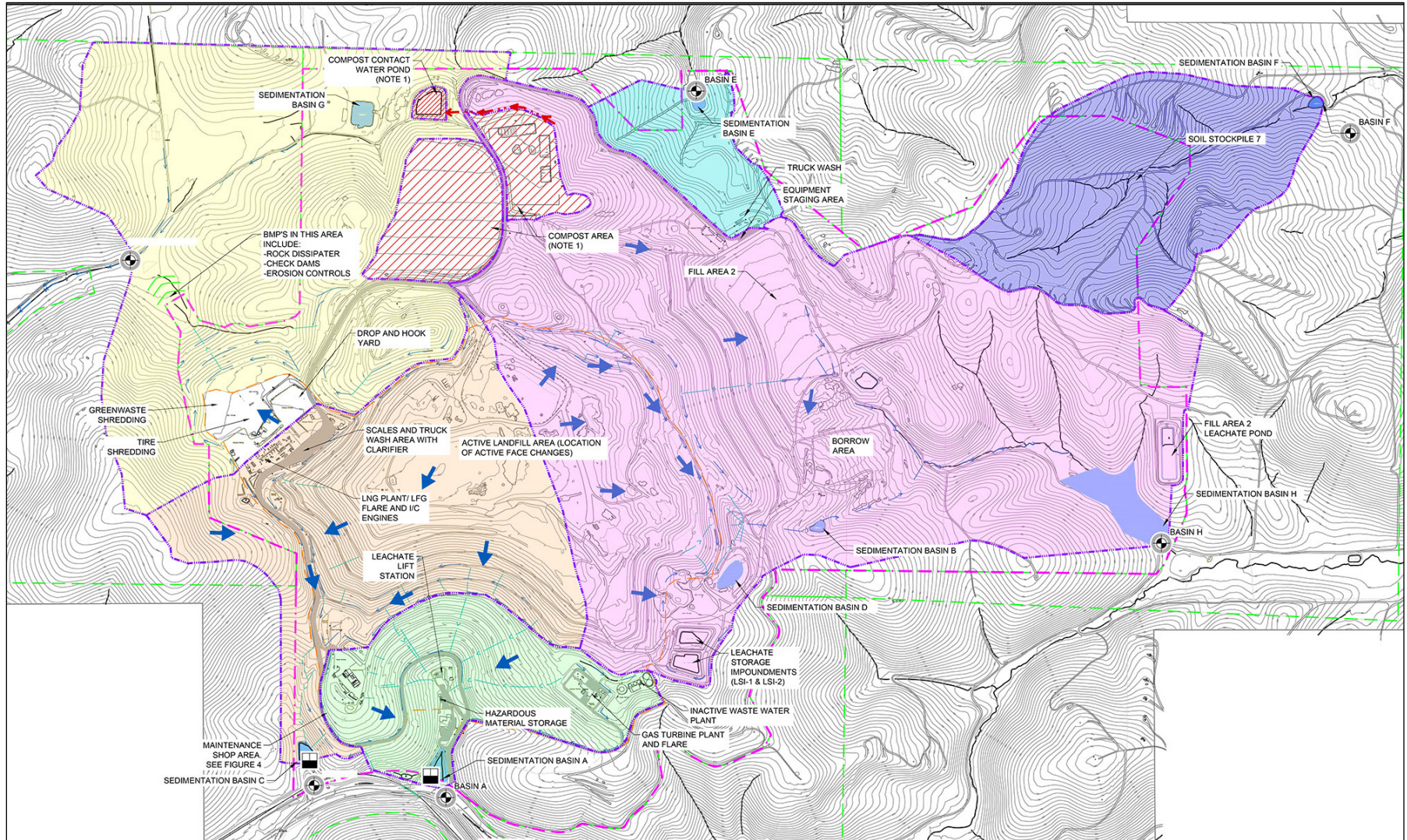


Figure 6.4-2  
Map of ALRRF Stormwater Drainage Zones



(source: ALRRF SWPPP, revised June 2019)

### **SWPPP for the ALRRF: Parameters, Numeric Action Levels, and Exceedance Responses**

The current SWPPP for the ALRRF, last revised in June 2019, states that the facility has two applicable industry SIC codes: “4953: Refuse Systems” for landfill activity and “2875: Fertilizer, Mixing only” for the Covered Aerated Static Pile (CASP) composting system. The IGP requires each type of industry to monitor and if necessary, control certain stormwater pollutants. Those pollutants are chosen based on the pollutants typically produced by that industry. For SIC codes 4953 and 2875, stormwater samples must be analyzed for the parameters shown in the table below.

<b>Parameter</b>	<b>Reporting Units</b>	<b>Annual NAL</b>	<b>Instantaneous Maximum NAL</b>	<b>Required for SIC Code</b>
pH	pH units	n/a	Less than 6.0 Greater than 9.0	All
Suspended Solids (TSS), Total	mg/L	100	400	All
Oil & Grease (O&G), Total	mg/L	15	25	All
Zinc, Total (H)	mg/L	0.26	n/a	2875
Lead, Total (H)	mg/L	0.262	n/a	2875
Iron, Total	mg/L	1.0	n/a	2875 & 4953
Nitrate + Nitrite Nitrogen	mg/L as N	0.68	n/a	2875
Total Phosphorus	mg/L as P	2.0	n/a	2875

The “Annual NAL” column in this table denotes the Numerical Action Level (NAL) for each parameter. If the average of all samples in a given stormwater year exceeds the Annual NAL for a parameter, then a facility must increase its efforts to reduce that parameter. If a parameter with an Instantaneous Maximum NAL exceeds that NAL value twice in one year, then a similar requirement to reduce that parameter applies.

### **Reporting for the IGP**

In addition to the IGP-required parameters, the landfill’s Waste Discharge Requirements call for stormwater sampling for Copper, Chemical Oxygen Demand (COD), and Nitrate + Nitrite, among other substances. The current SWPPP states that “The CASP is considered a zero-discharge operation. However, potential pollutants include residual solids, nitrates and metals.” Through 2018, the ALRRF reported on the parameters required for landfills, plus three other parameters that have exceeded threshold values in the past (Copper, COD and Nitrate + Nitrite), but not Zinc, Lead or Total Phosphorus.

### **Exceedances and Responses**

2015-2016: Basins A, B and C discharges were sampled as required. Six samples were taken and analyzed. Exceedances were found for TSS, Iron and Nitrate. Results were reported to the State, but it is not clear if any remedial steps were taken in 2016.

2016-2017: Basins A, B, C and the newly defined Northwest Discharge (a channel with no basin) had their discharges sampled as required. Ten samples were taken and analyzed. Concentrations of pollutants were generally lower, but exceedances were found for TSS, Copper, Iron and Nitrate. It was also noted that Iron and TSS were strongly correlated, and thus controlling TSS would likely reduce Iron.



All appropriate minimum BMPs were already in place, so the required Exceedance Response Action reports in 2017 recommended the following advanced BMPs:

- Riprap at basin inlets
- Special Filtrexx check-dams in ditches above basins B and C to reduce metals and COD.
- Active management of TSS in all basins, using flocculant to reduce TSS and Faircloth skimmers to further reduce the discharge of TSS. Only discharge from basins when turbidity is low.
- Rock check dams upstream of the NW drainage discharge location, to reduce silt.
- Relocating the Basin C sampling point to avoid extraneous runoff.

2017-2018: Basins A, B, C and the Northwest Discharge (a channel with no basin) had their discharges sampled as required. Six samples were taken and analyzed. Exceedances were found for TSS and Iron. It was also noted that Iron and TSS were strongly correlated, and thus controlling TSS would likely reduce Iron. In addition to the BMPs already recommended, the following advanced BMPs were recommended:

- Hydrojet the piping for Basin A.
- Install fencing to diminish livestock influence.
- Complete construction of new Basin H and install a controlled drainage device there.

This report may be continued in mid-2020 when the data and reports for the 2018-2019 stormwater year have been made available.

**Stormwater VOCs**

The Federally driven Industrial General Permit process does not include volatile organic compounds (VOCs) as parameters; it is focused on non-volatile substances such as metals, suspended solids, etc. However, the Waste Discharge Requirements (WDRs) issued by the CVRWQCB for the ALRRF do require a focused study of VOCs in stormwater, with the goal of identifying sources of any VOCs found. Provision H.8.d. reads:

d. Discharges of COCs to Storm Water Detention Basins: The Discharger shall:	
1. Submit a work plan and implementation schedule that complies with Title 27 section 20430 that investigates the source of COCs [Constituents of Concern] that have been periodically discovered in storm water detention basins. The work plan shall include an accelerated monitoring schedule for at least one year (e.g., quarterly monitoring or more frequently to determine the sources of VOCs);	1 December 2016
3. Implement work plan including accelerated monitoring schedule; and	1 March 2017
4. Submit Technical Report including source control methods, operation and maintenance and best management practices to prevent release of COCs to storm water detention basins.	30 June 2018

Note: there was no item 2 in the final version of the WDRs.

The WDRs state in section 108 of the Findings: “The data indicates that runoff from the Facility to storm water basins contains multiple COCs such as 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), acetone, and n-hexane extractable material.” The required stormwater VOC studies have tested for those substances and others identified in the ALRRF stormwater basins. The findings are summarized in the following table which shows, for each substance and sampling location, the number of detections that occurred and the number of samples obtained.

When reviewing these data, the following should be kept in mind:

During the 2016-17 rainy season, the ALRRF’s work plan was not approved by the CVRWQCB until April, and no subsequent rainstorms that season were heavy enough to provide samples. Thus far, sampling has only occurred in the 2017-18 and 2018-19 rainy seasons.

In some storm events, there has only been enough flow to obtain a sample at some but not all sampling points. This is why the total number of samples varies from point to point. Another reason for this variation is that two of the sample points, 2A and 2B, were not defined in the first sampling year. They were added in the second year in an attempt to trace some of the SW-2 compounds back to their source.

In most cases, the detection was so low in concentration that the lab could not determine the concentration accurately; they provided an estimate and noted the low concentration.

**Table 6.4-2**  
**Summary of Stormwater VOC Sampling Results, 2017-18 and 2018-19**

Sample Point Watershed	Basin C					Basin A		Basin B
	SW-1	SW-2	SW-2A	SW-2B	SW-3	SW-4	SW-5	SW-6
General Location	Across entry road from leachate tank	Below leachate tank, same side of road	Above leachate tank, west of truck scales	Above leachate tank, east of truck scales	Across road from shop and upslope	At entrance to shop area	Between turbine plant and wastewater plant	Above Basin B (no samples: low flow)
MEK	1 of 4	4 of 6	3 of 3	3 of 3	-	1 of 3	-	-
Tert-Butyl Alcohol	-	1 of 6	-	-	-	1 of 3	-	-
Tetrahydrofuran	-	2 of 6	-	-	-	1 of 3	-	-
MIBK	3 of 4	4 of 6	-	1 of 3	4 of 6	2 of 3	-	-
Toluene	-	2 of 6	1 of 3	1 of 3	-	1 of 3	1 of 4	-
Naphthalene	-	1 of 6	1 of 3	1 of 3	-	-	-	-
Ethanol	-	3 of 6	-	-	-	-	-	-
1,2,4-Trichlorobenzene	-	1 of 6	-	-	-	-	-	-
Total Xylenes	-	1 of 6	1 of 3	1 of 3	-	-	-	-

SCS Engineers has been conducting this evaluation and reporting the results. Their mid-2019 report mentions the BMPs that were installed in 2018 and states “it is our assessment that VOC detections [in 2018-19] were less frequent than in 2017-2018 and prior years.” They add that additional BMPs will be installed, and the VOC sampling of stormwater will continue, in the 2019-2020 wet season.

From these results it is clear that most of the VOC detections have been in the SW-2/2A/2B complex. If this pattern continues, it suggests an area of the site to focus on for additional VOC controls.

# memorandum

date December 27, 2019  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 1/15/20 - Agenda Item 6.5 - Review of Documents on Geotracker Web Site

**This is the abridged version of this memorandum. It is limited to new items reported in Geotracker since the previous Community Monitor Committee packet was completed, plus any prior items that provide useful background information for the new items.** The complete, current version of this Review of Documents is located on the Community Monitor Committee web site and can be accessed using [this link](#).

In this memo, each topic is given its own table where relevant documents are summarized in chronological order. For ease of reference, the topics are grouped under five major headings, and in the electronic version of this memo, [links](#) 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 recent important development or Violation are marked with a special bullet:

- This topic links to a list of documents that contains a recent violation or important development.
- This topic links to a list of documents with no substantial change from the prior quarter.

Summaries of the documents added since the previous Community Monitor Committee meeting are indicated with a **heavy black border**. They largely consist of ALRRF responses to Central Valley Regional Water Quality Control Board requests and notices, as well as design reports and reports describing specific incidents.

Violations and important areas of concern are highlighted in **pink** and **yellow**, respectively. Noteworthy new items are highlighted in **green**. The topic list begins on the following page. When a single document addresses multiple topics, its summary is placed under the most general category available, which is often the first topic, Refuse Disposal Operations.

**Topic List**

**Landfill Operations**

- [Revised Configuration and Phasing Schedule for Fill Area 2](#)

**Liquids Management**

- [Fill Area 1 Leachate and Liquids Management](#)

**Stormwater Management**

- [Stormwater Controls](#)

**Monitoring Wells**

- [New or Pending Monitoring Wells](#)
- [Change in Water Quality, Future Fill Area 2 Monitoring Well PC-1C](#)
- [Exceedances in Monitoring Wells](#)

**Other Topics**

- [Testing for PFA Compounds](#)

**LANDFILL OPERATIONS**

**Revised Configuration and Phasing Schedule for Fill Area 2**

[Topics](#)

From	Format   Date	Key Point(s)
ALRRF	Design Report   Feb 19, 2019	This <a href="#">Design Report – Fill Area 2, Phase 2B</a> was submitted to the CVRWQCB for approval of an extension to Phase 2 of Fill Area 2, as proposed in a meeting on May 17, 2018 (see note above). It extends the footprint of Fill Area 2 Phase 2 roughly 500 feet farther south at the base, and 200 to 700 feet on the sides of the canyon. The cover letter explains that the extension to Phase 2 “is needed for the anticipated waste flows that we will receive in 2020.” This does not modify the final footprint of Fill Area 2.
ALRRF	Letter  Mar 13, 2019	This letter transmits a report by Geosyntec Consultants describing the pending construction of an on-site earthen pad to test the permeability of recently excavated on-site clay soils for use in construction of the next Phases (2 and 2B) in Fill Area 2.
ALRRF	Design Report   Aug 30, 2019	Resubmitted the February 19 <a href="#">Design Report – Fill Area 2, Phase 2B</a> with the required Professional Engineer’s stamp and certification. The resubmittal also responds to 16 highly technical comments emailed by Water Board staff on August 1. Where necessary, the resubmittal modifies the construction specifications to satisfy the Water Board’s concerns as expressed in those comments.
ALRRF	Test Report   Sep 11, 2019	Reported on permeability testing of native clay-rich soils that will be used as liner material, where specified, for Fill Area 2. Found that the native soils in Stockpiles 6A and 6A2, when blended and compacted per the construction specifications, provide lower permeability than that required by water quality regulations.

**LIQUIDS MANAGEMENT**

**Fill Area 1 Leachate and Liquids Management**

[Topics](#)

From	Format   Date	Key Point(s)
CVRWQCB	Letter   Feb 22, 2019	<b>Notice of Violation</b> 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.
ALRRF	Letter   May 31, 2019	Transmits a report that revises the design water balance for the CASP facility. This re-evaluation was requested by the CVRWQCB after unexpected high runoff volumes at the CASP resulted in CASP runoff being diverted to the ALRRF's future underdrain water pond.
ALRRF	Letter   Jun 28, 2019	Provides a status report to the CVRWQCB on the design of a second stormwater pond for the CASP facility. The stormwater that was transferred to the Fill Area 1 leachate pond in February will be returned to the CASP facility when the necessary equipment is installed: pumps, piping, etc. (see April 1 letter above). This transfer was originally projected to be finished by July 31 2019, but design obstacles have caused delays, so the ALRRF's finish date has been revised to September 15, 2019.
ALRRF	Letter   Jul 31, 2019	<p>Advises the CVRWQCB of the following:</p> <ul style="list-style-type: none"> <li>• Installation of a second CASP stormwater pond has been significantly delayed by interfering utility lines which PG&amp;E will need 6 months or more to move;</li> <li>• ALRRF proposes to continue to use LSI-2 (underdrain water pond designed to serve Fill Area 1) as a secondary stormwater pond for the CASP through the coming rainy season; and</li> <li>• WMAC and its consultant Geosyntec will provide a technical memorandum supporting this approach.</li> </ul>
CVRWQCB	Letter   Aug 14, 2019	Responds to ALRRF's March 8 letter regarding the February 22 NOV's for transfer of CASP stormwater to pond LSI-2 on Fill Area 1. Does not rescind the two Violations. Concurs with ALRRF's proposal to repeat this transfer, if needed, in 2019-2020 rainy season. Requires that prior to using LSI-2 for underdrain water, the pond must be cleaned out.

From	Format   Date	Key Point(s)
ALRRF	Letter Report   Sep 15, 2019	Provides a technical memorandum by Geosyntec supporting the use of LSI-2 as a short-term secondary stormwater pond for the CASP through the coming rainy season. Capacity of this approach is somewhat limited. It can handle 20-year wet year conditions, i.e. the wettest rainy season believed to be likely in the next 20 years. However, it does not have capacity for 25-year wet year conditions. The letter also notes that “the storage capacity provided in the existing [CASP pond] already exceeds the capacity required ... [for] a 25-year, 24-hour peak storm event as required by General Waste Discharge Requirements for Composting Operations... Based on the water balance calculation results, the storage capacity provided by CWP and LSI-2 is considered adequate for temporary conditions until a permanent storage facility is constructed in 2020.”
CVRWQCB	Letter   Oct 2, 2019	<p>Following an August 14 site inspection, this letter gives notice of 3 Violations. In brief these are:</p> <ul style="list-style-type: none"> <li>- Failure to address leachate seeps from Fill Area 1</li> <li>- Compost leachate continuing to be held in pond LSI-2</li> <li>- Failure to implement leachate/underdrain liquid separation</li> </ul> <p>The letter also expresses dissatisfaction with grading and drainage on the surface of Fill Area 1, noting several instances of ponded water, including both solidification basins.</p>

## STORMWATER MANAGEMENT

### Stormwater Controls

[Topics](#)

From	Format   Date	Key Point(s)
CVRWQCB	Letter   Dec 5, 2018	<b>Area of Concern</b> for inadequate stormwater controls in FA2 excavations and ET Cover Test Area.
ALRRF	Letter   Feb 1, 2019	Stated that all measures described in the Construction Stormwater Plan had been installed, and that field inspections found them to be effective.
ALRRF	Report   Nov 15, 2019	Winterization Plan: a required annual documentation of preparation for winter weather. It includes lists of measures installed and photos showing examples.

## MONITORING WELLS

### New or Pending Monitoring Wells

[Topics](#)

From	Format   Date	Key Point(s)
ALRRF	Letter   May 28, 2019	This letter proposes a new location for the not-yet-installed monitoring well MW-27 (see first four items above), because of PG&E high voltage overhead power lines near the previously proposed location. The new location is downslope and downgradient of the earlier location, and it is away from power lines and steep slopes.

From	Format   Date	Key Point(s)
ALRRF / Geosyntec	Letter Report   Jul 31, 2019	Letter summarizes an attached report which details how monitoring wells within FA2 are to be destroyed and replaced as the landfill expands downslope, phase by phase. Specifically, because Phase 2B of FA2 is currently being constructed immediately downslope of Phase 1, wells MW-14, MW-14R and MW-21 at the toe of Phase 1 will be replaced by wells MW-22, MW-23 and MW-28 at the toe of Phase 2B, as shown on a drawing within the report.
ALRRF / Geosyntec	Report   Nov 15, 2019	Provides report documenting the installation of Fill Area 2 monitoring wells MW-22, MW-23A, MW-23B, MW-27, MW-28 and soil gas probe VP-2. Most of the installations were typical, but MW-23B, initially drilled to 101 feet, <b>became artesian after the casing was installed.</b> It was fitted with a cap and pressure gauge. Groundwater sampling by SCS was planned for November, and soil gas testing at VP-2 was being done by ALRRF staff.

**Change in Water Quality, Future Fill Area 2 Monitoring Well PC-1C**

[Topics](#)

From	Format   Date	Key Point(s)
ALRRF	Letter   Jun 24, 2019	At this well, downslope of Fill Area 2 Phase 1, several inorganic parameters increased prior to landfilling in Fill Area 2. A new pump within that well may be part of the problem. The ALRRF will keep the RWQCB informed.
ALRRF	Letter   Aug 28, 2019	Provided an update regarding adjustments made to the pump and tubing in this well in August. Sampling was done and results will be provided when available.

**Exceedances in Monitoring Wells**

[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.

From	Format   Date	Key Point(s)
ALRRF/SCS	Letter Report   Nov 12, 2019	Follows up on initial report (August 2019) of exceedances in wells MW-2A (nitrogen), PC-1B (calcium), MW-8A (COD and tetrahydrofuran), and MW-8B (COD, tetrahydrofuran and other VOCs). The wells were resampled. Exceedances were confirmed for PC-1B (calcium), MW-8A (COD and tetrahydrofuran), and MW-8B (COD only). Asserts that the exceedances are unrelated to FA2 activities due to distance from the Phase 1 fill area. Proposes further study and an Optional Demonstration Report due in early January.

**OTHER TOPICS**

**Testing for PFA Compounds**

[Topics](#)

From	Format   Date	Key Point(s)
CVRWQCB	Letter   Mar 20, 2019	Statewide survey: Requirement to provide a work plan by May 19 for the one-time testing of groundwater samples for 23 designated types of polyfluoroalkyl substances (PFAs).
ALRRF	Letter & Report   May 17, 2019	Transmits, for approval, a sampling plan by Wood Environment & Infrastructure Solutions to comply with the requirements for PFA sampling. It identifies five groundwater well sampling locations (1 upgradient, 1 downgradient, and 3 wells near Fill Area 1 where other contaminants have been found) and three leachate sampling sites (1 for each of the three units currently in operation). The report also cautions that PFA compounds are commonly used in the groundwater sampling devices in place at many of the ALRRF monitoring wells. Sampling is planned for the next round of groundwater monitoring, after this sampling plan is approved. Results will be included in the subsequent groundwater monitoring report. Analyses will be conducted by TestAmerica’s facility in West Sacramento. (The laboratory that analyzes most ALRRF water samples is a different facility in Arvada, Colorado.) The Reporting Limit for PFAs at the West Sacramento facility is 2 parts per <i>trillion</i> , which is extremely low.
CVRWQCB	Letter   Oct 1, 2019	Added four sampling points, focused on wells where VOCs were detected in 2017 and 2018; added requirements to prevent accidental contamination with PFAS from reusable sampling equipment, tools, clothing, etc.; and other measures to prevent false positives and document lab techniques.



From	Format   Date	Key Point(s)
ALRRF	Addendum   Oct 16, 2019	Reviewed the additional requirements and generally agreed to them. Explained the analytical procedures to be used by the lab, and how they conform to Federal standards. Notes that the selected lab (Eurofins TestAmerica) has a longer sample hold time in its protocol than the Water Board has requested, and the lab will be asked to meet the Water Board requirement; but “If samples are extracted and analyzed within the default holding times listed in Eurofins TestAmerica SOPs (14/40 days) and no other quality control issues are identified with the analysis, the analysis will be considered acceptable and reported. ... Given the large volume of samples being collected for this state-wide initiative, it is anticipated that Eurofins TestAmerica will have a considerable workload of PFAS analysis and that their internal scheduling and coordination will already be tight.”
CVRWQCB	Letter   Oct 23, 2019	Accepted the Work Plan as modified by the October 16 Addendum.

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# memorandum

date December 27, 2019  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 1/15/19 - Agenda Item 6.6 - Reports From Community Monitor

Attached are inspection reports for October through December of 2019.

The October inspection was unannounced and took place on October 11, with the LEA.

The November inspection was announced and took place on November 14, off hours (8PM).

The December inspection was announced and took place on December 12.

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, construction of additional landfill space in Fill Area 2 (Phases 2 / 2B) was an ongoing event. Windblown litter issues continued, stormwater preparations were made, and a substantial amount of disposal material was received from salt pond remediation in the City of Newark.

In the tonnage records we noted that one load for disposal was received in September, and one in October, from Santa Cruz County.

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.

**ALRRF Community Monitor Monthly Report**

**October 2019**

Monthly Tonnage Report for September 2019, received October 14, 2019

Tonnage Summary:		<u>tons</u>
Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	96,368.61
1.2	Other Out of County Disposal Tons	1,708.45 *
	subtotal Disposed	<u>98,077.06</u>
Disposed, By Source Type		
2.1	C&D	893.58
2.2	MSW	91,986.27
2.3	Special Wastes	5,197.21
	subtotal Disposed	<u>98,077.06</u>
		0.00 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	6,121.04
2.5	Revenue Generating Cover	55,405.82
	Total, 2.1 - 2.5	159,603.92
Materials of Interest		
2.3.1	Friable Asbestos	1,205.39
2.3.2	Class 2 Cover Soils	23,954.55
2.5.1	Auto Shredder Fluff	11,491.40
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00
2.5.3	MRF Fines for ADC	645.33

\* Line 1.2 includes one load, of 13.22 tons, from Santa Cruz County

**ALRRF Community Monitor Monthly Report****October 2019**Site Inspection October 11, 2019, 12 noon - 2:00 PM

- Attended by K. Runyon and Mukta Patil, accompanying the LEA. Escort: Luis Rocha. Unannounced. Weather: partly cloudy, warm, winds light.

Fill Area 1

- As seen in the photo below, activity in Fill Area 1 was limited to three functions:



A (upper left): Preparing a winter pad to handle disposal operations during wet weather;  
 B (upper right): Reclaiming stockpiled soil for use as daily and/or intermediate cover; and  
 C (below B): Operating the solidification basin.

- The blue solidification basin, which handles materials that will be disposed in the Class 2 area after solidification, contained mud (or soft soil) partially wrapped in heavy plastic film, which is removed prior to mixing in the basin, according to ALRRF staff.

Fill Area 2 Operations

- More than a dozen large portable tanks were positioned at the northeast corner of Fill Area 2 in preparation for wet conditions.
- Several hundred seagulls were present in Fill Area 2. No bird scare devices were currently in use. Traffic within Fill Area 2 disposal operations was light. Two dozers and two compactors were handling incoming refuse, with one tipper operating during our observations.
- Thin cover was noted within portions of Fill Area 2; some items of refuse were partially exposed. ALRRF staff said that it would be covered later in the week. The LEA requested photos from ALRRF for verification.
- The area east of Fill Area 2 was checked for windblown litter, from the east edge of FA2 to the east property line. Windblown litter was much lighter than noted on the previous Community Monitor site visit. However, there was litter along the property line fences and in the valley immediately east of Fill Area 2, where some sections of tall litter fence had failed and were being replaced. The LEA noted windblown litter as an Area of Concern in his inspection report.



## ALRRF Community Monitor Monthly Report

October 2019

Fill Area 2 Construction

- Construction of Phases 2 and 2B was continuing, downslope of Phase 1 and on adjoining side slopes. The layers of the liner were being installed in sequence, as shown below. The dark brown layer at the right-hand side of the photo is the operations layer where refuse will be placed.



- Elsewhere on site, clay from the on-site excavation was being moisture conditioned for impermeability before being used in Fill Area 2 construction, and liner material was being welded, checked and repaired where necessary.
- The extent of the soil stockpile east of FA2 does not encroach on the Conservation Plan Area. This was determined using GPS data and photos from this site visit, which used roadways to the north and east of the Conservation Plan Area.
- The phase 1 leachate control system was connected to the Phase 2 system with a hose that crossed the toe berm at the lower end of Phase 1.

Mitigation Pond

- Vegetation at the Mitigation Pond included cattails and rushes within the pond, with the tallest growth near the pond inlet.
- A stand of stinkwort, an invasive plant that is highly competitive in bare soil, was noted immediately west of the pond.

Other Environmental Issues

- Monitoring well 8A was directly observed and was seen to have a protective sleeve made of white plastic pipe.
- Litter and weeds were present in some ditches. The deadline for wet weather preparation was the end of October.
- Stormwater basin B was observed. Water level was very low and there was minimal litter within the basin.
- The south pond serving Fill Area 1 (LSI-1) contains the usual amount of leachate and underdrain water. The north pond (LSI-2) contains an estimated 1 to 2 feet of water remaining from the transfer of stormwater from the CASP. The ALRRF is actively working to empty this pond.
- At the northwest stormwater pond (SB-G) the plants growing near the pond inlet appear to be a mix of willow and tamarisk.
- In the upper part of the ET Cover Test Area, some tumbleweeds / Russian thistle / *Salsola tragus* plants are evident in the vehicle access track that runs just above the steeply sloped area.

**ALRRF Community Monitor Monthly Report**

**November 2019**

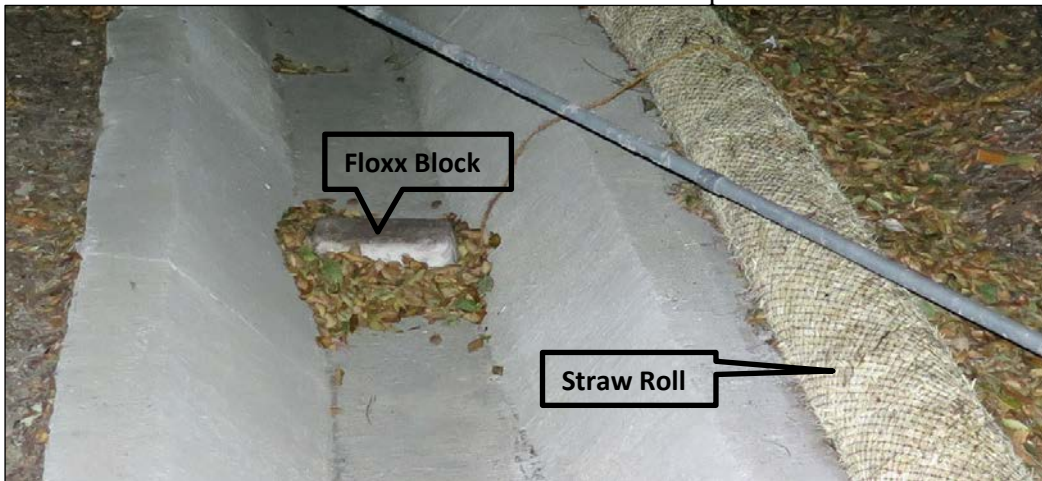
Monthly Tonnage Report for October 2019, received November 15, 2019

Tonnage Summary:		tons
Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	104,038.86
1.2	Other Out of County Disposal Tons *	4,934.85 *
	subtotal Disposed	108,973.71
Disposed, By Source Type		
2.1	C&D	285.45
2.2	MSW	101,410.36
2.3	Special Wastes	7,277.90
	subtotal Disposed	108,973.71
		0.00 0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	5,165.15
2.5	Revenue Generating Cover	41,620.62
	Total, 2.1 - 2.5	155,759.48
Materials of Interest		
2.3.1	Friable Asbestos	577.91
2.3.2	Class 2 Cover Soils	14,126.29
2.5.1	Auto Shredder Fluff	9,681.00
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00
2.5.3	MRF Fines for ADC	953.14

\* Line 1.2 includes one load, of 5.01 tons, from Santa Cruz County

**ALRRF Community Monitor Monthly Report****November 2019**Site Inspection November 14, 2019, 8:00 PM - 9:30 PM

- Attended by K. Runyon and Maria Lorca. Escorted by Luis Rocha. Announced.  
Weather: partly cloudy, warm, winds light.
- One objective of this visit was to observe night-time operations when transfer truck traffic was arriving steadily, to note if trucks were able to unload without delay. However, traffic was very light during these observations, and queuing did not occur. All trucks were serviced promptly.
- A second purpose was to observe stormwater pollution prevention measures, and these were very much in evidence. They included:
  - Silt barriers at storm drain inlets.
  - Straw rolls at the edge of ditches and on slopes to trap suspended solids.
  - Adsorbent wattle ("Filtrex") installed across drainage ditches to remove VOC's and metals.
  - "Floxx blocks", tethered brick-shaped objects that release flocculant into stormwater channels.
 The flocculant is delivered to stormwater basins where it causes suspended solids to clump together and settle out, reducing Total Suspended Solids within the basin and in its discharge. A Floxx block and the straw roll material are shown in the photo below.

Fill Area 1

- At the Fill Area 1 solidification basins, the yellow basin (cover material production) had absorbent material staged for mixing. The blue basin (blending for Class 2 disposal) had some refuse showing (plastic membrane and what appeared to be soil). Neither basin had any free liquid visible.
- Some concrete material was being received for use as winter pad paving on Fill Area 1.
- The small reservoir for truck wash water near the scales was essentially dry. The tamarisk plants on the north side of this basin were growing.

Fill Area 2 Operations

- No material was received while we were observing. One dozer and one compactor were idling. It was apparent that some refuse had recently been placed, spread and compacted in the lower Phase 2 area. A substantial amount of cover material was staged alongside the tippers, ready to be applied on Friday when cover is spread across most of the working face.

Fill Area 2 Construction

- Although the northern portion of the bottom of Phase 2 had been completed and placed in service, the sloped sides of the Phase 2 area was not yet completed and (of course) was not in use.



**ALRRF Community Monitor Monthly Report****November 2019**Stormwater Basin SB-G

- This basin is located northwest of the CASP operation, set in undisturbed terrain. It receives overland flow from its immediate surroundings but not from the CASP or landfill operations. Hence, its discharge, if any, is not sampled. Our concern regarding this basin is that it could harbor invasive plants that would be detrimental to the Conservation Plan Area.
- In October, observation of this basin from a distance detected what might have been a small stand of the invasive plant Tamarisk, which can choke and degrade wet areas by growing thickly and concentrating salts at the surface.
- For this inspection, our group walked to the basin inlet and examined the plants there closely. Many were willows, which are native and provide valuable habitat for insects, birds and other animals. However, a number of young tamarisk as well as several mature tamarisk were present around the west side (the in-basin side) of the SB-G inlet; and the mature plants had bloomed and set seed, as shown in the photo below. Tamarisk seed spreads by wind and by water, and by spreading roots. The plant survives well in dry and alkaline areas, which are present in the Conservation Plan Area. From aerial photos visible in Google Earth, it is clear that Tamarisk was not present in SB-G two years ago. The presence and spread of this plant should continue to be monitored. It is present elsewhere in eastern Alameda and Contra Costa counties, so it may emerge anywhere on the ALRRF property at any time.

Other Environmental Issues

- The leachate and underdrain water ponds at Fill Area 1 (LSI-1 and LSI-2 respectively) were observed. LSI-2 was virtually empty, and a water truck was in place to remove the last of the CASP stormwater stored there. LSI-1 was at a low level, and the leachate/underdrain water stored there had a noticeable odor.
- During this visit, ALRRF staff reported that a fire had occurred in the CASP area. It was contained there and extinguished by on-site staff, and it reportedly had no effect on landfill operations.

**ALRRF Community Monitor Monthly Report**

**December 2019**

Monthly Tonnage Report for November 2019, received December 13, 2019

Tonnage Summary:		<u>tons</u>
Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	72,674.78
1.2	Other Out of County Disposal Tons*	689.93
	subtotal Disposed	<u>73,364.71</u>
Disposed, By Source Type		
2.1	C&D	298.06
2.2	MSW	70,343.64
2.3	Special Wastes	2,723.01
	subtotal Disposed	<u>73,364.71</u>
		0.00    0.00%
Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	6,454.62
2.5	Revenue Generating Cover	39,596.94
	Total, 2.1 - 2.5	119,416.27
Materials of Interest		
2.3.1	Friable Asbestos	411.58
2.3.2	Class 2 Cover Soils	18,869.06
2.5.1	Auto Shredder Fluff	8,889.19
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00
2.5.3	MRF Fines for ADC	522.02

Special Occurrences Log (last summarized Sept 2019)

No special occurrences in October.

- Nov 21 - An end dump truck carrying treated auto shredder waste overturned. The load had stuck in the nose of the trailer. There were no injuries.
- December 9 - An end dump truck loaded with soil for solidification overturned. There were no injuries.

**ALRRF Community Monitor Monthly Report****December 2019**Site Inspection December 12, 2019, 8:30 AM - 10:45 AM

- Attended by Kelly Runyon, escorted by Luis Rocha. Announced.  
Weather: overcast, cool, winds light to moderate.
- This site visit focused on the Mitigation Pond and stormwater basin C, in addition to normal operations.



- As shown above, the upper portion of the pond was not yet holding water, but recent rains had irrigated the area and grasses were growing in the surrounding uplands.
- The irrigation system remained in place, although the water supply trucks were no longer on site.
- The inlet (west) side of the pond had been regraded and the lower portion of the area between SB-H and the pond inlet appeared to be bare soil.
- Noticed a tall blue survey stake midway along the north side of the pond, with a matching stake on the opposite side. Might be markers for habitat survey work.

Fill Area 1

- There was material on the upper deck of FA1 (east side, north of the asbestos area) that could be used to pave the surface for wintertime use, but it had not been spread, and no refuse was being received in FA1 apart from asbestos and material for solidification.
- In response to the Water Board Violation Notice from October 2, interceptor trenches and piping were being installed in three areas where seeps frequently occur: (1) west side of FA1 near the truck scales, (2) south side of FA1 overlooking the closed portion of the site, (3) downslope of the FA1 leachate tank (between the maintenance shop and the truck scale).
- Shallow ponding was visible in flat areas near roadways and in heavy equipment tire ruts. No erosional problems were seen. Ditches and drains were clear.  
The leachate and underdrain ponds were in good condition. The south pond (LSI-1) contained a modest amount of leachate and underdrain liquid, combined. The north pond (LSI-2) was emptied in late October and had since accumulated a small amount of rain water. In the photo below, taken from a high point to the west of the ponds, LSI-2 is on the left.

Stormwater Basin C

- This basin is located west of the site entrance, and it drains the southwest portion of the property. The large corrugated metal downdrain pipe that discharges to this basin had an erosional channel running directly below it, with water flowing. This may be delivering suspended solids to the basin.

## ALRRF Community Monitor Monthly Report

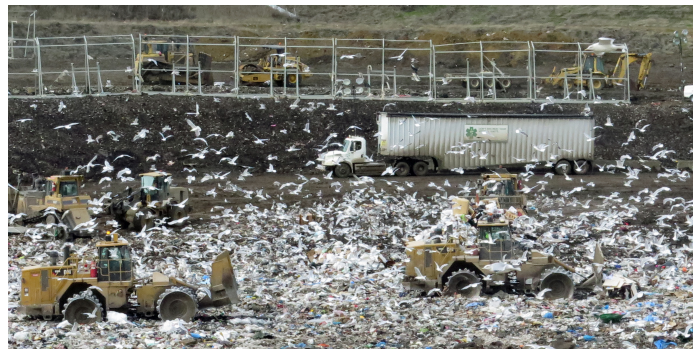
December 2019

Fill Area 2 Operations

- Filling was taking place in the north end of Phase 1, with two tippers, two compactors, and two dozers working. The working area had portable litter fences nearby along the east and west sides. During these observations, winds were light, but there was a noticeable amount of litter to the northwest of Fill Area 2 on the slope below (east of) the CASP operation. That litter was probably blown there by southeast winds that occurred during recent storms.
- The number of birds at Fill Area 2 was very large, probably several thousand. See photos below.



The photo to the right is a close-up of the area shown in the red box above.



- The tall permanent litter fence east of Fill Area 2, which had been destroyed by high winds and built-up litter earlier this year, has been replaced with an equally tall fence having steel pipe posts rather than the timber posts used previously.

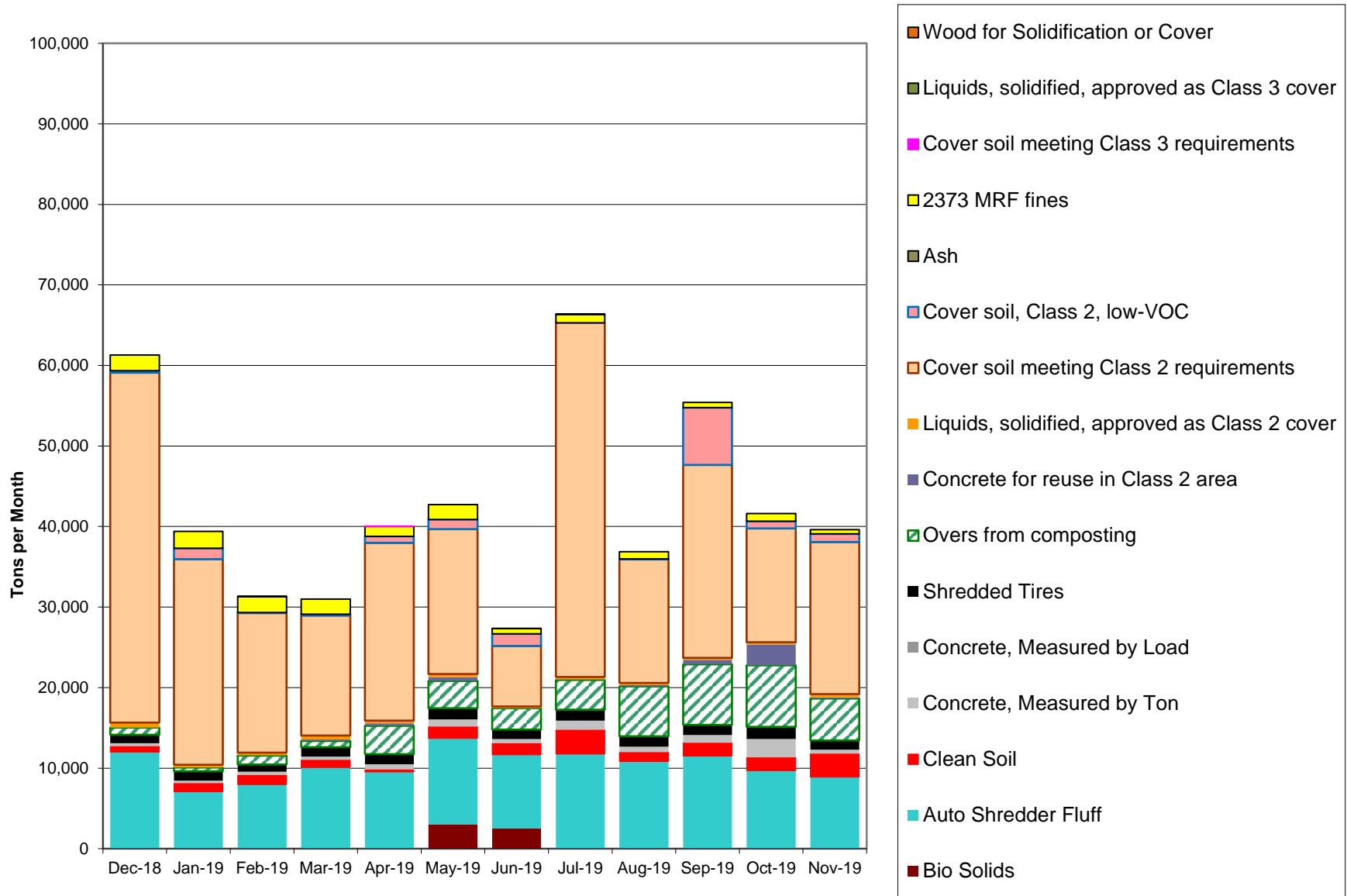
Fill Area 2 Construction

- Construction was nearly complete, with current work focused on the edges of the newly lined areas. Most of the synthetic liner materials were in place but layers of soil still had to be placed and compacted, especially on the east side of Phase 2B. Phase 2 is complete and in use.
- During construction of this phase, the leachate and underdrain capture pipes are being directed to temporary portable tanks which are emptied as needed. The leachate pipe will later be reconnected to the permanent pumping system that will deliver leachate to the pond east of Fill Area 2.

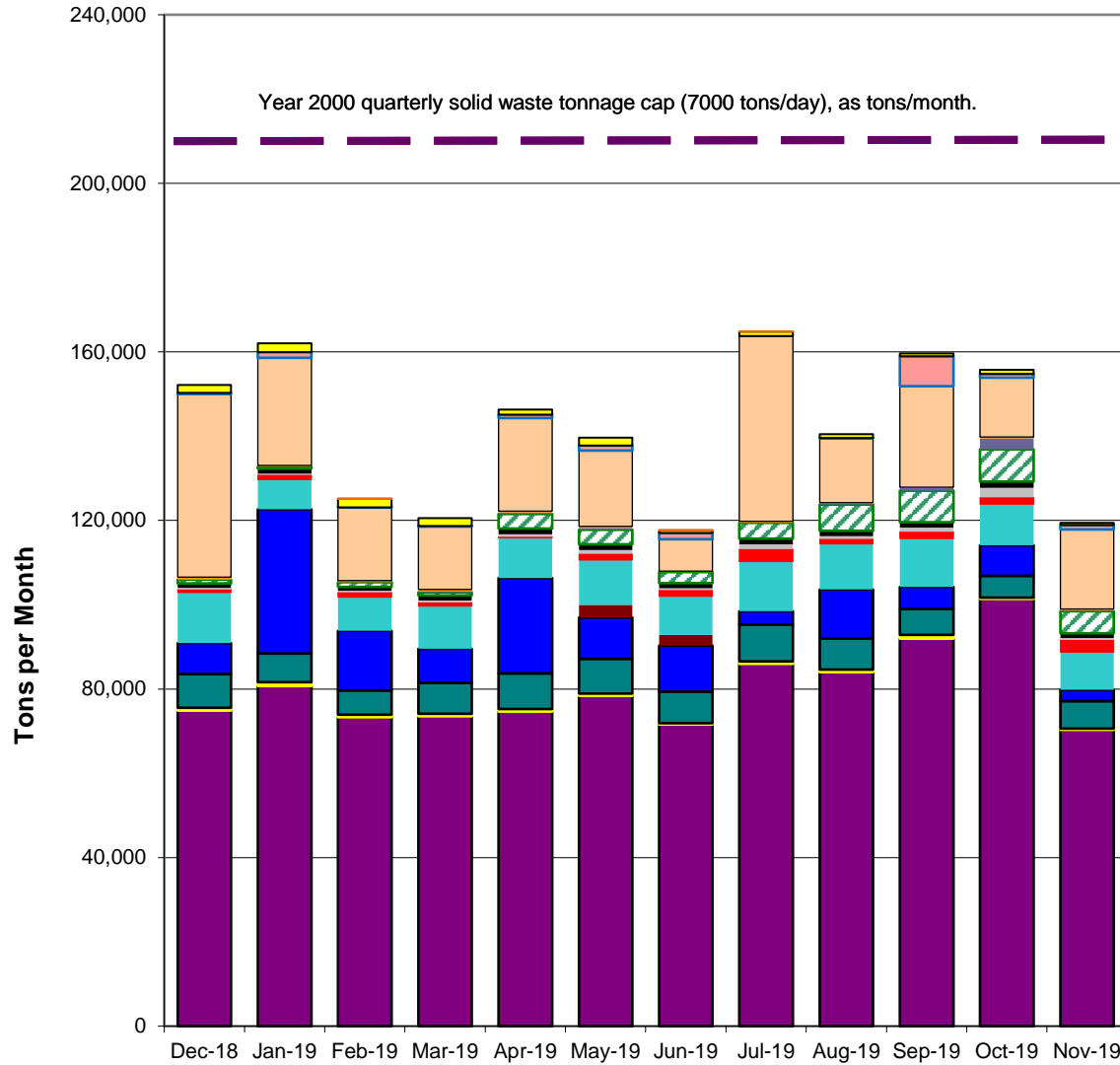
ET Cover Test Area

- This area was examined on foot, along the roadway near the slope-break between the gently sloped top deck and the steeply sloped south face of Fill Area 1.
- Some of the plant species in the original hydroseed mix were emerging, including white yarrow and one or more of the perennial grasses. Numerous emerging seedlings were too small and young to be identified.
- A variety of other species were also emerging, many of them non-native invasives, including stork's-bill and mustard. There was evidence of use by rabbits, and there were several very small burrows near the slope break.

**Figure 6.6-1 Monthly Volumes of Revenue-Generating Cover**



**Figure 6.6-2 Monthly Volumes of Landfilled Materials**



- Wood For Solidification or Cover
- 2373 MRF fines
- Ash
- Cover soil, Class 2, low-VOC
- Cover soil meeting Class 2 requirements
- Liquids, solidified, approved as Class 2 cover
- Concrete for reuse in Class 2 area
- Overs from composting
- Shredded Tires
- Concrete, Measured by Load
- Concrete, Measured by Ton
- Clean Soil
- Auto Shredder Fluff
- Bio Solids
- Special Waste
- Redirected Waste (RDW)
- Construction and Demolition (C&D)
- MSW

# memorandum

date December 27, 2019

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 1/15/20 - Agenda Item 6.7 - Topics for 2019 Annual Report

A draft of the Annual Report for 2019 is attached. The list below shows the topics-of-interest for 2019 that were identified by Committee members or by the CM. Each of these is addressed or updated in the appropriate section(s) within the report, and those sections are identified below.

<u>Topic</u>	<u>Section(s)</u>
Evapotranspiration (ET) cover performance	2.2 – 6 <sup>th</sup> bullet
Mitigation pond and new basin SB-H	1.5.2.3 first para., 2.4 – end
Windblown litter incidents and controls	1.4 end, 2.2 – 7 <sup>th</sup> bullet, 2.3 – end, 2.3.2.1 2 <sup>nd</sup> para., 2.3.3.4
PFAS investigation	3.2.2.5
End-dump truck overturns	2.3.3.3
Requirements to be triggered by disposal in Fill Area 2	
Tonnage limitations	1.4
Construction activity	1.4, 2.2
Monitoring well replacement	2.2 – 1 <sup>st</sup> bullet
Use of FA1 pond for CASP runoff	2.2 – 3 <sup>rd</sup> bullet, 2.3.2.1 – 4 <sup>th</sup> para.
Laboratory contamination of samples	2.4.1 end
Class 2 soil file completeness	2.5.1

Information has been updated throughout the report. The most substantial updates occurred in the following sections:

Section 1- Introduction: 1.5.2.3

Section 2 – Activities and Issues: 2.2, 2.3, 2.4.1, 2.4.2, 2.5.2

Section 3 – Looking Ahead: Anticipated Efforts and Issues: 3.1, 3.2.2.5

# ALRRF COMMUNITY MONITOR ANNUAL REPORT 2019

DRAFT

Prepared for  
ALRRF Community Monitor  
Committee

January 15, 2020





The photo on the cover of this report shows construction of the liner for the Phase 2/2B portion of Fill Area 2, viewed from the hill immediately to the west. The photo was taken on October 11, 2019.

# ALRRF COMMUNITY MONITOR ANNUAL REPORT 2019

DRAFT

Prepared for  
ALRRF Community Monitor Committee

January 15, 2020



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# SECTION 1

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## 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 2019.

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 2019, 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<sup>1</sup> 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.

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 Document<sup>2</sup>(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 staff prepared, and the Water Board adopted, the WDRs. Subsequently, the LEA's review has required more than three years to complete. It has been difficult for the ALRRF to refine its JTD to conform to the requirements of the WDRs and subsequent directives from Water Board staff, and the sheer size and complexity of the JTD itself has also impeded progress. The JTD was in the final stages of review in December 2019.

## 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 be counted as diversion for compliance with the 50 percent diversion mandate for local jurisdictions established by AB 939. Green material ADC will instead be counted as disposal from that year forward.

---

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

<sup>2</sup> 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.

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 similar materials that readily decompose and produce methane, a potent greenhouse gas). In Alameda County, this material is approximately 30% of the waste stream<sup>3,4</sup>.

The two pieces of 2016 legislation with the most direct effect are SB 1383 and AB 901. SB 1383 established 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 changed how disposal and recycling is reported to CalRecycle. The intended effect is to provide a more accurate assessment of progress toward State goals. Regulations that implement AB 901 are now in place, and the regulations implementing SB 1383 are being completed.

One result of this activity has been a tangible commitment by waste industries in California to provide additional organics diversion facilities. In Alameda County, two examples are the 500 ton per day CASP facility at the ALRRF, and the implementation of 100 tons per day of anaerobic digestion and subsequent composting capacity at the Davis Street Transfer Station. Taken together, these could reduce disposal at the ALRRF by up to 600 tons per day, which would be a 25% reduction in the current rate of disposal there. This reduction may be offset somewhat by the need for disposal of contaminants and oversize materials from compost operations.

Related State legislation passed in the 2017-2018 session provided further support for waste reduction through product stewardship, packaging, and enhanced organics-diversion requirements. The legislation passed in the first year of the 2019-2020 session has continued to focus on product stewardship while also removing some requirements to provide buy-back recycling centers.

Against this backdrop, the ALRRF began operation in Fill Area 2 on March 25, 2019. This triggered several constraints on the types, quantities and sources of materials received; these are described in the next section of this report.

## 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 were 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 did not take effect until Fill Area 2 began to receive refuse, on March 25, 2019. These conditions include limitations on the amounts of Sludges, Inert Waste and

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

<sup>4</sup> 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.

Special Waste accepted from certain Bay Area counties, as well as self-hauled wastes from Contra Costa County. The specific restrictions are:

- Wastes collected for disposal under a municipal franchise may only be received from Alameda County, San Francisco, and the City of San Ramon in Contra Costa County. San Francisco and San Ramon wastes can only be received if those jurisdictions meet specified waste diversion goals.
- Non-franchise waste may only be received for disposal from Alameda County and San Francisco, plus up to 25,000 tons per year of sludges, inert waste and special waste from the other seven Bay Area counties. In addition, up to 25,000 tons per year of self-hauled wastes from Contra Costa County may be disposed.

Also, under the Settlement Agreement 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 established the CMC and the CM role, as described above; and it established mitigation funding related to the landfill expansion.

The physical setting of the ALRRF site 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 has neared 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 increased through 2019, despite the move to Fill Area 2 at a lower elevation. The landfill has added staff dedicated to litter cleanup and has repaired and augmented litter fencing downwind of Fill Area 2. Although the ALRRF's litter collection crew has been able to repeatedly remove litter from large expanses of the ALRRF property, high-wind events in 2019 quickly replenished windblown litter in those areas, requiring repeated cleanups.

## **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, and to fuel trucks in Waste Management's regional fleet;
- Stockpiling and processing materials for beneficial use on site, such as using demolished 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 and Fill Area 2. Fill Area 1 covers approximately 235 acres, including an Asbestos-Containing Waste landfill operation which occupies several acres within the Fill Area 1 footprint. The Fill Area 2 footprint is approximately 250 acres. Although most refuse and cover material are currently being delivered to Fill Area 2, Fill Area 1 has not closed, and it will likely receive additional refuse to reach its permitted final elevation. It is currently the site of an active asbestos landfill and two solidification basins.

Lands surrounding Fill Areas 1 and 2 contain grazing land and some construction-support activities related to the continuing construction of Fill Area 2, which will take place in phases over several years. These surrounding lands include a Conservation Plan Area, protected with a permanent easement, that provides 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 (GHG) emissions, as required by Federal regulations. The most recent data available, for 2018, indicate that the ALRRF is the third highest GHG-emitting landfill in California, behind the Puente Hills landfill in Los Angeles County and the Kiefer Landfill in Sacramento County.<sup>5</sup>

### **1.5.1.3 Disposed Wastes**

Two agencies 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 required by 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. In April 2018, the ALRRF began operation of its Covered Aerated Static Pile (CASP) compost facility northeast of Fill Area 1. Currently, Waste Management’s position is that the CASP facility is not within the purview of the CMC. However, the CMC has taken the position that the additional permit *is* within its purview.

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<sup>5</sup> Air Resources Board file <https://www.arb.ca.gov/cc/reporting/ghg-rep/reported-data/2018-ghg-emissions-2019-11-04.xlsx>, accessed December 24, 2019.

### 1.5.1.5 Waste Diversion Requirements

At the local level, the Alameda County Waste Management Authority, and the Alameda County Source Reduction and Recycling Board formed StopWaste as a joint powers agency to pursue local and state waste reduction and diversion goals. StopWaste has implemented mandatory separation of recyclables and compostables at businesses and multifamily properties throughout the County, and it provides public education, training and other assistance. 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.

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.

## 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 Wildlife, which concurred with the USFWS' Biological Opinion and placed specific conditions on work in the wetland channel.

The fundamental requirements of these permits are:

- The dedication of 750 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 CDFW Consistency Determination.

### 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 had the pond rebuilt and replanted in 2018. 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. This performed well throughout the 2018-2019 wet season. In the pond itself, it appeared that there was some mortality among the plants that were installed in late 2018, but the extent of this problem will need to be evaluated by the consultant that is monitoring the pond for the ALRRF.

In 2017, the CM reviewed a summary of wetland and wildlife mitigation activities and issues. Wetland and wildlife mitigation activities continued in 2018 and 2019, with monitoring of construction areas and wildlife protection measures (e.g., relocating sensitive species such as California Tiger Salamander, when encountered). ALRRF staff have stated that a report is being prepared by their natural resources consultant, Dudek, but no reports were provided to the CM for review in 2019.

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.

## SECTION 2

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# 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 2019, 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 2019:

- On March 25, 2019, refuse disposal operations began in the Phase 1 portion of Fill Area 2. Excavation of the Phase 2/2B portion of Fill Area 2 began in June, and liner construction began in August. Also, the monitoring wells at the toe of the Phase 1 area were decommissioned and replaced by wells at the toe of the Phase 2/2B area. The lower portion of the Phase 2/2B Area was in use in late 2019 while liner installation was being completed on the side slopes.
- In the 12 months from June 2018 through May 2019, 23 poorly-performing landfill gas wells were decommissioned and 24 new wells were brought on line. Wells with higher than normal gas temperatures were monitored for possible subsurface combustion (none was detected).
- For the two Fill Area 1 ponds intended to hold leachate and underdrain water separately, installation of the liquids separation equipment and piping was completed in 2019, but earlier in 2019 the future underdrain water pond (LSI-2) was needed to hold excess stormwater from the CASP compost facility. This delayed the use of the liquid separation system through 2019.
- In 2019, further efforts were made to reduce stormwater pollution. Drop inlets were fitted with "Ertec" filter cloth barriers to screen out silt. Specialized Filtrex<sup>TM</sup> wattles, designed to trap metals and hydrocarbons, 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 volatile organic compounds that have previously been detected in the basins. It was not possible to identify specific sources, so monitoring will continue in 2020.

- The 10-acre Evapotranspirative (ET) Cover Test area was observed several times throughout the year as the hydroseeded plants grew in and local plants also appeared. These observations have found that the hydroseeded species germinated successfully but were joined by local species, including some invasives, as the year progressed. No erosion problems were seen. A late-summer inspection by the Water Board noted some surface cracking of the soil in sparsely vegetated areas. In late 2019, with the return of the rainy season, grasses and forbs began to reappear. The plans for the ET Cover Test Area includes annual monitoring, followed by a report to the Water Board at the conclusion of the four-year study period.
- The windblown litter problem was expected to improve with the move to Fill Area 2, but that was not the case. Several high-wind events, and generally windy conditions throughout the site, caused litter to repeatedly spread toward and occasionally beyond the east and north boundaries of the site.
- In the period from January through November 2019, as disposal activities shifted to Fill Area 2, the ratio of **Class 2 cover soil** to municipal solid waste declined to 25%. In 2018 that ratio was 68%, as cover soil for Fill Area 1 was accumulated in anticipation of the shift to Fill Area 2.

## 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 – 2014 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. Fortunately, no such issues occurred in 2019.


The total severity score for 2019 is slightly lower than in 2018.

Three types of incidents that are of particular concern occurred in 2019:

- **End-dump Truck Overturns.** Within the ALRRF operating area, four end-dump truck overturns occurred during 2019, and the average number of overturns per year from 2012 through 2019 has been 6. This is a tiny fraction of the roughly 16,000 truckloads of class 2 soil and treated auto shredder fluff brought to the facility each year, but the risk of injury and damage in such incidents continues to be a concern for Committee members and ALRRF management. The ALRRF increased its oversight of end-dump truck unloading in 2018, which moderated the problem but did not eliminate it. An analysis of end-dump overturn statistics is provided in section 2.3.3.3 below.
- **Fire.** There were three fires in the ALRRF in 2019. One occurred in Fill Area 2 near the toe of the active area, and the other two occurred in grasslands close to Fill Area 2. They are described further in section 2.3.3.2 below.
- **Windblown Litter.** This may be the single most persistent problem at the ALRRF. With the move of refuse fill operations from the Fill Area 1 hilltop into the Fill Area 2 canyon, a reduction in windblown litter was expected. However, this did not occur, and due to strong west winds, litter was being deposited beyond the east property line. Damaged litter fences are being repaired, and the number of portable fences has increased. The litter cleanup crew has been enlarged and is now a permanent part of the ALRRF work force. When necessary, the crew removes litter from neighboring properties to the east of the ALRRF. The ALRRF also redeploys other staff to retrieve litter when necessary.

Table 2-1: Compliance Issues Ranked by Severity

Issue	Severity				
	2015	2016	2017	2018	2019
Contamination at E-05, E-07, E-20B	2	2	2	2	2
Stormwater contamination	3	3	3	3	3
Windblown Litter	2	4	2	3	4
Birds	2	2	2	2	2
Erosion	3	2	1	-	3
Cover thin / absent	4	-	-	-	1
Worker injury	1	2	1	-	1
Condensate/Leachate Leakage	3	-	3	3	3
Ponding in low-lying area of landfill	-	-	-	1	2
Sediment in Wetland Mitigation Area	3	3	2	-	-
Odor, on site	-	1	-	-	1
Leachate Seeps	1	1	2	-	4
Late Annual Report to Water Board	4	-	-	-	-
Sampling Pump Problem: well E-05	2	-	-	-	-
Stormwater monitoring compliance (FA2 pond, tire and wood operations)	-	4	2	2	-
Material out of bounds (wood operation)	-	4	-	-	-
Erosion control (sitewide)	-	4	-	-	3
Waste outside active area (trash, pallets)	-	4	-	-	-
Leachate Leak Disposal	-	-	4	-	-
Contaminants at monitoring well MW-4A	-	-	4	-	-
Release of condensate from secondary containment	-	-	-	4	-
Release of leachate at leaking flange	-	-	-	4	-
Windblown litter beyond last litter fence	-	-	-	4	2
Disposal of liquid into pond without prior approval	-	-	-	4	5
Lack of means to record liquid level in ponds	-	-	-	4	-
Failure to monitor landfill gas well	-	-	-	4	-
Incomplete groundwater monitoring report	-	-	-	4	-
Liquid separation not implemented, Fill Area 1					4
<b>Totals</b>	<b>30</b>	<b>36</b>	<b>28</b>	<b>44</b>	<b>40</b>
<b>Issues Beyond Control of / Refuted by ALRRF</b>					
Truck overturn	1	3	3	3	2
Methane Gas at Perimeter Probe(s) [cleared]	4	4	-	-	4
Liquid high in chromium, nickel received (removed before being disposed)	-	4	-	-	-
Soil high in benzene received, disposed	-	4	-	-	-
Fire in refuse &/or stored material	-	3	1	-	3
Fire on ALRRF property, outside active areas	-	-	2	2	3
Hazardous material delivered (high in lead)	-	-	-	4	-
Water Board not notified before ET Cover area constructed	-	-	-	4	-

 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 2019, several Area of Concern notices were issued by the Local Enforcement Agency (LEA). LEA inspection reports indicate concerns about the following:

- Frequent need for litter control east of Fill Area 2
- Erosion and ponding in wheel ruts during wet weather
- Bird control, especially during winter months

The LEA issued a Notice of Violation for methane in perimeter gas probe GP-9C, on July 31. The ALRRF adjusted gas extraction in nearby wells, and the methane was not found when the probe was tested on August 10, so the Violation was removed.

## 2.3.2 Water Board Violations and Concerns

### 2.3.2.1 2019 Violations

**Holding excess storm water from CASP operation in underdrain water pond** – Although Water Board staff acknowledged that this was a sensible approach to preventing destructive overtopping of the basin in the CASP facility, they issued several violations, both to the CASP and the ALRRF, for this action. In addition to the initial violations dated February 13, they issued an additional Notice of Violation dated August 14 for continuing to hold CASP stormwater in the underdrain pond. The remaining stormwater has since been returned to the CASP area, but the ALRRF has advised Water Board staff that until the CASP has additional stormwater capacity, the underdrain pond might be used for this purpose again.

**Windblown Litter** – On February 27, prior to the opening of Fill Area 2, Water Board staff issued a violation stating that “Windblown trash was observed in FA2, well outside the boundaries of the active working face of FA1, in violation of WDR Prohibition A.4, which states: The discharge of wastes outside of a Unit or portions of a Unit specifically designed for their containment is prohibited.” ALRRF management contested the logic of this Violation, because it was based on a regulation that was written to control materials that present special risks to groundwater, not to control litter. However, the violation was not withdrawn.

**Leachate Seeps** – On August 14, a Violation was issued for failure to correct persistent leachate seeps in Fill Area 1. The ALRRF has since installed leachate extraction systems in the three areas where those seeps were noted.

**Liquid Separation** – On August 14, a Violation was also issued for failure to implement the separation of underdrain water from leachate in Fill Area 1, as explicitly required by the WDRs. The ALRRF has not implemented this because the underdrain pond, LSI-2, has been, and may continue to be, used for emergency storage of stormwater runoff from the CASP area.

### 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 2018-2019 stormwater sampling again detected VOCs in several locations, but the data still did not clearly indicate specific sources, in spite of having added sample points to narrow down the possible sources. Meanwhile, more is being done to reduce stormwater pollution throughout the site, and other improvements (e.g., eliminating leachate seeps) may further reduce stormwater pollution. We will continue to track this issue.

**Solidification Basin Compliance** –Water Board staff has expressed concern when they find standing liquid in the solidification basins. The ALRRF has responded by pointing out that this is inherent in the operation of these basins. ALRRF staff have mentioned that the basins will be moved, and constructed to be impermeable, in a location not above refuse. However, that has not yet taken place.

### 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 Vehicular Accidents

In addition to trailer overturns (discussed below), there was an incident on May 23 in which a large trash compactor fell off of the rolloff truck that had brought it to the site. Later in the year, on August 19, a bulldozer backed into a rolloff truck, which was also backing at the time. Fortunately, there were no injuries in either incident.

#### 2.3.3.2 Fire

Three fires occurred at the ALRRF site in 2019:

- June 9: A fire caused by hot material in refuse in Fill Area 2 spread to grasses on the adjacent hillside. This occurred on a Sunday morning with limited staff on site. Local fire agencies assisted with on-ground equipment and crews. The extent of the burned area was approximately 3 acres.
- July 10: Failure of a pole-mounted electrical transformer at the edge of the CASP composting area ignited dry grasses on the hillside above the Fill Area 2 access road. Fire agencies responded with ground and air support, limiting the burned area to approximately 8 acres.
- July 12: A refuse fire occurred near the toe of the active area. It was extinguished by on-site staff in less than an hour. The apparent cause: hot material in refuse.

#### 2.3.3.3 Trailer Overturns

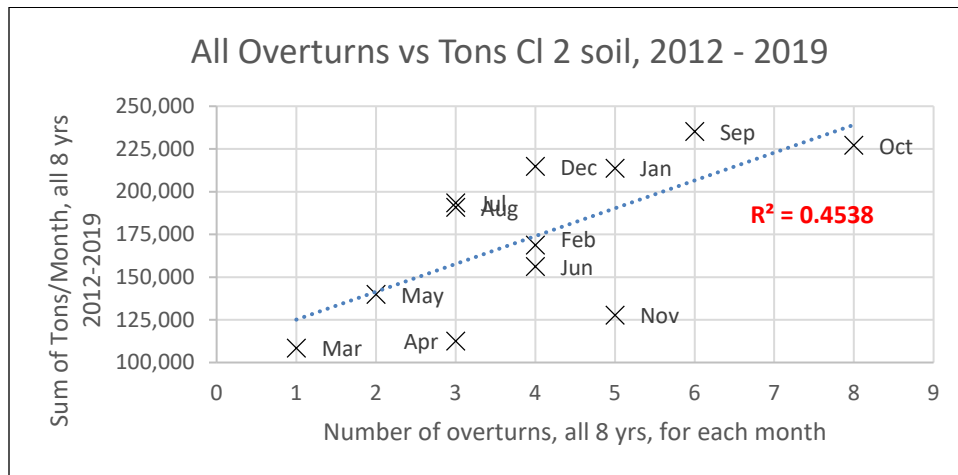
One collision was recorded in 2019, and there were four incidents of end-dump trailers overturning. At the request of Committee members, records of prior overturns have been summarized and analyzed, with the goal of suggesting ways to reduce these incidents based on causative factors.

As background, there are three high-volume material streams delivered using end-dump trailers: Class 2 soils (62% of loads), treated auto shredder waste (36%), and clean soil(2%). All of them are somewhat susceptible to one factor that contributes to overturn accidents: when a portion of their load remains stuck in the trailer while it is elevated for unloading, the center of gravity of the truck and payload is suddenly high off the ground, and what was a minor imbalance can cause an overturn.

Records were readily accessible for the time period 2012 – 2019 (the most recent eight years). We found that in that period, the average number of these incidents was 6 per calendar year. Dividing the calendar into dry seasons (April – September) and wet seasons (October – March), we found that the average number of occurrences was slightly higher during the wet season (3.6 then, vs. 2.7 in the dry season). This was surprising, since it is generally true that more end-dump deliveries occur during the dry season. This suggests that wet-season conditions such as lower visibility and softer soils may be causative factors.

Overturn accident records often cite driver inexperience as a factor. There are likely to be more inexperienced drivers when deliveries surge, as haulers are using all available drivers to expedite their projects. Auto fluff deliveries are generally steady, and clean soil is a tiny fraction of the total, so we focused on Class 2 soil haulers to investigate this further.

We used the sum total of tonnage each month as a proxy for the number of loads and compared that to the number of overturns – for all types of loads – in a given month. To reduce the effect of year-to-year variation, we made this comparison using the sums of tonnage and overturns for all eight years. For example, the number of January overturns for all 8 years is 5, and the amount of Class 2 soil received in all eight Januaries is 213,621 tons. Graphing these pairs for all 12 months and calculating the best-fit straight line gives the result shown in Figure 2-1 below.



In the figure above, the  $R^2$  value, known as the coefficient of determination, indicates the extent to which the number of overturns correlates with the number of tons.  $R^2 = 1$  would indicate a perfect correlation; the data points would all be in a straight line. An  $R^2$  value of 0.45 indicates a moderate correlation. There appears to be a relationship between these two factors, but other factors are probably also having an effect.

This suggests that the ALRRF should consider making a greater effort to prevent overturns during months when Class 2 soil deliveries are at their peak. While this may seem like an obvious result, it is interesting to note that when the same analysis was run for the treated auto shredder waste tonnage, there was no relationship between that tonnage and the overturns per month. It may be that in the busiest months, the unloading areas are more congested, some drivers are inexperienced, some drivers are more hasty, and some are distracted by other traffic. There also may be trucks coming to the site with mechanical problems, as older equipment is placed in service to move more material.

### **2.3.3.4 High Wind Incidents**

In an effort to understand the windblown litter problem in 2019 more completely, we examined wind data from the closest State of California weather station, comparing 2019 to 2018. The “Altamont” weather station is approximately 4 miles SSE of the ALRRF and should have wind speed data that correlates reasonably well with windspeeds at the landfill.

To compare the two years, we defined a wind event as any day containing a period of 4 hours or more when the wind velocity did not drop below 20 MPH. We then counted the number of wind events each month by visually examining monthly graphs of wind speed over time.

The two years were quite similar. The number of wind events in a month ranged from 1 to 18 and averaged 8 per month. The primary difference was that 2018 had fewer wind events in winter months and more wind events in summer months. This suggests that the more difficult windblown litter problem in 2019 was not due to an exceptionally windy year, but rather to the location of the active landfill area, at the north end of Fill Area 2.

## **2.4 Review of Reports**

### **2.4.1 Groundwater**

Two groundwater monitoring reports were reviewed in 2019. The first covered the period from July through December of 2018; the second covered January through June of 2019.

The data in these reports indicate that monitoring wells with VOC contamination are responding to intensified landfill gas extraction nearby, but some VOCs diminish more quickly than others.

One new development has been an increase in concentrations of inorganic constituents in certain wells in Fill Areas 1 and 2. Near Fill Area 1 these are MW-2A and MW-4A, on opposite sides of Fill Area 1 itself. In Fill Area 2 these are MW-8A, MW-8B, PC-1A and PC-1C, all near the bottom of the Fill Area 2 canyon and over half a mile from the active portion of Fill Area 2. The groundwater reports do not explain these phenomena but will continue to track them.

In 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.

The two groundwater reports, especially the second one, present some disturbing QA/QC issues with field sampling and laboratory practices: contaminated trip and equipment blanks, hold time exceedances, and an increasing number of VOCs attributed to laboratory contamination. SCS Engineers has responded to this concern by defending the quality of the laboratory work, stating that these issues are normal for all laboratories.

### **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”<sup>6</sup> (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 Numeric 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, which emphasize minimum Best Management Practices (BMPs). These are low-cost measures such as improving housekeeping, cleaning drain pipes, etc. If the exceedance continues into its second consecutive year, Level 2 ERAs must be developed, and these typically involve advanced BMPs such as specialized equipment, paving projects, etc.

Stormwater monitoring and reporting is especially complex at a landfill site, and even more so at a site that is expanding, like the ALRRF. Since the current regulations took effect, the number of sampling points has increased from three to six, and exceedances have persisted in spite of initial efforts to reduce silt, metals and organics. Each year the ALRRF has applied more Best Management Practices, especially in the current wet season (2019-2020). The landfill has implemented all applicable minimum BMPs and several types of advanced BMPs. Sampling and analyses will take place as the wet season continues, and the results should indicate improvement, especially in the vicinity of Fill Area 1 where disposal activity is diminished. The Stormwater Pollution Prevention Plan does need to be updated to include Fill Area 2 in its Industrial Activity Area.

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.

The ALRRF has also been tracking the presence of VOCs in stormwater, under a separate requirement in the WDRs. After two years of sampling, the program has found VOCs in some channels, and not in others, but more sampling is needed to identify the origins of these VOCs. This program is continuing in the 2019-2020 wet season.

### 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 2019, the CM received the Title V reports for the periods June – November 2018, and December 2018 – May 2019. 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.

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<sup>6</sup> 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.

- From June 2018 – May 2019, 23 landfill gas wells were decommissioned, and 24 new wells were installed and began operation.
- The LNG plant continued to operate at a fairly steady production rate. There were a few brief unscheduled down-time events (several days at most), but after each of those problems was resolved, the gas plant returned to steady production.
- All control devices passed their latest emissions tests without incident.

## 2.4.4 Mitigation Monitoring

The Mitigation Monitoring and Reporting Program Annual Progress Report, covering calendar year 2018, was received by the CM on February 4, 2019. 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 as follows: “Expect Fill Area 2 Operations to begin in March – April 2019” (revised from the previous year’ report, which stated March 2019).

In addition to the Annual Progress Report described above, in prior years 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. The Community Monitor did not receive any formal reports on mitigation activities in 2019. Considerable mitigation work took place in 2019, establishing an irrigation system in the mitigation pond and supplying it with water, by truck, in late summer. According to ALRRF staff, biological surveys were conducted in the Conservation Plan Area, and a report on this subject is in preparation.

## 2.5 Review of Records

Several types of site records were reviewed by the CM in 2019. 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.

The **Special Occurrences Log** for the ALRRF was examined four times during the year and summarized for the Committee. 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 generally conducted two to three times per year, and it requires at least one 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. This review was conducted once in 2019, in mid July. Attempts to schedule a second review near the end of the year were hindered by

schedule conflicts, but the next review will be scheduled as soon as possible in 2020. The files are made accessible electronically from Waste Management's Oakland office.

A total of 119 files were reviewed in July 2019. No out-of-compliance profiles were found, but there were 19 files in the review that required further attention. Langan staff are looking into this issue and will update the CM team when more is known.

## **2.5.2 Other Materials**

In late 2019, a large surge of soil (approximately 30,000 tons) containing high concentrations of salt was delivered to the ALRRF for disposal in September and October. This material originated from development project on salt flats in the City of Newark.

## **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 2019. As in prior years, a 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, and they were relatively infrequent in 2019 (a total of 4, versus 10 in 2018). In their reporting, ALRRF staff attributed many of these overturns to driver inexperience.

Other logged incidents included three fires, two employee injuries (one serious), a condensate spill near Basin A, and several minor vehicular accidents on site.

## **2.5.4 LEA Inspection Reports**

In 2019, there were three types of Areas of Concern noted in these reports. Eight involved windblown litter, one concerned bird activity, and two focused on erosion on and near roadways. These Areas of Concern were consistent with Community Monitor observations.

## 2.6 Monthly Inspections

Twelve site inspections were held during 2019. 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 Week	Inspection Time	Announced in Advance?	With LEA staff?
Jan 17	Thurs	1:00 PM	no	yes
Feb 8	Fri	8:15 AM	yes	no
Mar 18	Mon	1:00 PM	yes	no
Apr 9	Tues	1:00 PM	no	yes
May 28	Tues	5:30 AM	yes	no
Jun 18	Tues	11:00 AM	yes	no
Jul 12	Fri	1:00 PM	no	yes
Aug 15	Thurs	5:00 AM	yes	no
Sep 9	Mon	11:00 AM	yes	no
Oct 11	Fri	12:00 PM	no	yes
Nov 14	Thurs	8:00 PM	yes	no
Dec 12	Thurs	8:30 AM	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, whether on hours or off hours. Throughout these inspections, staff and management were forthcoming regarding operating practices and current conditions.

In 2019, observations by the CM focused on:

- The transition to the use of Fill Area 2.
- Completion and maintenance of the mitigation pond.
- Plant growth and soil conditions in the evapotranspirative cover test area.
- Storm drainage and erosion control, including the sampling points chosen for stormwater VOC testing.
- Observation of issues of ongoing concern, including the presence of large numbers of seagulls and management of windblown litter east of Fill Area 2.
- Excavation and construction of Fill Area 2 phases 2 and 2B.
- 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 four joint inspections were conducted in 2019.

No truck traffic counts were conducted in 2019, because ALRRF data on tonnage and traffic made it clear that the traffic volume requirements of the Conditional Use Permit were being met.





## **SECTION 3**

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# **Looking Ahead: Anticipated Efforts and Issues**

### **3.1 Introduction**

The 2020 contract year is the beginning of a new Community Monitor contract, with Langan providing CM services, assisted by ESA. The CM team will continue to perform report reviews, site inspections and Class 2 soils file reviews.

The four-year test of evapotranspirative (ET) cover methods will be ongoing; the liquids separation system may begin to operate; and the mitigation pond with stormwater basin SB-H will be functioning. Exceedances at several monitoring wells will continue to be tracked. 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 2020**

#### **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, and possibly, the initiation of the next such 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 liners.
- Stormwater quality and management practices.
- Performance of the landfill gas system; decommissioning and installation of gas wells.
- Effects of any composting or material recovery development or operations on the landfill.
- Refuse truck traffic counts, if needed.
- 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 2020, 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.
- 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, flocculant addition, Filtrexx check dams, and additional discharge points – will be of special interest.

### **3.2.2.3 Windblown Litter**

This will continue to be an issue for Fill Area 2 and downwind areas.

### **3.2.2.4 New Systems**

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

- The ET cover test area
- The reconstructed wetland mitigation pond
- Sediment basin SB-H
- Tipper and truck wash equipment in Fill Area 2
- The liquids separation system, if it begins operation.
- Modifications to solidification operations

In addition, monitoring reports on the Mitigation Wetland and the Conservation Plan Area, will be reviewed as they are provided.

### **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 evidence 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.

In addition, the results of a one-time round of sampling and testing for per- and polyfluoroalkyl substances (PFAS) will be reported. This was mandated by the State Water Resources Control Board (SWRCB) in 2019 to determine the extent of PFAS presence at landfills throughout California. These substances are present in a wide variety of consumer products, and certain members of this class of substances have been found to cause negative health effects in humans and animals. The SWRCB's web page on PFAS states that "The four major sources of PFAS are: fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids."<sup>7</sup> Testing for PFAS is intended to detect it at extremely low concentrations (parts per trillion), and this requires extreme care during sampling and analysis.

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<sup>7</sup> Source: <https://www.waterboards.ca.gov/pfas/>, accessed December 30, 2019.

### 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 2020.

### 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].” That occurred on March 25, 2019, triggering 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.
- Materials brought for disposal may only originate from Alameda County, San Francisco, and San Ramon.

#### 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.

In 2019, these reports reportedly were being prepared, but none were received by the CM.

## 3.3 Project Management Considerations

In 2020 Kelly Runyon’s role will be limited to assisting Langan with its transition to the lead role as Community Monitor; ESA will continue as a subcontractor. Rachel Brownsey will serve as ESA’s Project Manager and will provide her expertise in biology / botany and that of other ESA staff. Langan’s work will continue to include reviewing groundwater monitoring reports and Class 2 soil files.