

Giant Mine Environmental Assessment IR Response

Round One: Information Request - Review Board #17

May 31, 2011

INFORMATION REQUEST RESPONSE

EA No: 0809-001 Information Request No: Review Board #17

Date Received

February 14, 2011

Linkage to Other IRs

NSMA IR #09

Date of this Response:

May 31, 2011

Request

Preamble:

To assess impacts on wildlife, the Board considers the effectiveness of proposed mitigations. The DAR and accompanying materials suggest that the treated water storage pond will be fenced to make it inaccessible

Question:

Please describe if the treated water storage pond will be covered with fencing to keep water birds from landing on it. If not, please describe if and how water birds will be kept away.

Reference to DAR (relevant DAR Sections):

S.7.5.3.1

"Birds that are "At Risk" are the common nighthawk and olive-sided flycatcher while the harlequin duck, yellow rail, rusty blackbird and American white pelican are classified as "May Be At Risk".

S.7.5.4.4

"The survey showed that no duck broods were present on the disturbed sites during the summer, likely due to the lack of emergent vegetation along the shoreline. However, gulls and terns preferred disturbed sites over control sites. While no ducks were observed in Baker Creek Pond, shorebirds nested in the area. A breeding bird survey conducted as part of the study during the summer reported a total of 79 species present on site from mid-May to mid-October, most associated with the wetlands on the site, followed by the mesic forests".

S.7.1.4.3 and Fig. 7.1.7

"Sediments from Baker Pond had total arsenic concentrations in the range of a few hundred $\mu g/g$ to over 3,500 $\mu g/g$ ".







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Reference Supporting document N1 Tier 2 RA under 2.2.1 Potential Future Releases Associated with Remediation Case state:

"No surface ponds will be present on site with the exception of the treated water storage pond. The arsenic concentration in the pond is expected to average approximately 0.38 mg/L, but the pond will be fenced. Therefore, it will be inaccessible".

Reference to the EA Terms of Reference

S.3.5.4 (2)

"The effects of each development component on each wildlife and wildlife habitat component"

S.3.5.4 (3)

"The potential effects of the development operations on rare, threatened or endangered species including Peregrine falcon (anatum subspecies) and species listed by the Committee on the Status of Endangered Wildlife in Canada, including plans for monitoring species listed as "at risk" or "may be at risk" in the NWT General Status Ranks".

Summary

The water storage pond will contain clean water, and will have no habitat or vegetation. The pond will be small in comparison to other water bodies in the area, and will present no significant risk to birds.

Response

Storing treated water in a holding pond would allow the water quality to be monitored before discharge. Most of the water in the pond would be discharge quality, with only occasional exceedances of discharge criteria. Any treated water that fails to meet the discharge criteria, for example due to occasional plant upsets, would be recycled through the treatment plant or returned to underground storage.

An outdoor treated water storage pond would be within a fenced area to inhibit land access. It is not anticipated that the pond would be covered since the treated water storage pond would lack vegetation and aquatic life and therefore it would not attract water birds. The pond will be small in comparison to other water bodies in the area, and any birds that land on the pond would not stay long due to the lack of food and suitable habitat. The short exposure period and the fact that the pond would only contain water that had been treated to remove contaminants mean there will be no significant risk to birds.

