MMG RESOURCES INC 2600-1177 WEST HASTINGS STREET VANCOUVER BC V6E 2K3 TELEPHONE +1 778 373 5600 FAX +1 778 373 5598 WWW.MMG.COM



5 November, 2012

Eva Paul
Water Resources Officer
Aboriginal Affairs and Northern Development Canada (AANDC)
Nunavut Regional Office
Building 918, PO Box 100
Igaluit, NU X0A 0H0

Dear Eva,

I would like to thank you again for bringing to our attention your concerns in relation to our Izok Project. There are certainly some observations made that are surprising to us and which we are already taking action to remedy. Some of these I would like to take this opportunity to expand upon, as we feel that there may be some mis-understandings in relation to some of the issues.

To that effect I would like to start by addressing directly the "Summary of Actions Required" portion of the report in the same order as they are presented:

#### 1. Submission of 2008/2009 annual reports

The annual report for activity in the year 2008 (filed 2009?) appears to be missing from our records and it is quite possible that it was never filed. I will be submitting a report for this period with the information that I can find. The 2009 report (filed 2010?), appears to have never been submitted due to inactivity at the Izok site during the field season in question. It was admittedly a mistake on behalf of the individuals involved at the time, not to submit a simple letter explaining this fact to the Nunavut Water Board to avoid any confusion. I would like to take this opportunity to submit said communication.

# 2. Amendments of submissions of 2010/2011 reports and the immediate submittal of water usage records

The "amendments" I assume are related to the inadequate reporting of water usage volumes and are taken to refer to the lack of water meters on drill supply pumps prior to the 2012 summer season. I would like to point out that mandatory use of water meters on drill supply pumps was only communicated to MMG during the July 10, 2011 inspection conducted by Andrew Keim (see included copy of inspection report). Data prior to this is unavailable, but estimated volumes for permitting were based on the known pump capacity supplied by Drilling Contractors in gal/minute, and accepted by NWB. When employed during the winter months, water meters proved problematic due to sub-zero conditions, continually freezing solid, and not giving measurements. Once ambient air temperatures were above zero, the

meters were installed as requested, and only then did the issues with volumes come to our attention.

# 3. Documentation of progressive reclamation included in annual reports

MMG will include "adequate" reporting of progressive reclamation in all future annual reports.

We would like to clarify what is considered "adequate" reporting of progressive reclamation. When specific actions have been taken to remediate the cumulative impacts of our activities (or those of others inherited by us as legacy issues) we have provided some photographic evidence. As an example, the annual report to AANDC of 2011 activities in which before and after pictures were provided of the hood camp clean-up. Please provide some guidance here.

# 4. Water usage is not to exceed licensed amount. Renewal application to be amended

MMG will make all efforts to ensure that in the future licensed water volumes are not exceeded during exploration activities.

It is acknowledged that water meters showed a much greater volume than previously estimated was being used during drilling activities and that for periods of time we appear to have exceeded permitted amounts. The volumes in question are unexpectedly high, and this will be taken up with the Drilling contractor in order determine exactly what is happening.

We anticipate no drilling activity next year at the Izok location, and only a single drill operating at the Hood location. We believe that this same 100m3 daily volume will be adequate for the anticipated 2013 programs with adjustments and modifications made by Drilling contractors in their practices. If we find that we are still exceeding this volume with only the one drill operating, or need more than one drill to operate, then we will at that point amend the license to account for those volumes. Immediate amendments to the requested volumes for the renewal of the water license applied for in September of 2012 will not be made.

# 5. All water usage is to be recorded daily, and reported in m<sup>3</sup>

MMG has reported domestic camp water usage on an annual basis since the request was first made in 2006. Following the July 10, 2011 request to report drilling water usage water meters were purchased and installed on drilling supply pumps for the 2012 season. Unfortunately in sub zero conditions they were unable to function, so data is only available for the summer months. We will continue to strive to come up with a solution for measuring water volumes during the winter months. If AANDC has any suggestions or examples from other operations in regards to water meters that are impervious to – 40 then we are certainly open to suggestions. Data has traditionally been reported in the units in which the meters read (Litres) but if AANDC prefers m³ we can certainly make the conversions.

## 6. Open burning is unacceptable and is to be discontinued

Open burning is now prohibited at all MMG sites. Our understanding is that AANDC prefers to see it "prohibited" in order to completely eliminate the possibility that non-combustible

materials are included in open burns. Environment Canada seems to accept the practice for untreated wood and paper products.

# 7. Waste sorting practices are to be implemented prior to incineration

MMG sites already have implemented some sorting of the waste stream. Industrial waste from drilling (metals and plastics) are separated out and packaged for transport to Yellowknife for proper disposal in sealed 45gal. drums along with any petroleum products.

Food containers included in kitchen waste are incinerated to remove any remnants of organic material that might attract wildlife, and are then shipped to Yellowknife for disposal along with incinerator ash containing the remains of any other non-combustible materials.

Aluminium pop cans and plastic water bottles are removed from the waste stream, directed to specially marked containers, and flown to Yellowknife for recycling. In the future the importance of this will be further emphasized to employees and in practice will be supervised at MMG sites to ensure actions are carried out.

# 8. An Incinerator Management Plan or operations manual will be submitted with the 2012 annual report

A waste management plan exists for our Izok Corridor camps. An updated version will be submitted with the 2012 report.

# 9. Proof of final disposal will be provided to inspectors upon request.

Documentation has been solicited from KBL Environmental showing some "proof" of final disposal. Not sure as of yet in what form it will appear.

#### 10. All fuel transfers are to occur over secondary containment

Secondary containment at all fuelling stations is provided onsite through the use of plastic spill trays, slid under vehicles at time of fuelling. The suggestion to install "liners" was made by Andrew Keim during his inspection visit of July 10th, 2011 for both the principal fuel transfer point at the fuel farm and the garage shop floor. This has now been completed and a report provided documenting their installation.

### 11. Spill kits are to be located at all fuel transfer areas.

This is standard MMG policy. We were remiss in not having a spill kit and a secondary containment tray located at the Hood site where the helicopter was refuelling. Because the helicopter was never actually to be "stationed" at the Hood site a true "fuelling station" was not properly set up.

# 12. Fuel barrels are to be stored in secondary containment.

This is standard MMG policy. See above comments regarding the Hood site and helicopter refuelling practices.

#### 13. Hoses and nozzles are to be kept over drip trays or pans.

This is standard MMG policy. Containment procedures will be reviewed with Drilling Contractors and more constant supervision implemented.

# 14. Salts and Drill greases are to be kept on adequate secondary containment at the drills.

This is standard MMG policy. Containment procedures will be reviewed with Drilling Contractors and more constant supervision implemented.

# 15. Consistency in application of water sampling before and after on-ice drilling

This will be reviewed. We suspect the error you mention in the reporting of these locations was a typo of some kind. MMG has consistently provided this information on an annual basis.

# 16. Recording and reporting of permafrost depths.

This information is unavailable and to my knowledge this is the first time that this data has been requested from us. The process of diamond drilling does not give us an accurate indication of permafrost levels in the drill hole. In order to establish depths of freezing a thermistor must be installed in the hole to collect temperature data. We do not install thermistors in drill holes, as they are expensive and the data is not required for exploration.

#### 17. Removal and capping of drill casing as part of reclamation.

The Izok project is currently in feasibility studies. Some aspects of the engineering studies being carried out may involve the re-use or continued use of some drill holes. For this reason drill casing has been left in some locations. In other locations equipment has been left in the drill hole to monitor ground water for example. MMG will in the future ensure that those casings left are "capped" if possible, as suggested.

#### 18. Metering the water use at the drills year round to accurately record water usage.

This has been addressed in item #5

#### 19. Provide GPS locations of water sources

UTM or Lat and Long coordinates for water sources will be provided with drill location data in the future. It is usually inferred that the closest water source to the drill location will be used if suitable.

#### 20. Exercise caution when selecting water sources to avoid use of shallow water bodies

This will be discussed in the future with Drilling Contractors and receive greater supervision by MMG staff on site during drilling operations.

You will be receiving the action items mentioned above over the next few weeks. There are a few other comments that I would like to make in association with some of the observations presented in the report:

#### **Hood Camp Clean-up**

The reclamation of the historic camp at the Hood location was undertaken in the spring and summer of 2011, and began prior to Andrew Keim's inspection visit to the Izok site on July10th. In the days immediately prior to Andrew's arrival, the remains of 2 of the 8 then existing wood frame and structures at the historic Hood location were burned along with other scrap lumber collected around the site deemed to be of "....combustible material" as defined by the Department of Environment Canada's "Municipal Solid Wastes Suitable for Open Burning". By definition these materials include paper products, paperboard packing, and untreated wood wastes.

Following Andrew's visit, in which it was made very clear that AANDC (at this time still INAC) was no longer accepting open burning as a disposal method, the remaining structures were dismantled. Combustible materials were flown to the Izok site where scrap lumber was cut into small chunks and mixed with waste from the kitchen to be incinerated in order to obtain complete burns of kitchen refuse. Non-combustible materials were placed in empty fuel drums and flown to Yellowknife for disposal with KBL Environmental.

The project has a waste management plan that was developed in early 2012. It has been revised and I will be sending a copy of that document along with annual reports. If materials were encountered in the waste stream, (or remnants in the incinerator ash) that are not compliant, then this must be reviewed with camp staff.

## **Ham Lake Fuel Farm and Secondary Containment**

Item "5" is the condition of the original 2007 water license that refers to the historic fuel farm at the Ham Lake site, and states that an inspection and certification process must be carried out prior to making use of the empty tanks.

An inspection was carried out, and the tanks were registered with Environment Canada in 2008, however the decision was made not to make use of them, and skid mounted portable double walled steel tanks were purchased. Are these tanks as well subject to annual inspection?

At no point in time during the life of the license were the original fuel farm tanks employed.

It is our understanding that by the very nature of their design, double walled steel tanks provide their own secondary containment, and therefore a containment berm surrounding them is not required. If we are incorrect in this interpretation of Transport Canada and Environment Canada regulations then please correct us.

# In Closing.....

I would like to take this opportunity to address reporting in general. It has for some time been apparent that AANDC conducts site inspections on behalf of the Nunavut Water Board. It would appear that AANDC now requests much the same reporting information as that which is normally provided in annual reports to the Nunavut Water Board. Can a single report be provided to both agencies? Do AANDC staff have open access to NWB annual reports and vice versa? We have not traditionally included water usage volume records and test results from on ice drilling in our reporting to AANDC.

For the record I would also like to add that this is the first time that MMG/Oz/Zinifex has ever received a report of this nature in relation to the Izok Project site, having passed inspections on an annual basis by AANDC and other regulatory bodies (KIA, DFO, Mines Inspector) stretching back to our acquisition of the property from Wolfden Resources in 2007.

Given the report, it is apparent to us that AANDC is making a concerted effort to step up its activity in this regard, which is to be applauded. MMG is committed to compliance in all of its activities, and is certainly more than willing to abide by those regulations and conditions set out by the regulatory bodies.

That being said, one has to recognize some inconsistencies on behalf of the Regulatory Agencies. To my knowledge we have made all attempts to address the few observations provided on an annual basis by inspectors. It is understandably with some surprise that we regard the report received.

Thank you again Eva. If you have any further questions or comments please do not hesitate to contact me. I have been travelling of late but will be back at my desk in the Vancouver office soon. In the meantime you should start to see the action items mentioned above trickle in. I hope to have them all to you by months end. I will be sending a copy of this response to Phyllis Bealieau at the Nunavut Water Board for her files.

Regards,

**TED MURARO** 

OPERATIONS MANAGER – CANADA 2600 – 1177 W. HASTINGS ST. VANCOUVER, BC V6E 2K3

T 778 373 5589

F 778 373 5598

E TED.MURARO@MMG.COM