

ANNUAL SUMMARY REPORT

2012 IZOK CORRIDOR PROJECT ENVIRONMENTAL BASELINE STUDY **– LAND AND WATER RESEARCH COMPONENTS**

This summary is intended to meet the requirements of MMG Resources Inc.'s (MMG) Scientific Research Licence No. 04 054 12N-M for the Izok Corridor Project area.

MMG is exploring significant base metal deposits at its High Lake and Izok properties in order to advance the proposed Izok Corridor Project. The environmental baseline work conducted under this research permit will be used to support the development of an Environmental Impact Statement for a future the project.

In 2012, MMG conducted baseline studies in the Izok Corridor Project area to augment data collected from previous years. Work took place within all areas of the project footprint as well as those further away (reference areas) used for determining project impacts.

Highlights from the 2012 baseline monitoring include the following:

- Collection of data on wave, current and tidal height from Grays Bay in the summer of 2012 by deploying two Acoustic Doppler Current Profiler (ADCP) current/wave moorings and a tide gauge. The largest current observed, 104.4 cm/s (2.1 knots), was in late July. At near-surface and mid-depth, the largest current events are directed more to the northeast at 57.4° and 42.3°. The largest significant wave height, 1.15 m, was measured by the ADCP during a burst on 12 August, 2012. These waves were coming from the west, and had a peak period of 5 seconds. The water levels were dominated by the diurnal (once per day) tidal constituents. The maximum observed tidal range was 0.69 m. The instruments were recovered from the study area in September 2012.
- Collection of data to characterize hydrogeology baseline conditions in and around the proposed Izok Mine. The activities conducted include: borehole logging, well development and baseline groundwater quality sampling, downloading of data from existing hydrogeological instrumentation and installation of new hydrogeological instrumentation on site.

- Conducting an aerial field reconnaissance of the Izok Corridor Project area in June 2012 to visually inspect break-up conditions, water levels and discharges of the major water courses along the proposed road corridor between Izok Lake and the proposed port facility at Grays Bay.
- Conducting stream flow measurements and the installation of water level loggers at a sample of streams and lakes in the Izok Corridor Project area in June 2012.
- Supplementing previously developed mapping data on soils and terrain in the Izok Corridor Project area by conducting aerial surveys and ground-truthing of the terrain and soil types in the summer of 2012.
- Collecting water, sediment and benthic invertebrate samples at watercourse crossings along the proposed Izok Road alignment to determine water and sediment quality.
- Developing baseline vegetation data by conducting ecological land classification (ELC) and mapping of the Izok Corridor Project area, and collecting land cover data to support classification of remote sensing imagery for the Regional Study Area. Twenty-eight ecosystem units were identified in the project area. During the ELC surveys, rare species ranked as "May be at Risk" were found at five locations, and species ranked as "Sensitive" were found in eleven locations.

Baseline data will continue to be collected in 2013 to further characterize the natural environment in the Izok Corridor Project study area.