

## Johnson, Bill H (DNR)

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**From:** Johnson, Bill H (DNR)  
**Sent:** Thursday, November 29, 2012 9:21 AM  
**To:** Liljegren, Michael W (DNR); Colvin, Steve E (DNR)  
**Cc:** 'Al Trippel'; David Blaha; John L. Adams; Kunz, Michael (DNR); Fay, Lisa (DNR); Carlson, Erik (MPCA)  
**Subject:** RE: XP-SWMM and GOLDSIM Model Re-run

Thanks Mike for the report. This should be an update item for the December 5 meeting with PolyMet/Barr. Bill.

Bill Johnson, Mining Section Lead  
Environmental Policy & Review Unit  
MDNR Division of Ecological & Water Resources

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**From:** Liljegren, Michael W (DNR)  
**Sent:** Thursday, November 29, 2012 9:06 AM  
**To:** Colvin, Steve E (DNR); Johnson, Bill H (DNR)  
**Cc:** 'Al Trippel'; David Blaha; John L. Adams  
**Subject:** XP-SWMM and GOLDSIM Model Re-run

Steve/Bill

After our meeting with Barr yesterday to discuss the flow modeling results from the XP-SWMM model, it was determined that the XP-SWMM closure model needs to be re-run to take into account for all of the footprint changes (haul roads, Cat 1 stockpile and WWTF). These changes are already accounted for in the GOLDSIM model.

The XP-SWMM and GOLDSIM model currently don't account for 30 acres which previously was thought to drain to the north, which now are tributary to the west pit in closure because of the permanent dike. The 30 acre increase results in approximately 30 gpm of additional runoff which will report to the West Pit. The WWTF will need to treat an additional 30 gpm, approximately 10% of its median capacity.

Also, the previous XP-SWMM model did not include a year-round discharge from the West Pit. The XP-SWMM closure model will include the constant WWTF discharge, which will more accurately reflect the long-term closure period.

1. XP-SWMM Closure Model need to be re-run (Distribution of runoff out of the XP-SWMM is input into the GOLDSIM Model)
2. GOLDSIM model will need to be re-run

Let me know if you have any questions.

Thanks  
Mike

Michael Liljegren  
Mining Hydrologist/Hydrogeologist  
MN DNR Waters  
Technical Analysis Unit

500 Lafayette Road  
St. Paul, MN 55155-4032

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