From: Katie Hill Brandt
To: Cordes, Richard M (MPCA)
Cc: ben.bertram@sanimax.com
Subject: RE: Sanimax Haul Roads Emissions
Date: Monday, February 23, 2015 4:04:06 PM

Dick,

I think you're right. The haul road spreadsheet from the previous permit had an error that we noticed and fixed back in 2013 when we first started working on this permit amendment project. We corrected the units for the vehicle weights from lbs to tons.

The 4.3 g/m2 value was in the original haul road spreadsheet that I received from MPCA in January 2013, so I didn't come up with the number. My assumption is that the value is correct but the units are wrong (should be % instead of g/m2). I see a value of 4.3% mean silt content for a taconite mining and processing service road in AP-42 Table 13.2.2-1. This would seem like a conservative silt content estimate for the Sanimax site.

Thanks,

Katie Hill Brandt, PE | Environmental Engineer
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From: "Cordes, Richard M (MPCA)" <richard.cordes@state.mn.us>
To: Katie Hill Brandt <khillbrandt@sehinc.com>,
Cc: "ben.bertram@sanimax.com" <ben.bertram@sanimax.com>
Date: 02/23/2015 03:08 PM
Subject: RE: Sanimax Haul Roads Emissions

Katie –

I have a couple questions about the haul roads for the modeling.

It looks to me as though the inputs to the calculations (VMT, vehicle weight, etc.) are the same. Calculation methods appear to have been changed and there seems to have been a units problem (lbs vs tons) with the spreadsheet for the previous permit. Is this your understanding of the situation?

Also, the units for silt loading for unpaved roads is percent, not g/m2. The spreadsheet you sent me included a value of 4.3 g/m2. Can you let me know where this value came from and provide to me the percentage silt loading?

Thanks.

Dick

From: Katie Hill Brandt [mailto:khillbrandt@sehinc.com]
Sent: Monday, February 23, 2015 11:24 AM
To: Cordes, Richard M (MPCA)
Subject: Sanimax Haul Roads Emissions

Dick,

Per your request, here is a copy of the Sanimax haul road emission calculations, to supplement the modeling protocol.

Let me know if you have any questions. Thanks.

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