

Review Comment Table

Board:	WLWB
Review Item:	Diavik - SNP Update Request to Sampling Frequency of SNP Station 1645-33 (W2015L2-0001)
File(s):	W2015L2-0001
Proponent:	Diavik Diamond Mines (2012) Inc.
Document(s):	Diavik - SNP Update Request - 1645-33 - Jul 23 20 (197 KB)
Item For Review Distributed On:	Sep 2 at 10:01 Distribution List
Reviewer Comments Due By:	Sep 23, 2020
Proponent Responses Due By:	Sep 30, 2020
Item Description:	<p>Diavik Diamond Mines (2012) Inc. (DDMI) has submitted a request to change the sampling frequency of Surveillance Network Program (SNP) Station 1645-33. Currently, SNP Station 1645-33 is to be "checked weekly for Groundwater flow and sampled monthly". DDMI has requested to reduce the sampling frequency to monthly to align with the current groundwater sampling schedule at 1645-33.</p> <p>Using the Online Review System (ORS), reviewers are invited to submit comments and recommendations on the document linked below by the review comment deadline specified. Reviewers may also wish to consider providing an overarching recommendation regarding whether the Board should approve the submission, to provide context for the comments and recommendations and assist the Board with its decision. If reviewers seek clarification on the submission, they are encouraged to correspond directly with the Applicant prior to submitting comments and recommendations.</p> <p>All documents that have been uploaded to this review are also available on our public Registry. If you have any questions or comments about the ORS or this review, please contact Board staff identified below.</p>
Contact Information:	Anneli Jokela 867-765-4588 Kassandra DeFrancis 867-765-4581

Comment Summary

Diavik Diamond Mines (2012) Inc. (Proponent)			
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General File	Comment (doc) Cover Letter Re Response to Reviewer Comments Recommendation	
Environment and Climate Change Canada: Cari-Lyn Epp			
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	General	Comment No comments at this time. Recommendation N/A	Sep 30: DDMI would like to thank ECCC for the review. DDMI has no further comments.
Fisheries and Oceans Canada: Nicholas Wasilik			
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	SNP Update Request to Sampling Frequency of SNP Station 1645-33	Comment Fisheries and Oceans Canada has reviewed the request and has no comments at this time. Recommendation Fisheries and Oceans Canada has reviewed the request and has no recommendations at this time.	Sep 30: DDMI would like to thank DFO for the review. DDMI has no further comments.
GNWT - ENR - EAM (Environmental Assessment and Monitoring): Central Email GNWT			
ID	Topic	Reviewer Comment/Recommendation	Proponent Response
3	General File	Comment (doc) ENR Letter with Comments and Recommendations Recommendation	
1	Topic: SNP 1645-33 Monitoring Frequency	Comment Based on consistent insufficient water for analysis at SNP station 1645-33, ENR does not have any concerns about DDMI's request to reduce the monitoring frequency to monthly to coincide with the sampling schedule; however, if future samples detect hydrocarbons, ENR recommends that the	Sep 30: DDMI acknowledges ENR's recommendation that the proposed change to the monitoring frequency at SNP Station 16-45-33 be approved.

		<p>monitoring frequency be re-evaluated to ensure appropriate monitoring of groundwater flow near the Bulk Fuel Storage.</p> <p>Recommendation 1) ENR recommends that the monitoring frequency at SNP 1645-33 be reduced to monthly, as proposed by DDMI, to coincide with the sampling schedule.</p>	
2	None	<p>Comment None</p> <p>Recommendation 2) ENR recommends that if future sample results detect hydrocarbons, that the monitoring frequency be re-evaluated to ensure appropriate monitoring of groundwater flow south of the Main Tank Farm nearest to the Bulk Fuel Storage.</p>	<p>Sep 30: DDMI agrees with ENR's recommendation that if hydrocarbons are detected in a groundwater sample from SNP Station 1645-33, the monitoring frequency of monthly should be re-evaluated. DDMI also notes that the south tank farm area is bermed and lined with an HDP liner. DDMI inspects the tanks and ground frequently for signs of leakage and or spills and to ensure the liner is not compromised.</p>

North Slave Metis Alliance: Adelaide Mufandaedza

ID	Topic	Reviewer Comment/Recommendation	Proponent Response
1	SNP Update request 1645-33	<p>Comment DDMI reports that "This station was established to monitor and sample the water downgradient of the Bulk Fuel Storage. From 2011 to present, only 1 weekly inspection event in 2017 resulted in sample collection at SNP station 1645-33 as the sampling well has consistently had insufficient amounts of sample water for analysis or has been completely dry.";</p> <p>Recommendation NSMA recommends a gradual reduction in sampling frequency; that sampling is done twice monthly instead of once a month with the view that potential hydrocarbon leaks are not missed. NSMA recommends finding different groundwater well downstream to the Bulk Fuel Storage which does not consistently run dry or may DDMI provides the rationale for the SNP 1645-33</p>	<p>Sep 30: Based on the records of a single successful sampling event in the last 10 years of monitoring, and from a risk-based perspective, DDMI believes that the proposed reduction of monitoring of SNP Station 1645-33 from weekly to monthly is appropriate. DDMI notes that the likelihood of hydrocarbon leakage to ground and thus hydrocarbons in groundwater from the south tank farm is low as the tank farm area is bermed and lined with an HDP liner. DDMI inspects the tanks and ground frequently for signs of leakage and or spills and to ensure the liner is not compromised. DDMI also notes that the current location of SNP groundwater well 1645-33 was chosen based on local topography and groundwater flow in the vicinity (area of influence) of the South Tank Farm.</p>

			compromised liner, the current SNP Station 1645-33 will be the ideal location to monitor for hydrocarbons moving through the active layer.
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September 23, 2020

Joseph Mackenzie
Chair
Wekeezhii Land and Water Board
#1-4905 48th Street
Yellowknife, NT
X1A 3S3

Dear Mr. Mackenzie,

**Re: Diavik Diamond Mines Inc.
Water Licence – W2015L2-0001
SNP Update Request
Sampling Frequency of SNP Station 1645-33
Request for Comment**

The Department of Environment and Natural Resources (ENR), Government of the Northwest Territories has reviewed the update request at reference based on its mandated responsibilities under the *Environmental Protection Act*, the *Forest Management Act*, the *Forest Protection Act*, the *Species at Risk (NWT) Act*, the *Waters Act* and the *Wildlife Act* and provides the following comments and recommendations for the consideration of the Board.

Topic 1: SNP 1645-33 Monitoring Frequency

Comment(s):

Based on consistent insufficient water for analysis at SNP station 1645-33, ENR does not have any concerns about DDMI's request to reduce the monitoring frequency to monthly to coincide with the sampling schedule; however, if future samples detect hydrocarbons, ENR recommends that the monitoring frequency be re-evaluated to ensure appropriate monitoring of groundwater flow near the Bulk Fuel Storage.

Recommendation(s):

- 1) ENR recommends that the monitoring frequency at SNP 1645-33 be reduced to monthly, as proposed by DDMI, to coincide with the sampling schedule.

2) ENR recommends that if future sample results detect hydrocarbons, that the monitoring frequency be re-evaluated to ensure appropriate monitoring of groundwater flow south of the Main Tank Farm nearest to the Bulk Fuel Storage.

Comments and recommendations were provided by ENR technical experts in the Water Management and Monitoring Division and the North Slave Region and were coordinated and collated by the Environmental Assessment and Monitoring Section (EAM), Environmental Stewardship and Climate Change Division.

Should you have any questions or concerns, please do not hesitate to contact Patrick Clancy, Environmental Regulatory Analyst at (867) 767-9233 Ext: 53096 or email patrick.clancy@gov.nt.ca.

Sincerely,



Patrick Clancy
Environmental Regulatory Analyst
Environmental Assessment and Monitoring Section
Environmental Stewardship and Climate Change Division
Department of Environment and Natural Resources
Government of the Northwest Territories

RioTinto

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Joseph Mackenzie, Chair
Wek'èezhii Land and Water Board
PO Box 32
Wekweètì, NT X1A 3S3, Canada

30 September 2020

Dear Mr. Mackenzie:

Subject: DDMI Response to Reviewer Comments and Recommendations – Request for an Update to the Surveillance Network Program to Reduce the Monitoring Frequency at Station 1645-33

Diavik Diamond Mines (2012) Inc. (DDMI) is pleased to submit its response to Reviewer Comments and Recommendations regarding DDMI's request to the Wek'èezhii Land and Water Board (WLWB) for approval of an update to the Surveillance Network Program (SNP) to change the monitoring frequency of groundwater flow at SNP Station 1645-33 from once every 7 days to once every calendar month to align with the monthly sampling requirements at the station. DDMI commits to reconsidering the proposed monitoring frequency for SNP Station 1645-33 if monitoring indicates presence of hydrocarbons in groundwater at this monitoring station.

DDMI's response to Reviewer Comments and Recommendations has been uploaded to the WLWB's Online Review System. Please do not hesitate to contact the undersigned if you have any questions related to this submission.

Yours sincerely,



Kofi Boa-Antwi
Superintendent, Environment

cc: Anneli Jokela, WLWB
Kassandra DeFrancis, WLWB