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RE: INSPECTION OF JERICHO MINE AUGUST 4, 2016 [2AM-JER1119]

Shear Diamonds (Nunavut) Corp. left the Jericho Mine site in September 2012. In March 2013 an Inspector's Direction was issued to Shear to undertake work to prevent impacts to persons, property and the environment. Shear failed to carry out the requirements in the Direction. INAC's Contaminated Sites (CSP) division has been conducting environmental protection activities at Jericho Mine site since June 2013 at the request of the Inspector, pursuant to s.87(4) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSTRA). In January 2014, Jericho Mine was declared abandoned. INAC Field Operations continues to inspect and assess the site.

I attempted an inspection in June 2016 but was not able to land at the site due to weather. August 4 2016 I was able to attend site on CSP's charter and was met on site by Andy Uyarrai.

An inspection of the site was conducted in order to assess risks to persons, property or the environment, and particularly the likelihood of any discharges to water.

Inspection findings are as follows:

Use of water:

Water usage is minimal. Personnel were on site June 6-9, and July 28 to August 4 2016. Water usage for June was approximately 20L total for camp use, and approximately 20L per day for 6 days in July and August. Water is drawn by hand from Carat Lake.

Discharges to water:

No maintenance or repairs to the silt curtain and silt fence on the SE Dam Pond were noted, although it was recommended in my 2015 report. As no measures were put in place to monitor fine processed kimberlite deposition from the Processed Kimberlite Containment Area (PKCA), it is unknown whether this resulted in any further impact to the SE Dam Pond. Vegetation growing at the base of the slope appears robust.



The PKCA discharge was ongoing at the time of the inspection, and the diffuser plate in use to mitigate erosion caused by the flow. From the records provided by CSP following the inspection, discharge from the PKCA ran full time whenever employees were on site, and the discharge volume was calculated by the volume of the pump and the hours (240) that it operated. An estimated total of 94,608m³ of effluent was discharged from the PKCA (cell B/C).

Mr. Uyarrai indicated that effluent from the tank farm and day tank berm was added to the PKCA (cell A) following the sampling in June. This effluent was not filtered through the Oztek filtration unit. I have in past years requested that this effluent be treated prior to discharge as we know that the Phase 2 berm was contaminated with hydraulic oil in 2012; it continues to hold approximately 60 barrels of hydraulic-oil-contaminated soil and water, many of which have overturned into the berm; and I have noted a sheen on the water during past inspections. Mr. Yetman provided the sampling results demonstrating that effluent met discharge criteria, and has indicated that the pumping method utilized minimizes disturbance of the contaminated substrate and avoids any free product floating on the surface.

CSP is requested to ensure that notification is provided to the inspector prior to any future discharges and any changes in protocols, until such time as CSP will be guided by more specific water licence criteria for this work.

Risks to persons, property or the environment:

No new risks were identified. CSP is doing what is possible to reduce the existing risks. Warning signage has been posted at site where dangers are present. No third-party access has been authorized; airlines have been notified that the site is not to be accessed. Facilities are being monitored, and discharged where necessary to prevent failure of works. CSP has fully assessed the site and is in the process of applying for the necessary permits to conduct long-term site stabilization.

Regards,

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