

Subject: Re: Stream Beneath Tailings Basin
Date: Saturday, January 4, 2014 8:07:47 PM CT
From: DONALD W LEE
To: Paula Maccabee

Paula,

This observation from the DEIS is important. The tailings pile has no liner. The tailings pile, however, has some degree of containment around its perimeter, which PolyMet intends to improve. This means all of the water sluiced into the tailings pile will be able to drain through creeks underlying the tailings pile. Creeks at the top of watersheds are generally ephemeral. While they can be covered with overburden, tailings, a liner, or whatever, they continue to function as ephemeral creeks. As long as the geologic materials associated with the ephemeral creeks are not relocated, they will continue to function as they have for thousands of years. This means the tailings pile will continue to drain through the ephemeral creeks unless the tailings pile perimeter drains intercept the ephemeral creek waters, which would necessitate setting the tailings pile perimeter drains well below the depth of the ephemeral creeks. The depth to intercept the ephemeral creeks would require drilling to determine the depth in the geologic cross section that the creeks are associated with. I suspect the reason the SDEIS does not show the ephemeral creeks is because they are ephemeral. Many map makers do not appreciate the importance of ephemeral creeks in draining landscapes.

Don
