



NWB Tools

Ida Porter &lt;ida.porter@nwb-oen.ca&gt;

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## Clarification Regarding 2AM-DOH1323, Pad T - EC issues resolved

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**Sonia Aredes** <sonia.aredes@nwb-oen.ca>

Tue, Aug 25, 2015 at 9:34 AM

To: Sharleen Hamm &lt;sharleen.hamm@tmacresources.com&gt;, John Roberts &lt;john.roberts@tmacresources.com&gt;

Cc: Licensing Department &lt;licensing@nwb-oen.ca&gt;, Ida Porter &lt;ida.porter@nwb-oen.ca&gt;

Hi Sharleen

Thanks for your email. Everything is fine now and the Board will move forward to issue the WR&M Plan approval

Cheers  
Sonia

----- Forwarded message -----

From: **Sharleen Hamm** <[sharleen.hamm@tmacresources.com](mailto:sharleen.hamm@tmacresources.com)>

Date: Tue, Aug 25, 2015 at 11:23 AM

Subject: Fw: Clarification Regarding 2AM-DOH1323, Pad T

To: Sonia Aredes <[sonia.aredes@nwb-oen.ca](mailto:sonia.aredes@nwb-oen.ca)>Cc: John Roberts <[john.roberts@tmacresources.com](mailto:john.roberts@tmacresources.com)>

Sonia,

Please see below. Hopefully this addresses the remaining questions around Pad T and we can move forward under the revised plan. Please advise if you require anything further from us to support this approval.

Sharleen

Sharleen Hamm  
[604.996.1110](tel:604.996.1110)

Sharleen Hamm  
[604.996.1110](tel:604.996.1110)

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**From:** Ejeckam,Reg [Wpg] <[Reg.Ejeckam@EC.GC.CA](mailto:Reg.Ejeckam@EC.GC.CA)>**Sent:** Tuesday, August 25, 2015 8:16 AM**To:** Sharleen Hamm**Cc:** [kssexsmith@srk.com](mailto:kssexsmith@srk.com); John Roberts; Jill Turk; Dahl,Mark [Wpg]; [phyllis.beaulieu@nwb-oen.ca](mailto:phyllis.beaulieu@nwb-oen.ca); Wilson,Anne [Edm]**Subject:** RE: Clarification Regarding 2AM-DOH1323, Pad T

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Hi Sharleen,

Environment Canada (EC) has reviewed your summary of the conference call held on Friday, August 21, 2015 @ 10 AM CST between TMAC Resources Inc. & EC to resolve the outstanding issues raised during our review of TMAC Resources Inc., : 150508 2AM-DOH1323 Request to Modify Waste Rock and Ore Management Plan-OMLE. EC accepts your notes as an accurate summary of the conversation and agrees that the issues discussed on the call have been resolved.

EC does not have any other outstanding issues on this review.

Reg Ejeckam, MSc., P. Geo.

Senior Mining Projects Officer, Environmental Protection Operations Directorate  
Environment Canada/ Government of Canada  
[reg.ejeckam@ec.gc.ca](mailto:reg.ejeckam@ec.gc.ca) / Tel: 204-984-3522 /Cell: 204-688-7394 /Fax: 204-983-0960.

Agent principal de projets des miniers , Direction des activités de protection de l'environnement  
Environnement Canada/ Gouvernement du Canada  
[reg.ejeckam@ec.gc.ca](mailto:reg.ejeckam@ec.gc.ca) / Téléphone 204-984-3522 /Cellulaire: 204-688-7394 /Télécopieur 204-983-0960.

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**From:** Sharleen Hamm [mailto:[sharleen.hamm@tmacresources.com](mailto:sharleen.hamm@tmacresources.com)]  
**Sent:** August 24, 2015 4:30 PM  
**To:** Ejeckam,Reg [Wpg]; Dahl,Mark [Wpg]  
**Cc:** [ksexsmith@srk.com](mailto:ksexsmith@srk.com); John Roberts; Jill Turk  
**Subject:** Clarification Regarding 2AM-DOH1323, Pad T

Reg, Mark,

Thanks for taking the time to discuss the comments submitted by EC on July 20, and the responses TMAC provided on August 5, 2015, regarding TMAC's request for approval of a revised Waste Rock and Ore Management Plan to allow for the construction and use of Pad T for waste rock storage.

The outcomes of our discussion are summarized as follows:

- **EC2, Classification of samples identified as "Uncertain or PAG":** TMAC provided further discussion on the geochemistry, the different ABA methods used to classify waste rock, and other data supporting the use of NP/AP ratios rather than TIC/AP for classifying the diabase rock unit. Additionally, TMAC provided an update on the performance of the current waste rock pile, which has neutral drainage, and low levels of sulphate and metals. TMAC acknowledges that it may have been confusing to show the TIC/AP ratio when it was not considered relevant for this rock type. TMAC understands that this issue has been resolved and the classification based on NP/AP ratios should continue to be used for the diabase rock unit.
- **EC4, Inspection frequency:** TMAC explained that the annual inspection was not the only component of the waste rock monitoring program, and provided a description of the inspection and water management program, as it pertains to waste rock characterization and seep monitoring. The monitoring program as described in the current approved Waste Rock and Ore Management Plan includes the following: 1) all waste rock is classified by site geologists prior to placement on the waste rock pile, 2) seep monitoring occurs in spring, proximal to freshet, 3) routine water quality monitoring is conducted monthly, when water is present in the Pollution Control Pond. In addition, the seepage is captured in existing water management facilities and discharged to the Tailings Impoundment Area (TIA), and discharges from the TIA are also monitored. Site water management facilities are required to be inspected on a 'regular' basis under 2AM-DOH1323; site staff monitor these facilities typically on a daily basis during the open water season. TMAC understands that this issue has been resolved and the monitoring program remains appropriate.
- **EC5, definition of "Environmentally Significant" level of metal leaching from waste rock:** TMAC provided further discussion around the metal leaching potential of waste rock, seepage characteristics and management, as well an explanation of the water and load balance that was used in the environmental assessment and water licencing to assess whether metal leaching from the waste rock could occur at environmentally significant levels. Seepage from the waste rock pile is typically below MMER, is collected in the existing water management system where it is ultimately discharged to the TIA. In consideration of all inputs into the TIA throughout all stages of mining, final discharge to the environment is characterized in the water and load balance and is predicted to be compliant with CCME PAL guidelines and licence criteria. For further information, the final water and load balance submitted in support of Doris water licencing, can be reviewed: Water Quality Model, Doris North Project, Hope Bay, Nunavut (SRK 2007). TMAC understands that there is further clarity on the definition used in the Plan and that this issue has been resolved.

Further to the discussion today and provision of this email, TMAC understands that all comments from EC pertaining approval of a revised Waste Rock and Ore Management Plan have been satisfied. If in agreement, TMAC respectfully requests EC's confirmation via email to the Nunavut Water Board.

Should you wish to discuss this further, feel free to contact me at any time.

Kind regards,

Sharleen

604.996.1110