

Dept. Of Environmental Protection

DEC 15 2010

Southwest District

December 14, 2010

Ms. Susan Pelz, P.E.
Program Manager, Solid Waste
Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

**Re: Submittal of Requested Additional Information
Phase I Hot Spot Issue
Status and Proposed Response Plan
Central County Solid Waste Disposal Facility
Sarasota County, Florida**

Dear Susan:

On behalf of Sarasota County Solid Waste, HDR Engineering, Inc. (HDR) appreciates your prompt response and approval of the proposed Response Plan to the Hot Spot, located within the southwest area of the Phase I landfill, Central County Solid Waste Disposal Complex, Sarasota County Florida. The implementation of the Response Plan for the Hot Spot will be in accordance with HDR's letter to the Florida Department of Environmental Protection (Department) dated December 9, 2010, and per your email to Ms. Lois Rose dated December 9, 2010 (see attached). As requested in your December 9, 2010 email, provided below is additional information to clarify actions already taken.

RESPONSES TO REQUESTED INFORMATION

- 1. Please verify if the Department was verbally notified within 24 hours of the observation of the condition and provided written notification within 7 days as required by SC#C.6.**

The CCSWDC's Permit (No. 130542-007-SO/01), PART C, 6.b, refers to notifying the Department in the event of damage to any portion of the landfill site facilities, unauthorized leachate discharge, failure of any portion of the landfill systems (including damaged or dry groundwater monitoring wells), fire, explosion, the development of sinkhole(s), or other subsurface instability at the site. The Hot Spot is currently under investigation to assess if damage has occurred to the landfill and/or landfill gas collection system. Therefore, at this time, the County knows of no actual damage to any portion of the landfill. Once the investigation has been completed, the Department will be notified in accordance with the Permit.

2. How deep were the 2-inch temperature probe pipes installed?

The 2-inch diameter temperature probe pipes were installed between 8 to 13 feet below grade. Given that additional soil cover was placed within the Hot Spot area when the Hot Spot was discovered (approximately 4 to 6 feet of additional cover soil over the existing 18 inches of intermediate cover), the objective was to install the end of the temperature probes about 3 to 5 feet in the waste mass. Table 1 provides the installed depth of each temperature probe.

3. How does the foam perform when water is subsequently added to the pipe?

The foam of AFFF typically is used for surface fires to suffocate the fire. However, in this case, the chemicals in the AFFF will assist in decreasing the decomposition of waste in the area and thereby help to accelerate the cooling process.

4. Please provide a detail from the as-builts that identify the "stand pipe."

Attached is Figure 1 showing a section of the stand pipe adjacent to and west of the end of the 18-inch header pipe on the Phase I south side slope. The stand pipe was installed solely as an identification marker to locate the location of the end of the header pipe.

5. Please clarify how the gas system is designed to prevent air intrusion, and explain how this may have occurred at the "hot spot" well.

The LFG system was designed to minimize the potential for air intrusion by placing the top of the slotted pipe approximately 10 feet below grade. In addition, based on the initial system tuning and subsequent monthly monitoring of the LFG system, the vacuum being applied to each well is adjusted to minimize oxygen concentrations. As stated in HDR's December 9, 2010 letter, GW-26 was closed during initial start-up of the LFG system given LFG temperature and the close proximity of the active working face. GW-26 continues to be closed. The cause of the Hot Spot is still under investigation and will be fully detailed when we are able to excavate below the surface to assess the condition of the waste mass and LFG system.

6. Please clarify if a leachate cleanout pipe is present in the vicinity of the "hot spot." If so, please take temperature measurements in the cleanout pipe at a point in the bottom of the landfill in the proximity of the "hot spot" to demonstrate that the excessive temperatures have not reached the bottom liner system.

The nearest cleanout location near the Hot Spot is approximately 80 feet west and 60 feet south of the Hot Spot area which is outside of the elevated temperature area.

7. Please explain why (and when) soil was placed in the stand pipe.

Soil was placed in the stand pipe on November 12, 2010, when the Hot Spot was first observed. Although the stand pipe was installed in an area of soil backfill, filling the stand pipe with additional soil will further assist in minimizing the potential for air intrusion.

8. Please provide a MSDS for the AFFF.

See attached.

9. Please specify which of the site drawings show the "hot load area."

Please see attached Figure 2 for the designated "Hot Load Area."

10. At what depth were the temperature readings on Table 1 taken?

The temperatures taken at each probe represent the temperature at the bottom of the probe. See attached Table 1 for the depth of each temperature probe.

Given that the Department does not object to the proposed Response Plan for the Hot Spot, the County will begin to implement the response measures during the week of December 13, 2010. Upon finalizing the investigation and/or discovery of landfill conditions as detailed in the CCSWDC's permit, *PART C, 6.b*, the County will notify the Department of the findings and any repairs to the LFG system as required.

Please call me at 813-270-8058 or Ms. Lois Rose of Sarasota County at 941-861-1589 if you have any questions or require additional information.

Sincerely,
HDR ENGINEERING, INC.



Richard A. Siemering
Solid Waste Section Manager

Attachments

cc: Lois Rose, Sarasota County
Gary Bennett, Sarasota County

Siemering, Richard

From: Pelz, Susan [Susan.Pelz@dep.state.fl.us]
Sent: Thursday, December 09, 2010 6:25 PM
To: Lois E. Rose
Cc: Gary Bennett; Siemering, Richard; Morgan, Steve; Morris, John R.; Watson, Stephanie M.; Madden, Melissa
Subject: RE: Sarasota CCSWDC - Phase I Landfill - Hot Spot Issue
Attachments: Letter_Pelz Susan 12-9-10 Sara Co Ph I hot spot issue.pdf

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Lois,

The Department **does not object** to the proposed immediate corrective action for the "hot spot" subject to the following:

1. The working face shall be relocated to an area substantially away from the "hot spot" until it is demonstrated that the temperatures have returned to normal and/or there is no evidence of fire.
2. Mixtures of soil/mulch shall not be used for erosion control or cover in the vicinity of the "hot spot."
3. Runoff from the "hot load area" shall be contained and managed as leachate.
4. Time and depth of each temperature reading should be recorded and consistent to allow for meaningful comparison.

However, please provide the following information to clarify the actions already taken:

1. Please verify if the Department was verbally notified within 24 hours of the observation of the condition and provided written notification within 7 days as required by SC#C.6.
2. How deep were the 2-inch temperature probe pipes installed?
3. How does the foam perform when water is subsequently added to the pipe?
4. Please provide a detail from the as-built drawings that identify the "stand pipe."
5. Please clarify how the gas system is designed to prevent air intrusion, and explain how this may have occurred at the "hot spot" well.
6. Please clarify if a leachate cleanout pipe is present in the vicinity of the "hot spot." If so, please take temperature measurements in the cleanout pipe at a point in the bottom of the landfill in the proximity of the "hot spot" to demonstrate that the excessive temperatures have not reached the bottom liner system.
7. Please explain why (and when) soil was placed in the stand pipe.
8. Please provide a MSDS for the AFFF.
9. Please specify which of the site drawings show the "hot load area".
10. At what depth were the temperature readings on Table 1 taken?

If you have any questions, please call or email (email is better).

Susan J. Pelz, P.E.
Solid Waste Program Manager
Southwest District

13051 N. Telecom Parkway
Temple Terrace, FL 33637
813-632-7600 x 386
susan.pelz@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Mimi Drew is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Siemering, Richard [<mailto:Richard.Siemering@hdrinc.com>]

Sent: Thursday, December 09, 2010 3:39 PM

To: Pelz, Susan

Cc: Lois E. Rose; Gary Bennett

Subject: Sarasota CCSWDC - Phase I Landfill - Hot Spot Issue

Susan-

Please see attached letter. Your prompt comments/approval would be greatly appreciated. Original letter is being forwarded to you via regular mail. Thanks.

Please call if you have any questions or require additional information. Thank you.

Richard A. Siemering

Senior Project Manager

Professional Associate

HDR ONE COMPANY | Many Solutions

5426 Bay Center Drive, Suite 400 | Tampa, FL | 33609-3444

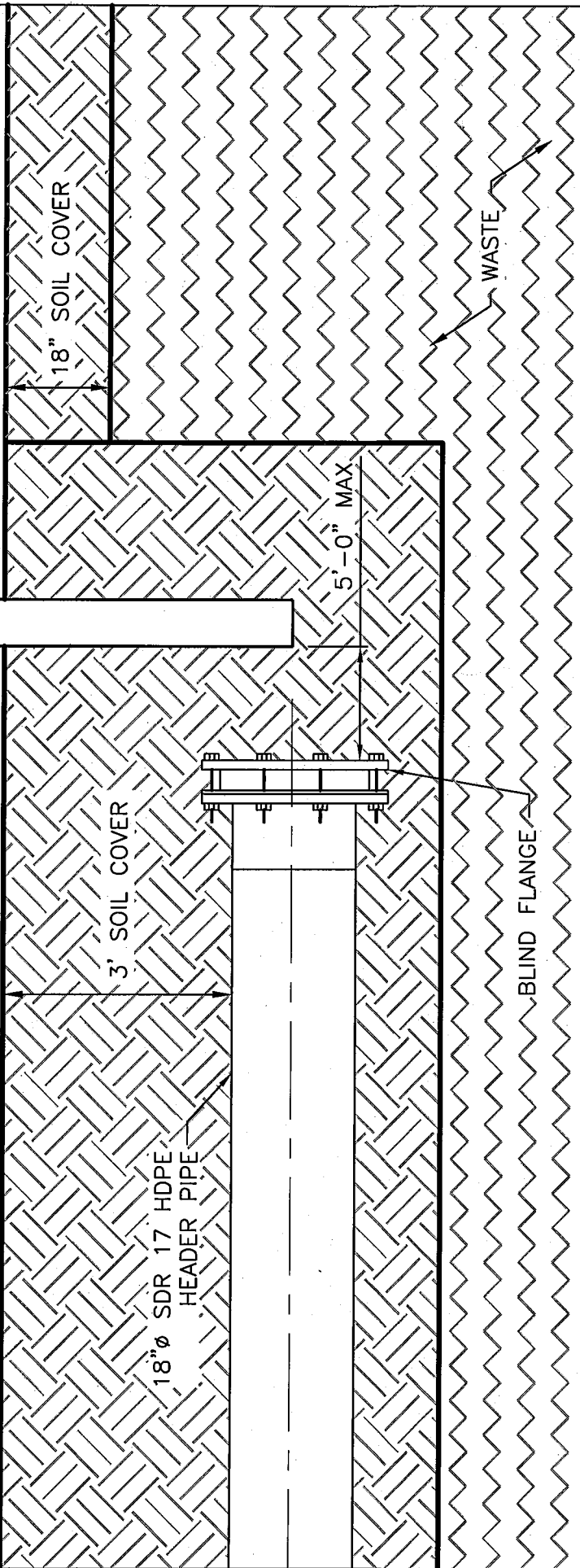
Phone: 813.262.2776 | Fax: 813.282.2440 | Cell: 813.270.8058 Email: richard.siemering@hdrinc.com


**TABLE 1. TEMPERATURE PROBE DEPTHS
PHASE I LANDFILL HOT SPOT
CCSWDC - SARASOTA COUNTY**

TEMPERATURE MONITORING POINT	APPROXIMATE SOIL COVER DEPTH (FEET)	DEPTH BELOW GRADE (FEET)	APPROXIMATE DEPTH INTO WASTE (FEET)
SW-1	8	13	5
SW-2	8	12	4
SW-3	8	12	4
SW-4	8	11	3
SW-5	6	10	4
SW-6	5	8	3
SW-7	5	8	3
SW-8	5	8	3
SW-9	4	8	4
SW-10	4	8	4

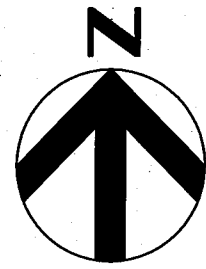
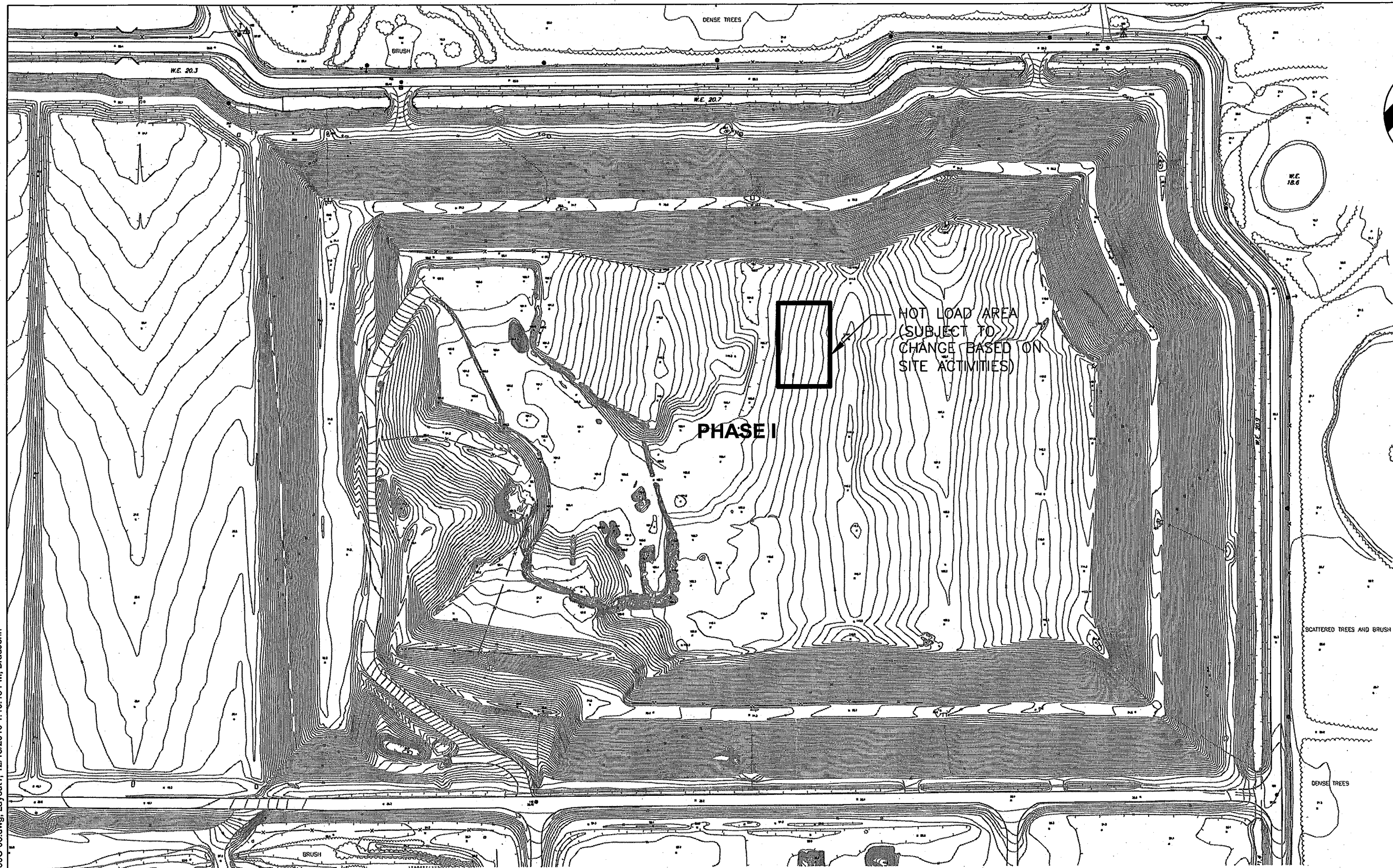
WEST
→

6"Ø STEEL STAND PIPE



	PROJECT TITLE STAND PIPE AND HEADER FLANGE DETAIL		PROJECT NUMBER 131412	SCALE NOT TO SCALE
	SHEET TITLE SARASOTA COUNTY CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX		PROJECT MANAGER R. SIEMERING DATE DECEMBER 2010	FILENAME 00C-04.DWG FIGURE 1

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HDR

PROJECT TITLE

SITE PLAN

SHEET TITLE

**SARASOTA COUNTY
CENTRAL COUNTY SOLID WASTE
DISPOSAL COMPLEX**

PROJECT NUMBER

131412

PROJECT MANAGER

R. SIEMERING

DATE

DECEMBER 2010

SCALE

1"=200'

FILENAME

00C-05.DWG

FIGURE

2

MATERIAL SAFETY **DATA SHEET**

CHEMGUARD 3%/6% AR-AFFF C-363

Revision Date: 5/28/2009

1. PRODUCT IDENTIFICATION

Chemical Family: Surfactant mixture; fire fighting foam concentrate
Aqueous Film Forming Foam

Product name: Chemguard 3%/6% AR-AFFF C-363

Manufacturer: Chemguard, Inc.
204 South 6th Ave.
Mansfield, TX 76063
emergency phone: 817-473-9964

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>CAS NO.</u>	<u>Common Name</u>	<u>ACGIH/PPM</u>		<u>OSHA/PPM</u>		<u>% by wt</u>
		<u>TWA</u>	<u>STEL</u>	<u>PEL</u>		
7732-18-5	water					70% - 80%
112-34-5	diethylene glycol monobutyl ether	not established				4% - 7%
	proprietary hydrocarbon surfactant					proprietary
	proprietary fluorosurfactant	N/A	N/A	N/A		proprietary
	polysaccharide gum	N/A	N/A	N/A		1% - 2%

3. HAZARDS IDENTIFICATION

Routes of entry: Dermal, Inhalation and ingestion
Potential Health Effects: May cause skin and eye irritation.

Carcinogenicity: Not a carcinogen.

Non-Hazardous

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Call a physician.

Inhalation: Remove to fresh air.

Skin: Rinse with water. Wash with soap and water. Contaminated clothing should be washed before re-use.

Eyes: Rinse with water. Call a physician.

5. FIRE FIGHTING MEASURES

Flash Point:

Flammable Limits in air (lower % by volume):

Flammable Limits in air (upper % by volume):

Auto-ignition Temperature:

no flash to boiling

not flammable

not flammable

not flammable

General Hazards: None known.

Fire Fighting Equipment: Self contained breathing apparatus

Fire Extinguishing Media: Water, Foam, Carbon Dioxide, Dry Chemical, Halon

Fire and Explosion Hazards: Decomposition products may be toxic.

Hazardous Combustion Products:

6. ACCIDENTAL RELEASE

Contain spills. Vacuum or pump into storage containers, absorb smaller quantities with absorbent materials, and dispose of properly. Washing area with water will create large amounts of foam.

Dispose of released and contained material in accordance with local, state, and federal regulations. Release to local waste treatment plant only with permission.

7. HANDLING AND STORAGE

Store in original container, or appropriate end-use device. Store at temperatures of 35° - 120° F. If the material freezes, it may be thawed without loss of performance.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eye Protection: Wear side-shield safety glasses.

Skin Protection: Wear latex gloves.

Respiratory Protection: Use organic vapor respirator if needed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	212° F.
Melting Point:	30° F
Specific Gravity:	1.012 g/ml
Vapor Pressure (mm Hg):	N/A
pH	7.0 - 8.5
Flash Point (PMCC):	no flash to boiling
Vapor Density (air = 1)	N/A
Solubility in water:	100%
Appearance:	opaque, thick liquid
Odor:	very slight solvent odor

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Strong oxidizers

Hazardous Polymerization: Will not occur.

Decomposition Products: Oxides of nitrogen, sulfur, carbon.

11. TOXICOLOGICAL INFORMATION

Eye Irritation: (Rabbits) mild irritant
Skin Irritation: (Rabbits) minimal irritant
Inhalation Toxicity: not evaluated
Sensitization: not evaluated
Teratology: not evaluated
Mutagenicity: not evaluated
Reproduction: not evaluated
Acute Oral Effects (Rats): not evaluated

12. ECOLOGICAL INFORMATION

Chemical Oxygen Demand: 254,000 mg/l
Biological Oxygen Demand (20 day): 166,000 mg/l
Biodegradability (B.O.D./C.O.D.): 65%
Total Organic Carbon: 8,300 mg/l
LC50 (96 hour pimephales promelas) not determined
LC50 (48 hour, daphnia magna) not determined

13. DISPOSAL CONSIDERATIONS

Dispose in accordance with local, state, and federal regulations. Discharge to waste treatment plants only with permission. Anti-foam agents may be used to reduce foaming in waste streams.

14. TRANSPORTATION INFORMATION

Department of Transportation proper shipping name: not regulated

15. REGULATORY INFORMATION

All ingredients are on the TSCA inventory.
No components are reportable under SARA Title III, sec. 313
No components are priority pollutants listed under the U.S. Clean Water Act Section 307 (2)(1)

No components are reportable under CERCLA.
Priority Pollutant List (40 CFR 401.15).

16. OTHER INFORMATION

NFPA Hazard Ratings

1
1
0

Health Hazard Rating
Flammability Rating
Instability/Reactivity Rating

HMIS Identification System

1
1
0

Change Log:

Revision 2, 1/26/06	Revision date changed.
Revision 3, 10/11/07	BOD, COD and TOC changed to reflect new data.
Revision 4, 5/28/09	Revision date changed.