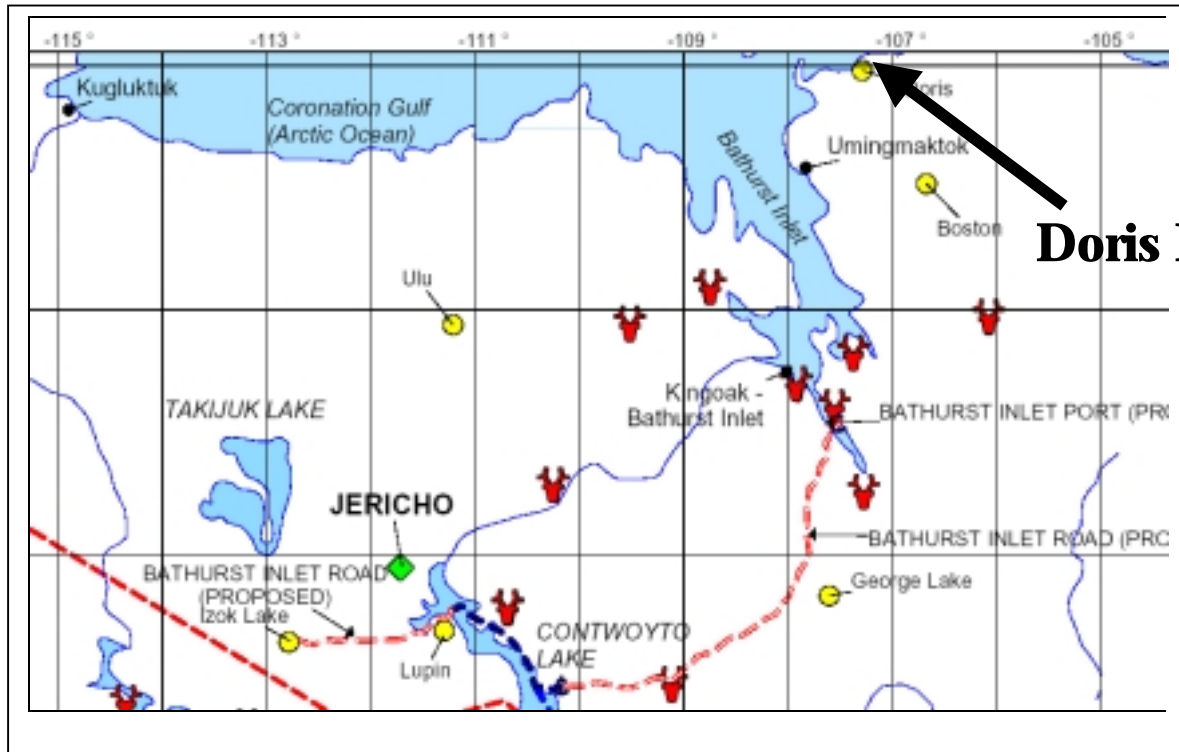


in the guidelines, and if the answers were good enough (quality). The Board received very high quality comments from the various stakeholders.

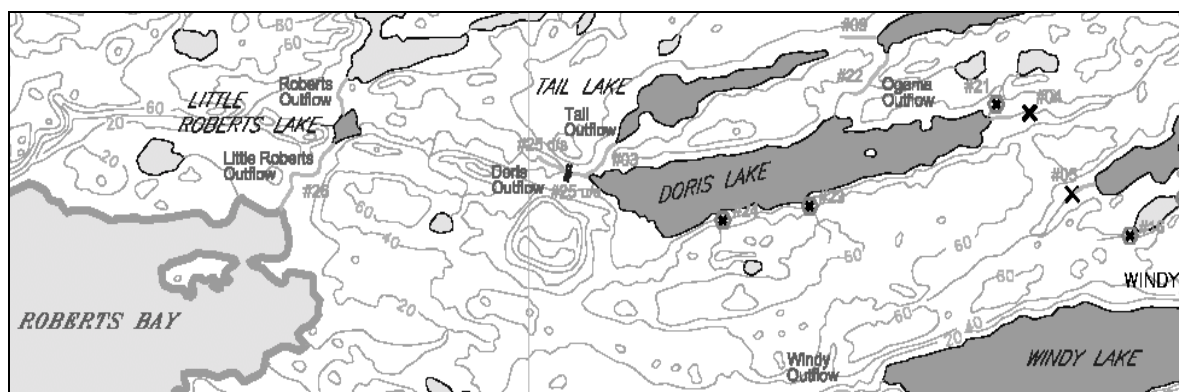
NIRB is going to tell Miramar how to improve the environmental impact

report and what information is missing. Then, everyone will wait until Miramar gives NIRB its final report. When the final report is submitted, NIRB will choose the best time for public hearings to discuss the project.



Doris North

The table on the next page shows the steps that the NIRB follows when it does an environmental review of a project. The darker areas show what has been done so far. The lighter areas show what has to be done before NIRB can finish reviewing the proposed gold mine.



NUNAVUT IMPACT REVIEW BOARD

Steps in the Environmental Review

Doris North (Miramar)
1. Environmental Screening - COMPLETED
2. Guidelines prepared by NIRB, government and interested parties - COMPLETED
3. Guidelines sent to Miramar - COMPLETED
4. Miramar prepares draft environmental report based on guidelines - COMPLETED
5. NIRB and government and interested parties review the draft environmental report to make sure its good enough - COMPLETED
6. NIRB and governments and interested parties have public pre-hearings to discuss the draft environmental report - COMPLETED
7. NIRB informs Miramar what additional environmental information is needed to finalize the environmental impact report and before the public hearings.
8. NIRB holds public hearings to discuss the environmental impacts of the Doris North gold mine.
9. NIRB prepares its decision on the North gold mine
10. NIRB environmental decision sent to the Minister of Indian and Northern Affairs

The Doris North Gold Mine

The Doris North gold mine is an underground mine; they will not need to drill into eskers. Miramar will blast into the rock, make a tunnel into a hill and then make a big cave in the hill

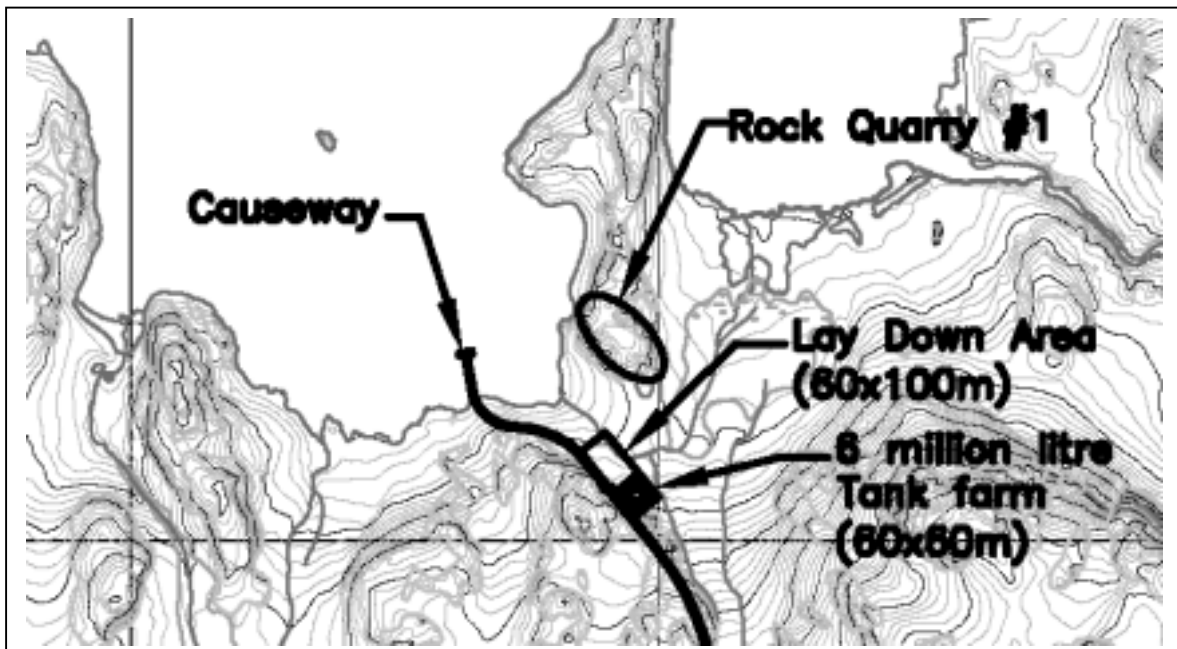
by taking out the rocks with gold using trucks. Miramar wants to start building the mine early in 2004, and start operations in 2005. The mine will operate for about two years.

With old mining technology, it would take much longer to mine rock, but with new technology Miramar can take out all the gold rock much faster. Miramar plans on reclaiming the mine after it has finished taking out the gold rock. The reclamation will restore the land to almost the same condition as before the mine was there.

Miramar plans to take 690 tonnes of rock out of the mine every day. In two years Miramar will take out about ½ million tonnes of rock. That amount would cover most of Cambridge Bay with a few feet of rock. Miramar will create 307,000 ounces of gold from that rock. The gold will be flown out of the mine.

Site Access

During construction, most of the construction material will be brought in by barge to Roberts Bay. The water near the shoreline of the bay is quite shallow. So, Miramar wants to build a causeway about 300 feet long out into the bay in a T shape. The dock would be about 300 feet long and 20 feet wide, and made of big boulders that are dumped into the water. The boulders would be covered with gravel so trucks can drive on it.



Miramar also wants to build a 5km road from the Roberts Bay to the mine. Part of the road will be made wide enough to use as a land strip for a twin otter.

Miramar will also build about 4 km of onsite roads, construct a dock for float planes at a nearby lake, an airstrip for twin-otters about 3,000 feet long, a large flat area to store supplies, and a bridge across the Doris Lake outlet stream.

Fuel

Fuel will come into Roberts Bay by barge and stored in large storage tanks until it is needed. The fuel is then pumped into a tanker truck and trucked to the mine

site. Miramar plans to burn the waste oil in an incinerator so that it does not pollute the air

Explosives

There will be three quarries and they will use dynamite for the quarries to break up the rock before they crush it up. Dynamite has to be handled carefully and stored away from the camp at the end of a 1,000-foot access road behind a hill. One of the quarries will be used as a garbage dump for harmless material.

Acid Rock Drainage

Rain and snow can unlock chemicals in the rock. These chemicals can flow into streams and create problems for the fish and other aquatic life. Not all rocks contain the chemicals that can cause acid rock drainage. Miramar says some of the rock will create acid rock chemical mix and that other rock will not. Miramar says that for building roads and docks, it will use rock that does not produce bad chemicals. Some people that have reviewed the environmental impact report are concerned that Miramar is not sure where the acid-making rocks are. They want more discussion of the issue and on going testing of the rock before it is used for building.

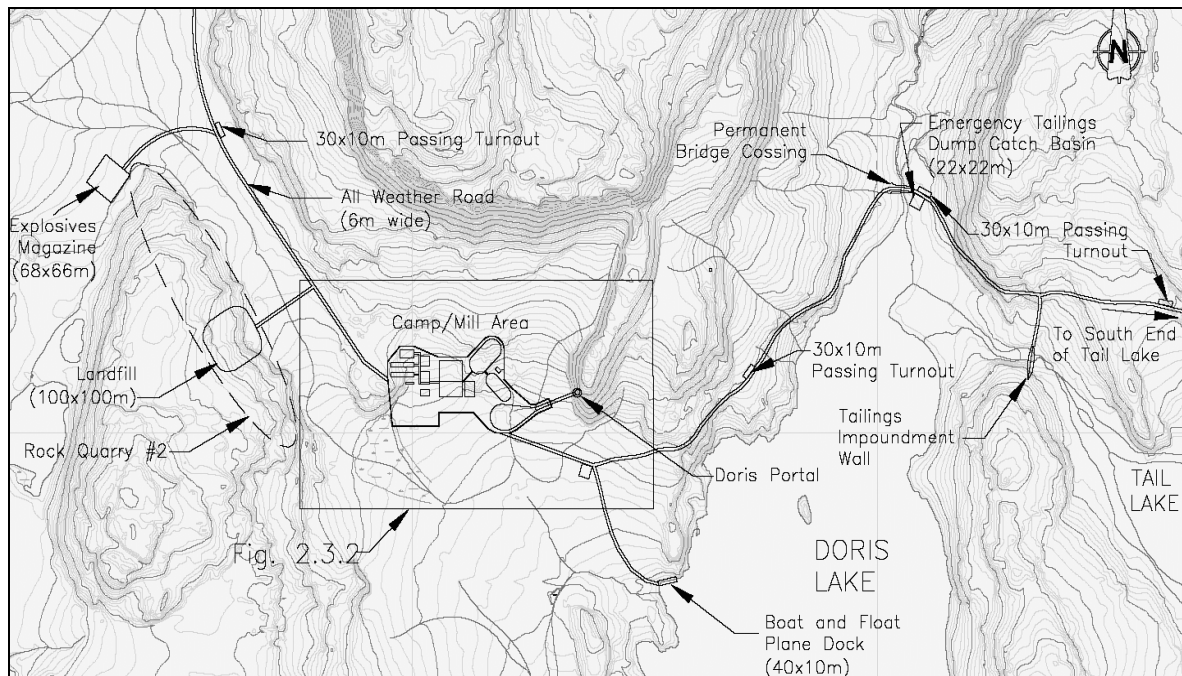
Tailings

The rock with gold is crushed into sand and the gold taken out of the sand. Then the sand is then pumped into Tail Lake and left there forever. Miramar will pump the sand, with water, to Tail Lake using a six inch pipeline. The sand will go into Tail Lake and settle at the bottom of the Lake.

The tailings will remain dangerous when poured into Tail Lake for many years. To protect the environment Miramar wants to hold the tailings and the water in the lake for many years. To do this Miramar plans on building a dam to hold the water and tailings in Tail Lake.

On-site infrastructure

Miramar will have standard infrastructure on site like garages, offices, workers sleeping and eating areas, mill, etc...



Gold Processing

Large rocks containing gold are taken out of the mine, then the rocks are crushed to particles the size of sand. First, using gravity, they scoop up the gold, like gold panning. The next step is to put chemicals into the water and bubble air through the chemicals. The material with gold in it floats to the top. Miramar then takes this material with gold in it and puts it into a cyanide and water mixture. The cyanide melts the gold but it does not melt the rock. Then an electric current pulls the gold out of the water.

There is a process used to change the cyanide from a poisonous state to a non-poisonous state. The environmental impact report describes how Miramar will change unsafe cyanide, to a safe chemical. Some of the technical reviewers recommend the Review Board should get more information on the cyanide treatment process.

Freshwater Supply

In winter most of the water comes from Doris Lake. Miramar also wants to reuse and recirculate water from Tail Lake to reduce water consumption to a minimum. About ½ of the water for the mill will come from Tail Lake. Doris Lake water will be used for drinking and the water will be purified. It will also be used to process the gold rock.

Miramar will release water from Tail Lake in the summer into Roberts Lake but only after testing it to make sure it is safe and suitable for release.

Project Economics

Can Miramar build and operate their mine in an environmentally responsible way? That is the key question that needs to be answered in relationship to the project economics. Can the mine run, make money and still be environmentally responsible? Miramar expects to make a \$69 Million dollar profit over a two-year period. This suggests they will have the money to undertake the project in an environmentally responsible way.

Employment

Miramar plans a two-weeks in, two-weeks out, work rotation. The mine will operate seven days a week, 24-hours a day. During construction there will be about six jobs for Nunavut residents. During mine operation, about 87 of the 150 jobs would come from Nunavut. The company will provide training to help Kitikmeot residents qualify for the jobs.

Mine Closure

Miramar will start to close the mine in 2006. All the equipment will be taken away and all the buildings will be taken down and shipped out on the barge. The underground part of the mine would be closed. The entrance of the mine would be sealed to keep animals and people out. Miramar will leave the roads, airstrip, and causeway, but will remove the culverts so all the streams can run naturally. All the fuel tanks will be taken apart and shipped out. Waste oil would be incinerated. When the water in Tailings Lake is cleaned Miramar will reopen the dam and let the water run freely. Nobody knows how long it will take before the water in Tail Lake will be clean enough to flow freely.

Community Coordination

The NIRB community coordinator, Lucianno Azzolini, was in Kugluktuk April 21-25 and in Gjoa Haven May 6-9, 2003.

NIRB Board Members

Members of the Nunavut Impact Review Board are Nunavut beneficiaries. Your board members are:

Elisabeth Copland, Chairperson, Arviat
Ryan St. John, Vice-Chairperson, Arviat
Albert Ehaloak, Secretary/Treasurer, Cambridge Bay
Pauloosie Paniloo, Executive Member, Iqaluit
Percy Kabloona, Member, Whale Cove
Martha Akoluk, Member, Bathurst Inlet
Mary Avalak, Member, Cambridge Bay
Peter Paneak, Member, Clyde River
Peter Akkikungnaq, Member, Gjoa Haven

Members are nominated by NTI, GN or DIAND and are appointed by Minister Nault, Minister of Indian Affairs and Northern Development for 3-year terms.

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