

July 20, 2011

Dept. Of Environmental Protection

JUL 21 2011

Southwest District

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

**Re: Southeast County Landfill
Landfill Gas Header Damage and Repairs
FDEP Permit No.: 35435-014-SO/01**

Dear Susan:

On behalf of the Hillsborough County Public Utilities Department Solid Waste Management Group (SWMG), HDR submits this letter to notify and provide repair details to the Florida Department of Environmental Protection (Department) regarding the damage to the landfill gas collection and control system (LFGCCS) header pipe located on the north slope of Section 8 at the Southeast County Landfill (SCLF).

BACKGROUND OF OCCURRENCE

During the morning of July 14, 2011, the SWMG's landfill operator damaged a portion of the landfill gas collection and control system's (LFGCCS) header piping, air supply piping, and condensate piping located along the north side of Section 8 approximately 20 feet east of the header pipes for LCO8-2 as shown on the drawing provided in Attachment 1. The damage occurred as a result of re-grading in the area along the north side slope of Section 8. For a short duration, the landfill operator shut down the LFGCCS to assess the damage. This shut down was recorded in accordance with the SSM plan for system shut-down and startup.

The landfill operator provided a temporary repair to bring the system back on line. The Department was notified via email on July 14, 2011 in accordance and compliance with the subject FDEP permit, Specific Condition C.6.b.

REPAIR SUMMARY

The permanent repair for the damaged header was performed on Friday, July 15, 2011. The landfill operator and a welding technician from ISCO Industries, Inc. (ISCO) used two electro fusion couplings and a section of 16-inch Dia. SDR 17 HDPE pipe to repair the damaged section. The repair work was observed by representatives of both HDR and the SWMG. The repairs were documented in detail using the field work daily log provided in Attachment 1. Representative photos of the repair work are provided in Attachment 2. The Section 7 and 8 portion of the GCCS was isolated from the blower/flare station using GCCS Valve V-8 from 10:00AM to 4:30PM, however, the GCCS system, including blowers and the flare, was never shutdown during the repairs. Following the repair of the header pipe and the recommended weld cooling period, Valve V-8 was reopened and the seams at the electrofusion coupling checked for leaks. No leaks were identified. All wells on Section 7 and 8 were reopened for normal operation.

The 2-inch air supply piping was repaired by the landfill operator on July 14, 2011 and the 2-inch condensate piping was repaired by the landfill operator on July 18, 2011. Following repair of the 2-inch condensate line, the GCCS piping in the area of the damage was backfilled and brought to existing grades.

The repairs required a total of 3 work days, which included repair of the air supply piping on July 14, 2011, the GCCS header on July 15, 2011, and the condensate piping on July 18, 2011.

METHOD TO PREVENT REOCCURENCE

For future excavations and preparation work, the landfill operator will take greater care in locating and protecting the existing GCCS piping to prevent future occurrences of damage.

CONCLUSION

The GCCS header line damaged by the SCLF landfill operator on July 14, 2011 was repaired and the GCCS system on Section 7 and 8 was brought back to normal operations in approximately 24 hours from the initial damage. All repairs to the GCCS piping not critical to operation of the GCCS were completed and the area backfilled to existing grade on July 18, 2011. In accordance with the Department Permit #35435-014-SO/01, Specific Condition C.6.b, this report is being provided to detail the occurrence of damage and the repair completed. No additional repairs are required at this time and the GCCS is functioning normally.

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Please call me at 813-270-8058 if you have any questions or require additional information regarding this notification and report for completion of the LFGCCS piping repairs.

Sincerely,
HDR ENGINEERING, INC.



Richard A. Siemering
Solid Waste Section Manager

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Attachments (2)

cc: Max Grondahl, FDEP
Larry Ruiz, SWMG
Walter Gray, SWMG
Ron Cope, EPC

ATTACHMENT 1

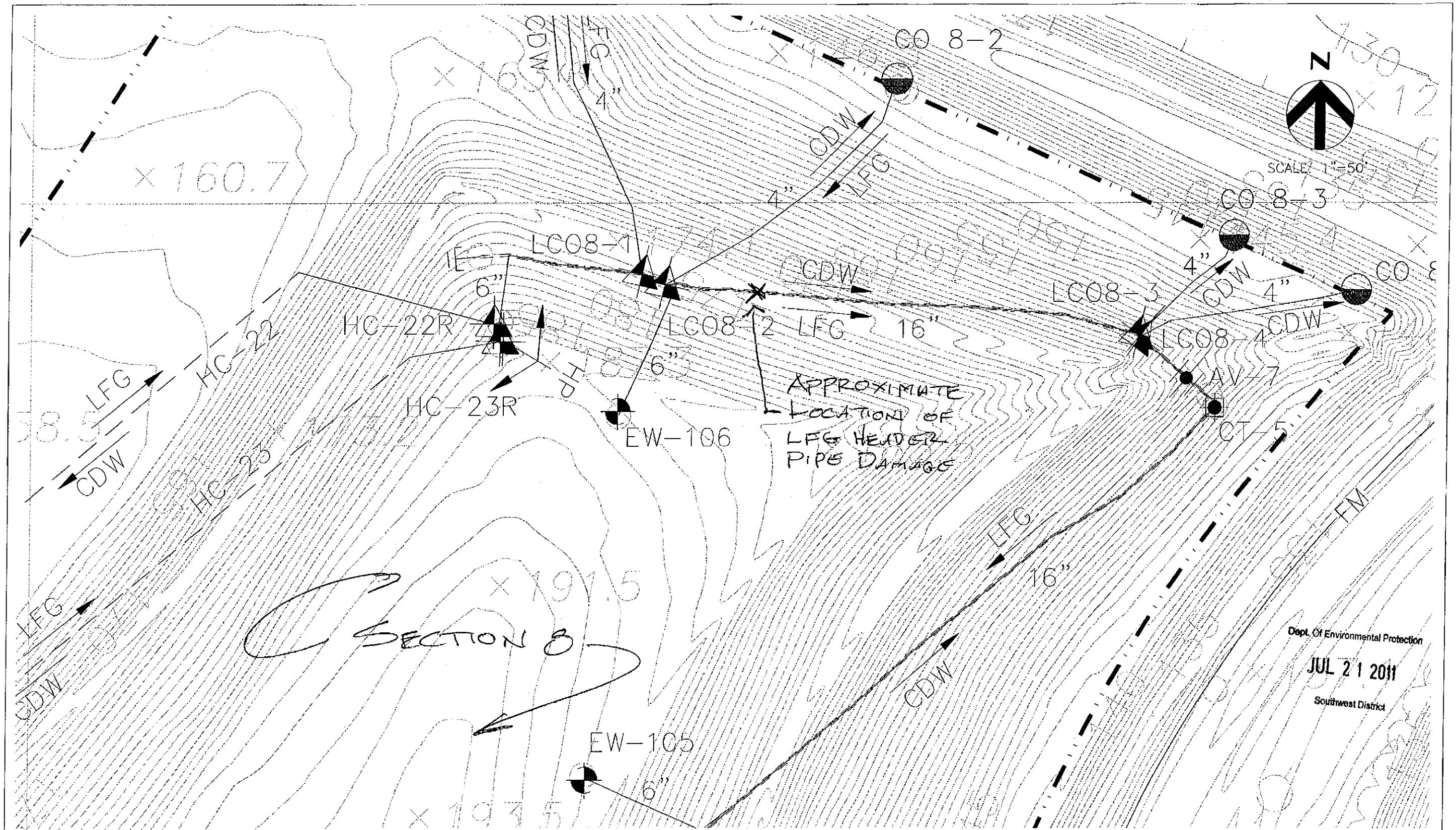
LOCATION MAP AND FIELD LOG

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C:\pwworking\pald0305425\00C-01.dwg, Section 8 Plan, 7/14/2011 3:18:29 PM, Brad John



HDR

**HILLSBOROUGH COUNTY
SOUTHEAST COUNTY LANDFILL
SECTION 8 GCCS**

PIPE REPAIR FIGURE

DATE

07/14/11

FIGURE

1

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Daily Field Report

Project Name: Southeast County Landfill Section 8 Gas Header Repair	Date: 7/15/2011	Day: Friday
Project Owner: Hillsborough County Public Utilities Department Solid Waste Management Group	Contractor: Waste Management, Inc. and ISCO, Inc.	
HDR Project No. 096-149350-006	CQA: Jason Timmons (HDR)	

Weather Conditions:

Temperature		Weather	Precipitation
Max.	Min.	Sunny AM, Cloudy/Rainy PM	Approx. 0.5-inch late in the day
93 F	84 F		

Contractor's Employees / Title		Equipment Used	Dept. Of Environmental Protection
Ernie Ely	General Manager (WMI)	Loader/Excavator (WMI)	JUL 21 2011
Keith Barnes	Pipe Welding Technician (ISCO)	Flat Bed Pickup Truck (ISCO)	
		Friatec Electrofusion Unit (ISCO)	Southwest District
		16" Frialen Electrofusion Coupling x 2	
		10-foot section 16" HDPE SDR 11 IPS Pipe for replacement	

Work Performed:

- 8:00 AM to 9:00 AM – Travel and HDR arrived to SCLF.
- 9:30 AM - Project kickoff meeting with County, WMI, and ISCO.
- 10:00 AM – WMI and County shut all GCCS well heads on Sections 7 and 8 and near closed GCCS header isolation valve Section 7 and 8 at Blower Station (Valve #V-8).
- 10:30 AM – ISCO cuts out damaged section of 16" header line (approximately 7.5 feet). Pipe ends and surrounding checked for gases. Gases present at west end of cut pipe. WMI uncapped LCO heads 8-1 and 8-2 to vent. Gases dissipated at pipe end, area checked OK, no gases, 20% oxygen.
- 11:00 AM – ISCO and WMI prepare ends of existing 16" pipe and 16" replacement section for electro fusion welding.
- 11:30 AM – ISCO and WMI install electrofusion coupling on ends of existing 16" header pipe then install replacement section and moving the electrofusion couples into place. Small amount of water observed on bottom of pipe leaking through coupling. ISCO technician felt the weld would be good regardless of small amount of water. WMI directed ISCO to proceed.
- 12:15 PM – ISCO begin preheat cycles for each of the electrofusion ends - 2 for each couple (4 total at ~800 seconds per cycle).
- 1:30 PM – ISCO completes preheating for each end of coupling and begin welding cycling for each couple end – 2 for each couple (4 total at ~660 seconds per cycle). Weld #1 completed at 1:38PM, Weld #2 completed at 1:50PM, Weld #3 completed at 2:03PM, Weld #4 completed at 2:15PM – Allow 2 hour cool cycle, therefore pipe will not be pressurized until 4:30PM.
- 2:45 PM – ISCO and WMI leave work site.
- 4:30 PM – WMI removed loader/excavator from site. HDR and County open all closed wells to previous setting and open Valve #V-8 to pressurize system. Rain began at approximately same time.
- 4:45 PM – HDR and County check weld seams for sounds of leaks (whistling) and indication of suction. No leaks appear present.
- 5:15 PM to 6:00 PM – HDR leaves work site and returns to office.

Notes/Comments:

- Friatec Unit indicated full completion of weld cycles indicating a good weld. ISCO will provide reports from the data logger of the machine to HDR.
- WMI to repair 2" air line on Saturday or Monday and provide photos of repair.

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ATTACHMENT 2

PHOTO LOG

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July 15, 2011 – Damaged GCCS Header Pipe on Section 8 north slope.



July 15, 2011 – Damaged GCCS Header Pipe on Section 8 north slope.

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July 15, 2011 – Removing section of damaged pipe.



July 15, 2011 – Preparing ends of pipe for electrofusion couplings.



July 15, 2011 – Installing electrofusion couplings.



July 15, 2011 – Installing electrofusion couplings and aligning pipe



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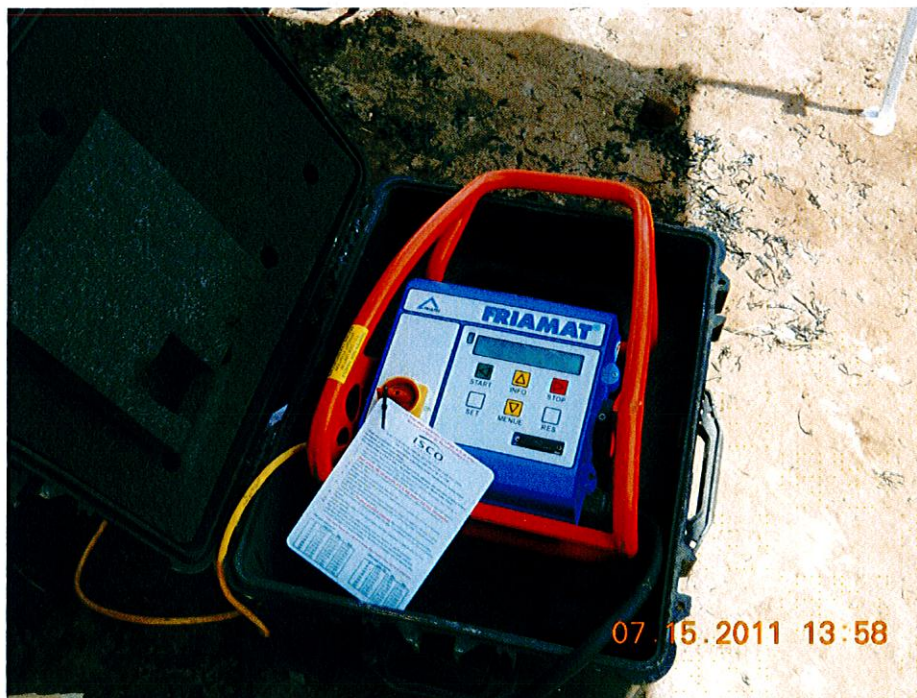
July 15, 2011 – Electrofusion coupling installed.



July 15, 2011 – Preheat and welding cycles for electrofusion welds.



July 15, 2011 – Final welding cycle.



July 15, 2011 – Friatec Electrofusion Processor

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July 15, 2011 – Complete pipe repair installation. No leaks detected.

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July 18, 2011 – Repair and placement of 2-inch air header line.