From: Sara Greivell
To: McWade, Tammy
Subject: Re: Nassau Landfill Title V Renewal
Date: Friday, August 15, 2014 8:58:26 AM
Attachments: image.png
image.png

Hi Tammy,

I have part of the answer to your 2 questions. For question 1, I have issues with the data I have received and think that one is best to talk about. I will call you after my 9 am conference call, if you are available.

2. I don't believe there is a simple conversion for Mg/hr. I do not see flow rates with the test data and each sample was taken at a different time, some on different days. We can discuss this further when we talk. The section of the Tier II report that explains the 2 test events is included below:

Sampling

Samples from the temporary probes and the active gas collection system were collected using Summa canisters pressurized to accommodate sample collection. Sampling of the temporary probes commenced on May 19, 2004 and continued to the end of the week. Because of some issues associated with the extraction system and collected samples, contingencies were developed and the system sampling as well as some additional probe sampling was completed on June 11, 2004 and June 14, 2004 (see discussion below).

Temporary probe sampling procedures included purging the probes and then collecting the samples in the Summa canisters. Each probe was purged utilizing the pump in the GEM 2000 sampling instrument. At least two sample probe volumes were evacuated from each probe at a nominal flow rate of 500 ml/min. Sampling was then performed at a maximum flow rate of 500 ml/min. A final pressure reading for the canister was taken and recorded on the chain-of-custody forms. After sampling was completed, each of the sampling probes was again taped shut to prevent gas from escaping to the atmosphere.

During the initial probe sampling effort in May 2004, a few samples were not able to be collected from the probes or were rendered unusable by the laboratory. Probe TP-10 was originally sampled on May 21, 2004. However, STL indicated that when the Summa canister arrived at the laboratory there was no pressure in the canister, indicating that it had apparently leaked in transit. Additionally, three of the sampling implants (TP-19, TP-14, and TP-9) were clogged with leachate so gas samples could not be obtained. It was determined that these locations should be sampled at a later date to provide sufficient coverage of the landfill. Samples were taken at all four of these locations on June 11, 2004. Instead of using the implants that were no longer providing a sufficient landfill gas sample, a five foot hole was made with a bar hole probe adjacent to the temporary probes. Perforated tubing was placed to the bottom of the bore, the bore was purged, and the samples were obtained.

The initial work plan called for sampling the gas collection system by taking samples in the header line close to the flare. However, readings taken at the flare in May 2004 indicated an oxygen content greater than 5 percent. Per the regulations, all samples collected must have less than 5 percent oxygen to be valid for the Tier II analyses. The source of the oxygen was evaluated and it was concluded that the likely source was the drip leg on the west slope. Because the time and effort to repair the system was excessive, a contingency for sampling the system was developed by sampling the system on the other side of the drip leg and the individual wells between the drip leg and the flare.

Three landfill gas samples were taken from the header, just to the north of gas extraction well GW-5, as the header entered the closed and capped portion of the landfill, as representative samples of the entire capped area. Samples were then taken directly from seven of the existing gas extraction wells (GW-1, GW-2, GW-3, GW-4, GW-5, GW-6, and GW-11) to cover the remaining gas collection system.

On Thu, Aug 14, 2014 at 4:53 PM, McWade, Tammy <Tammy.McWade@dep.state.fl.us> wrote:

> Hi Sara,
>
> As per our conversation, I need the following information:
>
> 1. As of what date did the NMOC emissions go below 50 Mg/year?
> 2. Tier II test data was 590.4 ppmv on May and June 2004. Please convert to Mg/hour. Not sure why they are stating two different months? Can you clarify. If so, did the test data show the same results?
>
> Thank you,
>
> Tammy
>
> *Tammy T. McWade*
>
> **Engineer Specialist IV**
>
> **Florida Department of Environmental Protection**
>
> **Division of Air Resource Management (DARM)**
>
> **Office of Permitting and Compliance (OPC)**
>
> **Phone: 850/717-9086**
>
> **GIC: 59586**

--
Sara Greivell
Project Manager
Grove Scientific & Engineering
Phone: 407-298-2282 ext.108

Fax: 407-290-9038
sara@grovescientific.com