

Accidents and Malfunctions Plan Annual Update: 2025

Site C Clean Energy Project

March 31, 2026

Introduction

The purpose of this report is to provide an annual update on BC Hydro's Accidents and Malfunctions Plan covering the period of January 1st to December 31st, 2025. This report is being submitted in accordance with Condition 2.6 of the Site C Project Clean Energy Project's Decision Statement, issued to BC Hydro on November 25, 2014. Condition 2.6 states:

“The Proponent shall implement the plan and provide to the Agency a review and summary of the implementation of the plan as well as any updates required to the plan on an annual basis commencing with construction. In the event of an occurrence of an accident or malfunction, the Proponent shall update the plan to incorporate new procedures and measures to avoid a reoccurrence, as necessary.”

In accordance with Decision Statement 2, the Accidents and Malfunctions Plan was developed by BC Hydro, in consultation with Environment Canada and the Environmental Assessment Agency, to prevent accidents and malfunctions and outline procedures in the case of occurrence of an accident or malfunction.

The draft Plan covering the construction period of the Site C Project was submitted to the CEA Agency (now the Impact Assessment Agency of Canada, or IAAC) and Environment Canada (now Environment and Climate Change Canada, or ECCC) on October 17, 2014. The final Plan was submitted on June 5, 2015 and is available at: https://www.sitecproject.com/sites/default/files/Accidents_and_Malfunctions_Plan.pdf

The draft Plan covering the operations period of the Site C Project was submitted to IAAC and ECCC on August 18, 2023. The final Plan was submitted on July 26, 2024, and is available at: https://www.sitecproject.com/sites/default/files/Accidents-and-Malfunctions-Plan-Operations_0.pdf

This report is the first to be submitted under the Operations Accidents and Malfunctions Plan.

Background

Construction began at the Site C Project (the “Project”) on July 27, 2015, and is nearing completion. Reservoir filling began in August 2024 and was completed in November 2024. The project officially transitioned from the Construction phase to the Operations phase when the first generating unit came into service on October 28, 2024. The remaining units were safely brought into operation following the successful completion of required testing and commissioning processes. The sixth and final generating unit came into service on August 8, 2025, approximately three months ahead of the approved schedule, bringing the Project into full operation. The reservoir level continues to be maintained in its normal operating range between 460.0 to 461.8 metres elevation above sea level.

With Site C now fully operational, the remaining construction activities include tunnel backfilling and concrete plug installation, completion of outstanding work in the right bank drainage tunnel and left bank drainage adit, tailrace riverbed excavation, construction of permanent site roads, completion of the Cultural Centre, final spillway gate commissioning, and final site reclamation.

Key activities during 2025 included:

- Continued performance of damsite structures, including the earthfill dam, roller-compacted concrete buttresses, powerhouse, spillways, approach channel, and the dam abutments.
- Substantial completion of “balance of plant” installation work. The mechanical contractor completed final work on the Unit 1 to 6 common mechanical systems and is transferring completed work to BC Hydro. Remaining tasks include handover of the cranes to BC Hydro Operations, and testing and commissioning the hydronic heat system. The electrical contractor completed all heavy electrical scopes, including station service and the isolated-phase bus connecting Unit 1 to 6 to the main step-up transformers. The remaining focus for “balance of plant” activities is deficiency rectification and document review to complete the contracts.
- Commissioning the permanent upstream fishway, which operated from April 7 to October 31. An equipment failure on May 31 required shutdown of the facility and implementation of contingent of contingent fish capture and transport measures, including weekly boat electroshocking surveys to capture target species downstream and release them upstream. In 2025, BC Hydro passed 12,306 fish through the fish passage facility and contingency program.
- Completion of fish habitat enhancements in the Peace River downstream of the dam, as part of a broader program to reduce fish stranding risks from flow fluctuations of the Peace River by deepening the channel, expanding permanently wetted areas and improving overall habitat quality. In-river excavation was completed at Midstream Island in 2025 and remaining work on the 106.5 Main Channel Bar is scheduled for completion in 2026.
- Completion of final commissioning of permanent power and controls for the six intake gates and the three spillway operating gates.
- Completion of bedrock foundation stabilization work for the dam, powerhouse, and spillways.
- Ongoing decommissioning of the temporary diversion tunnels, including backfilling with granular material, construction of a concrete plug in each tunnel upstream of mid-point, and placement of granular fill over the downstream portal. Grouting began in July, concrete plug installation was completed in December 2025, and final backfill on tunnels, portal structure, and sediment pond construction will follow in spring and summer 2026.

- Energization of additional transmission lines, with the second transmission line between the powerhouse and Site C substation energized in January, and the third and final line energized in May.
- Continued operation and maintenance of the right bank drainage tunnel and left bank drainage adit. Structural enhancement began in summer 2025. Production bolting and meshing are underway in the left bank drainage adit. All structural work in both the left bank adit and right bank tunnel is scheduled for completion in summer 2026, followed by installation of permanent portal structures and electrical and mechanical equipment.
- Commencement of road construction for the earthfill dam roads and the section between the viewpoint and guardhouse. Site completion and road work, including final outdoor security installations, are anticipated to begin in 2026.
- Completion of final planting at Portage Mountain Quarry and the Area E Gravel Pit and Laydown area in spring of 2025. Reclamation activities at the dam site continue, with physical reclamation of Central Area A complete and final planting scheduled for spring 2026.
- Ongoing repair work for minor deficiencies along Highway 29, including small, non-structural, bridge deck cracking, damaged BC Hydro and Telus conduits, and construction of emergency turnarounds.
- Completion of the DA Thomas Road upgrades and Recreation Site construction, upgrades to the Peace River Valley Viewpoint, Halfway River Boat Launch construction, Lynx Creek Boat Launch Construction.

2025 Accidents and Malfunctions

BC Hydro reported 280 environmental incidents within the internal BC Hydro incident management system (IMS) from January 1st to December 31st, 2025. The incident type summary for all reported environmental issues is as follows:

- 258 Spill/Pollution
- 5 Fish/Water
- 2 Land/Vegetation
- 15 Bird/Wildlife
- 0 Archeological

The vast majority of incidents on the Site C Project in 2025 were related to small volume spills of less than 5 litres. In these incidents, workers deployed spill response measures and contaminated soil was disposed of appropriately.

Reporting

Through its Fish Hydro Management Committee (FHMC), which has representation of Fisheries and Oceans Canada (DFO) and the Province of B.C., BC Hydro has established an agency notification protocol that defines the nature of an accident/incident, its level/severity, who to notify and how (i.e., by phone, website, or e-mail). Although ECCC is not represented at FHMC, DFO did ensure that any notifications to them related to a deleterious substance spill to water would be conveyed to ECCC upon receipt of an applicable notification. This notification procedure was agreed upon by FHMC on July 23, 2015, within roughly one week of the start of Site C Construction. A detailed description of this notification procedure is provided in Appendix A.

Plan Updates

Section 6 of the Accidents and Malfunctions Plan requires that the Plan is updated annually. In 2025, BC Hydro did not undertake any material modifications to procedures to avoid reoccurrence of incidents. An update to the Plan was not required for 2025.

Closure

This report has been reviewed by:



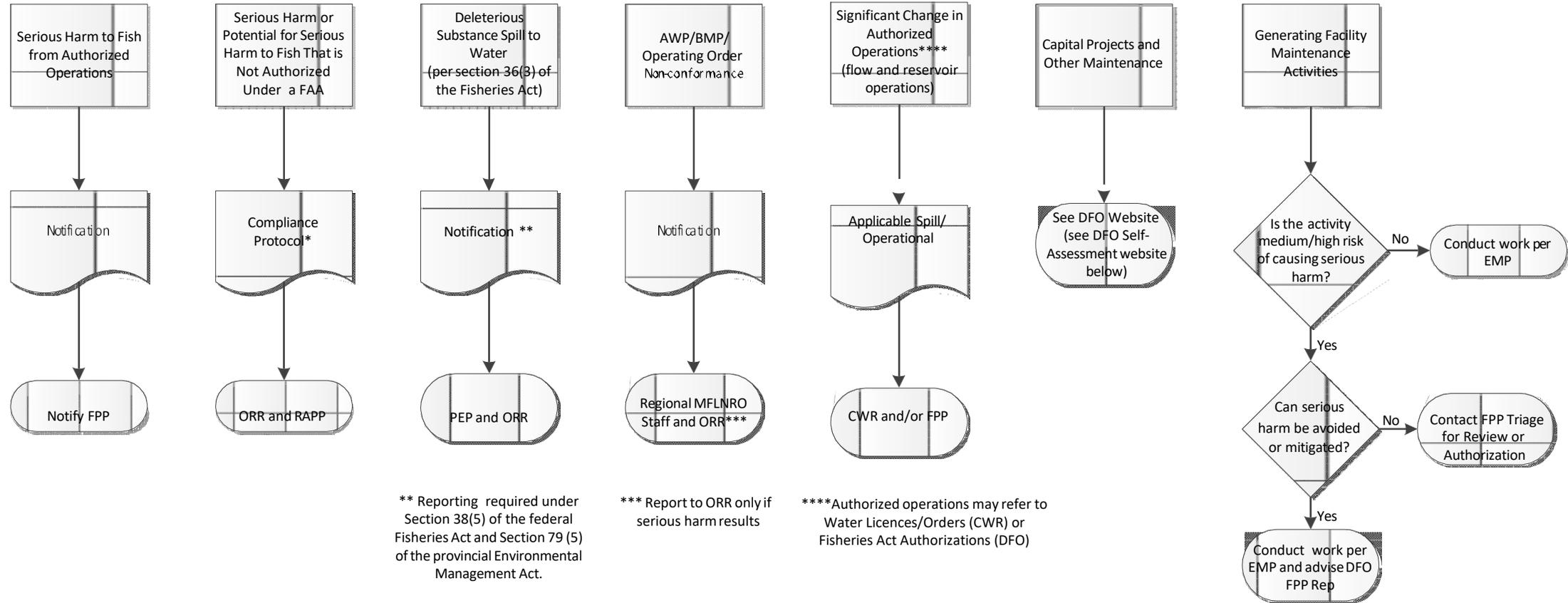
Greg Scarborough
Manager, Environmental Mitigation, Monitoring and Compliance
Site C Clean Energy Project

Attachments

Appendix A – Agency Notification Process Chart

Agency Notifications

Applicable to incidents, agreement non-compliance and generating plant maintenance. Does not include notifications in advance of projects related to request for review, permits or authorization.



Note on notification: ensure that any reports to regulatory agencies state whether the event being reported is authorized/licenced/permited or not and which regulatory requirement (e.g. serious harm, deposit of a deleterious substance, etc.) has triggered the notification.

*Compliance Protocol timelines:

(notification of Serious Harm required per Section 38(4) of the Fisheries Act)

1. Report to local contacts as soon as possible.
2. Preliminary assessment within 24 hour or such time frame as otherwise agreed.
 - depending on nature of incident, assessment may include stranding and/or salvage.
3. Within 5 days or a time frame agreed to by all parties, review of the preliminary assessment and notify location contacts as to the status of compliance with all Acts, regulations, licenses, permits and authorizations.

See full Compliance Protocol for complete process.

Types of Incidents

- Serious Harm: Stranding, entrainment, TDG, destruction of fish, habitat
- Protocols and procedures: deviation from ordered operational requirements and BMPs
- AWP Non-conformance: clearing exceedance, riparian area trespass
- Spills of Deleterious Substances to Water (administered by EC federally, MoE provincially)

Contacts:

Department of Fisheries and Oceans

Triage & Planning Unit (Authorizations & Reviews)

Telephone: Toll free 1-866-845-6776
 Email: ReferralsPacific@dfo-mpo.gc.ca
 Self-Assessment Website: <http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>

Observe, Record & Report (ORR)

Telephone: Toll free 1-800-465-4336
 Email: PACRadioRoomRHQ@pac.dfo-mpo.gc.ca

Contacts:

Province of BC

Report All Poachers and Polluters (RAPP)
 Telephone: 1-877-952-7277

Provincial Emergency Program (PEP)
 Telephone: Toll free 1-800-663-3456

DFO Fisheries Protection Program – Large Hydro Unit

Brian Naito (Large Hydro Lead and Peace)
 Telephone: 604-790-4260
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