Scearce, Lynn

From: Sheplak, Scott
Sent: Wednesday, April 16, 2014 2:35 PM
To: Scearce, Lynn
Subject: Wheelabrator North and South - 3/27 email - 4/15 & 4/16 projects issued

---

From: Faller, Chuck [mailto:cfaller@WM.com]
Sent: Thursday, March 27, 2014 11:51 AM
To: Sheplak, Scott; Read, David
Cc: Kendrigan, Peter; Porter, Timothy; Turnbull, Nicole; Epsilantis, Jim; Connolly, James
Subject: Landfill Gas/Biosoilds Draft Permit - Wheelabrator North and South Broward

Scott and David, please find below Wheelabrator North and South Broward's comments to construction permits 0112119-019-AC/PSD-FL-105F (South Broward) and 0112120-017-AC/PSD-FL-112E (North Broward). The draft permits require that these comments be submitted in writing to the FDEP at The Bob Martinez Center, 2600 Blair Stone Road in Tallahassee within 14 days of publication of the Public Notice of Intent, which is April 4, 2014. Please let me know if this email is sufficient documentation or if the Department requires the facility to send a hard copy letter to the FDEP Tallahassee office. Thank you in advance for your consideration of the items listed below:

North and South Broward:

1) Page 3 of 11 (Section I. General Information), the third paragraph states North Broward can burn 2420 tons of MSW and South Broward can burn 2589 tons and we requested a maximum of 15% biosoilds, which is equivalent to 390 tons/day at North Broward and 416 tons at South Broward. It is not clear where these 390 ton and 416 ton numbers come from as 15% of 2420 tons is 363 tons and 15% of 2589 tons is 388 tons.
2) Page 7 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), the second paragraph ends by saying this construction permit "…authorizes the combustion of biosolids that are not liquid biosolids in municipal waste combustor Unit Nos. 1, 2 and 3 as allowable non-MSW fuel received as a segregated load." Wheelabrator would prefer the language be slightly modified so no confusion exists that biosolids are **NOT** part of the non-MSW that was permitted last year to increase from 5% to 20%.
3) Page 8 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Condition 3 again references 390 tons for North Broward and 416 tons for South Broward. See comment #1 above.
4) Page 8 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Condition 6 references a specific biosolids training plan. Wheelabrator would like language added that this plan may be incorporated into the site specific operating manual required by MWC standards (40 CFR 60.54b(e)). The training and recordkeeping requirements associated with this manual would comply with the specific biosolids requirements listed in the construction permit.
5) Page 9 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Condition 8 (the initial compliance stack test) states the facility shall do three one-hour runs and the three runs shall be averaged. First, Wheelabrator requests that this line should read "a minimum" of three runs shall be conducted and "all" runs shall be averaged. This makes the biosolids/landfill gas stack test requirements consistent with existing TV stack test requirements. Secondly, the EPA methods for PM and MWC metals (mercury cadmium and lead) are Methods 5 and 29 respectively, which under the EPA MWC standards (40 CFR 60.58b) and TV permit require two-hour runs be conducted. Wheelabrator requests that the duration of M5 and M29 test runs be a minimum of 2 hours consistent with existing requirements.
6) Page 10 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Condition 10 states that the ammonia injection rate during NOx testing shall be included in the report. Wheelabrator requests that this phrase be changed to "ammonia/urea" since the facility uses urea, not ammonia, for NOx control.

7) Page 10 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Condition 14.c. states that the facility has to keep records of analytical results from the source of the biosolids. This condition should be clarified that analytical results are not required for each load of biosolids received at the facility. Rather, the facility is required to maintain records of analytical results provided by the biosolids source under the sampling requirements in Chapter 640 FAC as explained in permitting note. Suggested language might be: " c*. analytical results provided by sources of biosolids pursuant to biosolids analyses requirements in Chapter 640 FAC including metals constituents, % solids by weight and pathogen results."*

8) Page 10 of 14 (Section III. Emissions Unit Specific Conditions Subsection A), Conditions 20 and 21 appear to be unnecessary hourly facility emission limits (lbs/hr) to restrict emission increases below the annual significant emission rate (SER) levels (in tons/yr) for NOx (9.11 lbs/hr x 8760 hr x 1/2000 lbs = 40 tons/yr) and CO (22.8 lbs/hr x 8760 hr x 1/2000 lbs=100 tons/yr). Wheelabrator does not believe such additional facility limits are necessary as the facility will be keeping 12 month rolling average annual emissions calculations to maintain emissions below the respective annual SER. If the Department believes such additional facility restrictions are necessary, such restrictions should be based on tons/yr consistent with the SER and tied to annual baseline emissions as in: "*Any increase in facility SO2 emissions shall be limited to 40 tons/year above projected baseline actual emissions*".

North Broward only:

9) Page 12 of 14 (Section III. Emissions Unit Specific Conditions Subsection B), Condition 4 states that the landfill gas cannot exceed 2800 ppm sulfur. Wheelabrator believes there should be no restriction on landfill gas sulfur content given the facility has CEMs to continuously monitor SO2 levels, demonstrate compliance with 29 ppm Title V permit limit and for calculation of annual emissions. Additionally the facility has the option to install SO2 CEMS at the SDA inlets to determine SO2 removal efficiency should it become desirable.
10) Page 12 of 14 (Section III. Emissions Unit Specific Conditions Subsection B), Condition 5 – Wheelabrator offers the same comment as listed in #8 regarding the unnecessary hourly SO2 limit of 9.11 lbs/hr.
11) Page 13 of 14 (Section III. Emissions Unit Specific Conditions Subsection B), Conditions 6 and 7 state that a gas chromatograph must be used to analyze the landfill gas for sulfur. As stated in #9 above, and since CEMS are available and landfill gas may only be a component of the total fuel mixture, if the facility is able to maintain SO2 and NOx levels below Title V permit limits, these conditions are unnecessary. In addition, the conditions do not provide sampling procedures or averaging times. Lastly, both conditions reference analysis for sulfur. It is assumed condition 7 in meant to reference nitrogen.

North and South Broward – non-MSW clarification

Wheelabrator North and South Broward are also requesting the following modification to construction permits 0112120-015-AC/PSD-FL-112D (North) and 0112119-017-AC/PSD-FL-105E (South). The permits were issued in December, 2013 increasing the allowable amount of non-MSW able to be received at the facilities from 5% to 20%. There are two methods of calculating non-MSW in the permits. On page 11, condition 7.f, the original language of a 30-day rolling average is used. On page 12, condition 7.g. and Recordkeeping and Reporting Requirement condition c. the conditions state the calculation is to be on a calendar monthly basis, not a 30 day rolling average. Wheelabrator is requesting the permits be revised uniformly to require a 30-day rolling average for calculations of non-MSW.

If further information or clarification is needed, please feel free to contact me via email or at the phone number listed below.

Chuck Faller
Florida Regional Environmental Manager
Wheelabrator North Broward

Wheelabrator Technologies

A Waste Management Company
2600 Wiles Road
Pompano Beach, FL 33073
Tel 954 971 8701 Ext. 216

Recycling is a good thing. Please recycle any printed emails.

Scearce, Lynn

From: Sheplak, Scott
Sent: Wednesday, April 16, 2014 2:34 PM
To: Scearce, Lynn
Subject: Wheelabrator North and South - comments - 4/15 & 4/16 projects issued

---

From: Faller, Chuck [mailto:cfaller@WM.com]
Sent: Friday, April 11, 2014 12:53 PM
To: Sheplak, Scott
Cc: Porter, Timothy
Subject: Wheelabrator North and South Broward SO2 and NOx controls

As per our phone conversation from this morning regarding Wheelabrator's comments to the draft construction permits involving biosolids and landfill gas, here is a basic overview of how North and South Broward control SO2 and NOx levels in the facilities boilers utilizing CEMS data to adjust lime and urea feed rates. If you have any questions, or if you need more information, please let me know.

Boiler SO2 and NOx concentrations are measured by CEMS at the outlet of the air emissions control train, prior to the ID fan. The CEM measured concentrations are transmitted on a real time basis to the control room Data Control System, the ABB Infi-90 System. The ABB system is equipped with automatic SO2 and NOx controllers which respond continuously to variations in SO2 or NOx emission levels. The SO2 controller automatically adjusts the lime slurry feed rate to the spray dry absorber (SDA) to maintain the SO2 concentrations to a predetermined set point below the 29 ppm limit. The NOx controller likewise automatically adjusts the urea injection rate to the furnace of each boiler based on NOx CEM signal to a predetermined set point below the 205 ppm limit The controller set points are chosen to ensure outlet emission levels remain below permit limits with a reasonable comfort margin. For example, presently, the SO2 set point at North Broward is 20 ppm corrected to 7% O2 and the NOx set point is 195 ppm, corrected to 7% O2.

Additionally for SO2 control, a minimum lime feed rate set point is also entered into the SO2 controller. This minimum set point ensures , the control system will maintain an oversupply of lime slurry to the SDA during periods of low outlet SO2 levels. This minimum lime feed ensures there is a good lime buffer in the event there is rapid rise in SO2. The end result of the automated SO2 controller is SO2 is controlled well below the SO2 set point for a substantial portion of the operating time. Typically a single digit 24-hour average is recorded for SO2.

Chuck Faller
Florida Regional Environmental Manager
Wheelabrator North Broward

Wheelabrator Technologies
A Waste Management Company
2600 Wiles Road
Pompano Beach, FL 33073
Tel 954 971 8701 Ext. 216
