



# Water quality study underway at Nechalacho

Cody Drygeese, the environmental officer for Cheetah Resources, tests a water sample at the mine's water settling pond. Photo courtesy of billbradenphoto/Cheetah Resources

## Federal government funds three-year analysis at rare earth mine site

By Jonathan Gardiner  
Northern News Services

A three-year study of the water quality at the Nechalacho rare earth mine is underway, thanks to federal funding from the Natural Sciences and Engineering Research Council of Canada.

The study, which began this past summer, helps define a comprehensive understanding of the potential effects of rare earth residue in aquatic ecosystems specifically related to the Nechalacho site. It will also help the mine and its regulators to set the appropriate levels of treatment before any site waters are discharged.

The initiative is valued at \$265,000 annually.

The study's focus is on ground and melt water that collects in an excavation pit named North T.

Water from the pit is pumped into a lined settling pond and analyzed before being released back into the environment.

The study is led by biology professor Jim

McGeer of Wilfrid Laurier University, who's been studying the toxicology of metals for 27 years, and has been focusing on rare earths for a decade.

McGeer emphasized the importance of getting hands-on results.

"As Canada's only rare earth mine, it is the only field location in Canada where real-life data can be collected," he stated. "This data will ensure that decisions are made based on local conditions and not lab-derived estimates."

For the study, he has been working with colleagues from Laurier, the Université de Montréal, University of Guelph as well as the Institut national de la recherche scientifique and CANMETMining.

David Connelly, vice-president of strategy and corporate affairs for Cheetah Resources Corp. and parent company Vital Metals, said he's open to the research.

"We are committed to being a responsibly-sourced supplier of rare earth product, and this will help everyone build confidence

that the environment is being protected," he said. "We welcome this kind of academic and scientific research at Nechalacho."

Cheetah Resources will be providing local air transportation, accommodation at the mine

and logistical support for the field studies at the site.

The mine, 110 kilometres southeast of Yellowknife, went into production in summer 2021.



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Professor Jim McGeer of Wilfrid Laurier University is joined by a team from the GNWT departments of Lands and Environment and Natural Resources at the Nechalacho Rare Earth Mine in August. McGeer is overseeing a three-year water quality study at the site. Photo courtesy of Cody Drygeese/Cheetah Resources