

# Giant Mine Remediation Project Environmental Assessment Surface Remediation



*Alternatives North*

Kevin O'Reilly  
September 12, 2012

# Presentation Outline

- **Surface Remediation Concerns**
- **Unresolved Issues**
  1. **Cover Design and Performance**
  2. **Air Quality**
  3. **Roaster Demolition**



# Surface Remediation Concerns

- **Proper surface remediation important to deal with:**
  - **Tailings ponds**
  - **Air quality impacts from windblown tailings and during construction**
  - **Demolition of the roaster complex**
- **Preferred alternatives for remediation of surface still in design phase with no plans, performance measures or contingencies**
- **Impact predictions not detailed or well supported**

# Unresolved Issues

## Cover Design and Performance

- **Questions raised about objectives and performance criteria (measures of success) at October 2011 Technical Sessions**
- **Developer contracted for two test pads in the Northwest Tailings Pond in 2007 to document settlement (sinking into the tailings), temperature and moisture content**

# Unresolved Issues

## Cover Design and Performance

- **Data to 2010 only has been provided to date**
- **One of the two test pads is submerged and of limited value**
- **Cover design not finished, only preliminary work on a revegetation study**
- **No performance criteria developed**

# Unresolved Issues

## Cover Design and Performance



**Trial Test Pads September 2011**



**Trial Test Pads June 2012**

**Red Lines show Test Pad under water**

# Unresolved Issues

## Cover Design and Performance

- **Cover design objectives and performance criteria unclear**
  - Retain water or shed it?
  - Revegetated cover or not?
  - Will roots penetrate cover and uptake tailings?
- **Concern with long-term performance of tailings cover**
- **Concern with ability of cover to prevent further dust problems**

# Unresolved Issues

## Cover Design and Performance

- Significant public concern and potential for significant adverse environmental impacts
- AN recommended that Developer submit final cover design, objectives and performance criteria to regulatory authorities for approval

## Developer—Agree

AN concerned that Developer did not ‘accept’ recommendation

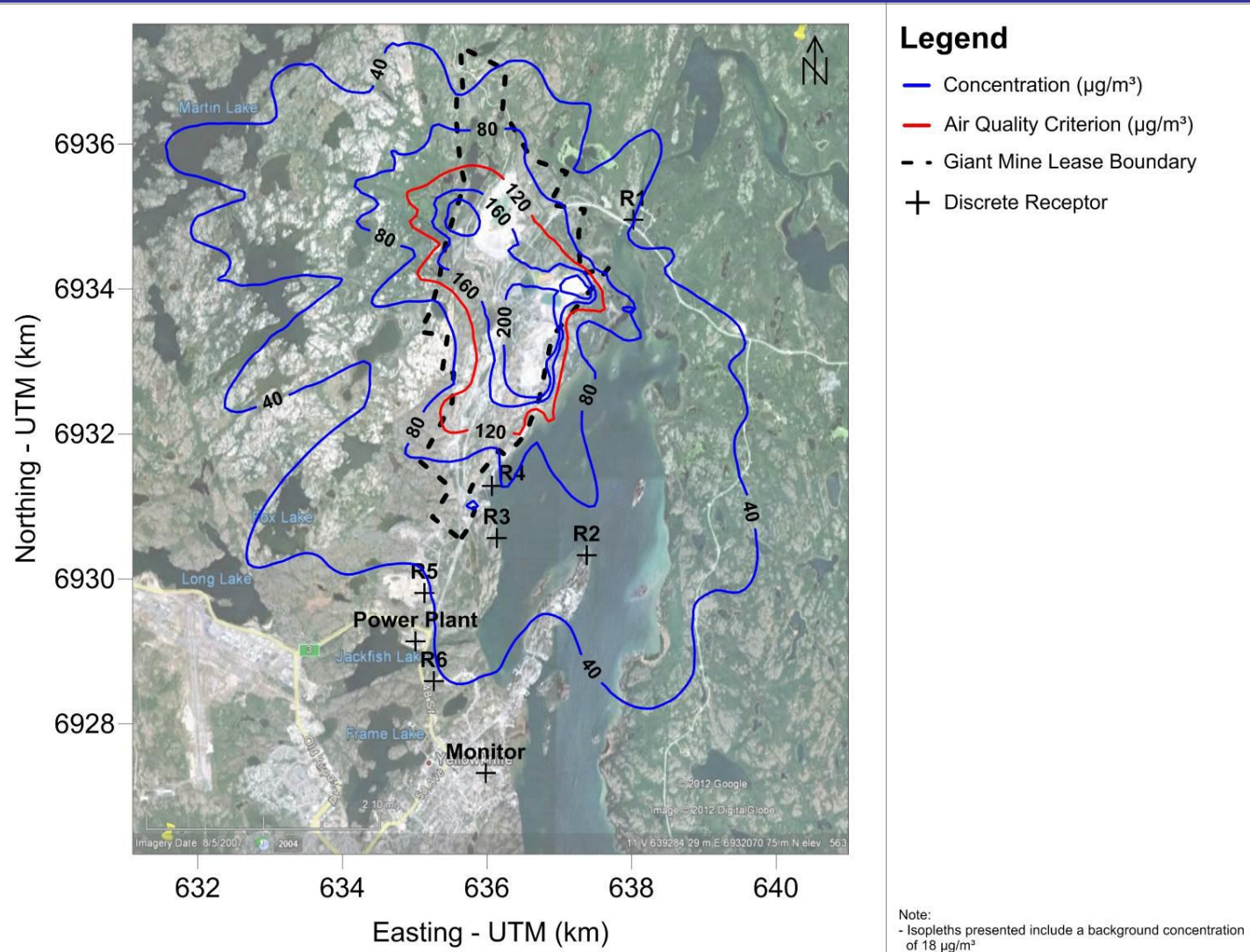
# Unresolved Issues

## Air Quality

- **Concerns raised over assessment of air quality impacts in the DAR**
- **Predictions of air quality contaminants above guidelines in areas accessible by public and site workers**
- **Triggers or thresholds for actions or contingencies not identified**

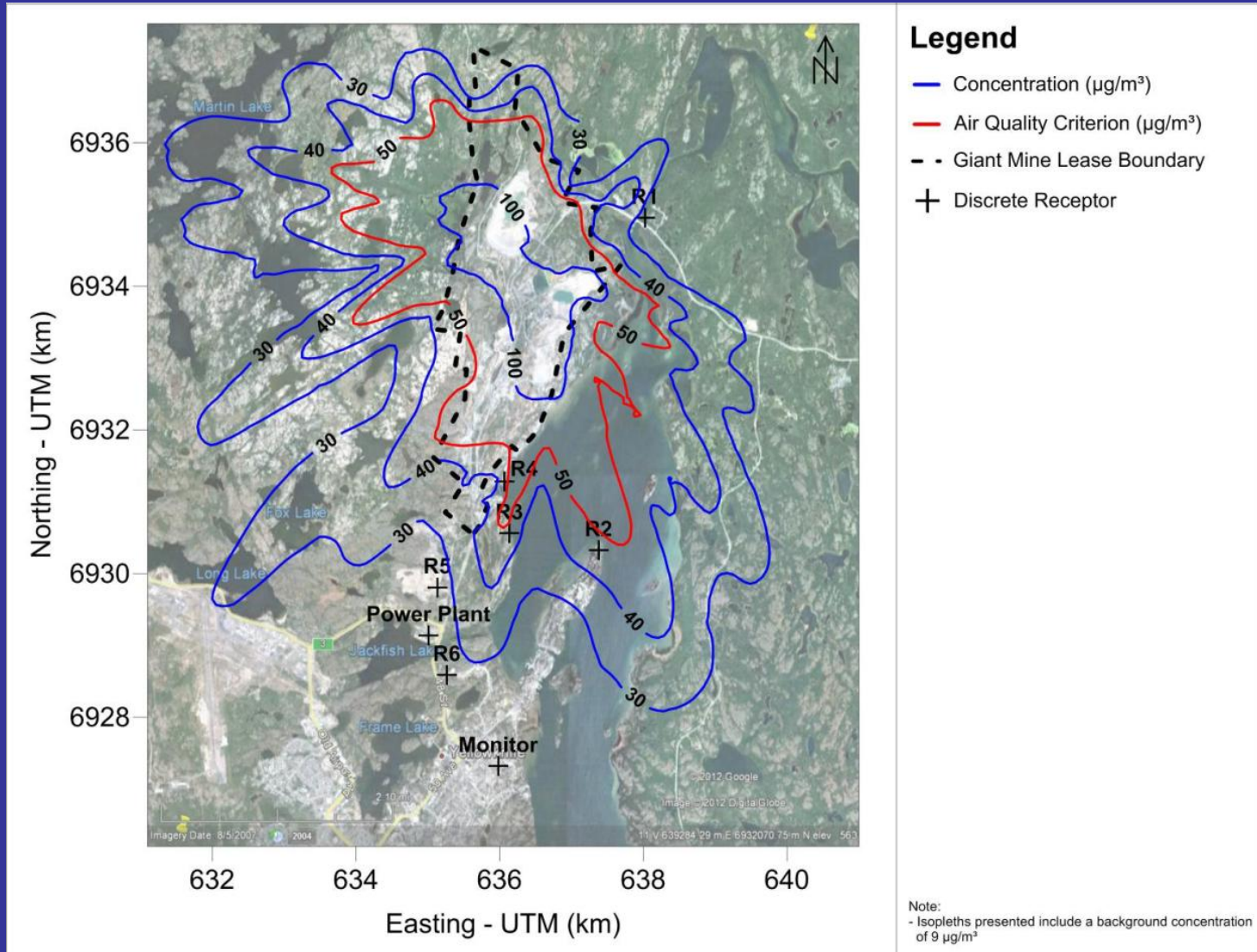
# Unresolved Issues

## Air Quality (24 hr. TSP)



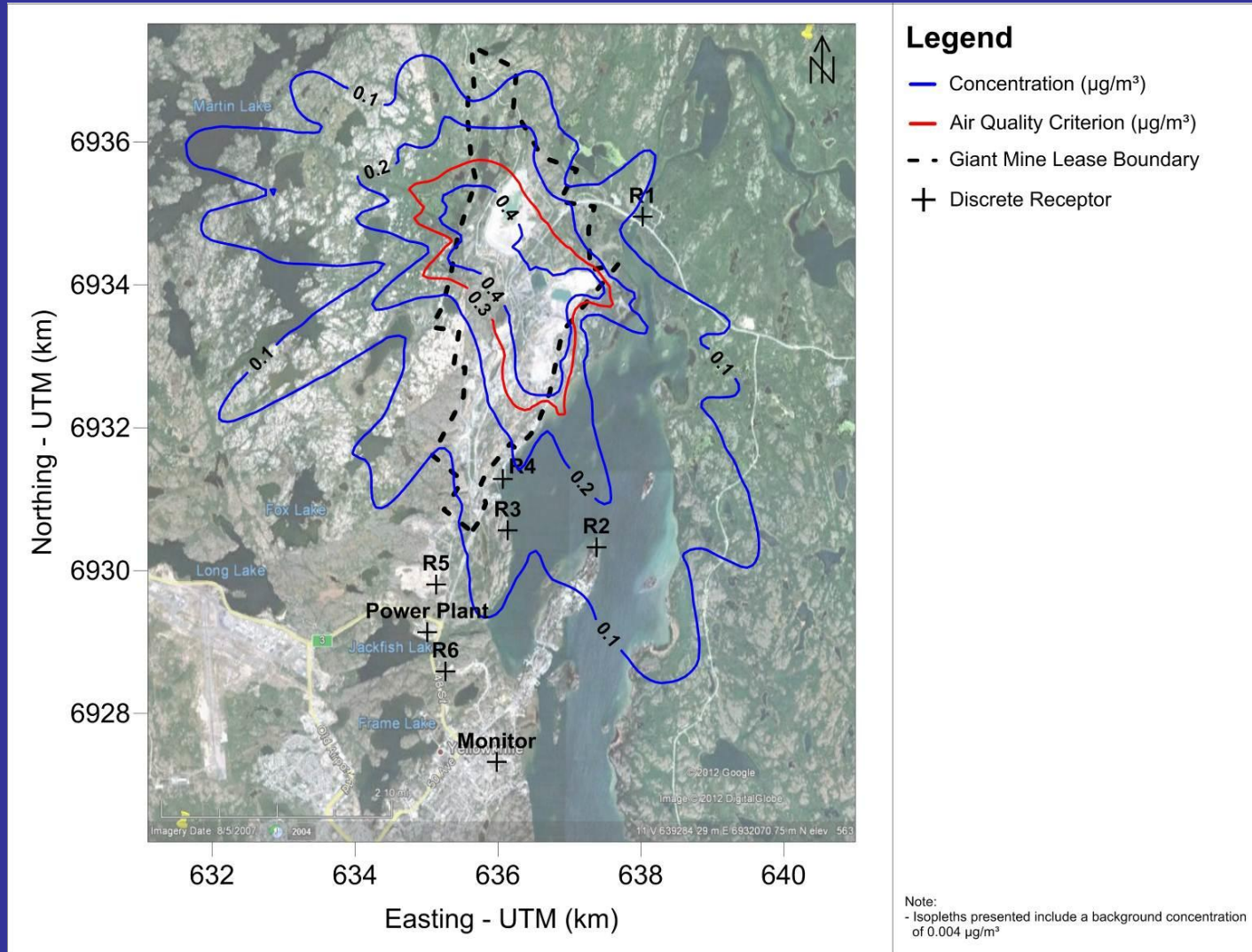
# Unresolved Issues

## Air Quality (24 hr. PM<sub>10</sub>)



# Unresolved Issues

## Air Quality (24 hr. Arsenic)



# Unresolved Issues

## Air Quality

- **Need to develop specific arsenic air quality guidelines for NWT as result of work to be done at Giant and for exposure of workers at the site**

# Unresolved Issues

## Air Quality

- AN recommended Developer prepare an air quality monitoring program to test the performance of tailings covers, with thresholds tied to specific actions. We would also add that the program should also cover site construction activities.

**Developer—Accept in principle**

**AN concerned that Developer did not ‘accept’ recommendation.**

# Unresolved Issues

## Roaster Demolition

- **Most highly contaminated structure and part of the site on the surface (4,900 cubic metres of arsenic trioxide)**
- **Developer has not released a plan for how demolition and disposal will be carried out**

# Unresolved Issues

## Roaster Demolition

- **Developer put together ‘secret’ Site Stabilization Plan to exempt roaster demolition from ongoing EA, approved by AANDC Minister in November 2011**
- **Developer resisted submission of Plan even though it committed to “early and ongoing engagement and dialogue”**
- **Questionable redactions made to Plan when finally submitted in August 2012**

# Unresolved Issues

## Roaster Demolition

- Alternatives North does not object to legitimate emergency work being carried out, prefer that this be communicated clearly
- Developer appears to be want to push ahead with full demolition rather than immediate emergency work (e.g. taking down the flues on the roaster)

# Unresolved Issues

## Roaster Demolition

- **Developer has not proven**
  - **there is an emergency (e.g. stamped engineering reports based on site visits)**
  - **it has the ability or capacity to carry out the work in a timely fashion**
  - **Current plan is to contract this work using regular contracting route (August 2012) rather than emergency authority**

# Unresolved Issues

## Roaster Demolition

- Alternatives North concerned that AANDC will exempt the roaster demolition from the Environmental Assessment
- Review Board should exercise its authority over any roaster demolition exemption
  - Need for evidence of an emergency
  - Demonstrated capability to do the work in a timely fashion
  - seek commitment that EA measures will be applied to any exempted work