Inspection Report
Pinellas County Resource Recovery Facility
Facility ID 1030117
Current Permit 1030117-008-AV
Expires July 15, 2016
Report Date: April 13, 2012

4-9-12 Phone call with Rebecca Macionski (Veolia) and Jeffrey Hahn (stack testing consultant): Rebecca called to inform me that stack testing will likely be postponed from this week due to issues with the ash handling system over the weekend that are keeping the plant from being able to operate at full load. RATA testing will proceed this week (week of 4/9/12) beginning with Unit 2 on Tuesday, Unit 3 on Wednesday and Unit 1 on Thursday. She also explained that they will be running simultaneous Method 5/29 and 5/26a to try and confirm that higher PM values are reported when tests are conducted at lower probe temperatures under Method 5/26a (PM/HCl) than using Method 5/29 (PM/Metals). Method 29 will be conducted with a filter temperature of about 230 degrees F while Method 26a will be conducted with a filter temperature of about 320 degrees F. Baseline PM was originally calculated using Method 26a tests, but the facility switched to Method 5/29 annual compliance tests several years ago to save on costs. Rebecca said when they went back and looked at where PM was coming from in their test reports, and unusually large amount was coming from the probe rinse. Mr. Hahn believes that the lower probe and filter temp could result in more NH3, SO2 and HCl not passing through the probe as gas and being captured in the probe pre-filter as particulates. Mr. Hahn said his research indicates these issues seem to develop once the probe temperature drops below 255 degrees F. DARM (Al Linero) is requesting this upcoming test data to confirm that there has been no increase in PM emissions as a result of the Facility Improvement Project (Permit No. 1030117-007-AC). I asked Rebecca about changes in the placement of the CEMS shelters as well. She said that originally there was one CEMS shelter for each unit, housing equipment for inlet and outlet monitoring. The facility moved inlet equipment for each unit to a new shelter closer to the sample point. This reduced the length of the sample lines, likely providing more accurate readings of inlet samples.

4-10-12. 9 am, I met with TF Armbruster, Solid Waste Supervisor, regarding the revised NMOC Emission Rate Report submitted March 29, 2012. He confirmed that they are scheduling new Tier 2 sampling for a report prior to October 2012. He explained the fluctuations in waste acceptance are a result of the MWC units being down for renovation or repair. During those times all waste is diverted to the landfill. 9:25 met with Rebecca Macionski and Jeffery Hahn, Environmental Consultant, to discuss MWC units. This plant uses urea rather than liquid or anhydrous ammonia for reduction of SO2. This is primarily a safety measure. The urea is purchased through a vendor named Colonial. It is premixed with water by the vendor. Rebecca believed the solution to be about 10 percent urea and 90 percent water. She provided me with a table showing the last 11 deliveries for some indication of how much solution they use. They received 55,210 gallons in that time period, dating back to October 6 2011. I asked Rebecca what the maximum continuous steam load was that each unit could run at. She said that maximum

implied a peak value, and the plant is not operated with peaks in mind. We observed the boiler nameplates for units 1 and 3 (2 did not have a Riley nameplate showing steam capacity) and they showed the units capable of 256,000 pounds per hour of steam. Rebecca and Jeff said that while that is the design capacity, it does not take into account the safeties in place at this specific facility. Rebecca said she could provide me with average operating capacity over a specific period of time. I asked if Veolia had any side by side operating data for the new inlet CEMS and the older inlet CEMS that has since been removed. Rebecca said the county has a permitting RAI asking this question. She said Veolia has provided all of their CEMS data to Pinellas County, and that she would prefer to let the county respond. Rebecca and Jeff both felt that it was unlikely there would be any simultaneous valid data. Generally, once a new unit passes certification the older unit is removed from service. Permit No. 1030117-008-AV allows up to 275,000 pounds per hour maximum steam load averaged over a 4-hour period. Rebecca also took me to the location of the newer inlet CEMS shelter, the sampling points for each unit and the outlet CEMS shelter. This was to demonstrate why Veolia decided to move the inlet CEMS. Originally, gas collected from the inlets had to travel long distances—possibly around 1,000 feet—which could have created some accuracy issues since the full length of the line had to be heated. She did not speak to any specific issues, and she also was not employed by the plant at the time the new shelter was installed, but speaking theoretically, she thought the new location made more sense. On my request, Rebecca provided me with some pages from the operator's log, an "Excess Emission Notification or Explanation of Carbon/Continuous Emission Monitor Event/Discrepancy" entry, and an email exchange she had with me. I requested this information as an example of how the facility documents malfunction events.

4-12-12. Rebecca informed me that the plant would be testing Unit 3 for metals, HCl and PM today. I arrived on site at 12:30 and was there until about 2:00. We were also joined by Beth Burns of Pinellas County. Testing was being conducted by ACG.
The following observations were made:
12:39 29/5 filter temp at 231 F.
12:56 26a/5 filter temp at 313 F.
12:56 stack temps observed for beginning of Run 2 were between 270 F and 324 F.
12:56 26a/5 probe temp at 310 F.
1:22 stack temp at 284 F.
1:23 29/5 dry gas meter out temp at 83 F.
1:23 29/5 pump vacuum at 5" Hg.
1:32 29/5 probe temp at 239 F.
1:32 29/5 filter temp at 230 F.
1:35 stack temp at 322 F.
1:35 both meter box levels ok.
1:35 confirmed glass lining in both probes.
I was unable to stay for the Run 2 post-test leak check.

Rebecca said that they always have fluctuating stack temperatures due to the cyclical function of the SDA and its cooling effect. Rebecca told me Veolia was having the test crew use a temperature set point for the 5/26a filter at 315 F and 5/29 filter at 230 F.

Rebecca said that if they can bring Unit 1 back online by Sunday, they intend to test for metals at that time. Unit 1 has been down all week.

Contact info:
Rebecca Macionski (Veolia) – 727-259-8979
Jeffrey Hahn (consultant) – 925-284-2006
Beth Burns (Pinellas County) – 727-464-7525

Digitally signed by Max Grondahl
DN: cn=Max Grondahl, o=FL Dept. of Env. Protection, ou=SWD DARM, email=max.grondahl@dep.state.fl.us, c=US
Date: 2012.04.17 13:12:07 -04'00'