From: Katie Hill Brandt
To: Sullivan, Jim (MPCA); Cordes, Richard M (MPCA)
Subject: Sanimax Modeling Updates - Larger Replacement Boiler
Date: Thursday, April 23, 2015 2:36:40 PM
Attachments: Sanimax_StPaul_PM2.5_Boiler EBD_April 2015.zip
AQDM-02_Protocol_Sanimax_2015.04.21.xls
Sanimax Roads_2010 and 2015.xlsx
Sanimax PTE Calculations_2015.04.21.xlsx
AQDM-08_EBD Form_Sanimax_2015.04.21.doc

Jim & Dick,

Here is the updated modeling protocol, modeling files, and emission calculations for Sanimax. The new modeling:

- includes an updated emission rate for SV018 (1.04 lb/hr),
- addresses the removal of SV019 (previously modeled at 1.04 lb/hr, according to the input files provided by Jim on 4/6/15),
- uses the updated fugitives method, and
- uses a higher emission rate for the replacement boiler SV020 (proposed size: 98 MMBtu/hr).

Let me know if you have any questions. Thanks.

Katie Hill Brandt, PE | Environmental Engineer
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From: "Sullivan, Jim (MPCA)" <jim.sullivan@state.mn.us>
To: Katie Hill Brandt <khillbrandt@sehinc.com>,
Date: 04/15/2015 06:07 PM
Subject: FW: Sanimax July 2010 Modeling Report

Katie,

See Dick's note below. I think you can go ahead and rerun the EBD based on the removal of SV019 and the updated fugitives method. I believe that you will end up at or very near a "zero." Call me if you have any additional questions.

Thanks!

-jim

From: Cordes, Richard M (MPCA)

Sent: Tuesday, April 14, 2015 8:53 AM
To: Sullivan, Jim (MPCA)
Subject: RE: Sanimax July 2010 Modeling Report

Jim –

The PM2.5 emission limit for SV 018 (associated with PPF cooking, pressing, and milling) limited emission rate is 1.04 lb/hr (EU 020 (cooking) – 0.77 lb/hr, EU 021 (pressing) – 0.22 lb/hr, EU 022 (milling) – 0.050 lb/hr). SV 018 was modeled at 1.0 lb/hr in the most recent submittal (AQDM-02_Protocol_Sanimax_2015.03.18.xls). It should be the same rate before and after the proposed change.

Appendix II to the permit lists the stack ID for the PPF as "018 or 019" with an emission rate of 1.0 lb/hr. I haven't looked at the input files for the last round of modeling, so I'm not really sure what's presented there. If SV 018 and SV 019 are both included in the baseline modeling, it would be fine to eliminate SV 019 in the "after the change" modeling.

Regarding the permitting of SV 019, I will just remove it from our permitting system. It's not currently used in the permit.

Dick

From: Sullivan, Jim (MPCA)
Sent: Friday, April 10, 2015 4:19 PM
To: Katie Hill Brandt
Cc: Cordes, Richard M (MPCA)
Subject: RE: Sanimax July 2010 Modeling Report

Good Afternoon Katie,

Thanks for your note. Dick and I chatted about the issues with SV025 (SV018) and SV026(SV019). From what I can gather, SV019 was modeled; but never permitted. For baseline purposes, it was the totality of the modeling that was considered in the final permit; however, SV019 was never permitted in 2010. This means that the removal of SV019 as part of the EBD is justified. Based on the note you just sent me, I think we can be sure that the changes you are comparing now, including the removal of SV019, will result in a "zero" value. Dick can speak more to the future permitting end on the implications of the SV019 stack. I believe that Dick was also going to do a final check on SV018 inputs. Once I hear from Dick on the confirmation of SV018, we can finish up the EBD. I think it will be a new form; however, you can send it to us digitally rather than a new hard copy form.

Thanks!

-jim

From: Katie Hill Brandt [mailto:khillbrandt@sehinc.com]
Sent: Monday, April 06, 2015 4:14 PM
To: Sullivan, Jim (MPCA)
Cc: Cordes, Richard M (MPCA)
Subject: RE: Sanimax July 2010 Modeling Report

Jim,

These look like the correct files. Let me know how your results turn out.

I did notice one thing that is different from my model. SV025 & SV026 (numbered SV018 & SV019 in the permit) are both included in the the 2010 model, but only one of them (SV018) was built and is in operation today. My EBD model only includes SV018, but I should have added SV019 as well. I think that would have a favorable effect on the EBD results.

Thanks,

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From: "Sullivan, Jim (MPCA)" <jim.sullivan@state.mn.us>
To: Katie Hill Brandt <khillbrandt@sehinc.com>,
Cc: "Cordes, Richard M (MPCA)" <richard.cordes@state.mn.us>
Date: 04/06/2015 03:36 PM
Subject: RE: Sanimax July 2010 Modeling Report

Katie,

I found the files – they were misplaced in a different folder. I have updated them (sort of) in the most current version of Aermod. If you want to take a look at the files and confirm that we are working off the correct set, I can finish up on my end.

Thanks!

-jim

From: Katie Hill Brandt [mailto:khillbrandt@sehinc.com]
Sent: Monday, April 06, 2015 3:04 PM
To: Sullivan, Jim (MPCA)
Subject: Sanimax July 2010 Modeling Report

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[attachment "SannPM2524hr.ADI" deleted by Katie Hill Brandt/seh] [attachment "SannPM2524hr.bpi" deleted by Katie Hill Brandt/seh]