

## Johnson, Bill H (DNR)

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**From:** Fred Marinelli <[REDACTED]>  
**Sent:** Friday, July 27, 2012 7:46 PM  
**To:** Peter Hinck ([REDACTED])  
**Cc:** Tina Pint ([REDACTED]); Cory D. Anderson; Carlson, Erik (DNR); Al Trippel; Paul Haby; Houston Kempton; Fred Marinelli  
**Subject:** Mine Site CVs and CPs  
**Attachments:** Initial mine site CVs to Peter Hink.PDF

Peter,

Please find attachment showing my first crack at defining three CVs and associated CPs for the Mine Site. These are intended to get the ball rolling. Other CVs and CPs will be specified in the future. Since you know the model better than anyone, I trust your judgement to modify the CVs shown, to add CPs that are useful, and possibly eliminate CPs that are not useful. You can email or call me on my cell any time this weekend ([REDACTED]).

Based on review of the Plant Site spreadsheets, please consider the following:

One Excel file for each CV.

All flows in one table, with inflows grouped together and outflows grouped together.

All concentrations in one table with each concentration cell row/column matching the flow cell/column in the flow table. For example cell G120 in the flow table connects to cell G120 in the concentration table. Both represent the same CP and time step. Then if we want to compute mass flux, we create a new table that multiplies flow cell G120 by concentration cell G120 and (with unit conversions) puts the result in cell G120 of the mass flux table. In the mass flux table, we can write one equation and then copy it over the entire table. (Clear as mud?)

Provide concentrations in mg/L to be consistent with the results and culpability spreadsheets previously provided.

Use wrapping on column labels to reduce column width.

Develop a unique ID for each CP and Mass Point (MP) that can be shown on the flow charts and in the column headings on the spreadsheet tables. An example might be 3-12 to imply control volume 3 and associated flow line 12. I'm open to your suggestions on this. Also show the GoldSim variable name and 3 or 4 word description in the column headings (as Cory has done for the Plant Site).

Hope this helps.

Fred

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