

Drury, Andrew (DEQ)

From: Drury, Andrew (DEQ)
Sent: Tuesday, January 30, 2018 1:30 PM
To: Dungey, Curt (Curt.Dungey@Foth.com)
Cc: Thomas Repaal; Baran, Kris K (Kris.Baran@Foth.com); Donohue, Steve (Steve.Donohue@Foth.com); McDonald, Tracey (DEQ); Smith, Cindy (DEQ); Lancaster, Edward (DEQ)
Subject: FW: Copperwood Resources Modeling Protocol

Curt,

AQD has reviewed the modeling protocol submitted for the Copperwood Project and we have a few comments in the e-mail below. The requested background data for the modeling is also included below.

Please let us know if you have any questions.

Thanks,

Andrew Drury, Senior Environmental Engineer
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DEQ-Air Quality Division, Permit Section
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Phone number: 517-284-6792

From: McDonald, Tracey (DEQ) -
Sent: Tuesday, January 30, 2018 11:07 AM -
To: Drury, Andrew (DEQ) <DRURYA@michigan.gov> -
Subject: Copperwood Resources Modeling Protocol -

Andy, -

I received a copy of the modeling protocol for Copperwood Resources, Inc. submitted by Foth Infrastructure & - Environment, LLC, along with a request to review and comment on it. The following comments follow the same format - as the headings provided in the protocol letter: -

Proposed Model -

When submitting modeling files, please don't forget to include the building profile input program (.bpip or something similar). Building downwash analysis will be utilized in the review process.

Proposed Meteorological Data

Please be aware I now have access to 2017 met data, and it will soon be made available on our website. Feel free to contact me if you would like to use 2017 met data and can't acquire it through the MDEQ-AQD webpage, I'd be happy to send it. In addition, if this project becomes a PSD project, EPA expects facilities to use 1-min met data, which is not available for the Gogebic-Iron County Airport. You should consider changing to 1-min met data at another airport, or be prepared to explain why you believe it's better to use the hourly based IWD met data.

Proposed Receptor Locations

The spacing of the receptor grid you have proposed sounds sufficient, however, just note that modeling staff may choose to use a denser grid if “hotspots” need closer analysis.

Use of Any Special Non-Default Options

Please note, both the MDEQ and EPA consider using u-star met data a perfectly acceptable option that you might find useful.

Baseline Ambient Air Quality Data

Additional sources – Based on an analysis of available data, it is agreed, no sources in the area are expected to have an impact on your proposed permitting action.

Background data – Updated background data is as follows:

Year	NO2 Houghton Lake, MI		PM-2.5 Ashland Co, WI		PM-10 Duluth, MI	SO2 Forest County, WI	
	1-hr	Annual	24-hr	Annual	24-hr Highest 2nd high	1-hr	3-hr
	98th pctl	Max	98th pctl	Avg		avg of 4th high	high 2nd high
2014							
2015	7.0	1.4	19.0	5.0	67.0	4.2	4.8
2016	9.0	1.7	11.9	3.9	66.0	3.3	3.9
2017	6.5	1.3	19.0	3.5	62.0	1.7	1.3
	7.5 ppb	1.7 ppb	16.6 ug/m3	4.1 ug/m3	67.0 ug/m3	3.1 ppb	4.8 ppb

NAAQS MODELING BACKGROUND SUMMARY

NO2		PM-2.5		PM-10	SO2	
14.1 ug/m3	3.2 ug/m3	16.6 ug/m3	4.1 ug/m3	67.0 ug/m3	8.0 ug/m3	12.6 ug/m3

Finally, in case this becomes a PSD permitting action, I wanted to make sure to take note of the additional materials that will be necessary for a modeling protocol. These items include addressing secondary formation, secondary impacts (such as growth, etc.), Class 1 areas and visibility, and preconstruction monitoring.

If anyone has questions about the above comments, please feel free to contact me for more information or further discussion.

Thanks for the opportunity.

Trace McDonald
 Environmental Engineer
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