

Real Time Water Quality Monthly Report for Voisey's Bay Nickel Company Ltd. July 2003

- Real time water quality monitoring stations were calibrated and installed at the following locations on July 16th and 17th:
 - > Camp Pond Brook below Camp Pond (03NE002)
 - > Reid Brook at Outlet of Reid Pond (03NE001)
 - > Lower Reid Brook below Tributary (03NE011)
- Quality Assurance/Quality Control (QA/QC) measurements were taken using the Minisonde at the time of installation to ensure the readings produced by the three Datasondes were accurate.
- Digital photographs and GPS coordinates were also taken at each location.
- The three Datasondes began to successfully transmit water quality data.
- There was a problem encountered with a Datasonde at one location (Reid Brook at Outlet of Reid Pond) whereby the turbidity sensor was not working properly; this probe is being sent back to Edmonton for repair work in August.
- There was a problem with the transmission of data from one location (Lower Reid Brook below Tributary) whereby only parts of the collected data was transmitting properly; Environment Canada has been informed of this issue and will correct it when they travel to Voisey's Bay in the fall.
- A webpage has been developed that displays the water quality data collected at the real time stations; this webpage will be made public when the initial phase of development and testing is complete.
- Through the webpage, it was determined that turbidity levels rose significantly at the Camp Pond Brook site in the early morning of July 20th (see graph below); this rise in turbidity levels corresponded to significant rainfall amounts over that particular weekend; at the same time, the Environmental Officer on-site (Perry Blanchard) received a report from workers on-site that the water in Camp Pond Brook was very turbid; the turbidity levels rose sharply and dropped back to background levels within a 4 hour time frame.



• On July 30th and 31st, the turbidity levels on Lower Reid Brook below Tributary also rose at the same time on two consecutive evenings (see graph below); there were no similar spikes recorded at the two other water quality stations; after speaking with the Environmental Officers on-site (Perry and Lela), a cause for this event cannot be determined at this time.



- The rise in turbidity levels were the only significant events that occurred in the month of July; all other parameters remained very constant at expected background levels.
- The Water Resources Management Division staff analyses the real-time webpage on a daily basis; Voisey's Bay Nickel Company Ltd. will continue to be informed of any significant water quality events in the future.

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