



# COMMUNITY MONITOR COMMITTEE

## Altamont Landfill Settlement Agreement

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

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

### VOTING MEMBERS

Robert Carling  
City of Livermore

Jerry Pentin  
City of Pleasanton

Donna Cabanne  
Sierra Club

David Tam  
Northern California  
Recycling Association

### NON-VOTING MEMBERS

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

## AGENDA

DATE: **Wednesday, July 12, 2017**  
TIME: **4:00 p.m.**  
PLACE: City of Livermore  
Maintenance Services Center  
3500 Robertson Park Road

1. Call to Order
2. Introductions
3. Roll Call
4. Approval of Minutes (From April 12, 2017)
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:**
    - Landfills Using Evapotranspiration Covers
    - Description of Fill Area 2 Excavation Phases
    - Limit on Class 2 Cover Soil
    - Status of Minor Landslide in Fill Area 2
  - 6.2 **Five-Year Permit Review and CASP Status (ESA)**
  - 6.3 **Review of Reports Provided by ALRRF (ESA)**
  - 6.4 **Reports from Community Monitor (ESA)**
  - 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 **October 11, 2017** at 3500 Robertson Park Road, Livermore.

### Informational Materials:

- Community Monitor Roles and Responsibilities
- List of Acronyms
- Draft Minutes of April 12, 2017
- Reports from ESA and subcontractors

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Per the settlement agreement, Waste Management is responsible for:

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

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## List of Acronyms

Below is a list of acronyms that may be used in discussion of waste disposal facilities. These have been posted on the CMC web site, together with a link to the CIWMB acronyms page:  
<http://www.ciwmb.ca.gov/LEACentral/Acronyms/default.htm>.<sup>1</sup>

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

### Agencies

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

### Waste Categories

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

### Water Quality Terminology

IDL – Instrument Detection Limit – The smallest concentration of a specific chemical, in reagent grade water, that can be detected, with 99% confidence, with the detection instrument (e.g. the mass spectrometer).  
MCL – Maximum Contaminant Level – The legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act.  
MDL – Method Detection Limit – The smallest concentration of a specific chemical, in a sample that contains other non-interfering chemicals, that can be detected by the prescribed method, including preparatory steps such as dilution, filtration, digestion, etc.  
RL – reporting limit: in groundwater analysis, for a given substance and laboratory, the concentration above which there is a less than 1% likelihood of a false-negative measurement.

### Substances or Pollutants

ACM – asbestos-containing material  
ACW – asbestos-containing waste  
ADC – Alternative Daily Cover. For more information: <http://www.ciwmb.ca.gov/lqcentral/basics/adcbasic.htm><sup>1</sup>  
BTEX – benzene, toluene, ethylbenzene, and xylene (used in reference to testing for contamination)  
CH<sub>4</sub> – methane  
CO<sub>2</sub> – carbon dioxide  
DO – dissolved oxygen  
HHW – household hazardous waste

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<sup>1</sup> This link may need to be typed into your search bar to work correctly.

LFG – landfill gas  
LNG – liquefied natural gas  
MEK – methyl ethyl ketone  
MIBK – methyl isobutyl ketone  
MTBE – methyl tertiary butyl ether, a gasoline additive  
NMOC – Non-methane organic compounds  
NTU – nephelometric turbidity units, a measure of the cloudiness of water  
TCE - Trichloroethylene  
TDS – total dissolved solids  
TKN – total Kjeldahl nitrogen  
TSS – Total Suspended Solids  
VOC – volatile organic compounds

#### Documents

CCR – California Code of Regulations (includes Title 14 and Title 27)  
CoIWMP – County Integrated Waste Management Plan  
CUP – Conditional Use Permit  
JTD – Joint Technical Document (contains detailed descriptions of permitted landfill operations)  
MMRP – Mitigation Monitoring and Reporting Program  
RDSI – Report of Disposal Site Information  
RWD – Report of Waste Discharge  
SRRE – Source Reduction and Recycling Element (part of CoIWMP)  
SWPPP – Stormwater Pollution Prevention Plan  
WDR – Waste Discharge Requirements (Water Board permit)

#### General Terms

ALRRF – Altamont Landfill and Resource Recovery Facility  
ASP – Aerated Static Pile composting, which involves forming a pile of compostable materials and causing air to move through the pile so that the materials decompose aerobically.  
BGS – below ground surface  
BMP – Best Management Practice  
CASP – Same as ASP, above; but the “C” denotes that the pile is covered.  
CEQA – California Environmental Quality Act  
CQA – Construction Quality Assurance (relates to initial construction, and closure, of landfill Units)  
CY – cubic yards  
GCL – geosynthetic clay liner  
GPS – Global Positioning System  
IC engine – Internal combustion engine  
LCRS – leachate collection and removal system  
LEL – lower explosive limit  
mg/L – milligrams per liter, or (approximately) parts per million  
µg/L – micrograms per liter, or parts per billion  
PPE – personal protective equipment  
ppm, ppb, ppt – parts per million, parts per billion, parts per trillion  
RAC – Reclaimable Anaerobic Composter – a method developed by Waste Management, Inc., to place organic materials in an impervious containment, allow them to decompose anaerobically, and extract methane during this decomposition.  
SCF – Standard cubic foot, a quantity of gas that would occupy one cubic foot if at a temperature of 60°F and a pressure of one atmosphere  
SCFM – standard cubic feet per minute, the rate at which gas flows past a designated point or surface  
STLC – Soluble Threshold Limit Concentration, a regulatory limit for the concentrations of certain pollutants in groundwater  
TTLC – Total Threshold Limit Concentration, similar to STLC but determined using a different method of analysis  
TPD, TPM, TPY – Tons per day, month, year  
WMAC – Waste Management of Alameda County



*COMMUNITY MONITOR  
COMMITTEE*  
*Altamont Landfill Settlement Agreement*  
Minutes of April 12, 2017

**DRAFT**

1. Call to Order  
The meeting was called to order at 4:01 p.m.
2. Roll Call  
Members Present: Donna Cabanne; Jerry Pentin; David Tam; Sarah Fockler  
  
Absent: Robert Cooper, Altamont Landowners Against Rural Mismanagement; Robert Carling  
  
Staff: Judy Erlandson, City of Livermore Public Works Manager; Marisa Gan, City of Livermore Recycling Specialist; Kelly Runyon, Community Monitor
3. Introductions  
Those in attendance introduced themselves.
4. Approval of Minutes  
Minutes of the October 12, 2016 meeting: Mr. Tam moved approval, and Ms. Cabanne seconded. The minutes were approved by a vote of 3-0.  
Minutes of the January 11, 2017 meeting: Ms. Cabanne moved approval, and Mr. Tam seconded. The minutes were approved by a vote of 3-0.
5. Open Forum  
There was no Open Forum discussion.
6. Matters for Consideration
  - 6.1 Responses to Committee Members' Questions  
Sampling Requirements for Stormwater Basin SB-2 - To clarify information given in the previous meeting, Mr. Runyon provided additional detail about stormwater sampling requirements, distinguishing between the surface-water-focused requirements of the State Water Resources Control Board and the groundwater-focused requirements of the Central Valley Regional Water Quality Control Board (Regional Water Board). [An updated version of the April monitoring-requirements table has been prepared and is attached to these minutes.] Ms. Fockler corrected the names of the Fill Area 2 stormwater basins; they are SB-A, SB-1 and SB-2, rather than SW-A, etc. Ms. Cabanne asked if the Fill Area 2 basins will be monitored from now until Fill Area 2 opens. Ms. Fockler replied that because the Fill Area 2 basins are currently

governed by a Construction stormwater plan (as opposed to the Industrial plan that will take effect when Fill Area 2 is in use), the Basins are sampled any day that they discharge. In response to a question from Mr. Pentin, Ms. Fockler noted that currently, SB-1 has been discharging every day since January and has been sampled every day. Under the Industrial stormwater requirements, it would have been sampled one time only, when it began to discharge due to a storm.

Hazardous material removal - Mr. Runyon noted that the original estimate of the amount of this material has been reduced to approximately 760 tons, per a verbal report from Ms. Fockler. At the landfill, the material has been found and partially exposed, but removal is awaiting the lab analyses and approval from the final disposal site. Ms. Cabanne asked where the material would be going; Mr. Runyon reported that the hazardous waste facility in Buttonwillow is the intended location. Ms. Cabanne asked if the removal report would be prepared prior to the Committee's July meeting. Mr. Runyon said that he expects that to be the case.

Status of Regional Water Board violations - Mr. Runyon noted that the ALRRF has addressed the violations regarding the wood grinding operation, and they are being abated by the wood grinding operator as well.

Landfills Using Evapotranspiration Covers - Mr. Runyon provided further background about a number of landfills that have used this cover approach, including an earlier test at the Altamont site that did not succeed. Ms. Cabanne asked for more detail about how the ET cover would handle heavy precipitation. Mr. Runyon replied that if the soil became saturated, additional water would run off to the basins that handle stormwater now. Mr. Pentin asked for additional information about the proposed design in contrast to the previous design; Mr. Runyon explained that the new design is expected to avoid the problems that arose earlier, which were attributed to excessive compaction of the cover soil in that test area. Ms. Cabanne and Mr. Pentin asked for an update on the performance of some of the listed ET covers, especially the Kiefer Road landfill in Sacramento County, which is likely the one with weather most similar to the ALRRF. Mr. Runyon said that he would report back on that at the next Committee meeting. Mr. Tam asked which of the landfills using ET would have precipitation similar to the ALRRF. Mr. Runyon responded that he did not know of any, other than the Kiefer Road landfill, but could look into it further.

## 6.2 Five-Year Permit Review and CASP Project

Mr. Runyon summarized the ALRRF permit review as having been completed by the Regional Water Board, but still in progress with the Local Enforcement Agency (LEA), pending feedback from CalRecycle. Ms. Fockler added that CalRecycle had made minor comments and given ALRRF until March 16 to respond, which was when ALRRF submitted those responses. The ALLRF has received no further feedback.



Mr. Runyon also noted that he had no updates to the written summary of the CASP compost project status. Committee members had no questions on this topic.

### 6.3 Review of Reports Provided by ALRRF

*Annual Mitigation Monitoring Report* - Ms. Cabanne asked about next steps to address the sediment problem at the mitigation wetland. Ms. Fockler replied that the upland water features and the wetland itself are in redesign at this time. In response to a followup question, Ms. Fockler estimated that the redesign could be implemented in 2018.

*Air Emissions Report* - Mr. Runyon mentioned that the gas system testing and monitoring was functioning as intended, with all emission control devices passing their annual tests. No significant change was noted in the two gas extraction wells that are closest to groundwater well E-20B. Mr. Runyon also noted that the overall volume of extracted landfill gas gradually declined during this report period, but he expects the next report to show an increase because additional gas wells were brought on line the following month (December 2016).

*Groundwater Monitoring Report* - Mr. Runyon provided a brief verbal summary of the content of the memo. Mr. Tam asked if this memo is the first mention of 2019 as a startup date for Fill Area 2. Mr. Runyon confirmed that it is. Ms. Cabanne asked what could cause VOC's to be found in several future Fill Area 2 monitoring wells, as noted in the memo. Mr. Runyon described possible scenarios involving the use of glues or solvents in connection with agricultural activity and assured that he would continue to watch these findings.

*Minor and one-time reports* - Ms. Fockler confirmed that the required April response to the Regional Water Board, regarding the solidification process, was submitted on time. Mr. Runyon also mentioned that his observations of the solidification operation in March indicated that liquids were not discharging from solidified material as it was being transferred from the mixing basin pits to the haul truck for placement on the landfill.

Due to time constraints, it was suggested that the agenda be altered so that the Annual Report (item 6.5) would be next for discussion. The Chair concurred.

### 6.5 2016 Annual Report

Ms. Cabanne moved that the report be accepted, and Mr. Tam seconded. Mr. Pentin asked about the need to continue to watch for the presence of methylene chloride, as discussed on Annual Report page 3-2. Mr. Runyon replied that although the initial occurrence was possibly due to sample contamination in the lab or during field handling, the substance is a probable human carcinogen and therefore of concern. He also stated that the Community Monitor team will continue to check for it in future monitoring reports and will advise the Committee if it persists.

Mr. Pentin also asked for a description of the Phase 3 excavation for Fill Area 2, as noted on page 3-2. Mr. Runyon gave a verbal description of the location and extent of this work.

The motion to accept the report was approved 3-0.

6.4 Reports from Community Monitor

Mr. Runyon noted that the bar chart showing monthly tonnages was inadvertently omitted but will be included in the next quarter's packet. He also pointed out that the tonnage of one particular incoming stream, Class 2 cover soils, was much higher than the typical volume in December of 2016. This material originated from numerous sources, taking advantage of a letup in the wet weather that had been occurring in prior months. Ms. Cabanne asked if there is a limit on the tonnage of Class 2 cover soil, and Mr. Runyon responded that he knew of none.

Ms. Cabanne also asked about the reported statement that construction of the CASP was on hold. Ms. Fockler clarified that the activity on hold was rough grading of the CASP area, not construction of CASP facilities. Mr. Runyon stated that he would correct that entry.

He also mentioned, as significant events, the occurrence of a small landslide on the west side of Fill Area 2, and the good results from a concentrated effort by the ALRRF litter crew to collect litter downwind of the site.

Mr. Pentin remarked on the December 22 incident involving a leak from a water tank, and Mr. Runyon noted that because it was untreated canal water, it would have had no environmental effect. Ms. Cabanne asked if the small landslide (noted above) was continuing to grow, and Mr. Runyon stated that based on his observations it was not. He also noted that it may require special care when Fill Area 2 Phase 3 is excavated.

6.6 Announcements

There were no announcements.

7. Agenda Building

No agenda topics were suggested.

8. Adjournment

The meeting was adjourned at 4:52 p.m.

		2009 Sampling Program						2016 Sampling Program				
		Parameters	Method	N	Monitoring Frequency			Parameters	Method	N	Monitoring Frequency	Notes
<b>Groundwater</b>												
G1	<b>Field Parameters</b>	Elevation	Field Equipment	37*	Quarterly	<b>Field Parameters</b>	Elevation	Field Equipment	44*	Quarterly	*Nine Monitoring wells will be sampled in 2016, and then will be on a 5-year sampling schedule	
G2		Temperature, Electric Conductivity, pH, Turbidity	Field Equipment	37*	Semiannual		Temperature, Specific Conductance, pH, Turbidity	Field Equipment	37*	Semiannual		
G3	<b>Monitoring Parameters</b>	Chemical Oxygen Demand (COD), Kjeldahl Nitrogen, Total Dissolved Solids (TDS), Chloride, Bicarbonate as CaCO3, Sulfate, Calcium	Various	37*	Semiannual	<b>Monitoring Parameters</b>	Total Dissolved Solids (TDS), Chloride, Chemical Oxygen Demand (COD), Bicarbonate as CaCO3, Kjeldahl Nitrogen, Sulfate, Calcium	Various	37*	Semiannual		
G4		Volatile Organic Compounds (VOCs)	EPA Method 8260	37*	Semiannual		Volatile Organic Compounds (VOCs)	EPA Method 8260B	37*	Semiannual	Short List in Table V	
G5	<b>Supplemental Parameters</b>	Carbonate, Nitrogen Nitrate as N, Calcium (dissolved), Magnesium (dissolved), Manganese (dissolved), Potassium (dissolved), Sodium (dissolved)	Various	37*	Semiannual	<b>Supplemental Parameters</b>	Nitrogen Nitrate as N, Magnesium(dissolved), Manganese(dissolved), Potassium (dissolved), Sodium (dissolved), Sulfate	Various	37*	Semiannual	Complete list in Table I	
G6	<b>5-Year Consituents of Concern</b>	Total Organic Carbon (TOC)	5310B	37	5 years	<b>5-Year Consituents of Concern</b>	Total Organic Carbon (TOC)	5310B	37	5 years	Complete list in table V	
G7		Inorganics (dissolved)	Various EPA Methods - See Table VI	37	5 years		Inorganics (dissolved)	Various EPA Methods - See Table VI	37	5 years	Complete list in table VI	
G8		VOCs (extended)	EPA Method 8260B	37	5 years		VOCs (extended)	EPA Method 8260B	37	5 years	Extended list in Table VI	
G9		Semi-Volatile Organic Compounds (SVOCs)	EPA Method 8270	37	5 years		Semi-Volatile Organic Compounds (SVOCs)	EPA Method 8270C/D	37	5 years	Complete list in table VI	
G10		Chlorophenoxy Herbicides	EPA Method 8151A	37	5 years		Chlorophenoxy Herbicides	EPA Method 8151A	37	5 years	Complete list in table VI	
G11		Organophosphorus Compounds	EPA Method 8141A	37	5 years		Organophosphorus Compounds	EPA Method 8141A	37	5 years	Complete list in table VI	
G12						<b>Corrective Action</b>	Acetophenone		3	Semiannual		
G13						<b>Corrective Action</b>	Dinoseb		15	Annual		

2009 Sampling Program						2016 Sampling Program					
	Parameters	Method	N	Monitoring Frequency		Parameters	Method	N	Monitoring Frequency	Notes	
<b>Unsaturated Zone: Soil-Pore Gas</b>											
SG1	Field Parameters	VOCs	EPA Method TO-14	2	Semiannual	Field Parameters	VOCs *	EPA Method TO-15	12	Annual	TO-14 vs TO-15: TO-15 is an expanded analyte list that includes polar and non-polar compounds. Can achieve lower detection limits
SG2		Methane	Field Equipment	2	Semiannual		Methane, Carbon Dioxide, Oxygen, Remainder Gas, Flow rate (CFM)				
<b>Unsaturated Zone: Lysimeters, Leak Detection System and Underdrains</b>											
U1	Field Parameters	Electrical conductivity, pH	Field Equipment	1	Quarterly	Field Parameters	Presence/absence of liquid, Specific conductance, pH, volume of liquid removed, flow from underdrains	Field Equipment	7	Monthly	
U2	Monitoring Parameters	TDS, Chloride, Carbonate, Bicarbonate, Nitrogen - Nitrate, Sulfate, Calcium, Magnesium, Potassium, Sodium		1	Annual	Monitoring Parameters	TDS, Chloride, Carbonate as CaCO3, Bicarbonate as CaCO3, Nitrogen, Sulfate, Calcium, Magnesium, Manganese, Potassium, Sodium, Methane, Carbon Dioxide, Oxygen		7	Semiannual	
U3		VOCs (in liquid matrix)	EPA Method 8260B	1	Annual		VOCs (in liquid matrix)		7	Semiannual	Short List in Table V
U3						Pentaclorophenol, arsenic (dissolved), copper (dissolved), chromium (dissolved)		7	Annual		
U4	5-Year Constituents of Concern	TOC		1	5 years	5-Year Constituents of Concern	TOC		7	5 years	
U5		Inorganics (dissolved)	Various EPA Methods - See Table VI	1	5 years		Inorganics (dissolved)	Various EPA Methods - See Table VI	7	5 years	Complete list in table VI
U6		VOCs (extended)	EPA Method 8260B	1	5 years		VOCs (extended)	EPA Method 8260B	7	5 years	Extended list in Table VI
U7		SVOCs	EPA Method 8270C	1	5 years		SVOCs	EPA Method 8270C	7	5 years	Complete list in table VI
U8		Chlorophenoxy Herbicides	EPA Method 8151A	1	5 years		Chlorophenoxy Herbicides	EPA Method 8151A	7	5 years	Complete list in table VI
U9		Organophosphorus Compounds	EPA Method 8141A	1	5 years		Organophosphorus Compounds	EPA Method 8141A	7	5 years	Complete list in table VI
U10					Corrective Action	Acetophenone		1	Semiannual		
U11						Di-noseb		3	Annual		

		2009 Sampling Program						2016 Sampling Program				
		Parameters	Method	N	Monitoring Frequency			Parameters	Method	N	Monitoring Frequency	Notes
<b>Leachate/Seep</b>												
L1	<b>Field Parameters</b>	Total Flow, Flow Rate, Electric Conductivity, pH	Field Equipment	2	Quarterly	<b>Field Parameters</b>	<b>Presence/absence of liquid</b> , flow rate	Field Equipment	4**	Monthly	**In the event of a new seep in a previously dry location, the Water Board will be notified and the seep will be sampled immediately	
L2							Specific conductance, pH	Field Equipment	4**	Monthly for seeps, semiannually for everything else		
L3	<b>Monitoring Parameters</b>	TDS, Chloride, Carbonate, Bicarbonate, Nitrogen - Nitrate, Sulfate, Calcium, Magnesium, Potassium, Sodium, VOCs		2	Annual	<b>Monitoring Parameters</b>	TDS, Chloride, Carbonate as CaCO3, Bicarbonate as CaCO3, Nitrogen, Sulfate, Calcium, Magnesium, <b>Manganese</b> , Potassium, <b>Pentachlorophenol</b> , <b>Sulfide</b>		4**	Semiannual		
L4							Volatile Organic Compounds <sup>1</sup> (in liquid matrix)		4**	Semiannual	Short List in Table V	
L5							Arsenic, copper, chromium		4**	Annual		
L6	<b>5-Year Consituents of Concern</b>	TOC		2	5 years	<b>5-Year Consituents of Concern</b>	TOC		4**	5 years		
L7		Inorganics (dissolved)	Various EPA Methods - See Table VI	2	5 years		Inorganics (dissolved)	Various EPA Methods - See Table VI	4**	5 years	Complete list in table VI	
L8		VOCs (extended)	EPA Method 8260B	2	5 years		VOCs (extended)	EPA Method 8260B	4**	5 years	Extended list in Table VI	
L9		SVOCs	EPA Method 8270C	2	5 years		SVOCs	EPA Method 8270C	4**	5 years	Complete list in table VI	
L10		Chlorophenoxy Herbicides	EPA Method 8151A	2	5 years		Chlorophenoxy Herbicides	EPA Method 8151A	4**	5 years	Complete list in table VI	
L11		Organophosphorus Compounds	EPA Method 8141A	2	5 years		Organophosphorus Compounds	EPA Method 8141A	4**	5 years	Complete list in table VI	

		2009 Sampling Program						2016 Sampling Program				
		Parameters	Method	N	Monitoring Frequency			Parameters	Method	N	Monitoring Frequency	Notes
<b>Surface Water</b>												
SW1	<b>Field Parameters</b>	Total Flow, Flow Rate, Electric Conductivity, pH	Field Equipment	6***	Semiannual	<b>Field Parameters</b>		Specific Conductance, pH, Dissolved Oxygen, Turbidity, Temperature	Field Equipment	6	Semiannual****	*** Three samples from the facility boundary to be collected Semiannually during the wet season (Oct 1 through May 30) and three samples, one within each basin to be collected annually  ****Semiannual samples to be taken from each of six basins, twice during the wet season (15 October through 15 May)
SW2								Discharge to Water of USA	Field Equipment	6	Each Storm Event	
SW3	<b>Monitoring Parameters</b>	TDS, Carbonate, Bicarbonate, Chloride, Nitrogen -Nitrate, Sulfate, Calcium, Magnesium, Potassium, Sodium		6***	Semiannual	<b>Monitoring Parameters</b>		TDS, Chloride, Carbonate as CaCO3, Bicarbonate as CaCO3, Nitrogen, Sulfate, Calcium, Magnesium, Potassium, Sodium		6	Semiannual***	
SW4		VOCs	EPA Method 8260B		Semiannual			VOCs		6	Semiannual***	Short List in Table V
SW5	<b>5-Year Consituents of Concern</b>	TOC		6	5 years	<b>5-Year Consituents of Concern</b>		TOC		6	5 years	
SW6		Inorganics (dissolved)	Various EPA Methods - See Table VI	6	5 years			Inorganics (dissolved)	Various EPA Methods - See Table VI	6	5 years	Complete list in table VI
SW7		VOCs (extended)	EPA Method 8260B	6	5 years			VOCs (extended)	EPA Method 8260B	6	5 years	Extended list in Table VI
SW8		SVOCs	EPA Method 8270C	6	5 years			SVOCs	EPA Method 8270C	6	5 years	Complete list in table VI
SW9		Chlorophenoxy Herbicides	EPA Method 8151A	6	5 years			Chlorophenoxy Herbicides	EPA Method 8151A	6	5 years	Complete list in table VI
SW10		Organophosphorus Compounds	EPA Method 8141A	6	5 years			Organophosphorus Compounds	EPA Method 8141A	6	5 years	Complete list in table VI

		2009 Sampling Program						2016 Sampling Program				
		Parameters	Method	N	Monitoring Frequency			Parameters	Method	N	Monitoring Frequency	Notes
<b>Landfill Gas Extraction Wells</b>												
LFG1						<b>LFG Corrective Action Monitoring</b>		Methane, Carbon Dioxide, Oxygen, Remainder Gas, Gas Temperature at each well, Gas Flow Rate (CFM)		14	Monthly	
LFG2								Initial Static Pressure in Wellhead, Adjusted static pressure in wellhead		14	Monthly	
<b>Facility Monitoring</b>												
F1		Facility Monitoring and Maintenance			Annually - Prior to 30 September, the start of the rainy season			Facility Monitoring and Maintenance		6	Annually - Prior to 30 September, the start of the rainy season	
F2		Any Maintenance and Repairs based on the annual Facility Monitoring and Maintenance assessed in September			Annually - Prior to 31 October			Any Maintenance and Repairs based on the annual Facility Monitoring and Maintenance assessed in September			Annually - Prior to 31 October	
F3		Major Storm Inspection for damage and/or repairs			Within 7 days of major storm event			Major Storm Inspection for damage and/or repairs			Within 7 days of major storm event	
								Pre and Post earthquake inspections			Before and after an earthquake event	
F4								Leak Search for the integrity of low permeable layers			Biennial	

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# memorandum

date June 30, 2017  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 7/12/17 - Agenda Item 6.1 - Answers to Committee Members' Questions

## **Landfills Using Evapotranspiration (ET) Covers**

At the April 11, 2017 Community Monitor Committee meeting, Committee members requested further detail about the performance of ET cover systems in areas with rainfall comparable to the ALRRF, including the Kiefer Landfill in Sacramento County. Available information about the two most comparable landfills, Kiefer and Forward (near Stockton) is provided below, followed by information on two other somewhat comparable ET cover applications in California.

The reviewed information suggests that the success of an ET cover system in the greater-Bay-Area climate depends on diligent maintenance of surface contours (to prevent ponding) and vegetation (to take up water throughout the growing season), as well as a monitoring system that can detect the infiltration of water into the refuse below. This is particularly important for the Class 3 portion of Fill Area 1, which is lined with low-permeability clay, in contrast to the impermeable membrane in the Class 2 area.

### Kiefer Landfill

The Kiefer Landfill is a 660-permitted-acre disposal site operated by Sacramento County; it is permitted to receive up to 10,815 tons per day. Average precipitation in Sacramento is 18.5 inches per year, which is comparable to 15.3 inches per year in the City of Livermore. Although Kiefer has a projected life through 2064, portions of the site are reaching final elevation. In 2015, a 20-acre section of the landfill went through the closure process after receiving permission to use an ET cover. The design called for six feet of soil to be placed on top of the refuse fill. I spoke with a knowledgeable engineer in the County's Environmental Management Department about the performance of that cover.

He reported that in its first year, the cover performed well in terms of water management, but by the second year the vegetative cover had been invaded by a species of vetch that "took over" the plant community, excluding other types of vegetation. When the vetch died back in late summer, there were not enough other ground cover plants to continue to take up water, and it was apparent that the cover system was not working as designed. The County intends to remove the current vegetation, replant with an appropriate mix of plants, and do a much more careful job of controlling weeds. The County has also requested proposals to install a second ET cover system, similar in size, this summer, because the cost advantages of this approach are significant.

Forward Landfill, Inc.

This site is operated by Republic Industries and is permitted to receive up to 8,668 tons per day. Average precipitation is 15.8 inches per year. Its current permit gives an estimated closure date of 1/1/2020. An ET cover system was installed in 2005 on a 29 acre portion of the site. This area was exhibiting leachate “breakouts” (seeps) along the north side slope, and this prompted the decision to apply final cover in this area. Cover consisted of four feet of clayey silt from on site, vegetated with native seasonal grasses and shallow rooting shrubs. Two moisture probes were installed along the edge of the north slope. A spot check of LEA inspection and enforcement records found evidence of minor problems in the closed area (ponding on the top deck, May 2006). A spot check of 2006-2007 water quality reports found no issues related to the closed area. Aerial photographs indicate that the closed area has maintained vegetative cover since 2005.

Spadra Landfill

This site is located in eastern Los Angeles County, near Pomona. This area reportedly receives 17 inches of rain per year on average. The landfill covers roughly 150 acres, with a 50-acre top deck that is designated for agricultural grazing. The landfill ceased operations in 2000 and received approval for an ET cover soon thereafter. The cover consists of 5 feet of vegetative soil over one foot or more of interim cover or foundation soil. A three-year soil moisture study was conducted from 2002 to 2005, after which the cover system was approved by the Regional Water Board. CalRecycle inspection records, and Water Board public records, were reviewed to check for problems with the ET cover. None were found. In August 2014, the CalRecycle inspector noted that the integrity of the final cover had been maintained well.

China Grade Sanitary Landfill

This site is located near Bakersfield and was operated by Kern County until it closed in 1992. Bakersfield receives 6.45 inches of rain per year, on average. After testing an ET cover design on a 0.05-acre area for two years, ET cover was installed on the entire site in 2009. The cover system consisted of three feet of vegetative soil cover over two feet of interim cover.

**Description of Fill Area 2 Excavation Phases**

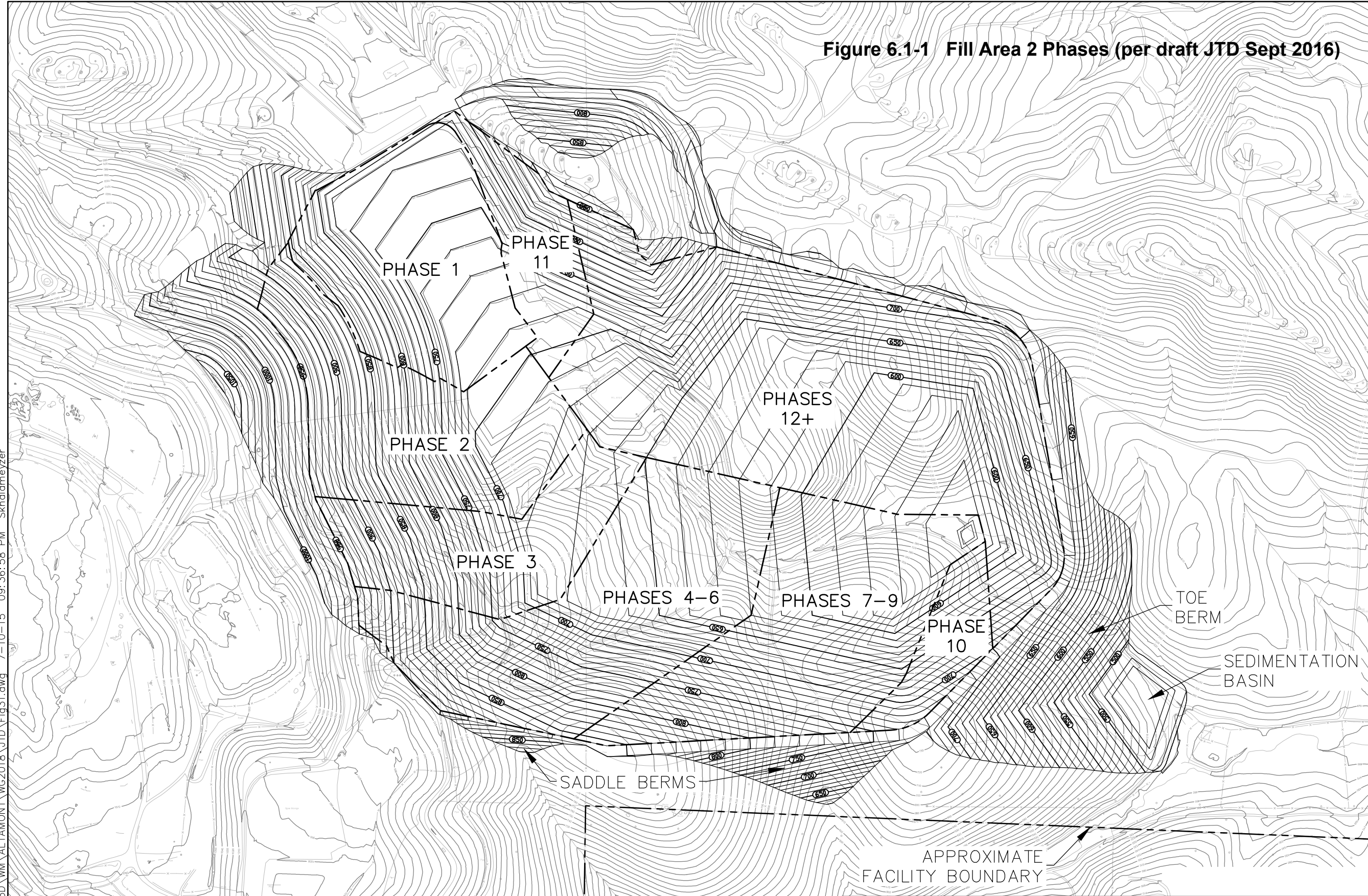
In the April Community Monitor Committee meeting, there were questions about the plan to develop Fill Area 2 in a series of Phases. Figure 6.1-1 on the following page is taken from the most recent copy in our records of the proposed Joint Technical Document.

The design has continued to evolve since this drawing was made, and the phasing has changed. The area shown as “Phase 11” is in fact Phase 2, which has been excavated but has not been lined. Discussions with ALRRF staff have indicated that Phase 3 continues to be Phase 3 and will be the next area to be excavated. As Phases 1, 2 and 3 receive refuse, later phases will be installed more or less in the sequence shown, proceeding south and east down-canyon.

Figure 6.1-1 Fill Area 2 Phases (per draft JTD Sept 2016)



- NOTES:
1. SITE TOPOGRAPHY PROVIDED BY MILLER CREEK AERIAL MAPPING, LLC. AERIAL PHOTO DATED 31 DECEMBER 2014.
  2. CONTOURS REPRESENT TOP OF SUBGRADE.
  3. PHASES BOUNDARIES REPRESENT APPROXIMATE LIMITS OF REFUSE



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CONCEPTUAL DEVELOPMENT PLAN – UNIT 1 OF FILL AREA 2 ALTAMONT LANDFILL & RESOURCE RECOVERY FACILITY ALAMEDA COUNTY, CALIFORNIA		<b>Geosyntec</b> consultants	
		FIGURE NO.	31
		DATE:	JULY 2015

## **Limit on Class 2 Cover Soil**

At the April Community Monitor Committee meeting, Ms. Cabanne asked if there is a limit on the amount of Class 2 cover soil that can be accepted at the ALRRF. I have reviewed several documents that could contain the answer to this question:

- The current draft Joint Technical Document (JTD), as of September 2016 (not yet final)
- The current Solid Waste Facility Permit
- The 1999 Settlement Agreement
- The current version of Conditional Use Permit C-5512 (CUP)
- Portions of the California Code of Regulations, Title 14

None of them provides a direct answer, but after looking through all of them, I have concluded that there is no limit on this material. There are many other tonnage limits in these documents, especially the CUP. They apply to certain types of material, they distinguish between in-County and out-of-County wastes, and many of them change when Fill Area 2 begins operations. Most of them apply to disposed wastes, and a few apply to certain types of Alternative Daily Cover (ADC). However, in the context of the above documents, Class 2 cover soil is not waste, and it is not ADC. It is cover soil that is restricted to Class 2 areas, which are those lined with an impermeable membrane: Fill Area 1 Unit 2, and all of Fill Area 2.

## **Status of Minor Landslide in Fill Area 2**

In the April Community Monitor Committee meeting, members asked to be kept informed about the status of the minor landslide that has occurred on the west side of Fill Area 2, in the future Phase 3 area. It has not been repaired, and it does not appear to have moved in at least the last two months. It appears that the wind has begun to pull its black plastic cover out from under the sandbags that are holding it down, but a small crew of workers can replace the cover easily.

# memorandum

date June 30, 2017  
to ALRRF Community Monitor Committee  
from Kelly Runyon  
subject CMC Meeting of 7/12/17 - Agenda Item 6.2 - Five-Year Permit Review and CASP Project

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

The LEA is continuing to review the Joint Technical Document and related material applicable to the reissuance of the ALRRF Solid Waste Facility Permit.

## **Development of the Covered Aerated Static Pile (CASP) Composting Project at the ALRRF**

As noted in the June site inspection report, excavation work to prepare the compost operations pad for construction has continued through late June. Physical additions to the site, such as paving and equipment installation, have not begun.

For future reference it should be noted that the Site Plan section of the Report of Compost Site Information (RCSI), which describes the CASP operation for permitting purposes, begins with:

The composting facility generally occupies an approximately 40.5 acre area located within the ALRRF property boundary, inside the permitted landfill operations boundary north of Fill Area 1, as shown . . . . Finished compost may be stored on Fill Area 1 dependent on space requirements for the curing area up to another 20 acres at any one time, resulting in a total facility acreage of approximately 60.5 acres with inclusion of the contact water impoundment.

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# memorandum

date June 30, 2017

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 7/12/17 - Agenda Item 6.3 - Review of Reports Provided by ALRRF

## Minor and One-Time Reports

Reports from the ALRRF to the Central Valley Regional Water Quality Control Board (Water Board) have been reviewed as they have been posted on the Water Board's GeoTracker website. Some of them are ongoing reports on certain aspects of ALRRF operation that are of special interest to Water Board staff. Below, for ongoing topics, the new reports are summarized in *italicized* additions to the summaries provided for the Community Monitor Committee's April meeting. These are followed by new topics, which are summarized in plain text.

### Ongoing Topics

The September 29, 2016 S.O.P. for Solidification describes the ALRRF's approach to blending liquid and solid wastes to prepare a mixture that prevents free liquid from being placed in the landfill. The mixing pits, mixing methods, loadout, and inspection of the blend for proper dryness are described. In a review letter dated January 24, 2017, Water Board staff express concern that (a) blended liquids might react chemically in the mixing pits, (b) the construction of the pits does not assure that leakage will not occur, (c) visual monitoring of blended material may not prevent the presence of free liquid in the mix, and (d) visual monitoring of the mixing pits may not detect leakage from them into the waste below. The letter requires submittal of a technical report to address these and other issues by April 1, 2017. *A March 31 letter from Waste Management to Water Board staff transmits a TECHNICAL REPORT FOR THE SOLIDIFICATION BASIN OPERATIONS prepared by Golder Associates Inc.*

A December 1, 2016 letter from SCS Engineers (on behalf of ALRRF) to Central Valley Regional Water Board staff addresses that Water Board's requirement for a Work Plan to identify and evaluate potential sources of VOCs that may have impacted stormwater at the facility. It identifies six sampling locations in drainage features (e.g. ditches) that are downstream of specific industrial activities such as the maintenance shop and the LNG plant. It proposes to sample them during storm events, twice in the current rainy season and twice in the next rainy season. A technical report would be submitted by June 30, 2018. *A review letter from Water Board staff, dated April 26 2017, contains reminders of certain relevant regulatory requirements as well as these specific requirements: "3. If COCs [Constituents Of Concern] are detected and additional storm events allow, additional sampling events, beyond the two proposed each wet season, should occur as needed to define the source of the detected COCs. 4. The Discharger shall submit a technical report, by 30 June 2017, with the results of the winter/spring 2017 wet season sampling of SW-1 through SW-6. This report must also include the storm water sampling results from each of the site's six surface water detention basins, along with a revised sampling proposal for the 2017-2018 wet season, as discussed in the Work Plan."*

A December 15, 2016 report by Geosyntec addresses requirements in the 2016 WDRs to evaluate the adequacy of the current groundwater monitoring system and propose additional wells to adequately monitor Fill Area 2 throughout its development. This report, 129 pages in length, will likely become the basis for discussion with the Water Board for revisions to the MRP as Fill Area 2 is developed. This report asserts that on the whole, the existing monitoring well network is adequate; that long-term planning for Fill Area 2 monitoring wells must await the designs of later phases of Fill Area 2; and that with two added wells at the downslope edges of the Phase 1 and Phase 2 areas, the well system will provide an adequate basis for groundwater flow mapping. A well in the canyon that runs southeast from well E-20B is also proposed, and changes to groundwater wells near stormwater basins are discussed. In all, five additional wells are proposed for installation in the near future. *A May 23, 2017 Monitoring Well Installation Report by GeoSyntec has been submitted to the Water Board. It documents the installation of one upgradient well (MW-19) and two downgradient wells (MW-14R, MW-21) adjacent to the Phase 1 portion of Fill Area 2. It also proposes locations for additional wells MW-20 and MW-22 to monitor the Phase 2 and Phase 3 areas, respectively.*

The January 17, 2017 Work Plan to Remove Trash/Waste, submitted to the Regional Water Board, describes methods currently used to prevent and collect windblown litter. These include mechanical and manual collection, litter fences, and landfilling techniques to reduce the spread of litter from the working face of the landfill. *Subsequent updates from the ALRRF to Water Board staff on March 1 and March 30 provide discussion and numerous photos documenting progress in litter removal. A May 12 letter from Water Board staff confirms that no further updates are needed after March 30, but it also stipulates that “Waste Management shall continue to proactively adjust site operations to reduce the occurrence of windblown trash, and diligently work to remove and properly dispose of any future windblown trash that does occur.”*

A February 1, 2017 letter from ALRRF to Water Board staff describes the ALRRF’s position regarding the violation requiring that the size and location of the wood grinding operation be reduced. The letter points out that the size and location are consistent with current permit documents, and it describes efforts by WMAC to (a) ensure that stockpile location and size requirements are met, and (b) storm water runoff monitoring is properly established. *Subsequent letters on February 1, March 1, March 31 and May 1 provide updates and address specific questions raised by Water Board staff. The May 1 letter notes that the LEA’s March 30 inspection report contained an order requiring Bio-Fuels, Inc. to immediately cease and desist operations.*

### New Topics

A February 28, 2017 report by GeoSyntec on behalf of the ALRRF proposes soil gas monitoring locations to satisfy the soil gas monitoring conditions in the current Waste Discharge Requirements. The report includes a detailed, comprehensive map of all soil gas and groundwater monitoring locations proposed to satisfy the WDRs. In an April 25 letter, Water Board staff call for additional detail, as required by regulations, to provide a “detailed rationale for the spatial distribution selected for the unsaturated zone monitoring device proposed around the entire outside perimeter of each waste management unit” by May 31. Subsequent correspondence has not yet been made available on the Water Board’s GeoTracker web site.

A March 30, 2017 letter from Waste Management to Water Board staff notes that a potential groundwater contaminant, Bis(2-ethylhexyl)phthalate, was incorrectly listed as a “short list VOC” to be checked in every round of groundwater testing. The letter states that the substance was also correctly listed as a five year Constituent of Concern, and the five-year COC testing will include it.



An April 14 letter from Waste Management to the Water Board transmits an Evapotranspirative Cover Work Plan prepared by GeoSyntec. This is in response to an October 19, 2016 letter from Water Board staff which outlined the needed content for the Work Plan. The Work Plan shows 3 feet of vegetative cover to be placed in the test area over 1 foot of existing intermediate cover, with the top 2 feet lightly compacted to 90 percent relative compaction prior to planting. The report provides a wealth of detail about the soil testing and hydrological modeling that has been performed to date. Its information about the vegetation to be used is rather general at this stage: “A California-native seed mix with perennial grasses, annual herbs, and perennial herbs, including pioneer species shall be part included in the hydroseed mix design.” The report also indicates that a full design package with construction drawings, specifications and a Construction Quality Assurance Plan will be prepared.

A May 18 letter from Waste Management to Water Board staff transmits a design package for the CASP composting facility at the ALRRF, including construction drawings and specifications, a Construction Quality Assurance Plan, and a verbal explanation of certain details regarding construction of the Curing Pad. The letter states that this submittal “complies with the 8 May 2017 Notice of Applicability issued for this project and Order WQ 2015-0121-DWQ.”

An April 14 letter from Waste Management to Water Board staff reported a leak from a leachate pipe on ALRRF property immediately adjacent to Fill Area 1. The leachate plus a considerable amount of rainwater, approximately 500 gallons in all, was captured using a vacuum truck and deposited in the solidification basin for disposal (not for cover). Soil that had contacted the leachate was placed in the Class 2 portion of Fill Area 1. Subsequently, on April 26 the Water Board issued a Notice of Violation for having put the leachate in the solidification basin. This is expressly prohibited in Discharge Specification B1 of the current Waste Discharge Requirements. The NOV requires by 30 May 2017, a report prepared as an operation manual, outlining how accumulated liquid from any and all future leachate and/or condensate leaks will be contained, extracted, transported, and properly disposed.

In 2016, the cleanup of a Manufactured Gas Plant (MGP) site in San Rafael, by PGandE, led to the delivery of 965 tons of hazardous soil containing benzene to the Altamont Landfill under erroneous profile documents. In November 2016, the Water Board issued a Notice of Violation to the ALRRF for receiving this material. PGandE prepared an initial Soil Removal Work Plan and revised it on March 23, 2017 in response to Water Board staff comments. These events and plans are summarized in an April 17, 2017 letter from Water Board staff to the ALRRF. The letter also requires a report from the ALLRF documenting the completion of cleanup, due by May 31, 2017.

A May 12 letter from Water Board staff commented on the removal of litter, as noted above; it also addressed the management of liquid from an apparent leachate seep that has occurred several times along a bench road on the south side of Fill Area 1. The letter expresses some concern about how the seep liquid was reportedly managed, and it requires a report providing additional detail by June 30, 2017.

In September 2016, Waste Management notified Water Board staff that liquid with chromium and nickel concentrations above RCRA hazardous waste levels had been discharged into one of the site’s solidification basins, due to incorrect profiling of the material. As a result, Water Board staff promptly issued a Notice of Violation, which directed Waste Management to remove and properly dispose of the illegally discharged hazardous waste. Removal of the material has been fully documented in a May 17, 2017 report to the Water Board from Waste Management. Subsequently, a May 23 letter from Water Board staff notes that this issue is considered resolved.

A May 23, 2017 report to the Water Board provides, as required, concentration limits for the monitoring well MW-11, which is downgradient of well E-20B. These limits are based on statistical analysis of existing concentrations of substances in groundwater. These include general chemistry parameters such as alkalinity, minerals such as potassium and magnesium, and constituents of concern including copper and zinc (20 metals, plus total organic carbon and cyanide, in all). These do not include VOC's or other man-made substances such as herbicides, which have regulatory limits that apply regardless of background concentrations.

# memorandum

date June 30, 2017

to ALRRF Community Monitor Committee

from Kelly Runyon

subject CMC Meeting of 7/12/17 - Agenda Item 6.4 - Reports From Community Monitor

Attached are inspection reports for April through June of 2017.

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

The May inspection was announced and took place on May 23.

The June inspection was announced and took place on June 27, off-hours (5 AM).

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

With the decline in wet weather, two developments received ongoing attention during this quarter:

- Preparation of the 10-acre test area for evapotranspirative (ET) final cover resumed
- Invasive plants, with the potential to impact native vegetation in the Conservation Plan Area, increased their presence, specifically in the truck wash overflow pond near the scale house.

In addition, the Bio-Fuels wood grinding operation has vacated the site, and all related stockpiles have been removed.

Additional details about these and other operations-related matters are provided in the attached reports. Issues that cause special concern are marked with yellow rectangles in the monthly inspection reports.

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****April 2017**Monthly Tonnage Report for March 2017, received April 15, 2017

Tonnage Summary:		<u>tons</u>	
Disposed, By Source Location			
1.1	Tons Disposed from Within Alameda County	79,292.55	
1.2	Other Out of County Disposal Tons	1,703.76	
	subtotal Disposed	<u>80,996.31</u>	
Disposed, By Source Type			
2.1	C&D	577.76	
2.2	MSW	72,826.79	
2.3	Special Wastes	7,591.76	
	subtotal Disposed	<u>80,996.31</u>	
		0.00	0.00%
Other Major Categories			
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	37.69	
2.5	Revenue Generating Cover	55,541.71	
	Total, 2.1 - 2.5	136,575.71	
Materials of Interest			
2.3.1	Friable Asbestos	604.59	
2.3.2	Class 2 Cover Soils	27,343.40	
2.5.1	Auto Shredder Fluff	13,927.36	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	61.94	
2.5.3	MRF Fines for ADC	2,969.35	

**ALRRF Community Monitor Monthly Report****April 2017**Site Inspection April 12, 2017, 2:00 - 3:30 PM.

- Attended by K. Runyon. Escorted by S. Fockler. Announced.
- The C&D material bunker was approximately half full. The plant debris bunker was 3/4 full. A substantial number of metal appliances, roughly 20 cubic yards in volume, was staged near the bunkers.
- At the solidification basin, ground wood was being unloaded for use as an extender (dry material, to be mixed with liquids. This was being done at the "yellow" basin, which holds material to be used as cover (ADC) after mixing. No mixing was taking place during this observation. The spare solidification basin was being used to store auto shredder fluff for future use.
- At the working face, one D-10 dozer and one compactor were handling refuse from the tippers. No transfer trucks were delivering refuse. A smaller dozer was standing by to spread cover.
- A strong odor of biosolids (sewage sludge) was evident north of the working face, but this was not present on other parts of the site.
- The public unloading area was located north of the tippers. It was being used to fill in low areas near the working face, so it has been changing locations frequently in recent weeks.
- At the asbestos disposal area, one dozer was spreading soil to cover material that had been brought in earlier in the day.
- Near the northeast corner of the Fill Area 1 top deck, the benzene-contaminated soil was exposed for removal, and the edges of the area had been marked with survey stakes, but removal had not yet begun. Approval by the hazardous waste site that would receive the material was pending review of lab test results. Minor ponding was occurring in this area, which was slightly below grade due to the excavation made to expose the soil. See photo below.



- The evapotranspiration cover test area was well marked. The test cover material had not yet been placed; dry weather is needed for that activity.
- Gulls were present at the working face and on surrounding open land. They were not as numerous as in prior months. The bird cannon was operating but seemed to have little effect.

**ALRRF Community Monitor Monthly Report****April 2017**Stormwater Controls and Best Management Practices

- Basin A was lower than last month, about 2-3 feet below its discharge elevation. No litter was seen. Basin B was about a foot below its discharge elevation, with a very minor amount of litter on surrounding land. The basin above Basin B was about half full. Basin C was not observed.
- Ditches and drains were generally clear. No significant erosion was seen at Fill Area 1.

Fill Area 1 Leachate Ponds

- The liners for both ponds are fully installed. They are not yet in use; the Construction Quality Assurance (CQA) report was under review.

Fill Area 2

- New groundwater wells are being / have been installed as described in reports to the Central Valley Regional Water Board.
- Windblown litter in Fill Area 2 has been completely cleaned up.
- The small landslide area noted last month above the west side of FA2 appeared unchanged. It was still covered by a large plastic sheet held in place by sandbags. See photo below.



**ALRRF Community Monitor Monthly Report****May 2017**Monthly Tonnage Report for April 2017, received May 15, 2017

Tonnage Summary:		<u>tons</u>	
Disposed, By Source Location			
1.1	Tons Disposed from Within Alameda County	76,792.02	
1.2	Other Out of County Disposal Tons	7,009.40	
	subtotal Disposed	<u>83,801.42</u>	
Disposed, By Source Type			
2.1	C&D	693.52	
2.2	MSW	73,209.16	
2.3	Special Wastes	9,898.74	
	subtotal Disposed	<u>83,801.42</u>	
		0.00	0.00%
Other Major Categories			
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	0.00	
2.5	Revenue Generating Cover	50,975.54	
	Total, 2.1 - 2.5	134,776.96	
Materials of Interest			
2.3.1	Friable Asbestos	859.00	
2.3.2	Class 2 Cover Soils	20,545.96	
2.5.1	Auto Shredder Fluff	14,627.45	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	133.37	
2.5.3	MRF Fines for ADC	1,692.86	

**ALRRF Community Monitor Monthly Report****May 2017**Site Inspection May 23, 2017, 5:00 - 6:30 AM.

- Attended by K. Runyon. Escorted by Terry Medeiros. Off hours (pre 6 AM). Announced.
- At the working face, one dozer and one compactor were operating. Lighting was sufficient. The transfer truck queue varied from one to two trucks during this observation. Two tippers were in use. One was LNG fueled and the other was diesel fueled.
- The solidification basins were not active.
- All of the contaminated soil that was slated for removal was excavated and hauled off; this work is complete pending results from confirmation testing of material at the edges of the excavation.
- Birds were not yet active during this early morning visit.
- The evapotranspiration cover test area was being filled with refuse to achieve the design height. The test cover soil had not yet been placed.

Truck Wash Water Basin

- No water was visible in this small basin. Unfortunately, the tamarisk trees that were treated with herbicide last year have begun to regrow. This invasive plant can damage surface soil by concentrating salt, and it is very hard to control. The plant may have been blooming as well. See photo below. The pinkish-gray tufts at the ends of the dark green branches appear to be flowers from this plant.





**ALRRF Community Monitor Monthly Report****May 2017**Stormwater Controls and Best Management Practices

- Most of the stormwater basins were not observed due to the lack of daylight. Basin A appeared to be at a normal height for the time of year.

Mitigation Wetland Area

- The wetland area had open water in its eastern portion and sediment in its western portion, consistent with past visits. Apparently the heavy precipitation in past months did not cause any gross physical damage in this area. However, tall weeds were widespread within the wetland, including black mustard and pepperweed (*Lepidium latifolium*) which was noted there in an earlier monitoring report and is likely to be spreading.

Seep and Other Wetlands in Conservation Plan Area

- Conditions at the seep and the nearby roadside ditch did not indicate any erosional damage in that area. Enroute to the seep, some evidence of erosion was seen on the north side of the northernmost landfill soil stockpile. Virtually all of this erosion was outside of the Conservation Plan Area, and some repair and preventive maintenance work had been done.

Fill Area 1 Leachate Ponds; Fill Area 2 Leachate Pond

- These ponds were not yet in service.

Fill Area 2

- Windblown litter in Fill Area 2 was virtually nonexistent. East of Fill Area 2, only a very minor amount of litter was seen.
- The small landslide area noted last month above the west side of FA2 appeared unchanged. It was still covered by a large plastic sheet held in place by sandbags.

Bio-Fuels Wood Grinding Yard

- The piles of wood and other materials were much smaller and more confined than previously.

**ALRRF Community Monitor Monthly Report**

**June 2017**

Monthly Tonnage Report for May 2017, received June 15, 2017

Tonnage Summary:		<u>tons</u>	
Disposed, By Source Location			
1.1	Tons Disposed from Within Alameda County	78,024.35	
1.2	Other Out of County Disposal Tons	2,312.92	
	subtotal Disposed	80,337.27	
Disposed, By Source Type			
2.1	C&D	854.78	
2.2	MSW	73,632.37	
2.3	Special Wastes	5,850.12	
	subtotal Disposed	80,337.27	
		0.00	0.00%
Other Major Categories			
2.4	Re-Directed Wastes (Shipped Off Site or Beneficially Used)	124.42	
2.5	Revenue Generating Cover	62,641.28	
	Total, 2.1 - 2.5	143,102.97	
Materials of Interest			
2.3.1	Friable Asbestos	813.10	
2.3.2	Class 2 Cover Soils	34,797.77	
2.5.1	Auto Shredder Fluff	13,451.94	
2.5.2	Processed Green Waste/MRF fines, Beneficial Use (GSET)	89.61	
2.5.3	MRF Fines for ADC	2,053.31	

Newark Salt Pond Soil

- ALRRF staff indicated that more salt pond soil was expected this summer, but none had been delivered as yet.

**ALRRF Community Monitor Monthly Report**

**June 2017**

Site Inspection June 27, 2017, 12:30 - 1:30 PM.

- Attended by K. Runyon. Escorted by Terry Medeiros. Announced.
- The C&D material bunker was approximately 1/2 full. The plant debris bunker was about 1/3 full. Several metal appliances and objects were staged near the bunkers.
- At the working face, the general activity level was low, with just one transfer truck arriving during these observations. Dozer and compactor were parked. Fill was taking place in the southeast portion of the site.
- The public unloading area was located east of the tippers. Several truckloads of recently-delivered material were awaiting spreading and compaction.
- Bird numbers and activity were lower than in winter months. The bird cannon did not operate during these observations.
- The 10-acre test area for evapotranspiration (ET) cover was being covered with soil. The soil was being brought from elsewhere on site. It appeared somewhat coarse. Large rocks were being removed and stockpiled as the soil was being placed. According to staff, the uppermost layer of soil will be less coarse.
- The haul road for trucks bringing soil to the ET area was very dry and dusty. I had noticed the dust when observing the ET area from Altamont Pass Road. Without my mentioning it, after driving in the area Terry called for a water truck to wet down the roadway for dust control.



**top deck of ET area**



**sloped portion of ET area**



**Close-up of ET cover subsurface soil. Largest fragments are approximately 2 to 3 inches**

**ALRRF Community Monitor Monthly Report****June 2017**Stormwater Controls and Best Management Practices

- Basin A water level was about 2-3 feet below its discharge elevation. The discharge riser was fully exposed. No litter was seen. Basin B water level was also 2-3 feet below its discharge elevation, with no litter visible nearby. The Basin C water level was approximately 6 feet below its discharge elevation. Near its northwest shore, dry leaves and other plant matter, plus some plastic fragments, had accumulated on the surface.

Truck Wash Water Basin

- No water was visible in this small basin. The tamarisk trees that were treated with herbicide last year were still growing but it appears that they have finished blooming and have probably set seed. In addition, small perennial pepperweed was seen in the bottom of the basin, and several pepperweed plants were seen growing near the top of the basin. This plant is highly invasive; see [this link for further information](#).

Fill Area 1 Leachate Ponds

- The ponds appeared intact and fully lined but were not yet in use.

Fill Area 2

- The area generally appeared undisturbed and in good condition.
- Windblown litter was largely absent from the floor of Fill Area 2, but the west side slope had been accumulating some litter.
- The small landslide area above the west side of FA2 appeared unchanged. The large plastic sheet covering this area was coming loose from the sandbags that have held it in place. This was not causing a problem during these observations.

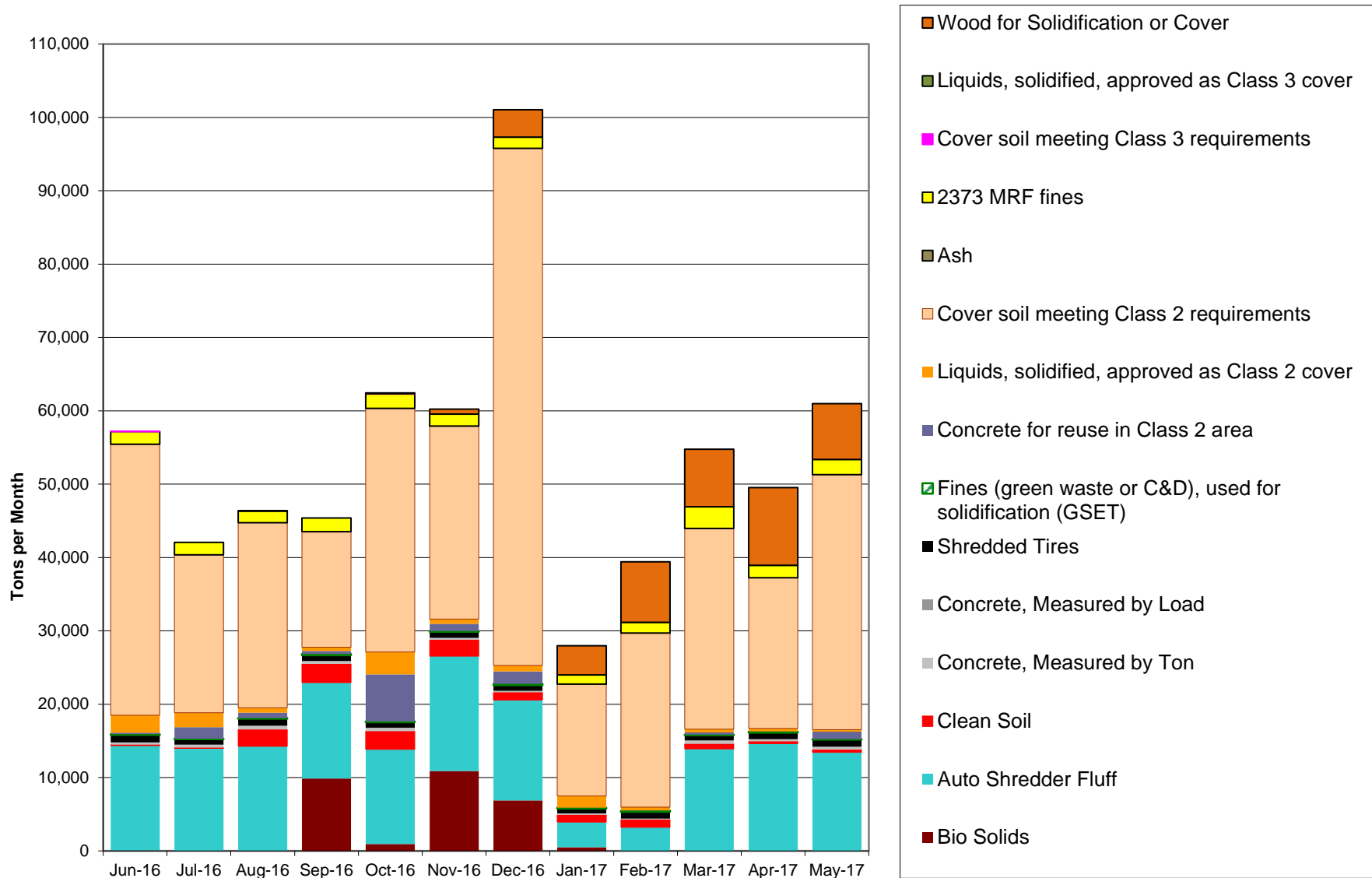
CASP area

- Fine grading appeared to be taking place on the east side of the Fill Area 2 access road. On the west side, a rock crushing and screening operation was reducing rocks and boulders to base rock size material. No actual construction was observed.

Bio-Fuels Yard

This yard was basically empty. The office trailer was still on site but all wood piles and related mechanical equipment were gone.

**Figure 6.4-1 Monthly Volumes of Revenue-Generating Cover**



**Figure 6.4-2 Monthly Volumes of Landfilled Materials**

