

From: Jim Scott [mailto:jr.scott@frontiernet.net]
Sent: Thursday, February 07, 2013 6:52 AM
To: Ross Vellacott
Cc: Kearney Christie; Ryan Lisson
Subject: Fw: NorthMet: Vegetation Section

Ross

I asked Christie to look into this – her response is below.

As Christie explains, the discrepancies noted are because the table referenced in the ROMP is for acres at the end of Mine Year 1 not final for maximum footprint.

The OSLA is discussed in the ROMP but no acres currently provided (Christie has provided below). The plan is that this level of detail will be provided in the Contingency Reclamation Estimate that will be included with the permitting version of the ROMP.

Roads, parking lots and building areas are discussed in the Reclamation Plan but no acres currently provided (Christie has provided below). The plan is that this level of detail will be provided in the Contingency Reclamation Estimate that will be included with the permitting version of the Reclamation Plan.

Please confirm that this response is satisfactory or if additional information is required.

Jim

From: [Christie Kearney](#)
Sent: Wednesday, February 06, 2013 11:11 AM
To: [Jim Scott](#)
Subject: RE: NorthMet: Vegetation Section

Jim, I added 2 columns to the table below to provide a response with: final footprints and comments. Please note, ROMP v5 'Stockpile Acres to be Reclaimed' and 'Liner Acres to be Reclaimed' are rows from ROMP v5 Table 7-1 (Key Reclamation Cost Parameters), which are the sizes of stockpiles after Mine Year 1 only, not for the entire 20 years of operations. ROMP v5 Table 2-3 (Maximum Stockpile Dimensions) should be referenced instead for the maximum stockpile sizes.

Please note, the table below only includes the Mine Site features. If ERM also needs roads, parking areas and buildings for the Plant Site, I'll have to do some additional calcs to get those numbers. Give me a call if you have questions. thanks!

Category	PD v4 "Max Footprint Acres"	ROMP v5 "Stockpile Acres to be Reclaimed"	ROMP v5 "Liner Acres to be Reclaimed"	Final Footprint (acres)	Comments
Cat. 1 Stockpile	526	201	-	526	From ROMP v5 Table 2-3 (and PD Table 4-6)
Cat. 2/3 Stockpile	180	-	180	180	From ROMP v5 Table 2-3 (and PD Table 4-6)
Cat. 4 Stockpile	57	-	29	57	From ROMP v5 Table 2-3 (and PD Table 4-6)
Ore Surge Pile	31	-	31	31	From ROMP v5 Table 2-3 (and PD Table 4-6)
OSLA	?	?	?	41	Not provided in a management plan
Roads	?	?	?	116	Not provided in a management plan; this is for the Mine Site only. Max haul roads and access road provided. Note: 30 of these acres will remain long-term (not reclaimed).
Parking Areas				0	Not provided in a management plan; this is for the Mine Site only. None (parking in OSLA, Mine Fueling and Maintenance Facility, and WWTF; these are already accounted for in this table).

Buildings				2	Not provided in a management plan; this is for the Mine Site only. This only includes the Mine Fueling and Maintenance Facility footprint (entire footprint, not just buildings); it does not include the WWTF, which will remain long-term (not reclaimed).
-----------	--	--	--	---	--

Christie Kearney, PE

MS Civil Engineering
 Senior Water Resources Environ. Engineer
 Hibbing office: 218.262.8629
 cell: 218.969.4355
ckearney@barr.com
www.barr.com



From: Jim Scott [<mailto:jr.scott@frontiernet.net>]
Sent: Tuesday, February 05, 2013 9:53 PM
To: Christie Kearney
Subject: Fw: NorthMet: Vegetation Section

Christie

Can you help with this

Jim

From: [Ross Vellacott](mailto:Ross.Vellacott@erm.com)
Sent: Tuesday, February 05, 2013 11:24 AM
To: <mailto:jr.scott@frontiernet.net>
Cc: [Ryan Lisson](mailto:Ryan.Lisson@erm.com) ; [Pat Fleischauer](mailto:Pat.Fleischauer@erm.com)
Subject: FW: NorthMet: Vegetation Section

Hi Jim

Please see Ryan's email below.

We have identified a couple of discrepancies and gaps (for our drafting needs) in the maximum impact footprint and reclamation acreages in the PD ver4 and ROM. Are you able to help clarify for us and confirm if any errors need to be corrected in the MP / PD to ensure consistency.

Thanks

Ross

 Ross Vellacott: +1 216-593-5210
Environmental Resources Management (ERM)
www.erm.com The world's leading sustainability consultancy

From: Ryan Lisson
Sent: Friday, February 01, 2013 2:59 PM
To: Ross Vellacott
Cc: Pat Fleischauer
Subject: NorthMet: Vegetation Section

Hey Ross,

I looked through the new Reclamation Plan and new Rock and Overburden Management Plan. As we discussed on the phone, the Project Description v4 lists "Max footprint acres" for the Cat. 1 Stockpile and Cat. 4 Stockpile that do not match the Rock and Overburden Management Plan v5 list of "Acres to be reclaimed" (as highlighted yellow below). The acres of these two categories do match for the Cat. 2/3 Stockpile and Ore surge Pile, however (as highlighted green below).

Neither of the plans fill the gap in my chapter regarding acres of OSLA or roads, parking areas, buildings to be reclaimed. That specifically was in our initial request of gaps that we sent to PolyMet/Barr.

Category	PD v4 "Max Footprint Acres"	ROMP v5 "Stockpile Acres to be Reclaimed"	ROMP v5 "Liner Acres to be Reclaimed"
Cat. 1 Stockpile	526	201	-

Cat. 2/3 Stockpile	180	-	180
Cat. 4 Stockpile	57	-	29
Ore Surge Pile	31	-	31
OSLA	?	?	?
Roads, Parking Areas, Buildings	?	?	?

Thanks,

Ryan J. Lisson

Environmental Resources Management | ERM
190 East 5th Street, Suite 255
St. Paul, MN 55101
Phone: 651-846-2875
Email: ryan.lisson@erm.com

This message contains information which may be confidential, proprietary, privileged, or otherwise protected by law from disclosure or use by a third party. If you have received this message in error, please contact us immediately and take the steps necessary to delete the message completely from your computer system. Thank you.

Please visit ERM's web site: <http://www.erm.com>