

## Johnson, Bill H (DNR)

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**From:** Jim Scott <[REDACTED]>  
**Sent:** Saturday, December 03, 2011 9:40 AM  
**To:** Arkley, Stuart (DNR); John Borovsky; Tina Pint  
**Cc:** Carlson, Erik (DNR); Johnson, Bill H (DNR)  
**Subject:** Re: ERM Model Evaluation Plan for GoldSim based modeling

Tina and John

I read this and have no comment other than

from page 9 – should this be Mine Site ?

### Parameters (West Pit):

1. Area of each rock type above each level in the pit (PolyMet 2011a, Model work plans, Plant Site, Fig 1-4)
2. Average sulfur concentration in the wall rock above each level in the pit (Model work plans, Plant Site: Cat1 in Fig 1-5, Cat2/3 in Figure 1-6, Ore in Figure 1-7, [the Model Work Plans for the Plant Site are missing information on sulfur content in Cat4 Duluth Complex rock])

Jim

**From:** [Arkley, Stuart \(DNR\)](#)  
**Sent:** Friday, December 02, 2011 11:19 AM  
**To:** [John Borovsky](#) ; [mailto:\[REDACTED\]](mailto:[REDACTED]) ; [Tina Pint](#)  
**Cc:** [Carlson, Erik \(DNR\)](#) ; [Johnson, Bill H \(DNR\)](#)  
**Subject:** FW: ERM Model Evaluation Plan for GoldSim based modeling

John, Jim, Tina –

I am forwarding this document to you as an informational item at this point, in advance of agency comments on the document. I recognize the need for Barr's modeling staff to see what is being developed and to consider this before the start of modeling. I am not asking that Barr and PolyMet comment on the document but feel free to contact me or another member of the project management team if you have any immediate concerns. The co-lead agency small technical team has been given one week to review (see below).

Stuart

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**From:** Arkley, Stuart (DNR)  
**Sent:** Friday, December 02, 2011 11:14 AM  
**To:** Liljegren, Michael W (DNR); Schwanz, Neil T MVP; Clark, Richard (MPCA); Olson, Michael (DNR)  
**Cc:** Johnson, Bill H (DNR); Carlson, Erik (DNR); 'Hingsberger, Thomas J MVP'; [REDACTED] Colvin, Steve E (DNR); Engstrom, Jennifer N (DNR); Al Trippel; 'Deb McGovern'  
**Subject:** ERM Model Evaluation Plan for GoldSim based modeling

I received the DRAFT model evaluation plan from Dave Blaha this morning for co-lead agency review. I will also be sending a copy to Barr for informational purposes while we review this. The plan represents a mechanism for QA/QC checks on the structure and functionality of the GoldSim based models.

I'm assuming that **Mike L, Mike O, and Neil S** will be the primary co-lead reviewers and that Richard needs to look at it from a standards perspective where applicable. If others need to have input, please let me know.

There is a need to have a robust plan prior to the start of Barr's modeling.  
Given this, I would like to have comments back to me by **Friday, December 9**.

If this presents any problems, please let me know as soon as possible.

Thanks,  
Stuart