



Upper Lillooet Hydro Project

Weekly Environmental Monitoring Report #103

Reporting Period: September 11 – September 24, 2016

Upper Lillooet River Hydroelectric Facility (Water File No. 2002561, Water Licence No. C130613), Boulder Creek Hydroelectric Facility (Water File No. 2003049, Water Licence No. C129969) & Transmission Line (TX Line)

Distribution List		Prepared By
Name	Organization	
Brian Naito	Fisheries and Oceans Canada	 J. Alex Sartori, RPBio <i>Independent Environmental Monitor (IEM)</i>
James Davies	MFLNRO – Water Allocation	
Danielle Cunningham	MFLNRO – Land and Resources	
Frank DeGagne	MFLNRO – Land and Resources	
Monica Perry	BC Environmental Assessment Office	
Sheldon Foote	BC Environmental Assessment Office	
George Steeves	True North Energy – Independent Engineer	
Jennifer McCash	JEM Energy Ltd. – Independent Engineer	
Thomas Hicks	Sartori Environmental Services	
Peter Ramsden	Innergex Renewable Energy Inc.	
Oliver Robson	Innergex Renewable Energy Inc.	
Grant Lindemulder	Innergex Renewable Energy Inc.	
Joshua Zandbergen	Innergex Renewable Energy Inc.	
Julia Mancinelli	Innergex Renewable Energy Inc.	
Liz Scroggins	Innergex Renewable Energy Inc.	
Colleen Giroux-Schmidt	Innergex Renewable Energy Inc.	
Matt Kennedy	Innergex Renewable Energy Inc.	
Renaud DeBatz	Innergex Renewable Energy Inc.	
Richard Blanchet	Innergex Renewable Energy Inc.	
Alex Yung	Innergex Renewable Energy Inc.	
Sarah Taschuk	Innergex Renewable Energy Inc.	
Serge Moalli	CRT-ebc Construction Inc.	 J. Stephen Sims, RPBio <i>Delegate IEM</i>
Jonathan Drapeau	CRT-ebc Construction Inc.	
Jean Pelletier	CRT-ebc Construction Inc.	Date Prepared: February 21, 2017 Date Submitted: August 14, 2017
D'Arcy Soutar	Westpark Electric Ltd.	
Pontus Lindgren	Westpark Electric Ltd.	
Harriet VanWart	Lil'wat Nation	
Carrie Lester	Lil'wat Nation	

Owner Construction Permits and Approvals

Environmental Assessment Certificate No. E13-01 (Amendment 1, 2, 3, 4, 5, 6, 7)
Fisheries Act Subsection 35(2)(b) Authorization No. 09-HPAC-PA2-000303 (Amendment 1, 2)
Letter of Advice for the Transmission Line No. 09-HPAC0-PA2-000303
Leave To Commence Construction (ULRHEF) File No. 2002561
Leave To Commence Construction (BDRHEF) File No. 2002453
Leave To Commence Construction (TX Line) File No. 2002561/2002453
Conditional Water Licence (ULRHEF C130613) File No. 2002561
Conditional Water Licence (BDRHEF C129969) File No. 2002453
Conditional Water Licence (BDRHEF C131153) File No. 2003601
Licence of Occupation & Modification Agreement (ULRHEF #232384) File No. 2409871
Licence of Occupation (BDRHEF #232386) File No. 2409998
Licence of Occupation (TX Line #2423386) File No. 2410654
Occupant Licence to Cut (ULRHEF) No. L49717(Amendments 1, 2, 3, 4, 5, 6, 7)
Occupant Licence to Cut (BDRHEF – KM 38 laydown) No. L49698
Occupant Licence to Cut (BDRHEF) No. L49816 (Amendments 1, 2, 3)
Occupant Licence to Cut (TX Line) No. L49697 (Amendments 1, 2, 3, 4, 5, 6, 7, 8, 9)
General Wildlife Measure Exemption Approval Letter (TX Line & BDRHEF) File No. 78700-35/06 UWR and 39585-20 WHA
Heritage Conservation Act – Alteration Permit (ULRHEF) File No. 11200-03/2014-0033
Road Use Permit No. 6123-13-02 (Lillooet River FSR); 5673-13-01 (Rutherford Creek FSR); 7977-13-01 (Lillooet South FSR); 8015-13-01 (Ryan River); 8188-13-01 (Pemberton Creek FSR); and 9717-13-01 (Miller Bench FSR)
Junction Permit (ULRHEF & BDRHEF) File No. 11250-32/6123 (Amendment 1)
Aeronautical Obstruction Approval (Tx Line - Lillooet River Crossing) File No. 2013-004
Aeronautical Obstruction Approval (Tx Line - Ryan River) File No. 2013-005
Aeronautical Obstruction Approval (Tx Line - North Miller) File No. 2013-006
Aeronautical Obstruction Approval (Tx Line - South Miller) File No. 2013-007
Aeronautical Obstruction Approval (Tx Line - Pemberton Creek) File No. 2013-008
Aeronautical Obstruction Approval (Tx Line - Lillooet River near Pemberton) File No. 2013-009
Aeronautical Obstruction Approval (Tx Line - Lillooet River near Meager Creek) File No. 2013-010
Navigable Water Protection Act (ULRHEF) File No. 8200-2009-500434-001
Navigable Water Protection Act (BDRHEF) File No. 8200-2012-501-032-001
Navigable Water Protection Act (Tx Line – North Creek) File No. 8200-2013-500103-001
Navigable Water Protection Act (Tx Line – Lillooet River) File No. 8200-2013-500101-001
Navigable Water Protection Act (Tx Line – Lillooet River) File No. 8200-2013-500102-01
Navigable Water Protection Act (Tx Line – Ryan River) File No. 8200-2013-500104-001
Navigable Water Protection Act (Tx Line – South Miller River) File No. 8200-2013-500100-001
Navigable Water Protection Act (Tx Line – Boulder Creek) File No. 8200-2013-500099-001
Navigable Water Protection Act – Extension Approval (ULRHEF, BDRHEF, Tx Line)
Navigable Water Protection Act (Bridge – Ryan River) File No. 8200-2013-500381
Navigable Water Protection Act (Bridge – Upper Lillooet Side Channel; Extension Approval) File No. 8200-2013-500383
Section 57 Authorization (ULRHEF) File No. 16660-20/REC202717
SLRD Temporary Use Permit No. 34 – Boulder Creek HEF
SLRD Temporary Use Permit No. 35 – Upper Lillooet River HEF
SLRD Building Permit (10864) – Upper Lillooet River HEF Powerhouse
SLRD Building Permit (10865) – Boulder Creek HEF Powerhouse
Works Permit for Construction within FSR Right-of-Way No. 6123-14-01
Works Permit for Construction within FSR Right-of-Way No. 7977-15-01
Section 52(1)(b) FRPA Authorization for Ryan River Wet Crossing File No. FOR-19400-01/2014
MOTI Permit to Construct, Use and Maintain Works Upon the Right-Of-Way of a Provincial Public Highway No. 2014-06099
Magazine Licence File No. UL76018 (Renewal 1)
Section 8 Approval – Short Term Use of Water File (Lillooet River and Tributaries) No. A2006123 (Amendment 1)
Section 8 - Special Use Permit issued for the operation of an avalanche weather station on Crown land (File No. S25988)

Contractor Construction Permits and Approvals

Waste Discharge under the Code of Practice for the Concrete and Concrete Products Industry under the Environmental Management Act (Authorization No. 107204) Tracking No. 349424 (Renewal 2)
Wildlife Act Permits – Pacific Tailed Frog Salvage Permit # SU15-164805; Fish Salvage Permit # SU15-174722
Fisheries and Oceans Canada – Anadromous Fish Salvage Permit #XR 178 2015
BC Safety Authority – Temporary Construction Electrical Service Permit EL-140698-2014
Municipal Wastewater Regulation - Authorization # 107032
Water Supply System Construction Permits – VCH-14-613 for Main Camp
Water Supply System Permit to Operate Issued July 30th, 2014 for Main Camp
Section 6(3) and Schedule 3 Wildfire Regulations Fire Exemption for Ryan River Bridge File No. 14350-07
SLRD Building Inspection Report dated August 13, 2014 - Construction Camp Building Permit No. 10830
Lillooet River FSR Temporary Road Closures Approval File No. 11250-32/6123 (Amendment 1, 2)
Lillooet South FSR Temporary Road Closures Approval File No. 11250-32/7977
SLRD Building Permits for Mechanic Shop (10862) and Carpentry Shop (10836) March 18, 2015
SLRD Building Permit Stages 1 - 4 – Boulder Powerhouse Architectural, Electrical and Mechanical (10865) October 8, 2015
SLRD Building Permit Stages 1 - 4 – Upper Lillooet Powerhouse Architectural and Mechanical (10864) October 6, 2015
Water Sustainability Act Section 10(1) Use Approval dated March 24, 2016
Section 7 Explosives Act – Magazine Licence (U76018) Renewal April 30, 2016

ACRONYMS:

AMBNS	Active Migratory Bird Nesting Survey	HWM	High water mark
Andritz	Andritz Hydro Canada Inc.	IE	Independent Engineer (True North Energy)
ANFO	Ammonia nitrate fuel oil (industrial explosive)	IEM	Independent Environmental Monitor
ARD M/L	Acid Rock Drainage and Metal Leaching	INX	Innergex Renewable Energy Inc.
BCEAO	British Columbia Environmental Assessment Office	ISW	Instream Works
BCCOS	British Columbia Conservation Officer Service	ITM	Environmental Issue Tracking Matrix
BCWQG	British Columbia Water Quality Guidelines	JEM	JEM Energy Ltd. (Delegate Independent Engineer)
BDRHEF	Boulder Creek Hydroelectric Facility	LTC	Leave to Construct
BEBO	ULRHEF Intake Concrete Arch & Foundation Wall	MFLNRO	Ministry of Forests, Lands and Natural Resource Operations
BG	Background	MOE	Ministry of Environment
BKL	BKL Consultants Ltd.	MOTI	Ministry of Transportation and Infrastructure
CE	CRT-ebc Construction Inc.	OGMA	Old Growth Management Area
CEMP	Construction Environmental Management Plan	OLTC	Occupational License to Cut
CTF	Coastal Tailed Frog	PAG	Potentially Acid Generating
DFO	Fisheries and Oceans Canada	QP	Qualified Professional
DS	Downstream	ROW	Right of Way
EPP	Environmental Protection Plan	RVMA	Riparian Vegetation Management Area
EAC	Environmental Assessment Certificate	SES	Sartori Environmental Services
EAO	Environmental Assessment Office	SLRD	Squamish-Lillooet Regional District
Ecofish	Ecofish Research Ltd.	TX Line	Transmission Line
Ecologic	Ecologic Consulting	ULRHEF	Upper Lillooet Hydroelectric Facility
EIR	Environmental Incident Report	UWR	Ungulate Winter Range
ESC	Erosion and Sediment Control	VC	Valued Component
FAM	Field Advice Memorandum	WEL	Westpark Electric Ltd.
FSR	Forest Service Road	WEMR	Weekly Environmental Monitoring Report
Golder	Golder Associates	WHA	Wildlife Habitat Area
GWR	Mountain Goat Winter Range		
Hedberg	Hedberg and Associates Ltd.		

1.0 Summary of Site Inspections for Reporting Period

The table presented below summarizes the IEM team site presence, weather and monitoring locations by component:

Date	IEM Team Personnel	Key Monitoring Locations & Activities
September 11 – 17, 2016	SE, DA, TH	<p>Construction Camp, Laydown Areas and the Lillooet River FSR</p> <ul style="list-style-type: none"> • Road maintenance on the Lillooet River FSR <p>ULRHEF Intake & Upstream Tunnel Portal</p> <ul style="list-style-type: none"> • Final tunnel lining and rock support (including shotcrete) • Sluice gate installation (watering of sluiceway) • Upstream cofferdam removal • BEBO tunnel formwork, rebar and concrete works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Rocktrap drill, blast, rock support, and concrete works • Tunnel plug and grouting program <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Reclamation along penstock alignment • Backfill and re-shaping of slopes at Truckwash Creek <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Andritz mechanical and electrical works • Second stage rebar, formwork and concrete works • Westpark switchyard works <p>BDRHEF Intake & Upstream Tunnel Portal</p> <ul style="list-style-type: none"> • Excavation of crane pad; backfill of intake wing wall • Rebar, formwork and concrete works • Lowering downstream cofferdam <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Final tunnel lining and rock support (including shotcrete) <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Andritz electrical work • BDRHEF intake electrical conduit installation within transmission line ROW <p>TX-Line</p> <p>Segments 1 – 5</p> <ul style="list-style-type: none"> • Fiber-optic cable installation <p>Segment 11</p> <ul style="list-style-type: none"> • Framing and preparing to string • Ground preparations for anchor installation <p>Segment 12</p> <ul style="list-style-type: none"> • Framing and preparing to string • Straightening poles and backfilling <p>Segment 13</p> <ul style="list-style-type: none"> • Slashing and bucking timber <p>Segment 14</p> <ul style="list-style-type: none"> • Slashing and bucking timber • Ground preparations <p>Segment 15</p> <ul style="list-style-type: none"> • Falling and slashing hazard trees <p>Segment 16</p> <ul style="list-style-type: none"> • CN rail crossing works • Processing felled timber

Date	IEM Team Personnel	Key Monitoring Locations & Activities
September 18 – 24, 2016	SE, MC	<p>Construction Camp, Laydown Areas and the Lillooet River FSR</p> <ul style="list-style-type: none"> • Road maintenance on the Lillooet River FSR <p>ULRHEF Intake & Upstream Tunnel Portal</p> <ul style="list-style-type: none"> • Final tunnel lining and rock support (including shotcrete) • BEBO tunnel formwork, rebar and concrete works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Rocktrap drill, blast, rock support, and concrete works • Tunnel plug and grouting program <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Reclamation along penstock alignment • Shear rings welding <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Andritz mechanical and electrical works • Westpark switchyard works • Septic field excavation and backfill <p>BDRHEF Intake & Upstream Tunnel Portal</p> <ul style="list-style-type: none"> • Excavation of the downstream cofferdam • Rebar, formwork and concrete works • Ditching works from KM0.25 – 0.75 of the intake access road • Construction of access ramp to the upstream cofferdam • Placement of riprap upstream of the Coanda • Drilling Anchors <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Final tunnel lining and rock support (including shotcrete) <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Andritz electrical work • Bifurcation and manifold excavation, installation and concrete works • BDRHEF intake electrical conduit installation along transmission line <p>TX-Line</p> <p>Segment 1</p> <ul style="list-style-type: none"> • Ground preparation with machine <p>Segment 11</p> <ul style="list-style-type: none"> • Framing and preparing to string • Flying ropes, pulling conductor, tensioning and clipping • Ground preparations for anchor installation <p>Segment 12</p> <ul style="list-style-type: none"> • Framing and preparing to string • Flying ropes, pulling conductor, tensioning and clipping • Straightening poles and backfilling <p>Segment 13</p> <ul style="list-style-type: none"> • Straightening poles and backfilling <p>Segment 14</p> <ul style="list-style-type: none"> • Slashing and bucking timber • Ground preparations (including blasting) • Framing

IEM Team Personnel: TH – Tom Hicks; SE – Stephanie Ellis; MC – Mike Champion; DA – Danita Abraham

2.0 Administrative Summary

Key communications and meetings the IEM team had with the licensees, contractors and/or environmental authorities:

Date	Communication Type	Participants	Issues Discussed	ITM ID No.
September 12	<i>Pre-work meeting</i>	CE, SES, INX	CE held a pre-work meeting for the ULR-TUN tunnel plug and grouting. All attending reviewed the work plan and discussed safety, environmental, and construction concerns.	-
September 13	<i>Email</i>	CE, SES, INX	RE: Spill Report 2016-33 – CE provided the IEM and INX with the final report outlining the spill of <2L of biodegradable hydraulic oil, to the Lillooet River, during the removal of the ULRHEF upstream cofferdam. The IEM notified the Environmental Emergency Program as this was a spill to a watercourse.	<i>Spill Report #2016-33</i>
September 14	<i>Pre-work meeting</i>	CE, SES, INX	CE held a pre-work meeting for the lowering of the downstream coffer dam at BDRHEF intake. All attending reviewed the work plan and discussed safety, environmental, and construction concerns.	-
September 15	<i>Email</i>	CE, SES, INX, JEM, IE	RE: Environmental Incident Report 2016-09-12 CE-EIR-30 – CE provided the final incident report outlining the spill of <2L of biodegradable hydraulic oil, to the Lillooet River, during the removal of the ULRHEF upstream coffer dam. INX informed CE that the report had been submitted to the relevant agencies and the Lil'wat Nation.	<i>EIR# 30</i>
	<i>Email</i>	CE, Ecofish, SES, INX,	RE: Instream work ULR diversion channel – CE provided their QP's instruction for either salvaging fish or maintaining flow in the Obermeyer diversion channel after the ULRHEF upstream cofferdam is removed.	-
September 18	<i>Pre-work meeting</i>	CE, SES, INX	CE held a pre-work meeting for the BDRHEF powerhouse bifurcation excavation. All attending reviewed the work plan and discussed safety, environmental, and construction concerns.	-
September 21	<i>Email</i>	INX, SES	INX informed the IEM that WEL would commence oil-filling of the ULRHEF and BDRHEF power transformers within the next week.	-
September 22	<i>Email</i>	SES, CE, INX	RE: Water quality exceedance from the lower portal active water treatment system – The IEM notified CE of the discharge of water exceeding BCWQG, for both pH and turbidity, discharging from the lower portal active water treatment system. CE was aware of the incident; however, the IEM had not been informed. The IEM reminded CE that all BCWQG exceedances are to be immediately reported to the IEM. CE adjusted the water treatment system to return water quality to within BCWQGs.	-
September 23	<i>Site meeting and tour</i>	CE, MFLNRO, INX, SES	CE and INX toured the Lillooet River FSR with MFLNRO to discuss the location of cable boxes, drainage, and protection from grading operations once the project is complete.	-
September 24	<i>Pre-work Meeting</i>	CE, SES, INX	CE held a pre-work meeting for the installation of the BDRHEF bifurcation. All attending reviewed the work plan and discussed safety, environmental, and construction concerns.	-

3.0 Current Work Restrictions and Timing Windows

The table presented below outlines work restrictions applicable during the reporting period for each active Project component location:

Component	Location	Wildlife/Archeology Concern	Construction/Timing Restrictions & Mitigations
All Project Areas	ULRHEF intake & tailrace, BDRHEF tailrace, and fish accessible tributaries of the Lillooet River	Reduced Risk Project Specific Instream work windows for the protection of Bull Trout, Cutthroat Trout and Pacific Salmon (Coho, Sockeye), during sensitive life stages	All instream work will be conducted within Project specific timing windows. They are as follows: ULRHEF intake: August 1 – October 31 ULRHEF and BDRHEF powerhouses: July 15 – September 15
Lillooet River FSR, ULRHEF, & BDRHEF intake	Access roads above the lower limit of the 200m buffer to the Truckwash Creek Migration Corridor to the ULRHEF intake, as well as a portion of BDRHEF intake access road and intake structure within UWR u-2-002 UL 12	Mountain Goat UWRs & Migration Corridor	If a mountain goat is observed within 500m line of sight of construction operations, construction must cease for at least 48 hours. Approval from the IEM must be obtained prior to recommencing construction activities, and the IEM must record and submit all goat observations to MFLNRO within 48 hours.
TX Line	All Segments	Mountain Goat UWRs SO-04 & SO-08	If a mountain goat is observed within 500m line of sight of construction operations, construction must cease for at least 48 hours. Approval from the IEM must be obtained prior to recommencing construction activities, and the IEM must record and submit all goat observations to MFLNRO within 48 hours.
		Suitable Class 1 & 2 Grizzly Bear forage habitat	IEM monitoring is required when clearing within identified Class 1 & 2 Grizzly Bear forage habitat, to ensure clearing areas are minimized.
		Ryan River Drainage	Construction of the TX Line into and across the Ryan River drainage will occur during the less critical Grizzly Bear summer foraging period (June 1 – September 1).
		Riparian Vegetation Management Areas (RVMA)	IEM monitoring is required during clearing within RVMAs.
		Within 150m of wetlands or 100m of Coastal Tailed Frog Streams	IEM presence is required when clearing within 150m of wetlands or 100m of CTF Streams, to ensure clearing areas are minimized.

4.0 Upper Lillooet River HEF – Monitoring Results

4.1 Construction Camp, KM38 Laydown, Access Roads & Lillooet River FSR

Construction Activities:

- CE continued routine fuel management and maintenance of construction equipment within the mechanic shop at the KM38 laydown (Photo 1). CE temporarily stored all hazardous substance materials (waste oil, contaminated soil, used oil/hydraulic fluid containers, etc.) in a designated area at the laydown prior to off-site disposal. The materials were all well contained and protected from the weather.

Environmental Summary:

- On September 20, the IEM identified erosion on the downslope of the Lillooet River FSR between KM46.5 and 48 (Photo 2). Runoff from recent rain fall has begun to erode the conduit trenching material that was pushed onto the downslope in August 2016 (ITM #60). The IEM raised the issue with CE and will continue to monitor the slope.

Photos:



Photo 1 – Fuel storage at the KM38 laydown (September 17, 2016).



Photo 2 – Erosion on the downslope of the Lillooet River FSR at KM47 (September 20, 2016).

4.2 Intake, Concrete Arch Foundation Walls, and Upstream Tunnel

Construction Activities:

- CE continued final concrete and shotcrete lining of the ULRHEF tunnel throughout the monitoring period (Photo 3).
- BEBO tunnel formwork, rebar, and concrete works (Photo 4).
- Instream excavation of the upstream cofferdam and diversion of the Lillooet River into the sluice way occurred from September 12 – 15 (Photo 5 - Photo 13).
- Repair works on the Obermeyer structure (Photo 14).

Environmental Summary:

- On September 11, CE began filling the intake/slucice way, with clean ground water pumped from the BEBO tunnel wall excavation, to equalize water levels between the Lillooet River and the intake structure behind the upstream cofferdam. During filling operations crews observed that water was leaking through the IFR gate (Photo 5). CE drained the water within the intake structure to complete the repairs on the IFR gate, water was discharged downstream of the sluice gate to the Lillooet River. The IEM monitored water quality at Keyhole bridge and did not observe any exceedances in BCWQG during the dewatering. Once CE completed repairs on the gate they resumed filling the intake structure. While the intake structure was being filled, CE continued excavation of the upstream cofferdam to an elevation of ~300mm above the water level (Photo 6).
- On September 12, water levels between the intake and the Lillooet River had equalized, allowing CE to begin instream excavation of the ULRHEF upstream cofferdam (Photo 7). At 11:50 a hydraulic hose ruptured on the excavator conducting instream works spilling approximately 2L of biodegradable hydraulic oil to the ground, a portion of which entered a pool of water behind the cofferdam (Spill report #33; EIR #30; Photo 8). CE immediately stopped all construction activities, deployed spill pads, and removed all contaminated material. After the spill was cleaned up and repairs were complete crews resumed instream excavation and connected the intake structure to the Lillooet River at 14:00, instream excavation continued until 22:00. The IEM monitored all construction activities and collected water quality at Keyhole bridge (max turbidity = 58.9 NTU when background condition was 45.8 NTU) and 100 meters downstream of the ULRHEF powerhouse (max turbidity = 43.6 NTU when background condition was 25.4 NTU). The IEM detected slight elevations in turbidity downstream of the cofferdam removal throughout instream excavation, however WQ returned to within BCWQG shortly after instream excavation stopped. Additional WQ results are available upon request.
- On September 13, CE completed the removal of the ULRHEF upstream cofferdam at approximately 13:30 (Photo 9_{Photo 7}). CE allowed water to settle in the intake/slucice way over-night prior to opening the sluice gate. The IEM detected slight elevations in turbidity downstream at Keyhole bridge (max turbidity = 54.9 NTU when background condition was 26.9 NTU) and 100 meters downstream of the ULRHEF powerhouse (max turbidity = 39.8 NTU when background condition was 26.1 NTU) throughout instream excavation, however WQ returned to within BCWQG shortly after instream excavation stopped. Additional WQ results are available upon request.
- On September 14, CE opened the sluice gate in stages (Photo 10). At 08:10 crews opened the gate 6-inches, or approximately 5.6 cubic meters per second. The IFR gate was opened for approximately 20 minutes to ensure it was not blocked by sediment and was functioning as intended. At 11:00 CE continued opening the sluice gate 3 inches every 15 – 20 minutes, until fully open. The IEM and Ecofish monitored all construction activities associated with sluicing operations and the IEM collected water quality at Keyhole bridge (max turbidity = 124 NTU when background condition was 107 NTU) and 100 meters downstream of the ULRHEF powerhouse (max turbidity = 85 NTU when background condition was 38.2 NTU). Turbidity was slightly elevated throughout sluicing

operations, however, opening the sluice gate in stages helped to reduce impacts to water quality. Additional water quality results are available upon request.

- On September 15, a portion of the Lillooet River was still flowing through the Obermeyer diversion channel. Working from the right bank, CE lowered the elevation of the river channel by excavating instream and constructed a berm along the Obermeyer channel (Photo 11). The IEM monitored all instream activities and collected water quality downstream at Keyhole bridge (max turbidity = 66.9 NTU when background condition was 37.4 NTU) and 100 meters downstream of the ULRHEF powerhouse (max turbidity = 77.1 NTU when background condition was 44.3 NTU) throughout instream excavation. Additional water quality results are available upon request. As per Ecofish's directions the discharge of a 3-inch pump was directed into the Obermeyer diversion channel to provide constant flow and prevent fish stranding, until a salvage could occur on September 16 (Photo 12).
- On September 16, Ecofish conducted a fish salvage (Photo 13) in the Obermeyer diversion channel. Once the fish salvage operation was complete in the diversion channel CE removed the 3-inch pump and isolated the diversion channel to complete repairs on the Obermeyer structure (Photo 14). No fish mortalities were reported to the IEM.
- During concrete slab pours and final tunnel lining in the upstream tunnel, CE directed all seepage water to the ULRHEF intake sediment basins for treatment. CE's environmental management team ensured that the active water treatment system was functioning and well maintained. Additional water quality sampling results are available upon request.

Photos:



Photo 3 – ULRHEF upper tunnel portal and BEBO tunnel wall (September 14, 2016).

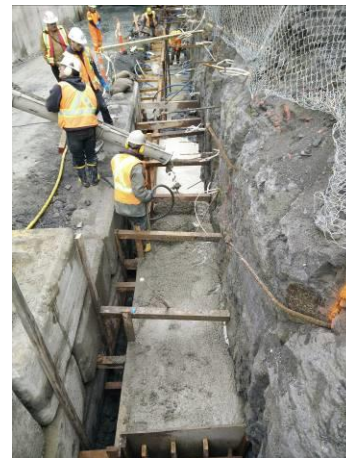


Photo 4 – Concrete works on the east side of the BEBO tunnel wall (September 24, 2016).



Photo 5 – Water leaking through the IFR gate at the ULRHEF intake structure (September 11, 2016).



Photo 6 – Excavation of the ULRHEF upstream cofferdam to 300mm above river level on night shift (September 11, 2016).



Photo 7 – Instream excavation once water levels were equal between the Lillooet River and the ULRHEF intake structure (September 12, 2016).



Photo 8 – Crews deploying and cleaning up the hydraulic spill (September 12, 2016).



Photo 9 – Crews finishing the ULRHEF upstream cofferdam removal (September 13, 2016).



Photo 10 – Opening of the ULRHEF sluice gate (September 14, 2016).



Photo 11 – Instream excavation to lower the elevation of the river channel and to fully divert the Lillooet River through the sluice way (September 15, 2016).



Photo 12 – Discharge of 3-inch pump directed to the Obermeyer diversion channel (September 15, 2016).



Photo 13 – Ecofish conducting a fish salvage in the ULRHEF Obermeyer diversion channel (September 16, 2016).



Photo 14 – Damage to the Obermeyer structure (September 16, 2016).

4.3 *Downstream Tunnel Portal*

Construction Activities:

- CE continued to drill, anchor and spray shotcrete as part of rock support activities associated with the rock trap installation (Photo 15).
- CE began tunnel plug and grouting operations on September 16, 2016.

Environmental Summary:

- The IEM monitored the discharge from the active water treatment system for compliance with BCWQG. On September 22, the water discharged from the active water treatment system exceeded BCWQG (11.23pH and 30.7 NTU). Upon notification, CE informed the IEM that they were aware of the issue and that crews were on their way to perform maintenance on the system. The IEM reminded CE that all exceedances of BCWQG need

to be reported to the IEM immediately. Additional water quality sampling results are available upon request.

Photos:



Photo 15 – ULRHEF lower tunnel portal (September 16, 2016).

4.4 Penstock and Truckwash Creek Penstock Crossing

Construction Activities:

- Reclamation along the ULRHEF penstock alignment and backfill and re-shaping the banks of Truckwash Creek (Photo 16).

Environmental Summary:

- The IEM monitored construction activities throughout the monitoring period and observed no environmental issues.

Photos:



Photo 16 – Reconstructed left bank of Truckwash Creek (September 16, 2016).

4.5 Powerhouse, Tailrace & Access Road

Construction Activities:

- Andritz mechanical works in the ULRHEF powerhouse (Photo 17).
- Westpark switchyard works.
- Septic field backfill (Photo 18).

Environmental Summary:

- The IEM monitored construction activities throughout the monitoring period and observed no environmental issues.

Photos:



Photo 17 – Andritz electrical works in the ULRHEF powerhouse (September 17, 2016).



Photo 18 – Backfill of the ULRHEF powerhouse septic field (September 22, 2016).

4.6 Water Quality Results

The following table presents the results of the routine WQ sampling program for the ULRHEF. The IEM is undertaking a weekly monitoring program according to the conditions outlined in the Surface Water Quality Protection Plan. The IEM selected the regular monitoring to quantify WQ conditions within the Lillooet River upstream and downstream of active construction areas. The IEM acknowledges the natural variability of instream WQ conditions in the Lillooet River due to seasonal fluctuations in snowmelt. In the event of an exceedance of *in-situ* WQ (turbidity and/or pH) because of project-related activities, the IEM will highlight the exceedance, discuss the cause, and outline measures undertaken by the contractor to correct the issue. When an exceedance cannot be attributed to project-related activities, an asterisk (*) will be used to denote it.

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (µS)	Temp (°C)
Routine Water Quality						
	11:54	ULR Background – ULRHEF Intake	7.42	36.7	62	6.2

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (µS)	Temp (°C)
September 16, 2016	11:28	ULR #0.5 – Downstream of ULRHEF intake at Keyhole Bridge	7.87	38.2	51	6.1
	16:56	ULR # 1 – Upstream of ULRHEF Powerhouse	7.24	75.0*	48	6.9
	16:44	ULR #2 – Downstream of ULRHEF Powerhouse between KM40.5 and KM 41	6.32	75.0*	49	6.9
	14:28	ULR #3 – Lillooet River FSR KM38 Laydown – D/S of Boulder confluence	7.92	104.0*	45	6.9
	17:30	ULR #4 – Lillooet River FSR KM24 – D/S of all works and Meager confluence	7.14	124.0*	56	8.4
September 23, 2016	14:55	ULR Background – ULRHEF Intake	8.04	15.4	-	7.0
	15:15	ULR #0.5 – Downstream of ULRHEF intake at Keyhole Bridge	7.95	18.9	-	7.1
	14:20	ULR # 1 – Upstream of ULRHEF Powerhouse	7.65	17.0	-	7.7
	14:10	ULR #2 – Downstream of ULRHEF Powerhouse between KM40.5 and KM41	7.65	22.2	-	7.6
	17:24	ULR #3 – Lillooet River FSR KM38 Laydown – D/S of Boulder confluence	7.62	22.2	-	8.6
	17:53	ULR #4 – Lillooet River FSR KM24 – D/S of all works and Meager confluence	7.57	20.0	-	9.0

4.7 Recommendations

ITEM recommendations for the ULRHEF are as follows:

- CE should continue to convey all water from the ULRHEF upstream tunnel heading to the sediment basins for treatment. CE should perform regular monitoring to ensure that the water treatment system is functioning as intended and that discharge to the Lillooet River.
- CE should remove material deposited on the downslope of the Lillooet River FSR between KM46.5 – 48 and hydroseed exposed areas to prevent erosion during fall rains (*ULR #60*).
- CE should perform regular inspections at all parking areas and ensure all spilled fuel and/or oil is cleaned up and disposed of in the proper disposal container, as per the Human-Bear Conflict Management Plan, and Hazardous Materials Management Plan.
- CE should continue to remind crews of proper food and wildlife attractant management, as per the Human – Bear and Human – Wildlife Interaction Management Plans.

4.8 Upcoming Works

New and/or environmentally sensitive construction activities scheduled to occur at the ULRHEF:

- Final tunnel lining, rock support and concrete floor slab of the ULRHEF tunnel.
- Rebar, formwork, and concrete works on the Truckwash Creek protection slab.
- Construction activities associated with the ULRHEF tunnel plug grouting program will continue.
- Use of the ULRHEF intake sediment basins will continue.

- Andritz electrical work in the ULRHEF powerhouse will continue.
- Repair works on the damaged Obermeyer structure.
- BEBO tunnel construction activities will continue.

5.0 Boulder Creek Hydroelectric Facility – Monitoring Results

5.1 Access Road & Intake

Construction Activities:

- Excavation of BDRHEF intake crane pad (Photo 19).
- Formwork, rebar, and concrete works on the BDRHEF downstream Coanda slab (Photo 20).
- Excavation of the BDRHEF downstream cofferdam, all works were conducted in the dry and above the high-water mark (Photo 21).
- Installation of the BDRHEF intake upstream scour protection (Photo 22).

Environmental Summary:

- On September 18, CE excavated a portion of the BDRHEF downstream cofferdam to allow for the installation of downstream scour protection (Photo 21). All construction was completed in the dry and above the high-water mark. The IEM monitored all construction activities and no environmental issues were observed.
- The IEM monitored the discharge from the active water treatment system for compliance with BCWQG. Water discharged to Boulder Creek did not exceed > 8NTU above background turbidity during the reporting period. Additional water quality sampling results are available upon request.

Photos:



Photo 19 – Excavation of the BDRHEF intake crane pad (September 17, 2016).



Photo 20 – Concrete pour for the BDRHEF Coanda downstream slab (September 20, 2016).



Photo 21 – Excavation of the BDRHEF downstream coffer dam, all works were conducted in the dry and above the high water mark (September 18, 2016).



Photo 22 – Installation of scour protection upstream of the BDRHEF intake (September 24, 2016).

5.2 *Downstream Tunnel Portal and Powerhouse*

Construction Activities:

- Final lining of the BDRHEF tunnel (Photo 23).
- Andritz electrical work.
- BDRHEF conduit installation along the transmission line (Photo 24).
- Excavation of the BDRHEF powerhouse bifurcation (Photo 25).

Environmental Summary:

- CE conveyed all wastewater related to the BDRHEF tunnelling works to the downstream settling ponds for treatment.

Photos:



Photo 23 – BDRHEF lower-tunnel portal (September 17, 2016).



Photo 24 – Conduit installation between BDRHEF powerhouse and intake access road (September 17, 2016).



Photo 25 – BDRHEF bifurcation excavation and mud slab cure (September 24, 2016).

5.3 *Water Quality Results*

The following table presents the results of the routine WQ sampling program for the BDRHEF. The IEM is undertaking a weekly monitoring program according to the conditions outlined in the Surface Water Quality Protection Plan. The IEM selected the regular monitoring to quantify WQ conditions within Boulder Creek upstream and downstream of active construction areas. The IEM acknowledges the natural variability of instream WQ conditions in Boulder Creek due to seasonal fluctuations in snowmelt. In the event of an exceedance of *in-situ* WQ (turbidity and/or pH) because of project-related activities, the IEM will highlight the exceedance, discuss the cause, and outline measures undertaken by the contractor to correct the issue. When an exceedance cannot be attributed to project-related activities, an asterisk (*) will be used to denote it.

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (µS)	Temp (°C)
Routine Water Quality						
September 16, 2016	16:04	BDR BG – Upstream of BDRHEF intake	7.6	56.6	42	6.4
	13:33	BDR #1 – Downstream of BDRHEF intake	7.6	32.5	59	8.7
	15:16	BDR #2 – Upstream of BDRHEF Powerhouse	7.4	108.7*	41	7.2
	14:56	BDR #3 – Downstream of BDRHEF Powerhouse at Pebble Creek Bridge	7.6	81.0*	42	7.2
September 23, 2016	13:30	BDR BG – Upstream of BDRHEF intake	7.7	21.3	-	6.5
	13:40	BDR #1 – Downstream of BDRHEF intake	Inaccessible			
	17:05	BDR #2 – Upstream of BDRHEF Powerhouse	7.7	22.3	-	9.7
	17:15	BDR #3 – Downstream of BDRHEF Powerhouse at Pebble Creek Bridge	7.6	20.8	-	8.8

5.4 Recommendations

IEM recommendations for the BDRHEF are as follows:

- CE should continue to direct all construction related wastewater to the active water treatment systems/settling ponds. CE should continue to monitor the newly constructed settling/infiltration pond to ensure that it remains in good working condition, and perform all maintenance activities as outlined in the work plan. If water begins to discharge from the newly constructed channel, CE should conduct regular inspections to ensure that it meets BCWQG prior to infiltration near or connection with the Boulder Creek side channel.
- CE should regularly monitor the BDRHEF intake active water treatment system to ensure the system is functioning as intended and that discharge into Boulder Creek is within BCWQGs. The water treatment system capacity should be regularly assessed to ensure the system can handle the necessary volumes of water.
- CE should ensure that all culvert inlets and outlets are free of sediment and other construction related debris and are armoured with non-erodible materials.

5.5 Upcoming Works

New and/or environmentally sensitive construction activities scheduled to occur at the BDRHEF:

- Final lining of the BDRHEF tunnel will continue.
- Grouted riprap at the BDRHEF intake structure.
- Up and downstream cofferdam removal (instream works).
- Deactivation of BDRHEF diversion tunnel.
- Electrical component installation will continue at the BDRHEF powerhouse.
- Switch yard installation will continue.

6.0 Transmission Line – Monitoring Results

6.1 Transmission Line Construction Activities

Construction Activities:

Segment 1-5

- Hanging gear for fiber-optic cable installation

Segment 11

- Framing and preparing to string cable
- Ground preparation for anchor installations
- Tensioning and clipping structures

Segment 12

- Framing and preparing to string cable
- Straightening poles and backfilling
- Pulling conductor
- Tensioning and clipping structures

Segment 13

- Slashing and bucking timber
- Straightening poles and backfilling
- Pulling conductor
- Piling brush and roadworks

Segment 14

- Slashing and bucking timber
- Ground preparations (hand digging)
- Framing structures

Segment 15

- Falling hazard trees and slashing

Segment 16

- CN rail crossing
- Processing felled timber

Environmental Summary:

- No environmentally sensitive works requiring IEM monitoring were completed during this reporting period.

6.2 Recommendations

IEM recommendations for the Transmission Line are as follows:

- WEL's Environmental Manager continues to provide regular scheduling updates that permits the IEM to assess environmental risks and coordinate monitoring requirements. WEL should continue to provide the IEM with a minimum of 48 hours' notice if IEMs presence is required or expected for construction activities.

6.3 Upcoming Works

New and/or environmentally sensitive construction activities scheduled to occur along the Transmission Line alignment:

Segment 1

- Machine ground preparation
- Installation of fiber-optics cable

Segment 2

- Installation of fiber-optics cable

Segment 11

- Tensioning and clipping structures

Segment 12

- Tensioning and clipping structures

Segment 13

- Piling brush and road works (ditching)
- Structure framing
- Heli pole setting

Segment 14

- Structure framing
- Ground preparation (hand)

Segment 15

- Pole installation via helicopter and framing in preparation to string conductor

Segment 16

- Ground preparation (including blasting)

7.0 Wildlife Sightings

As per the CEMP, the IEM implemented a wildlife sightings record. Project Personnel are required to regularly update the record and it is mandatory for all personnel to report wildlife sightings including, but not limited to bears, cougars, mountain goats and deer. Wildlife Observation forms will be included in first reporting period following month end. Observation or detection of the following species will trigger notification to identified parties according to the following table.

Species Observed or Detected	Notification Period	Agencies to be Notified
Northern rubber boa	Immediately	IEM, Owner
Grizzly bear	24hrs	IEM, Safety Officer, Conservation Officer, Owner
Wolverine den	24hrs	IEM, MFLNRO, Owner
Spotted owls	24hrs	IEM, MOE, Owner
Mountain goats	48hrs	IEM, MFLNRO, Owner

8.0 Mountain Goat Monitoring Program

The spring 2016 Mountain Goat Monitoring Program is complete as of June 15, 2016 according to conditions of the Mountain Goat Management Plan. The mountain goat monitoring program will resume in November 2016.

To mitigate potential impacts to mountain goats during the summer months, Construction activities will cease if a mountain goat(s) is (are) observed moving towards the ULRHEF intake and/or if a mountain goat(s) is (are) observed within a 500m line of site of a construction activity. No mountain goats were observed within 500m line of sight of construction activities and no work stoppages were required during this monitoring period.

9.0 Environmental Issues Tracking Matrix (ITM)

9.1 Hydroelectric Facilities (ULRHEF & BDRHEF)

ITM Tracking Legend:		Work Item Open		Work Item Complete		Issue Closed	
Issue Tracking		Environmental Issue		Mitigation Measures			
ID No.	Status	Location	Issue Description	Action Taken/Recommended	Date of Identification	Targeted Date for Completion	Date Completed
ULR#58	OPEN	All work areas	Conservation Officer and BCEAO Compliance and Enforcement Officer Inspection noted non-compliance with regard to wildlife attractant management.	1. Develop, implement and document internal waste and attractant management auditing tool. Tool will be available for use by the IEM and CE's EM Team. Records of inspections and noted non-compliances should be tracked internally with clean-up documented in each report. This tracking tool will be available to agencies upon request. This tool should be used similarly to the Spill Reporting tool currently being employed onsite.	July 6, 2016	July 9, 2016	July 8, 2016
				2. Repair and adjust the electric fences and charged entrance mats at the construction camp (perimeter fence, camp kitchen fence, and waste compactor fence) and surrounding the septic field.			July 21, 2016
				3. Install self-closing door hinges in all site lunchrooms and anywhere food is being stored temporarily (lunch rooms, kitchen storage area) OR adjust how food is transported, stored and consumed onsite to eliminate the possibility of food and food waste attractants onsite.			July 21, 2016
				4. Perform maintenance to clean-up grease and liquid waste around and underneath the garbage compactor			July 21, 2016
				5. Install berms surrounding parking areas that are lined with impermeable fabric in areas where tunneling equipment is parked. All leaks could be considered wildlife attractants; therefore all leaky equipment should be repaired and leaks or spills to ground in parking areas must be cleaned up daily and be disposed of in appropriate contaminated soil bins.			
				6. Update August 29, 2016: CE has completed excavation of the BDR tunnel and tunnel equipment has been parked in the designated parking area. These pieces of equipment continue to leak hydrocarbon fluids to the containment area. ACTION: CE to remove hydrocarbons that have been leaked and protect equipment with drip trays.			

Issue Tracking		Environmental Issue		Mitigation Measures			
ID No.	Status	Location	Issue Description	Action Taken/Recommended	Date of Identification	Targeted Date for Completion	Date Completed
ULR#60	OPEN	Lillooet River FSR from KM46 – 48	The road fill slope of the Lillooet River FSR between KM46 – 48 requires ESC measures to ensure slope stability and prevent rill erosion from transporting material into the forested area below.	<ol style="list-style-type: none"> 1. Assess the road fill slope conditions following conduit installation in the Lillooet River FSR in this section. Update August 30: item remains outstanding. 2. Provide a plan to protect the slope from an erosion and sediment transport perspective and/or a plan to initiate reclamation of the impacted area. Update August 30: item remains outstanding. 	August 8, 2016	August 16, 2016	-

9.2 Transmission Line

ITM Tracking Legend:	Work Item Open
	Work Item Complete
	Issue Closed

Issue Tracking		Environmental Issue		Mitigation Measures			
ID No.	Status	Location	Issue Description	Action Taken/Recommended	Date of Identification	Targeted Date for Completion	Date Completed
<i>No outstanding environmental issues (next ITM – Tx#3)</i>							






Environmental Incident Reporting Form

General Information	
Project Name: Upper Lillooet Hydro Project	Project Component Upper Lillooet Intake Cofferdam
Time/Date of Incident Start: 2016-09-12 at 11:55 AM	Time/Date Incident Stopped: 2016-09-12 at 11:55 AM
Date of Report: 2016-09-13	Project Incident Report Number: 2016-09-12 CE-EIR-030
Report Prepared By: Lianne Leblond	
Contractor's Environmental Manager: Lianne Leblond – Ian McKeachie – Jean Pelletier	
Independent Environmental Monitor: Tom Hicks–Stephanie Ellis	
Licensee's Environmental Coordinator: Julia Mancinelli	

Contact Information for Company Involved in Incident	
Company: CRT-ebc, s. e. n. c.	Address: PO Box 585, Pemberton BC – V0N 2L0
Phone #: 604-894-5002	Email: serge.moalli@ebcinc.com
Contact Person: Serge Moalli	Position: Project Director

Incident Type (check all that apply)			
Encroachment of an Environmentally Sensitive Area (e.g. Riparian/Wildlife Buffer) Please provide details in "Description" section below.	<input type="checkbox"/>	Adverse Impacts to Fish/Wildlife (e.g. Mortality/Injury) Please provide details in "Description" section below.	<input type="checkbox"/>
Water Quality/Quantity Please provide details in "Description" section below.	<input type="checkbox"/>	Hazardous Material Spills (to ground or water) Please provide details in description section in regards to: <ul style="list-style-type: none"> Perceives extent of damage Type, quantity and area of the spill Containment Procedures Environmental features in close proximity to the spill 	<input checked="" type="checkbox"/>
Disturbance of known or unknown archeological /heritage site Please provide details in "Description" section below.	<input type="checkbox"/>	Air Quality Please provide details in "Description" section below.	<input type="checkbox"/>
Spill reported to external agencies If yes, describe the receiving environment and substance/quantity spilled.	<input type="checkbox"/>	Other Please provide details in "Description" section below.	<input type="checkbox"/>

Incident Profile								
Weather at time of incident	 <input checked="" type="checkbox"/> Clear	 <input type="checkbox"/> Partly Cloudy/ Variable	 <input type="checkbox"/> Cloudy	 <input type="checkbox"/> Showers/ Periods of Rain	 <input type="checkbox"/> Rain	 <input type="checkbox"/> Heavy Rain (>25mm in 24hr)	 <input type="checkbox"/> Storm (Heavy rain and high winds)	 <input type="checkbox"/> Snow
Specific Location: Upper Lillooet Intake Upstream Cofferdam								
Description and Cause of Incident:								
<u>Description:</u>								
<p>A Caterpillar 345D excavator (unit 50-0524) equipped with biodegradable hydraulic-oil, was working on the Upper Lillooet Intake excavating the upstream cofferdam, when a hose on the excavator's boom failed. Less than 2 liters of hydraulic fluid was lost on the excavator, the ground below as well as a small amount that entered the pool of water behind the cofferdam. Upon noticing the leak the operator placed the excavator bucket on the ground and powered down the machine.</p> <p>Spill pads were placed below the excavator boom used to clean the soil below. A slight sheen was observed on the pool of water behind the cofferdam. The cleanup was overseen by the IEM and completed to their satisfaction.</p> <p>The contaminated pads and soil were placed in a 45 gallon drum and sealed. The drum will be disposed of offsite by third party contractor specializing in hazardous waste.</p>								
<u>Cause:</u> Hydraulic hose failure								
Incident Witness: Nicolas Grondin (foreman), Stephane Corivaux (operator) and Tom Hicks (IEM)								
Were there any Potential Environmental impacts as a result of the incident? (e.g., surface contamination, storm sewers, or fish/wildlife mortalities)						Yes <input checked="" type="checkbox"/>	None Observed <input type="checkbox"/>	
If Yes, please describe: See incident description above.								
Has Wildlife Salvage Protocol been followed? i.e. Carrion Removal						Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If No, please explain:								
Water Quality Samples Collected?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
<p>If yes, attach results of water quality analysis to report in table format. Include Laboratory analysis if completed.</p> <p>If No please explain: The small quantity spilled was cleaned to the satisfaction of the IEM. No confirmatory sampling was required.</p>								
Have applicable photos and/or drawings been attached to the incident report?						Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>




Incident Response Measures
See incident description above
Actions to Prevent Incident Recurrence
While the failure of a hydraulic hose is unpredictable, regular maintenance and inspections will continue to reduce the likelihood of a future reoccurrence.


Notification Record						
Agency Reported to	Contact Information	Agency Contacted		Date Reported	Reported By	Method of Reporting
		Yes	No			
External						
MFLNRO	James Davies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/14	Julia Mancinelli	email
BCEAO	Monica Perry Sheldon Foote Justin Carlson	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/14	Julia Mancinelli	email
Lil'wat Nation	Harriet VanWart Carrie Lester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/14	Julia Mancinelli	email
RAPP	Conservation Officer	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/13	Tom Hicks	Phone report – DGIR 161-283
EEP	1-800-663-3456	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/13	Tom Hicks	Phone report – DGIR 161-283
DFO	Herb Klassen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/14	Julia Mancinelli	email
Environment Canada	604-666-6100	<input checked="" type="checkbox"/>	<input type="checkbox"/>			Notified via EEP
Canadian Coast Guard	604-666-6011	<input checked="" type="checkbox"/>	<input type="checkbox"/>			Notified via EEP
Local Fire Rescue	911	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Internal						
Innergex	Julia Mancinelli	<input checked="" type="checkbox"/>	<input type="checkbox"/>			Present on site during occurrence
IEM	Stephanie Ellis – Tom Hicks	<input checked="" type="checkbox"/>	<input type="checkbox"/>			Present on site during occurrence
IE	Jenn McCash	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2016/09/13	Lianne Leblond	Email



Independent Environmental Monitor:

Tom Hicks	IEM - SES		2016-09-14
Print Name	Position and Company	Signature	Date

Contractor's Manager:

Lianne Leblond	Environmental Manager– CRT-ebc		2016-09-14
Print Name	Position and Company	Signature	Date