



Kearl EPO Update #4 – March 8, 2023

Imperial is committed to complying with an environmental protection order that was issued by the Alberta Energy Regulator (AER) related to industrial wastewater at our Kearl oil sands operating site. We regret these incidents and are making every effort to learn from it and apply preventative measures.

Imperial will provide regular updates to communities and potentially affected stakeholders. Updates will be posted to Imperial's website weekly and notifications will be sent via e-mail.

There are two separate incidents included in the order issued on Feb. 6. We are working with the regulator on next steps for both.

On March 6, Imperial provided an update to communities that work to clean up overflow released from the drainage pond on January 31, 2023, has made significant progress both on and in close proximity to the Kearl operations lease. All impacted surface ice and snow in the area has now been removed and safely disposed.

Based on our monitoring, released fluids did not enter any waterways and there have been no impacts to local drinking water sources. There is no indication of impact to wildlife. Imperial will continue to work closely with the Alberta Energy Regulator to certify the cleanup.

Imperial plans to invite community leaders to visit the site and will continue to be responsive in addressing questions and concerns from local Indigenous communities and municipalities in the area.

Imperial is continuing to address a separate issue related to seepage in close proximity to the Kearl lease. The seepage is primarily natural groundwater and precipitation, with a small amount of industrial wastewater. Extensive and ongoing water monitoring has confirmed that seepage has not entered local waterways. As such, there have been no impacts to local drinking water sources. There is no indication of impact to wildlife.

We recognize that we have fallen short of communities' expectations for transparency and communication. We notified communities at the time of initial discovery of the surface water and it was always our intent to share our findings when we had more definitively determined the cause and planned actions. We are taking the necessary steps to improve our communications so this does not happen again in the future.

In compliance with regulations, the Kearl facility has an advanced seepage interception system for its tailings area, which is a customary design feature for operations such as Kearl. Based on the ongoing investigation conducted in full cooperation with the AER, we have determined that the seepage occurred in shallower ground layers not protected by the system.

Imperial is undertaking several immediate actions to rectify this issue.

These actions include:

- Ongoing extensive monitoring of local waterways;
- Drilling work which is underway to install additional monitoring and collection wells to expand the site's existing seepage interception system to better protect against seepage events at all levels;
- Construction of additional drainage collection structures;
- Adding additional surface pumps to ensure water is returned to collection areas.

Updates

Regulatory submissions

Imperial has submitted the documents required for the February 28 submission deadline. These documents include the Sampling and Monitoring Plan, Source Control and Containment Plan and the Remedial Action Plan. Imperial received supplemental information requests from the AER on March 6 and responses are to be returned to the AER March 13.

Cleanup from overflow

All impacted surface ice and snow in the area has now been removed and safely disposed. Sampling is underway to verify the removal of impacted material. Imperial will continue to work closely with the Alberta Energy Regulator to certify the cleanup.

Wildlife

Wildlife monitoring continues around the Kearl site and no impacted wildlife have been identified to date. Impacted areas north of the lease had wildlife sweep work conducted in fall and winter 2022/23. No wildlife den features were identified in these areas.

Plans to install wildlife fencing in seep areas are underway.

Monitoring to date at one on-lease waterbody indicates there has been no change in baseline conditions. As a precaution, we plan to collect and relocate the fish from this waterbody and install a fish barrier to prevent migration. We anticipate that fish collected will be mostly minnows.

Source containment work

Imperial is working on plans to implement additional monitoring and control measures, including water catchment features, and additional monitoring and pumping wells at different depths.

Drilling program progress is on track for completion as planned:

Deep monitoring wells: 54 of 72 have been drilled
Shallow monitoring wells: 15 of 43 have been drilled
Pumping wells: 17 of 17 have been drilled

The planned number of wells may change due to geological conditions encountered in the field and available access for drilling equipment.

Trench construction has begun at both the North Overburden Disposal Area and Drainage Pond locations.

We have started work to build drain structures in the area, which will collect water that can be pumped back to closed-loop collection areas. Additional surface pumps will be installed in key areas in the spring.

Ongoing monitoring and sampling programs, as well as risk assessments, will help inform plans for additional actions that may be implemented in the future.