

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
Field Observation Report: Stack Testing

Facility: Packaging Corporation of America - Filer City Mill		SRN / ID: B3692	
Location: FILER CITY		County: MANISTEE	
District: Cadillac			
Permit(s): MI-ROP-B3692-2009			
Save			
Contact (s):	Cody Campbell - PCA Contact	Staff (s):	Jeremy Howe - Cadillac
	Todd Wessel - Tester Lead		
		Date (s):	05/20/14
ACTIVITY:			
<input type="checkbox"/> Pre-Test Site Visit/Monitoring		<input checked="" type="checkbox"/> Source Test Observation	
<input type="checkbox"/> Visible Emissions Observation		<input type="checkbox"/> Sample(s) Collected	
<input type="checkbox"/> Photos Taken		<input type="checkbox"/> Other	

This was a leak test and Btu/H2S content test at Packaging Corporation of America (PCA) in Filer City, Manistee County on May 20+22, 2014 for the following emission units and parameters:

- Low Volume / High Concentration (LVHC) system
 - o Hazardous Air Pollutants as Volatile Organic Compounds
- EUBIOGASFLARE
 - o British thermal units (Btu)
 - o Hydrogen Sulfide (H2S)

JH
2-1-14

The following individuals were involved with the test:

DEQ

Jeremy Howe – Cadillac

Stack Testers – BTEC

Todd Wessel – Lead 616-885-4013 twessel@btecinc.com

Kenny Felder – Operating Leak Detector

Facility

Cody Campbell – Process Engineer 231-723-8142 ccampbell@packagingcorp.com

Drew Kennon – Pointing out leak check locations

Observations:

May 20

I had been onsite earlier in the day to witness the Relative Accuracy Test Audit on EUBOILER4A.

I left the site at 1330

Cody called me around 1530 to say that the methane standard was there and they were getting ready to test. I told him I would be there ASAP.

I returned to the site at 1600

I found out that there was a problem with the calibration gas tank. The tank required a proprietary regulator, which BTEC did not know about or have on hand. Todd searched for a regulator that would work with the tank by calling around, but everyone was too far away or did not have one. As such Todd rigged up a mechanism to depress the valve and fill a tedlar bag. Todd filled up the bag and checked the calibration which was returning a concentration of 12,000 ppm. I had not seen Method 21 in action. There is a requirement that the calibration be within 10% of the standard (Section 8.1.1.2) that I did not know about at the time. BTEC and PCA still wanted to proceed with the test because they reassured me that they've never gotten a reading much above background. I proposed to drop the leak definition from 500 ppm to 250 ppm which PCA agreed. In hindsight,

BTEC should've purged the bag a couple of times. I think it was calibrated with leftover air in the bag resulting in a less concentrated standard. When they refilled the bag for the calibration check, the concentration was now as it should be, but higher than during the calibration (hence the high reading). As such, the highest reading I observed was maybe 17 ppm above background, but all the rest were roughly 3-5 ppm.

There were a couple of problems that I noticed during testing that may need to be resolved:

1. None of the potential sources of leakage were labeled. This made it difficult to assess if all the points were sampled and to link up resultant concentrations with their sources.
2. NCG-L-22, NCG-L-23 and NCG-L-25 all had duct tape around their seams. I was told by Drew that the duct tape was used by maintenance to trouble shoot potential leaks and that the mechanics forgot to remove them. He also told me that the system was under negative pressure there, so any leaks would result in air being sucked into the system and not blown out from it.

I left the site at 1900

Note: sampling for BIOGASFLARE using summa canisters occurred on May 22. Since this was the only event that day, I did not show up since all analysis was to occur offsite at a lab in California. Nevertheless, I did talk with BTEC to make sure that they were aware of the seven day hold time. While they were ostensibly aware of this, they forgot that the following Monday was a holiday. As such, they decided to sample on May 22 to give the lab an extra day the following week to complete the analysis.

Staff:

CC:

Date: