

Def # 1764483



December 1, 2014

Ms. Wendy Wyels  
 California Regional Water Quality Control Board  
 Central Valley Region  
 11020 Sun Center Drive, #200  
 Rancho Cordova, CA 95670-6114

RE: Compost Area Improvement Report, Feather River Organics, Yuba County, California

Dear Ms. Wyels:

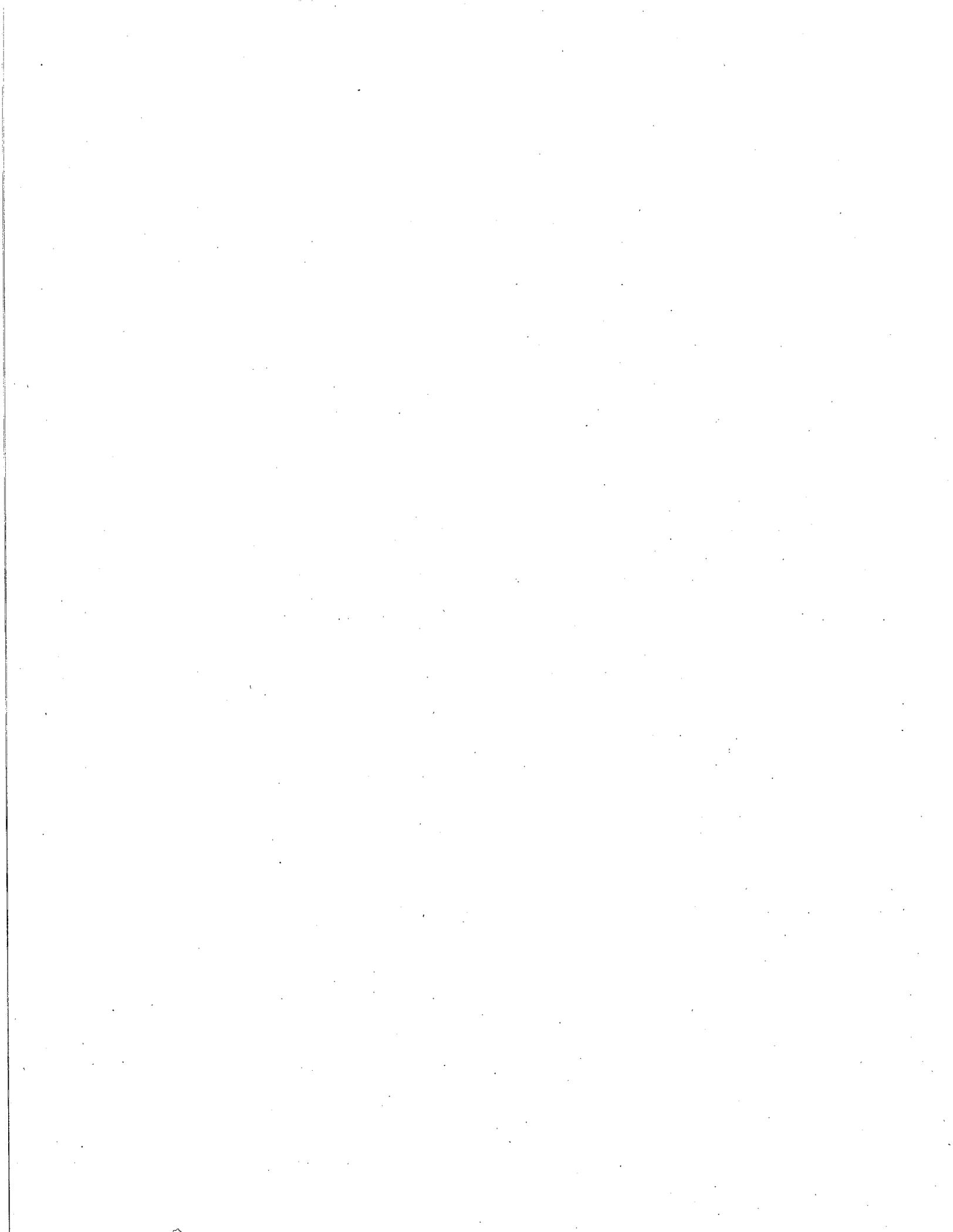
Recology Yuba-Sutter (RYS) is submitting the attached Compost Area Improvement Report, on behalf of its subsidiary, Feather River Organics (FRO). The plan was prepared by Golden Associates Inc. as prescribed by Order 13 of the August 29, 2013 Cleanup and Abatement Order (CAO) R5-2013-0704.

The following statement is provided, as required by the CAO, "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment." Should you have any questions regarding this report or the monitoring program, please contact Bryan Clarkson of our staff at 707.678.1492.

Sincerely,  
 Recology Yuba Sutter

Dave Vaughn  
 Group Manager

cc: Paul Donoho, Yuba County Environmental Health Department  
 Stephanie Kendall, Recology Yuba Sutter  
 Bryan Clarkson, Recology Environmental Solutions  
 Phil Graham, Recology Yuba-Sutter





December 1, 2014

Project No. 1301525

Mr. Phil Graham  
Recology Yuba Sutter  
3001 North Levee Road  
Marysville, CA 95901

**RE: COMPOST AREA IMPROVEMENT REPORT FOR THE FEATHER RIVER ORGANICS  
COMPOSTING OPERATION, RECOLOGY YUBA SUTTER FACILITY, MARYSVILLE,  
CALIFORNIA**

Dear Mr. Graham:

This Compost Area Improvement Report for the Feather River Organics (FRO) composting facility has been prepared to comply with Item No. 13 of Cleanup and Abatement Order (CAO R5-2013-0704 as issued by the Central Valley Regional Water Quality Control Board (CVRWQCB) on August 29, 2013. In accordance with Item No. 13, this Compost Area Improvement Report describes the work completed per the Compost Area Work Plan (Golder, 2013) and the Compost Area Leachate Collection Work Plan (Golder, 2014).

## 1.0 BACKGROUND

As part of the requirements of the CAO, Golder Associates (Golder) prepared the two above referenced work plans for Recology Yuba Sutter (RYS). These work plans are associated with the FRO composting operations at the RYS facility and are summarized below.

The Compost Area Work Plan (Compost Plan), which was submitted to the CVRWQCB in October 2013, describes in part how the composting activities will be completely separated from the closure cover of Landfill No. 1 (LF-1) through the modification or installation of a compost pad. The Compost Plan establishes minimum requirements for the thickness and grade of the pad, provides inspection frequencies, and establishes a soil sampling program.

The Compost Area Leachate Collection Work Plan (Leachate Plan), which was submitted to the CVRWQCB in January 2014, includes a conceptual permanent containment and control system of compost leachate discharging to the facility surface water management system for a 100-year, 24-hour storm event. Due to the infeasibility of constructing a permanent containment and control system per CAO Order R5-2013-0704, the CVRWQCB approved the construction and operation of an interim compost leachate containment and control system as described in Golder's letter to RYS dated August 13, 2014. This interim system is designed to accommodate a 3.16-inch storm (25-year, 24-hour storm per Department of Water Resources).

Sections 2 of this report describes improvements implemented associated with the compost pad and Section 3 includes a summary of the interim compost leachate management improvements for the FRO compost facility.

n:\projects\ 2013\1301525 (rys cao workplans)\compost area improvement report\final\rys fro compost area improvement report\_final.docx

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Golder Associates: Operations in Africa, Asia, Australasia, Europe, North America and South America

## 2.0 COMPOST PAD IMPROVEMENTS

The Compost Plan established minimum requirements for a compost pad that would help protect the LF-1 closure cover from the composting operations. The Compost Plan requires that the following work items be performed:

- Construct a low-permeability aggregate compost pad to a minimum of nine (9) inches to allow for wearing of the pad thickness over time and graded at a minimum of three (3) percent to promote positive drainage. The low-permeability aggregate shall consist of an aggregate comparable to a Caltrans Class 2 or Class 3 aggregate base with a minimum of 15 percent fines. In addition, this material is required to be compacted to a minimum density of 90 percent relative compaction per ASTM D1557. The compost pad surface is to be installed by September 15, 2014.
- Install thickness markers by October 1, 2014 to verify that the minimum thickness is maintained.

During the summer and fall of 2014, Recology processed recycled concrete to an approximate 1-inch minus particle size material at their nearby Ostrom Road Landfill facility. This material was mixed with silty-clay soil to create a low-permeability aggregate mixture for use in the compost pad at the RYS facility. The aggregate mixture was hauled to RYS where it was placed and compacted to nine (9) inches or greater thickness and the minimum three (3) percent grades were achieved. The intent of the 9-inch compost pad thickness is to meet the minimum requirement of six (6) inches in thickness and provide additional material to allow for wear expected to occur during composting operations. Thickness markers were installed in rows at approximately 200-foot intervals per the requirements of the Compost Plan. Golder provided CQA services which consisted of:

- Performing field density testing for the compost pad surface
- Collecting soil samples for laboratory analysis
- Observing typical thickness marker installation

CQA procedures consisted of measuring the in-situ moisture-density using a nuclear density gauge (ASTM D6938). Golder performed 35 nuclear moisture-density tests, resulting in a testing frequency of one test per 394 cubic yards (cy). This frequency exceeds the Compost Plan requirements (minimum frequency of 1 test per 500 cy). In addition, samples of the in-situ compost pad low-permeability aggregate soils were obtained for laboratory testing for particle-size distribution (ASTM D422) and modified Proctor density (ASTM D1557). Field density test and/or soil samples locations are shown on the attached Figure 1. The results of the in-situ density testing and laboratory results are summarized in Attachment 1. Recology contracted MHM of Yuba City, California to perform a survey of the improved compost pad. The compost pad thickness was verified by comparing the base topography (April 2012) to the improved compost pad surface. The pre-construction and post-construction pad surface elevations are shown on Figure 2.

The above information indicates the following:

- The 9-inch thick compost pad surface exceeds the minimum required thickness of Six (6) inches
- As indicated in Figure 2, the compost pad thickness was actually increased by up to one to two feet to establish minimum drainage grades. The compost pad fill placement occurred primarily in August and September and was initially staked and graded to a minimum three (3) percent grade. The November 18, 2014 survey in Figure 2 was completed two to three months after the additional fill was placed, and therefore reflects some additional minor settlement that has occurred following fill placement. The November 18, 2014 survey shows that the overall surface grades are approximately three (3) percent or greater.

- The compaction of the compost pad surface meets or exceeds the required 90 percent relative compaction.
- The results of the in-situ testing for particle size showed that the southwest and southeast portions of the compost pad meet the minimum fines content requirements set forth in the Compost Plan. Some areas were identified as needing additional fines. These areas are being amended with clayey soils to bring the fines content at or above 15 percent.

### 3.0 COMPOST PAD LEACHATE MANAGEMENT IMPROVEMENTS

The system was designed to accommodate a 3.16-inch storm. The minimum required improvements to manage a 3.16-inch storm include the following key elements:

- Adding three (3) 21,000-gallon capacity storage tanks to the existing three (3) storage tanks currently in use at FRO
- Extending a 4-inch diameter pipeline along the north end of the compost facility to the publically-owned treatment works (POTW) sewer system discharge point near the RYS truck maintenance facility
- Adding a larger additional concrete vault and four (4) five (5) horsepower (HP) pumps at the Hog Farm area location to convey compost leachate to the storage tanks
- Upsizing the existing pumps in the southern compost leachate collection vaults to convey larger leachate flows

Recology opted to temporarily install additional surface water management infrastructure beyond those required for the design storm. Therefore, the surface water improvements that were installed include:

- The total number of 21,000-gallon capacity storage tanks was increased from two (2) to eight (8) at the northern end of the compost pad near the Hog Farm area
- The total number of 21,000-gallon capacity storage tanks was increased from one (1) to four (4) along the southern end of the compost pad near the Material Recovery Facility (MRF)
- A second vault with an approximate 5,000-gallon capacity was constructed within the Hog Farm area
- Two (2) additional 5-HP pumps were installed into the existing and new vault for a total of four (4) pumps within the Hog Farm area vaults
- A 2-HP pump was installed in each of the southern sumps near the MRF
- A 4-inch diameter discharge pipes was installed from each group of tanks to the POTW sewer connection to allow for direct disposal. These pipes connect to form one discharge pipe near the southwest corner of the compost area.
- A total of eight (8) flow meters were installed at the following locations:
  - On each pipe from the sump/vault pumps to the storage tanks (5 total)
  - On the pipes to each water filling station (J-Stand) (2 total)
  - On the 4-inch diameter pipe to the POTW (1 unit) after the pipes are combined near the south west corner of the site.
- Each of the previously installed 6-inch diameter pipes from the northern compost pad were connected to an 18-inch diameter pipe installed within the western drainage ditch that routes water to the Hog Farm area vaults

Additional improvements include the construction of a diversion berm along the entire southern boundary of the active compost area which connects to the existing diversion berm along the northwest edge and

terminates near the southeast sump to limit surface water run-on. Golder also installed one (1) suction lysimeter near each storage tank group location to monitor any potential contamination within the vadose zone. Figure 3 shows the key drainage improvements and the lysimeter installation locations. Lysimeter installation logs are presented in Attachment 2 and a photograph log illustrating key drainage improvements is included in Attachment 3.

Based on actual measured compost leachate volumes, Recology may reduce, maintain, or increase the tank storage volume to ensure that a 3.16-inch storm can be accommodated without discharge to the Hog Farm area.

#### 4.0 CLOSURE

This submittal summarizes the compost pad and leachate management improvements completed to date at the FRO compost facility located at RYS as required per Item No. 13 of the CAO. Please call if you have any questions or need additional information.

Sincerely,

**GOLDER ASSOCIATES INC.**



Joel Kelsey  
Project Engineer



Kenneth G. Haskell, P.E.  
Principal/ Sr. Practice Leader

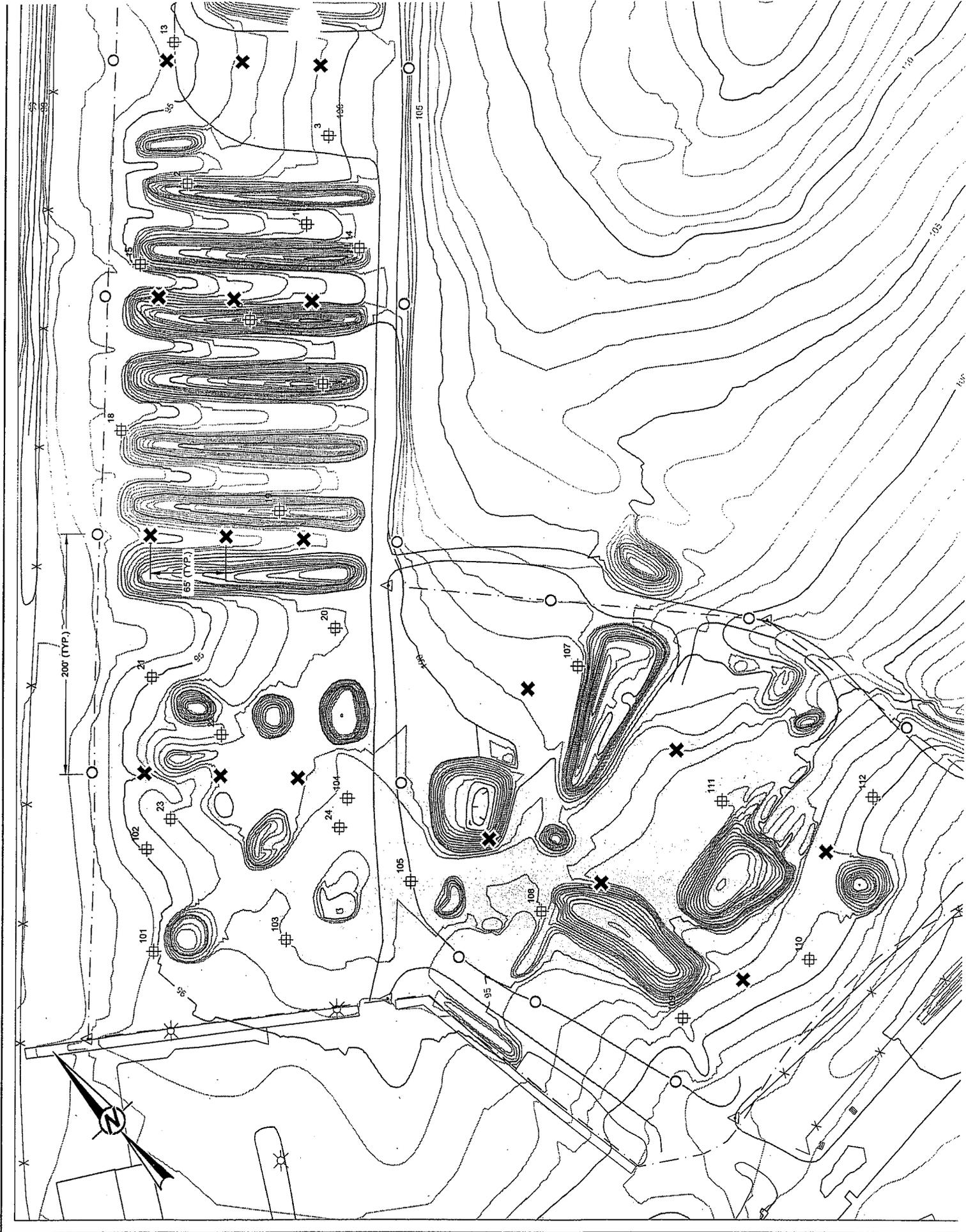


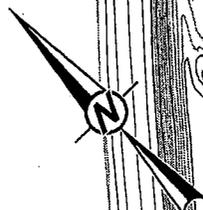
Figures/Attachments:

- Figure 1: Compost Pad Sample Locations
- Figure 2: Compost Pad Survey Map
- Figure 3: Compost Area Stormwater Improvements
- Attachment 1: Compost Pad Soil Testing
- Attachment 2: Lysimeter Installation Logs
- Attachment 3: Compost Area Improvements Photograph Log



**FIGURES**





CONNECTED 4-INCH Ø PIPE TO POTW SEWER CONNECTION

4-INCH Ø DISCHARGE PIPE

EXISTING SCREENING BERM  
LOCATION APPROXIMATE

EXISTING CLAY-LINED DITCH

CONNECTED ALL PIPES FROM C TO 18-INCH Ø HDI

EXISTING DRAINAGE DIVERSION BERM

COMPOST AREA

NEW DRAINAGE DIVERSION BERM

COMPOST OPERATIONS LIMITS

INSTALLED 3 ADDITIONAL 21,000 GAL STORAGE TANKS

INSTALLED 1-STAND

EXISTING 21,000 GAL STORAGE TANK OAE

EXISTING DRAIN INLET SUMP

INSTALLED 2-HP PUMP

INSTALLED 2-HP PUMP

EXISTING DRAIN INLET SUMP

LYSIMETER L-8

055965



**ATTACHMENT 1  
COMPOST PAD SOIL TESTING**

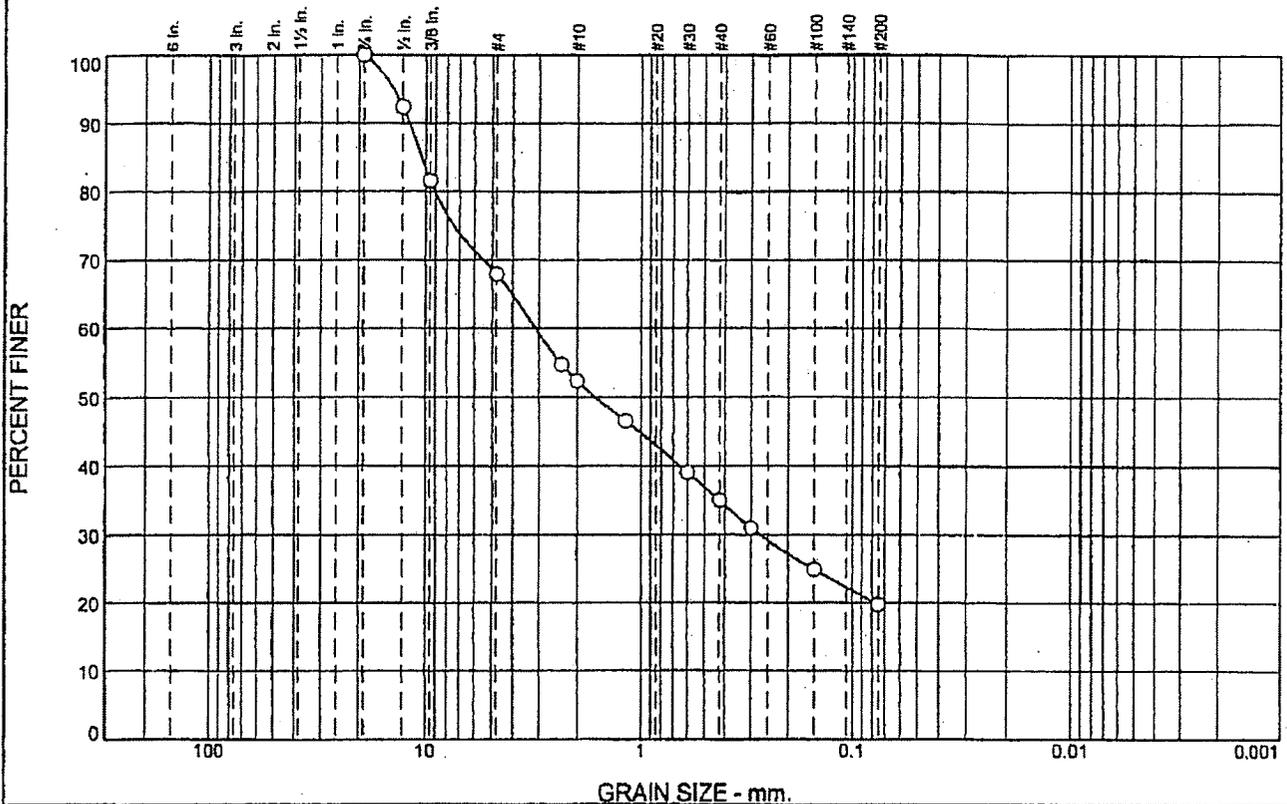
**TABLE 1**  
**SUMMARY OF MOISTURE/DENSITY TESTING**  
**LOW-PERMEABILITY AGGREGATE COMPOST PAD**  
**FEATHER RIVER ORGANICS, MARYSVILLE, CALIFORNIA**  
**1301525**

Location ID	Test Reference					In-Situ Values			Perc Rela Comp
	Date	Test Depth (in.)	Reference Curve Number	Maximum Dry Density (pcf)	Optimum Moisture Content	Wet Density (pcf)	Moisture Content	Dry Density (pcf)	
1	8/15/2014	6	1	125.7	11.0%	128.4	8.3%	118.5	94
2	8/15/2014	6	1	125.7	11.0%	126.3	8.5%	116.4	93
3	8/15/2014	6	1	125.7	11.0%	137.5	6.3%	129.9	103
4	8/15/2014	6	1	125.7	11.0%	131.0	6.6%	122.9	98
5	8/15/2014	6	1	125.7	11.0%	127.3	5.8%	120.4	96
6	8/15/2014	6	1	125.7	11.0%	122.5	5.5%	116.1	92
7	8/15/2014	6	1	125.7	11.0%	130.2	6.2%	122.6	98
8	8/15/2014	6	1	125.7	11.0%	136.1	7.6%	126.5	107
9	8/15/2014	6	1	125.7	11.0%	135.5	7.7%	125.9	100
10	8/15/2014	6	1	125.7	11.0%	131.9	6.9%	123.4	98
11	8/15/2014	6	1	125.7	11.0%	126.0	5.7%	119.2	95
13	8/29/2014	6	1	125.7	11.0%	130.6	6.6%	122.5	97
14	8/29/2014	6	1	125.7	11.0%	131.0	5.0%	124.7	99
15	8/29/2014	6	1	125.7	11.0%	125.3	6.7%	117.4	93
16	8/29/2014	6	1	125.7	11.0%	124.9	6.1%	117.7	94
17	8/29/2014	6	1	125.7	11.0%	123.7	7.2%	115.4	92
18	8/29/2014	6	22	130.1	8.7%	129.8	7.1%	121.1	93
19	8/29/2014	6	22	130.1	8.7%	128.3	6.9%	120.3	92
20	8/29/2014	6	22	130.1	8.7%	129.6	8.1%	119.9	92
21	8/29/2014	6	22	130.1	8.7%	125.1	6.9%	117.0	90
22	8/29/2014	6	22	130.1	8.7%	127.8	7.2%	119.3	92
23	8/29/2014	6	22	130.1	8.7%	128.7	6.6%	120.7	93
24	8/29/2014	6	22	130.1	8.7%	125.8	7.9%	116.7	90
101	10/29/2014	6	105	128.5	10.4%	126.1	6.5%	118.4	92
102	10/22/2014	6	105	128.5	10.4%	124.8	7.6%	116.0	90
103	10/29/2014	6	105	128.5	10.4%	127.8	7.4%	119.0	93
104	10/22/2014	6	105	128.5	10.4%	127.2	9.7%	116.0	90
105	10/29/2014	6	105	128.5	10.4%	129.5	6.8%	121.3	94
106	10/22/2014	6	105	128.5	10.4%	125.4	8.5%	115.5	90
107	10/29/2014	6	105	128.5	10.4%	129.7	6.7%	121.5	95
108	10/22/2014	6	105	128.5	10.4%	126.6	8.9%	116.3	91
109	10/29/2014	6	105	128.5	10.4%	128.0	7.4%	119.2	93
110	10/22/2014	6	105	128.5	10.4%	126.4	8.5%	116.5	91
111	10/22/2014	6	105	128.5	10.4%	126.8	7.9%	117.5	91
112	10/22/2014	6	105	128.5	10.4%	125.5	8.4%	115.8	90

**TABLE 2**  
**SUMMARY OF GRAIN SIZE ANALYSIS TESTING**  
**LOW-PERMEABILITY AGGREGATE COMPOST PAD**  
**FEATHER RIVER ORGANICS, MARYSVILLE, CALIFORNIA**  
**1301525**

Test No.	Grain Size Analysis				Pass/ Fail
	> 1"	Gravel	Sand	Fines	
101	0%	32.1%	48.1%	19.8%	Pass
103	0%	34.0%	33.1%	32.9%	Pass
105	0%	29.6%	51.9%	18.5%	Pass
107	0%	29.0%	45.4%	25.6%	Pass
111	0%	46.4%	34.8%	18.8%	Pass

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	32.1	15.5	17.4	15.2	19.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 Inch	100.0		
1/2 Inch	92.5		
3/8 Inch	81.6		
#4	67.9		
#8	54.7		
#10	52.4		
#16	46.5		
#30	39.1		
#40	35.0		
#50	31.0		
#100	24.9		
#200	19.8		

**Soil Description**

PL=                      **Atterberg Limits**                      PI=

LL=

**Coefficients**

D<sub>90</sub>= 11.8311      D<sub>85</sub>= 10.4158      D<sub>60</sub>= 3.1356

D<sub>50</sub>= 1.6409      D<sub>30</sub>= 0.2727      D<sub>15</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

USCS=                      **Classification**                      AASHTO=

**Remarks**

(no specification provided)

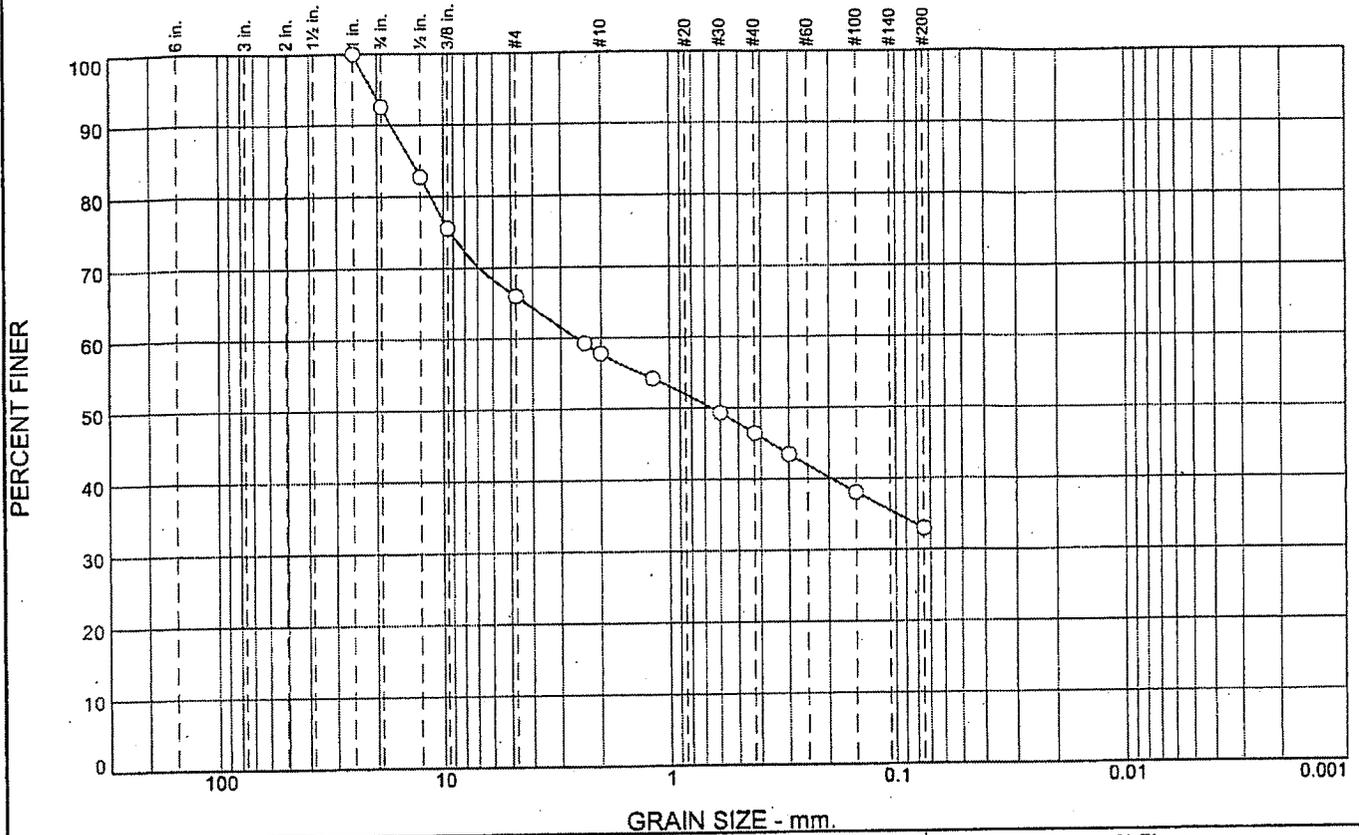
Location: 101  
Sample Number: S43621

Date: 10/22/14

<b>SIERRA TESTING LABS, INC.</b> El Dorado Hills, CA	Client: Golder Associates Project: RYS Compost Pad CQA 339-7668 Project No: 14-108
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Tested By: jm                      Checked By: MW

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.5	26.5	8.2	11.3	13.6	32.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	92.5		
1/2	82.8		
3/8	75.6		
#4	66.0		
#8	59.2		
#10	57.8		
#16	54.2		
#30	49.3		
#40	46.5		
#50	43.4		
#100	38.0		
#200	32.9		

**Soil Description**

PL=                      **Atterberg Limits**                      PI=

LL=

**Coefficients**

D<sub>90</sub>= 17.1551      D<sub>85</sub>= 13.9075                      D<sub>60</sub>= 2.5627

D<sub>50</sub>= 0.6522      D<sub>30</sub>=                                      D<sub>15</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=                                      C<sub>c</sub>=

**Classification**

USCS=                      AASHTO=

**Remarks**

\* (no specification provided)

Location: ~~114~~ 103  
 Sample Number: 43636

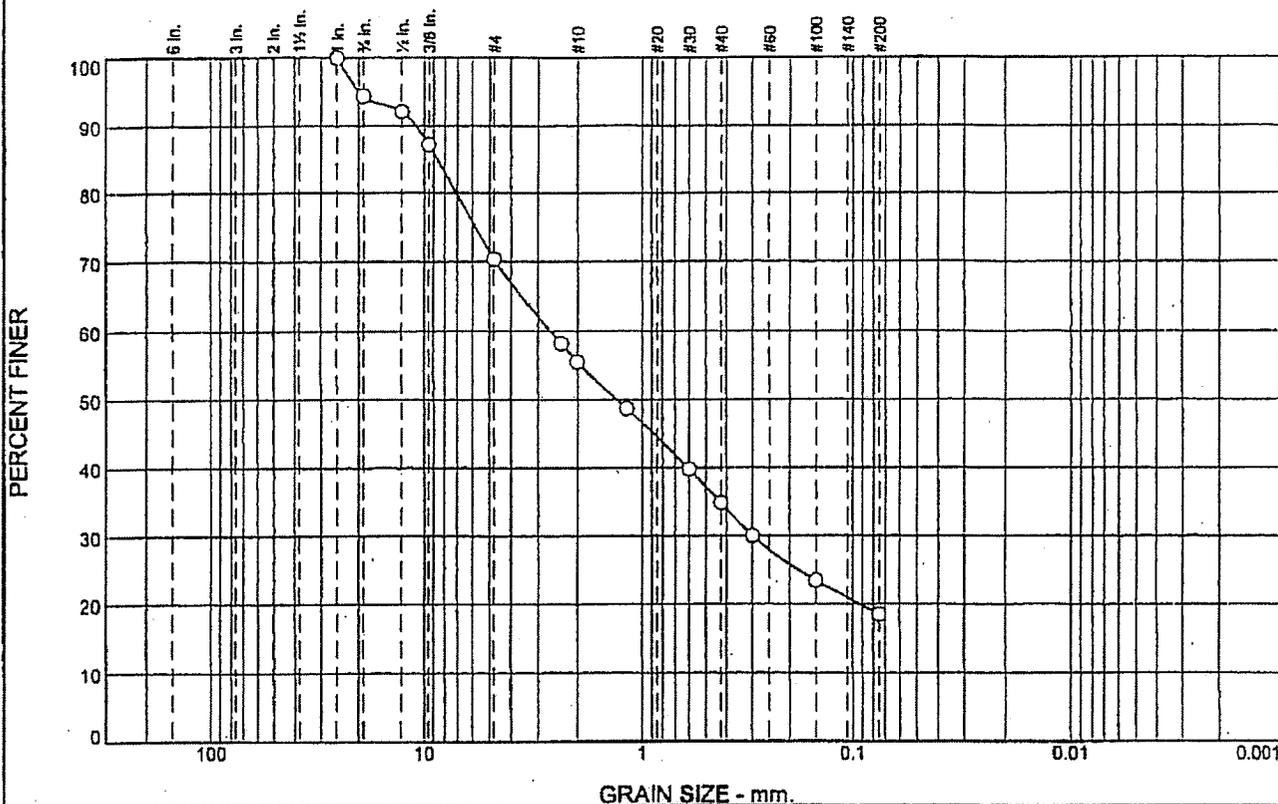
Date: 10/31/14

<b>SIERRA TESTING LABS, INC.</b> El Dorado Hills, CA	Client: Golder Associates Project: RYS Compost Pad CQA 339-7668 Project No: 14-108
---	---

Figure

Tested By: jm                      Checked By: mpw

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.6	24.0	14.9	20.7	16.3	18.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 Inch	100.0		
3/4 Inch	94.4		
1/2 Inch	92.1		
3/8 Inch	87.2		
#4	70.4		
#8	58.2		
#10	55.5		
#16	48.7		
#30	39.8		
#40	34.8		
#50	30.0		
#100	23.5		
#200	18.5		

**Soil Description**

PL=                      Atterberg Limits                      PI=

LL=

Coefficients

D<sub>80</sub>= 10.9182      D<sub>85</sub>= 8.6526                      D<sub>60</sub>= 2.6378

D<sub>50</sub>= 1.3181      D<sub>30</sub>= 0.2990                      D<sub>15</sub>=

D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

USCS=                      Classification                      AASHTO=

Remarks

(no specification provided)

Location: 105  
Sample Number: S43623

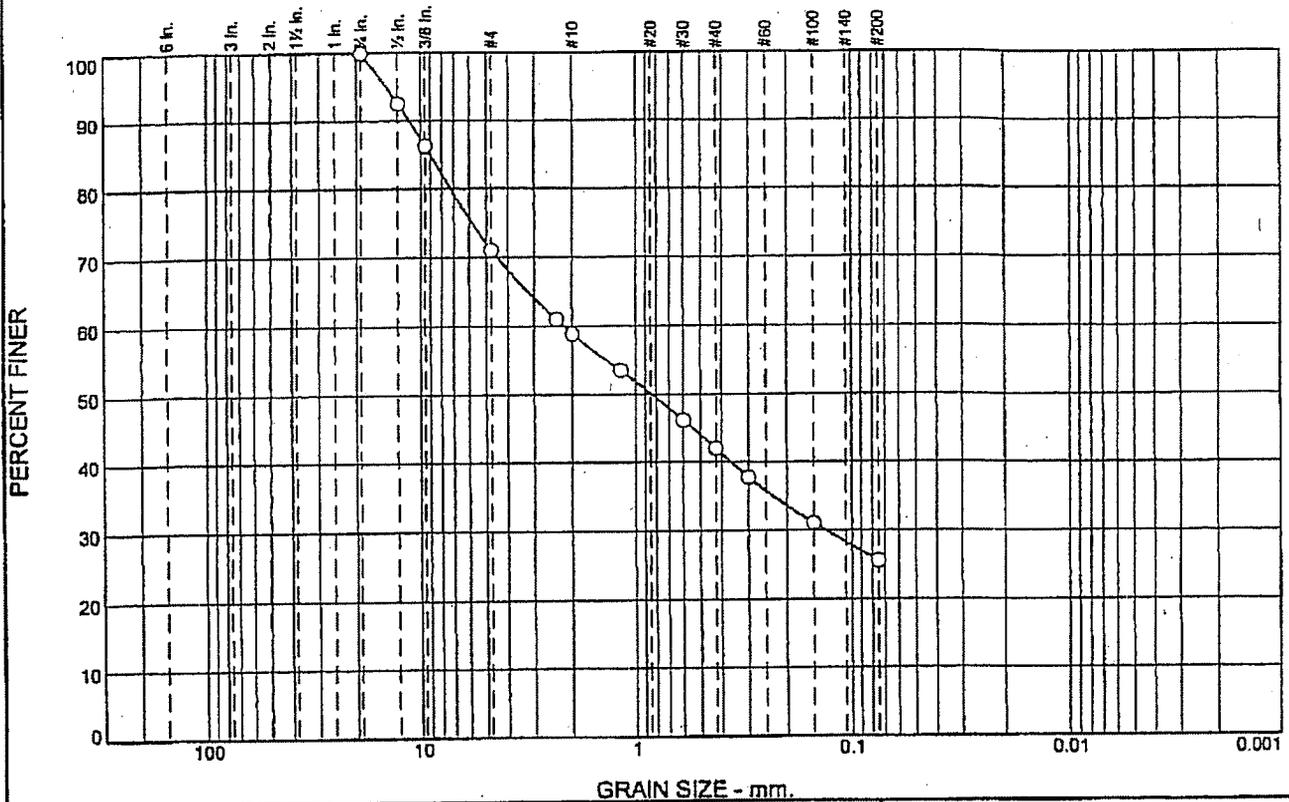
Date: 10/23/14

<b>SIERRA TESTING LABS, INC. El Dorado Hills, CA</b>	Client: Golder Associates Project: RYS Compost Pad CQA 339-7668 Project No: 14-108
--	---

Tested By: jm                      Checked By: MW

Figure

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	29.0	12.2	16.8	16.4	25.6	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 Inch	100.0		
1/2 Inch	92.5		
3/8 Inch	86.3		
#4	71.0		
#8	61.0		
#10	58.8		
#16	53.5		
#30	46.2		
#40	42.0		
#50	37.7		
#100	31.1		
#200	25.6		

(no specification provided)

**Soil Description**

**Atterberg Limits**  
 PL=                      LL=                      PI=

**Coefficients**  
 D<sub>90</sub>= 11.2655      D<sub>85</sub>= 9.0117                      D<sub>60</sub>= 2.1917  
 D<sub>50</sub>= 0.8394      D<sub>30</sub>= 0.1314                      D<sub>15</sub>=  
 D<sub>10</sub>=                      C<sub>u</sub>=                                      C<sub>c</sub>=

**Classification**  
 USCS=                      AASHTO=

Remarks

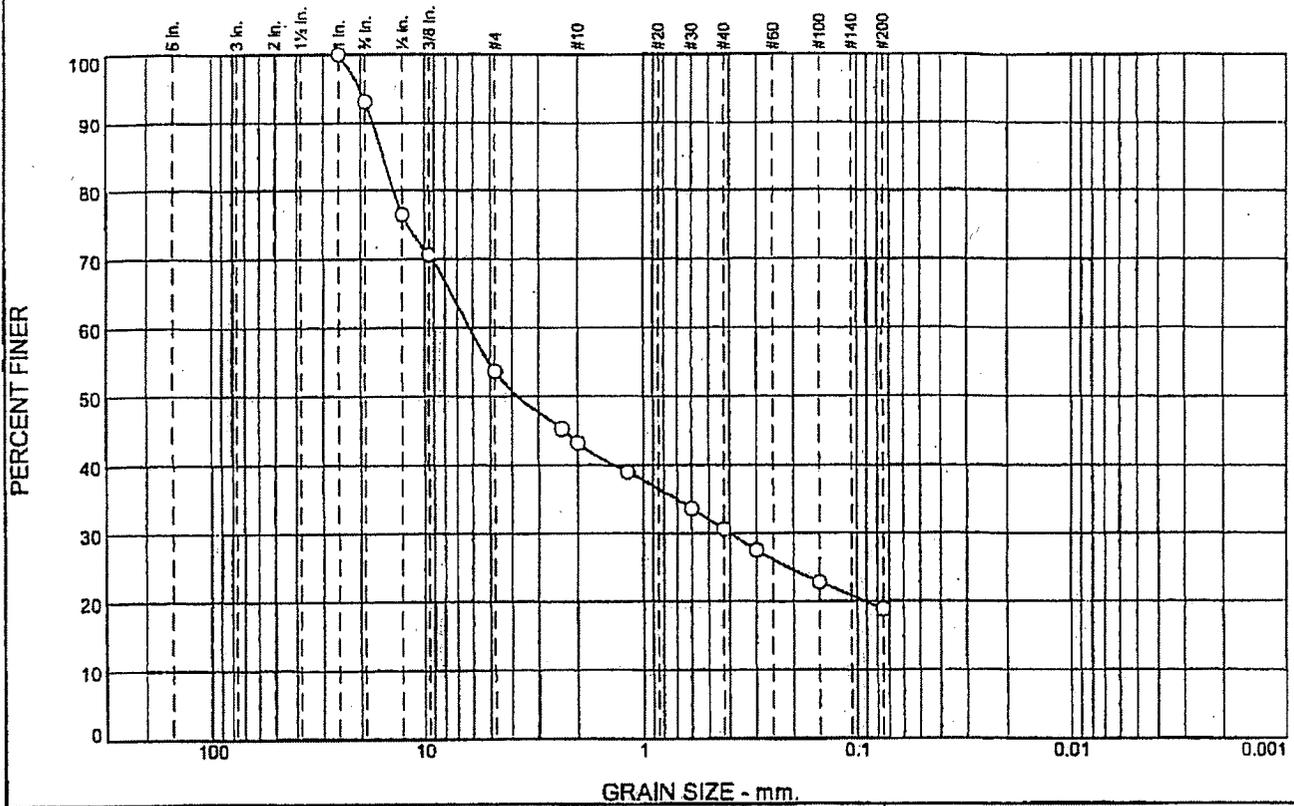
Location: 107  
 Sample Number: S43624

Date: 10/23/14

<b>SIERRA TESTING LABS, INC.</b> El Dorado Hills, CA	Client: Golder Associates Project: RYS Compost Pad CQA 339-7668 Project No: 14-108
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Tested By: jm                      Checked By: MW

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	6.8	39.6	10.3	12.7	11.8	18.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 Inch	100.0		
3/4 Inch	93.2		
1/2 Inch	76.5		
3/8 Inch	70.7		
#4	53.6		
#8	45.3		
#10	43.3		
#16	39.0		
#30	33.6		
#40	30.6		
#50	27.5		
#100	22.8		
#200	18.8		

**Soil Description**

**Atterberg Limits**  
 PL=                      LL=                      PI=

**Coefficients**  
 D<sub>90</sub>= 17.5475      D<sub>85</sub>= 15.6717      D<sub>60</sub>= 6.1940  
 D<sub>50</sub>= 3.7754      D<sub>30</sub>= 0.3980      D<sub>15</sub>=  
 D<sub>10</sub>=                      C<sub>u</sub>=                      C<sub>c</sub>=

**Classification**  
 USCS=                      AASHTO=

**Remarks**

(no specification provided)

Location: 111  
 Sample Number: S43626

Date: 10/23/14

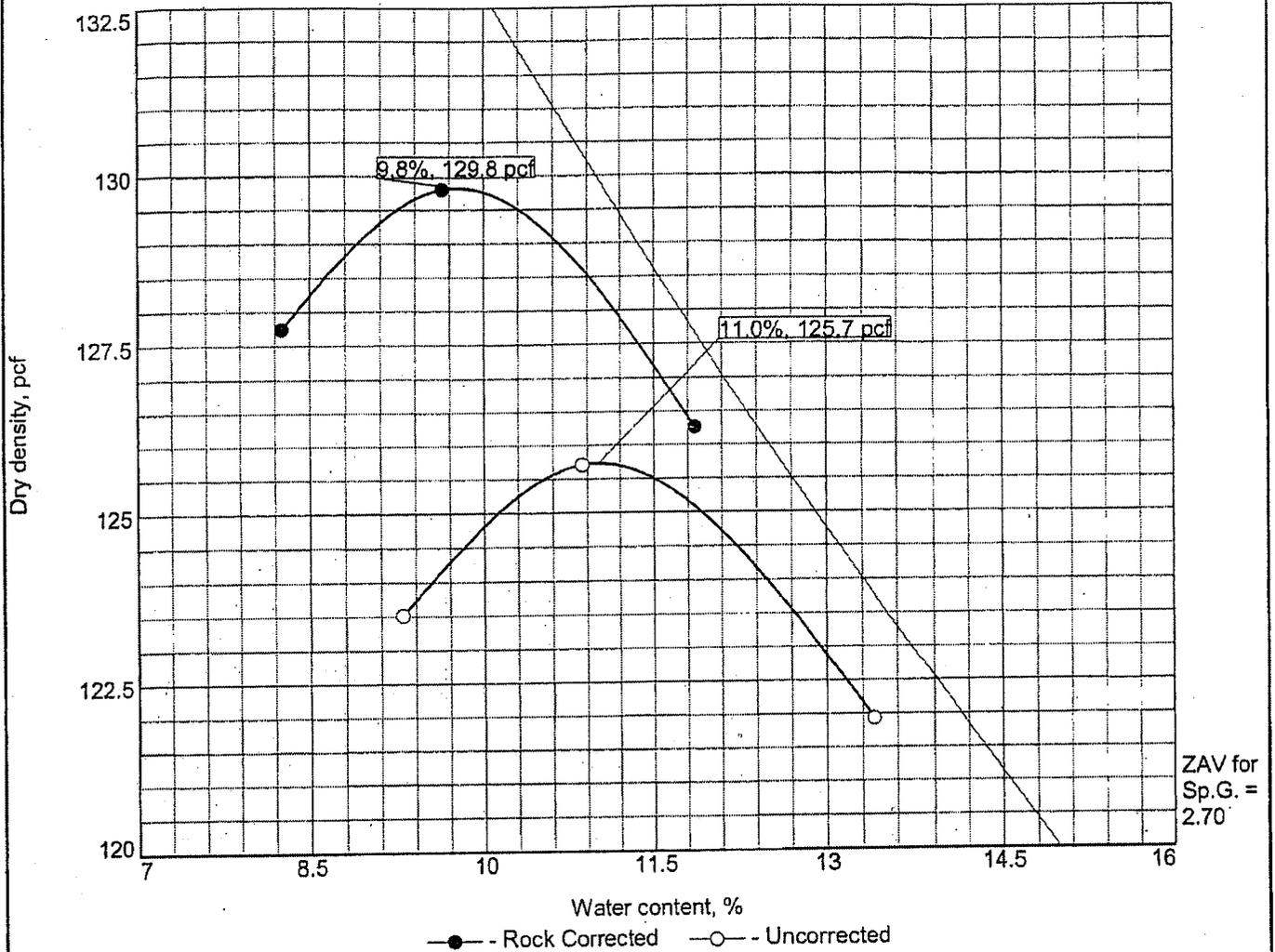
<b>SIERRA TESTING LABS, INC.</b> El Dorado Hills, CA	Client: Golder Associates Project: RYS Compost Pad CQA 339-7668 Project No: 14-108
---	---

Figure

Tested By: jm

Checked By: MW

# COMPACTION TEST REPORT



Test specification: ASTM D 1557-07 Method C Modified  
 ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in.	% < No.200
	USCS	AASHTO						
							12.4	

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 129.8 pcf	125.7 pcf	
Optimum moisture = 9.8 %	11.0 %	
Project No. 14-092      Client: Golder Associates Inc Project: Recology Yuba - Sutter 339-7668 Location: <del>---</del> Sample Number: S43301 Location No. 1      SIERRA TESTING LABS, INC. EI Dorado Hills, CA		Remarks:

Tested By: jm      Checked By: MW

Figure



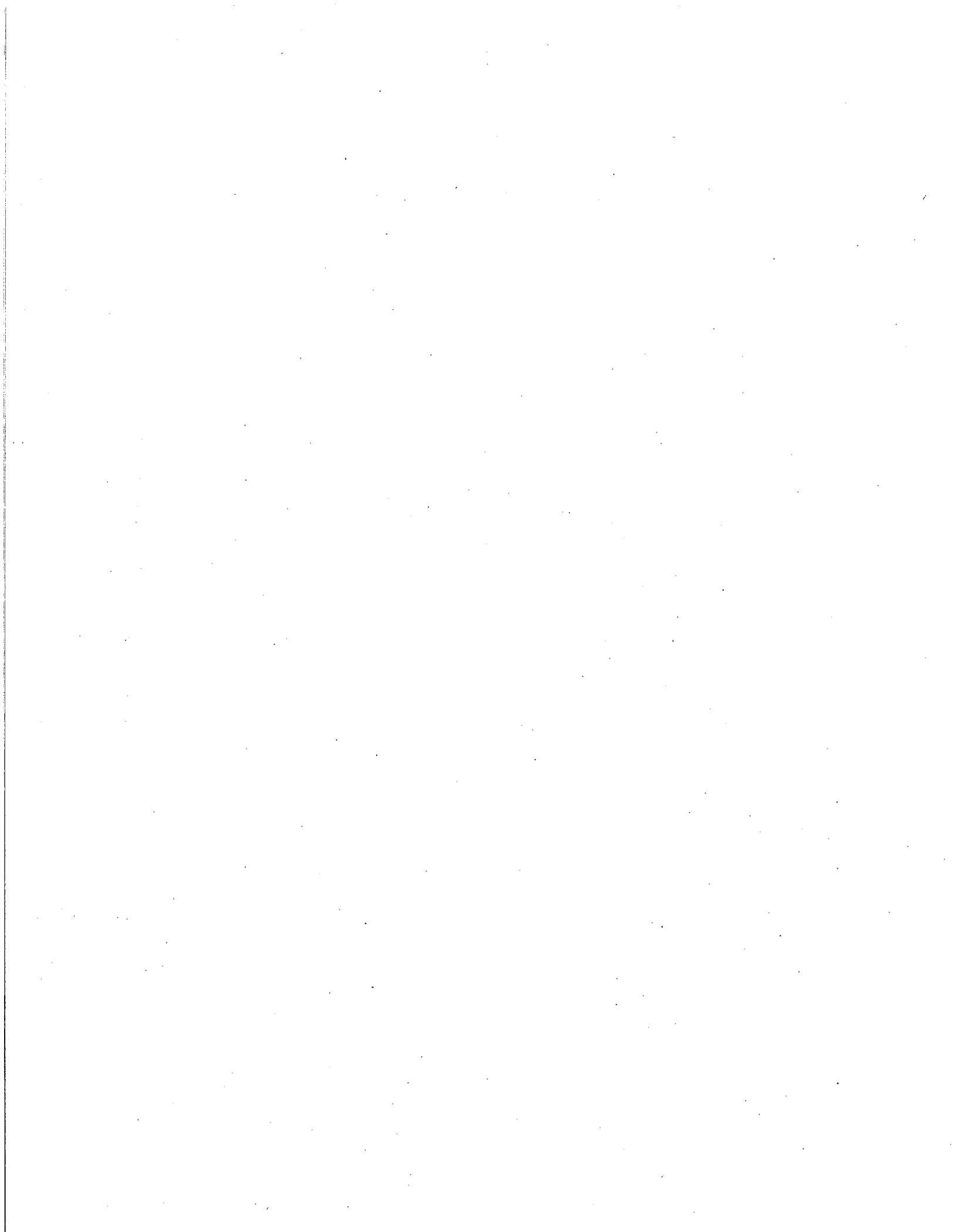


**ATTACHMENT 2  
LYSIMETER INSTALLATION LOGS**





**ATTACHMENT 3  
COMPOST AREA IMPROVEMENTS PHOTOGRAPH LOG**



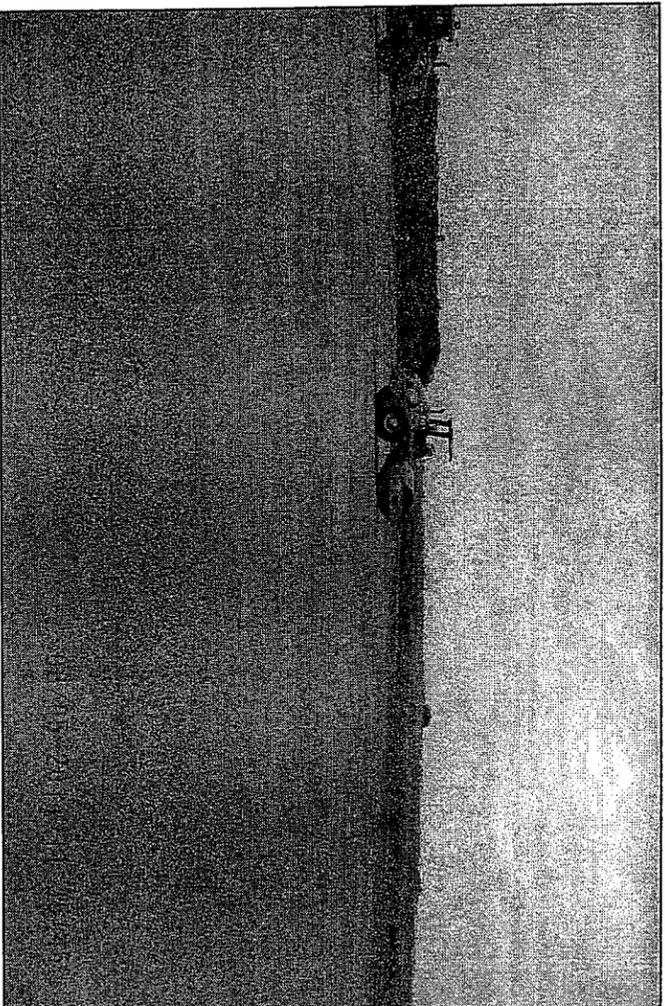


Photo 1: Operator compacting compost pad. Low-permeability aggregate.

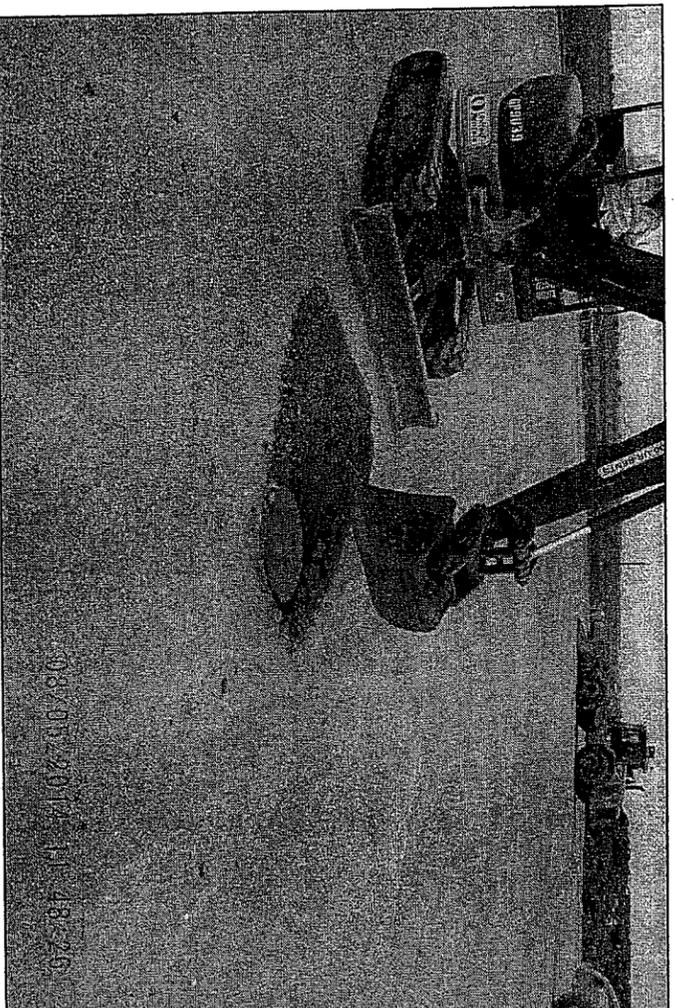


Photo 2: Operator excavating compost pad to install thickness marker.

PROJECT NO: 1301528 DWG: Attachment 3 - Photographs DATE: 11/22/2014

FIGURE **A-1**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements  
Golder Associates

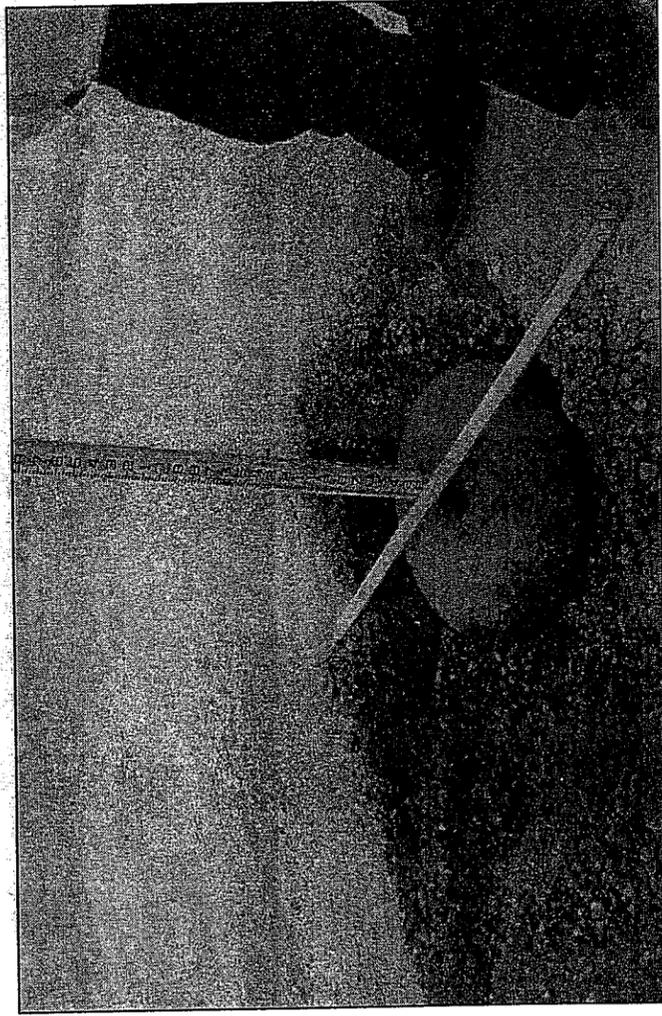


Photo 3: Laborer installs thickness marker.

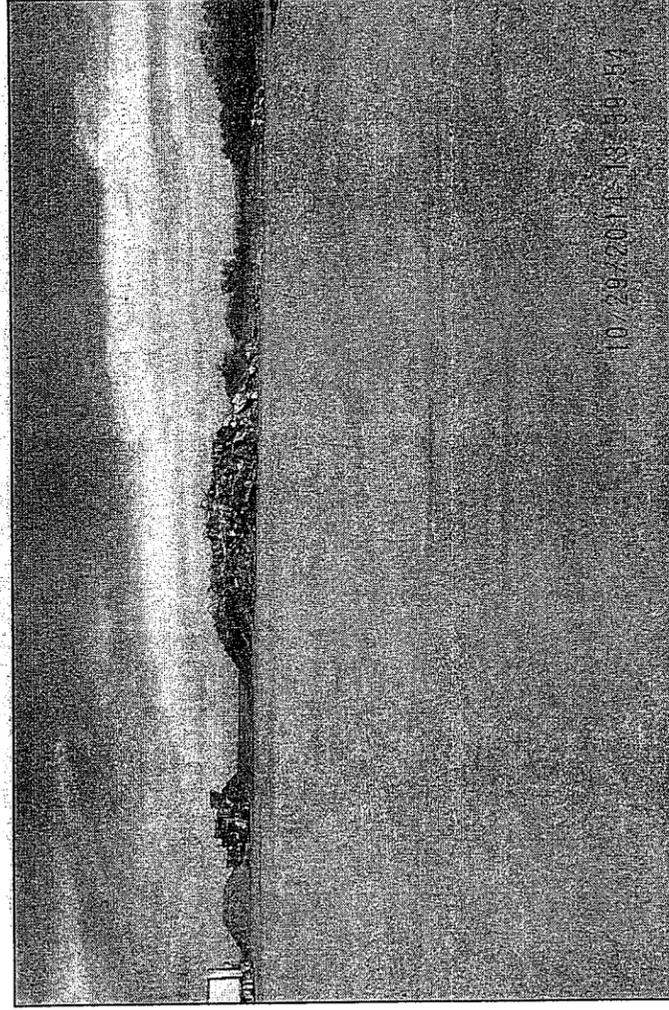


Photo 4: View of improved compost pad in the southern area of compost operations.

FIGURE **A-2**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements

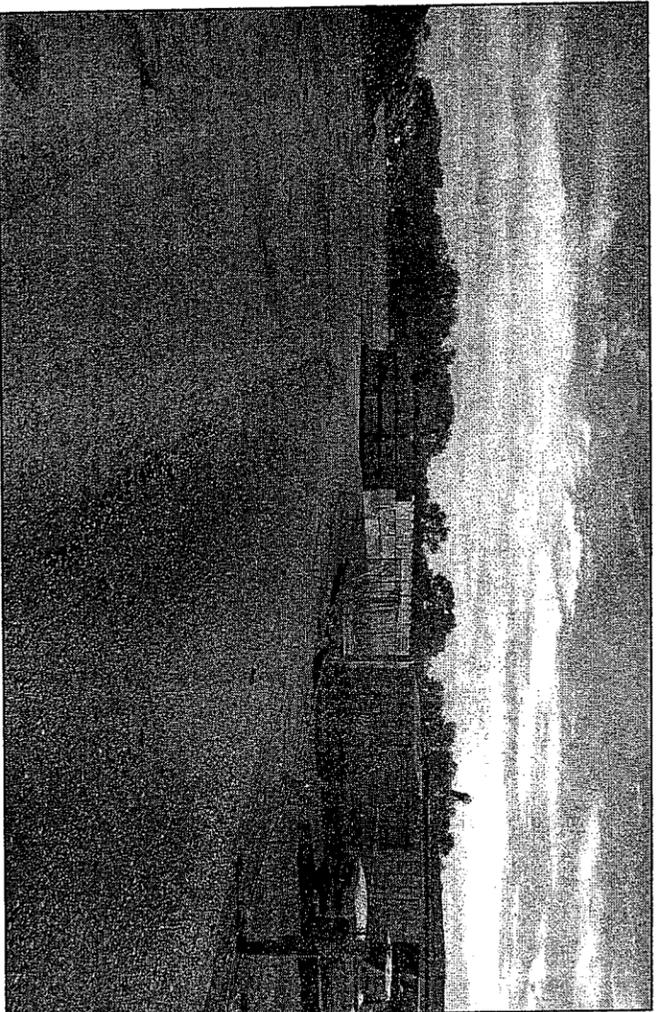


Photo 5: Diversion berm along southern perimeter of compost operations area.

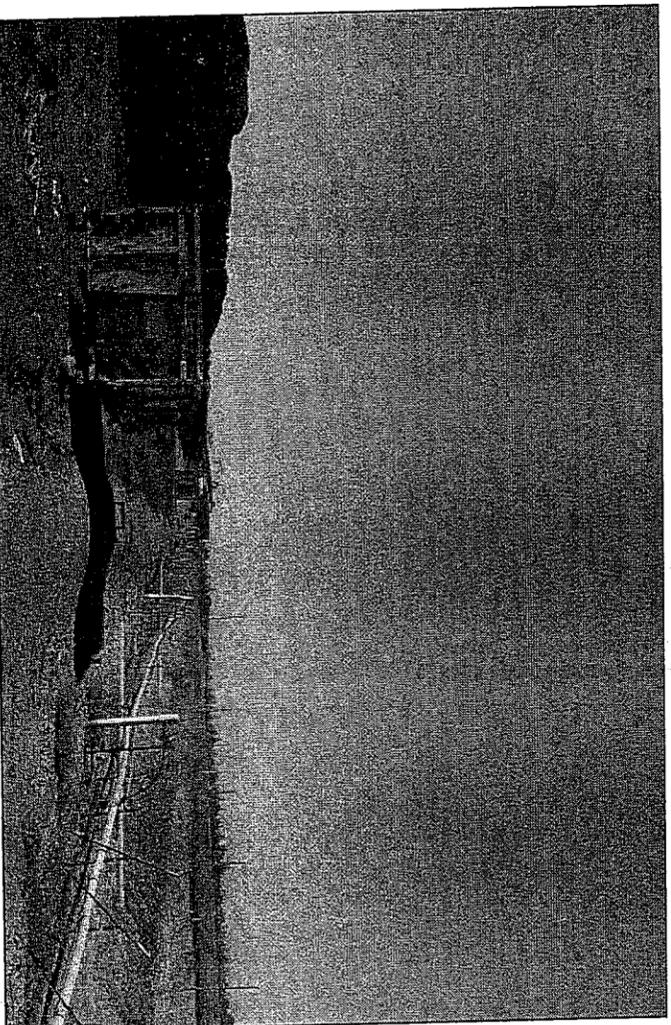


Photo 6: Diversion berm along western perimeter of compost operations area.

FIGURE **A-3**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements

Golder Associates

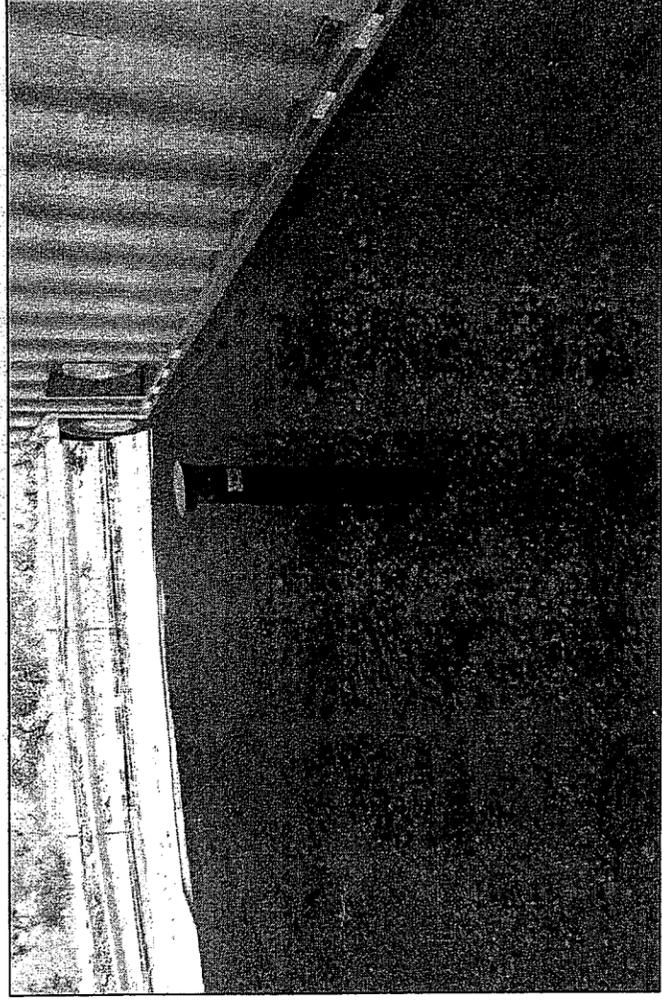


Photo 7: Typical installed Lysimeter.

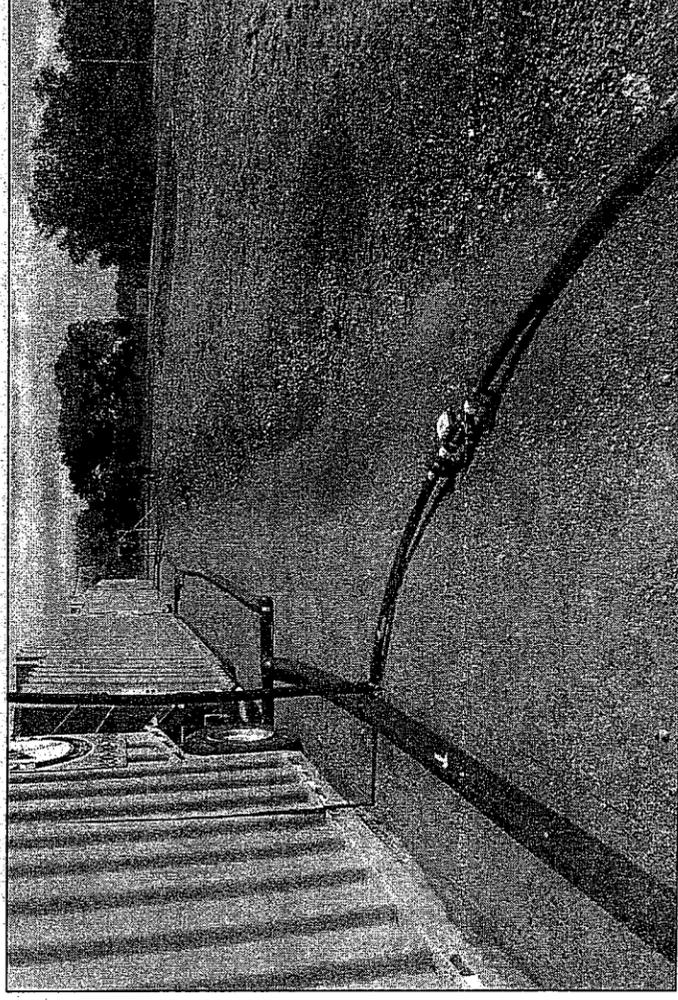


Photo 8: Typical installed flow meter.

**FIGURE A-4**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements

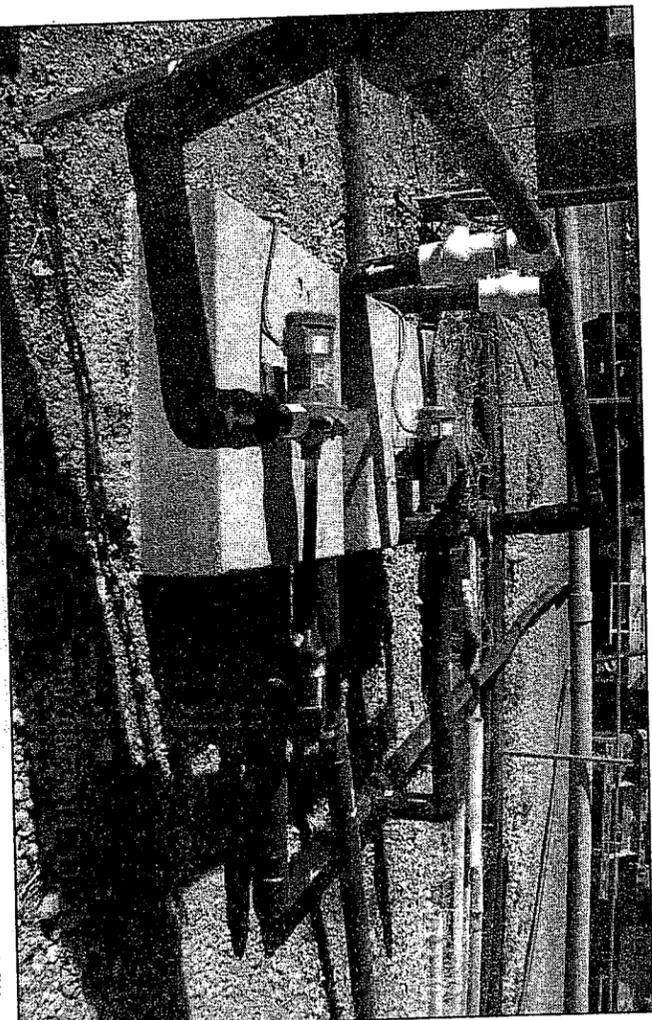


Photo 9: View of northern pumps and piping associated with POTW discharge and J-stand fill station.

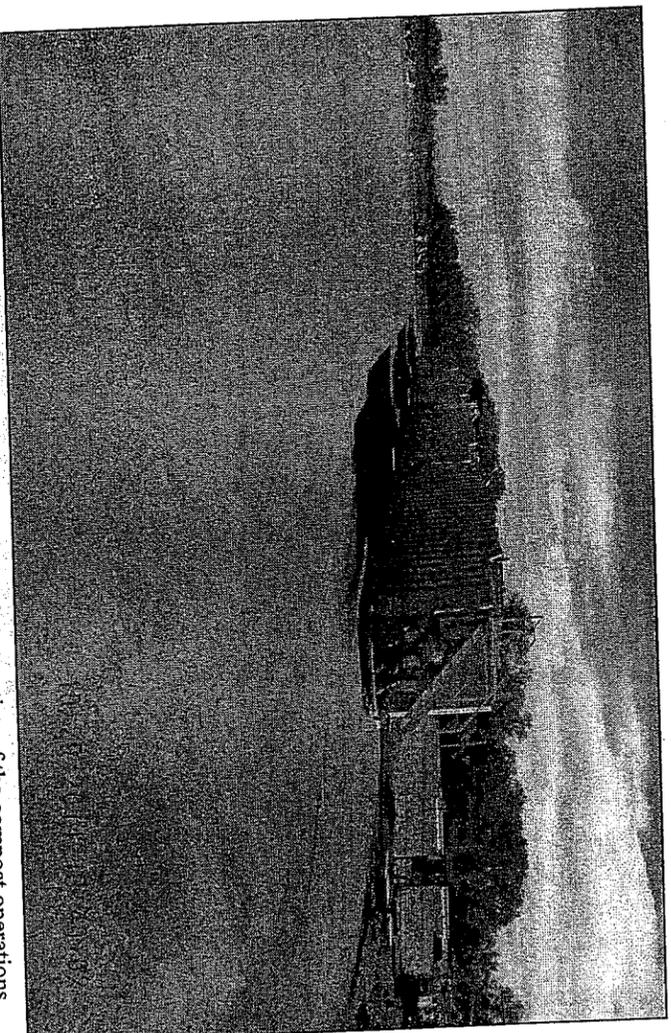


Photo 10: View of four Baker tanks located in the southern portion of the compost operations area.

FIGURE **A-5**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements

**Golder Associates**

PROJECT NO: 1301526 DWG.: Attachment 3 - Photographs DATE: 11/12/2014

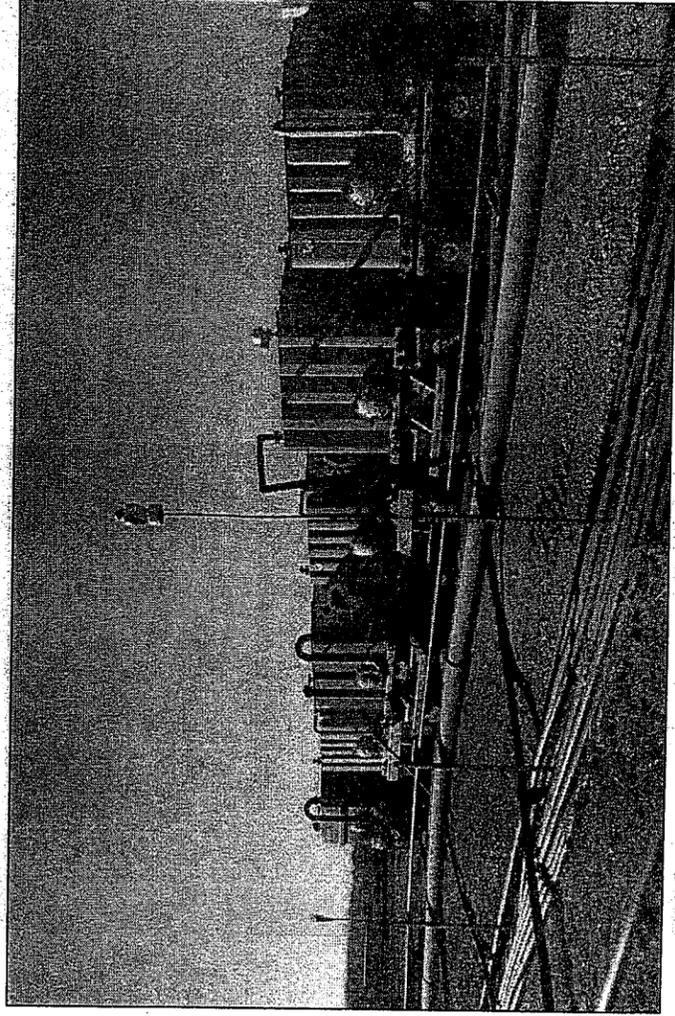


Photo 11: View of a portion of the 8 tanks located near the Hog farm.

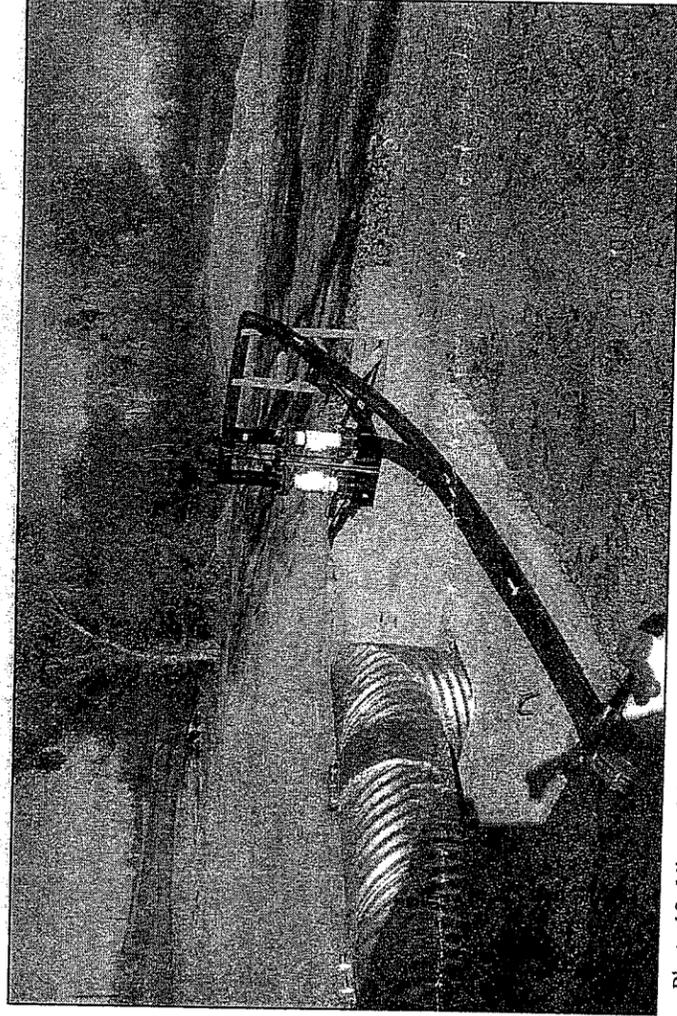


Photo 12: View of the second vault and associated pipes.

FIGURE **A-6**  
**PROJECT PHOTOGRAPHS**  
Recology Yuba Sutter Compost Area Improvements