Water Balance and Reclaim Operations

The Rainy River Mine (RRM) developed a water balance to be update periodically during the mine life using the goldsim program. There are 3 major ponds used for reclaiming water the Mine Rock Pond (MRP), the Water Management Pond (WMP), and the Tailings Management Area (TMA). This model defines the logic for reclaim operations shown in Figure X. Below are a few scenarios which describe a certain set of conditions and the appropriate response to these using the reclaim logic.

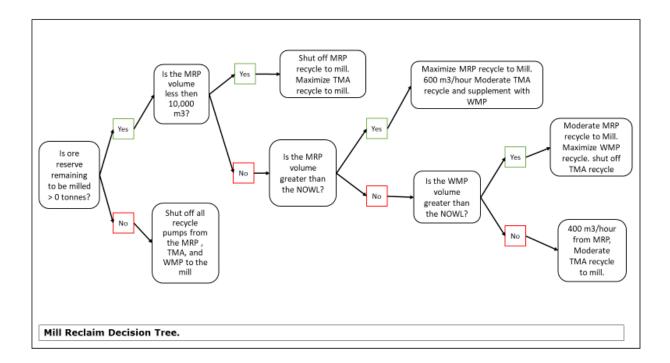


Figure X: Mill Reclaim Decision Tree

Scenario 1: No ore tonnage remained to be mill.

Response: Shut off all reclaim pumps. See in Figure X below.

Shut off MRP Maximize MRP recycle to Mill. recycle to mill. Is the MRP Maximize TMA 600 m3/hour Moderate TMA volume recycle to mill. recycle and supplement with less then 10,000 WMP m3? Moderate MRP Yes recycle to Mill. Maximize WMP Is ore Is the MRP Yes recycle. shut off reserve volume TMA recycle No remaining greater than Is the WMP to be milled the NOWL? volume No > 0 tonnes? greater than Shut off all the NOWL? No recycle 400 m3/hour pumps from No from MRP, the MRP, Moderate TMA, and WMP to the TMA recycle mill to mill. Mill Reclaim Decision Tree Scenario 1.

Figure X: Mill Reclaim Decision Tree Scenario 1

Scenario 2: MRP volume is 5000 m3, WMP and TMA are at normal elevations

Response: Shut off MRP reclaim and maximize the TMA reclaim. See in Figure X below.

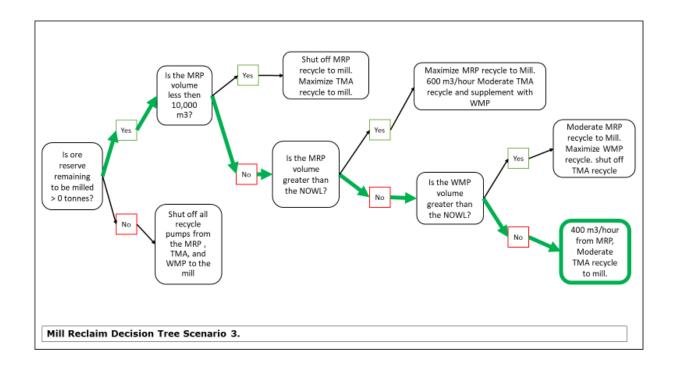
Shut off MRP recycle to mill. Maximize MRP recycle to Mill. Is the MRP Maximize TMA 600 m3/hour Moderate TMA volume recycle to mill. recycle and supplement with less then 10,000 WMP m3? Moderate MRP Yes recycle to Mill. Maximize WMP Is ore Is the MRP Yes recycle. shut off reserve volume TMA recycle No remaining greater than Is the WMP to be milled the NOWL? volume No > 0 tonnes? greater than Shut off all the NOWL? recycle No 400 m3/hour pumps from No from MRP, the MRP, Moderate TMA, and TMA recycle WMP to the to mill. mill Mill Reclaim Decision Tree For Scenario 2.

Figure X: Mill Reclaim Decision Tree Scenario 2

Scenario 3: All ponds elevations are below Normal operation water levels.

Response: Set MRP reclaim at 400 m3/hr, reclaim the rest from the TMA. See in Figure X below.

Figure X: Mill Reclaim Decision Tree Scenario 3



<u>Scenario 4:</u> WMP water elevation is above the normal operating water level, all other ponds are below the normal operating water level.

Response: Maximize WMP reclaim and moderate with MRP reclaim. Shut off TMA reclaim.

Figure X: Mill Reclaim Decision Tree Scenario 4

