June 2, 2015

Ryan Fequet
Executive Director
Wekeezhii Land and Water Board
#1-4905 48th Street
Yellowknife, NT
X1A 3S3

Dear Mr. Fequet,

Re: Diavik Diamond Mines (2012) Inc. (DDMI)
Water Licence Renewal (W2015L2-0001)
Undertakings from the Public Hearing
Response to Undertaking #3

In the Public Hearings for the Diavik Water Licence renewal, The Government of the Northwest Territories (GNWT) was assigned to respond to Undertaking #3. GNWT responses are bellow.

**Undertaking #3**

i. Did the GNWT participate in any review process or provide advice to the Land and Water Board during the development of the *Guidelines for Developing a Waste Management Plan*?

**Comments:**

Yes ENR was involved in 2009 and 2010 when they were being developed.

ii. Did the GNWT recommend at that time that ash and scrubber monitoring be required?

**Comments:**

Incinerator ash or residue was identified as a hazardous or potentially hazardous waste. The *Guidelines for Developing a Waste Management Plan* referred back to the ENR’s Guideline for the General Management of Hazardous Waste in the NWT and, Guideline for Industrial Waste Discharges in the NWT which outline the requirements for testing and various criteria of hazardous wastes.
iii. The GNWT provided responses in IR#1 and IR#2 and these are specifically ENR’s responses of April 9th related to standards and guidelines for incinerator ash and incinerator scrubber water testing. Was this information provided to the Land and Water Boards’ when they were developing the Waste Management Guidelines?

Comments:

The information in the April 9, 2015 IR response was not provided at the time the Land and Water Boards were developing the “Guidelines for Developing a Waste Management Plan” in 2009/2010. The Guidelines for Developing a Waste Management Plan were not scoped to contain numerical criteria.

iv. In the GNWT’s response to IR#2, the GNWT indicated a table of leachate thresholds that are recommended that the WLWB use as acceptance criteria for ash and scrubber water. What is the basis for each of the values in the table, how were they determined, and how were volumes or mass of material and disposal locations factored into these values?

Comments:

These parameters were selected as potential contaminants in incinerator ash. The criteria for dioxins and furans are referenced in BC’s Hazardous Waste Regulation after a jurisdictional scan.

The numerical leachate criteria for selected metals are chemical substances that are regulated as leachable waste across various jurisdictions in Canada the criteria based on:

➤ Health Canada’s Drinking Water Guidelines
➤ CCME Contaminant Hazard Rankings

The basic thresholds for classifying a substance as non-hazardous waste based on quantity is typically 5kg/L per month, or at any one time. The small quantity threshold for certain substances that may be acutely/severely toxic are often lower or as the case may be higher for substances that have lower environmental risk. Numerical criteria set in guidelines are applied in a wide variety of waste management scenario’s in the NWT and throughout Canada and the cumulative impact of all waste management decisions in numerous settings (volume/disposal location) are factored into establishing numerical criteria. The numerical criteria provided are not developed for site specific circumstances.

Comments and recommendations were provided by ENR technical experts in the Water Resources Division, the Environment Division, the Conservation, Assessment and Monitoring Division and the North Slave Region and were coordinated and collated by the Environmental Impact Assessment Section, Conservation, Assessment and Monitoring Division (CAM).
If you have any questions or concerns, contact Patrick Clancy at 920-6118 or patrick_clancy@gov.nt.ca

Sincerely,

Patrick Clancy
Environmental Regulatory Analyst
Environmental Impact Assessment Section
Conservation, Assessment and Monitoring Division
Department of Environment and Natural Resources
Government of the Northwest Territories