

**Giant Mine Environmental Assessment** 

IR Response

### **INFORMATION REQUEST RESPONSE**

EA No: 0809-001

Information Request No: City of Yellowknife #11

Date Received

February 28, 2011

### Linkage to Other IRs

YKDFN IR #18 City of Yellowknife IR #05 Review Board IR #21

### Date of this Response

June 17, 2011

### Request

#### Question:

- 1. Please clarify in a map whether the water lots of the Cruising Club lease, boat launch and waterfront recreational area is included in the SSA.
- 2. Please indicate whether the removal of contaminants or other mitigation measures are considered as part of the remediation plan.
- 3. What risks, if any, exist regarding the disturbance of the contaminants in the bay area at the mouth of Baker Creek given the boat launch and mooring activities which are taking place?
- 4. Please indicate what public health risks are present with reference to the contaminants in the bay area near Giant Mine site given the waterfront recreational opportunities available to the public (i.e., swimming, boating).
- 5. What are the potential health and environmental risks if the City, private sector or third party (i.e. Great Slave Cruising Club) were to undertake construction which disturbs the lakebed, or if dredging is required to facilitate the development of a marina adjacent to Baker Creek? How will these risks be mitigated in the remediation plans?
- 6. Should the Communities and Great Slave Cruising Club be required to relocate the boat launch and marina development to another location as a result of contamination, will appropriate compensation be provided for the design, relocation and construction of a Marina at a new site? Please provide a review of costs associated with redeveloping the Town Site to include a marina versus relocation and construction at a new site.







# **Reference to DAR (relevant DAR Sections)**

S.2.3.3 Limitations to the Scope of AssessmentS.3.4.1 Spatial BoundariesS.6.7 Historic Foreshore Tailings

## **Reference to the EA Terms of Reference**

S 3.4.2 Human Health and Safety S 3.5.2 Fish and Aquatic Habitat

### Summary

The water lots in question are located within the Site Study Area (SSA). However, the Giant Mine Remediation Project (Remediation Project) does not include activities to directly remediate sediments in Great Slave Lake, including those associated with the water lots.

Given the boat launch and mooring activities that are taking place, any incremental risks to humans or the aquatic environment associated with localized disturbances of contaminated sediments in Great Slave Lake will be very small.

The Remediation Project focuses exclusively on the remediation activities described in Chapter 6 of the Developer's Assessment Report (DAR). Future redevelopment projects, whether on land or water, are therefore beyond the scope of the Remediation Project and this Environmental Assessment (EA). As a result, detailed evaluations of the effects of future redevelopment projects were not done.

Relocation, and therefore compensation, required as a result of contamination is not within the scope of the Remediation Project or this EA.

## Response 1

Figure 3.4.1 of the DAR shows the SSA drawn across a portion of the bay in the area of the Cruising Club and boat launch at the mouth of Baker Creek. However, remediation of the water lots is not included in the Remediation Project.

## Response 2

The Remediation Project does not involve activities that will directly remediate contaminated sediments in Great Slave Lake. However, by reducing future arsenic loads to Great Slave Lake, the Remediation Project is anticipated to result in a long-term improvement of sediment quality. Please refer to the response for City of Yellowknife Information Request #05, Question 2, for additional details.







### Responses 3 and 4

With regard to potential effects that disturbed sediments might have on people, a supplementary exposure assessment was conducted in response to Review Board Information Response #21, Question 2. As indicated in the response to that Information Request, various pathways were assessed to evaluate dermal exposure and inadvertent ingestion of sediment solids. These pathways were found to contribute negligibly to the total arsenic intake and associated risks.

In addition to low incremental risks to humans, it is unlikely that disturbances would result in significant effects to the aquatic environment. This conclusion is based on the assumption that the spatial extent of any sediment disturbances caused by mooring/recreational activities would be small and, as a consequence, mobilization of suspended sediments and/or arsenic would rapidly equilibrate within the receiving environment.

### Response 5

The current project focuses exclusively on the remediation activities described in Chapter 6 of the DAR. Future redevelopment projects, whether on land or water, are therefore outside the scope of the Remediation Project and this EA. As a result, detailed evaluations of the potential effects of such redevelopment projects have not been performed. It is important to note that future projects will undergo an appropriate level of EA as part of regulatory approval processes. Depending on the nature of any interactions with the environment, those assessments will include an evaluation of sediment effects. Mitigation requirements would also be put in place to ensure that the future projects do not cause significant residual effects.

On this basis, any future projects that disturb sediments (whether contaminated or not) should be subjected to an appropriate level of review to determine whether adverse environmental effects are likely to occur, how they can be mitigated and whether any residual effects are likely to be significant. Parties are also referred to the response to YKDFN Information Response #18, Question 1, that discusses the question of redevelopment on the historic foreshore tailings area.

## **Response 6**

Relocation, and therefore compensation, required as a result of contamination is not within the scope of the Remediation Project or this EA.



