COMMUNITY MONITOR COMMITTEE
Altamont Landfill Settlement Agreement
AGENDA

www.altamontcmc.org

VOTING MEMBERS

Robert Carling
City of Livermore

Valerie Arkin
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, April 14, 2021**
TIME: **4:00 p.m.**
PLACE: Online Zoom Meeting

Zoom Link: https://us02web.zoom.us/j/81557969234
Zoom dial in phone number: 1-669-900-6833 Webinar ID: 815 5796 9234

1. Call to Order
2. Introductions
3. Roll Call
4. Approval of Minutes (From January 13, 2021)
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 Responses to Committee Member Questions**
   - **6.2 Review of Reports From ALRRF**
     - **a. Groundwater**
     - **b. Title V/Air Emissions Report**
     - **c. ET Cover**
   - **6.3 Review of Documents on GeoTracker website**
   - **6.4 Reports from Community Monitor**
   - **6.5 Announcements (Committee Members)**
7. Agenda Building

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

8. Adjournment

   The next regular Community Monitor Committee meeting is tentatively scheduled to take place at 4:00 p.m. on **July 14, 2021,** at 3500 Robertson Park Road, Livermore.

Informational Materials:

- Community Monitor Roles and Responsibilities
- List of Acronyms
- Draft Minutes of January 13, 2021

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 CONTACT THE ADA COORDINATOR AT ADACOORDINATOR@CITYOFLIVERMORE.NET OR CALL (925) 960-4170 (VOICE) OR (925) 960-4104 (TDD) AT LEAST THREE (3) BUSINESS DAYS 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 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 and included in the agenda packet available on the Community Monitor Committee web site http://www.altamontcmc.org.

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.

NOTICE OF PUBLIC MEETING

The City of Livermore Public Works Department, Environmental Services Division invites you to attend a public Community Monitor Committee Meeting pursuant to the Settlement Agreement governing the expansion of the Altamont Landfill and Resource Recovery Facility (ALRRF), the City of Livermore, the City of Pleasanton, the Sierra Club, the Northern California Recycling Association (NCRA), and Altamont Landowners Against Rural Mismanagement (ALARM). Given the international COVID-19 pandemic, and consistent with the California Department of Public Health's recommendations, Alameda County Health Orders and Governor Newsom's Executive Order N-29-20, the meeting will be held via video teleconference at April 14, 2021 with NO PHYSCIAL LOCATION FOR PUBLIC ATTENDANCE. This teleconference meeting will be recorded. Please follow the instructions below to join the meeting remotely.

Zoom Link: https://us02web.zoom.us/j/81557969234
Zoom dial in phone number: 1-669-900-6833 Webinar ID: 815 5796 9234

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 2025) 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

F. 5.7.7);

G. Counting trucks arriving at the Altamont Landfill (section 5.7.8); and

H. 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).

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 CalRecycle acronyms page: https://www.calrecycle.ca.gov/lea/acronyms.

Updates will be provided as needed. This list was last revised on December 23, 2020.

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
CDFW – California Department of Fish and Wildlife (formerly California Department of Fish and Game or CDFG/DFG)
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
CVRWQCB – Central Valley Regional Water Quality Control Board
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:
https://www.calrecycle.ca.gov/lgcentral/basics/adcbasic
BTEX – benzene, toluene, ethylbenzene, and xylene (used in reference to testing for contamination)
CH_4 – methane
CO_2 – 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
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 – Covered Aerated Static Pile (ASP) composting
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

General Terms (continued)
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 January 13, 2021

DRAFT

1. Call to Order

The meeting came to order at 4:00 PM.

Mr. Carling noted that pursuant to the provisions of the Brown Act and due to recent executive orders issued by the governor to facilitate teleconferencing in order to reduce the risk of COVID-19 transmission at public meetings, this meeting was being held via Zoom meeting platform. Mr. Carling further explained the process and protocols for the meeting.

2. Roll Call

Members Present:	Robert Carling, City of Livermore; Valerie Arkin, City of Pleasanton; Donna Cabanne, Sierra Club; David Tam, NCRA (joined at 4:10 p.m.)
Absent:	Robert Cooper, Altamont Landowners Against Rural Mismanagement
Staff:	Marisa Gan, City of Livermore Public Works Department; Mukta Patil, Langan/Community Monitor; Maria Lorca, Langan/Community Monitor;
Others:	Judy Erlandson, Livermore Recycling Specialist; Arthur Surdilla, Alameda County Department of Environmental Health (LEA); Marcus Nettz II, Senior District Manager, Altamont Landfill and Resource Recovery Facility (ALRRF)

3. Introductions

All those present introduced themselves.

4. Approval of Minutes of October 14, 2020 meeting

Ms. Cabanne moved approval, Mr. Carling seconded, and the minutes were approved 3-0; committee member Tam absent.

5. Open Forum

There was no open forum discussion.

6. Matters for Consideration

6.1 Election of Chair

Ms. Gan recommended election of a chairperson. Ms. Cabanne suggested Mr. Carling continue to be Chair. Mr. Carling noted he could continue to serve as Chairperson if asked. Ms. Cabanne moved the motion, Ms. Arkin seconded, and the motion was approved 4-0.

6.2 Response to Committee Member Questions

Ms. Patil presented the responses to the committee member questions.

Compost Labeling

Ms. Patil explained that there is no compost labeling requirements for Altamont compost nor for any compost sold to consumers in California. Ms. Cabanne commented it would be beneficial for the community to have compost labeling requirements. Mr. Carling noted it appeared that compost operations are not in the purview of the CMC. Mr. Nettz explained that compost origin labeling is not part of the landfill permit nor the settlement agreement. Mr. Nettz further explained that Altamont does not accept food or sludges or biowastes, only green wastes for their compost, and that other landfills in the area have CASP to compost from vineyards. Altamont accepts municipal green waste from Pleasanton and San Ramon. Waste is preprocessed in the Davis transfer station prior to being sent to the landfill, except Pleasanton waste. Mr. Nettz mentioned that Altamont is not a sorting facility. Mr. Nettz continued to explain that the compost produced at Altamont is of excellent quality, and it is sold to farms and vineyards, not consumers. Mr. Nettz explained the discussion should occur in another forum. Ms. Cabanne agreed and noted she will find another forum to discuss this item.

Bird Strike

At the October 14, 2020 meeting Ms. Cabanne requested to follow up regarding the March 14, 2020 bird strike that disrupted the gas system. Ms. Patil explained that no further information on the March 2020 bird strike was available. Ms. Cabanne asked if any other actions could be taken to prevent bird strikes to the gas system. Mr. Netzz explained there have been two bird strike events in the past 10 years, which indicates a low frequency of such events.

6.3 Five-Year Permit Review

Ms. Patil noted that the Five-Year permit had been completed and provided an update on the summary comments from CVRWQB and BAAMMD to a resident's questions. Mr. Carling noted the answers by the agencies were brief and regretted the agencies did not provide more details to the resident.

Ms. Cabanne expressed concern that even if the air emissions regulations are met, there might be too much emissions and is not healthy for the TriValley (considering other sources of emissions). Ms. Arkin asked about the air quality in the basin, and Ms. Cabanne noted that PM 2.5 and 10 are exceeded several times a year, some of this is due to the geography. Mr. Nettz noted CARB (California Air Resources Board) and NASA (National Aeronautics and Space Administration) do flyovers in landfills and oil fields; Altamont had very low score (which is fewer methane emissions than other facilities) and it is the best

in terms of landfills. The higher emissions at the landfill are on the LFG plant area, no emissions in FA1 nor on CASP. Altamont takes the issue seriously, and the Air Board has noted that Altamont is one of the best landfills reducing greenhouse gas emissions. Ms. Patil added that there are two other landfills in California[1] that generate almost three times more emissions than Altamont.

6.4 Review of Documents on GeoTracker

The review began with a verbal summary of Langan's memo by Ms. Lorca; items from the GeoTracker tables were verbally summarized. Ms. Cabanne asked about the replacement of monitoring wells, and Ms. Lorca explained the replaced groundwater wells are due to the next phases of operations in Fill Area 2. Ms. Cabanne also asked the CM continue to review concentrations on monitoring well E-20B, due to its historical problems.

6.5 Reports from Community Monitor

Ms. Lorca explained that due to Shelter-in-Place order and COVID-19 pandemic, the Community Monitors had not been allowed to visit the Landfill every month. The CM visited the landfill in November, but has mostly relied on reports from LEA site inspections. Ms. Lorca summarized observations from the November site visit and the summaries of LEA inspections, tonnage reports, as well as figures with tonnages plots.

Ms. Lorca explained that there has been another emergency waiver to receive wildfire debris at Altamont, which provided increased limits on daily loads, but had not been needed. Ms. Cabanne asked if the waiver expired on January 30, 2021, and Mr. Nettz further explained that Altamont is not in an area that expects to receive this kind of debris, but it is important to have the option if needed to assist with the emergency, and due to the continued efforts WM would request an extension on the emergency waiver.

Ms. Cabanne also asked about the repairs needed for the mitigation pond. Mr. Netzz explained during 2018 wet season it was impacted by erosion and WM is reaching to Dudek (their contractor) and expect to begin repairs to the pond in the summer. Ms. Cabanne requested the CM continued to track the repairs to the mitigation pond.

6.6 Altamont Community Monitor Committee website

Ms. Patil explained and asked the CMC members check out the website and let us know if there are any changes or recommendations. Mr. Carling welcomed the update.

6.7 Draft Community Monitor Annual Report 2020

[1] Puente Hills landfill in Los Angeles County (114,774 metric tons of total carbon dioxide emitted) and the Kiefer Landfill in Sacramento County (125,920 metric tons of carbon dioxide emitted)

Ms. Patil provided a verbal summary of the relevant topics from the draft annual report. The severity score for 2020 was significantly lower than the previous years.

Mr. Carling asked why COVID-19 had a positive effect on the severity score. Ms. Patil noted that people's increased awareness might have a positive impact, which has been observed in reportable incidents. Ms. Cabanne noted the severity chart and the new website were helpful to keep the community informed, and she found the annual report readable by laypeople. Ms. Cabanne requested the CM continue looking into the invasive plants in the ET Cover; keep watching if any there are any PFAS updates; track any changes in methane emissions and groundwater exceedances. Ms. Arkin noted PFAS have been detected in Pleasanton's water and has become a concern for the community, and asked why there has been no additional sampling proposed at Altamont. Ms. Patil explained the groundwater wells were sampled upgradient and downgradient of the Fill Areas, and in corrective action areas. The sampling was conducted to establish a baseline, and the SWRCB will review data and propose monitoring or corrective actions after data from other landfills in the state are gathered and reviewed. Mr. Tam appreciated the annual report updates.

Mr. Tam moved approval of the annual report, Ms. Cabanne seconded, and the Community Monitor Annual Report 2020 was approved 4-0.

6.8 Announcements

No announcements were made.

7. Agenda Building

No items were added to future agenda.

8. Adjournment

The meeting was adjourned at 6:06 p.m. The next meeting will be held on Wednesday April 14, 2021 at 4:00 p.m. potentially at the Livermore Maintenance Services Center at 3500 Robertson Park Road or presented virtually using Zoom.

LANGAN

Memorandum

501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001

To: ALRRF Community Monitor Committee

From: Langan – Community Monitor

Date: April 2, 2021

Re: **CMC Meeting of 4/14/21 - Agenda Item 6.1 - Responses to Committee Members' Questions**

At the January 13, 2021 meeting, the committee members did not have any questions for the CMC. The committee members requested continued tracking of repairs to the mitigation ponds, groundwater quality in the vicinity of monitoring well E-20B, looking for invasive plants in the ET Cover area, updates related to PFAS sampling, changes in methane emissions and groundwater exceedances.

LANGAN

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

Memorandum

To: Community Monitor Committee

From: Langan – Community Monitor

Date: April 2, 2021

Re: CMC Meeting of 04/14/21 – Agenda Item 6.2 – Review of Reports from ALRRF
Groundwater Analysis Progress Report #26
Altamont Landfill and Resource Recovery Facility (ALRRF)
Livermore, California
Langan Project No.: 750657601

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

- SCS Engineers, Second Semiannual-Annual 2020 Groundwater Monitoring Report, Altamont Landfill and Resource Recovery Facility (WDR Order No. R5-2016-0042-1), Long Beach, California dated February 7, 2020.

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

The Phase 1 portion of Fill Area 2 began receiving wastes on March 25, 2019 and the Phase 2 potion of Fill Area 2 began receiving wastes on April 1, 2020. The second semiannual 2020 groundwater sampling activities for Fill Area 1 and Fill Area 2 were conducted in October and November 2020. Wells associated with Fill Area 2 were monitored on a semiannual basis to establish baseline conditions. Eight new monitoring wells were installed in Fill Area 2 in 2020 for detection monitoring purposes; they were sampled for the first time for 5-Year Contaminants of Concern (COC) parameters. Wells and monitoring points were generally found to be in compliance during the Second Semiannual 2020 sampling event.

Laboratory QA/QC

There were no occurrences of any volatile organic compounds (VOCs) in method blanks. The VOCs: tetrahydrofuran and toluene were detected in trip and equipment blanks. One or more of these VOCs was also detected in ALRRF groundwater samples. These VOC detections attributable to cross-contamination were flagged where appropriate.

Values reported between the method detection limit (MDL) and the reporting limit (RL) should not be considered a reliable quantitative result given the method uncertainty at this low range. The RL was established to protect against false positives within the MDL - RL range. This is typically why no action is usually taken on the basis of these detections.

The laboratory reports (by TestAmerica in Colorado) mention the detections in several of the case narratives. The laboratory states that when samples had detections similar to the blanks, the detections in the samples were likely due to laboratory artifacts, and because these detections were below the RLs, the laboratory reports note that no corrections were required.

Another problem noted during the Second Semiannual 2020 sampling event was that samples collected on October 15, 2020 had delays in courier deliveries, which caused three samples to be received outside of the temperature criteria and two nitrate samples to be analyzed outside the hold time. Due to laboratory instrument error, three additional nitrate samples and one total cyanide sample was analyzed outside the hold. Similar issues had been observed in previous monitoring events.

During the Second Semiannual 2020 sampling event, the number of analyses outside of standard protocol decreased.

Second Semiannual 2020 Groundwater Sampling Results

Detection and Corrective Action Wells[1] Inorganic and Volatile Organic Compound Concentrations

The 2016 MRP identifies two sets of corrective action wells: 1) well E-20B along the east side of Fill Area 1 and downgradient (detection) well MW-12, and 2) wells E-05 and E-07 in the main canyon south of Fill Area 1 and their downgradient (detection) well E-03A. Additional detection wells have been added to the MRP, due to indications of possible groundwater impacts at other locations on site. Table 6.2-1 (below) summarizes the monitoring well network, which is also presented in Figure 6.2-5.

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

Table 6.2-1

Fill Area 1 (FA1)	
Detection Monitoring Groundwater Monitoring Wells	MW-3B
Corrective Action Program Groundwater Monitoring Wells	E-03A, E-05, E-07, E-20B, E- 23, MW-12, MW-20, MW-27, PC-1B, PC-1C
Evaluation Groundwater Monitoring Wells	MW-1A, MW-2A, MW-3B, MW-4A, MW-5A, MW-6, MW-7, MW-31
Class II Surface Impoundment "FA1 South LSI" Evaluation Monitoring Groundwater Well	MW-11
Fill Area 2 (FA2)	
Detection Monitoring Groundwater Monitoring Wells	MW-10, MW-13A, MW-13B, MW-19, MW-23A, MW-23B, MW-28, MW-22, PC-1A, PC-1B, PC-1C, PC-6B, PC-6B[R], WM-2, PC-2A, PC-2C, P-2
Class II Surface Impoundment (LSI-3) Detection Groundwater Monitoring Wells (listed in MRP as SI-1)	MW-8A, MW-8B, MW-15A, MW-15B, MW-16, MW-17, MW-17R, MW-18
Interim Phase 3 or Final POC Groundwater Monitoring Wells	MW-24, MW-25, MW-26, MW-34A, MW-34B, MW-35A, MW-44A, MW-44B, MW-45A, MW-45B, MW-46A, MW-46B

On October 26, 2020, WMAC transmitted the 2020 2-year concentration limit updates for Fill Areas 1 and 2 to the CVRWQCB. The CVRWQCB provided comments to WMAC on January 11, 2021. WMAC is reviewing and will respond to the requirements in a separate cover. For the Second Semiannual 2020 sampling event, monitoring results were compared directly to the updated concentration limits to evaluate if a potentially measurable significant change in water quality had occurred.

Based on the analytical results of the Second Semiannual 2020 monitoring event, no concentration limit exceedances were observed for the inorganic monitoring parameters for Fill Area 1 wells MW-2A, MW-6, MW-7, E-05, E-07, E-23, and MW-11. Monitoring wells MW-4A and MW-5A had initial concentration limit exceedances of COD. Six initial statistical exceedances were observed for inorganic monitoring parameters in Fill Area 2 monitoring wells. The six initial statistical exceedances of inorganic compounds correspond to chloride at MW-8B, COD at MW-10, MW-13B, and MW-18, dissolved calcium at MW-16 and WM-2. Upon receipt of the Data Quality Review (DQR), Waste Management will notify the CVRWQCB of any errors found and if resampling will be conducted. Recurring exceedances of COD for MW-8A and MW-8B that were not observed during the previous period were observed in addition to dissolved calcium, chloride, and total dissolved solids in MW-8B. Reoccurring exceedances of dissolved calcium, chloride, and total dissolved solids were observed at PC-2A, recurring exceedances of dissolved calcium were observed again at PC-1B and recurring exceedances of dissolved calcium, chloride, and

total dissolved solids, were observed again at PC-1C. The previously seen exceedance of sulfate at PC-1C was not observed during this period.

Fill Area 1

VOCs not attributable to laboratory cross contamination were detected in seven wells, as indicated in Table 6.2-2, attached at the end of the memo. At these well locations, the concentrations were similar to historical data. In monitoring well E-20B, 1,1-dichloroethane (1,1-DCA) and dichlorofluromethane were detected at concentrations above RL.

Corrective action well E-07 had detections above their respective RLs for 1,1-dichloroethane and dichlorodifluoromethane. All other VOC detections in both E-07 and E-05 were at concentrations below their respective RLs. Downgradient wells E-03A, E-21, E-22, and E-23 did not have any VOC detections.

E-20B and downgradient wells

In monitoring well E-20B, 1,1-dichloroethane (1,1-DCA) and dichlorofluromethane were detected at concentrations above RL. These VOCs have been detected in E-20B since 1999. Below RL concentrations of cis-1,2-dichloroethene (cis-1,2-DCE), diethyl ether, methyl tert-butyl ether (MTBE), TBA, and tetrahydrofuran were also detected in E-20B during the Second Semiannual 2020 monitoring event. These results were also consistent with past results at E-20B. Concentrations of 1,4-dichlorobenzene (1,4-DCB), a substance that has been observed in E-20B samples for over 15 years, was not detected in either 2020 sample. The Updated Engineering Feasibility Study (EFS), completed by SCS Engineers (November 2004, Revised March 2005), and the Revised E-20B Corrective Action Plan (CAP), dated August 13, 2014, prepared by Waste Management of Alameda County, Inc. (WMAC) concluded that the VOC detections at E-20B do not appear to be indicative of leachate impacts. However, in a letter dated May 23, 2014, the CVRWQCB remarked about its reservations regarding this conclusion. As discussed below, the area surrounding E-20B is currently undergoing corrective action, including landfill gas control; and E-20B is also sampled for natural attenuation parameters to monitor conditions favorable for VOC degradation. Wells MW-12 and MW-20 located down-gradient of E-20B, were not sampled during the Second Semiannual 2020 monitoring event as the wells went dry after purging. As requested by the RWQCB letter dated June 1, 2020, Geosyntec conducted further evaluation of the water quality changes observed at PC-1 up-gradient of E-20B. The assessment included prior groundwater analysis as well as an evaluation of storm water analytical data. Based on this additional evaluation, Geosyntec concluded that the inorganic compound groundwater quality changes observed at E-20B, MW-12 and PC-1C since 2017 were related to affected storm water not with the E-20B correction action area LFG release. No significant changes to the conceptual site model were proposed and no update of the E-20B EFS were considered necessary.

PC-1B and PC-1C

Detection wells PC-1B and PC-1C were added to the monitoring network, at the request of CVRWQCB, to monitor for potential migration of VOCs further downgradient of E-20B. Wells PC-1B and PC-1C, located approximately 2,000 feet from E-20B and approximately 1,500 feet

downgradient of MW-12 have not had any landfill associated VOC detections since the start of monitoring in 2006 with the exception of those attributable to laboratory cross contamination (acetone, carbon disulfide, and methylene chloride), and field contamination of naphthalene as explained below. VOCs that are consistently detected in E-20B also have not been detected downgradient in the deeper groundwater zone monitoring wells MW-3B and MW-3C during the 2018, 2019, or 2020 monitoring events.

The first semiannual 2018 sample from PC-1B had an above RL detection of naphthalene at 2.1 µg/L. Given the fact that no landfilling had occurred within 1,750 feet of PC-1B, the detection of naphthalene was deemed anomalous. In a letter dated October 12, 2018, WMAC concluded that the source of the naphthalene was unknown but may be cross-contamination from components of the dedicated pump used for sampling the well. The CVRWQCB concurred with the findings in a letter dated January 11, 2019 and requested continued quarterly sampling of PC-1B. PC-1B was sampled four times in 2019 and reported below RL concentrations of laboratory attributed acetone and carbon disulfide, and below RL concentrations of naphthalene. PC-1B was sampled in September and November during the Second Semiannual 2020 sampling event. The September 2020 sample had below RL concentrations of naphthalene and tert-butyl alcohol that were not detected in the November 2020 sample. Other than the one naphthalene detection, no VOCs were detected in four 2020 samples from this well. Quarterly sampling will continue to be conducted.

MW-4A

In May 2017, bicarbonate, calcium and five VOCs were detected in monitoring well MW-4A above the concentration limits established for these constituents in the WDRs. A Notice of Violation (NOV) for recurring VOCs was issued by the CVRWQCB on October 19, 2017. The August 2020 sample presented detections below the RL for acetone. There were no VOC detections in the March, April or November 2020 samples. These detections have been decreasing since the initial detection in May 2017. Bicarbonate alkalinity continues to exceed the background concentration limit. In November 2018 new downgradient monitoring well MW-31 was installed. No VOCs were detected above the RL in well MW-31 during the First Semiannual 2019 sampled in March and May or the Second Semiannual 2019 sampled in August and November. During the Second Semiannual 2020 sampling event, other than a laboratory attributed contaminant, a below RL concentration of acetone in August 2020 and a below RL concentration of total xylenes in the August and November 2020 samples, no VOCs were detected. These wells will continue to be monitored quarterly for one additional year.

Fill Area 2

Waste was placed in Fill Area 2 Phase 1 through 2B, and leachate was discharged to Fill Area 2 Class II Surface Impoundment LSI-3 during the Second Semiannual 2020 period. Wells associated with Fill Area 2 were evaluated with the same statistical protocols used for Fill Area 1 wells as mentioned above. A summary of VOCs detected in Fill Area 2 is presented in Table 6.2-3, attached at the end of the memo. During the Third Quarter 2020 period, no VOCs were detected in samples from Fill Area 2 wells MW-8A, MW-8B, MW-10 (and its duplicate), MW-13B,

MW-15B (and its duplicate), MW-16, MW-17R[2], MW-18, MW-19, PC-1C, PC-6B(R), WM-2, P-2, PC-2A and PC-2C aside from one below RL concentration of tert-butyl alcohol in MW-8B. Toluene was detected below the RL in Fill Area 2's new interim Phase 3 detection monitoring wells MW-24, MW-26, and Fill Area 2's final Fill Area 2 POC monitoring wells MW-34B, MW-35A, MW-35B, MW-44B. A below RL concentration of xylenes was detected in MW-24 and an above RL concentration of 1 microgram per liter of benzene was detected in MW-26. No VOCs were detected in well MW-25, MW-34A, or MW-44A.

The two below RL concentrations of toluene and xylenes in MW-24, and the above RL concentration of benzene and below RL concentration of toluene, triggered the non-statistical indicators. The below RL concentrations of toluene in the other four wells did not trigger either of the two non-statistical indicators. For wells MW-24 and MW-26, the RWQCB was notified by WMAC of these initial detections of VOCs in an email on January 22, 2021 which indicated that resampling at these location would be performed within 30 days of notification.

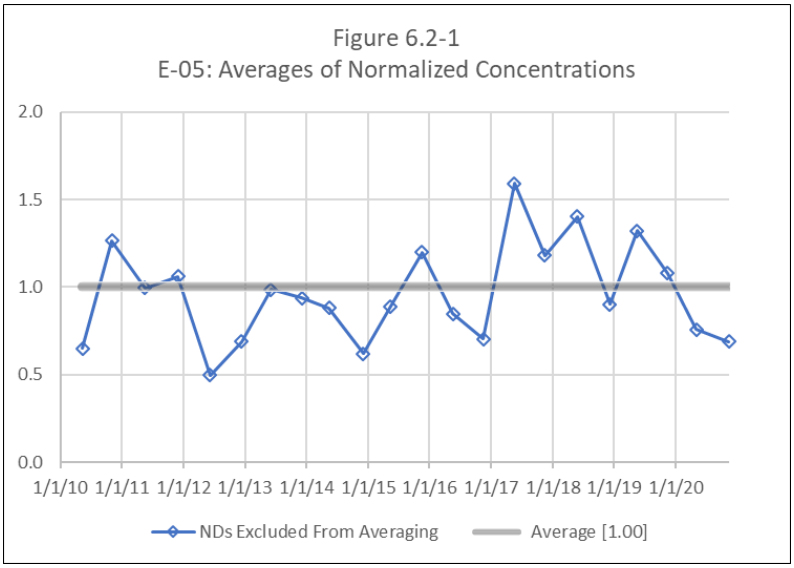
Wells MW-23 and MW-23B were abandoned in late September 2020 for Phase 3 construction purposes.

As mentioned above, during the Second Semiannual 2020 sampling event, six initial statistical exceedances were observed for inorganic monitoring parameters in Fill Area 2 monitoring wells. The six initial statistical exceedances of inorganic compounds correspond to chloride at MW-8B, COD at MW-10, MW-13B, and MW-18, and dissolved calcium at MW-16 and WM-2. Upon receipt of the Data Quality Review (DQR), Waste Management will notify the CVRWQCB of any errors found and if resampling will be conducted. Recurring exceedances of COD for MW-8A and MW-8B that were not observed during the previous period were observed in addition to dissolved calcium, chloride, and total dissolved solids in MW-8B.

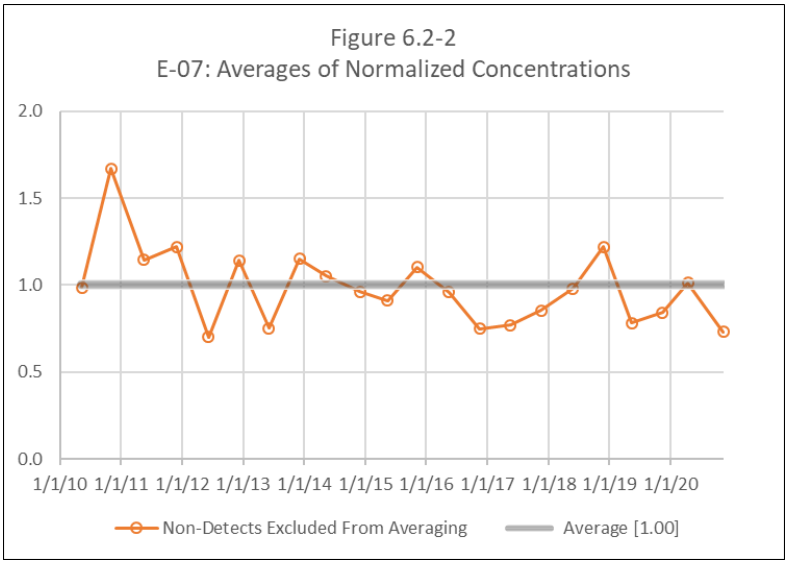
Trends in VOC Data

We continued to review the trends in data from monitoring wells where VOCs have been detected and continued graphing the data over time for each contaminant in each such well. We have normalized the concentration data (dividing each data point by the average for that compound at that well, with non-detects excluded) in order to pool all of the VOC data at a well and look for trends. We offer the following updated observations well-by-well, and the general observation that for most of these wells normalized concentration trends were close to, at or below the average (i.e. 1.0), with the exception of MW-4A for which VOCs were not detected.

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

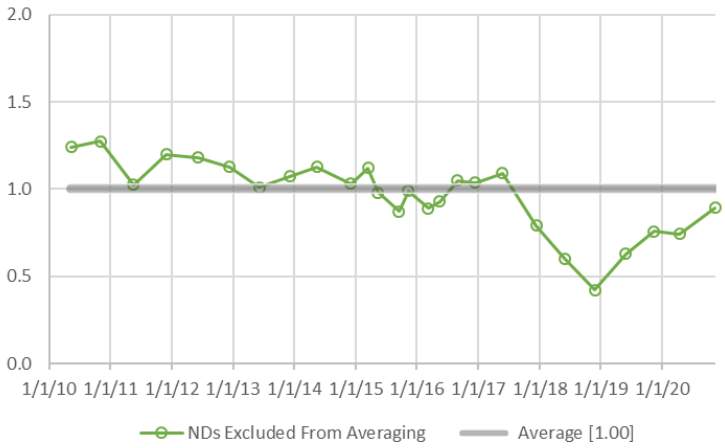


At Well E-05, at the toe of Fill Area 1, as noted previously, the data vary too widely to provide a clear trend. The November 2020 sample showed slightly below average concentrations.



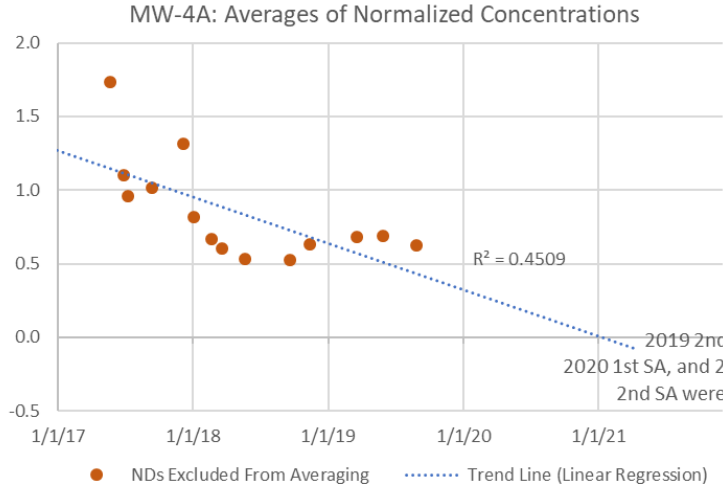
At well E-07, in the same location but sampling at a greater depth, the November 2020 sample was slightly below average and showed a decrease with respect to the previous sampling event. No clear trend is observed for this well, and we will continue to monitor the normalized concentrations over time.

Figure 6.2-3
E-20B: Averages of Normalized Concentrations



At well E-20B on the east side of Fill Area 1, the average across all VOC's was showing a clear decline in 2017 – 2018, but the most recent samples show a continued increase since 2019, which is bringing concentrations back to the historical average. This should continue to be tracked.

Figure 6.2-4
MW-4A: Averages of Normalized Concentrations



At well MW-4A, at the northeast corner of Fill Area 1, the three 2020 samples had no detections and therefore it appears that the downward trend continues.

Summary of Groundwater Results

VOCs detected in corrective action monitoring wells E-05, E-07, E-20B and MW-4A were generally consistent and within the ranges of previous detections observed at these wells; MW-20 and MW-12 were not sampled as they became dry during purging. Due to the continued detections of VOCs in MW-20, a new downgradient well MW-27 was installed in 2019. No VOCs have been detected in MW-27, with the exception of TBA in the September 2020 sample. As requested by the RWQCB, further evaluation of the water quality changes observed in PC-1C

and the Fill Area 1 upgradient E-20B corrective action area was completed and Geosytec concluded it is most likely that inorganic compound groundwater quality changes observed in E-20B, MW-12, and PC-1C since 2017 were related to storm water and are not associated with the E-20B corrective action area landfill gas release. All newly installed wells, MW-24, MW-25, MW-26, zmw-34A, MW-34B, MW-35A, MW-35B, MW-44A, and MW-44B were sampled during the Second Semiannual 2020 event and data from MW-24 and MW-26 show below RL detections of toluene in both, below RL detections of xylenes in MW-24 and above RL detections of benzene in MW-26. WMAC notified the RWQCB of these initial VOC detections on January 22, 2021 and noted that resampling events would be scheduled. VOCs detected in E-20B and MW-20 were not detected in downgradient wells PC-1B and PC-1C, with the exception of naphthalene and tert-butyl alcohol. No VOCs were detected in E-23 located downgradient of E-05 and E-07. Naphthalene was detected in PC-1B during the August but not the November sampling event and will continue to be monitored quarterly at the request of the CVRWQCB. There were fewer occurrences of laboratory QA/QC issues, there were no concentrations that were observed in method blanks at levels below the laboratory reporting limit (RL) during the Second Semiannual 2020 sampling event. The GCCS system and LFG extraction wells are performing as expected and VOCs are continuing to decrease over time based on the VOC data, VOC time series plots, and LFG control system data.

Recommendation

We recommend continuing review of groundwater, unsaturated zone, leachate, and stormwater data as it becomes available, and evaluating for trends in data, especially for groundwater monitoring wells where VOCs have previously been detected. Also, we recommend to continue review of laboratory QA/QC issues.

Attachments:

Figure 6.2-5 Site Plan showing Monitoring Wells
Table 6.2-2 Fill Area 1 Analytical Results Summary
Table 6.2-3 Fill Area 2 Analytical Results Summary

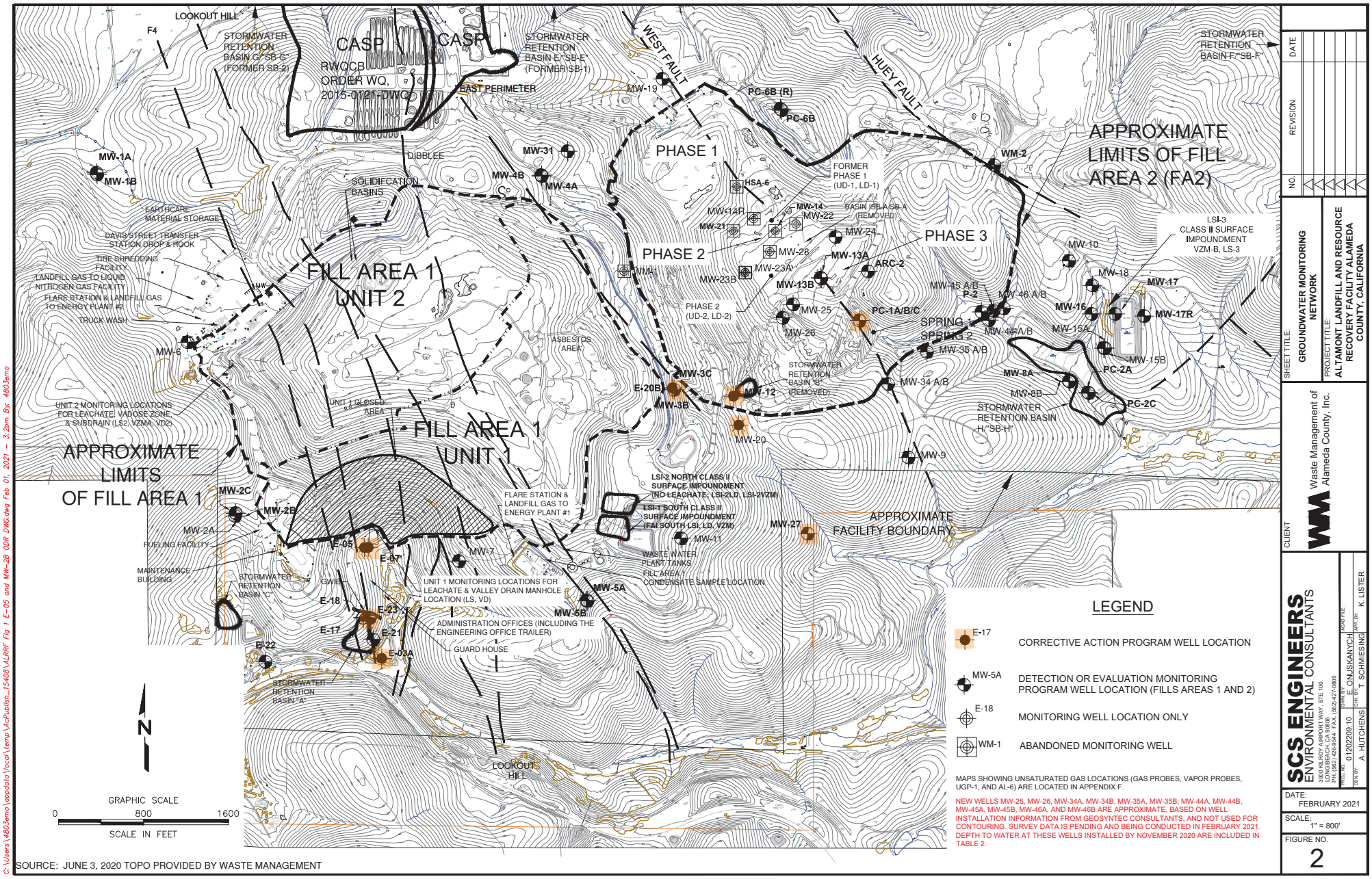

LOOKOUT HILL
F4
STORMWATER RETENTION BASIN G/"SB-G" (FORMER SB-2)
CASP
CASP
RWQCB ORDER WQ, 2015-0121-DWQ
STORMWATER RETENTION BASIN E/"SB-E" (FORMER SB-1)
EAST PERIMETER
WEST FAULT
HUEY FAULT
STORMWATER RETENTION BASIN F/"SB-F"
APPROXIMATE LIMITS OF FILL AREA 2 (FA2)
MW-19
PC-6B (R)
PC-6B
MW-1A
MW-1B
DIBBLEE
MW-31
MW-4B
MW-4A
SOLIDIFICATION BASINS
PHASE 1
HSA-6
FORMER PHASE 1 (UD-1, LD-1)
WM-2
EARTHCARE MATERIAL STORAGE
DAVIS STREET TRANSFER STATION DROP & HOOK
TIRE SHREDDING FACILITY
LANDFILL GAS TO LIQUID NITROGEN GAS FACILITY
FLARE STATION & LANDFILL GAS TO ENERGY PLANT #2
TRUCK WASH
FILL AREA 1 UNIT 2
MW-14R
MW-14
MW-22
BASIN ISB-A/SB-A (REMOVED)
MW-21
MW-24
PHASE 2
PHASE 3
MW-28
MW-13A
ARC-2
MW-10
LSI-3 CLASS II SURFACE IMPOUNDMENT VZM-B, LS-3
MW-23A
MW-23B
MW-13B
MW-18
MW-17
MW-45 A/B
P-2
MW-46 A/B
MW-16
MW-17R
MW-25
PC-1A/B/C
MW-15A
MW-26
SPRING 1
SPRING 2
MW-44A/B
MW-35 A/B
MW-15B
PC-2A
MW-6
ASBESTOS AREA
PHASE 2 (UD-2, LD-2)
MW-3C
E-20B
MW-3B
MW-12
STORMWATER RETENTION BASIN "B" (REMOVED)
MW-34 A/B
MW-8A
MW-8B
PC-2C
UNIT 2 MONITORING LOCATIONS FOR LEACHATE, VADOSE ZONE, & SUBDRAIN (LS2, VZMA, VD2)
UNIT 1 CLOSED AREA
FILL AREA 1 UNIT 1
MW-20
STORMWATER RETENTION BASIN H/"SB-H"
MW-9
APPROXIMATE LIMITS OF FILL AREA 1
MW-2C
MW-2B
MW-2A
LSI-2 NORTH CLASS II SURFACE IMPOUNDMENT (NO LEACHATE: LSI-2LD, LSI-2VZM)
FLARE STATION & LANDFILL GAS TO ENERGY PLANT #1
LSI-1 SOUTH CLASS II SURFACE IMPOUNDMENT (FAI SOUTH LSI, LD, VZM)
MW-27
APPROXIMATE FACILITY BOUNDARY
MW-11
FUELING FACILITY
E-05
E-07
MW-7
WASTE WATER PLANT TANKS FILL AREA 1 CONDENSATE SAMPLE LOCATION
MAINTENANCE BUILDING
STORMWATER RETENTION BASIN "C"
GWIE
UNIT 1 MONITORING LOCATIONS FOR LEACHATE & VALLEY DRAIN MANHOLE LOCATION (LS, VD)
MW-5A
E-18
E-23
MW-5B
ADMINISTRATION OFFICES (INCLUDING THE ENGINEERING OFFICE TRAILER)
E-17
E-21
GUARD HOUSE
E-22
E-03A
STORMWATER RETENTION BASIN "A"
LOOKOUT HILL
N
GRAPHIC SCALE
0
800
1600
SCALE IN FEET
LEGEND
E-17
CORRECTIVE ACTION PROGRAM WELL LOCATION
MW-5A
DETECTION OR EVALUATION MONITORING PROGRAM WELL LOCATION (FILLS AREAS 1 AND 2)
E-18
MONITORING WELL LOCATION ONLY
WM-1
ABANDONED MONITORING WELL
MAPS SHOWING UNSATURATED GAS LOCATIONS (GAS PROBES, VAPOR PROBES, UGP-1, AND AL-6) ARE LOCATED IN APPENDIX F.
NEW WELLS MW-25, MW-26, MW-34A, MW-34B, MW-35A, MW-35B, MW-44A, MW-44B, MW-45A, MW-45B, MW-46A, AND MW-46B ARE APPROXIMATE, BASED ON WELL INSTALLATION INFORMATION FROM GEOSYNTEC CONSULTANTS, AND NOT USED FOR CONTOURING. SURVEY DATA IS PENDING AND BEING CONDUCTED IN FEBRUARY 2021. DEPTH TO WATER AT THESE WELLS INSTALLED BY NOVEMBER 2020 ARE INCLUDED IN TABLE 2.
NO.
REVISION
DATE
SHEET TITLE: GROUNDWATER MONITORING NETWORK
PROJECT TITLE: ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY ALAMEDA COUNTY, CALIFORNIA
CLIENT
Waste Management of Alameda County, Inc.
SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3900 KILROY AIRPORT WAY, STE 100
LONG BEACH, CA 90806
(562) 426-9544 FAX (562) 427-0805
PROJECT NO. 01202209.10
DSN. BY: A. HUTCHENS
CHK. BY: E. ONUSKANYCH
APP'D FILE:
APP'T. BY: T. SCHMIESING
K. LISTER
DATE: FEBRUARY 2021
SCALE: 1" = 800'
FIGURE NO. 2
SOURCE: JUNE 3, 2020 TOPO PROVIDED BY WASTE MANAGEMENT
C:\Users\4803emo\appdata\local\temp\AcPublish_15408\ALRRF Fig 1 E-05 and MW-2B ODR DWG.dwg Feb 01, 2021 - 3:2pm By: 4803emo

Table 6.2-2
Fill Area 1 Analytical Results Summary
Altamont Landfill Resource and Recovery
Livermore, CA

Area	Sample ID	Acetone	Benzyl Alcohol	2, Butanone	Carbon Disulfide	Chloro-benzene	1,4-Dichloro-benzene	cis-1,2-dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichloroethane	Dichlorodi-fluoromethane	Dichloro-flouromethane	Diethyl either	Methylene Chloride	Methyl tert-butyl ether	Napthalene	Styrene	Tert-Butyl-Alcohol	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Vinyl chloride	Comment
West of FA1	MW-2A																									Monitoring Well
	MW-6																									Monitoring Well
Canyon South of Fill Area 1	E-05														X		X			X		X[3]				Corrective Action Well Matches Historical Data
	E-07							X	X				X	X	X		X				X	X		X		Corrective Action Well Matches Historical Data
	E-21																									Evaluation Well
	E-22																									Evaluation Well
	E-23																									Corrective Action Well
	E-03A																									Corrective Action Well
NE of FA1	MW-4A	X																								Monitoring Well
	MW-31	X[4]																								Monitoring Well
South of FA1	MW-5A																									Monitoring Well
	MW-7																									Monitoring Well
	MW-11																									Monitoring Well
East of Fill Area 1	E-20B							X	X					X	X		X			X		X[1]				Corrective Action Well Matches Historical data
	MW-20																									Downgradient Corrective Action Well
	MW-12																									Downgradient Corrective Action Well
	MW-27																			X						Downgradient Evaluation Well
Down-gradient of MW-12	PC-1B																	X		X						Monitoring Well
	PC-1C																									Monitoring Well

Notes
VOCs - Volatile organic compounds

[1] Compound was also detected in field or method blank at similar levels below the method RL. These detections could be a laboratory artifact.

[2] First detection

[3] Compound was also detected in trip blank.

[4] MW-31 was sampled in August and November. Only the sample colected in August detected acetone.

[5] MW-1A, MW-3B and MW-4B were also sampled during this event.VOCs were not detected on these wells for this sampling event.

[6] The water level at MW-12 and MW-20 fell approximately 14 feet and 17 feet since the 3rd Quarter of 2020. On 12/1/2020 MW-12 and MW-20 were purged dry and did not recharge until 12/3/2020.

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Table 6.2-3
Fill Area 2 Analytical Results Summary
Altamont Landfill Resource and Recovery
Livermore, CA

Area	Sample ID	Sample Date	Acetone	Benzene	Benzyl Alcohol	2, Butanone	Carbon Disulfide	Chloro-benzene	Chloroform	1,4-Dichloro-benzene	cis-1,2-dichloroethene	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dichloropropane	1,2-Dichloroethane	Dichlorodi-fluoromethane	Dichloro-flouromethane	Diethyl ether	Methylene Chloride	Methyl tert-butyl ether	Napthalene	Styrene	Tert-Butyl-Alcohol	Tetrachloroethene	Tetrahydrofuran	Toluene	Trichloroethene	Xylenes	Comment
N of FA2	MW-19	11/30/2020																											Monitoring Well
Fill Area 2	MW-24	10/15/2020																								X[1]		X[1]	Interim Phase 3 Groundwater Monitoring Wells
	MW-25	10/15/2020																											Interim Phase 3 Groundwater Monitoring Wells
	MW-26	10/16/2020		X[1]																						X[1]			Interim Phase 3 Groundwater Monitoring Wells
	MW-34B	11/11/2020																								X[1]			Final POC Groundwater Monitoring Wells
	MW-35A	11/11/2020																								X[1]			Final POC Groundwater Monitoring Wells
	MW-35B	11/11/2020																								X[1]			Final POC Groundwater Monitoring Wells
	MW-44B	11/10/2020																								X[1]			Final POC Groundwater Monitoring Wells
LSI-3	MW-8A	9/4/2020																											Monitoring Well
		11/4/2020																											
	MW-8B	9/11/2020																					X						Monitoring Well
		11/4/2020																											
	MW-15B	11/4/2020																											Monitoring Well
		11/4/2020 D																											

Notes
VOCs - Volatile organic compounds
[1] First detection
[2] MW-10, MW-13B, MW-16, MW-17R, MW-18, MW-34A, MW-44A, PC-1C, PC-2A, PC-2C, PC-6B(R), P-2, WM-2 were also sampled during this event. No detection of VOCs were reported for this sampling event.
[3] MW-9 was not sampled because it is well outside the downgradient areas of Fill Area 2 Phse 1 and LSI-3.
[4] MW-13A, MW-15A, MW-17, PC-1A, PC-6B and ARC-2 were dry during the Second Semiannual 2020 sampling event and were not sampled.
[5] MW-23A and MW-23B were abandoned in September 2020.
[6] Final POC Groundwater Monitoring Wells MW-45 A/B and MW-46 A/B will be sampled for the first time during First Quarter 2021.

LANGAN

LANGAN

501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001

Memorandum

To: Community Monitor Committee

From: Langan – Community Monitor

Date: April 2, 2021

Re: **CMC Meeting of 04/14/21 – Agenda Item 6.2 – Review of Reports Provided by ALRRF: Air Emission Report**

Air Emissions Report

The most recent Semi-Annual Report to the Bay Area Air Quality Management District (BAAQMD) covers the period from June 1, 2020 through November 30, 2020. The key points from this document are:

- New gas wells brought on line – During the reporting period, 19 new landfill gas extraction wells were brought on line.

- High temperature wells – During the reporting period, two wells (well 818 and 782) showed high temperatures (131 F or higher). 21 wells showed oxygen exceedances during a monitoring event within the reporting period. Nine of the 21 wells were corrected, eight were decommissioned, and the remaining three wells had exceedances during the initial monitoring event and remain under evaluation.

- Recent gas well decommissions – During the reporting period, a total of 12 existing wells were decommissioned, i.e., shut down and disconnected from the gas extraction system because they had become unproductive.

- Surface emissions monitoring - For the second quarter of 2020, monitoring took place in June and August; for the third quarter of 2020, it took place on August 18 and 19, 2020. In June, for the second quarter of 2020, there were 33 exceedances of the 500 parts per million by volume (ppmv) methane threshold. In August 2020, for the third quarter, the number of exceedances decreased to 23. All of the corrective actions to block these emissions were successful and passed their 10-day and 30-day follow-up tests.

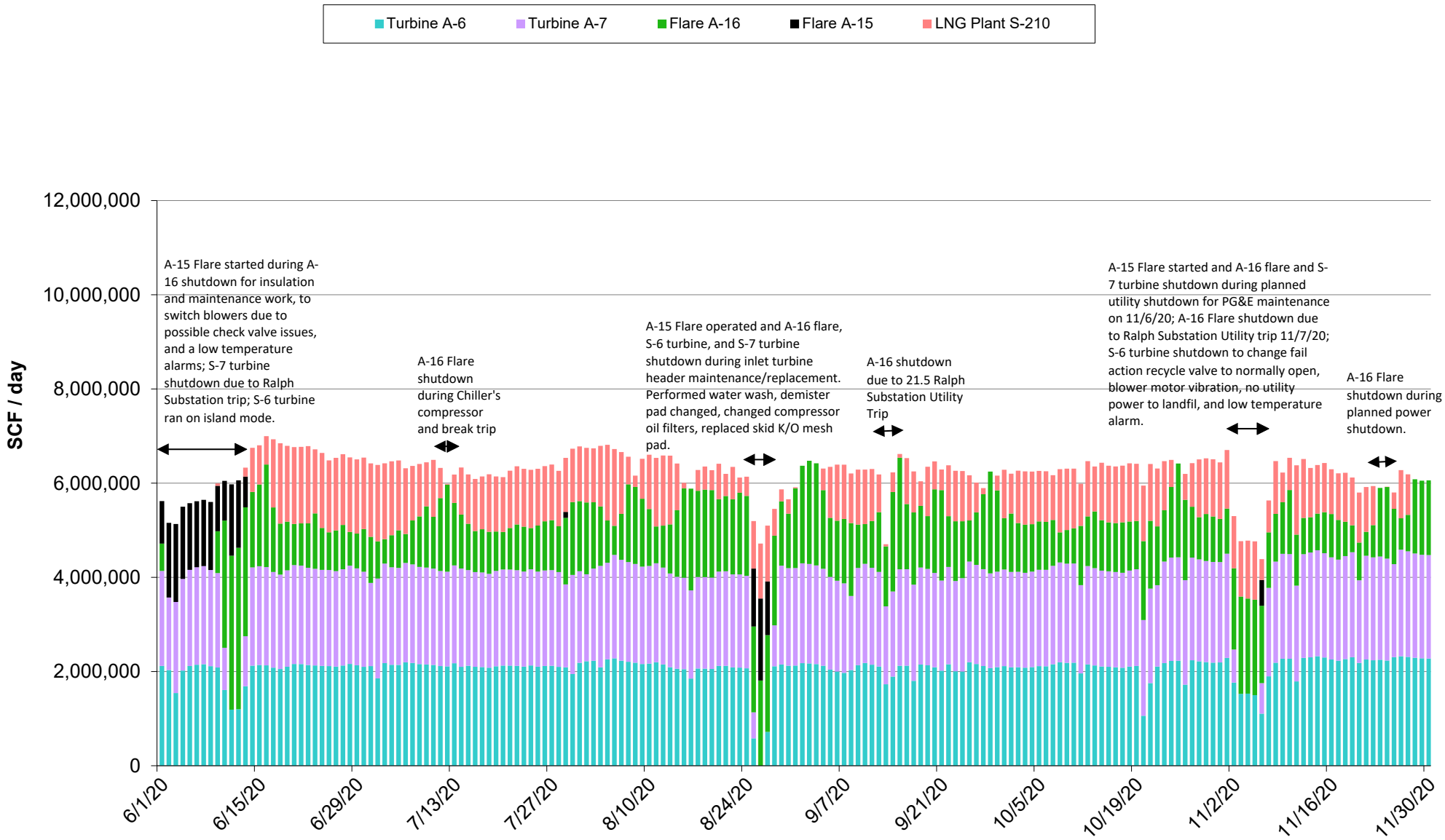
- Emission Control Device Source Tests – Currently the operating emission control devices for landfill gas at the ALRRF consist of two turbines (S-6 and S-7) and two flares (A-15 and A-16). The two turbines were tested for compliance with emission limits in January 2020, while the main flare, A-16, and the back-up flare, A-15, were tested in March 2020. All three devices passed except A-16. As required by the BAAQMD Permit 8-34-301.1 and Condition Number 19235, the flare does not meet the non-methane organic carbon (NMOC) emission rate of less than 30 ppmv as methane, because the results were 43.0, 33.6, and 41.3 NMOC on March 25th and 26th.

- Gas Migration at Perimeter Probes – In this reporting period, methane exceeding regulatory threshold of 5% was not found in any of the 50 perimeter probes installed around Fill Areas 1 and 2. Probe GP-20C and probe GP-8C, both have historically had higher methane values that have been proven to be naturally occurring and not related to landfill operations. No exceedances were detected during this monitoring event.

- Gas Migration Near Groundwater Monitoring Wells – Throughout this monitoring period, the landfill gas wells nearest to groundwater monitoring wells E-05/E-07, E-20B and MW-4A continued to be operated with as much vacuum as they would tolerate without pulling in air from above the ground surface. This was an effort to prevent landfill gas from reaching those groundwater wells, where low concentrations of VOCs have been detected.

Figure 6.2.2 shows the amounts of landfill gas consumed by each of the gas-consuming devices at the ALRRF. As shown in the figure, the gas system ran for most of the six-month reporting period. There were few major down times for the A-16 Flare, a unique event in June due to insulation and maintenance work in order to switch blowers due to possible check valve issues, low-temperature alarms, and a Ralph Substation trip, a unique incident in August due to inlet header turbine header maintenance and replacement, and a planned utility shutdown for PG&E maintenance and Ralph Substation Utility Trips. There were numerous but brief unplanned interruptions most of which were confined to a single gas control device at any given time.

Figure 6.2.2 - ALRRF Daily LFG Flow
(values derived from Title V Report)



LANGAN

501 14th Street, 3rd Floor Oakland, CA 94612 T: 510.874.7000 F: 510.874.7001

Memorandum

To: ALRRF Community Monitor Committee

From: Langan – Community Monitor

Date: April 2, 2021

Re: **CMC Meeting of 04/14/2021 – Agenda Item 6.3 – 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 for the January 2021 meeting 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[1].

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.

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. Other 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.

[1] https://altamontcmc.org/agendas-etc-2020-2023

Topic List

Landfill Operations

- ET Cover Planning, Design and Installation
- Drainage System Repair and Maintenance

Monitoring Wells

- Concentration Limits for Monitoring Wells
- New or Pending Monitoring Wells
- Exceedances in Monitoring Wells

LANDFILL OPERATIONS

ET Cover Planning, Design and Installation

Topics

From	Format | Date	Key Point(s)
ALRRF/ Geosyntec	Letter | Sep 25, 2017	Notified CVRWQCB staff that delay is needed until late 2018 due to unexpected differential settlement, which must be corrected.
CVRWQCB	Meeting Notes | May 17, 2018	Noted that a decision about ET Cover location is expected shortly after next aerial topography survey, end of June 2018.
ALRRF/ Geosyntec	Letter, Plans and Specs | Jul 24, 2018	Recommendation from Geosyntec to proceed; drawings and specifications included.
CVRWQCB	Letter | Dec 5, 2018	**Notice of Violation** for failure to notify Water Board staff 14 days prior to beginning construction of the ET cover demonstration project.
ALRRF	Letter | Feb 1, 2019	Refuted the failure-to-notify violation, noting that CVRWQCB compliance and permitting staff were kept informed prior to construction.
ALRRF/ Geosyntec	Construction Report | Feb 12, 2019	The Construction Quality Assurance report was transmitted. It documents the placement of soil (including thickness and compaction), hydroseed, and monitoring devices. The scope of this report had been approved by the CVRWQCB on July 27, 2018.
ALRRF/ Geosyntec	Letter | Feb 21, 2020	This letter transmits the written responses to the comments received on the CQA for ET cover that were verbally discussed during a conference call on 8 January 2020.

ALRRF/ Geosyntec	Report | Dec 16, 2020	This 2019 Annual Progress Report for the ET cover notes the following: - Vegetation along the top deck (except the southeast corner) and along the sideslopes and ditches was generally well established by the end of 2019. The maximum and average root depths indicated that the vegetation across the ET cover was healthy and progressing well. In the areas where vegetation was limited, Geosyntec advised to sacrifice the soil so that the areas can be re-hydro-seeded as part of post-closure maintenance. - The ET cover experienced minimal erosion except a small area at the end of the mid-slope bench ditch, beyond the final cover limit. Geosyntec recommends that the area be re-graded as part of general maintenance of the drainage along the benches to promote runoff. - Cracks, likely due to desiccation, were observed. Geosyntec recommends annual assessment of the occurrence and depth a cracking and if significant cracks are observed in the future, test pitting for root depth should be expanded to measure the depth. - Although infiltration depths for all four monitoring locations exceed the depth of the cover, infiltration could be attributable to low vegetation density as roots haven't reached maturity. As roots mature, transpiration will increase and decrease liquid flux through the cover. Geosyntec recommends to continue monitoring the sensor nests to measure changes in moisture as vegetation matures.

ALRRF/Geosyntec	Report | January 15, 2021	Provides a report documenting the CQA monitoring activities for the construction of the approximately 19.7-acre Fill Area 2, Phase 3 containment cell and storm water improvements. The construction occurred between 30 January 2020 through 31 December 2020 and all significant construction was completed and accepted by the owner. In 2021, after approval of construction and prior to waste placement in Phase 3, in order to allow leachate from upgradient Phases 1,2, and 2B to flow through the Phase 3 LCRS the following must be completed: 1. LCRS valve keeping leachate from flowing directly into Phase 3 from the Phase 2B main collection pipe will be opened 2. LCRS valve at southern termination will be opened to allow leachate to flow into the conveyance pipe that discharges to the temporary leachate tanks 3. The existing Phase 2B LCRS pipe boot will be severed to allow direct contact between Phase 2B and Phase 3 LCRS gravel layer 4. Existing Phase 2B by-pass pipe will be removed from Phase 3 footprint LCRS gravel thickness required at transition between Phase 2B and Phase 3 main collector trench will be placed. Followed by a layer of 8 oz/sy filter nonwoven geotextile, and the gravel window materials to complete construction of the remaining Phase 3 containment system components.
ALRRF/Geosyntec	Report | February 1, 2021	Design report provides the design basis, plans, specifications, CQA plan and supporting documentation for Fill Area 2, Phase 4 cell construction and stormwater improvements to be reviewed by the CVRWQCB. Phase 4 cell will not adjoin the recently completed Phase 3 cell at its southern, down-canyon edge. Excavation of Phase 4 cell is currently occurring and at the beginning of May, liner containment system construction will start.

Drainage System Repair and Maintenance Topics

ALRRF/Geosyntec	Letter | Jan 8, 2021	Letter notifying RWQCB of necessary repair and/or maintenance of the external drainage system in Area A and C. Letter provides analytical results from the leachate sample collected at Area A; parameters were

		generally consistent with the results of historical leachate sampling conducted at LS, LS2, and LSI-1, although dissolved solids content was higher than typical concentrations collected from the LCRS. The letter also described additional actions taken to intercept and collect potential seepage from Area A and C. In Area A, existing drainage was extended up slope to provide additional collection and conveyance to the LCRS on December 7, 2020 and no further leachate migration has been observed. Temporary pumping equipment is still removing residual but the flow rate is minimal. In Area C, a temporary sump and pump at the lowest point of Area C was installed. Drainage was then allowed to bypass the clogged section of the piping to convey liquid to the LCRS. Between December 14 and 24, 2020, the clogged section of piping was removed and replaced with larger twin sections. WMAC will install a chemical dosing skid to inject prescribed anti-scalant agent to deter solidification of leachate in the drainage system by January 15, 2021.

MONITORING WELLS

Concentration Limits for Monitoring Wells Topics

CVRWQCB	Letter | Jan 11, 2019	Concurred with most of the limits proposed in the October report but noted that for wells PC-2A and WM-2, not enough samples were taken. Prior limits to remain until four samples taken from each well. Also adjusted downward 17 limits at 7 different wells, excluding outliers in historical data.
ALRRF	Letter | Feb 15, 2019	Provided a summary table of agreed-upon concentration limits for monitoring wells in FA1 and FA2.
ALRRF/ Geochem Applications	Report | Jul 31, 2019	For FA2 monitoring wells not yet installed, provides proposed concentration limits that would be applicable immediately after well installation, so that groundwater quality can be evaluated as soon as the wells are in service. Methodology is based on values from several nearby existing wells, as discussed between ALRRF and CVRWQCB staff.

ALRRF/GeoChem Applications	Letter | Report Feb 21, 2020	Provided additional concentration limits for both the alluvial and unweathered bedrock zones for monitoring wells in FA2, based on combined interwell/intrawell statistical analysis, which may be used to define concentration limits as soon as a new well is installed.
ALRRF/GeoChem Applications	Report | July 27, 2020	Provided additional intra-well concentration limits for monitoring parameters and constituents of concern for Fill Area 2 compliance monitoring well MW-17R that was installed in 2018 to monitor the Fill Area 2 Class II Surface Impoundment (LSI-3). The concentration limits are based on monitoring data collected during the 2018-2019 time period.
ALRRF/GeoChem Applications	Letter & Report | October 26, 2020	2020 2-year update to groundwater concentrations limits (CLs) for monitoring parameters for Fill Areas 1 and 2. The updated CLs are based on historical baseline monitoring data through June 2020 for each constituent and were statistically calculated using the intrawell data evaluation procedure. The 2020 updated CLs were similar to the previous CLs, which had been presented in 2016 and 2018.
CVRWQCB	Letter | January 11, 2021	Letter requests ALRRF to submit an amended WQPS Report by April 1, 2021 as strict use of Table VIII is no longer adequate to comply with the MRP for the following reasons: 1. Table only lists WQPS that were approved in 2016 when the MRP was adopted 2. The MRP was adopted before waste was placed in FA2 3. Multiple new FA2 detection monitoring program wells have been installed since the MRP was adopted 4. Section C.1 of the MRP state the WQPS reports are to include "all monitoring points consistent with this Order". The MRP also discusses the addition of new wells and the calculation of additional concentration limits. The letter also states all additional data, documents, and reports that must be included in the amendment.

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.
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, **became artesian after the casing was installed**. 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.
ALRRF / Geosyntec	Work Plan | Feb 25, 2020	Provides a work plan for Fill Area 2 Phase 3 monitoring well installation and destruction. The plan proposed the installation of three new monitoring wells, MW-24, MW-25, and MW-26 as well as one gas probe, VP-3, in Fill Area 2. The proposed schedule states that on April 27, 2020 MW-24 and VP-3 will be installed and MW-22, MW28, and VP-2 (from Phase 2) will be destroyed. In addition, in August 2020, monitoring wells MW-23A and MW-23B (from Phase 2) will be destroyed and monitoring wells MW-25 and MW-26, will be installed.

From	Format | Date	Key Point(s)
ALRRF / Geosytec	Report | May 29, 2020	Provides a report documenting the installation of Fill Area 2 Phase 3 monitoring well MW-24 and soil gas probe VP-3 as well as the destruction of Fill Area 2 Phase 3 monitoring wells MW-22 and MW-28 and soil gas probe VP-2 to allow construction of FA2 Phase 3 to progress. The monitoring wells and gas probes were installed and destroyed in accordance with the February 25, 2020 Fill Area 2 Phase 3 Monitoring Well Installation and Destruction Work Plan (Geosyntec 2020). Additional monitoring wells MW-25 and MW-26 for Phase 3 are proposed in the Work Plan to be installed and MW-22A and MW-22B were proposed to be destroyed in August 2020.
ALRRF / Geosytec	Letter & Report | October 29, 2020	Provides a report documenting the installation of eight FA-2 groundwater monitoring wells from September 15 to 21, 2020. The new monitoring wells were installed downgradient of the planned liner extent of FA2 Phase 3 (MW-25 and MW-26) and the final anticipated FA2 lateral extent (MW-34A/B, MW-35A/B and MW-44A/B). In addition, two monitoring wells, MW-23A/B were destroyed on September 14 and 15, 2020. The monitoring wells and gas probes were installed and destroyed in accordance with the February 25, 2020 Fill Area 2 Phase 3 Monitoring Well Installation and Destruction Work Plan (Geosyntec 2020).
ALRRF/ Geosyntec	Work Plan Addendum | November 11, 2020	Addendum to the February 25, 2020 FA-2 Phase 3 Monitoring Well Installation and Destruction Work Plan. Two additional monitoring well clusters (MW-45 and MW-46) were proposed to be installed, at the conceptual planned FA2 final buildout extent in the thalweg of the valley as requested by the CVRWQCB. One well in each well cluster will be installed in the first encountered groundwater, which is anticipated to occur in weathered rock. A second well will be installed at each well cluster in groundwater in unweathered rock.

From	Format | Date	Key Point(s)
CVRWQCB	Letter | November 18, 2020	CVRWQCB response to November 11, 2020 *Fill Area 2 Phase 3 Monitoring Well Installation and Destruction Work Plan Addendum*. CVRWQCB approved the installation of wells MW-25 and MW-26 as proposed in the Addendum, Work Plan, and SOP with the following conditions: 1. As noted in the Work Plan, if first groundwater occurs in alluvium, each cluster well shall be completed with three screened intervals, with the first well screen installed across the water table in the alluvial zone, followed by wells screened in the underlying weathered and unweathered bedrock. Given groundwater has been observed in nearby well P-2 as shallow as 2.80 feet below ground surface, a third shallow alluvial screened zone is expected for cluster wells MW-45 and MW-46. 2. Following well development, these two cluster wells, along with all other final FA-2 limit wells, are to be sampled quarterly until intrawell water quality protection standard CLs have been proposed for each sampling interval.
ALRRF/Geosyntec	Report | January 27, 2021	Provides a report documenting the installation of four new wells (MW-45A, MW-45B, MW-46A, and MW-46B) in accordance with the November 11, 2020 Fill Area. An additional well will be installed and screened from 40 to 50 feet bgs in the MW-45 well cluster during the next monitoring well installation field event conducted at the site in 2021.

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.

From	Format | Date	Key Point(s)
CVRWQCB	Letter | Jan 11, 2019	Responded to ALRRF Oct 12, 2018 letter; concurred with proposed actions and required quarterly sampling.
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.
ALRRF/SCS	Letter & Report| Jan 9, 2020	Optional Demonstration Report. Verified statistical exceedances. Exceedances do not appear to be due to landfill leachate or LFG migration. The presence of the unlined storm water basin SB-H adjacent to wells MW-8A and MW-8B, soil disturbance during construction, and increased infiltration of storm water through the underlying soil and into groundwater, may be the causes of the increases in COD concentrations that triggered the statistical exceedances. Pipe-joining materials used for pipe installation during construction of the storm water basin appears to be the source of the THF detections in these wells. The report recommends continued semiannual groundwater monitoring and tracking the resulting data.
CVRWQCB	Letter| Jan 24, 2020	Agrees with optional demonstration and requires: 1. Quarterly sampling of PC-2A, PC-2C, P-2, and ARC-2 (surrounding wells). This sampling shall begin with the Second Quarter 2020 sampling event and shall extend for a minimum two-years. 2. Comparison of exceedance wells to surrounding wells. 3. Reporting 30 days after sampling events

From	Format | Date	Key Point(s)
ALRRF	Letter | May 21, 2020	Verification resampling results for groundwater monitoring wells MW-8B, MW-10, PC-1B, and PC-2A in Fill Area 2 that had initial exceedances of concentration limits during the second semiannual 2019 monitoring event. Resampling was performed on March 11, 2020 and April 1, 2020. The results confirmed the initial statistical exceedances for chloride in MW-10 and bicarbonate alkalinity in PC-1B were not confirmed; however, the statistical exceedances for chloride in MW-8B and dissolved calcium, chloride, and TDS in PC-2A were confirmed. Fill Area 2 wells with the confirmed statistical exceedances (MW-8B and PC-2A) are not located in close proximity or directly downgradient to the current active Phases 1 or 2 fill areas. Therefore based on the earlier Optional Demonstration Report (ODR) and this supplementary information, WMAC considered the changes in water chemistry to be unrelated to Fill Area 2 landfill activities and most likely due to the presence of the unlined storm water Basin H adjacent to the well, soil disturbance during construction of the basin, and/or increased infiltration of storm water. PC-2A is also located adjacent to storm water basin H and is thus likely to be affected by the same processes. WMAC proposed that MW-8A and MW-8B were added to the list of wells sampled on a quarterly basis and that the forthcoming summary document for the study area include a review of the parameter changes noted during the second semiannual 2019 period.

From	Format | Date	Key Point(s)
CVRWQCB	Letter | Jun 1, 2020	Response to statistical exceedance of inorganic constituent concentrations in well PC-1C in FA2. Once the Discharger's PC-1C investigation was expanded to include other up-gradient wells, a clear pattern of increasing inorganic concentrations in groundwater west of PC-1C was also observed in E-20B and MW-12. The E-20B release from FA1 impacted groundwater in FA2 and by 31 August 2020, Waste Management must submit: 1. A revised site conceptual model to address the far reaching impact of the E-20B release, as well as the LFG releases recorded at MW-4, GP-8, and GP-9. 2. An updated EFS to make appropriate changes to the E-20B correction action program. 3. A proposal to expidite the establishment of background groundwater concentration limits across FA2 before E-20B release impacts other FA2 wells. Well will need to be installed immediately, so that a background data set for each individual well can be obtained before any other FA2 wells are impacted. An AROWD to make appropriate changes to the E-20B release correction action program 90 days after submitting the EFS as required above.
ALRRF/SCS	Letter & Report | August 25, 2020	Groundwater monitoring conducted in FA-2 wells MW-8A, MW-8B, MW-13B, PC-1B, PC-1C, PC-2A, PC-2C, and P-2. MW-8B showed an initial statistical exceedance for dissolved calcium and total dissolved solids. Other than MW-8B, no new initial concentration limit exceedances were identified for inorganic monitoring. Recurring statistical exceedances for MW-8B (chloride), PC-1B (dissolved calcium), PC-1C (dissolved calcium, chloride, sulfate, and total dissolved solids) and PC-2A (dissolved calcium, chloride, and total dissolved solids) were observed. Previous concentrations of THF and naphthalene were not detected in the samples, and other than a single below RL concentration of toluene, no VOCs were detected in the samples. PC-2A, PC-2C, P-2 and ARC-2 are continued to be sampled quarterly to monitor statistical exceedances.

From	Format | Date	Key Point(s)
ALRRF	Letter | October 16, 2020	Letter states that during the first semiannual 2020 monitoring event, naphthalene in MW-2B and bis(2-ethylhexyl) phthalate in E-05 were observed above the reporting limit. Naphthalene was detected in the May 2020 MW-2B sample at 1.1 µg/L, slightly above the reporting limit (1.0 µg/L). Re-sampling occurred on August 12, 2020 where naphthalene was not observed and September 3, 2020 where naphthalene was detected below the RL. Therefore, the initial naphthalene detection from May 2020 was not confirmed. Bis(2-ethylhexyl) phthalate was detected at 26 µg/L, above the RL of 10 µg/L in May 2020 at E-05. After re-sampling once in August and twice September 2020, it was reported at 22 µg/L, 16 µg/L and 13 µg/L respectively; resampling confirms the initial detection in May 2020 but showed decreasing concentration over time. This confirmed detection in E-05 does not appear to be due to the influence of either LFG or leachate from ALRRF as bis(2-ethylhexyl) phthalate is not generally found in LFG and historical concentration in leachate samples since 2005 have not been elevated. WM proposed to conduct a study to determine the nature of bis(2-ethylhexyl) phthalate detection in an ODR which will be submitted within 90 days from October 9, 2020.
ALRRF/SCS Engineers	Report | January 8, 2021	Groundwater monitoring conducted at corrective action monitoring well E-05 concluded that it is unlikely that the source of bis(2-ethylhexyl) phthalate detected is associated with leachate, LFG, or laboratory contamination. Although the source cannot be determined, the monitoring well casing integrity and dedicated pumping system need to be considered as it is one of the oldest well on site (installed 1985) and has a 33 year old dedicated QED bladder pump installed in 1987. Based on a discussion with WMAC, SCS Engineers proposes the monitoring well E-05 be replaced and that further evaluation of groundwater quality be based on data from the replacement well. A workplan will be prepared and submitted with 90 days of RWQCB concurrence.

LANGAN

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Memorandum

To: ALRRF Community Monitor Committee

From: Langan, Community Monitor

Date: April 2, 2021

Re: **CMC Meeting of 04/14/21 – Agenda Item 6.4 – Reports From Community Monitor**

Altamont Monthly Operations and Records Review

Community Monitor site visits have been suspended by ALRRF during the Shelter-in-Place period. Waste Management has declared that the COVID-19 pandemic is a force majeure event, and therefore their policy formally "only allows for agency inspectors, or regulators who perform compliance related activities, to have access to the site at this time." A site visit was allowed for the month of November, during a period when the state and county allowed additional activities to be conducted.

In lieu of site visit reports, summaries of LEA inspections available on CalRecycle's website, are provided for the months where site visits were not completed. The reports in this item include:

- LEA Inspection for December, which took place on December 28, 2020.
- LEA Inspection for January, which took place on January 28, 2021.
- LEA Inspection for February, which took place on February 19, 2021.

Details about operations-related matters are provided in the attached reports. Issues that cause special concern are marked with yellow rectangles in the monthly reports. For the first quarter, the current fill sequence and Active Face is located at the Winter Pad and at Fill Area 2, Phase 2. Windblown litter issues continued.

Also attached are graphs showing monthly tonnages by type of material for the most recent 12-month period. Figure 6.4-1 shows the breakdown of materials that make up Revenue-Generating Cover. Figure 6.4-2 shows these same quantities, plus the Municipal Solid Waste (MSW) and Special Waste tonnage for each month.

ALRRF Community Monitor Monthly Report ***December 2020***

Monthly Tonnage Report for December 2020, received January 15, 2021

Tonnage Summary:		tons	
	Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	82,555.05	
1.2	Other Out of County Disposal Tons	2,572.99	
	subtotal Disposed	85,128.04	
	Disposed, By Source Type		
2.1	C&D	152.36	
2.2	MSW	80,742.18	
2.3	Special Wastes	4,233.50	
	subtotal Disposed	85,128.04	
		0.00	0.00%
	Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	2.01	
2.5	Revenue Generating Cover	39,467.19	
	Total, 2.1 - 2.5	124,597.24	
	Materials of Interest		
2.3.1	Friable Asbestos	299.65	
2.3.2	Class 2 Cover Soils	7,924.48	
2.5.1	Auto Shredder Fluff	8,778.68	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00	
2.5.3	MRF Fines for ADC	713.35	

ALRRF Reports from Community Monitor **December 2020**

Review of LEA Site Inspection on December 28, 2020

For the month of December, ALRRF did not allow site visits from the Community Monitor because of the COVID-19 emergency and Shelter-in-Place order. The LEA conducted the inspection using a modified procedure to limit person-to-person contact.

The LEA conducted an inspection on December 28, 2020. The general conditions noted in the report and pictures appear to be good, however heavy fog obscured server areas around the facility, particularly FA 1 and FA 2. The LEA conducted this inspection virtually and asked clarifying questions that could not visibly be seen. Due to the nature of the virtual inspection, the LEA was unable to verify whether there was any windblown debris or litter leading to or away from the entrance to the ALRRF. These areas will be observed at the next possible in-person inspection. Green beacon lights were observed alongside all paved main access roads around the site. The Operator noted that the beacon lights leading from the CASP to Fill Area 2 that were previously coated in mud and dirt were cleaned and functioning properly.

Light traffic was observed at scalehouse area and landfill slopes to the south but the area remained in good condition. The Linde gas plant and truck wash at the scalehouse were in operation at the time of inspection. The truck wash operating indicated that there were no tracks out from the facility due to recent rains and the operator demonstrated its use at the end of the inspection. No issues observed.

Fill Area 1 was reportedly in good condition. According to the operator, there was less than 0.2 inches of rain at the site overnight. Due to the reduced visibility from the heavy fog, the bird perch could not be seen. The bench roads had no standing water, depression areas, or litter and activities were minimal and overall appeared to be in good condition. The inspector did not observe any bird activity during the inspection at Fill Area 1.

The Solidification Pit Area was maintained and in good condition; no customers were observed unloading solidification materials into the Blue or Yellow Flag Solidification Pit at the time of inspection. However, an excavator was observed mixing TASW with Yellow Flag to be utilized as ADC at Fill Area 2. A D6 was observed pushing the Yellow Flag material and TASW so that the excavator could solidify this material.

The winterized pad, which is only utilized during muddy or wet weather conditions, was observed in Fill Area 2, Phase 1. The winter pad was being extended to the north/northeast with inert debris and concrete; a single tipper was located in the area.

When the weather conditions are not wet and muddy, the fill sequence and active face are focused on the southeastern position of Fill Area 2, Phase 2 which is currently about 100 feet by 100 feet. There were two tippers located at Fill Area 2, Phase 2 that were unloading at the active face in Fill Area 2. Two dozers were also present and actively moving tipped materials towards the compactor, spreading and compacting materials to the south. The LEA also observed soil and ADC stockpiles to the northeast of the active

face, cover stockpiled being unloaded on the lower area in Fill Area 2, Phase 2, a haul truck dropping off auto shredder ADC on the northeast and southeast sides of the active face.

The outside slopes of Fill Area 2 as well as previous active faces were being covered out with additional soil. Areas on east bench, roads, and slopes where windblown litter was present have been cleared by litter crews. At the eastern bench road and the south edge of Fill Area 2, Phase 2 bull screen were present to prevent debris from reaching the preparation area of Fill Area 2, Phase 2B and 3. In addition, new permanent wind fences were connected the existing faces on the east side leading northeast to reduce litter. Accumulated litter was collected to prevent it from being blown to the east and on to the "Back 40".

The public area, just west of the active face tippers, was also observed during the inspection. Customers were unloading in these areas wearing proper PPE, vest and hat, and there we no safety or spacing issues observed.

The LEA observed less bird activity during the virtual inspection at Fill Area 2 compared to previous inspections. The operator utilized two bird cannons and screamers to scatter birds but none were observed in the active face.

The operator noted that Sukut is still preparing for Phase 3 earthwork. Several areas appeared to be cleared and graded in preparation of the placement of the liner systems. More slopes to the southeast/southwest of the current Active Face had liner/operation fill layer placed on the slope. The inspector noted that all alarms on heavy equipment are audible and beacon lights can be seen flashing.

The truck wash in Fill Area 2 was in operation during the inspection. In combination with the truck wash at the scalehouse, the Fill Area 2 truck wash was effective at keeping debris and mud off of the roads. Windblown litter was previously observed along the access road and permanent wind fences around the Back 40 sloped and valley but has improved. The area where debris build up occurred before, behind rocks and the permanent fence near the Sukut water pond, was cleared and litter crew will continue to target these areas. No windblown debris was observed escaping the facility or outside the site boundary to the east.

The operator noted that there was one confirmed COVID-19 positive test from an ALRRF employee. WMAC initiated all internal protocols to ensure employee safety. The positive test will be included in the special occurrences log.

No violations or areas of concern were reported in the December inspection report.

Special Occurrences

On December 3, 2020 at 9:00 AM, Altamont's management was notified of a positive COVID-19 case with symptoms. Altamont policy and directive mandated that the employee could not return to work until said employee completes Self-Certification health screening, experiences at least 72 hours fever free without the use of fever-reducing

medication, the other COVID-19 symptoms improve, at least 10 days have passed since the symptoms appeared, and the employee was not in close contact with confirmed COVID-19 cases during absence.

ALRRF Community Monitor Monthly Report ***January 2021***

Monthly Tonnage Report for January 2021, received February 12, 2021

Tonnage Summary:		tons	
	Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	83,913.80	
1.2	Other Out of County Disposal Tons	1,181.30	
	subtotal Disposed	85,095.10	
	Disposed, By Source Type		
2.1	C&D	538.88	
2.2	MSW	81,868.96	
2.3	Special Wastes	2,687.26	
	subtotal Disposed	85,095.10	
		0.00	0.00%
	Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	3.39	
2.5	Revenue Generating Cover	20,183.88	
	Total, 2.1 - 2.5	105,282.37	
	Materials of Interest		
2.3.1	Friable Asbestos	247.32	
2.3.2	Class 2 Cover Soils	3,988.36	
2.5.1	Auto Shredder Fluff	7,875.03	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00	
2.5.3	MRF Fines for ADC	589.33	

ALRRF Reports from Community Monitor **January 2021**

Review of LEA Site Inspection on January 28, 2021

For the month of January, ALRRF did not allow site visits from the Community Monitor because of the COVID-19 emergency and Shelter-in-Place order. The LEA conducted a virtual inspection to limit person-to-person contact.

The LEA conducted an inspection on January 28, 2021. The general conditions noted in the report and pictures appear to be good and similar to previous inspections, and the weather rainy for the duration of the inspection. Due to the nature of the virtual inspection, the LEA was unable to verify whether there was any windblown debris or litter leading to or away from the entrance to the ALRRF. These areas will be observed at the next possible in-person inspection. A haul truck was observed moving materials from the Solidification Pit Area. Despite the rain, no erosion or debris was observed on the slopes facing the Boneyard or the surrounding slopes to the east. The truck wash at the scalehouse was in operation during the inspection to ensure no track out from the facility due to recent rains.

Fill Area 1 was reportedly in good condition. Due to the reduced visibility from the heavy rain and fog, the bird perch could not be seen. Several pallets of sandbags appeared to be staged on the top of Fill Area 1 that were not there during the previous inspection. No birds were observed flying around Fill Area 1 or the immediate surrounding area. All roads at Fill Area 1 were bladed to prevent buildup of mud from tire tracks and prevention of ponding from rain water; the bladed mud is pushed to the side and brought to Fill Area 2.

The truck wash in Fill Area 2 was in operation during the inspection to prevent track out onto the paved road leading to Fill Area 1. In combination with the truck wash at the scalehouse, track out of the facility onto the road should be minimal. The active face was observed in Fill Area 2 Phase 2, where dozers were currently track walking down the slope away from the active face and two tippers situated on the winter pad were in service to spread out the material from west to east. The outside slopes in Fill Area 2 were being covered out with additional soil and a single dozer was observed pushing TASW at the easternmost slope upwards to cover the garbage.

The LEA observed more bird activity during the virtual inspection at Fill Area 2 compared to previous inspection. According to the operator, there were approximately 300 to 400 seagulls flying around Fill Area 2. The operator utilized two bird cannons and screamers to scatter the birds; the birds scattered. Cattle were observed grazing at the hill at the "Back 40" but no issues were observed.

No violations or areas of concern were reported in the January inspection report.

Special Occurrences

On January 22, 2021, the first loads of fire debris were accepted from Santa Clara County and disposed in Fill Area 2.

ALRRF Community Monitor Monthly Report ***February 2021***

Monthly Tonnage Report for February 2021, received March 12, 2021

Tonnage Summary:		tons	
	Disposed, By Source Location		
1.1	Tons Disposed from Within Alameda County	77,123.33	
1.2	Other Out of County Disposal Tons	6,019.61	
	subtotal Disposed	83,142.94	
	Disposed, By Source Type		
2.1	C&D	5,605.52	
2.2	MSW	75,784.53	
2.3	Special Wastes	1,752.89	
	subtotal Disposed	83,142.94	
		0.00	0.00%
	Other Major Categories		
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	1.38	
2.5	Revenue Generating Cover	44,869.81	
	Total, 2.1 - 2.5	128,014.13	
	Materials of Interest		
2.3.1	Friable Asbestos	212.72	
2.3.2	Class 2 Cover Soils	21,272.43	
2.5.1	Auto Shredder Fluff	7,736.68	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	0.00	
2.5.3	MRF Fines for ADC	657.32	

ALRRF Reports from Community Monitor **February 2021**

Review of LEA Site Inspection on February 19, 2021

For the month of February, ALRRF did not allow site visits from the Community Monitor because of the COVID-19 emergency and Shelter-in-Place order. The LEA conducted the inspection in a modified manner including observing social distancing, taking separate vehicles, and reviewing records offsite.

The LEA conducted an inspection on February 19, 2021. The general conditions noted in the report and pictures appear to be good and similar to previous inspections, and the weather intermittently rainy for the duration of the inspection. Illegal dumping was observed in some areas, several miles from the western main entrance along Altamont Pass Road, along the railroad tracks. Minimal windblown debris was observed leading up from Summit Garage towards the western access to the main entrance on Altamont Pass Road. The LEA discussed the current Treated Wood Waste regulations with the Operator to inquire what they currently were doing at the Facility. The Operator stated that in addition to load checking, the Sales team was conducting pre-disposal phone screening and material profiling with customers. ALRRF is looking into the DTSC Variance in regards to TWW for the facility.

Standing water was observed in the main office in the southeast corner or the caged area. The LEA requested that all standing water be removed to prevent attraction of vectors. Despite the rain, no erosion or debris was observed on the landfill slopes North A (near Scalehouse), West B (along main road and near maintenance), or South C (facing the main office and lower lift station). The Scalehouse had light traffic during the inspection, a holster was observed moving full trailers to the Active Face tippers in Fill Area 2, tire recycling operations, Linde gas plant, and the truck wash at the Scalehouse were in operation during the time of the inspection; no issues were observed.

Fill Area 1 was reportedly in good condition. Some erosion rills were observed along the inner edge of the dirt road to the Bird Perch, but were generally in good driving condition. Approximately 100+ birds were observed flying towards Fill Area 1 and the CASP from Fill Area 2 after screamers and bird cannons were utilized there. An operator at the Bird Perch and another employee at the Solidification pit were utilizing screamers and dispersed birds from that area as well. Several pallets of sandbags, bentonite chips, and K-rails appeared to be staged on the top of Fill Area 1 that were not there during the previous inspection. The Solidification Pit Area was maintained in good condition; a customer wearing PPE was observed unloading solidification materials into the Yellow Flag Solidification Pit at the time of inspection. Some windblown debris was observed on the slopes and the access road to the north of the Bird Perch. The windblown debris appeared to have been blown in from the CASP unscreened curing piles. The LEA suggested that ALRRF consider methods to prevent windblown debris from getting on the slopes/crossing the road in these areas and requested ALRRF to maintain areas free of windblown debris.

Drainage at Fill Area 1 was reinforced for wet conditions especially at the v-ditches along the east access road; no issues were observed. LSI 1 and 2 were maintained in good condition and below freeboard level. LSI 1 was filled with leachate from Fill Area 1 and rain water and was less than 2/3 full. LSI 2 had rain water but was mostly empty.

The active face was observed in Fill Area 2 Phase 2. The current fill sequence and Active Face is located at the Winter Pad and at the Fill Area 2, Phase 2 northeastern slope. The Active Face was smaller than the previous inspection and measured approximately 100' (L) x 50' (W) along the slope. Dozers were observed currently trackwalking down the slope away from the active face to be covered out. Two tippers were situated on the Winter Pad and were in service spreading the material out from the west to east. The south lower lift bench will also be covered from west to east. Aside from cover soil, ADC currently consists of TASW, Yellow Flag Solidification (mixed with TASW), and Shredded Tires (not used in wet weather). ADC was stockpiled at the toe of the Active Face slope to assist in easier covering of the wastes.

The LEA observed several hundred birds were present at the start of the inspection either in the waste or flying above Fill Area 2. Significant windblown debris was caught behind the Bull screens at the south edge of Fill Area 2; not much had spread to the new area for Phase 3 which was mainly clear of litter. Sukut continues to prepare the Phase 3 access road and construction work in Phase 3 areas. The road and slopes behind the new permanent wind fence have been cleared of all windblown debris to allow for grading of the Phase 3 access roads. The stockpile and staging area for Sukut equipment has been mainly cleared.

No violations or areas of concern were reported in the February inspection report.

On January 22, 2021, the LEA received a request for Altamont Landfill and Resource Recovery Facility on behalf of Waste Management of Alameda County, for an extension of the existing Emergency Waiver of minimum standards for landfill operations that was originally approved on September 30, 2020. The extension request was submitted in accordance with Title 14, California Code of Regulations (CCR), Section 17210 (et seq.) requirements as a result of the statewide wildfires and the planned disposal of fire debris at the site. The LEA approved the extension of the Emergency Waiver on January 29, 2021 not to exceed another 120 days from this approval date. There were no changes to the original terms of the Emergency Waiver Permitted Tons Per Operating Day and the Permitted Traffic Volume. According to the first 90 day report submittal, there was zero tonnage accepted related to Fire Debris. However, ALRRF expects to receive Fire Debris during the current approved extension period of the Emergency Waiver and will report jurisdiction of origin and Fire Debris related tonnage on the next 90 day report.

Special Occurrences

No special occurrences were reported in February.

Figure 6.4-1 Monthly Volumes of Revenue-Generating Cover

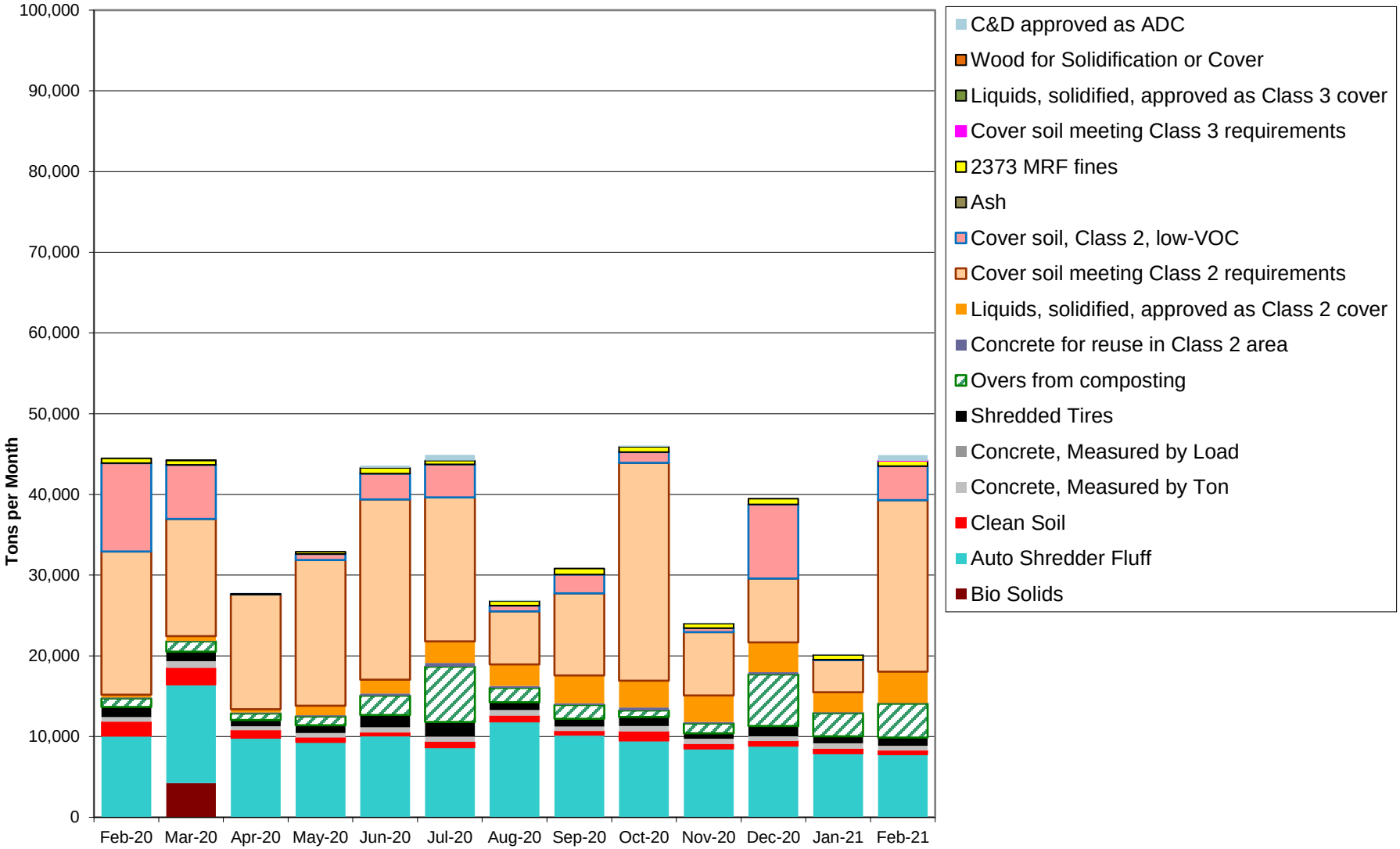

Figure 6.4-2 Monthly Volumes of Landfilled Materials