



November 3, 2023

David Livingstone
Chair
Giant Mine Oversight Board (GMOB)

Dear Mr. Livingstone:

Re: GMOB Review of proposed updates to the draft GNWT Environmental Guideline for Contaminated Sites Remediation

Thank you for your letter of October 17, 2023, regarding the GNWT proposed updates on the abovementioned draft Guideline. In your letter you asked a number of questions to both the Project Team and the GNWT. I am happy to provide some clarity to the questions posed to the Project Team.

- 1. What would be the implications for project schedule and cost if the draft guidelines values were adopted and implemented during the current remediation program?*

If the Project was to change its scope (adopting new standards) there would most certainly be implications to both cost and schedule. The magnitude of these implications has not been evaluated at this time.

It is important to note that addressing contaminated soils was part of the Project team's [Closure and Reclamation Plan \(CRP\)](#), which was developed following extensive engagement with rights holders and stakeholders. This Plan was then submitted to the Mackenzie Valley Land and Water Board as part of the Type A Water Licence and Land Use Permit applications, and subject to regulatory review, including both technical and public hearings.

Having been granted with the Water Licence and Land Use Permit, which includes remediation criteria as set by the Board in those regulatory instruments, is ultimately what guides how the Project team proceeds with remediation. This includes how the project is required to address the contaminated soils on site.

As per the Closure and Reclamation Plan, the areas previously developed for mining (with the exception of the town site and marina lands) will be remediated to the current Government of the Northwest Territories' industrial soil quality guidelines. Contaminated soils in the former mine townsite, boat launch, and shoreline will be cleaned up to meet the current Government of the Northwest Territories' residential guidelines for arsenic and hydrocarbons (fuel) in soils. Contaminated soils around the former mill and roaster building with the highest concentrations of arsenic will be disposed of in the freeze area. Contaminated soils located in other areas developed by the mine will be disposed of in the pits or the Tailings Containment Areas.



2. *Has the Project Team assessed the affect on human and ecological risk of adopting the new standards? Are there implications of the proposed guidelines for future residential areas, recreational uses, and remediation of areas currently not slated for remediation?*

The Project Team has not assessed the effect on human and ecological risk of adopting the new standards. The Project team has, however, completed an updated Human Health and Ecological Risk Assessment (HHERA) to establish the current and future risks to people and the environment to finalize the closure and reclamation plan and meet the requirements of Measure 10 of the Environmental Assessment. The HHERA evaluated current and predicted future exposures to contaminants associated with Giant Mine to determine risks associated with possible sources and pathways of exposure, such as fish consumption or soil intake. The report was finalized in January 2018.

The report of the HHERA determines that the Giant Mine site is not currently a significant contributor to contaminants in the surrounding areas. The results of the risk assessment have also confirmed that although the central areas of the site (around the frozen blocks, water treatment plant, landfill and areas with high levels of arsenic in soil) will not be available for public use; however, a large part of the site, including the former townsite and adjacent shoreline areas, may be suitable for recreational or other uses once the remediation is complete. Ultimately, the City of Yellowknife and the Government of the Northwest Territories will make decisions about future use.

The HHERA shows that in terms of contaminants of concern that area residents are exposed to, the risks associated with the Giant Mine are low. Most of the exposure comes from off-site, from naturally occurring sources, or from the historical impacts of mining in the Yellowknife-area. The risks at various locations in the Yellowknife area will be the same before and after remediation of the Giant Mine site.

Based on the information present in the report we do not anticipate any changes to existing health advisories or additional advisories in Yellowknife, Ndilo, or Dettah. The Department of Health and Social Services is best positioned to address questions about existing advisories.

A plain language summary of the HHERA is available on the [Giant Mine Remediation Project website](#).

3. *Question 3 was posed to the GNWT.*
4. *Does the Project Team anticipate that the renewal of the current Water Licence will trigger application of the new Guidelines and if so, how does it plan to deal with that situation (refer to Point 1, above)?*

The Giant Mine Remediation Project's current Water Licence is valid until 2040. The current remediation schedule has implementation complete in 2038. Consequently, the renewal of the Water Licence will not contain remediation activities and therefore, should not trigger any such concern.

The guideline at this point is in draft form and are out for public engagement. It is our understanding that they are not intended to apply to holders of land use permits or water licences. The project doesn't anticipate making any changes to the CRP approach to contaminated soils for the reasons stated in #2 above.

Sincerely,

Natalie Plato
Deputy Director
Giant Mine Remediation Project

Cc: Parties to the Environmental Agreement