



September 16, 2009

Dept. of Environmental Protection

SEP 21 2009

Mr. Steve Morgan  
Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Parkway  
Temple Terrace, FL 33637

Southwest District

**Re: Central County Solid Waste Disposal Complex (CCSWDC)  
Phase II Expansion  
Permit No.: 130542-006-SC/01  
Bottom Liner Temporary Gas Vent Installation**

Dear Steve:

As requested during our phone conversation earlier today, this letter discusses the proposed installation of temporary gas vents within a portion of the Phase II landfill expansion area. Areas near the Cell 2/Cell 3 interface of Phase II have exhibited gas bubbles accumulating beneath the recently installed bottom liner system. The gas pressure has led to visible lifting of portions of the protective cover over the liner system. Several of the locations have been already been vented and repaired, however, the gas generally accumulates again after the repairs are made. Analysis of the gas indicates it is naturally occurring methane and not landfill gas.

The attached sketch illustrates the proposed temporary vent design and installation instructions. The vents consist of short lengths of perforated 4-inch diameter polyethylene pipe inserted beneath the liner system and connected to a riser pipe with a tee. The riser pipe will extend 2 feet above the protective cover soil and will be perforated above the protective cover soil to allow the gas to escape. An 18-inch diameter section of open-ended polyethylene pipe will be centered over the vent to protect it. Currently we estimate a maximum of approximately 6 vents will be installed although we hope this number can be reduced based on field observations after the initial vents are installed.

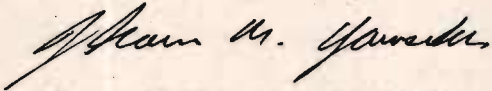
The vents will be removed prior to the placement of waste in the area. CQA will be provided during vent removal to verify that all pipes are removed, all geosynthetic layers are properly patched, and that a minimum of 2-feet of protective cover soil is placed over the patched area.

We understand that you will require a minor modification for the temporary gas vent installation. Since the geosynthetics installer is going to be demobilizing from the site very soon, we would appreciate your expedited review of this proposal so the County can install the vents without incurring a remobilization charge.

Please do not hesitate to contact us if you have any questions during your review.

Sincerely,

**HDR Engineering, Inc.**

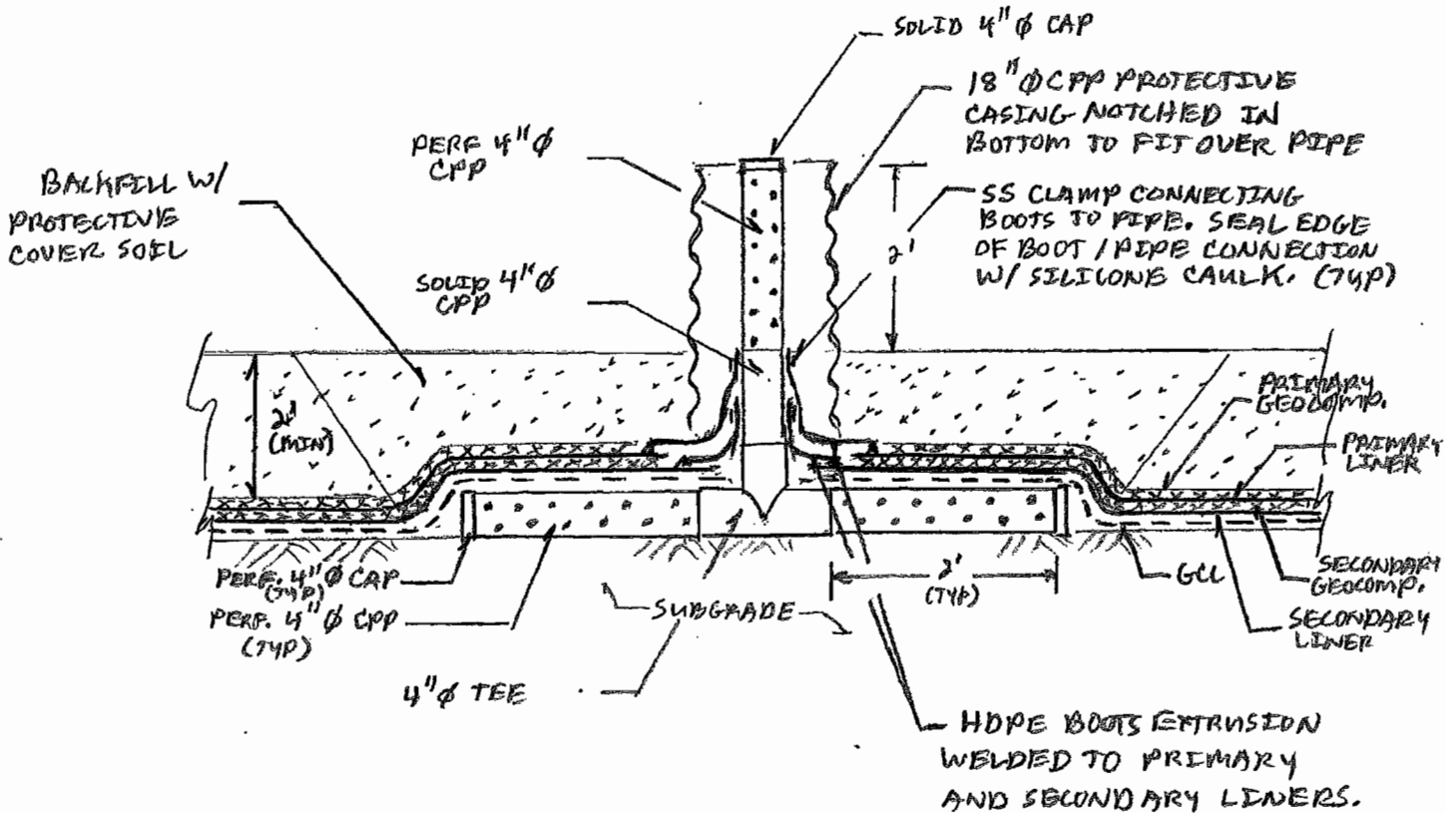


Thomas M. Yanoschak, PE, BCEE  
Senior Project Manager

Enclosures as noted.

cc: Gary Bennett, Sarasota County  
Frank Coggins, Sarasota County  
Spencer Anderson, Sarasota County  
Jack Gibson, Sarasota County  
Rich Siemering, HDR  
Joe Readling, HDR

Project: CCSWDC	Computed: TMY	Date: 9/10/09
Subject: Phase II	Checked:	Date:
Task: Gas Vent	Page: 1	of: 2
Job #:	No:	



TEMPORARY GAS VENT DETAIL

NTS.

NOTE: ALL PIPE AND BOOTS TO BE REMOVED, GEOSYNTHETICS REPAIRED, AND MIN. 2' PROTECTIVE COVER SOIL REPLACED PRIOR TO THE PLACEMENT OF WASTE WITHIN OR NEAR THE VENT AREA.

Project	Computed:	Date:
Subject	Checked:	Date:
Task	Page: 2	of: 2
Job #:	No:	

TEMPORARY GAS VENT CONSTRUCTION SEQUENCE

- ①. EXCAVATE PROTECTIVE COVER SOIL TO EXPOSE MIN. 2' X 5' OF PRIMARY GEOCOMPOSITE OVER GAS BUBBLE.
- ②. CUT APPROX. 12" Ø HOLE THROUGH EACH LAYER OF GEOSYNTHETICS AT CENTER OF EXPOSED AREA.
- ③. INSERT 2-2' LENGTHS OF PERFORATED 4" Ø CPP W/ CAPS ON FAR ENDS BETWEEN GCL AND SUBGRADE PER DETAIL.
- ④. INSERT 4" Ø CPP TEE THROUGH HOLE IN GEOSYNTHETICS AND CONNECT PERFORATED PIPE TO TEE PER DETAIL. ORIENT SIDE-OUT OF TEE VERTICAL.
- ⑤. CONNECT APPROX. 1.5' LENGTH OF SOLID 4" Ø CPP TO SIDE-OUT OF TEE.
- ⑥. FABRICATE BOOT EXTRUSION WELDED TO SECONDARY HDPE LINER AND CONNECTED TO VERTICAL PIPE W/ GS CLAMP AND SEALED W/ SILICONE CAULK.
- ⑦. FABRICATE BOOT EXTRUSION WELDED TO PRIMARY HDPE LINER AND CONNECTED TO VERTICAL PIPE SAME AS ABOVE.
- ⑧. CONNECT PERF. 4" Ø CPP TO VERTICAL SOLID PIPE TO EXTEND APPROX. 2' ABOVE PROTECTIVE COVER SOIL. ATTACH SOLID CAP TO END OF PIPE.
- ⑨. CENTER 18" Ø CPP PROTECTIVE CASING OVER VERTICAL PIPE. NOTCH OUT BOTTOM OF CASING TO FIT OVER BOOTS / PIPE.
- ⑩. BACKFILL OVER PIPE AND AROUND PROTECTIVE CASING W/ MIN. 2' OF PROTECTIVE COVER SOIL.