From: Katie Hill Brandt
To: Cordes, Richard M (MPCA)
Cc: Sheffer, Melissa (MPCA); Todd Potas (SEH); Troy A. Bech (troy.bech@sanimax.com)
Subject: RE: Additional Comments on Air Permit Application
Date: Thursday, July 11, 2013 3:32:09 PM
Attachments: Sanimax PTE Calculations_2013.07.11.xlsx

Hi Dick,

Thanks for looking into my natural gas emission factor question. I have updated and attached the combustion calculations, per your request.

Another question I have is in regards to the PM2.5 emission factors used for EU005, EU009, EU010, and EU014. The PM/PM10 emission factors for those sources are from AP-42 (Table 11.12-2 for Pneumatic Unloading of Cement to Elevated Storage Silo, SCC 30501107). An emission factor for PM2.5 is not available in AP-42, so PM2.5 is assumed equal to PM10. However, the EPA's PM Calculator does have a correction factor (PM2.5 = 15% of PM) for this equipment (SCC 30501107). I would like to propose using this emission factor correction instead of assuming that PM2.5 = PM10.

Let me know if you have any questions.

Thanks,

Katie Hill Brandt, PE | Environmental Engineer
SEH | 3535 Vadnais Center Drive | St. Paul, MN 55110
651.490.2032 direct | 612.723.6704 cell | 651.490.2150 fax
www.sehinc.com
SEH—Building a Better World for All of Us™

From: "Cordes, Richard M (MPCA)" <richard.cordes@state.mn.us>
To: Katie Hill Brandt <khillbrandt@sehinc.com>,
Cc: "Sheffer, Melissa (MPCA)" <melissa.sheffer@state.mn.us>, "Todd Potas (SEH)" <tpotas@sehinc.com>, "Troy A. Bech (troy.bech@sanimax.com)" <troy.bech@sanimax.com>
Date: 07/11/2013 08:00 AM
Subject: RE: Additional Comments on Air Permit Application

Katie –

For the purposes of emission calculations, we're not comfortable with the use of the emission factors that are on the emissions inventory page; if you have no source-specific information on particulate emissions, continue to use the AP-42 natural gas emission factors for your calculations. You may want to consider pursuing source-specific emission factors, such as vendor data. If so, please provide the vendor data or guarantee.

Dick

From: Katie Hill Brandt [mailto:khillbrandt@sehinc.com]

Sent: Wednesday, July 10, 2013 8:55 AM
To: Cordes, Richard M (MPCA)
Cc: Sheffer, Melissa (MPCA); Todd Potas (SEH); Troy A. Bech (troy.bech@sanimax.com)
Subject: Re: Additional Comments on Air Permit Application

Dick,

The attached CD-01 pages have been updated as requested, and I have also proposed CD-01 language for the temporary boiler to remain "temporary."

I'll wait to hear back from you on the natural gas emission factors before I send the revised calculations.

Thanks,

Katie Hill Brandt, PE | Environmental Engineer
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www.sehinc.com
SEH—Building a Better World for All of Us™

From: "Cordes, Richard M (MPCA)" <richard.cordes@state.mn.us>
To: Katie Hill Brandt <khillbrandt@sehinc.com>,
Cc: "Todd Potas (SEH)" <tpotas@sehinc.com>, "Troy A. Bech (troy.bech@sanimax.com)" <troy.bech@sanimax.com>, "Sheffer, Melissa (MPCA)" <melissa.sheffer@state.mn.us>
Date: 07/05/2013 12:26 PM
Subject: Additional Comments on Air Permit Application

Katie –

Thank you for getting me the information I requested on SV 019.

I also wanted to provide some feedback on your responses to my previous comments.

- Please update the PM calculations as indicated in my previous comments. Update the "Combustion (Existing Calcs)" tab to include condensables for PM10 and PM2.5.
- Delete RAVFO from the combustion emission calculations. (This applies to the "Combustion (Proposed)" and the "Combustion (Existing Calcs)" tabs.)
- Since the use of RAVFO as a fuel will no longer be allowed, it would be helpful for you to propose revisions for the CD-01s for GP 001 to reflect its elimination. Similarly, propose changes to the CD-01 language for each of the boilers that reflect this as well.
- Provide proposed CD-01 language for the temporary boiler to limit its use to less than twelve months.

As noted in Melissa's e-mail, we'll discuss the modeling next week.

Dick

From: Katie Hill Brandt [mailto:khillbrandt@sehinc.com]
Sent: Monday, July 01, 2013 11:26 AM
To: Cordes, Richard M (MPCA)
Cc: Todd Potas (SEH); Troy A. Bech (troy.bech@sanimax.com); Sheffer, Melissa (MPCA)
Subject: Re: Initial Comments on Air Permit Application received from Sanimax dated May 7, 2013

Hi Dick,

Please see our responses to your email below in red. Let me know if you have additional questions.

We would be open to another conference call this week prior to Thursday, if needed.

Thanks,

Katie Hill Brandt, PE | Environmental Engineer
SEH | 3535 Vadnais Center Drive | St. Paul, MN 55110
651.490.2032 direct | 612.723.6704 cell | 651.490.2150 fax
www.sehinc.com
SEH—Building a Better World for All of Us™

From: "Cordes, Richard M (MPCA)" <richard.cordes@state.mn.us>
To: "Troy A. Bech (troy.bech@sanimax.com)" <troy.bech@sanimax.com>, "Katie Hill Brandt (SEH)" <khillbrandt@sehinc.com>,
Cc: "Todd Potas (SEH)" <tpotas@sehinc.com>
Date: 06/21/2013 03:15 PM
Subject: Initial Comments on Air Permit Application received from Sanimax dated May 7, 2013

Troy and Katie –

I have reviewed the original permit application and provide the following comments:

Calculations

- Condensables – PM_{10} & $PM_{2.5}$ (need to be added for combustion sources). (This has been addressed.)
- PM – in most cases, PM does not include condensables (performance tests conducted using only Method 5). The exception is for state rules when organic condensable must be included in the PM determination. - Do we need to provide you any information to address this?

Application review

- The application indicates that the new boiler is eligible for "temporary" status under 40 CFR 63, Subpart JJJJJJ, as it is assumed that the boiler will be in operation for less than twelve months. Is this still a good assumption? If this status changes, please determine if a new highlighted copy of NESHAP JJJJJJ will be required. - Yes, the temporary boiler will be on site less than 12 months.
  - If the boiler is going to be temporary, have you proposed CD-01 language that will ensure that the boiler will not exceed the rule requirements for a temporary boiler? - We have not proposed such language, but we can

provide it.

- 40 CFR 60, Subpart A is omitted. (This has been addressed.)
- 40 CFR 63, Subpart A is omitted. (This has been addressed.)

Various and sundry

- What's the relationship between the existing facility and the "permanent" boiler that's planned to replace the temporary boiler addressed in the current permitting action? - The permanent boiler will be a permanent replacement solution for the temporary boiler. The design of the permanent boiler hasn't been finalized yet.
- What's the status of the modeling?
  - Have you addressed nearby sources? - Nearby sources have been added to the model. I spoke with Melissa Sheffer this morning to discuss some modeling details. There are a few kinks yet to be worked out.
  - Are there constraints that you plan to propose to facilitate compliance with the NAAQS? - Sanimax would be willing to place a weekly limit on the number of hours that they can run No. 2 fuel oil in their boilers and ring dryer.
- We discussed discontinuing the use of RAFVO as fuel due to the higher particulate emissions from the use of the fuel. Should the draft permit eliminate the use of RAFVO? - We will go ahead and eliminate RAFVO from the permit. Economically it does not make sense to use it as a fuel.
- We also discussed limitations on the hours of operation with fuel oil. - Melissa Sheffer said that she would accept modeling that scales boiler emissions down by a certain percentage to account for a weekly limit on fuel oil combustion. We would submit two modeling scenarios: 1) The normal operating scenario with natural gas as the only combustion fuel; 2) The gas curtailment operating scenario, limiting weekly No. 2 fuel oil usage.

I will be out of the office next week. I would be helpful to me if I received your response when I return to the office on Monday, July 1, 2013. Thanks.

Richard Cordes, P.E.
Staff Engineer, Air Permits Section
Industrial Division
Telephone: 651-757-2291
Fax: 651-296-8717