

EPA-R5-2014-001593-26

**Christine  
Wagener/R5/USEPA/US**

04/03/2012 10:12 AM

To Christine Wagener

cc

bcc

Subject Fw: TH169 McComber Mine area drilling

Filed 13.5 M document in Hwy 169 Folder.

----- Forwarded by Christine Wagener/R5/USEPA/US on 04/03/2012 10:11 AM -----

From: Virginia Laszewski/R5/USEPA/US  
To: Michael Sedlacek/R5/USEPA/US [REDACTED], James Grimes/R5/USEPA/US [REDACTED], Scott McWhorter/R5/USEPA/US [REDACTED], Christine Wagener/R5/USEPA/US [REDACTED]  
Date: 03/26/2012 08:57 AM  
Subject: Fw: TH169 McComber Mine area drilling

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Hi Mike, James, Scott and Chris,

Please see MnDOT's below email and attachment (map/figure) for some updated information regarding alternatives for the above referenced Hwy 1/169 project. Let me know if you have any comments/issues/concerns with MnDOT's response to the citizen and/or the attached map information regarding alternatives.

Thank you,

Virginia Laszewski  
Environmental Scientist

US EPA, Region 5  
NEPA Implementation, OECA  
77 W. Jackson Blvd. (mail code: E-19J)  
Chicago, IL 60604-3590  
Phone: [REDACTED]  
Fax: (312) 697-2097  
email: laszewski.virginia [REDACTED]

----- Forwarded by Virginia Laszewski/R5/USEPA/US on 03/26/2012 08:35 AM -----

From: "Larson, Brian (DOT)" <brian.larson [REDACTED]>  
To: sueo uslink.net <sueo [REDACTED]>  
Cc: "Phil Forst (Phil.Forst [REDACTED])" <Phil.Forst [REDACTED]>, Virginia Laszewski/R5/USEPA/US [REDACTED], "Martin, Dennis P (DNR)" <Dennis.Martin [REDACTED]>, "Foss, Ann (MPCA)" <ann.foss [REDACTED]>  
Date: 03/25/2012 08:48 AM  
Subject: RE: FW: TH169 McComber Mine area drilling

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Hello Matt,

Attached is a .pdf of the Highway 169 alignments most recently being looked at. I've left a voice message for Mark about the drill log and eastern geological mapping. When I receive it, I will provide you a copy.

In regards to other points you raised:

- At this time, MnDOT will not be developing a formal sulfide road construction policy. We

will address the issue as part of the NEPA process that our projects go through. This will involve continued consultation with the DNR, MPCA, FHWA, EPA and COE.

- In addition to consultation with the above noted agencies, MnDOT will use the expertise of Golder and Associates and the NRRRI to assist with the analytical methods and ARD evaluation guidelines. We will be incorporating some of the protocols and practices used in other states.
- The rest of your points are noted and will be considered as the project moves forward.

Again, thank you for writing.

Brian Larson  
Mn/DOT D1 Project Manager  
1123 Mesaba Ave.  
Duluth, MN 55811  
[REDACTED]

**From:** Larson, Brian (DOT)  
**Sent:** Friday, March 16, 2012 11:02 AM  
**To:** 'sueo uslink.net'  
**Cc:** Moates, Chris (DOT); phil.forst [REDACTED]; laszewski.virginia [REDACTED]  
**Subject:** RE: FW: TH169 McComber Mine area drilling

Hello Matt,

In regards to your e-mail, I'll try to get .pdf's created of the alignment alternatives we discussed and share them with you next week. I will also call Mark and see when the eastern mapping work will be finished. According to Jay, he has been busy logging other mine related work.

As for the rest of your questions, I've shared them with the project team for consideration and we will be discussing them next week. As you requested, I will follow up with a phone call or e-mail on how we plan to proceed.

Thanks for the note outlining your ongoing concerns regarding the sulfide issue.

Brian

**From:** sueo uslink.net [[mailto:sueo \[REDACTED\]](mailto:sueo [REDACTED])]  
**Sent:** Wednesday, March 14, 2012 11:03 PM  
**To:** Larson, Brian (DOT)  
**Cc:** Moates, Chris (DOT); [phil.forst@d \[REDACTED\]](mailto:phil.forst@d [REDACTED]); [laszewski.virginia \[REDACTED\]](mailto:laszewski.virginia [REDACTED])  
**Subject:** Re: FW: TH169 McComber Mine area drilling

Hello Brian,

I am requesting information on the drilling and mapping that was recently conducted and/or planned for the Highway 169 project. I am also listing some of my concerns that I would like to discuss with you.

I am interested in viewing a map depicting the latest routes and bedrock disturbance areas

(270,000 and 140,000 cubic yds) that we recently discussed; also I request copies of NRRI's deliverables for the eastern mapping project that was not in the original mapping report, please include the drill log for the hole T-03 that was unavailable per Jay's e-mail; and the locations of where Idea Drilling will be collecting core.

What analytical methods will be used on the core and who will be interpreting this data for mndot?

Mndot was previously meeting with PCA, DNR, Corps.of Engineers, Fed Hwy Dept, EPA etc for their input on this project, have those meetings been discontinued? As you know Mndot in consultation with selected consultants decided to proceed with the road construction project without conducting any pre-construction drilling for ARD evaluation until very recently. What are your thoughts on the sulfide %'s from the three holes drilled so far? Holes averaging 3.5% sulfide should be of concern if 0.2% can cause acid generation iin this type of rock.

What ARD evaluation guidelines is Mndot planning to follow for this project? This project will result in the largest non-mining disturbance of sulfide bearing bedrock in the state. Since Mndot has no experience with ARD evaluation and mitigation and that disturbing sulfides may affect the surrounding lakes, stream, wetlands, groundwater, including our private lands I believe it is prudent that Mndot define a sulfide road construction policy prior to conducting this road project. I encourage this be determined through a multi-agency committee (EPA, PCA, DNR, MNDOT, and US Army Corp of Engineers) and not only by Mndot and their current consultants.

I believe there needs to be discussion on how Mndot will determine an acceptable percent sulfur cutoff for the material to be used as fill under the road bed (Pennsylvania DOT uses 0.5 sulfur). Pennsylvania's policy requires material with sulfur levels greater than 0.5 % be encapsulated off site not under the roadbed, The reason being if mitigation fails the road may need to be torn up to extract the acid generating material. This at great expense plus the destruction of the newly built road. It should be noted that Minnesota is currently using similar thresholds for materials to be used in proposed mining roads at the Polymet proposed mine (see Polymet Draft EIS).

Tennessee does not allow their DOT to encapsulate sulfides on private land. If mitigation fails landowner bear the pollution consequences and DOT potential law suites. What compensation guarantees is Mndot willing to provide to the landowners if this project creates environmental problems? Encapsulating sulfides through private lands (realizing the right-away will be purchase) is basically creating a hazardous waste facility across private property. This type of material has caused issues at the Virginia, MN hazardous waste facility were sulfide bearing rock was deposited. How is Mndot going to compensate the landowner for reduced land value and the potential environmental risk if such facilities are constructed through their lands?

I look forward to further discussions.

Sincerely,

Matt Oberhelman

On Fri, Mar 9, 2012 at 9:12 AM, Larson, Brian (DOT) <[brian.larson](mailto:brian.larson)> wrote:  
Matt, here is the coring location information you were looking for.

Brian

**From:** Richter, Jason (DOT)  
**Sent:** Tuesday, March 06, 2012 3:33 PM  
**To:** Larson, Brian (DOT)  
**Subject:** TH169 McComber Mine area drilling

Brian... the following are coordinates for the borings obtained from the McComber area. The projection system is St. Louis County-Central (feet; NAD 1983).

T01 (X: 589915.802; Y: 320470.826)  
T02 (X: 590023.339; Y: 320517.144)  
T03 (X: 590075.847; Y: 320576.3)  
T04 (not drilled)  
T05 (not drilled)

It should be noted that these borings and any additional chemical analyses are intended for information only at this point until we acquire more borings which penetrate a fair representation of the bedding at the prescribed stations in the ROW. Though not unexpected, our rig had some difficulty fulfilling the need for angled borings... this exercise reinforced that Idea Drilling is more equipped to handle this need. We acquired 3 holes out of the 5 that were planned... the borings were located at 100-foot station intervals to satisfy PA's minimum boring requirements for the proposed length of cut in this area. Boring T-2, however, was offset +20' along CL and at proposed EB cut face to allow the hole to be drilled on level terrain and on bedrock found at surface. Unfortunately, T02 had to be abandoned since a portion of the core barrel sheared off in the hole... thus, we didn't reach the 'sub-cut + 5 feet' depth requirement needed at this station location. I believe both T01 and T03 reached targeted depth for the angles they were drilled at... Mark has the T03 log so can't verify for sure at this point.

Core was surface dried upon extraction and the remainder was allowed to air dry. The core has been kept in a dry environment since being delivered from the site.

All holes were treated as environmental boreholes and sealed with cement grout. I don't believe any of them technically qualify as environmental boreholes but given the presence of sulfide I figured the alkalinity of the grout would be a good buffer in the presence of potential acidity... Even if the boreholes were not backfilled the healthy calcite presence in the rock would likely counter any untreated acid generation. On that note, the McComber cut area as you know was selected for drilling due to its seemingly higher than average sulfide content compared to other portions of the Eagle's Nest improvement area. However, future chemical analyses may show that adequate carbonate concentrations are already present in the bedrock and capable of fulfilling the buffering requirements for this area.

This is probably more than you need to know. Let me know if you need anything else.

jay

[attachment "6904-46\_ALIGNOPTIONS\_032312.PDF" deleted by Christine Wagener/R5/USEPA/US]