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September 10, 2007

Fred Welke
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RE: Shear Minerals Water License Inspection Report of Churchill Diamond Property June 24, 2007

The Water Resources Officer (WRO) appreciates the assistance and cooperation provided by Mr. Fred Welke and other Shear Minerals staff during the inspection of the project.

As this was the second inspection conducted on this camp an Industrial Inspection form was not completed. Samples of water were collected from the drill however at the time of the inspection no potable water could be collected because of ice conditions.

The following report is based on observations made at the time of the inspection by the inspector as well as during a review of the terms and conditions of the issued license with Mr. Welke. This was the second review conducted with Mr. Welke.

Part A: Scope and Conditions

No issues were found with respect to the location of the camp, which was suggested by the Hunters and Trapper's Association of Chesterfield Inlet, or with the classification of undertaking (Mining and Milling) as determined by the Nunavut Water Board.

Part B: General Conditions

The question of water use fees and a determination on if they had been paid was not included within the context of this inspection.

A review of the Nunavut Water board web site and FTP – Public Registry did produce a copy of the annual report from both the 2005 and 2006 years of operation. The proponent is reminded that an annual report is required to be filed by March 31st 2008 for the year ending December 31st 2007. A copy of this report should also be sent to the Inspector at Keima@inac.gc.ca.

The licensee is reminded that by the next inspection the Inspector will be checking the water intake metering system required to be installed as per section 4 of Part B.

Part C: Conditions Applying to Water Use

At the time of the inspection the licensee was allocated the use of 5 CMD from Josephine Lake for domestic use in the camp. Josephine Lake is located immediately adjacent to the camp.



During the two inspections conducted at the Camp water samples of the potable source (Josephine Lake)could not be collected. Ice conditions were bad during both periods.

It was noted that the camp had curtailed the use of four wheelers within the camp because of rutting and erosion issues and that the supervisor had actively taken the initiative to address these issues prior to an inspection.

Part D: Conditions Applying to Waste Disposal

During the period of inspection an incinerator was noted on site. The capability of the unit to meet the Canada-wide Standards for Dioxins and Furans and the Canada-wide Standard for Mercury Emissions was not reviewed with the proponent. The licensee is reminded that this standard must be met by the date of the next inspection if not already achieved.

The proponent is reminded to include in the 2007 annual report due on March 31st 2008 a list of hazardous materials shipped out of the camp, the treatment received, and the location of the approved treatment facility to which they were sent. All of the foregoing is required information to be included in the annual report. Shipping and receiving invoices are not required so long as the records are available for inspection during the 2008 inspection season.

The proponent is asked to clarify whether or not the licensee is back-hauling the Pacto-bags into town for disposal at a pre-approved site as per section 6 of this Part, or, as the inspector believes was stated during the inspection, if the Pacto-Bags are currently being burned in the incinerator.

During the inspection it was noted that there was a large pile of scrap lumber. As the issued license strictly prohibits open burning the proponent is asked to clarify what was finally done with the lumber.

Because of the time of year the inspection took place it is accepted and understood by the inspector that the ground was still in a frozen state. This however does not preclude the proponent from digging an adequate sump in the fall of the year for use in May, June and July until such time as the ground thaws to allow the proper drainage. The sump located at the back of the kitchen was obviously overflowing and causing a build-up of standing water around the kitchen. This must be addressed by the next inspection.

Part E: Conditions For Camps, Access Infrastructures And Operations

Because of the time of year the inspection took place it is impossible for the Inspector to determine if any of the terms and conditions of this section has been contravened. It is suggested that during the period of winter road activity the Inspector will travel with a convoy from Rankin Inlet to the Camp.

Part F: Conditions Applying To Drilling Operations

Section 2 of this Part reads as follows;

The Licensee shall ensure that all drill waste, including water, chips, muds and salts (CaCl₂) in any quantity or concentration, from land-based and on-ice drilling, shall be disposed of in a properly constructed sump or an appropriate natural depression located at a distance of at least thirty (30) metres from the ordinary high water mark of any adjacent water body, where direct flow into a water body is not possible and no additional impacts are created.

During the period of inspection it was clear that this section of the license was not being followed. Drill cuttings and waste were found adjacent to the drilling platform and from seepage from the Bulk sample



quarry where the return discharge was pumped to. This flow then fed out through the pile and carried with it the drill cuttings and waste into surface water that spread the wastes and cuttings over an area of approximately 100 square meters. This is not acceptable practice and must be addressed by the date of the next inspection. Pictures were taken at the time of the inspection and will be used to monitor the effect of any remedial activities undertaken on the site.

Part G: Modifications

No items in this section were identified by the proponent during or since the inspection.

Part H: Conditions Applying To Spill Contingency Planning

During the writing of this report a review of the Spill contingency plan submitted to the Nunavut Water Board was not available off the web site for review. The Inspector failed to ask for a copy for review during the period of inspection and thus it is impossible to determine if the proponent is in compliance at this time. The proponent is reminded that an annual review of their Spill Contingency plan is required to be submitted with the Annual Report. (The statement – SCP submitted and approved - no revision required or proposed is not acceptable practice.)

Because of the amount of snow still present during the inspection it was impossible for the inspector to determine if adequate work had been completed by the proponent to ensure the safe containment and storage of fuels and petroleum products. A large number of barrels were visible through the snow lying on both lying on their sides and standing upright. Very little if any secondary containment was noted during the period of inspection and this was discussed with Mr. Welke, who stated that secondary containment had been ordered and would be in place by next inspection. Lack of secondary containment around fuel storage poses an unacceptable risk to the waters and environment in Nunavut and is not acceptable.

Part I: Conditions Applying To Abandonment And Restoration

As the expectation of this project is to progress to a more advanced stage, no discussion of closure work other than the backfilling of the Mini-Bulk Sample trench was discussed during the period of this inspection.

The proponent is reminded that the following sections of this part are to be addressed in the 2007 annual report. Photographic evidence taken before and after any progressive or on-going reclamation work such as outlined below will be accepted in the annual report.

5. The licensee shall backfill and restore, to the satisfaction of an inspector, all camp and drilling waste disposal sumps to the pre-existing natural contours of the land prior to the expiry of this license.

Capping of Drill holes, although not outlined in the license specifically, should also be completed prior to stopping work on any one set-up.

Part J: Conditions Applying To The Monitoring Program

The proponent is reminded that all usage of water including the quantities used for both domestic and drilling operations must be recorded and available for inspection. It is highly recommended by the inspector that flow meters be installed on both the drill pumps and domestic water line so accurate measurements can be recorded. Extrapolation of the quantity of water used based on the run time of a pump or the number of times a tank is filled is not adequate and will not be accepted in future inspections.



Non-Compliance:

During the period of inspection a number of items were noted and were discussed with the Mr. Welke at that time.

The following is a list of items which are to be addressed or brought into compliance either by the date of the next inspection or, as outlined during the inspection, with photographic evidence submitted to the inspector as proof of compliance.

- Revision of spill containment plan to address the lack of Secondary Containment on fuel drums (unless installed)
- Capping of drill holes
- Remediation and clean up of existing drill sites where cuttings and waste have not been consolidated into depressions or a constructed sump.

Andrew Keim
Inspector's Name

Inspector's Signature

Attached under separate cover : Photos taken during Inspection of June 24th, 2007.

Cc:

Peter Kusugak – Manager Field Operations section- Indian and Northern Affairs Canada
Phyllis Beaulieu – Manager licensing – Nunavut Water Board
Pamela Strand- President – Shear Minerals