

# SUMTER COUNTY PUBLIC WORKS

SUMTER COUNTY, FLORIDA

319 E. Anderson Avenue • Bushnell, FL 33513 • Phone (352) 569-6700 • Fax (352) 569-6701 • Website <http://sumtercountyfl.gov>



Dept. of Environmental  
Protection

## Memo

MAY 18 2012

To: Susan J. Pelz, P.E. Solid Waste Program Manager

From: Scott B. Cottrell, P.E. Director, Public Works Division

Date: May 15, 2012

Subject: Sumter County Closed Landfill  
Long-Term Care Permit No. 22926-003-SF  
2012 Annual Gas Migration Monitoring – Gas Vent Repair  
TCG Project No. P-453

South District  
*Scott B. Cottrell*

Attached you will find a report from The Colinas Group, Inc. (TCG) who is contracted by Sumter County to perform groundwater testing and landfill gas migration testing. In their Annual Gas Migration Monitoring survey that was conducted in January of 2012, TCG could not locate GV-21 and GV-25. Sumter County requested that TCG locate, repair or replace the missing gas vents and subsequently measure the methane gas concentrations of both vents.

The findings of TCG are outlined in the attached report dated May 8, 2012. Please feel free to contact me at 352-569-6700 if you have any questions or comments.

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**THE COLINAS GROUP, INC.**  
HYDROGEOLOGISTS & ENGINEERS

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May 8, 2012

Mr. Jackey Jackson  
Sumter County Public Works  
319 East Anderson Avenue  
Bushnell, FL 33513

Subj: Sumter County Closed Landfill  
Long-Term Care Permit No. 22926-003-SF  
2012 Annual Gas Migration Monitoring – Gas Vent Repair  
TCG Project No. P-453

Dear Mr. Jackson:

In accordance with the Sumter County Closed Landfill Long-Term Care Permit requirements, The Colinas Group, Inc. (TCG) completed the annual Gas Migration Monitoring survey at the landfill in January 2012. We reported that Gas Vents GV-21 and GV-25 could not be located in the field and subsequently, were not measured.

At the request of the County, TCG revisited the landfill in April 2012 in an attempt to locate or repair/replace the missing gas vents. We located GV-25 and found that it was broken-off at land surface. GV-21 could not be located.

TCG replaced lost gas vent GV-21 with a new gas vent, constructed of 2-inch PVC, 12 feet deep with 10 feet of slotted PVC well screen packed in coarse pea gravel and sealed with bentonite and neat cement. A 3-foot long PVC riser was installed from land surface and fitted with two 90° elbows.

Gas vent GV-25, found broken-off at land surface, was coupled with a new 3-foot long 2-inch diameter PVC riser and two 90° elbows.

TCG measured methane gas concentrations at both vents following completion of replacement and repair activities on April 9, 2012, with the following results:

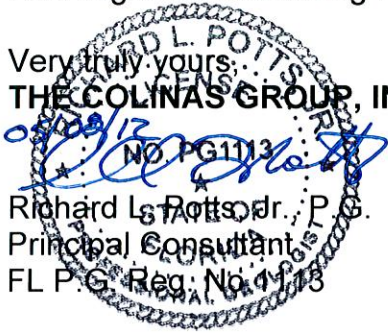
GV-21	0% LEL
GV-25	> 100% LEL

A copy of the Instrument Calibration Certificate for the methane gas measurements is attached.

A copy of this report of repair/replacement of gas vents and supplemental methane gas measurements should be sent to the FDEP Southwest District Office in Tampa.

Please let me know if you have any questions concerning the repair and replacement of the gas vents at the landfill and the results of the supplemental Gas Migration Monitoring measurements.

Very truly yours,  
**THE COLINAS GROUP, INC.**



Richard L. Potts, P.E.  
Principal Consultant  
FL P.E. Reg. No. 1113

cc: Ms. Becky Seagrest, Sumter County

Cyclone Instruments  
710 W. Princeton Street  
Orlando, FL 32804  
(407) 246-7276

## CALIBRATION CERTIFICATE

### RAE SYSTEMS

QRAE 4 Gas

SERVICE DATE: 4.9.12 TECHNICIAN: John H

SERIAL #: 101710 417538 413142 417556

Calibration Gas Standard Used:  
Accuracy +/- 1% @ 25 C\*  
LOT # Expiration date: August 31, 2012

<u>Gas</u>		<u>Instrument reading</u>
Oxygen	20.9	<u>20.9</u>
LEL 2.5 % Methane	50 %	<u>48</u>
Carbon Monoxide	50 ppm	<u>47</u>
Hydrogen Sulfide	25 ppm	<u>23</u>

The calibration results were obtained by following the manufactures standard Calibration Procedures.

All measurement standards are calibrated at scheduled intervals as prescribed by the NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST) or are measured against certified standards which are traceable to the National Institute of Standards and Technology, formerly the National Bureau of Standards (NBS).