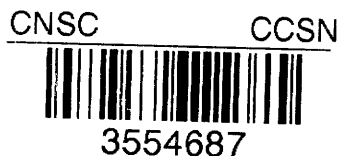




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May 27, 2010

CAMECO CORPORATION

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REFERRED TO RÉFÉRÉ À	Kostova M.

Dear Ms. Kostova:

CNSC 12(2) Action Items

Further to our letter dated March 26, 2010 regarding the Port Granby Waste Management Facility, I am pleased to report on the action items referenced in this document.

Appended to this letter is information pertaining to the following actions assigned by the CNSC to Cameco:

- *By the end of May 2010, develop and submit to the CNSC an action plan addressing the feasibility of extending the discharge pipeline from the end point of discharge into Lake Ontario.*
- *By the end of May 2010, assess the accumulation of precipitate in treatment lagoons and if needed to relocate the precipitate to ensure the material remains submerged.*

As indicated in the March 26, 2010 letter, Cameco will provide additional information on the East and West gorge reservoirs by the end of June, 2010.

Should you have any questions pertaining to this information please do not hesitate to contact me.

Yours truly,

Thomas P. Smith
Senior Environmental Specialist

SCANNED

MAY 31 2010

Port Granby Waste Management Facility Treated Effluent Pipeline

The feasibility of having treated effluent from the treatment lagoon discharged sub-aqueous in Lake Ontario has been assessed.

Cameco plans to install a new 10" diameter discharge line from south of the treatment lagoon into Lake Ontario. The discharge pipe will extend approximately 140 m into Lake Ontario and will be equipped with a diffuser at the end of the pipe. The new line will likely be installed using Horizontal Directional Drilling (HDD).

Draft drawings of the proposed pipeline installation are attached. Dispersion modeling for the proposed outfall is in progress and will be forwarded upon completion. To determine the design basis for the new pipeline, three sources of inflow were reviewed. The three sources included surface runoff, subsurface flow and treated effluent. All three flows were combined into one buried pipeline.

The new system is designed to handle a total gravity flow rate between 18.6 m³/hr and 582 m³/hr. The flow rates were developed using current and future plant capacity, traditional sub-aqueous flows and potential storm runoff. For the storm runoff flow rates, a 3.36"/hr event over 17 minutes was used, representing a 10 year storm surge. Data was obtained from Ganaraska Region Conservation Authority (GRCA). The low end of the total flow range was determined from the existing treatment facility operation only, with no additional flows from the surface or subsurface sources (dry periods). The high end of the flow rates were calculated by using a combined flow from treated effluent, surface runoff and subsurface flow (wet periods).

The codes and standards utilized for this project are as follows:

HDPE Pipe and Fittings – ASTM 3350-PE3408, AWWA 901/906, CSA;
Galvanized Piping – ASTM A53 or A106 grade A/B;
Burial Requirements – OPSD 514, 701, 1842, 802.010;
Ditch Inlet – OPSD 705.040; and
Horizontal Directional Drilling – PPI HDD CH12, ASTM F1962, ASCE MP 108.

The buried piping material chosen for the new pipeline was High Density Polyethylene (HDPE). HDPE with its fused joints provides a long lasting, leak free system. A size of 10" DR17 was selected as the main discharge pipe since it is able to handle peak flows with the minimum frictional resistance.

The concrete metering chamber was designed to house the new flow metering piping and was designed to allow full access for maintenance and for sampling. A vent was included to release trapped air and a drain was provided for effluent sampling. The chamber will be completely buried.

A single 6" diameter duck billed outfall was selected, as it is able to handle both the low and high flow rates of the pipeline. A transition from 10" piping to the 6" diffuser will be used for

the outfall. This rubber outfall has the ability to open and close and is designed to prevent clogging and maximize diffusion.

Upon receiving concurrence with our assessment from the CNSC, Cameco will engage other stakeholders with respect to this project. The stakeholders will include the Fisheries and Oceans Canada, Transport Canada, Ministry of the Environment, Ministry of Natural Resources, GRCA, and Municipality of Clarington. Assuming timely concurrence is obtained, this project should commence in August/September of this year. It is estimated that the project will take three weeks to complete.

Port Granby Waste Management Facility Treatment Lagoon Precipitate Accumulation

The water level in the treatment lagoon was increased in 2008 by adding additional stop logs in the discharge catch basin located at the south end of the lagoon. This effectively increased the operating capacity of the treatment lagoon by 1,800 m³. This in combination with the installation of two silt curtains in the lagoon has resulted in a more effective management of the precipitates stored in this lagoon. With the installation of the silt curtains, the treatment lagoon has been divided into three cells. Cell one represents the northern portion of the lagoon, cell two represents the centre area and cell three represents the southern portion of the lagoon. With the installation of the silt curtains, virtually all of the precipitate generated since the fall of 2008 and the majority the historically accumulated precipitates from the treatment system reside within cell one.

The current water retention time in the Treatment Lagoon is estimated at 9 days, assuming continuous flow from the Treatment Plant at the peak rate of 215 L/min. This retention time in combination with the silt curtains that were installed in 2008 are preventing the migration of suspended precipitate to the lagoon outlet pipe. Based on the annual average precipitate deposition rate of 70 m³ per year, it is concluded that there is ample storage space until the decommissioning of the facility.

Cameco is actively managing the accumulated precipitate in the north east corner of the lagoon in cell one by directing this precipitate towards the north-west corner or central area of the cell twice annually where there is sufficient depth of water column to keep the relocated material submerged.

Cameco will continue to monitor the treatment lagoon precipitate accumulation closely and if additional action is required, alternative management techniques of the treatment lagoon will be considered.