Incident Response Report
of Non-Exceedance
for the
Events following the report of a high CH4 alarm at the Haywood County Bus Garage

On January 13, 2015 at 4:45 pm Stephen King received a phone call from Tracy Hargrove, Haywood County Schools Maintenance Director. Mr. Hargrove called to report an alarm indication for the bus garage's methane continuous-monitoring system. Mr. King immediately instructed me to take our Landtec GEM 2000 Plus portable gas analyzer to the garage to see if it could detect any levels of CH4 and to verify everyone had left the building and doors were opened as needed.

Upon arrival most of the staff had left and the remaining staff was leaving. One person stayed behind with me to make sure the doors were locked when I finished. I checked the exhaust vent to make sure the system was operative and could see where it was operating correctly. I took a photo of the alarm panel at 5:05 pm and reset the alarm. The alarm was from the methane sensor mounted in the bus garage and was reading 18% of the LEL (LEL is 5% methane by volume). This equates to less than 1% of methane by volume. I then conducted a field calibration for the Landtec GEM 2000 Plus and proceeded to analyze methane, carbon dioxide and oxygen levels at the alarm panel, the three stationary methane sensors, outside of the building and at the nearest methane monitoring well (MM-7). I did not detect any methane at any of the locations. There was no evidence that a violation occurred due to methane gas readings never exceeding 25% of LEL in the structure. I returned to the office for a meeting once everything was under control.

I returned to the bus garage the next morning to check and see if the alarm was tripped. While there I conducted the same field calibration and analysis with the same results. I also obtained maintenance records for the continuous-monitoring system and everything looked to be in order.

Respectfully,

Randy Siske
Environmental Program Coordinator
Haywood County Solid Waste

ASSESSMENT MONITORING

Landfill Gas Measurements Field Worksheet Francis Farm Landfill - Permit #44-03 Haywood County, North Carolina	Field Calibration Gas Type & Canister Expiration Date		
	CH_4	50%	May-15
	CO_2	35%	May-15
	O_2	4%	Apr-17

Name of Person Taking Readings: Randal Siske, Environmental Coordinator
Weather Conditions: Misty 91% Humidity
Gas Monitoring Equipment: Land-Tec GEM 2000+
Factory Calibration Date: November 20, 2014
Pump Rate Flow: 300 cc/min Vacuum: 70 inches H_20

Date: January 13, 2015
Ambient Temp: 39° Barometric Pressure: 27.32 Hg
Serial #: 11944
Field Calibration Date/Time : January 13, 2015 1705

Well ID	Sample Tube Purge (> 60sec)	Stable Reading	Time Pumped (sec)	Time	%LEL	$\%CH_4$	$\%CO_2$	$\%O_2$	Baro Press	Notes:
MM-7	Y	Y	240	15:46:00 PM	0.0	0.0	4.9	16.1	27.32	
SM-1a	Y	Y	120	15:34:00 PM	0.0	0.0	0.2	20.4	27.32	
SM-1b	Y	Y	120	15:30:00 PM	0.0	0.0	0.2	20.6	27.32	
SM-1c	Y	Y	120	15:27:00 PM	0.0	0.0	0.2	20.7	27.32	
SafeT Net	Y	Y	120	15:23:00 PM	0.0	0.0	0.2	20.7	27.32	
Outside	Y	Y	120	15:38:00 PM	0.0	0.0	0.1	20.3	27.32	

Note: If methane gas readings exceed 25% of LEL in structures or 100% of LEL in probes contact Haywood County Solid Waste Director immediatley at 828-400-3544.

Landfill Gas Measurements Field Worksheet
Francis Farm Landfill - Permit #44-03
Haywood County, North Carolina

Field Calibration Gas Type & Canister Expiration Date		
CH_4	50%	May-15
CO_2	35%	May-15
O_2	4%	Apr-17

Name of Person Taking Readings: Randal Siske, Environmental Coordinator
Weather Conditions: Cloudy 100% Humidity
Gas Monitoring Equipment: Land-Tec GEM 2000+
Factory Calibration Date: November 20, 2014
Pump Rate Flow: 300 cc/min Vacuum: 70 inches H_20

Date: January 14, 2015
Ambient Temp: 34° Barometric Pressure: 27.30 Hg
Serial #: 11944
Field Calibration Date/Time : January 14, 2015 0925

Well ID	Sample Tube Purge (> 60sec)	Stable Reading	Time Pumped (sec)	Time	%LEL	$\%CH_4$	$\%CO_2$	$\%O_2$	Baro Press	Notes:
MM-7	Y	Y	240	9:51:00 AM	0.0	0.0	4.6	16.2	27.30	
SM-1a	Y	Y	120	9:38:00 AM	0.0	0.0	0.1	20.4	27.30	
SM-1b	Y	Y	120	9:33:00 AM	0.0	0.0	0.1	20.4	27.30	
SM-1c	Y	Y	120	9:29:00 AM	0.0	0.0	0.1	20.5	27.30	
SafeT Net	Y	Y	120	9:25:00 AM	0.0	0.0	0.1	20.4	27.30	
Outside	Y	Y	120	9:43:00 AM	0.0	0.0	0.1	20.6	27.30	

Note: If methane gas readings exceed 25% of LEL in structures or 100% of LEL in probes contact Haywood County Solid Waste Director immediatley at 828-400-3544.

SAFETNET

COMB
000
PPM
%VOL
LEL
HIGH ALARM
LOW ALARM
FAULT

COMB
000
PPM
%VOL
LEL
HIGH ALARM
LOW ALARM
FAULT

OFF
PPM
%VOL
LEL
HIGH ALARM
LOW ALARM
FAULT

COMB
018
PPM
%VOL
LEL
HIGH ALARM
LOW ALARM
FAULT

TYPE 410
GAS MONITOR

Thermo GasTech

RESET