Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 01**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:
In addition to the mitigation measures outlined in the response further information is needed on the trigger levels for the initiation of dust suppression measures proposed.

For ongoing project operations, how will dustfall be monitored and results incorporated into the annual air quality report?

Agnico Eagle's Response to Technical Comment / Recommendation:
Currently Agnico Eagle has a dust management/mitigation plan that is implemented at the Nunavut mining operations and will be implemented at Whale Tail and for use of the haul road. Agnico Eagle's dust management/mitigation plan for its mining operations in Nunavut continues to improve. Best practices from the Meadowbank Mine, Vault Pit, and All-Weather Access Road will be applied to operations of the proposed Whale Tail Pit and Haul Road.

The Whale Tail Pit and Haul Road FEIS predicts dustfall adjacent to the haul road below the Alberta Environment guidelines at approximately 300 m from the haul road. These predictions are consistent with the results presented in the 2016 All-Weather Access Road Dust Monitoring Report (Agnico Eagle 2017a). The report states: *"Cumulative results to date indicate that without dust suppressant application, average rates of dustfall decline below Alberta Environment's guideline for recreational areas within 100 m of the AWAR and meet the range of background rates within 200 m." These results are consistent with the original Meadowbank FEIS.*

Similar to current methods dustfall will be collected in open vessels containing a purified liquid matrix over one month periods (approximately). Particles will be deposited and retained in the liquid, which will be analyzed for total and fixed (non-combustible) dustfall. Calculated dustfall rates will be normalized to 30 days (mg/cm2/30 days). Dustfall canisters will be provided by and analyzed by an accredited laboratory. A section of the annual report will include a description of the results of the dustfall monitoring program and the results will be compared to industrial/commercial area guidelines. Any significant trends, will also be reported. In addition, improvements to best practices are expected over time and will continue to be informed by Agnico Eagle's Air Quality and Dustfall Monitoring Program (e.g., Agnico Eagle 2017b).

References:
Agnico Eagle (Agnico Eagle Mines Limited). 2017a. Meadowbank Gold Project: 2016 All-Weather Access Road Dust Monitoring Report. March 2017.

Agnico Eagle. 2017b. Meadowbank Gold Project: 2016 Air Quality and Dustfall Monitoring Report. March 2017.

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 05**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:

Road dust is a major contributor to levels of PM2.5 which may adversely impact human health. Accurate estimations of haul road dust emissions require an accurate determination of the silt content of the road. Provide a rationale for the 6.1% silt content value employed in the haul road dust emission estimate. If the silt content is estimated to be higher, the Proponent should update the air quality assessment and human health risk assessment (HHRA) with this information, and discuss mitigation measures.

Agnico Eagle's Response to Technical Comment / Recommendation:

Eleven eskers were sampled for use as road surface material and the size distribution of their granular material analyzed (Table HC05-1). The arithmetic mean silt content is 6.1% and was the value used in the assessment. Three samples had very high silt contents (27.3%, 17%, and 10.6%). The two highest silt contents were from material classified as "natural sands", rather than "natural gravels", and are considered unsuitable for use as road surface material (i.e., they would need to be blended with other material to meet the required road surface specifications). The geometric average and median silt contents are 2.7% and 2.0% (all other silt contents are <3.2%). Therefore, the use of a 6.1% silt content is considered sufficiently conservative. Agnico Eagle does not believe that the silt content will be higher; however, Agnico Eagle conducts a screening level risk assessment every 3 years and will continue to monitor dust and report on it on an annual basis. Results of annual dust monitoring and the screening level risk assessment will continue to inform adaptive management on-site.

Table HC05-1: Summary of Esker Silt Content

Assay Location	Sample No.	Material type	Silt&Clay
Esker 5B-2	1	Natural Gravel	2.00%
Esker 5D	2	Natural Gravel	**10.60%**
Esker 3A	3	Natural Gravel	3.10%
Esker 2C	4	Natural Sand	0.90%
Esker 2A-1	5	Natural Sand	**27.30%**
Esker 2C-2	6	Natural Sand	**17.00%**
Esker 2A-3	7	Natural Gravel	1.00%
Esker 4C	8	Natural Gravel	1.20%
Esker 1	9	Natural Gravel	0.6%
Esker 6-D	10	not indicated	0.9%
Esker 5A	11	Natural Gravel	2.6%

Arithmetic Average	6.1%
Geometric Average	2.7%
Median	2.0%

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 11**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:

Drinking water should meet the parameters specified in the Guidelines for Canadian Drinking Water Quality since Nemo Lake is identified as a drinking water supply source and/or a water source for traditional travel and camping activities. Ongoing monitoring would be useful to ensure levels remain below guideline including: details on baseline data, sampling locations, frequency, parameters, and any mitigation measures that would be implemented in the event of accident/malfunction which may adversely affect the quality of drinking water.

Should any of the freshwater resources affected by the project be potentially used as a source of drinking water additional monitoring and spills mitigation plans may be needed

Agnico Eagle's Response to Technical Comment / Recommendation:

As described in the FEIS (Volume 6, Section 6.4.3.3), a quantitative water quality model was developed with predictions compare to aquatic life guidelines (CCME 1999), drinking water quality guidelines (HC 2014), Meadowbank Core Receiving Environment Monitoring Program triggers and thresholds (Azimuth 2015), and background conditions (Volume 6, Appendix 6-I).

It also should be noted that the source of drinking (potable) water will only be from Nemo Lake which is located approximately 2 km northwest of the Whale Tail Pit located in a different watershed. Furthermore, in the receiving environment (i.e., Mammoth Lake and downstream), concentrations of all constituents are predicted to be less than the drinking water quality guidelines.

Collection of water quality data through construction to post-closure, and management response to those data are the best way to reduce uncertainty (see full response to Technical Comment INAC-TRC-7). Monitoring of site wide water quality is presented in Water Quality and Flow Monitoring Plan (FEIS Volume 8, Appendices 8-B.3) are intended to monitor and will inform adaptive management strategies during operation and closure to ensure the protection of the camp drinking water source and the receiving environment (monitored in the Core Receiving Environmental Monitoring Program). Agnico Eagle understands the importance of maintaining quality water that could be used as a drinking water source. Agnico Eagle is confident that by continuing to follow the Water Quality and Flow Monitoring Plan, Operational ARD/ML Testing and Sampling Plan, and Spill Contingency Plan, that rapid response

can be made to clean up all spills in a timely manner to reduce potential effects, and to learn from spills to implement additional mitigation.

References:

Azimuth (Azimuth Consulting Group Partnership). 2015. Core Receiving Environment Monitoring Program (CREMP) 2014, Meadowbank Mine. Report prepared by Azimuth Consulting Group, Vancouver, BC for Agnico-Eagle Mines Ltd., Baker Lake, NU. March, 2015.Azimuth. 2015b. Core Receiving Environment Monitoring Program (CREMP): 2015 Plan Update. Report prepared by Azimuth Consulting Group, Vancouver, BC for Agnico-Eagle Mines Ltd., Baker Lake, NU. November, 2015.

CCME (Canadian Council of Ministers of the Environment). 1999 (with updates to 2015). Canadian Environmental Quality Guidelines for the Protection of Aquatic Life – Summary Table. Available at: http://st-ts.ccme.ca/. Accessed: February 2016.

Health Canada. 2014. Guidelines for Canadian Drinking Water. Prepared by the Federal-Provincial-Territorial Committee on Drinking Water. Ottawa, ON, Canada.

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 14**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:

The 5 isopleth figures mentioned (HC_14a, HC_14b, HC_14c, HC_14d and HC_14e) are not found within the document. Provide a copy the isopleths or indicate where they can be found for review.

Agnico Eagle's Response to Technical Comment / Recommendation:

Agnico Eagle submitted the IR package on January 20, 2017 to the NIRB. Do to file size, the IR package had separated the figures from the responses. The standalone figures are attached and were provided to the NIRB to post to the Pubic Registry.

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 15**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:
Mercury can be mobilized by project-related flooding and may bioaccumulate in fish, potentially affecting the health of people consuming these fish. Given this concern, HC advises that mercury in commonly consumed fish species is monitored for the life of the project and post-closure, if initial monitoring results show increased mercury levels in biota. The monitoring program should encompass every water body impacted by the project where fishing may occur, including Whale Tail and Mammoth lakes.

Provide the "mercury monitoring program" referenced in the response for Health Canada's review and comment.

Agnico Eagle's Response to Technical Comment / Recommendation:
Health Canada's concern is duly noted and Agnico Eagle is committed to monitoring temporal trends in fish mercury concentrations in relation to the flooding of Whale Tail Lake (South Basin). Mercury-related monitoring will be integrated into the Whale Tail Pit – Fisheries and Offsetting Monitoring Plan which will be prepared prior to the Final Hearing and provided to Health Canada for review.

Agnico Eagle is committed to developing this plan to include collaborations with academics, DFO, DFO Science, and the KivA. The mercury monitoring plan will not only include lake trout (i.e., the top predatory fish in the lake), but will include monitoring temporal trends in methylmercury concentrations key components of the food chain (zooplankton and benthic invertebrates) and water. This approach will provide meaningful data to not only manage the flooding-related changes to fish mercury concentrations, but also to better understand the mercury-issue in a northern context.

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 18**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:

The response references a "focused study" on potential changes in fish mercury concentrations related to the flooding of Whale Tail Lake (South Basin). Health Canada would like to ask NIRB to request this study for Health Canada's review and comments from the Proponent should NIRB deem this review useful.

Agnico Eagle's Response to Technical Comment / Recommendation:

On February 28, 2017, Agnico Eagle submitted a report "*Whale Tail Pit Project: Predicted Changes in Fish Mercury Concentrations in the flooded area of Whale Tail Lake (South Basin)*" to the NIRB. This report is available on the NIRB's Public Registry for Health Canada's review.

Interested Party:	**Health Canada (HC)**	**NIRB Ref No.:**	**HC 19**
		NWB Ref No.	**n/a**
Re:			

Technical Comment / Recommendation Made By Interested Party:
Appendix 8-D.6 does not specify when or how communities will be advised of spills, beyond "Incidents that require media communications will be the responsibility of Agnico Eagle General Mine Manager or alternate." Figure 6 states that: Agnico Eagle General Mine Manager directs external communications to communities, media, etc."

It is not clear from the information provided in Appendix 8-D.6 which spills incidents would "require" media communications. Should a spill affect water bodies where fishing occurs, the incident along with any advisories, should be communicated to surrounding communities as soon as possible.

Agnico Eagle's Response to Technical Comment / Recommendation:
Agnico Eagle is committed to informing communities of any major spills as soon as practical to do so. As per Section 5.1.3, of Appendix 8-D.6, reporting spills is based on the following:

- Obtain all necessary information to complete the spill report form for spills that meet the criteria listed in Table 1. Spills that meet regulatory reporting criteria must be reported to the NWT-NU 24 Hour Spill Line/INAC/KivIA, and the Nunavut Water Board by Agnico Eagle Environment Staff. Minor spills that do not meet regulatory reporting criteria must still be reported to the Environment Department. This must be done within 24 hours using the Agnico Eagle internal Spill Report Form; and
- For spills that meet regulatory reporting criteria, a detailed spill report will be submitted to the AANDC Water License Inspector and the KIA Land's Inspector by Agnico Eagle Environment Staff no later than 30 days after the initial reporting of the spill. This report will contain the amount and type of spilled product, the GPS location of the spill and the measures taken to contain, cleanup and restore the spill site.

Procedures will vary depending on the season and materials spilled. The MSDS for spilled materials and/or Transport Canada's "Emergency Response Guidebook" must be consulted to ensure that safety procedures are followed. Response procedures specific to spills on land, water, snow and ice are presented within Appendix 8-D.6 as general guidelines.

Table 1 - Spill quantities that must be reported to the NT-NU 24-HOUR SPILL REPORT LINE

Transportation Class	Type of Substance	Compulsory Reporting Amount
1	Explosives	Any amount
2.1	Compressed gas (flammable)	Any amount of gas from containers with a capacity exceeding 100 L
2.2	Compressed gas (non-corrosive, non- flammable)	Any amount from containers with a capacity exceeding 100 L
2.3	Compressed gas	Any amount
2.4	Compressed gas (corrosive)	Any amount
3.1, 3.2, 3.3	Flammable liquid	100 L
4.1	Flammable solid	25 kg
4.2	Spontaneously combustible solid	25 kg
4.3	Water reactant solids	25 kg
5.1	Oxidizing substances	50 L or 50 kg
5.2	Organic peroxides	1 L or 1 kg
6.1	Poisonous substances	5 L or 5 kg
7	Radioactive substances	Any amount
8	Corrosive substances	5 L or 5 kg
9.1 (in part)	Miscellaneous substances	50 L or 50 kg
9.2	Environmentally hazardous	1 L or 1 kg
9.3	Dangerous wastes	5L or 5 kg
9.1 (in part)	PCB mixtures of 5 ppm or more	0.5 L or 0.5 kg
None	Other contaminants	100 L or 100 kg
None	Seepage from TSF and RSF	Any amount

Note: L = litre; kg = kilogram; PCB = polychlorinated biphenyls; ppm = parts per million.