

## **Site C Clean Energy Project**

### **Monthly Environmental Monitoring Summary Report - February 2017**

Prepared by BC Hydro

Submitted May 8, 2017

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## Glossary

Term	Definition
Compliance	When construction activities are being conducted in accordance with the Environmental Requirements of the Project.
Environmental Requirements	<p>Environmental Specifications set out in the CEMP and relevant Environmental Protection Plan (EPP).</p> <p>Conditions included in the Environmental Assessment Certificate for the Project (BCEAO 2014).</p> <p>Conditions included in the Decision Statement issued by the Minister of Environment of Canada (CEA Agency 2014).</p> <p>Permits, authorizations and approvals issued for the Project by regulatory agencies and Statutory requirements.</p>
Non-conformance	A construction activity conducted in a manner that deviates from a best management practice, compliance with which is required in the EPP for that construction activity.
Non-compliance	A construction activity conducted in a manner that deviates from a legal condition in a permit, an enactment, or a regulation, compliance with which is required in the EPP for that construction activity.
Reportable Environmental Incident	<p>An incident of non-conformance or non-compliance which:</p> <ul style="list-style-type: none"><li>• has caused or has the potential for causing an impact on the quality of air, land or water, wildlife, aquatic species, species at risk or heritage resources, and</li><li>• is reportable under a permit, an enactment, or a regulation.</li></ul>

## Introduction

The Site C Clean Energy Project (the Project) will be the third dam and generating station on the Peace River in northeast B.C. The Project will provide 1,100 megawatts of capacity and about 5,100 gigawatt hours of energy each year to the province's integrated electricity system. The Project will be a source of clean, reliable and cost-effective electricity for BC Hydro's customers for more than 100 years. The key components of the Project include:

- an earth fill dam, approximately 1,050 m long and 60 m high above the riverbed;
- an 83 km long reservoir that will be, on average, two to three times the width of the current river;
- a generating station with six 183 MW generating units;
- two new 500 kilovolt AC transmission lines that will connect the Project facilities to the Peace Canyon Substation, along an existing right-of-way;
- realignment of six segments of Highway 29 over a total distance of approximately 30 km;
- construction of a berm at Hudson's Hope; and
- construction of temporary access roads, a temporary bridge across the Peace River, and worker accommodation at the dam site.

Construction of the Project is subject to specific conditions described in various regulatory permits and approvals issued from federal and provincial authorities. Examples of federal approvals issued for the Project include authorizations under the *Fisheries Act* that enables the alteration of fish habitat and authorizations under the *Navigation Protection Act* that enables construction activities which may affect navigation in the Peace River. Examples of provincial approvals issued for the Project include Environmental Assessment Certificate (EAC) #E14-02 and its associated conditions issued under the *Environmental Assessment Act* and Conditional Water Licenses issued under the *Water Act* that permit construction of the dam and flooding of the reservoir.

In accordance with the EAC Conditions, during construction of the Project BC Hydro is required to implement measures detailed within a Construction Environmental Management Plan (CEMP) such that potential adverse environmental effects are avoided, mitigated or compensated. These measures include the requirement for construction contractors to prepare and follow activity- and site-specific Environmental Protection Plans (EPPs) which detail mitigation measures and how they will be implemented and the requirement for BC Hydro to audit contractor compliance with the Project's environmental management requirements.

Section 2.1 of the CEMP specifies that BC Hydro will prepare and distribute monthly summary reports during construction of the project that include the following information:

- Project progress;
- Permits issued by provincial and federal agencies;
- Environmental Management Plan (EMP) and EPP submissions;
- Reports submitted by contractor Environmental Monitors (EMs);
- Results of BC Hydro field inspections;
- Environmental incidents and applicable corrective action; and
- Compliance of construction activities with the Environmental Requirements.

This report serves as BC Hydro's summary report for the month of February 2017.

## **Project Progress**

During February 2017, the following construction activities were undertaken for the Project.

### **North or Left Bank**

#### Left Bank Excavation

- PAG material identified at east side of Bench 4. PAG located within bench 4 footprint has been excavated 200mm below bench 4 final grades and capped with 9b material back to final grades. Excavated PAG material is being relocated to the temporary PAG storage area on bench 5 at the east end of the excavation.
- 9b excavated material is hauled to Area 25 and L3 with CAT 745 rock trucks.

#### RSEM L3, Area 25

- PRHP removed temporary diversion CSP pipe from sta.0+200 and 0+850 running along the south side within L3.
- Work has resumed on the Area 25 sediment pond. Crew installing geo textile and 3e material. 3e material being placed in 300mm lifts and compacted.
- Continued placing 9b fill material hauled from Left Bank excavation at Area 25. Fill material being placed at south east corner of fill area footprint.

#### RSEM L5 and Garbage Creek

- 1 X CAT D8 pushing material at tension crack down towards River Road. Material to be used to construct pad to extend HDPE Diversion pipe into Peace River.
- Foundex drill rig onsite to drill holes for instrumentation.
- Water management pumps continue to be utilized at Garbage Creek.

### **South or Right Bank**

#### Area 20 & 21

- Wash plant operational; waste material from wash plant discharged into infiltration sump located west of the wash plant.

#### Area A

- Continued hauling Zone 3 from the transmission line excavation; material being hauled to SBIAR, MRCB causeway, and other areas as required.
- Topsoil stripping at the Transmission ROW.
- Enviromulch mulching large course woody debris.

#### Approach Channel

- Continued excavating for Approach Channel and hauling overburden material to RSEM.
- Erosion and sediment control measures implemented.

#### Cofferdam

- Continued development of guide walls and slurry trial panels.
- Continued injections of grout curtains.

#### Drainage Tunnel

- Tunnel excavation was initiated.

#### Moberly River Construction Bridge

- Completed ephemeral channel culvert installation.
- Construction continues on the west causeway.

#### Roller Compacted Concrete (RCC) Buttress Trial

- Trials continue.

#### RSEM 5a

- Repair to LDPE liner completed.
- Zone 8 material sourced from within the RSEM R5a footprint was placed and compacted for the non-contact water ditch.
- PAG material from Approach Channel being placed in footprint.
- Riprap was hauled from Wuthrich Quarry during the previous reporting period and is stockpiled at the west end of RSEM R5a for erosion protection of the non-contact water ditch.
- Logging operations continue beyond R5a.

#### RSEM 5b

- Water quality from sediment ponds meet releasable guidelines to discharge to the environment. Water discharged into Peace River.
- Snow continues to be placed in the sediment pond footprint.

## RSEM R6

- Construction of the outlet system at from the sediment pond continues.
- Zone 3 and Zone 8 surplus material was hauled from R6 to the SBIAR.

## South Bank Initial Access Road (SBIAR)

- Excavation from the top of the bench continued and the excavated PAG material was transported to R5a.

## **Offsite**

### Wuthrich Quarry

- Ongoing ditch maintenance and water control.

### West Pine Quarry

- Blasting activity is restricted from January 1 to March 30, 2017 due to the caribou winter habitat range.

### Transmission Line

- Road upgrades on Trapper Main Road and Medicine Woman Road.
- Vegetation clearing on the right-of-way.
- Geotechnical investigations on the right-of-way.

### Highway 29 realignment

- Clearing and grubbing of Peace View pit area.
- DWB continued environmental monitoring.

## **Permits Issued by Federal and Provincial Agencies**

Table 1 provides a summary of relevant federal and provincial permits issued for the Project.

**Table 1. Relevant Federal and Provincial Permits Issued for the Project.**

Act	Permit	Permit Duration
<b>ALL PROJECT SITES</b>		
<i>Fisheries Act</i>	Authorization for Site Preparation Activities	Sep 30, 2015 – Jun 30, 2017
<i>Fisheries Act</i>	Authorization Paragraph 35(2)(B) - Revised	Aug 22, 2016 - Dec 31, 2026
<i>Fisheries Act</i>	Authorization Paragraph 35(2)(B)	Jul 27, 2016 - Dec 31, 2026
<i>Navigation Protection Act</i>	Authorization for Site Preparation Activities (13 components)	Sep 30, 2015 – Dec 31, 2023

<b>Act</b>	<b>Permit</b>	<b>Permit Duration</b>
<i>Navigation Protection Act</i>	Moberly River Debris Boom-Peace River	Jul 27, 2016 – Dec 31, 2023
<i>Navigation Protection Act</i>	Right Bank Drainage Tunnel - Access Ramp-Peace River	Feb 2, 2016 - N/A
<i>Navigation Protection Act</i>	Dam, Spillway, Cofferdam, Diversion Tunnels, Generating Station, and Upstream Safety Boom	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Bridge Moberly River at Confluence Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Fish Habitat Compensation Structure RSEM L5 Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Fill RSEM R5A-Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Fill RSEM R6-Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Debris Boom Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Fill RSEM L6 Peace River	Jul 27, 2016 - N/A
<i>Navigation Protection Act</i>	Right Bank Log Boom for Water Intake	Feb 27, 2017 - N/A
<i>Heritage Conservation Act</i>	S.12 Alteration Permit	Jul 15, 2015 – Dec 31, 2023
<i>Heritage Conservation Act</i>	S.14 Inspection Permit	Jul 15, 2015 – Dec 31, 2023
<i>Land Act</i>	Licence of Occupation (Dam Site Area) – General Industrial	Jul 7, 2015 – Jul 7, 2017
<i>Land Act</i>	Licence of Occupation for Public Safety Booms	Jul 7, 2015 – Jul 7, 2017
<i>Land Act</i>	Limited Licence of Occupation- Clearing	Jul 7, 2015 – Jul 7, 2017
<i>Land Act</i>	Licence of Occupation for Reservoir Slope Geotechnical Monitoring	Aug 25, 2016- Aug 25, 2026
<i>Land Act</i>	Limited Licence of Occupation for Halfway River Debris Boom (anchors and footprint)	Aug 25, 2016- Aug 25, 2018
<i>Agricultural Land Act</i>	Temporary and permanent removal of agricultural lands from the ALR	April 8, 2015 – Dec 31, 2024
<i>Water Act</i>	S.8 Short Term Use – Dam Site #1 (dust control, fire protection & truck washing)	Jul 7, 2015 – Jul 6, 2017
<i>Water Act</i>	S.8 Short Term Use – Dam Site #2 (work camps and processing)	Jul 7, 2015 – Jul 6, 2017
<i>Water Act</i>	Conditional Water License 132990 and 132991, and PCL (Permit over Crown Land) 28283	Feb 26, 2016 – Feb 26, 2056
<i>Water Act</i>	S.10 Short Term Use – Work Camp Water Supply	July 27, 2016- July 26, 2018
<i>Water Sustainability Act</i>	S.10 Short Term Use – Moberly River Ice Crossings	Dec 8, 2016 – April 30, 2018



<b>Act</b>	<b>Permit</b>	<b>Permit Duration</b>
<i>Wildlife Act</i>	Removal of Eagle Nests	2015 - 2022
<i>Wildlife Act</i>	Removal of Beaver Dams – Construction	2015 - 2022
<i>Wildlife Act</i>	Capture and Relocation of Wildlife - Fish Salvage and Relocation for MCW Construction	June 30, 2016- Dec 31, 2023
<i>Wildlife Act</i>	Scientific Fish Collection Permit - Fish Stranding Monitoring Program	June 30, 2016- Dec 31, 2023
<i>Wildlife Act</i>	Amphibian and Reptile Salvage - capture and relocate amphibians and reptile	June 30, 2016 – Dec 31, 2023
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 6) – Halfway River Debris Boom Anchors	Aug 25, 2016- Aug 24, 2021
<b>Highway 29 Realignment</b>		
<i>Land Act</i>	Limited Licence of Occupation – Cache Creek - Investigations - survey and geotechnical drilling	June 20, 2016 - June 20, 2018
<i>Water Sustainability Act</i>	S. 11 Approval - Cache Creek – Cache Creek – Investigations	June 20, 2016 - April 30, 2017
<i>Forest Act</i>	S.52 Authority to harvest Crown Timber – Cache Creek	June 20, 2016 - June 20, 2017
<i>Forest Act</i>	Occupant Licence to Cut 10 – Halfway River Geotechnical Investigations	Sept 8, 2016- Sept 7, 2018
<i>Land Act</i>	Limited Licence of Occupation – Halfway River Geotechnical Investigations	Sept 8, 2016- Sept 8, 2018
<i>Water Sustainability Act</i>	S. 11 Approval – Halfway River – Geotechnical Investigations	Sept 8, 2016- April 30, 2017
<b>NORTH BANK</b>		
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 4) – North Bank	Jul 7, 2015 – Jul 6, 2017
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 5) - RSEM L3 (And S.91 Forest and Range Practices Act Exemptions)	Jul 7, 2015 – Jul 6, 2020
<i>Land Act</i>	Licence of Occupation (RSEM L3 Ravine) – General Industrial	Jul 7, 2015 – Jul 7, 2025
<b>SOUTH BANK</b>		
<i>Land Act</i>	Licence of Occupation (Area A) – Aggregates and Quarry	Jul 7, 2015 – Jul 7, 2017
<i>Mines Act</i>	Mines Act Permit & Notice of Work - Area A (2016 onwards)	Jan 1, 2016 – Dec 31, 2023
<i>Water Act</i>	S.9 Approval for Septimus Road, Septimus Siding, and Laydown Area 30 (extended)	Jul 7, 2015 – Aug 15, 2017
<i>Water Act</i>	S.9 Approval for Moberly Clearing Abutment Bridge	Aug 1, 2015 – Apr 30, 2017
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 1) – South Bank (and S.91 Forest and Range Practices Act Exemptions)	Jul 7, 2015 – Jul 6, 2017
<b>DEL RIO PIT</b>		

<b>Act</b>	<b>Permit</b>	<b>Permit Duration</b>
<i>Mines Act</i>	Mines Act Permit & Notice of Work - Del Rio Pit	Mar 29, 2016 – Mar 29, 2021
<i>Land Act</i>	Licence of Occupation - Aggregates and Quarry	Mar 15, 2016 – Mar 15, 2021
<b>PORTAGE MOUNTAIN QUARRY</b>		
<i>Land Act</i>	Licence of Occupation – Portage Mountain Quarry	Feb 18, 2016 – Feb 18, 2026
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 3) - Portage Mountain Quarry	Mar 11, 2016 - Mar 10, 2021
<i>Water Act</i>	S.10 Approval - Portage Mountain Quarry	Mar 15, 2016 – Dec 31, 2017
<b>WEST PINE QUARRY</b>		
<i>Land Act</i>	Licence of Occupation - West Pine Quarry	Jul 7, 2015 – Jul 6, 2025
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 12) - West Pine Quarry	Dec 9, 2016- Dec 8, 2021
<i>Mines Act</i>	Mines Act Permit & Notice of Work – West Pine Quarry	Dec 15, 2016 - Dec 31, 2022
<i>Water Sustainability Act</i>	S. 10 Short Term Use Approval – West Pine Quarry	Dec 9, 2016- Dec 31, 2018
<b>WUTHRICH QUARRY</b>		
<i>Mines Act</i>	Mines Act Permit & Notice of Work – Wuthrich Quarry	Jul 24, 2015 - Dec 21, 2021
<b>TRANSMISSION AND DISTRIBUTION</b>		
<i>Forest Act</i>	S.52 Authority to clear – South Bank Slope for Centreline Survey	Oct 27, 2016 – Jan 27, 2017
<i>Forest Act</i>	S. 52 Authority to harvest timber - Ice Bridge 3 Road	Nov 18, 2016 - Dec, 2022
<i>Forest Act</i>	Occupant Licence to Cut – Transmission Line	Oct 21, 2016 – Oct 10, 2021
<i>Land Act</i>	Licence of Occupation – PCN Connection	Oct 21, 2016 – Oct 10, 2018
<i>Land Act</i>	Licence of Occupation – South Bank Slope	Oct 21, 2016 – Oct 10, 2026
<i>Land Act</i>	Licence of Occupation – One Time Clearing along Transmission Line	Oct 21, 2016 – Oct 10, 2018
<i>Forest Act</i>	S.52 Authority to harvest timber – Transmission Line Security Trees	Feb 24, 2017 – Oct 10, 2021
<b>RESERVOIR</b>		
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 6) - South Bank Eastern Reservoir	Dec 12, 2016 – Dec 11, 2021
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 7) - North Bank Eastern Reservoir	Dec 12, 2016 – Dec 11, 2021

Act	Permit	Permit Duration
<i>Forest Act</i>	Occupant Licence to Cut (OLTC 8) - South Bank Access Eastern Reservoir	Dec 12, 2016 – Dec 11, 2021
<i>Land Act</i>	Licence of Occupation – Eastern Reservoir	Dec 12, 2016 – Dec 11, 2018

\*does not include *Water Sustainability Act* Notifications

## Environmental Management and Protection Plan Submissions

Table 2 provides a summary of the environmental management and protection plans submitted for BC Hydro's review and approval during February 2017.

**Table 2. Environmental Management (EMP) and Protection Plans (EPP) Submitted for BC Hydro's Review and Approval During February 2017.**

Contractor	EMP or EPP	Date Received
4Evergreen	Transmission Line Access Roads Upgrade EPP Rev 5	Feb 16
4Evergreen	Transmission Line Clearing EPP Rev 3	Feb 24
ALL Peace	Security Trailer and Fencing Installation EPP Rev 0	Feb 23
ATCO	Water Intake Construction EPP Addendum Rev 01	Feb 15
MoE/DWB	Bear Flat Cache Creek Highway Re-alignment Clearing BCH Owned Land Rev 0	Feb 8
Petro west/Ecofor	L3 Ravine Remediation Works EPP Rev 0	Feb 6
Petro west/Ecofor	Blind Corner and River Road Remediation EPP Rev 0	Feb 7
Petro west/Ecofor	L3 Ravine Remediation Works EPP Rev 1	Feb 10
Petro west/Ecofor	L3 Ravine Remediation Works EPP Rev 2	Feb 21
Petro west/Ecofor	Blind Corner and River Road Remediation EPP Rev 2	Feb 22
Petro west/Ecofor	Blind Corner and River Road Remediation EPP Rev 3	Feb 27
Petro west/Ecofor	Blind Corner and River Road Remediation EPP Rev 4	Feb 28
PRHP	Right Bank Drainage Tunnel EPP Rev 6	Feb 10
PRHP	Permanent Water intake EPP Rev 0	Feb 10
PRHP	L3 Closure Channel Construction EPP Rev 1	Feb 14
PRHP	Area 23 Temporary PAG Stockpile EPP Rev 3	Feb 14
PRHP	Eagle Cap Pre-construction Rare Plant Survey EPP Rev 0	Feb 15
PRHP	RSEM R5a Fish Salvage Plan Rev 1	Feb 22
PRHP	RSEM L5 EPP Temporary PAG Management Plan Garbage Creek Rev 4	Feb 22
PRHP	Stage 1 Diversion Inlet Cofferdam	Feb 22
PRHP	Wuthrich Quarry EPP Rev 3	Feb 23
PRHP	Backfilling Historical Drill Holes EPP Rev 5	Feb 27
PRHP	Right Bank Transmission Line EPP Rev 3	Feb 27
RF Binnie	Highway 29 Halfway River Geotechnical Investigations EPP Rev 0	Feb 21
Voith Hydro	On-Site Manufacturing EPP Rev 1	Feb 6
Voith Hydro	On-Site Manufacturing EPP Rev 2	Feb 28

## Environmental Monitoring Report Submissions

Table 3 provides a summary of the contractor-prepared environmental monitoring reports submitted for BC Hydro's information during February 2017.

**Table 3. Contractor-prepared Environmental Monitoring Reports Submitted for BC Hydro's Information during February 2017.**

Contractor	Report
Peace River Hydro Partners (PRHP)	Environmental monitoring report for Feb 5-11, 2017
PRHP	Environmental monitoring report for Feb 12-18, 2017
PRHP	Environmental monitoring report for Feb 19-25, 2017
PRHP	Environmental monitoring report for Feb 26 – March 4, 2017
4 Evergreen (4EG)	Environmental monitoring Moberly Clearing and Ice Bridge Report for Feb 5-11, 2017
4EG	Environmental monitoring Moberly Clearing and Ice Bridge Report for Feb 12-18, 2017
4EG	Environmental monitoring Moberly Clearing and Ice Bridge Report for Feb 19-25, 2017
4EG	Environmental monitoring Moberly Clearing and Ice Bridge Report for Feb 26- March 4, 2017
MoTI/ DWB	Environmental monitoring Bear Flats/Cache Creek Report for Feb 7-21, 2017
MoTI/ DWB	Environmental monitoring Bear Flats/Cache Creek Report for Feb 22-28, 2017

## **Environmental Monitoring and Compliance Auditing**

The Project's CEMP specifies the roles and responsibilities of Contractors, BC Hydro, and the Independent Environmental Monitor (IEM) during construction. Contractors appoint qualified environmental professionals and environmental monitors to assist with the identification, management, resolution and reporting of environmental management issues during construction activities. BC Hydro conducts field inspection audits to evaluate contractors' compliance with the environmental requirements specified within approved regulatory permits, the CEMP and EPPs, and to determine whether implemented mitigation measures are effective and functioning as intended. The IEM also conducts field inspection audits to evaluate contractors' compliance with the Project's environmental requirements.

Environmental issues that are identified and managed during construction activities are described in reports prepared by contractors' environmental monitors, by BC Hydro's Natural Resource Specialists and by the IEM.

A non-conformance event is defined as a construction activity conducted in a manner that deviates from a best management practice, compliance with which is required in the EPP for that particular construction activity. A non-compliance event is a construction activity conducted in a manner that deviates from a legal condition in a permit, an enactment, or a regulation, compliance with which is required in the EPP.

Examples of environmental management issues reported during February 2017 are presented in Table 4. During the reporting period there were 38 recorded minor hazardous material spills.

**Table 4. Summary of Reported Environmental Management Issues During February 2017.**

Reported By	Environmental Issue	Description of Environmental Issue	Implemented or Recommended Corrective Actions	Compliance Status as of Feb 28
<b>MAIN CIVIL WORKS</b>				
IEM 1844	Erosion and Sediment Control	Erosion of slope at RSEM Area L3 diversion culvert outlet.	Repair slope erosion at the outlet and prevent further sediment mobilization.	Closed
IEM 2930 and 2940	Erosion and Sediment Control	Sediment fences surrounding the topsoil stockpile and a wetted area (south and adjacent to covered PAG stockpile) at Howe Pit are not in functional condition (CEMP 4.4, 4.5, 4.12).	Repair or replace sediment fencing surrounding topsoil stockpile to avoid sediment mobilization.	Open
IEM 2946	Land Disturbance	Approximately 400m of non-status road was cleared adjacent to Medicine Woman Road without appropriate approvals in place for this specific area.	Confirm what, if any environmental features may have been impacted by the works. Confirm that any FLNRO requirements have been addressed	Open
IEM 2999	Surface Water Management	Water originating from Garbage Creek was not contained as intended by the upstream isolation and diversion structure, which subsequently resulted in flows into an RSEM L5 starter dike cell (CEMP S. 4.14, RSEM Area L5 EPP 6.2 rev.2)	Provide water quality monitoring data includes the receiving environments outside of the RSEM L5 area. Provide update on intended mitigation measures/improvements for Garbage Creek diversion.	Closed

IEM 3005	Water Quality Management	Turbid water was pumped from the surface of the North Bank Haul Road to a rock lined ditch that connected directly to the L3 watercourse, resulting in the introduction of turbid water to the L3 watercourse (CEMP S. 4.14, RSEM Area L3 EPP 6.3 rev.3).	Inform crews on acceptable practices for releasing turbid water.	Closed
IEM 3011	Surface Water Management	Water was not adequately contained within the L3 watercourse as a result of a diversion containment breach, resulting in a potentially sediment laden discharge to the stream and Peace River (CEMP S. 4.14, RSEM Area L3 Care of Water Plan 2.3 rev.3).	Provide water quality monitoring data that includes the receiving environments.	Closed
IEM 3030	Surface Water Management	The culvert within the Garbage Creek sump (located at the downhill end of the capped PAG material) was not isolated, presenting the potential to convey water out of RSEM area L5 (CEMP Appendix E S 5.0).	Plug culvert within the Garbage Creek sump to meet low permeability standards.	Open
IEM 3049	Water Quality Management	Water quality monitoring results provided indicated water quality guidelines (CEMP Section 4.14) were exceeded within the L3 watercourse.	No further action required by the IEM.	Closed
BC Hydro	Spill Prevention and Response	100 Liter diesel release from generator from a failed fuel filter.	The spill was contained, cleaned, and disposed into an appropriate labelled container.	Closed



## Upcoming Construction Activities

The following construction activities are planned to occur during February 2017:

- Continue excavation of Left Bank.
- Complete infilling RSEM Area L3.
- Complete construction of L3 diversion channel.
- Continue curtain grouting of Right Bank Cofferdam guide walls.
- Continue drainage tunnel excavation
- Continue placing excavated material into RSEM 5a.
- Continue excavation of Approach Channel phase 1.

## Closure

Submitted by BC Hydro for the Site C Clean Energy Project.

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### Distribution List:

BC Hydro: [REDACTED]  
[REDACTED]

Independent Environmental Monitor: [REDACTED] (EDI)

Regulators: [REDACTED] (EAO), [REDACTED] (EAO), [REDACTED] (MFLNRO), [REDACTED] (MFLNRO), [REDACTED] (CEAA), [REDACTED] (CEAA)

### Aboriginal Groups:

Blueberry River First Nations

Dene Tha' First Nation

Doig River First Nation

Duncan's First Nation

Fort Nelson First Nation

Halfway River First Nation

Horse Lake First Nation

Kelly Lake Métis Settlement Society

McLeod Lake Indian Band

Métis Nation BC

Prophet River First Nation

Saulteau First Nations

West Moberly First Nation