



# AER Update on Imperial Kearn: February 15 – 22, 2024

Hello everyone,

I hope you enjoyed a wonderful Family Day weekend.

Please find the latest information regarding our continued management of Imperial Kearn under the terms of the environmental protection order.

The AER conducted an inspection at Kearn on February 21 after we were notified by Imperial through Alberta EDGE (Environmental & Dangerous Goods Emergencies line) that high total suspended solids (TSS) (i.e., sediment mixed with ice and water) was observed in a trench near Polishing Pond 6. The trench and Polishing Pond 6 are located on the Kearn lease site.

It is important to note that a polishing pond is not a tailings pond. Polishing ponds include drainage from the surrounding landscape and accept water from muskeg drainage, overburden dewatering, overburden, and reclamation material storage areas or any areas not yet disturbed by mining and discharges to the environment. In this case, Polishing Pond 6 collects and discharges run off water and releases this water to the Muskeg River using trenches and diversion channels in accordance with AER requirements.

The high TSS is believed to be caused by erosion on a trench between Polishing Pond 6 and a channel before the Muskeg River. The cause of the erosion is believed to be due to change in elevation, and/or the early winter earthworks, associated with the removal of a damaged culvert from the previous year. The discharge was stopped by Imperial and all pumps in the area were turned off. Imperial noted to the AER that no high TSS was observed at a sampling location or at the Muskeg River.

Imperial took water samples on February 20 at a location upstream of a diversion channel (before the Muskeg River) and the results are expected February 23. The AER is awaiting the lab results from sampling to determine compliance and will communicate results as soon as possible.

The incident is not linked with the ongoing EPO.

If you have any questions, please don't hesitate to reach out.

[https://albertaenergyregulator.sharepoint.com/:p:/r/sites/REPEngagementandCommunication/\\_layouts/15/Doc.aspx?sourcedoc=%7B66AE41C9-2259-4DF1-8787-564D51A71E3B%7D&file=February%2026%2C%202024%20\(12%20AM%20-%203%20PM\)%20-%20AER%20Listening%20Report%20.pptx&action=edit&mobileredirect=true](https://albertaenergyregulator.sharepoint.com/:p:/r/sites/REPEngagementandCommunication/_layouts/15/Doc.aspx?sourcedoc=%7B66AE41C9-2259-4DF1-8787-564D51A71E3B%7D&file=February%2026%2C%202024%20(12%20AM%20-%203%20PM)%20-%20AER%20Listening%20Report%20.pptx&action=edit&mobileredirect=true)

## AER Highlights

- NODA, WETA, DP4, and WB3 areas were inspected by the AER on February 21
- The AER's next site inspection is planned for February 27
- AER SMEs are reviewing the following documents:
  - Groundwater Delineation – drilling program
  - Update to the Source Control and Containment Plan
  - Conceptual Site Model Interim Report- soil and groundwater reviewed and supplemental information requests (SIRs) were sent to Imperial on February 15

## North Overburden Disposal Area (NODA)

- Completed de-icing on south closed drain ditch
- An additional NODA Berm will be constructed when weather warms
- Continued monitoring of ice sheet on trench

#### West External Tailings Area (WETA)

- An additional WETA berm will be constructed when weather warms
- WETA sump pump was replaced; water levels were managed by temporary diesel pump during the maintenance window

#### Drainage Pond 4 (DP4)

- A small section of fence along DP4 was temporarily removed to accommodate a drilling pad in order to drill a new monitoring well under the EPO
- Temporary fencing was installed

#### Water Body 3 (WB3)

- System 2 routine maintenance was completed on February 10
- All well vacuum systems near WB3 remain operational

#### 2023-24 Winter Drilling Programs

- There are currently 244 locations planned as part of the EPO winter drilling scope
- To-date, 143 of the planned 213 EPO monitoring wells have been completed, and 4 of 31 planned External Tailings Area (ETA-SIS Seepage Interception System pumping wells) have been completed

#### Monitoring & Sampling

- Seep location checks are ongoing
- Inspections and sampling of seeps with water present is ongoing

#### Fish and Wildlife

- One deceased minnow was found during surface water sampling at the WB3 fish fence on February 19