IZOK CORRIDOR PROJECT

The Izok Corridor Project

September 2012

AGENDA

> Mineral and Metals Group (MMG)

> The Izok Corridor Project

> Project status and the next steps

MMG

Minerals and Metals Group

Members of the Minmetals Resources Limited group of companies (HKEx 1208)

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INCORPORATING MMG

MMG

> Created in 2009

> Acquired Oz Minerals and Zinifex

> Part of Minmetals Resources Ltd.

> MMG has an office in Vancouver and in Kugluktuk

> MMG has more than 8,500 employees worldwide

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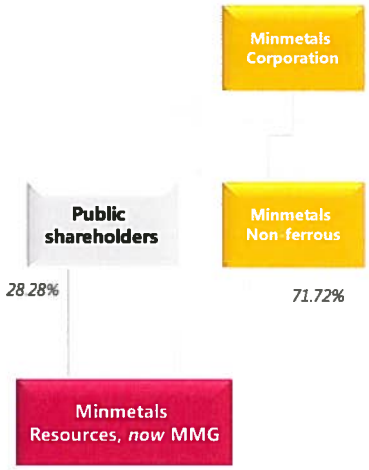
MMG: COMPANY STRUCTURE

- > MMG 100% owned by Minmetals Resources
- > Minmetals Resources: 71.72% privately held and 28.28% publicly held
- > Minmetals Corporation
  - founded in 1950
  - an international metals and mining corporation
  - primarily engages in exploration, mining, smelting, processing and trading for metals and minerals
- > Minmetals Resources' owners voted to change listed name to MMG Limited in August 2012



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MMG OPERATING MINES: EXAMPLES

Century (Queensland, Australia)

- Australia's largest open pit zinc mine.

Sepon (Lao PDR)

- A gold and copper operation that produces copper cathode and gold dore.

Golden Grove (Western Australia)

- An underground mine that produces zinc, copper, and lead and precious metals concentrates.

Rosebery (Tasmania, Australia)

- An underground mine that produces zinc, copper, lead concentrates, and gold dore.

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THE IZOK CORRIDOR PROJECT

History

Project Name

Project Description

HISTORY

- Wolfden Resources Inc. started the planning for High Lake and the Grays Bay port and submitted a draft EIS to the NIRB in 2006
- Zinifex purchased Wolfden's Nunavut project in 2007
- Zinifex started the work to extend the project to Izok Lake in 2007
- All work was put on hold in 2008

HISTORY: 2009 to present day

< Exploration programs continued

< New cost studies or prefeasibility was completed

- Design alternatives
- Transportation options
- Port options
- MMG decided not to finish the environmental assessment for High Lake; NIRB advised in December 2011 and withdrew the project from assessment

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HISTORY: 2009 to present day

> Pre-feasibility for project costs completed. Project is marginally economic

> Feasibility study underway to confirm costs against resources in the ground

> Need to develop High Lake and Izok together

> Zinc concentrate is best transported by truck and ship

- The road from Izok to High Lake to Grays Bay is the most feasible road option available
- A port located at Grays Bay is our most feasible option

> Ulu and Lupin properties sold to Elgin Mining

> Exploration continued at Izok and High Lake

> Project proposal submitted to NIRB

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HISTORY: 2009 to present day

> Engagement
- Community visits
  - open houses
  - targetted information sessions (one-on-one meetings)
- RDAG (Iqaluit, Yellowknife)
- Site visits
- Newsletters
- Traditional knowledge workshop

> Sponsorship
- trades camp
- youth programming

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IZOK CORRIDOR PROJECT COMPONENTS

> Two proposed mine sites: Izok and High Lake
- Zinc and copper at Izok
- Plant and tailings at Izok
- Twelve year projected mine life
- Copper and zinc at High Lake
- No plant or tailings at High Lake just a crusher

> Proposed port at Grays Bay on the Coronation Gulf

> August to October shipping of concentrate, no year round shipping

> Proposed all-weather road connecting the mines to the port
- Ore will be shipped from High Lake to the Izok mine site for processing
- Concentrate will be trucked to Grays Bay from Izok

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PROJECT COMPONENTS

Overview of the proposed Izok and High Lake Mine Sites

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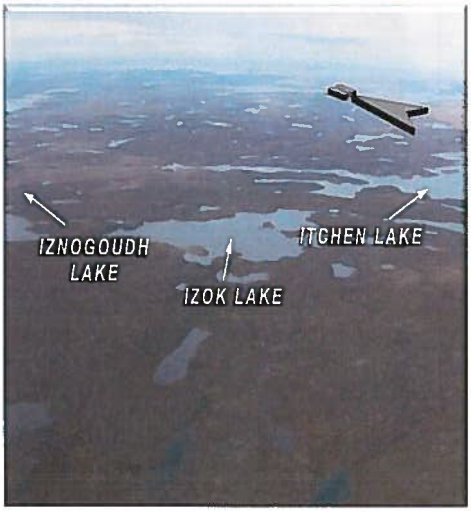
PROJECT COMPONENTS

Izok Mine

> 1 Open Pit, mined in 3 main phases
- High tonnage, high grade, mainly Zn but also Cu rich
- The deposit is under Izok Lake

> 1 Underground Mine
- Lower grade, low tonnage, more expensive to develop



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PROJECT COMPONENTS

Izok General Design Features

> Diversion channel connecting Iznogoudh and Itchen

> Izok Lake drained to access resource
- open pit mine

> Tailings Containment
- dry-stacking
- waste rock piles

> Water Containment
- Contact water captured and treated
- Dams to contain water
- Polishing ponds

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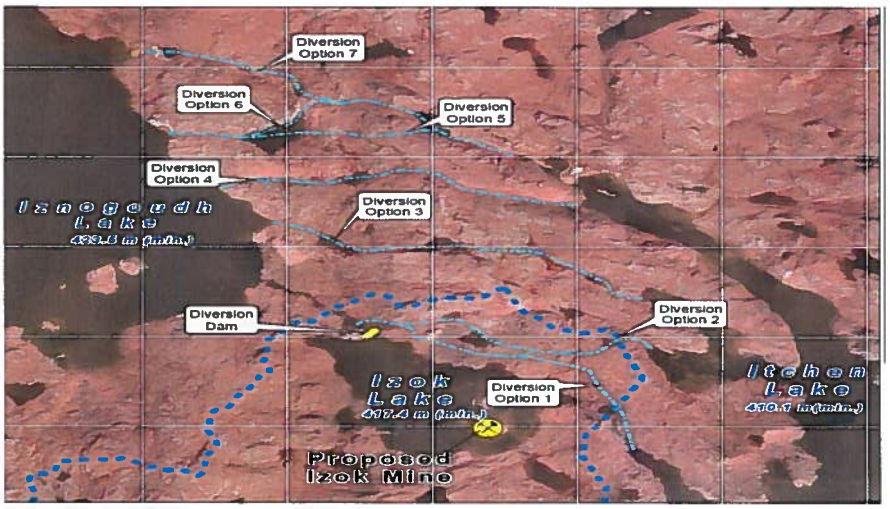
PROJECT COMPONENTS
Diversion Channel Options Overview



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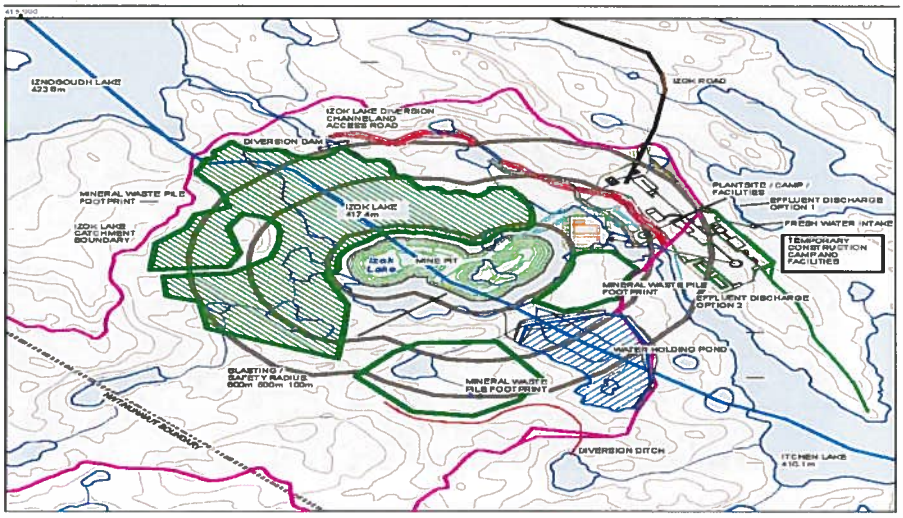
PROJECT COMPONENTS
Izok Mine Site Plan



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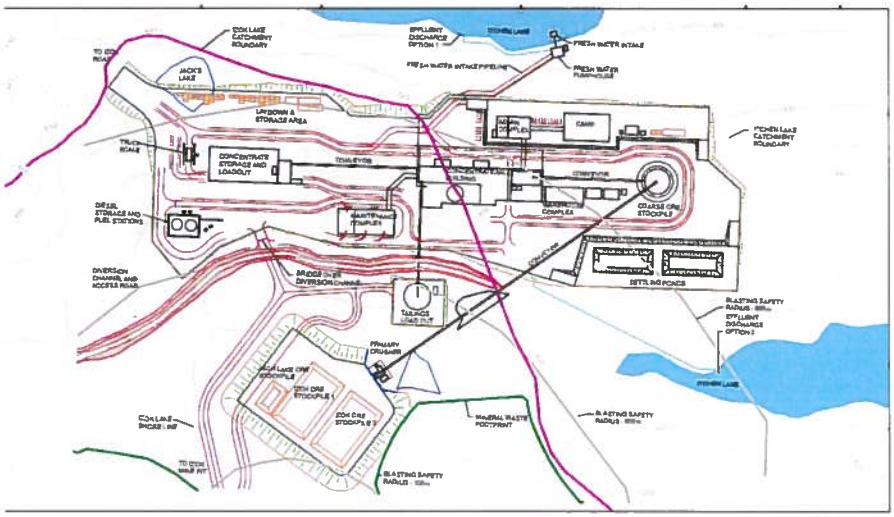
PROJECT COMPONENTS
Plantsite General Arrangement



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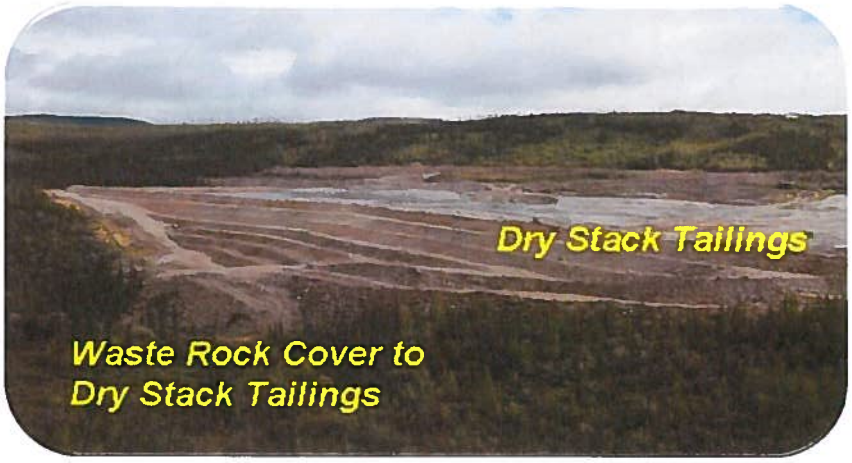
PROJECT COMPONENTS
Tailings Management Strategy



Example: Minto Mine, Yukon

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PROJECT COMPONENTS

High Lake General Design Features

> 2 Open Pits

> 1 Underground Mine, mined by decline from surface

> Crusher

High Lake camp site

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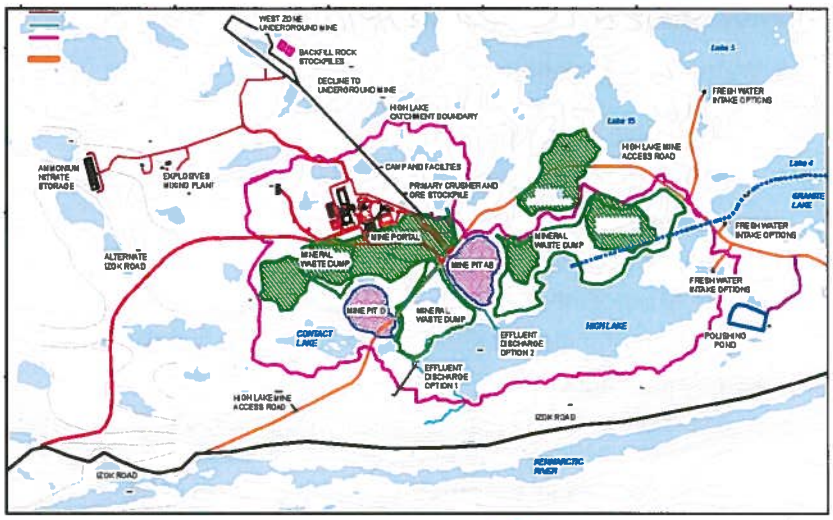
PROJECT COMPONENTS
High Lake Mine Site Plan



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PROJECT COMPONENTS

Common features to both

- > Haul roads linking pits and portal to dumps and ore stockpile area
- > Smaller access roads to ventilation, explosives storage, and water intake
- > Mobile equipment workshop
- > Water supply
- > Water treatment
- > Electric power
- > Communications
- > Explosives storage
- > Warehousing
- > Fuel supply
- > Accommodations, office and dry
- > Emergency response
- > Airstrips and fuel storage

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PROJECT COMPONENTS

Environmental Considerations

> Water Management

- surface water treatment (cleaning the water before it goes back into a lake or river)
- polishing ponds (where the water sits while it is cleaned)
- sewage (cleaned before release)
- drinking water

> Waste Management

- location of mine waste so it does not create a pollution problem

> Diversion Channel

- diversion channel created linking Iznogoudh and Itchen may be good fish habitat
- water flow being measured to limit impact on Itchen

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PROJECT COMPONENTS

Environmental Considerations – continued...

> Compensation for the loss of Izok lake

> Tailings

- potentially acid generating
- handled and contained so that they will not create a pollution problem

> Project foot print

> Closure of the site

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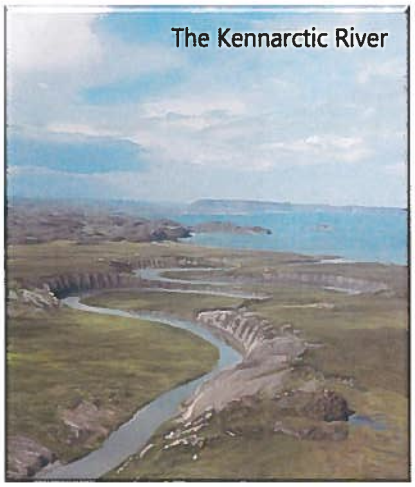
PROJECT COMPONENTS

Proposed Infrastructure

> All-weather road

> Winter roads

> Port



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PROJECT COMPONENTS

All Weather

> 350 km all weather road

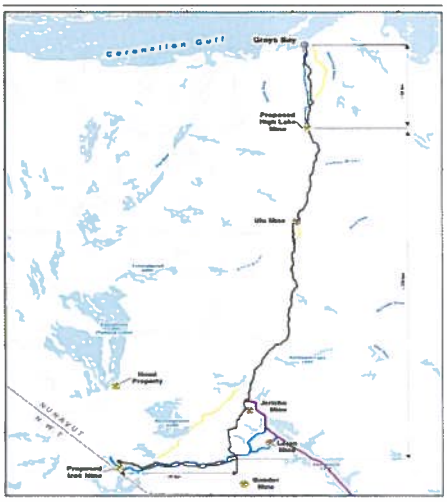
> Variation under consideration

Winter Roads (Construction)

> 100 km winter road from Izok to Jericho

> 80 km winter road from Izok to Lupin

> 50 km winter road from High Lake to Grays Bay



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PROJECT COMPONENTS

North of Contwoyto Lake – A particularly rugged section, weave between outcropping rock, following well vegetated surface

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PROJECT COMPONENTS

Burnside River crossing: 100 km south of Ulu, 70 m multi-span bridge

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PROJECT COMPONENTS

Hood River crossing: 17 km south of Ulu, 35 m single span bridge depending on crossing location

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PROJECT COMPONENTS

Example of the trucks that will be used

Concentrate and Ore Hauling

Sea Container Transport

Fuel Resupply

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PROJECT COMPONENTS

Environmental Considerations: Road

> Provisions for caribou crossing
> Road closure during calving season
> Water crossings to protect fish habitat

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PROJECT COMPONENTS

Air Transport Infrastructure

> Izok: runway capable of handling Boeing 737, Hercules

> High Lake: runway capable of handling Dash 8, Twin Otter

> Grays Bay: runway capable of handling Dash 8, Twin Otter

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PROJECT COMPONENTS

Grays Bay Port

> Concentrate

- An average of 500,000 WMT at 8% moisture per year from Izok Lake to Grays Bay over the 12-year production phase
- Zinc and copper con – bulk in B-Train Trucks (100 – 120 t tare)
- Lead con – in 20 ft containers (to be confirmed)

> Resupply

- 25,000 tpa, generally in 2,500 20 ft containers from Grays Bay to High Lake and Izok Lake, and returned to Grays Bay

> Diesel

- 45 Mt in road tankers from Grays Bay to Izok Lake and High Lake

Example: Voisey's Bay

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PROJECT COMPONENTS

Proposed port location: Grays Bay

> Concentrate shed for 10 months production (420m long, 90m wide)

> 50 M litres fuel storage

> Wharf and ship loader facility to accommodate 50 k t ships

> Lay down area for ship unloading

> 2,500 containers (20 ft) in and out annually

> Camp, administration and maintenance facilities

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PROJECT COMPONENTS

Shipping

> 10 to 15 ship-trips per year (80 day window from July to October)

> All passages to the east except for last run of the season

> Each passage takes 2-3 days (one way once inside Nunavut waters)

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PROJECT COMPONENTS

Environmental Considerations: Shipping

> No year round ice breaking
- Dolphin and Union caribou migration not affected
- Shipping between mid-July to October

> Ship traffic impact on marine life
- Avoid unnecessary ship acceleration to limit noise
- Maintain consistent course to the extent possible
- Maintain minimum distance from shore

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PROJECT COMPONENTS

> Construction

- average on-site workforce of 670 (based on Pre Feasibility Study and is to be confirmed)

> Operation

- Average on-site workforce of 400 (based on Pre Feasibility Study and is to be confirmed)

> Fly-in/fly-out rotational schedule

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PROJECT STATUS AND NEXT STEPS

> MMG submitted the Izok Corridor Project Proposal to the Nunavut Impact Review Board (NIRB) in late August, 2012

> NIRB will screen the Project Proposal to determine need for a review based on potential for significant impacts

> MMG anticipates that the Project will undergo further, and a more detailed, review by the NIRB

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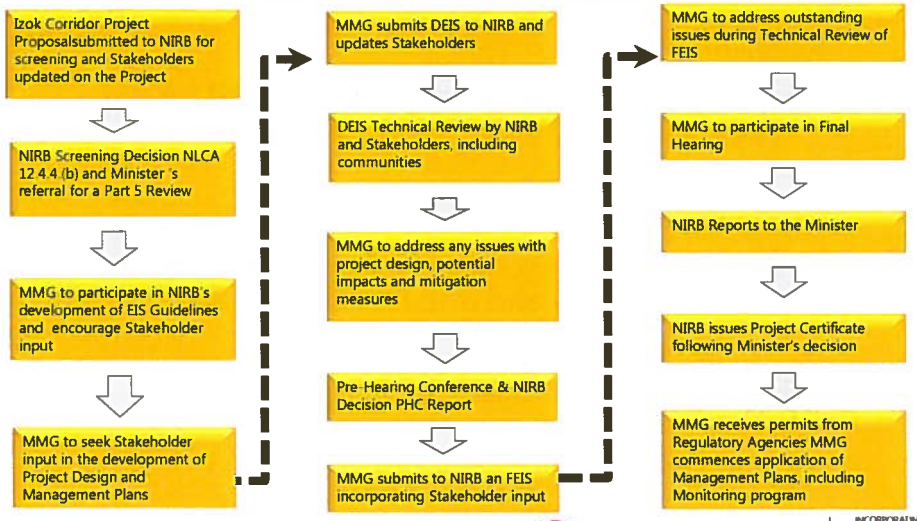
PROJECT STATUS AND NEXT STEPS



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PROJECT STATUS AND NEXT STEPS

> MMG will continue to collaborate with reviewers of the Project

> MMG will continue environmental baseline studies needed to better understand the environment in the Project area

> MMG will continue to provide project updates to, and gather feedback from, communities

> MMG plans to establish Advisory Groups to focus on Terrestrial and Marine Environments, and Socio-economic development and well-being

> MMG will incorporate input from communities, Inuit organizations, regulators and other stakeholders into the development of management plans to mitigate potentially adverse impacts of the Project

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MMG Izok Corridor Project

THANK YOU
KOANA

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