
From: Dungey, Curt <Curt.Dungey@Foth.com>
Sent: Thursday, August 30, 2018 3:52 PM
To: Drury, Andrew (DEQ)
Cc: Thomas Repaal; Baran, Kris K
Subject: RE: Copperwood Air Permit - Proposed Edits and Comments on Preliminary Draft Air Permit
Attachments: Attachments.html

Andy:

Attached as a Share File is a revised Fugitive Dust Control Plan (FDCP) for use with the draft air permit. It includes changes outlined in our August 17, 2018 submittal along with the new figure that shows haul routes HR-04 and HR-05. I am providing you with a pdf of the entire plan along with a Word version, thinking that might work better for inclusion with the draft air permit. Let us know if you also need a hard copies of this document.

Regarding your two questions below, I have already answered your question/comment on counting concentrate trucks, but include my previous response for completeness. We also have a response to your proposal to place a limit on emulsion usage to control CO PTE emissions below 100 tpy. Both responses are highlighted in red below.

As with previous messages, although there is a confidentiality statement automatically attached to the bottom, there is nothing in this message that should be considered confidential.

Please let us know if you have questions or would like to discuss further. We have one more conference call scheduled for Tuesday, September 4 at 2:00 pm CDT.

Thanks

ShareFile Attachments		Expires September 29, 2018
Copperwood Air Emissions Inventory Ver 3B.xlsx	713.8 KB	
R-Fugitive Dust Control Plan REV.docx	164.4 KB	
R-Fugitive Dust Control Plan REV.pdf	8 MB	

[Download Attachments](#)

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From: Drury, Andrew (DEQ) [mailto:DRURYA@michigan.gov]
Sent: Tuesday, August 28, 2018 3:16 PM
To: Dungey, Curt <Curt.Dungey@Foth.com>
Cc: Thomas Repaal <thomas.repaal@highlandcopper.com>; Baran, Kris K <Kris.Baran@Foth.com>; Lancaster, Edward (DEQ) <LANCASTERE1@michigan.gov>; Carlson, Nicholas (DEQ) <CarlsonN1@michigan.gov>; Smith, Cindy (DEQ) <SMITHC17@michigan.gov>
Subject: RE: Copperwood Air Permit - Proposed Edits and Comments on Preliminary Draft Air Permit

Curt,

Thank you for the comments on the conditions.

As we discussed on the phone, please send an electronic version of an up to date draft dust plan for inclusion in Appendix A of the conditions. **Revised Fugitive Dust Control Plan is attached.**

Also, could you provide an example of how the “gross equivalent number of 40-ton concentrate transport trucks” will be calculated. **The permit condition should probably state “payload equivalent number of 20-ton concentrate trucks.” Based on the estimated maximum production rate of 183,347 tons per year, this works out to be 9,168 truck trips per year based on a 20-ton payload maximum per the emission calculations. This can be documented through weighing incoming empty trucks (weights may vary slightly) and weighing the outgoing truck with payload. Assuming this rate, the facility should be able to meet the proposed 9,200 truck trips per year.**

I am preparing the final draft conditions and think it may be good to include a limit on the amount of emulsion that can be used, given that the CO PTE is above 90 tons per year and most of that comes from the blasting. I would propose a limit of 2,350 tons of emulsion per 12-month rolling time period. Please let me know what you think of this proposal. **After conferring with its mining consultant, Copperwood would like to propose an emulsion limit of 2,650 tons/year, based on a 12-month rolling average. This would be based on a new emulsion powder factor of 1.8 lb/ton calculated by the mining consultant. This is slightly higher than the previous 1.6 lb/ton. While they will not be using this amount of emulsion in early stages of mining, they may need more cushion as mine operations ramp up in a few years. At the same time, Copperwood would be willing to limit propane usage on the mine heaters to a maximum of 4,000 hours per year. Emission calculations used 8760 hours per year. Making these changes would result in a maximum combined CO PTE of 98.4 tpy from all facility activities. Revised emission calculations (Version 3B) are included with this message to demonstrate how this would work. The changes I note are highlighted in light blue on the Underground tab and Summary of Criteria Pollutants tab.**

Thank you,

Andrew Drury, Senior Environmental Engineer
General Manufacturing/Chemical Process Unit

DEQ-Air Quality Division, Permit Section
drurya@michigan.gov
Phone number: 517-284-6792

From: Dungey, Curt <Curt.Dungey@Foth.com>
Sent: Thursday, August 23, 2018 11:41 AM
To: Drury, Andrew (DEQ) <DRURYA@michigan.gov>
Cc: Thomas Repaal <thomas.repaal@highlandcopper.com>; Baran, Kris K <Kris.Baran@Foth.com>
Subject: Copperwood Air Permit - Proposed Edits and Comments on Preliminary Draft Air Permit

Andy:

Attached as a Share File and for your consideration are Copperwood's proposed edits and comments on the preliminary draft air permit that you provided last week. All proposed edits are in track changes. A few comments are shown in the margins.

We can discuss further during our scheduled conference call next week.

As before, even though this e-mail may have an automatic confidentiality statement at the bottom, none of the information in this message should be considered confidential.

Please let us know if you have any questions or need clarifications.

Thanks

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