RESPONSES TO SEPTEMBER 11, 2024, TOWNHALL PUBLIC QUESTIONS

MINISTRY OF TRANSPORTATION AND MINISTRY OF ENERGY AND MINES

1. Will Health and Safety Plans be developed for the Agnew Lake Tailings Management Area as has been the case within the Nipissing First Nation (NFN)?

Health and safety are a priority. Any work on the cover of the Agnew Lake Tailings Management area (ALTMA) requires a Health and Safety Plan and Radiation Protection Plan. The Ministry is committed to developing and following these health and safety plans.

For routine, non-construction activities such as site visits, water sampling, inspections, etc., ministry staff and other ministry visitors follow the ministry's existing health and safety policy and conduct a tailgate meeting at the ALTMA to review the Job Safety Analysis (JSA) for the site and environmental conditions at that time.

For the current Ministry of Transportation contract for the excavation, hauling and placement at the ATLMA, the contractor has developed separate Health and Safety Plans for both the originating sites at Nipissing First Nation and for the placement site at the Agnew Lake Tailings Management Area.

2. Will ongoing communication and consultation opportunities be provided at this end of the NORM remediation project, as has been the case within the Nipissing First Nation (NFN)?

As the licensee for the ALTMA, the Ministry of Mines will continue to meet our obligation to keep affected Indigenous communities informed about the activities that occur at the site.

The Ministry of Mines will continue communication with the municipalities to keep them informed about the status of the ALTMA and address any questions or concerns that the public may have. Information has been shared through meetings, letters and town halls. The Ministry of Mines will continue to share information regarding the site.

Questions about the transportation of the niobium relocation project from North Bay to the Tailings Management Area can be directed to MTO at NEConstruction@ontario.ca.

Questions about the Agnew Lake Mine and management of the Tailings Management Area can be directed to minerehab@ontario.ca.

Continuing communication from the Ministry of Transportation regarding the placement of rock tailings at the Agnew Lake Tailings Management Area will occur. Requested reports and information are being compiled and will be provided to the municipalities once completed.

3. Will the NORM tailing materials be the only contaminated material disposed of in the ALTMA location?

The site will only accept the naturally occurring radioactive material (NORM) originating from the Beaucage Mine. The ALTMA is licensed to store uranium tailings from the historic mine and will not receive nuclear waste from other sites, or any other hazardous substances.

The current Waste Nuclear Substance Licence has a temporary condition to allow the use of niobium tailings to repair a select area on the site that does not currently meet CNSC maintenance targets.

4. Will the license issued to the Ministry of Northern Development and Mines (MNDM) from the Canadian Nuclear Safety Commission (CNSC) be reviewed and revised to include increased protection, inspections and possibly an effluent treatment system to remediate and control the surface waters in the ALTMA watershed region?

The Ministry of Mines currently conducts semi-annual monitoring for both surface water and groundwater quality, exceeding the requirement of the Waste Nuclear Substance Licence (WNSL) which only requires annual surface water sampling.

Even though the concentration of contaminants in standing water adjacent to the ALTMA has been found to exceed Provincial Water Quality Objectives (PWQO), The Ministry of Mines water monitoring program has confirmed that surface water quality returns to acceptable conditions reflective of background conditions outside of the licence boundary.

There is no evidence indicating that the ALTMA negatively affects water chemistry and quality in Agnew Lake or the surface water in the immediate surrounding areas including John Creek and Ministic Creek.

As a licence requirement, the Ministry will continue with the current surface water sampling effort in combination with the expanded groundwater monitoring network for a minimum of five years to ensure that the placement of niobium rock tailings at the site will not impact water quality for downstream receptors.

5. Licensees are required to submit annual reports to the Commission. Where can we find these annual reports or are they purposely hidden from the public?

The Ministry of Mines has included the annual reports from 2021, 2022 and 2023 in the information package for the Townships. The annual report for 2024 is due at the end of the fiscal year (March 31, 2025).

Water quality results should be read in conjunction with the 2024 ALTMA Water Quality Memo which has been provided by the Ministry in the ALTMA information package.

6. Has there been any reported health effects within the Nipissing First Nation, as a result of this contaminated soil? It would be interesting to see their cancer rates compared to provincial cancer levels in non-contaminated areas. Are there any reports on this? Has the Ministry of Health been involved?

The Ministry of Mines and the Ministry of Transportation are unaware of any requested comparative reports being commissioned, or any reported health effects within Nipissing First Nation as a result of contaminated soil. Follow-ups with the Public Health Nurse at the North Bay – Parry Sound District Health Unit and with the Office of Chief Medical Officer of Health, Public Health indicated there was no information nor did they have involvement with the community.

We understand your concern and have contacted indigenous services on your behalf. To our knowledge there is no increased incidents of cancer or health effects. Due to the location ICS has jurisdiction, and we have reached out for addition information.

7. Your slogan states, “We will never Compromise on Safety”.

In 2015 your staff found sections of the tailings areas were exposed with levels 8 times higher than what is considered safe.
Why did the Commission not enforce the Licensee to remediate the issues immediately?
Why are we here 10 years later, with an even bigger problem?
Ignoring the issue since 2015 is negligent. Not informing the surrounding residents of the higher radiation levels is 5 negligent.
Why were community members not informed that the site was below expectations?

Since 2015, the Ministry of Mines has completed site inspections, ongoing sampling, and monitoring of the site, installed signage, and completed vegetation clearing of the ALTMA. The signage has been in place at the site to inform the public of the radiation risks associated with the ALTMA, which are replaced whenever the signs are damaged or missing.

Despite the ongoing vandalism, the Ministry remains diligent to ensure signage is maintained for public safety information at the site.

In addition, the Ministry, in collaboration with the Ministry of Transportation, has taken the necessary time to safely plan for the use of the niobium waste rock tailings to address concerns with the cover and maintain the area.

8. Where can we find these test results of the annual inspections made?

Water quality results should be read in conjunction with the 2024 ALTMA Water Quality Memo which has been provided by the Ministry in the ALTMA information package.

(Similar to question 5)

9. Has there been any reported health effects within the Nipissing First Nation, as a result of this contaminated soil? It would be interesting to see their cancer rates compared to provincial cancer levels in non-contaminated areas. Are there any reports on this? Has the Ministry of Health been involved? (duplicate to question 6).

The Ministry of Mines and the Ministry of Transportation are unaware of any requested comparative reports being commissioned, or any reported health effects within Nipissing First Nation as a result of contaminated soil. Follow-ups with the Public Health Nurse at the North Bay – Parry Sound District Health Unit and with the Office of Chief Medical Officer of Health, Public Health indicated there was no information nor did they have involvement with the community.

We understand your concern and have contacted indigenous services on your behalf. To our knowledge there is no increased incidents of cancer or health effects. Due to the location ICS has jurisdiction, and we have reached out for addition information.

10. If the bridge is being improved for long-term access, is the plan to continue using the location to store other radioactive garbage for the province?

The ALTMA will only accept the naturally occurring radioactive material (NORM) originating from the Beaucage Mine. Modelling shows that the niobium rock tailings are an effective material to help repair the existing cover on the Agnew Mines tailing site.

The ALTMA is licensed to store uranium tailings from the historic mine and will not receive nuclear waste from other sites, or any other hazardous substances. The current Waste Nuclear Substance Licence has a temporary condition to allow the use of niobium tailings to repair an area on the ALTMA that currently does not meet CNSC maintenance targets.

Additionally, the improvements to the infrastructure and access to the site will facilitate maintenance activities at the site.

11. The ALTMA site was designed and created to store the radioactive material for the decommissioned mine that was working in this area, not as a storage unit for radioactive material from other locations. ALTMA's current situation is unfortunate, however continually adding to this pile of cancer-causing substances, from other areas, with no idea of the capacity of the tailings pond, the effectiveness of the procedure, or without proper testing is negligent.

The ALTMA will only receive the NORM material from the Beaucage Mine.

Modelling shows that the niobium rock tailings are an effective material to help repair the existing cover on the Agnew Mines tailing site. The material will increase the thickness of the tailings cover which will ensure ongoing stability and public safety at the site.

A Human Health Ecological Risk Assessment confirmed that the risk of metals leaching from the NORM material into the environment is low.

The Ministry of Mines will continue with its water monitoring program and radiation surveys to confirm that the tailings area performs as predicted and identify and carry out additional repair activities, if required.

12. As a governmentally funded project, why was the project not posted for tender? Why was the project a non-competitive contract?

13. I worked in a provincially funded program for 30 years, and we were adamantly required to get three bids for every large project. Why was this not followed by our own government?

12 & 13 Response:

The contract was procured following the process under Ontario's Indigenous Procurement Program.

www.ontario.ca/page/aboriginal-businesses-bidding-government-contracts

14. What is the surface area, depth, and age of existing dam?

There are three dams in the Tailings Management Area (TMA). Two dams contain the tailings (West Dam and East Barrier Dyke), and one dam contains the Polishing Pond (Middle Dam). The TMA tailings area is approximately 13 hectares and contains approximately 2.7 million tonnes of waste material, with a nominal depth of 10 metres.

The TMA is retained by the West Dam on the west side, and the East Barrier Dyke on the east side. The West Dam is approximately 11 metres high and was initially constructed in the late 1960's/early 1970's. It was later upgraded to increase the dam height and add impermeable elements in the 1970's, with an emergency spillway added in the 1980's. The East Barrier Dyke is approximately 7 metres high and was constructed during closure of the site, in the early 1980’s.

The Polishing Pond covers an area of approximately 10 hectares. The Polishing Pond is located downstream (east) of the East Barrier Dyke and is retained by the Middle Dam on the east. The Middle Dam was constructed in the late 1960's / early 1970's when the facility was first developed and is approximately 5 metres high.

15. What was the volume capacity of original dam design, inclusive of designed contingency capacity. The original permit issued to proceed construction should state the limitations.

The TMA contains approximately 2.7 million tonnes (1.35 million m3) of waste material, retained by the West Dam and East Barrier Dyke. The TMA is retaining solid tailings with no supernatant pond (i.e., no standing water). The West Dam and East Barrier Dyke are retaining only solid tailings.

Surface water runoff due to precipitation or snow melt within the TMA flows to the Polishing Pond via the south drainage channel. Increasing the quantity of fill material in the TMA will not increase the amount of surface water runoff and therefore will not impact the capacity of the Polishing Pond.

16. Tailings Management Facility (TMF) are designed based on projected mine life production.

- **What were the recorded total final volumes placed in TMF?**
- **Was a Geomembrane liner or alternate material utilized to line inside wall of dam?**
- **Was the original dam designed to contain the water and tailings completely?**
- **With process water being the primary vehicle to move the tailings, has testing of existing tails been conducted for water content, fluidity and/or the solidity of existing tailings under the cap?**

The TMA contains approximately 2.7 million tonnes of tailings material with no supernatant pond (i.e., no standing water).

The West Dam is lined with a Hypalon liner and includes a seepage cutoff wall. This dam was designed to retain tailings and water, to reduce seepage towards John Creek. The East Barrier Dyke is constructed of waste rock and was designed to contain tailings but allow seepage from the tailings to drain into the Polishing Pond. The Middle Dam is constructed of a clay, sandy silt material which is designed to reduce seepage from the Polishing Pond.

The existing cover has been assessed through visual inspection and noted to be firm, stable and in good condition.

17. Has additional material ever been placed in the TMF since the official closure of mine operations?

With the exception of localized clean fill placed for minor maintenance repairs to the dams or cover where required, no additional material has been placed in the TMA since the facility was closed.

18. Assuming the tailings were capped with either water or till, is the current cap stable enough to support the weight and pressure that will occur with the proposed additional volume and weight of ALL projected material and traffic?

19. Was the dam wall designed and currently stable enough to accommodate the additional weights and pressures?

18 & 19 Response: The Ministry of Mines Engineering Services Unit (ESU) has visited the ALTMA annually since 2020 and continues to monitor the dams on site. From the most recent inspection, the existing cover was noted to be firm, stable and in good condition. Based on a visual observation of the East Barrier Dyke, which is closest to where the fill material will be placed, and a review of historical information and assessments, the dam is considered stable.

To reduce the risk of any potential impacts to dam stability during placement, a minimum offset distance will be maintained between the placement area and the dam. Further, the weight of the material will be distributed over a large area, and a biaxial composite geogrid will be placed between the fill and the existing cover to support the additional weight. The maximum fill thickness will be less than 1.5 metres and slope down to 0.3 metres near the edge where it will tie-in to the existing cover.

18 &19 Continued…..

Before placing material on the existing cover and tailings, a biaxial composite geogrid and a layer of Granular A material will be placed. The purpose of the biaxial composite geogrid is to support the construction equipment and protect the cover from any disturbance during construction. Additionally, the geogrid and Granular A material will provide more than adequate support for the additional fill in protecting the integrity of the existing cover.

A trial will be conducted at the beginning of material placement to assess the maximum weight (load size) that can be transported on the cover without negatively impacting it. The haul truck will be loaded to 50% capacity, and the cover will be monitored visually. If no impacts are observed, the load will be incrementally increased and monitored until a full load can be transported to the TMA. If impacts are observed, the load within the rock truck will be reduced to the maximum quantity with no impact to the cover.

The stability of the dam will continue to be monitored throughout the fill placement to verify that there are no impacts on the dam. If any signs of instability are detected, all work will be halted, and the necessary measures taken to stabilize the dam. A gamma radiation survey will be conducted following niobium placement to confirm that the ALTMA cover has not been damaged.

20. Does the wall of the dam indicate erosion occurring?

During the Ministry of Mines inspections of the ALTMA, erosion of the East Barrier Dyke was observed at select locations. The erosion is a result of surface water flow over the dam and not towards the South Drainage Channel. The erosion observed does not indicate any instability concerns with the dam. The erosion has been monitored since 2020 and has not been found to have progressed.

The ministry intends to repair the erosion, and to improve drainage patterns at the ALTMA (promote surface runoff to the South Drainage Ditch) to avoid the development of further erosion features. No erosion was observed on the West Dam or Middle Dam.

21. Will a neutral till cover be placed over the new material being placed (utilizing the radioactive material as cover should not be an option)?

Yes.

The niobium tailings material will be covered with a minimum 15 cm (150 mm) of material. This material will include 100 mm of select subgrade material (SSM) and capped with an additional 50 mm of topsoil and seed to facilitate revegetation. In addition, a matrix will be placed on all NORM material placed at the disposal area.

22. Will the existing tailings material be disturbed/exposed in order to accommodate the projected material to be placed.

The existing tailings and cover will not be disturbed during placement of niobium tailings. Excavation of the existing cover is not required.

For further information please see questions 18 &19

23. Have we been told whether the soil contamination has caused any health issues to the people in the community of Yellek Point.

The Ministry of Mines and the Ministry of Transportation are unaware of any requested reports being commissioned. However, we have contacted Indigenous Services Canada and have asked them to review these questions to determine if such information is available.

See response to Question # 6

24. Does this soil contamination affect the water quality, wildlife, gardens, etc.

Water sampling in the vicinity of the NORM sites showed no elevated radioactivity.

The maximum radiation level measured was within or barely above the background radiation exposure worldwide. As the material will be covered with additional clean fill at the site there is low risk for any direct exposure.

25. If this transport does happen, will there be measures in place to ensure that the maintenance is done on a regular basis to protect our communities?

Yes.

Regular maintenance will be undertaken by the Ministry of Mines as required based on the results of the ongoing site and dam safety inspections and in accordance with the license requirements. Groundwater monitoring, surface water monitoring and radiation surveys will continue in accordance with license conditions. The ministry will also continue to conduct dam safety inspections and reviews in accordance with Canadian Dam Association (CDA) requirements.

Following completion of the project, dam inspections will continue to be conducted at a regular frequency.

26. Who has been representing the interests and protecting the health, safety, security, and the environment at the ALTMA site and the surrounding region, 11 which comprises the Lake Huron watershed, during these NORM remediation discussions?

The Ministry of Mines has a broad mandate all in accordance with legislative and regulatory requirements. It includes orderly and equitable access to Crown mineral rights for the exploration and potential development of mining lands, ensuring sustainable and responsible development of Ontario's mineral resources, and the rehabilitation of mine hazards to ensure the protection of public health, safety, and the environment.

The rehabilitation of mine hazards is resourced through the Abandoned Mines Rehabilitation Program and the Contaminated Sites Program under Mining Act jurisdiction. As this is a federally regulated site, and as the licensee, the Ministry of Mines is responsible for managing the ALTMA on behalf of Ontario to ensure compliance and consistency with federal regulatory requirements.

The land at the ALTMA site is provincial Crown Land. The Ministry of Mines holds the Waste Nuclear Substance Licence (WNSL) at the site, issued by the regulating body, CNSC. All ministries and agencies were involved, together with MTO, in the discussions on this project throughout the design and contract preparation phase.

27. Who will be responsible for the ongoing regulation and monitoring of the ALTMA site?

28. Since the ALTMA site is located on a height of land with close proximity to creeks, rivers, and lakes, what provisions will be in place to ensure the tailings are not leaching contaminants into the surrounding area and further downstream?

27 & 28 Response: As the licensee, the Ministry of Mines is responsible for monitoring the site and reporting to the regulator, CNSC.

Following the completion of the niobium tailings project, dam safety inspections and reviews will continue to be conducted at a regular frequency in accordance with Canadian Dam Association (CDA) requirements.

Groundwater monitoring, surface water monitoring and radiation surveys will continue in accordance with license conditions. The ministry currently conducts semi-annual monitoring for both surface water and groundwater quality, which exceeds the sampling frequency specified as a condition of the Waste Nuclear Substance Licence (WNSL) for annual surface water sampling only. Additional water monitoring will occur for a minimum of five years following the project. The Ministry will also continue the same water monitoring program after the completion of the project through its Abandoned Mines Program.

27 & 28 Continued…...

For the niobium rock tailings to be placed under the current Ministry of Transportation contract, the Soils Management Plan contains provisions for material containment and protection against erosion and transport by water. The material is to be graded to flat slopes blending into the existing terrain to prevent ponding water on the surface and to mitigate erosion.

The contract requires the contractor to install and maintain robust erosion control measures during construction that must remain in place until the inert cover material and final vegetation seed and matrix have been placed to restore the area to a natural state.

The Soils Management Plan requires CNSC approval as the agency with regulatory control over the ALTMA site

29. The ALTMA disposal site has been designated as a federally regulated area, designed to receive radioactive material. Does this mean this is an open site for future dumping of contaminated materials?

The ALTMA will only accept the NORM material originating from the Beaucage Mine. Modelling shows that the niobium rock tailings are an effective material to help repair the existing cover on the Agnew Mines tailing site.

The ALTMA is licensed to store uranium tailings from the historic mine and will not receive nuclear waste from other sites, or any other hazardous substances. The current Waste Nuclear Substance Licence has a temporary condition to allow the use of niobium tailings to repair an area on the ALTMA that does not currently meet CNSC maintenance targets.

30. Given that ALTMA is a designated site for radioactive waste, the possibility of further dumping is a huge cause for concern. This is especially concerning since mention is made in one of the Nipissing First Nations communications, about the supply and installation of a new temporary modular bridge being required to replace a large, severely damaged culvert crossing the Ministic Creek. It goes on to explain that a new, more permanent bridge will be installed in 2025, to "…improve future long-term access to the Agnew Lake Tailings Management Area".

31. Why is this new, more permanent bridge to improve long-term access required if not for further dumping?

30 & 31 Response:

The ALTMA will only accept the NORM material originating from the Beaucage Mine, which includes the tailings being proposed to be relocated by the Ministry of Transportation.

The Agnew Lake Mine is an abandoned mine that will continue to require access for inspections, maintenance and monitoring of the tailings area and the mine site in perpetuity.

32. Apparently, they were labelled something like A, B, and C, but that was not clear to me even in the front row. If I understood correctly, there was a circle around one area of hot spots, in the middle of the tailings area, that indicated where the NORM was intended to be deposited. However, there was also a hotspot in the bottom left corner, at the edge of the tailings area, that did not appear to be selected for any remediation is this the case.

The placement of niobium material and additional cover material will address the largest area requiring maintenance, located within the centre of the TMA nearest the East Barrier Dyke. The other area which requires maintenance, located in the southwest corner of the TMA nearest the West Dam, will be addressed as part of a separate project. This area requires further study and engineering design to develop the most suitable approach for remediation. The Ministry of Mines is in the early stages of these studies.

No NORM will be used in this area.

33. It seems clear that the ALTMA site has been poorly maintained, and whether or not depositing NORM is the right solution to the existing problem, what can Nairn & Hyman do to ensure they are kept better informed, on an on-going basis, about issues such as these? Also, might a problem like this be lurking in the Township of Baldwin? The Ministry of Mines did say, they inherited numerous sites with issues, and given their limited resources, they necessarily focus their attention on the areas they perceive to be of the greatest concern is this accurate?

Rehabilitation efforts for abandoned mine sites are prioritized using a risk assessment that considers and ranks the risks of mine hazards to public safety and to the environment. The Abandoned Mines Information System (AMIS) is a central repository for data on known abandoned mine site in Ontario, which can be accessed by the public at: https://www.geologyontario.mndm.gov.on.ca/AMIS_Description.html

The Ministry of Mines is open to establishing a channel of communication with the municipalities to keep them informed about the status of the ALTMA and address any questions and concerns that the public may have about the ALTMA or any other abandoned mine sites.

Questions about the transportation of the niobium relocation project from North Bay to the Tailings Management Area can be directed to MTO at NEConstruction@ontario.ca.

Questions about the Agnew Lake Mine and management of the Tailings Management Area can be directed to minerehab@ontario.ca.

34. How deep is the well? What work has been done so far?

There are three groundwater monitoring wells, located near the West Dam, Middle Dam and Ministic Creek.

The depths of these wells range from 1.5 to 2.1 metres. In addition, there are some recently rehabilitated groundwater monitoring wells within the TMA. The depths of these wells are believed to range from approximately 1.5 to 12 metres.

35. What will happen to properties and towns on route to site? Worried about transportation of the material.

Hauling of material is limited to the designated haul route. No adverse impacts to properties adjacent to the designated haul route will occur. All hauling equipment is equipped with custom tarping to prevent the release of material during hauling and all vehicles will be inspected before leaving the source site.

36. Where did the decommission plan go? Why are they moving the material if it is so called “safe”?

On the Nova Beaucage decommissioning plan: The former niobium ore crushing and treatment mill was operated by the Beaucage Mining Company in the Nipissing area circa. 1956 and closed in the early 1960’s. “Decommissioning plans” which in Ontario are defined under the Mining Act as “closure plans”, did not come into effect until legislation was amended in the 1990’s. The Ministry of Mines does not have a filed closure plan or records pertaining to mine closure for the Beaucage Mining Company Tailings areas.

On the Agnew Lake Mine decommissioning plan: The Ministry of Mines does not have a copy of the decommissioning plan for the Agnew Lake Mine as the mine closed prior to legislation amendments in the 1990’s requiring mining proponents to submit a closure plan.

On the movement of materials considered “safe”: Niobium rock tailings on Nipissing First Nation (NFN) was used as common fill, including use in the construction of homes. The Ecometrix Risk Assessment study in 2015 identified the primary health hazards are radon gas in confined areas and potential impacts to shallow groundwater wells in the immediate area.

When the Niobium rock tailings are used as a material to enhance shielding of the ALTMA, and when it is further covered by inert material and soil to prevent direct skin contact, there is no risk to casual site users at the ALTMA.

37. At what capacity was the tailing pond built to hold? What percentage of the pond has been used to date? What percentage more of the pond will be used? Has leech testing been done?

Leach testing was completed in 2020 to support the risk assessment conducted in 2016. The results of the testing indicated that there is little risk of leaching from the niobium tailings.

For further information please see question # 15.

38. Concerned about water run-off. What will happen in the future?

The Ministry of Mines currently conducts semi-annual monitoring (Spring/Summer and then in the Autumn) for both surface and groundwater quality. There is no evidence that indicates the ALTMA negatively affects water chemistry and water quality in Agnew Lake or the surface water in the immediate surrounding areas.

A Human Health-Ecological Risk Assessment confirmed that the risk of metals leaching from the NORM material into the environment is low.

The ministry will continue with its water monitoring program to confirm that the ALTMA performs as expected, and carry out additional repair activities, if identified.

39. Was an NDA signed? How did the First Nations benefit? Was there a public tender?

The contract was procured under Ontario's Indigenous Procurement Program and a Non-Disclosure Agreement does not exist.

For further information please see question # 12.

40. Who is signing the waiver of liability if something goes wrong?

The **governments of Ontario and Canada are responsible** for any issues related to the ALTMA.

While transporting and depositing materials at the ALTMA, contractor liability insurance is required for vendors conducting work on any procurements commissioned by the Crown.

41. When is the latest date to move the material? What is the time frame to have project completed?

As we continue to share information with local communities and await a final approval from CNSC, the earliest the project could resume would be Summer 2025.