

Upper Lillooet Hydro Project

Weekly Environmental Monitoring Report #60

Reporting Period: May 3 – May 9, 2015

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	
Murray Manson	Fisheries and Oceans Canada	 <p>J. Alex Sartori, RPBio <i>Independent Environmental Monitor (IEM)</i></p>  <p>J. Stephen Sims, RPBio <i>Delegated IEM</i></p>
James Davies	MFLNRO – Water Allocation	
Danielle Cunningham	MFLNRO – Land and Resources	
Frank DeGagne	MFLNRO – Land and Resources	
Nathan Braun	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.	
Greg Davis	Innergex Renewable Energy Inc.	
Julia Mancinelli	Innergex Renewable Energy Inc.	
Liz Scroggins	Innergex Renewable Energy Inc.	
Bas Brusche	Innergex Renewable Energy Inc.	
Matt Kennedy	Innergex Renewable Energy Inc.	
Renaud de Batz	Innergex Renewable Energy Inc.	
Richard Blanchet	Innergex Renewable Energy Inc.	
Dara McDermott	Innergex Renewable Energy Inc.	
Yannick Tardif	CRT-ebc Construction Inc.	
Jonathan Drapeau	CRT-ebc Construction Inc.	
Éric Ayotte	CRT-ebc Construction Inc.	
Jean Pelletier	CRT-ebc Construction Inc.	
Jordan Gagne	CRT-ebc Construction Inc.	
Ian McKeachie	CRT-ebc Construction Inc.	
D'Arcy Soutar	Westpark Electric Ltd.	
Pontus Lindgren	Westpark Electric Ltd.	
Harriet VanWart	Lil'wat Nation	

Owner Construction Permits and Approvals

Environmental Assessment Certificate No. E13-01 (Amendment 1, 2, 3, 4, 5 & 6)
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 (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 Amendments 1, 2, 3, 4, 5, 6, 7) No. L49717
Occupant Licence to Cut (BDRHEF – KM 38 laydown) No. L49698
Occupant Licence to Cut (BDRHEF Amendments 1, 2, 3) No. L49816
Occupant Licence to Cut (TX Line Amendment 1, 2, 3, 4, 5, 6, 7, 8, 9) No. L49697
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
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

Contractor Construction Permits and Approvals

Magazine Licence File No. UL76018 (Renewal 1)
Section 8 Approval – Short Term Use of Water File (Lillooet River and Tributaries) No. A2006123 (Amendment 1)
Waste Discharge under the Code of Practice for the Concrete and Concrete Products Industry under the Environmental
Management Act (Authorization No. 107204) Tracking No. 326969 (Renewal 1)
Wildlife Act Permits – Pacific Tailed Frog Salvage Permit # SU15-164805
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) dated March 18, 2015

ACRONYMS:

AMBNS	Active Migratory Bird Nesting Survey	ISW	Instream Works
ASMP	Archaeological Sites Management Plan	ITM	Environmental Issue Tracking Matrix
ARD M/L	Acid Rock Drainage and Metal Leaching	JEM	JEM Energy Ltd. (Delegate Independent Engineer)
BCEAO	British Columbia Environmental Assessment Office	LTC	Leave to Construct
BCWQG	British Columbia Water Quality Guidelines	MFLNRO	Ministry of Forests, Lands and Natural Resource Operations
BDRHEF	Boulder Creek Hydroelectric Facility	MOE	Ministry of Environment
BG	Background	MOTI	Ministry of Transportation and Infrastructure
BKL	BKL Consultants Ltd.	NCD	Non Classified Drainage
CE	CRT-ebc Construction Inc.	OLTC	Occupational License to Cut
DFO	Fisheries and Oceans Canada	PAG	Potentially Acid Generating
DS	Downstream	ROW	Right of Way
EAC	Environmental Assessment Certificate	RVMA	Riparian Vegetation Management Area
EAO	Environmental Assessment Office	SES	Sartori Environmental Services
Ecofish	Ecofish Research Ltd.	Stringer Line	Temporary Backfeed Transmission Line
Ecologic	Ecologic Consulting	TX Line	Transmission Line
EIR	Environmental Incident Report	ULRHEF	Upper Lillooet Hydroelectric Facility
ESC	Erosion and Sediment Control	UWR	Ungulate Winter Range
FAM	Field Advice Memorandum	VC	Valued Component
FSR	Forest Service Road	WEL	Westpark Electric Ltd.
GWR	Mountain Goat Winter Range	WEMR	Weekly Environmental Monitoring Report
Hedberg	Hedberg and Associates Ltd.	WHA	Wildlife Habitat Area
IE	Independent Engineer (True North Energy)	WQ	Water Quality
IEM	Independent Environmental Monitor		
INX	Innergex Renewable Energy Inc.		

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	Weather Conditions	Key Monitoring Locations & Activities
Sunday, May 3	BA, AS	Sunny	<p>ULRHEF Intake</p> <ul style="list-style-type: none"> • Excavation of intake dewatering and wastewater treatment system sump • Hand falling and machine clearing for north-side spoil pile expansion and sediment basins • Excavation of sediment basins <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Assembly of 300 ton crane <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • No activity
Monday, May 4	TH, BA, AS	Overcast	<p>ULRHEF Intake</p> <ul style="list-style-type: none"> • Excavation intake dewatering and wastewater treatment system sump • Hand falling and machine clearing for north-side spoil pile expansion and sediment basins • Excavation of sediment basins <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Rope access scaling and stabilization works on right bank <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 8/9 <ul style="list-style-type: none"> ➤ Stringing structures 182-201 • Segment 12 <ul style="list-style-type: none"> ➤ Grading Miller Bench FSR from 0 – 2.8km • Segment 13 <ul style="list-style-type: none"> ➤ Clearing at structures 322-322.5 and 313-316.5

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<ul style="list-style-type: none"> ➤ Clearing at road 306 and 322 ➤ Hoe chucking at structures 318-319 • Segment 14 <ul style="list-style-type: none"> ➤ Building road 371.1 near structure 352 • Segment 15 <ul style="list-style-type: none"> ➤ Clearing and construction of helipad H376
Tuesday, May 5	TH, SE, AS	Overcast	<p>ULRHEF Intake</p> <ul style="list-style-type: none"> • Excavation of intake dewatering and wastewater treatment system sump • Hand falling and machine clearing for north-side spoil pile expansion and sediment basins • Excavation of sediment basins <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Rope access scaling and stabilization works on right bank <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 8/9 <ul style="list-style-type: none"> ➤ Stringing structures 182-201 • Segment 12 <ul style="list-style-type: none"> ➤ Grading Miller Bench FSR from 0 – 2.8km • Segment 13 <ul style="list-style-type: none"> ➤ Clearing at structures 322-322.5 and 313-316.5 ➤ Clearing at road 306 and 322 ➤ Hoe chucking at structures 318-319 • Segment 14 <ul style="list-style-type: none"> ➤ Building road 371.1 near structure 352 • Segment 15 <ul style="list-style-type: none"> ➤ Clearing and construction of helipad H376

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
Wednesday, May 6	TH, SE, AS	Overcast	<p>ULRHEF Intake</p> <ul style="list-style-type: none"> • Installation of pumps and hoses for intake dewatering and wastewater treatment system • Hand falling and machine clearing for north-side spoil pile expansion and sediment basins • Excavation of sediment basins <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork • Concrete pour <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Rope access scaling and stabilization works on right bank <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 8/9 <ul style="list-style-type: none"> ➢ Stringing structures 182-201 • Segment 10 <ul style="list-style-type: none"> ➢ Grading Valleau's private property access road to Ryan River FSR • Segment 13 <ul style="list-style-type: none"> ➢ Clearing at structures 313-316.5 ➢ Clearing at road 306 and 322 ➢ Hoe chucking at structures 318-319 • Segment 14 <ul style="list-style-type: none"> ➢ Building road 371.1 near structure 352 • Segment 15 <ul style="list-style-type: none"> ➢ Clearing and construction of helipad H376
Thursday, May 7	SE, AS, DA	Sunny	<p>ULRHEF Intake</p> <ul style="list-style-type: none"> • Installation of pumps and hoses for intake dewatering and wastewater treatment system • Re-grading and excavation for north-side spoil pile expansion • Construction of sediment basins <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Rope access scaling and stabilization works on right bank <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<ul style="list-style-type: none"> • Concrete pour TX-Line • Segment 8/9 <ul style="list-style-type: none"> ➢ Stringing structures 182-201 • Segment 13 <ul style="list-style-type: none"> ➢ Clearing at structures 313-316.5 ➢ Clearing at road 322 ➢ Hoe chucking at structures 318-319 • Segment 15 <ul style="list-style-type: none"> ➢ Clearing and construction of helipad H376
Friday, May 8	SE, DA	Sun and cloud	<ul style="list-style-type: none"> ULRHEF Intake • Installation of pumps and hoses for intake dewatering and wastewater treatment system • Re-grading and excavation for north-side spoil pile expansion • Construction of sediment basins ULRHEF Downstream Tunnel Portal • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal ULRHEF Penstock • No activity ULRHEF Powerhouse • Rebar installation and formwork • Concrete pour BDRHEF Intake, Crane Pad and Access Road • Rope access scaling and stabilization works on right bank BDRHEF Downstream Tunnel Portal • Drilling, blasting and tunnel stabilization BDRHEF Powerhouse • Rebar installation and formwork • Concrete pour TX-Line • Segment 8/9 <ul style="list-style-type: none"> ➢ Stringing structures 182-201 • Segment 13 <ul style="list-style-type: none"> ➢ Clearing at structures 313-316.5 ➢ Clearing at road 322 ➢ Hoe chucking at structures 318-319 • Segment 15 <ul style="list-style-type: none"> ➢ Clearing and construction of helipad H376
Saturday, May 9	BA, DA	Sunny	<ul style="list-style-type: none"> ULRHEF Intake • Installation of pumps and hoses for intake dewatering and wastewater treatment system • Re-grading and excavation for north-side spoil pile expansion • Construction of sediment basins • Drill and blast works between downstream cofferdam and intake portal excavation ULRHEF Downstream Tunnel Portal • Dewatering of tunnel portal • Mobilization of dewatering and tunnelling equipment to portal ULRHEF Penstock • Fill works at 2+800 • Excavation from 4+050 – 4+075

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Rock hammering and excavation above crane pad • Rope access scaling and stabilization works on right bank <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • No activity

IEM Team Personnel: TH – Tom Hicks; SS – Stephen Sims; BA – Blake Aleksich; VD – Vanessa Dan; AA – Anthony Andrews; AS – Anne Sutherland; DA – Danita Abraham; TJ – Tammie Jenkins; SE – Stephanie Ellis

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.
May 4, 2015	<i>Email</i>	INX, CE, SES	CE and INX distributed the confirmation of renewal for the concrete batch plant permit.	-
	<i>Emails</i>	CE, INX, SES, JEM, MFLNRO, EAO, Lil'wat Nation	CE submitted EIR015, SES reviewed and approved the final version and INX distributed the final report.	<i>ULR#24; EIR015</i>
May 5, 2015	<i>Pre-work Meeting</i>	WEL, Mumleqs, Blackcomb Aviation, Hedberg, SES	The Segment 15 clearing plan was reviewed with Mumleqs fallers and helicopter pilot. A pre-work helicopter flight was conducted to assess the UWRs RO-08 and RO-04, which were found to be unoccupied. A monitoring station was also setup on the South Rutherford FSR to monitor the UWRs during active construction to ensure no Mountain Goats moved into the area.	-
May 6, 2015	<i>Pre-work planning and field inspection</i>	CE, SES, INX	On May 5, CE discussed the plan to install the power cable needed to provide temporary power to the ULRHEF intake and downstream tunnel portal. SES approved a one-way crossing of the pre-existing Truckwash Creek ford with a rubber tire backhoe to facilitate the installation. SES was onsite during the work on May 6 and no water quality impacts occurred.	-
	<i>Inspection Record</i>	EAO, INX, IEM, CE, WEL	EAO issued their Inspection Report that concluded that the complaint about potential firearms presence on site was unfounded and that the Project is compliant with Condition #1 of EAC E13-01.	-
May 7, 2015	<i>Email</i>	CE, SES	CE notified SES of a mountain goat sighting on May 6 at 46km on the Lillooet River FSR. CE employees and a subcontractor (Sandvik) reported seeing six goats that remained undisturbed. No Photos were taken.	-

Date	Communication Type	Participants	Issues Discussed	ITM ID No.
	<i>Email</i>	WEL, SES, INX	WEL notified SES that an excavator unrelated to WEL project activities was working below HWM in the Salmon Slough to clean out the culvert inlets at dike crossing of the Salmon main access road.	-
May 8, 2015	<i>Emails</i>	INX, SES, CE, JEM	CE distributed their Magazine License renewal approval.	-
	<i>Email</i>	CE, INX, SES	CE provided an update to the ULRHEF Intake Dewatering plan, which included details of the addition of a fifth pond.	-

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
TX Line	Segments 8 – 15	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.
		Riparian Vegetation Management Areas (RVMA)	IEM monitoring is required during clearing within RVMAs.
		Surface Water Quality	IEM monitoring is required during culvert installation activities in non-fish bearing waters to document adherence to the Surface Water Quality Protection Plan objectives.
		Suitable Raptor Nesting Habitat	IEM presence is required when clearing within suitable Northern Goshawk (NOGO), SPOW (Spotted Owl) and Western Screech-Owl (WESO) nesting habitat during the breeding period. A QP is to complete a nest survey if working within 600m of suitable Peregrine Falcon (PEFA) nesting habitat during the breeding period.
		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.
		Wildlife Habitat Area (WHA) 2-399	Construction of the transmission line within the Grizzly Bear WHA 2-399 must be constructed outside of April 1 to June 1 and October 15 to December 31 to minimize disturbance to Grizzly Bears expected to use the WHA during spring and fall.
		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).

Component	Location	Wildlife/Archeology Concern	Construction/Timing Restrictions & Mitigations
		Moose, Deer, & Mountain Goat UWRs	Helicopter flight paths will avoid UWRs and landing locations will be located further than 500m away from the UWRs during the sensitive late winter period (March 1 – May 15).
Lillooet River FSR & ULRHEF	Access roads above the lower limit of the 200m buffer Truckwash Creek Migration Corridor to the ULRHEF intake	Mountain Goat UWR & Migration Corridor	<p>Daily construction equipment shutdowns occurred throughout the reporting period beginning one hour before and two hours after sunrise as well as two hours before and one hour after sunset. This timing restriction is effective within the Migration Corridor and 200m buffer throughout the month of May.</p> <p>Noise levels monitoring is occurring near the downstream portal at two monitoring stations within the Truckwash Creek migration route, as well as one location at the ULRHEF intake with guidance from an acoustical consulting firm. If noise levels exceed 75 dBA at the edge of UWR u-2-002 UL 11 or the migration corridor during the critical winter (Nov 1 - Apr 30) and kidding (May 1 - Jun 15) periods, additional mitigation measures are to be implemented to minimize noise levels.</p> <p>If a goat observation occurs within 500 m line-of-sight of construction activities, construction must cease for at least 48 hours. The IEM must record and submit all goat observations to FLNR within 48 hours.</p>
ULRHEF & BDRHEF	BDRHEF intake	Mountain Goat UWR habitat (u-2-002 UL 12)	<p>During winter construction and operations (November 1 – June 15), access to Boulder Creek HEF intake must be gated at least 500 m from the original UWR u-2-002 UL 12 to restrict motorized use within the UWR, unless otherwise directed by FLNR.</p> <p>Noise levels are monitored during active construction works occurring between May 1 – June 15 within UWR u-2-002 UL 12. The noise level monitoring location is between the intake work area and the portion of the UWR with the highest documented use. If noise levels exceed 75 dBA at this location, activities will cease until additional mitigation measures are proposed and implemented to minimize the possibility of additional noise level exceedances.</p>

4.0 Upper Lillooet River HEF – Monitoring Results

4.1 Intake (North & South Sides), Access Roads and Upstream Tunnel Portal

Construction Activities:

- Hand falling, clearing and grubbing for spoil area expansion and wastewater treatment ponds (Photo 1 and Photo 2).
- Construction of intake dewatering and wastewater treatment ponds (Photo 3, Photo 4 and Photo 5).
- Installation of pumps and hoses for intake dewatering and wastewater treatment sump (Photo 6).
- Re-contouring of north side spoil pile (Photo 7).
- Drilling and blasting between downstream cofferdam and intake portal excavation (Photo 8).

Environmental Summary:

- Construction of the ULRHEF intake dewatering and wastewater treatment system continued during this reporting period (Photo 3, Photo 4 and Photo 5).
- Drill and blast works commenced at the ULRHEF intake on May 9. CE and the IEM agreed that drilling and blasting may occur within 500m of the Keyhole Falls Mountain Goat kidding range under the following conditions:
 - Noise suppression measures (delays, charge weights, blast mats, etc.) be used,
 - Noise levels remain below 75 dBA (measured at Keyhole Falls monitoring location), and
 - The blasting schedule be provided to the IEM to allow for goat monitoring to occur during the blasts.
- On May 9, goat monitoring was conducted at the Keyhole Falls location (MG-OBS02) during a blast for the removal of the earth berm between the ULRHEF downstream cofferdam and the intake tunnel portal (17:52). No Mountain Goat disturbances were observed at the time of the blast. Analysis of the data from the Keyhole Falls noise monitoring station confirmed noise levels remained below 75 dBA during the blast event.
- The IEM was onsite to monitor construction activities within 30m of the Lillooet River.

Photos:



Photo 1 – Hand-falling completed for sediment ponds and spoil pile expansion (May 3, 2015).



Photo 2 – Clearing and grubbing for sediment ponds (May 3, 2015).



Photo 3 – Excavation of sediment ponds (May 3, 2015).



Photo 4 – Lining of intake sediment ponds (May 9, 2015).



Photo 5 – Lining and placing rock for intake sediment ponds (May 9, 2015).



Photo 6 – Pumps and hoses installed at intake dewatering sump (May 6, 2015).



Photo 7 – Re-contouring of north side spoil pile (May 9, 2015).



Photo 8 – Blast site between lower cofferdam and portal excavation (May 9, 2015).

4.2 *Downstream Tunnel Portal*

Construction Activities:

- Mobilization of tunneling and dewatering equipment (Photo 9 and Photo 10).
- Dewatering of downstream tunnel portal.

Environmental Summary:

- A generator continued to operate during the Mountain Goat migration corridor sunrise/sunset shutdown periods to power the pump for tunnel dewatering. The IEM approved its operation under the conditions that the generator was used only for the pumps and access to the generator was restricted during the shutdown periods.
- Accumulated water within the downstream tunnel portal was dewatered directly to Truckwash Creek with a 6" pump and hose. The pump was suspended from an excavator bucket to ensure that the intake did not convey sediment-laden water to Truckwash Creek. The hose outlet was secured in a position that would not cause erosion to the stream bank.
- The ULRHEF downstream tunnel portal settling ponds are scheduled for reactivation in the next reporting period when tunneling activities commence (Photo 11).
- The PAG stockpiles at 44.75km and 45km on the Lillooet River FSR remained isolated from precipitation and runoff (Photo 12).
- On May 7, a loader made one crossing over Truckwash Creek to string a power cable from the temporary generator station at 39km of the Lillooet River FSR (Photo 13). The IEM was present to monitor the crossing and ensure downstream water quality was not affected.

Photos:



Photo 9 – Current conditions at the ULRHEF downstream tunnel portal, dewatering continues (May 4, 2015).



Photo 10 – Oil water separator prepared for installation at ULRHEF downstream tunnel portal (May 4, 2015).



Photo 11 – ULRHEF downstream tunnel portal sediment ponds currently not in use (May 4, 2015).



Photo 12 – PAG stockpiles at 45km on the Lillooet River FSR remained protected from precipitation (May 4, 2015).



Photo 13 – Loader crossing Truckwash Creek to string power cable (May 7, 2015).

4.3 **Penstock**

Construction Activities:

- Penstock fill works commenced at 2+800.
- Penstock excavation works commenced from 4+050 to 4+075 (Photo 14).

Environmental Summary:

- No environmental issues were observed during this reporting period at the ULRHEF penstock.

Photos:



Photo 14 – Penstock excavation at 4+060 (May 9, 2015).

4.4 **Powerhouse & Access Road**

Construction Activities:

- Continued rebar installation and formwork for the powerhouse structure (Photo 15).
- A structural concrete pour was completed on May 6 (Photo 16).
- Dewatering of the powerhouse sump to the Lillooet River continued (Photo 17).

Environmental Summary:

- On May 6, the IEM was onsite to inspect the ULRHEF powerhouse during a concrete pour. The IEM conducted water quality sampling in the powerhouse sump and at discharge site of the dewatering pump. All water samples were measured to have a pH <9 and suitable for discharge to the surrounding environment as per the Surface Water Quality Protection Plan (see Section 4.5 Water Quality Results).
- Dewatering of the ULRHEF powerhouse continued without environmental concerns. The IEM will continue to monitor the works area to confirm that future concrete pours are adequately isolated from flowing water and protected from precipitation during curing.

Photos:



Photo 15 – Current conditions at the ULRHEF powerhouse (May 3, 2015).



Photo 16 – Concrete pour at ULRHEF powerhouse (May 6, 2015).



Photo 17 – Seepage water pumped to container above ULRHEF powerhouse sump (May 6, 2015).

4.5 *Water Quality Results*

The following table presents the results of the routine water quality 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 regular monitoring sites have been selected 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 melt fluctuations and large tributary inputs. In the event that an exceedance of *in-situ* water quality (turbidity or pH) is deemed to be caused by 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, the exceedance will be marked by an asterisk (*).

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (µS)	Temp (°C)
Routine Water Quality						
May 9, 2015	10:21	ULR Background – ULRHEF Intake	7.8	11.8	95	7.5
	10:35	ULR #0.5 – Downstream of ULRHEF intake at Keyhole Bridge	7.8	12.5	99	7.6
	11:12	ULR #1 – Upstream of ULRHEF Powerhouse	7.7	12.0	87	7.4
	11:29	ULR #2 – Downstream of ULRHEF Powerhouse between KM 40.5 and KM 41	7.8	11.0	94	7.5
	11:48	ULR #3 – Lillooet River FSR KM 38 Laydown – D/S of Boulder confluence	7.8	9.5	90	7.6
	13:10	ULR #4 – Lillooet River FSR KM 24 – D/S of all works and Meager confluence	7.8	13.8	101	7.9
Water Quality for Specific Works						
May 6 Concrete Pour at ULRHEF Powerhouse						
May 6, 2015	10:15	Outlet of powerhouse sump to settling pond	6.89	-	-	-
	10:28	Powerhouse sump	7.38	-	-	-
	10:06	10m downstream of settling pond discharge to Lillooet River	7.33	-	-	-

4.6 Recommendations

IEM recommendations for the ULRHEF are as follows:

- Following completion of the intake dewatering and wastewater treatment system, all seepage water in the portal excavation should be conveyed to the sediment basins unless approved for discharge directly to the Lillooet River by the IEM.
- The IEM recommends that the access roads and tributaries on the penstock alignment be monitored regularly to ensure that no erosion and sediment control issues develop with the continued excavation/fill works rock truck traffic.
- The ULRHEF powerhouse sump water should be monitored regularly. Alkaline or turbid water should be pumped to the remaining settling pond for treatment prior to discharge.

4.7 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur at the ULRHEF in the upcoming reporting period(s):

- Construction of the intake dewatering and wastewater treatment ponds will continue.
- Installation of pipes, hoses and pumps for the intake dewatering and wastewater treatment system will continue.

- Commissioning of intake dewatering and wastewater treatment system.
- Drilling and blasting will continue at the ULRHEF intake.
- Tunneling activities will commence at the ULRHEF downstream tunnel portal.
- Excavation and fill works will continue on the ULRHEF penstock alignment.
- Rebar installation, formwork and concrete pours will continue at the ULRHEF powerhouse.

5.0 Boulder Creek Hydroelectric Facility – Monitoring Results

5.1 Intake Access Road & Crane Pad

Construction Activities:

- Assembly of the 300-ton crane continued (Photo 18).
- Rope access scaling and slope stabilization works commenced on the right bank upstream of the crane pad (Photo 19).
- Rock hammering and excavation commenced above the intake crane pad (Photo 20).

Environmental Summary:

- On May 4, a noise monitoring station was installed 375m northwest of the BDRHEF intake within the identified UWR (UL-11, Photo 21). Based on discussions with INX, Ecofish and the IEM, the station was positioned between the intake site and the portion of the UWR with the highest level of recent documented (project assessment related) ungulate usage. Noise level monitoring will continue to ensure that the 75 dBA noise level threshold is not exceeded as outlined in the Mountain Goat Management Plan.
- The gate to restrict public access on the BDRHEF intake access road within 500m of UWR was manned throughout this reporting period.

Photos:



Photo 18 – 300 tonne crane assembly at the BDRHEF intake (May 3, 2015).



Photo 19 – Rope access crews conduct scaling works on right bank at BDRHEF intake (May 8, 2015).



Photo 20 – Rock hammering with excavator at BDRHEF intake (May 9, 2015).



Photo 21 – BDRHEF intake noise monitoring station (May 4, 2015).

5.2 *Downstream Tunnel Portal and Powerhouse*

Construction Activities:

- Rebar installation and formworks for the powerhouse structure continued.
- A structural concrete pour occurred on May 7 (Photo 22).
- Drilling, blasting, mucking and stabilization works continued within the tunnel.
- Dewatering of the tunnel and powerhouse excavation to the oil water separator and settling ponds continued (Photo 23).

Environmental Summary:

- No environmental issues were observed during this reporting period at the BDRHEF powerhouse or downstream tunnel portal.

Photos:



Photo 22 – Concrete pour at the BDRHEF powerhouse (May 7, 2015).



Photo 23 – Dewatering the BDRHEF tunnel and powerhouse to the oil water separator (May 7, 2015).

5.3 Water Quality Results

The following table presents the results of the routine water quality 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 regular monitoring sites have been selected 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 Boulder Creek due to seasonal fluctuations in snowmelt. In the event that an exceedance of *in-situ* water quality (turbidity or pH) is deemed to be caused by 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, the exceedance will be marked by an asterisk (*).

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (uS)	Temp (°C)
Routine Water Quality						
May 2, 2015	-	BDR BG – Upstream of BDRHEF intake *not currently accessible*	-	-	-	-
	-	BDR #1 – Downstream of BDRHEF intake *not currently accessible*	-	-	-	-
	12:05	BDR #2 – Upstream of BDRHEF Powerhouse	7.6	6.7	64	6.7
	12:15	BDR #3 – Downstream of BDRHEF Powerhouse at Pebble Creek Bridge	7.5	6.3	67	6.8

5.4 Recommendations

IEM recommendations for the BDRHEF are as follows:

- The IEM recommends that all wastewater related to the BDRHEF tunnel works continues to be contained and pumped to the downstream portal settling ponds for treatment.

5.5 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur at the BDRHEF in the upcoming reporting period(s):

- Scaling and stabilization works on the BDRHEF intake right bank will continue.
- Rock hammering and excavation at the intake will continue.
- BDRHEF downstream portal tunnelling works will continue.

6.0 Transmission Line – Monitoring Results

6.1 Transmission Line Construction Activities

Right-of-Way Clearing:

- Hand falling in Segment 13 from structures 313 – 316.5, 322 – 322.5, for roads 306 and 322.

Existing Road Upgrades and Access Road Construction

- Grading Miller Bench FSR in Segment 12 from 0 – 2.8km.
- Hoe chucking in Segment 13 near structures 318 – 319.
- Building road 371.1 near structure 352 in Segment 14.
- Clearing and construction of helipads H376 in Segment 15.

Transmission Line Pole Installation, Line Stringing and Clipping

- Stringing in Segment 8 and 9 from structure 182 – 201.

Temporary Power Generation

- WEL completed work on the temporary power generation station in Segment 2 on May 3, 2015 (Photo 24). The temporary power station will operate to provide power to the BDRHEF and ULRHEF intake and powerhouse sites until transmission line interconnection is able to provide backfeed power from BC Hydro. Backfeed is expected to be online mid-July 2015.

Environmental Summary:

- The IEM was present as required when clearing activities occurred within 150m of wetlands, 15m RVMAs (30m for CTF streams), 100m of Coastal Tailed Frog Streams, Class 1 & 2 suitable Grizzly Bear WHA and/or suitable forage habitat, moose and deer UWR, legally designated Old Growth Management Areas (OGMAs) or within Northern Goshawk, Spotted Owl or Western Screech-Owl nesting habitat (during breeding season). All flagged

boundaries were respected during clearing activities. No environmental issues were observed.

- A pre-work helicopter flight occurred on May 5, 2015 to assess the UWRs RO-08 and RO-04 adjacent to the Segment 15 ROW (Photo 25). Both UWRs were unoccupied during the assessment. A monitoring station was setup on the South Rutherford FSR to monitor the UWRs during active construction and helicopter work in Segment 15 to ensure no Mountain Goats moved into the area (Photo 26). No Mountain Goats were observed by the IEM or the helicopter flight on either UWRs during this reporting period.

Photos:



Photo 24 – Temporary generator station works completed in Segment 2 (May 3, 2015).



Photo 25 – Segment 16 helicopter reconnaissance of RO-4 and RO-8 (May 5, 2015).



Photo 26 – Goat monitoring location for UWR in Segment 16 (May 5, 2015).

6.2 Water Quality Results

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (uS)	Temp (°C)
Routine Water Quality						
No WQ measurements were recorded at active Tx-line work areas during this reporting period. Construction and clearing activities had no visual effect on WQ.						

6.3 Recommendations

- The IEM has no recommendations at this time.

6.4 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur along the TX Line in the upcoming reporting period(s):

- Access trail building in Segment 6.
- Hand clearing in Segment 13 and 14.
- Road construction in Segment 13 and 14.

7.0 Wildlife Sightings

As per the CEMP, a wildlife sightings record has been implemented and will be updated regularly by Project Personnel. It is mandatory for all personnel to report wildlife sightings including, but not limited to bears, cougars, mountain goats and deer. Wildlife sighting will be reported and recorded by the contractor(s). Wildlife Observation forms will be included in the 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 following mitigation measures were implemented for work activity within the Migration Corridor during this monitoring period:

- Daily dawn and dusk shutdowns as outlined in the Mountain Goat Management Plan were followed.
- Noise level monitoring to ensure that the 75 dBA noise level threshold is not exceeded as outlined in the Mountain Goat Management Plan.
- As of May 1, the IEM or designate was on site to monitor Mountain Goat activity within 500m of construction activities at the ULRHEF intake and the ULRHEF downstream tunnel portal. Mountain Goats were monitored from three sites:
 - Truckwash Creek viewing river right of the Migration Corridor – MG-OBS01 (10U 467955 5612773):
 - Keyhole Falls viewing the south side u-2-002 UL11 – MG-OBS02 (10U 466593 5613988); and,
 - Garibaldi Pumice mine site viewing u-2-002 UL 19 – MG-OBS03 (10U 467388 561408).

Monitoring effort was split between all three sites between sunrise and sunset, unless safety concerns or weather conditions precluded monitors from doing so. The order of site visits rotated daily. Construction activities need to cease if a goat(s) are observed moving towards the ULRHEF intake and/or if a goat(s) are observed within a 500m line of site of a construction activity. No goats were observed within 500m line of sight of construction activities and no work stoppages were required.

Please refer to the attached Mountain Goat Monitoring Daily Observation Forms for a summary of observations from this reporting 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#24	Closed	BDRHEF intake access road	An excavator was removing slope failure debris within a wetted ditch line without water management measures in place and without prior IEM notification. The work to remove the debris caused the generation of turbid water that was discharged offsite without treatment.	<ol style="list-style-type: none"> The IEM informed the CE environmental manager onsite that works were required to halt until pumps were in place to isolate the work area from flowing water. Works were halted and a pump was brought in to divert the flow around the work area. Prepare and submit EIR#015 outlining the root cause of the incident and how it will be avoided in future. 	May 1, 2015	May 3, 2015	May 4, 2015 (Final EIR distributed)
<i>next ITM – ULR#25</i>							

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: BDR HEF – Intake Access Road
Time/Date of Incident Start: May 1 st – 2015	Time/Date Incident Stopped: May 1 st – 2015
Date of Report: Draft Submitted: 2014-05-02 Final Submitted: 2014-05-04	Project Incident Report Number: 2015-05-02 CE-EIR-015 Incident Description: BDRHEF – Intake access road debris removal from ditch line without water management or notification to IEM
Report Prepared By: Jean Pelletier / Jordan Gagné / Ian McKeachie	
Contractor’s Environmental Manager: Jean Pelletier / Jordan Gagné / Ian McKeachie	
Independent Environmental Monitor (Sartori Environmental Services): Stephen Sims/ Tom Hicks	
Initial IEM Contact: 2015-05-01, the IEM raised concerns on-site regarding the work being done without his presence and without water management in place.	
Licensee’s Environmental Manager: Julia Mancinelli	

Contact Information for Company Involved in Incident	
Company: CRT-ebc	Address: 11-7339 Old Mill Road, PO Box 585, Pemberton, BC, V0N 2L0
Phone #: 604-894-5002	Email: jpelletier@crtconstruction.ca , jgagne@crtconstruction.ca , imckeachie@crtconstruction.ca
Contact Person: Jean Pelletier / Jordan Gagné / Ian McKeachie	Position: Environmental Managers

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"/>	Potential 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 checked="" 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 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 type="checkbox"/> Clear	 <input checked="" 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: BDR HEF – Intake Access Road								
Description and Cause of Incident: <u>Description:</u> <ul style="list-style-type: none"> • On May 1st, a CRT-ebc excavator began working to remove material/debris from the BDR HEF intake access road. • A ditch line on the upslope side of the BDR HEF intake access road was also blocked by material and debris, and the removal of this debris in the flowing water conveyed by this ditch caused the water to become turbid. • Turbid water conveyed through the ditch line was discharged from a culvert to a steep vegetated slope above Boulder Creek. <u>Cause:</u> <ul style="list-style-type: none"> • No water management mitigation measures were in place. Also, the IEM was not notified prior to commencing work in an area with flowing water. The kick-off meeting had not been completed before work commenced, which meant that the foreman had not been informed of the need for water management in this area. 								
Incident Witness: CRT-ebc environmental team and the IEM (Tom Hicks).								
Were there any Potential Environmental impacts as a result of the incident? (e.g., surface contamination, storm sewers, or fish/wildlife mortalities)							Yes <input type="checkbox"/>	None Observed <input checked="" type="checkbox"/>

If Yes, please describe:			
Has Wildlife Salvage Protocol been followed?	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 type="checkbox"/>	N/A <input checked="" type="checkbox"/>
If yes, attach results of water quality analysis to report in table format. Include Laboratory analysis if completed. If No please explain:			
Have applicable photos and/or drawings been attached to the incident report?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>
Incident Response Measures			
<p>CRT-ebc took the following response measures:</p> <ul style="list-style-type: none"> • A check dam was built in the ditch line, to intercept water upstream of the work area. • A pump was installed upstream of the work area to ensure that clear water was diverted around the work site before work continued. 			
Actions to Prevent Incident Recurrence			
<p>Before the incident the mitigation measures in place were:</p> <ul style="list-style-type: none"> • Work plans are being reviewed during kick-off meetings and include the presence of CRT-EBC Superintendent, Foreman, Field Engineer and Environmental Manager, IEM and Owner. • The work plans are referenced on site by foremen and superintendents during construction activities. • All steps and hold points were highlighted during kick-off meetings. <p>Action Items:</p> <ul style="list-style-type: none"> • Superintendents and foreman were reminded of the importance of water management. • Superintendents and foreman have acknowledged the error in commencing construction before the kickoff meeting had finished, and before the site could be properly assessed for environmental risks. • Solidify communication protocols – Superintendents and foreman to increase review of work plans daily with field engineers and environmental managers if any new steps in construction are occurring. Foreman will have a copy of the LTC authorization package (which includes the Work Plans) with them at all times and be able to demonstrate knowledge of the details and identify hold points. Superintendents are responsible for ensuring that foremen are in possession of the LTC authorization package and Work Plans at all times. • CRT-ebc Environmental Managers will check periodically to verify that all foremen are in possession of the LTC authorization package and Work Plans at all times. 			



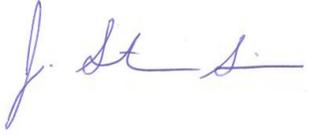
Notification Record						
Agency Reported to	Contact Information	Agency Contacted		Date and Time Reported	Reported By	Method of Reporting
		Yes	No			
External Notifications						
MFLNRO BC EAO	Andrea Cowgill	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
	Chris Parks	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
PEP	1-800-663-3456	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
MOE Staff		<input type="checkbox"/>	<input checked="" type="checkbox"/>			
DFO		<input type="checkbox"/>	<input checked="" type="checkbox"/>			
DFO		<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Environment Canada	604-666-6100	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Canadian Coast Guard	604-666-6011	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Local Fire Rescue	911	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Reported to	Contact Information	Contacted		Date and Time Reported	Reported By	Method of Reporting
		Yes	No			
Internal Notifications						
Owner Innergex	Julia Mancinelli jmancinelli@innergex.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2015-05-01 21:55	Tom Hicks	Email
IEM Sartori Environmental	Stephen Sims steve@sartorienv.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2015-05-01 21:55	Tom Hicks	Email
Owner Innergex	Julia Mancinelli jmancinelli@innergex.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2015-05-01 13:00	Tom Hicks	Phone
Owner Innergex	Oliver Robson orobson@innergex.com	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2015-05-01 13:00	Tom Hicks	Phone



Contractor's Project Manager:

Yannick Tardif	Project Manager, CRT-ebc		2015-05-04
Print Name	Position and Company	Signature	Date

Reviewed by:

J. Stephen Sims	Independent Environmental Monitor, Sartori Environmental Services		2015-05-04
Print Name	Position and Company	Signature	Date



Environmental Assessment Office

Inspection Record

Project Name: <input type="text" value="Upper Lillooet Hydro Project"/>	Inspection Status: <input type="text"/>
Certificate #: <input type="text" value="E#13-01"/>	Inspection No: <input type="text"/>
Certificate Status: <u>Certified</u>	Inspection Date: <input type="text" value="2015-04-14"/>
Region: <u>South Coast</u>	Office: <u>Victoria</u>
Trigger: <u>Complaint</u> Incidents of Non-Compliance Observed: <u>No</u>	
Non-Compliance Decision Matrix Level: <u>Level 0 - In Compliance</u>	Non-Compliance Decision Matrix Category: <u>Compliance</u>
Inspector Name(s): <input type="text" value="Chris Parks, Natural Resource Officer, Senior Compliance Officer BC Environmental Assessment Office"/>	
Audit Record(s): <input type="text"/>	Total Non-Compliance(s): <input type="text"/>
Proponents Name: <input type="text" value="Upper Lillooet River Power Limited Partnership (PLP), Boulder Creek (PLP), North Creek Hydro (PLP) (Innergex)"/>	
Proponents Contact(s): <input type="text" value="Julia MANCINELLI"/>	
Mailing Address: <input type="text" value="200 - 666 Burrard St., Park Place, Vancouver, British Columbia V6C 2X8"/>	
Phone No: <input type="text" value="604-633-9990 or 604-345-4009"/>	Fax No: <input type="text"/>
Contact Email: <input type="text" value="Julia Mancinelli <JMancinelli@innnergex.com>"/>	
Location Description: <input type="text" value="60 km northwest of Lillooet, accessed from Pemberton via the Upper Lillooet FSR"/>	
Lat: <input type="text" value="50.676726°"/> N	Long: <input type="text" value="-123.475516°"/> W
Sector: <u>Energy</u>	

Summary

MONITORING AND REPORTING REQUIREMENTS	
Inspection Period: From: 2015-03-31 To: 2015-04-13	
Certificate or Act: Environmental Assessment Certificate E#13-01	
Activity: <u>On Site</u>	
Inspection Summary: <p>EAO Compliance and Enforcement (C&E) received a complaint referral from the BC Conservation Officer Service (COS). The COS service had, in the course of their duties, received information from an informant that firearms may have been present on the Upper Lillooet Hydro Project (Project). Note that the informant wished to stay anonymous and was not contacted by EAO C&E.</p> <p>If carried in accordance with the Firearms Act, firearms may be legally carried by staff and contractors on construction projects in BC. However, the EAC#13-01, via Condition 1 of the Table of Conditions, prohibits the carrying of firearms on the Upper Lillooet Hydro Project.</p> <p>EAO Compliance and Enforcement (C&E) Officer Chris Parks contacted Julia MANCINELLI, Environmental Manager, Innergex regarding the complaint via email on March 31, 2015. Upon receipt of that email MANCINELLI contacted C&E Parks by telephone and expressed concern that a complaint had been made, noted that to her knowledge that there were no firearms present on the Project site as the contractors are following the Project permits and CEMP, and identified that in her opinion the complaint was likely a result of the complainants misinterpreting an Innergex corporate policy. That policy provides detailed requirements for where and when firearms are permitted by Innergex on their projects, and the policy states that if a project has a site-specific plan that it must be adhered to (e.g. Innergex and our contractors are required to adhere to the Upper Lillooet Hydro Project Human-Bear Conflict Management Plan which states "no firearms will be kept on site within the Project area"). MANCINELLI noted that she had already provided information to CO Tim Schumacker, and agreed to provide C&E Parks with the additional requested information.</p> <p>MANCINELLI provided C&E Parks with the requested information via email on April 10, 2015. MANCINELLI met with C&E Parks at the EAO C&E Offices in Victoria on April 13, 2015 to discuss the complaint and the information she had provided in her response to the complaint. C&E Parks reviewed the information provided by MANCINELLI, and determined that the policies and procedures in place on the Upper Lillooet Hydro Project regarding firearm presence are such that firearm presence on the Project is unlikely. Further, a written statement provided by the Independent Environmental Monitor on the Project confirms no observations or evidence of firearms being present on the Project. See the Inspection Details section for additional information.</p>	Response: <u>Notice</u>

Compliance Summary	In	Out	N/A	N/D

Automatically populated upon upload

Inspection Details

Types of Compliance: Construction

Requirement Description:

Condition 1 of the Table of Conditions requires that a "Human Wildlife Conflict Management Plan" be prepared and implemented. The Human Wildlife Conflict Management Plan states that "No firearms will be kept on site within the Project area, including construction sites, the construction camp, or in company vehicles".

Findings:

MANCINELLI provided C&E Parks with information requested to verify the Certificate Holders policies and procedures for staff and contractors employed on the Project (Appendix A). This submission includes:

1. A letter to C&E Parks clearly detailing the Certificate Holders policies and procedures specific to the Project meant to ensure compliance with the no-firearms requirement.
2. Photographs and examples of signage and orientation materials displayed and/or provided to staff and contractors to ensure that they are aware of the no-firearms requirement, and are aware of the consequences of not complying with the requirement.
3. A letter from Alex Sartori, RP Bio., Independent Environmental Monitor for the Upper Lilloet Hydro Project. Mr. Sartori confirms that neither he nor his staff, comprising the IEM team for the Project, have made any observations or noted any evidence of firearms on the Project.
4. An email from MANCINELLI to Ian McKEACHIE, Environmental Manager, CRT-ebc (Project civil construction contractor) identifying that EAO had received a complaint, conveying Innergex satisfaction with the contractors performance to date with respect to the no-firearms requirement and other project requirements, and requesting that McKEACHIE "continue to ensure that CRT-ebc stresses the strict no firearms requirement on site" during orientations, site safety meetings, and tailboards, as well as requesting information to provide confirmation of compliance with the no-firearms requirements.
5. An email from MANCINELLI to Pontus LINDGREN, Westpark Electric (Project transmission line construction contractor) identifying that EAO had received a complaint, conveying Innergex satisfaction with the contractors performance to date with respect to the no-firearms requirement and other project requirements, and requesting that LINDGREN "continue to ensure that Westpark stresses the strict no firearms requirement on site" during orientations, site safety meetings, and tailboards, as well as requesting information to provide confirmation of compliance with the no-firearms requirements.
6. Email responses to MANCINELLI from McKEACHIE and LINDGREN confirming their understanding of and compliance with the no-firearms requirement.
7. Email correspondence between CO Schumacker and MANCINELLI.

C&E Parks reviewed the information provided in the submission, and based on that review and in-person and telephone discussions with MANCINELLI, concluded that the complaint is unfounded. In addition, C&E Parks consulted with C&E Justin Carlson, who conducted a site inspection of the Project on November 26, 2014. During that inspection CARLSON noted signage specific to the no-firearms requirement, and did not make any observations that would indicate that firearms were or had been present on the Project.

Compliance: In

ACTIONS REQUIRED BY PROPONENT(S) & ADDITIONAL COMMENTS:

No actions required by the certificate holder at this time.

INSPECTION CONDUCTED BY:

<i>Signature</i>	<i>Date Signed :</i>
Chris Parks, Senior Compliance Officer, EAO	2015-05-06

ENCLOSURE(S) TO PROPONENT(S) & DESCRIPTION:

Appendix A-Submission form MANCINNELLI, Innergex, to C&E Parks

REGULATORY CONSIDERATIONS:

After discussions with and considering the information provided by Innergex, EAO C&E has determined that the complaint is unfounded. EAO C&E and FLNRO C&E will continue to conduct compliance oversight and inspections of the project in 2015/2016.

Environmental Assessment Office	Mailing Address: 1st Floor 836 Yates St PO Box 9426 Stn Prov Govt Victoria BC V8W 9V1	General Inquiries: (250) 356-7479 Fax: (250) 356-7440 E-mail: eaoinfo@gov.bc.ca Website: http://www.eao.gov.bc.ca
---------------------------------	--	--



Renewable Energy.
Sustainable Development.

April 10, 2015

[By Email]

Chris Parks
Senior Environmental Assessment Compliance Officer
BC Environmental Assessment Office
PO Box 9426 Stn. Prov. Government
Victoria, BC V8W 9V1

REFERENCE: Upper Lillooet Hydro Project
Compliance with Condition #1 of Environmental Assessment Certificate #E13-01

Dear Mr. Parks

Innergex Renewable Energy Inc. (“Innergex”), as well as our subsidiaries Upper Lillooet River Power Limited Partnership, Boulder Creek Power Limited Partnership and North Creek Hydro Power Limited Partnership (collectively, “the Partnerships” or “the Holders”), prides itself on being a responsible developer, owner and operator of clean energy projects across Canada and conducting our business in accordance with our project permits and best practices.

The Partnerships and our contractors on the Upper Lillooet Hydro Project (“ULHP” or “the Project”) place the utmost importance on managing project requirements and worker safety at our work site in an environmentally responsible manner in accordance with applicable law, permits and approval, including Environmental Assessment Certificate #E13-01 (EAC) and the Construction Environmental Management Plan (CEMP, which includes the Environmental Protection Plans), especially when it comes to human-bear/wildlife conflict management. As such, we take the BC Environmental Assessment Office’s information request to demonstrate our compliance with Condition #1 of the EAC, specifically in regards to possession of firearms on site very seriously and would dispute this claim.

We believe our project and contractor policies, plans, training programs (including on bear awareness), environmental and coordination meetings, kick-offs/tailboards, safety meetings, site signage, etc. together allow us to achieve this goal. We hope this information will be helpful to you in completing your inquiry.

ADDITIONAL INFORMATION

As previously discussed, several of Innergex’s older facilities across Canada do not have such robust site-specific plans that our projects currently in construction do (e.g. Upper Lillooet Hydro Project). In addition the permits for these sites (e.g., Ashlu, Rutherford, Fitzsimmons, Fire, Tipella, North West Stave, Upper Stave) do not contain the language that is contained in the ULHP permits and plans surrounding management of interaction with wildlife during operations. In an effort to ensure that interaction between humans and wildlife at these sites is responsibly managed in accordance with best practices (precautionary principles and minimization of interaction opportunities) a corporate Wildlife Interaction Management Plan was instituted by Innergex to apply to these sites. However, if there is a project-specific plan in place contractors and staff

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544
info@innnergex.com | www.innergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991
info@innnergex.com | www.innergex.com

are required to adhere to the project-specific plan (e.g. the ULHP which clearly states that the possession of firearms is strictly prohibited on site).

Attached is our correspondence with the BC Conservation Officer about the “rumor about Innergex employees possibly carrying sidearm for bear protection” in relation to our operating projects to provide additional context (refer to email exchange between Innergex and the BC Conservation Officer).

CONTRACT REQUIREMENTS

The Partnerships require that our contractors enter into comprehensive contracts for the Project. These contracts include copies of all Project permits and approval and the CEMP and specified, among many other details, that:

- The Contractor shall comply in all respects with all Applicable Laws, Applicable Permits and Ancillary Agreement relating to the Project and the Site in the performance of the Work.
- The Contractor is responsible for the protection of the environment and the archaeological resources and shall comply strictly with all conditions of Applicable Permits, all Applicable Laws relating to the protection of the environment and archaeological resources; all requirements and directions of Government Authorities, everything contained in the CEMP (e.g. that there is a strict no firearms possession on site requirement) and all environmental and archaeological guidelines, requirements and directions of the Owner acting reasonably.
- The Contractor acknowledges that the IEM and the IE have the authority to stop Work, whether caused by action or inaction of the Contractor, or not, and the Contractor agrees to abide by such stop Work orders.
- The Contractor shall submit to the Owner, the IEM and IE for review and approval work plans and procedures that details how they intend to executed the Work in compliance with the above noted items.

ENVIRONMENTAL OVERSIGHT & IMPLEMENTATION

Our contractors both employ full-time environmental leads, integrated into each contractors’ project management team, that are responsible for ensuring that the environmental requirements of the Project are achieved at the work site. CRT-ebc (CE, civil contractor) and Westpark Electric Ltd. (WEL, transmission line contractor) pride themselves on going above and beyond the compliance requirements associated with any of their projects, and the ULHP is no exception. The suggestions that firearms may have been brought to site is something that they both take very seriously and would dispute (refer to the communication between the Partnerships and our contractors reminding them of this requirement).

Condition #4 of EAC #E13-01 and the Conditional Water Licences require that an Independent Environmental Monitor (IEM) oversee the construction of the ULHP to ensure compliance with all Project permits and approvals, the CEMP and all applicable laws and issued a weekly report detailing the compliance with the project requirements. The government approved IEM for the ULHP (Sartori Environmental Services) has provided comment on the Project’s compliance with Condition 1 of the EAC #E13-01, specifically in relation to firearm possession and to Human-Bear Conflict Management at the ULHP (i.e. zero observations or evidence of firearm possession have been documented or observed at the ULHP to date) (refer to letter from Sartori Environmental Services).

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544
info@innnergex.com | www.innergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991
info@innnergex.com | www.innergex.com

ENVIRONMENTAL AND COORDINATION MEETINGS

- Prior to commencing works, formal Environmental kick-off meetings were held with our civil contractor (i.e. August 27, 2013 and a site visit the following day) and transmission line contractor (i.e. September 10, 2013) were held with their respective project teams and the IEM to formally review the environmental constraints and mitigation measures detailed in our Project permits and approvals and the CEMP (refer to the Environmental Mitigation Presentations).
- A 2014 Year in Review/2015 Environmental kick-off meeting was held with our civil contractor's project managers and environment team, the IE and the IEM to review lessons learned from the 2014 construction period, review environmental constraints and mitigation measures, and identify opportunities to improve the ESC program, work planning processes, and communication protocols prior to the start of the 2015 construction season.
- Bi-weekly Coordination meetings are held with our contractors to review all aspects of the project works, including environmental and permitting specific items related to the work tasks.

ORIENTATIONS

There are three (3) types of Orientations provided by our contractors to anyone working or visiting the site. The firearm restriction associated with the ULHP is highlighted during all these Orientations, as well as the other project specific mitigation measures outlined in the Human-Bear Conflict Management Plan and the Human-Wildlife Interaction Plan to avoid, minimize and mitigate impacts to bears.

1. **Full Environmental, Health and Safety (ESH) Orientation** - Both our civil and transmission line contractors require that all workers attend the respective contractors EHS Orientations. The EHS Orientations have three main components Health and Safety, Environment, and Bear Awareness (refer to Environmental and Health & Safety Orientations and the associated Form/Quiz).

The transmission line contractor has an additional Bear Aware Training module prepared and presented by Dr. Sue Senger (bear biologist) and emphasizes the importance of bear conservation, means of avoiding interactions with bears, managing attractants, and dealing with encounters (a copy of this presentation can be provided upon request). Dr. Senger provided training twice during 2014 and is scheduled to provide her training again this year on April 23 and again in May or June, with additional sessions scheduled as required.

While Dr. Senger is in town in April, Innergex and the Pemberton Wildlife Association have arranged to co-host a Community Backcountry Bear Awareness & Safety session the evening of April 22, 2015.

2. **Visitor Orientation** - Both our civil and transmission line contractors require that visitors complete a Visitor Orientation and be assigned an escort (refer to the Visitor Orientation).
3. **Refresher Orientation** - Workers returning to the civil sites are required to attend a Refresher EHS Orientation (including key human-bear mitigation measures) (refer to the Refresher Orientation) and workers returning to the transmission line sites are required to attend a Refresher Bear Aware Training module.

Our contractors hold all three (3) types of Orientations throughout the year on an as needed basis. The civil contractor holds their orientations on site multiple times a week (previously held in Pemberton at their office prior to the construction camp being established in August 2014). The transmission line contractor holds

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544
info@innnergex.com | www.innnergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991
info@innnergex.com | www.innnergex.com

their orientations in Pemberton (various locations) and at their office in Chilliwack as new crews are on boarded. Copies of the training tracking for both the contractors can be made available upon request.

KICK-OFFS, TAILBOARDS, SITE SAFETY, AND SIGNAGE

In addition to the above, kick-off meetings, daily tailboards and weekly site safety meetings are held to discuss work methodology as well as key environment and safety requirements and season items of interest or concern (e.g. remind crews in the spring that grizzly bear emergence will be occurring and to be diligent with waste management and reporting sightings immediately). Crews are being reminded, again, at tailboards and site safety meetings that there is a strict no firearm possession requirement on site as well as other human-bear/wildlife mitigation measures. Plus, there are various signs throughout the construction camp clearly stating that firearms, fireworks, bear bangers and ammunition are not allowed on site (refer to Photos 1, 2 and 3).

CONCLUSION

I trust our information confirms that the rumors (based on hearsay) you were initially made aware of cannot be substantiated by fact. The Partnerships wish to stress that carrying of weapons is strictly forbidden at the ULHP construction site. This is explicitly detailed in the contracts with our contractors and included in the EHS Orientation (which includes bear aware), ULHP General Camp & Site Rules and other environmental, health, safety and employment documents as well as on signage at site. Contents of the CEMP are also discussed on a regular basis with construction personnel at safety meetings and tailboards.

We trust the enclosed information demonstrates the Partnerships' and our contractors' continued level of diligence and compliance with the Upper Lillooet Hydro Project permits and approval, especially in regards to human-bear conflict management.

We would appreciate that, once BC Environmental Assessment Office has completed its review of the information, that a formal written response be provided confirming the conclusion of your information review.

Sincerely,

"Original Signed"

Julia Mancinelli
Environmental Manager

c.c. Autumn Cousins, Manager, Policy and Compliance - BC Environmental Assessment Office
Justin Carlson, EA Compliance Officer - BC Environmental Assessment Office
Andrew Milne, EA Compliance Officer - BC Environmental Assessment Office
Kirsten Pizarro, Administrative Assistant - BC Environmental Assessment Office
Peter Busink – Ministry of Environment
Tony Hamilton, Large Carnivore Specialist – Ministry of Environment
Tim Schumacher, Conservation Officer – Ministry of Environment
Matt Kennedy, VP Environment, Innergex Renewable Energy Inc.

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544
info@innnergex.com | www.innergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991
info@innnergex.com | www.innergex.com

Encl. Letter from Sartori Environmental Services RE ULHP BC EAO Bear Management
Email – CRT-ebc RE ULHP Compliance Inquiry by Govt – Firearms & Human-Bear
Email – Westpark Electric Ltd. RE ULHP Compliance Inquiry by Govt – Firearms & Human Bear
Email – Conservation Officer RE Worker Safety and Bears
Environmental Mitigation Presentation – Upper Lillooet River HEF
Environmental Mitigation Presentation – Boulder Creek HEF
Environmental Mitigation Presentation – Transmission Line
CE Orientation Environment
CE Orientation Safety
CE Orientation Refresher
CE Orientation Visitor/VIP
CE Orientation Test Environment
CE Orientation Test Safety
CE New Worker Form
WEL Orientation Environmental Awareness
WEL Orientation Health and Safety
WEL Orientation Temporary Site Access
WEL Orientation Training Record and Quiz

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544
info@innnergex.com | www.innergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991
info@innnergex.com | www.innergex.com

Photo 1: Rules on Site Signage (located at the Construction Camp outside of the dining hall)



Photo 2: General Rules on Site and Waste & Food Management Signage (located outside of the dining hall and throughout the Construction Camp)



Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West

East Tower, Suite 1255

Longueuil, Québec J4K 5G4

Canada

Tel. 450 928-2550 | Fax 450 928-2544

info@innergex.com | www.innergex.com

200-666 Burrard St., Park Place

Vancouver, British Columbia V6C 2X8

Canada

Tel. 604 633-9990 | Fax 604 633-9991

info@innergex.com | www.innergex.com

Photo 3: General Rules on Site and Waste & Food Management Signage Wording

General Rules On Site

1. Access to Pebble Creek Hot Springs, Keyhole Falls, and Upper Lillooet Provincial Park is prohibited.
2. Firearms, fireworks, ammunitions, and bear bangers are not allowed.
3. Hunting, Fishing & Trapping is forbidden.
4. Pets cannot be brought to site.
5. No wildlife harassment.
6. Speed limits are 40 km/h during winter and 50 km/h during summer.
7. Public and Wildlife have right of way on the road.
8. REPORT ALL WILDLIFE SIGHTINGS to CRT-ebc environmental team.
9. DRY CAMP: No drugs or alcohol.
10. No smoking inside your rooms, only within designated areas.

Failure to obey to those rules can lead to immediate dismissal.

Waste & Food Management

Food Management

1. All food will be transported and stored in sealed, air tight containers.
2. Food carried away from camp will be kept in closed vehicles or portable bear-proof containers. Food will not be highly odorous.
3. All food-related spills during transportation will be cleaned up immediately.
4. No food will be stored in sleeping areas, only in food preparation and eating areas.
5. Eating areas will be cleaned daily and dishes will be cleaned immediately after use.
6. Food will never be left outside camp perimeter unprotected, and BBQ/outdoor cooking is not permitted.
7. DO NOT LITTER.

Waste Management

1. All garbage and recycling waste will be properly stored and disposed of in bear-proof containers within the electrified fence area.
2. NEVER leave garbage, waste or recycling outside of appropriate bear-proof containers.
3. DO NOT LITTER.

Sewage Waste Management

1. Human grey & black water will be disposed of into our specially design sewage system.
2. All personal washing will be done in designated areas. NOT OUTSIDE.
3. All waste water will be disposed of in the drain provided. NOT OUTSIDE.

Innergex Renewable Energy Inc.

Head Office

1111 Saint-Charles Street West
East Tower, Suite 1255
Longueuil, Québec J4K 5G4
Canada

Tel. 450 928-2550 | Fax 450 928-2544

info@innnergex.com | www.innergex.com

200-666 Burrard St., Park Place
Vancouver, British Columbia V6C 2X8
Canada

Tel. 604 633-9990 | Fax 604 633-9991

info@innnergex.com | www.innergex.com



April 2, 2015

Innergex Renewable Energy Inc.
200 – 666 Burrard Street, Park Place
Vancouver, BC V6C 2X8

ATTENTION: Julia Mancinelli, Environmental Manager

REFERENCE: Upper Lillooet Hydro Projects (ULHP)

BC EAO Inquiry into Firearm Possession and Bear Awareness

Dear Julia,

The following is provided in response to BC EAO's inquiry into compliance with Condition 1 of the EAC# E13-01, specifically in relation to firearm possession and to Human-Bear Conflict Management at the ULHP. As the Independent Environmental Monitor (IEM) for the ULHP our role since September 2013 has been to monitor and report on construction activities and to ensure their compliance with the Conditional Water Licence, EAC# E13-01, the Construction Environmental Management Plan (CEMP), Environmental Protection Plans (EPPs), regulatory permits and approvals, and industry related Best Management Practices (BMPs).

The IEM team can confirm that zero observations or evidence of firearm possession have been documented or observed at the ULHP to date. In addition bear banger deterrents are not used or permitted onsite and blasting restrictions and mitigation measures have been implemented according to the CEMP conditions in order to minimize impacts to Grizzly Bears within the Project area. Human-Bear Conflict management is a key focus at the ULHP and has been diligently managed by Innergex, CRT-ebc, Westpark Electric and their sub-contractors to date resulting in zero instances of Human-Bear conflict at the ULHP.

This is by no means a comprehensive list of the mitigation measures employed by the Owner and its Contractors to adhere to the legislated conditions related to the management of Human-Bear and Human-Wildlife Interactions at the ULHP. In future, should BC EAO wish to discuss the adherence to the above mentioned conditions or any other of the EAC conditions, we are available to discuss these matters as the government approved project IEM. Please contact Tom Hicks, ULHP Lead Environmental Monitor or Stephen Sims, ULHP Delegated IEM at the Sartori Environmental Services head office (604.987.5588) for any project related questions or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read "Alex Sartori", with a long, sweeping flourish extending to the right.

Alex Sartori, RPBio

Upper Lillooet Hydro Projects – Independent Environmental Monitor

Julia Mancinelli

From: Ian Mckeachie <imckeachie@crtconstruction.ca>
Sent: April-01-15 11:51 AM
To: Julia Mancinelli
Cc: yannick.tardif@ebcinc.com; 'Jonathan Drapeau - CRT-EBC'; 'Éric Martin Gagnon'; 'Cindi McPherson'; 'Angel Orejas - CRT Construction'; Oliver Robson; Renaud De Batz; Matt Kennedy; Greg Davis; Liz Scroggins; 'Tom Hicks'; 'Steve Sims'; 'Jean Pelletier'; 'Jordan Gagne'
Subject: RE: ULHP Compliance Inquiry by Govt - Firearms & Human-Bear
Follow Up Flag: Follow up
Flag Status: Completed

Hi Julia,

I have attached the following documents as requested:

- Full EHS Orientation and associated documentation/forms (contained in Dropbox link)
- Refresher and Visitor Orientation and associated documentation/forms (contained in Dropbox link)
- ULHP General Camp & Site Rules (contained in Dropbox link)
- Any other documentation/forms provided to employees detailing these requirements (contained in Dropbox link)
- Photos/proofs of signage/posters on site (and specific location) clearly communicating this requirement (contained in Dropbox link)
- Documentation regarding when and what type of bear aware training that has and will be provided to crews on the Project (see note below)
- Confirmation as to whether or not there have been any instances of firearm possession by staff and subcontractors that was/is in non-compliance with the EAC and CEMP including the EPPs. (see note below)

As indicated on the environment test provided after orientation, each employee is required to view the “Staying Safe in Bear Country” video. During orientation, each employee is also given comprehensive training and information on the site specific conditions regarding Human-Bear awareness and the rules created to comply with the project’s permits and approvals.

There have been absolutely no instances of firearm possession by staff of CRT-ebc or its subcontractors on the ULHP site. The prohibition against carrying firearms is clearly communicated in all of our orientations, including those given to visitors, and is posted on signs around our camp. In addition, this prohibition and other bear awareness information is re-iterated in our refresher orientations and weekly site safety meetings with all staff.

Please access documents in the following Dropbox link:

<https://www.dropbox.com/sh/17bjncumru55txv/AADjU2jovLJOJkfcIghHFBdHa?dl=0>

If there is anything else that we can provide to you, please let me know.

Best regards,



Ian McKeachie

Environmental Manager

Tel: (604)894-5002

imckeachie@crtconstruction.ca

www.crtconstruction.ca

From: Julia Mancinelli [mailto:JMancinelli@innergex.com]

Sent: March-31-15 10:57 PM

To: Jean Pelletier (jeanpelletier@crtconstruction.ca); Ian Mckeachie (IMckeachie@crtconstruction.ca); Jordan Gagne (jgagne@crtconstruction.ca)

Cc: yannick.tardif@ebcinc.com; Jonathan Drapeau - CRT-EBC (jdrapeau@crtconstruction.ca); 'Éric Martin Gagnon'; Cindi McPherson (cmcpherson@crtconstruction.ca); Angel Orejas - CRT Construction (aorejas@crtconstruction.ca); Oliver Robson; Renaud De Batz; Matt K

Subject: ULHP Compliance Inquiry by Govt - Firearms & Human-Bear

Importance: High

Good Evening CRT-ebc Environment Team

We have been in discussions with provincial agencies following up on a rumor regarding “contractors carrying firearms on the Upper Lillooet Hydro Project” and ultimately the Project’s compliance with the Environmental Assessment Certificate.

The provincial agencies have requested a number of correspondence and documentation be provided to demonstrate our compliance with Condition #1 of the ULHP Environmental Assessment Certificate (i.e. the CEMP including the EPPs), especially pertaining to the Human-Bear Conflict Management Plan and the requirement to not carry firearms. Our formal response is required to be submitted prior to April 15, 2015. However, we would like to submit our formal response as soon as possible to close out this inquiry into the Project’s status of compliance with the EAC and CEMP.

As such, we kindly request that CRT-ebc provide responses and/or the most up-to-date version of the following documents prior to Wednesday, April 8, 2015.

- Full EHS Orientation and associated documentation/forms
- Refresher and Visitor Orientation and associated documentation/forms
- ULHP General Camp & Site Rules
- Any other documentation/forms provided to employees detailing these requirements
- Photos/proofs of signage/posters on site (and specific location) clearly communicating this requirement
- Documentation regarding when and what type of bear aware training that has and will be provided to crews on the Project
- Confirmation as to whether or not there have been any instances of firearm possession by staff and subcontractors that was/is in non-compliance with the EAC and CEMP including the EPPs.

As per previous correspondences/meetings, Innergex is pleased with how CRT-ebc has been mitigating the human-bear conflict on site (i.e. in accordance with the project permits/approvals and CEMP including the EPPs) and we trust that the level of diligence that has been displayed to date will continue through the remaining construction phase. As we have discussed on a number of occasions, this year will require extra due diligence as it is an early bear emergence year and the first year the camp will be operating during this spring emergence when bears are hungry and looking for easy access food.

I know CRT-ebc is well underway with starting to ramp up for the 2015 construction season and are holding refresher orientations for returning crews and full EHS Orientations for new personnel.

- I sat in on Visitor Orientation last Friday and I was very pleased to see how calmly and meticulously Eric Gagnon went through the project requirements (line-by-line) in the form and how he conveyed the seriousness of meeting all the requirements.
- Can you **please continue to ensure that CRT-ebc stresses the strict no firearms requirement on site** during these orientations as well as during your next site safety meeting and tailboards.

I am confident that we can easily put this rumor to rest and demonstrate the Project's compliance with the EAC and CEMP.

Thank you in advance for your timely response and your continued commitment to making this project a success and being in compliance with project permits and approvals.

Sincerely

Julia Mancinelli

Environmental Manager



200 – 666 Burrard St., Park Place, Vancouver, British Columbia V6C 2X8
Tel. Vancouver. 604 633-9990 x231 | Tel. Pemberton 604 894-6862
Cell. 604 345-4009 | www.innergex.com

Julia Mancinelli

From: Pontus Lindgren <plindgren@westparkelectric.com>
Sent: April-02-15 8:36 AM
To: Julia Mancinelli
Cc: Shea Irving (sirving@westparkelectric.com); D'Arcy Soutar (dsoutar@westparkelectric.com); Robert Taylor (rtaylor@westparkelectric.com); Renaud De Batz; Peter Ramsden; Liz Scroggins; Steve Sims (steve@sartorienv.com); Tom Hicks (tom@sartorienv.com); Matt Kennedy
Subject: Re: ULHP Compliance Inquiry by Govt - Firearms & Human-Bear
Attachments: ULHP Orientation Training Record and Quiz Rev 1.2.docx; W48 Temporary Site Access Orientation_Rev1.1.pdf; W48 Orientation Records, Mar. 27, 2015.xlsx

Follow Up Flag: Follow up
Flag Status: Completed

Hello, Julia.

Westpark Electric Ltd. (WEL) prides itself on going above and beyond the compliance requirements associated with any of our projects, and the Upper Lillooet Hydro Project (ULHP) is no exception. The suggestion that firearms may have been brought to site is something that we take very seriously and would dispute. We are happy to highlight the process that we implement to ensure that all WEL employees and subcontractors are fully aware of the firearm restriction associated with the ULHP.

1) In accordance with the ULHP Construction Environmental Management Plan (CEMP), every worker must be “oriented” before they are allowed to enter the work site. This orientation includes 2 main modules; 1) Health and Safety and 2) Environmental Awareness. Both modules highlight the firearm restriction. In addition, the “Bear Safety Training” component of the Environmental Awareness Orientation describes to proper responses for dealing with bear encounters, none of which include the use of firearms.

At the end of the orientation presentation, participants are required to take a quiz (attached) to confirm that they understood the fundamental aspects of the orientation, which includes a question related to the restriction of firearms. An Excel tracking record indicating who and when these orientations were completed is also attached.

Links and password for downloading these PowerPoint presentations are:

Password: N4EexWZgSFEz

W48 Environmental Awareness Orientation_Rev2.6.pptx

<https://westpark.egnyte.com/dl/hOtizWZx4O>

W48 Health and Safety Orientation_Rev2.6.pptx

<https://westpark.egnyte.com/dl/JFHJNdBBiT>

2) For those workers who require access to site on short notice (i.e., before a full orientation is possible), a temporary site access orientation must be completed. Firearm restrictions are highlighted within the temporary orientation. In addition, the temporary orientation is only good for 48 hours, after which, the worker must complete the full orientation before returning to site. Signed temporary site access orientation forms are kept on file. A scanned copy is attached as an example of this form.

3) In accordance with the ULHP CEMP and Human-Bear Conflict Management Plan, annual bear safety training, similar to the Bear Aware module, is provided by WEL to all of its workers and subcontractors. This project-specific training module is prepared and presented by Dr. Sue Senger (bear specialist) and emphasized the importance of bear conservation, means of avoiding interactions with bears, managing attractants, and dealing with encounters. The firearm restriction associated with the ULHP is repeatedly highlighted during this presentation.

Dr. Senger provided training twice during 2014 and is scheduled to provide her training again this year on April 23 and again in May or June, with additional sessions scheduled as required. Those workers who received this bear training in 2014 will have the option of taking an abbreviated, "refresher" course, if they wish. Copies of the full and abbreviated presentations can be made available upon request.

We will continue to be diligent with regards to all aspects of the CEMP and associated environmental protection plans and will be reiterating the firearm restriction policy during daily tailboard safety meetings in the coming weeks. Please let me know if you would like to see any documentation to confirm that this has taken place and I will see to it.

Regards,

On Tue, Mar 31, 2015 at 11:17 PM, Julia Mancinelli <JMancinelli@innergex.com> wrote:
Good Evening Pontus and Shea

We have been in discussions with provincial agencies following up on a rumor regarding "contractors carrying

firearms on the Upper Lillooet Hydro Project" and ultimately the Project's compliance with the Environmental Assessment Certificate.

The provincial agencies have requested a number of correspondence and documentation be provided to demonstrate our compliance with Condition #1 of the ULHP Environmental Assessment Certificate (i.e. the CEMP including the EPPs), especially pertaining to the Human-Bear Conflict Management Plan and the requirement to not carry firearms. Our formal response is required to be submitted prior to April 15, 2015. However, we would like to submit our formal response as soon as possible to close out this inquiry into the Project's status of compliance with the EAC and CEMP.

As such, we kindly request that WEL provide responses and/or the most up-to-date version of the following documents prior to Wednesday, April 8, 2015.

- * Full EHS Orientation and associated documentation/forms
- * Refresher/Visitor Orientation and associated documentation/forms
- * Any other documentation/forms provided to employees detailing the requirements of the Human-Bear Conflict Management Plan and specifically the requirement to not carry firearms
- * Photos/proofs of any signage in work areas (and specific location) clearly communicating this requirement
- * Documentation regarding when and what type of bear aware training that has and will be provided to crews on the Project
- * Confirmation as to whether or not there have been any instances of firearm possession by staff and subcontractors that was/is in non-compliance with the EAC and CEMP including the EPPs.

As per previous discussions, Innergex is pleased with how WEL has been mitigating the human-bear conflict on site (i.e. in accordance with the project permits/approvals and CEMP including the EPPs) and we trust that the level of diligence that has been displayed to date will continue through the remaining construction phase.

I know WEL is well underway with starting to ramp up for the 2015 construction season and are holding refresher orientations for returning crews and full EHS Orientations for new personnel.

- * Can you please continue to ensure that WEL stresses the strict no firearms requirement on site during these orientations as well as during your next safety meeting and tailboards with your various subcontractors.

I am confident that we can easily put this rumor to rest and demonstrate the Project's compliance with the EAC and CEMP.

Thank you in advance for your timely response and your continued commitment to making this project a success and being in compliance with project permits and approvals.

Sincerely

Julia Mancinelli

Environmental Manager

[Innergex]

200 - 666 Burrard St., Park Place, Vancouver, British Columbia V6C 2X8

Tel. Vancouver. 604 633-9990 x231 | Tel. Pemberton 604 894-6862

Cell. 604 345-4009 | www.innergex.com<<http://www.innergex.com>>

--

Pontus Lindgren, PhD, RPBio

Environmental Manager

Cell/Text (604) 308-2321

Office: (604) 846-0039

Fax: (604) 846-6857



Julia Mancinelli

From: Julia Mancinelli
Sent: April-08-15 8:50 PM
To: 'Schumacher, Tim D ENV:EX'
Cc: Liz Scroggins; Parks, Chris EAO:EX; Steven Kynoch (SKynoch@innergex.com)
Subject: RE: Worker safety and bears

Good Evening Tim

Since our initial discussion on Monday last week, I have provided you with information regarding the management of human-wildlife interaction and compliance with permits at ULHP and Innergex's other project sites. I have also given you information regarding Innergex's policies and wildlife management plans in an effort to assist your inquiry into the rumours you have heard. I have informed you that:

- 1) ULHP has a ban on carrying weapons and is in compliance with our wildlife management plans.
- 2) Innergex has a wildlife management plan that applies to all its facilities across Canada to the extent that they do not already have site specific plans (like ULHP does). This plan was implemented in an effort to ensure that there is no gap in the company's management of human-wildlife interaction at any project site and to maintain all our facilities in accordance with precautionary principles to minimize the likelihood of interaction.
- 3) The Innergex Plan requires all employees to attend bear safety training and to carry bear spray when working in bear country. Please note, while we require our employees to carry bear spray and train in bear awareness, the Company does not take a position on the effectiveness of one deterrent over another. We want our workers to be safe (and feel safe) on and around our work sites and we will allow them to use the deterrent they are most comfortable in handling to reach this objective. We govern ourselves and our work sites on the basis of applicable law, our permits and what is customary best practice among companies working in back country.
- 4) Innergex does not own or issue weapons to its employees or provide training to employees in the use of weapons.
- 5) If an employee wishes to bring a personal firearm to a work site (because, for example, the employee is experienced in the use of such firearm and would feel more comfortable working in isolation at a remote work site with both this personal firearm and bear spray at the employee's side) the employee can only bring the personal firearm to site if:
 - a. he/she requests a specific authorization from the company in respect of that weapon at that work site;
 - b. fulfills the criteria for carrying such weapon as outlined in the weapons policy (which is more rigorous than the requirements to carry a firearm under Canadian law); and
 - c. the permits for the work site do not prohibit weapons on the site.

We have also conducted a thorough internal inquiry and can confirm that there is no supervisor planning on outfitting his employees with firearms. The company has not given supervisors any authorization for this. In addition, this week and next week, we are providing a detailed seminar to our site personnel at each of our operating facilities in BC on the company's wildlife management plan and weapons policy. This seminar had already been scheduled several weeks ago as part of our ongoing efforts to train and update staff on applicable law and best practices.

I trust our information confirms that the rumours (based on hearsay) you were initially made aware of cannot be substantiated by fact. As far as we are aware, all of our plans and policies are in compliance with applicable law and consequently, we do not believe there is any basis for changing our policies and plans. To be clear, the Company does not have in its policies or otherwise any "exception for workers working in remote locations to carry firearms". All

workers on all of our operating facilities are subject to the Company's policies and none of them are permitted to bring weapons to a project site without fulfilling the company's authorization process (they are further required to certify to the company's on a yearly basis, continued compliance with the criteria, if they receive the initial authorization).

The company places utmost importance on managing worker safety at our work sites in an environmentally responsible manner in accordance with applicable law. We believe our policies, plans and continuing training programs (including on bear awareness) together allow us to achieve this goal. We hope this information will be helpful to you in completing your inquiry.

If you would like to discuss this matter further we would be happy to arrange an in person meeting.

Sincerely

Julia Mancinelli

Environmental Manager



200 – 666 Burrard St., Park Place, Vancouver, British Columbia V6C 2X8
Tel. Vancouver. 604 633-9990 x231 | Tel. Pemberton 604 894-6862
Cell. 604 345-4009 | www.innergex.com

From: Schumacher, Tim D ENV:EX [mailto:Tim.Schumacher@gov.bc.ca]

Sent: April-01-15 2:56 PM

To: Julia Mancinelli

Cc: Liz Scroggins; Parks, Chris EAO:EX

Subject: RE: Worker safety and bears

Hey Julia,

Thanks for the update. I appreciate you taking the time to speak with me on the phone and fill me in on the project/worker policies that you already have in place. My intention of contacting you was to ensure everyone has the most current and up to date information on personal protection against bears and other dangerous wildlife. It is our goal to educate companies and members of the public, so that they can stay safe while working or recreating in the backcountry. I was impressed to hear about all the training and information sessions that you have been putting on or plan to put on. I was also impressed to hear that you may be getting the following information out to your workers/contractors;

- Review of data regarding bear attacks, proves that bear spray is more effective than a firearm.
- Studies/review of bear attacks have proven that aiming a firearm, and hitting the small target of a bears central nervous system, is very difficult to do, under a high stress situation while a bear is charging you.
- Even if a bear is wounded by a fired round, it's a high likelihood of a bear injuring the person or worse.
- Bear spray, when deployed, disperses in a wide mist thus increasing chances of affecting the bear to avoid injury.
- Associated liabilities with firearms (accidental discharges, safe storage, logistics of carrying a firearm, training etc.) vs. carrying a more effective and less dangerous tool like bear spray.
- There has never been a documented fatality, when bear spray was deployed, to defend against a bear attack.
- There have been documented fatalities of persons discharging a firearm, at a bear, during an attack.
- Bear spray can also be effective against other dangerous wildlife.
- Bear spray is a non-lethal option thus protecting sensitive wildlife populations.

The above is not an exhaustive list but gives some good info, that can be passed onto anyone who might not know how effective bear spray is.

Given during our telephone conversation, we didn't go into that much detail as I listed above but I believe, we both had a pretty good understanding of the concept. The conversation I had with Liz, was also very similar. However, I'm a bit concerned with the wording of the policy that you refer to in your email, regarding exceptions to the policy for workers who work in remote locations. Based on the information that I have, I believe that these rumours may have originated from this exemption. Given the rumours I have heard, I believe it's probable that a supervisor somewhere is taking this exemption and is planning on outfitting his employees with firearms. In contacting you, it was my goal of finding out who this may be and provide them with the correct information to correct any misinformation or change a way of thinking.

I am also a bit concerned that, if Innergex believes that bear spray is more effective and agrees with the advantages of bear spray, I'm not sure why there would be an exception for workers working in remote locations to carry firearms? Remote location or not, the principles remain the same. The data analysed would have come from remote locations as these are typically where the encounters occur. I'm not completely familiar with the wording within your permits for the project so I will leave that conversation up to you and the Environmental Assessment Office. I have cc'd Chris Parks in this email for that purpose.

It is my understanding that work is underway, that will require all future permits to have a condition for a firearm ban, for all workers. It would also be advantageous if any companies/contractors currently operating under previously issued permits would employ this same practice. I'm wondering if you are able to reach out to other colleagues of yours, that oversee other projects, to implement similar policies banning employees to carry or possess firearms?

Thank you for putting on the additional bear awareness session in Pemberton, for the public. I hope to attend so I can answer any questions that may arise.

C.O. Tim Schumacher

Sea To Sky Zone | Conservation Officer Service | Ministry of Environment
Whistler, BC
Phone: 604-905-2797
Email: Tim.schumacher@gov.bc.ca

From: Julia Mancinelli [<mailto:JMancinelli@innergex.com>]
Sent: Tuesday, March 31, 2015 8:39 PM
To: Schumacher, Tim D ENV:EX
Cc: Liz Scroggins
Subject: RE: Worker safety and bears

Good Evening Tim

Upper Lillooet Hydro Project

I would like to reiterate, what we discussed on Monday, that the Upper Lillooet Hydro Project has been very serious at implementing a comprehensive Human-Bear Conflict Management Plan and Human-Wildlife Interaction Plan, as part of the larger Construction Environmental Management Plan for the Project, and mitigating potential construction-related impacts on bears and wildlife. We have reported grizzly bear sightings but no bear-related incidents have taken place. There was the one Moose incident that was reported and corrective measures were implemented.

I want to stress that carrying a weapon is strictly forbidden at the ULHP construction site. This is explicitly detailed in the contracts with our contractors and included in the EHS Orientation (which includes bear aware), ULHP General

Camp & Site Rules and other environmental, health, safety and employment documents as well as on signage at site. Contents of the Plans are also discussed on a regular basis with construction personnel at safety meetings and tailboards.

The 2015 construction season is starting to ramp up and our contractors are holding refresher orientations for returning crews and new members are completing the full EHS Orientation.

Last week we hosted a site visit with a number of grizzly bear/wildlife NGOs (i.e. Coast to Cascades, CPAWS and Pemberton Wildlife Association) where they were pleased to hear and see how well we have managed construction activities, particularly in relation to grizzly bears and wildlife, to date at the ULHP construction site. We have also arranged to co-host with the PWA a Community Bear Aware night in Pemberton on April 22, 2015 (Community Centre starting at 7 pm) where we are bringing in Sue Senger to present.

Innergex Operating Projects

As promised, I have followed up with my colleagues in respect to the rumors “about Innergex employees possibly carrying sidearm for bear protection” in relation to our operating projects.

Several of Innergex’s older facilities across Canada do not have such robust site-specific plans that our projects currently in construction do. In addition the permits for these sites (e.g., Ashlu, Rutherford, Fitzsimmons, Fire, Tipella, North West Stave, Upper Stave) do not contain the language that is contained in the ULHP permits and plans surrounding management of interaction with wildlife during operations. In an effort to ensure that interaction between humans and wildlife at these sites is responsibly managed in accordance with best practices (precautionary principles and minimization of interaction opportunities) a Wildlife Interaction Management Plan was instituted by Innergex to apply to these sites. The Plan specifies, among other things: 1) Approaching, feeding, harassing and hunting wildlife is prohibited by the Company 2) Manage waste at the Work Site appropriately; 3) If wildlife becomes a concern or potential hazard at or around a Work Site, contact the designated local Conservation Officer and the EHS Manager; 4) Attend Innergex's bear safety training and carry bear spray in bear country; 5) Where a human-wildlife conflict cannot be avoided and presents an Emergency, personal protection measures including personal wildlife deterrents should be used in accordance with this Plan. The Plan also states that lethal measures should only be used when all other practical means of averting an Emergency have been exhausted. Innergex team members are prohibited from carrying and using dangerous weapons at or around Work Sites except in accordance with the Company’s Canadian Policy on Weapons.

The Company’s Policy on Weapons prohibits personnel from carrying weapons at any work site unless specifically authorized to do so in accordance with the Policy and specifically states that such authorization will only be considered in relation to remote and isolated work sites. Given that Canadians are permitted by law to carry certain weapons (including firearms) if they have the appropriate licencing in place, the Policy was put in place to ensure that the Company could restrict and monitor the presence of weapons at its work sites and limit their use to sites where help/assistance was not easily accessible. The authorization process requires detailed information from the employee including for which work site the employee has requested the firearm authorization. Authorization is entirely within the discretion of the Company and will not be issued if the work site has any permits prohibiting the use of weapons on such site. In addition, once authorized, the employee is required to comply with higher standards than required by law for safe usage, transportation and storage of the authorized weapon. The employee is also required to certify that: 1) such Weapon will only be used as a last resort for Emergency protection against dangerous and predatory wildlife, 2) the employee will not carry a Weapon that has not been specifically authorized and will not carry an authorized Weapon to any Work Site other than the Work Site specified in the authorization letter; 3) will comply with all local, provincial and federal laws and regulations and permits applicable to the work site and the weapon being used; and 4) he/she will control the use of the authorized Weapon so no one except the authorized Innergex team member will handle it. Using firearms is always discouraged and in practice we have not recorded any incidents in recent years where Innergex personnel have shoot at wildlife on or around our work sites.

In addition, the Company does not own any weapons and does not issue weapons to its staff or provide firearms training at any of its work sites across Canada.

Innergex is committed to developing, constructing and operating our projects in a responsible manner and in accordance with project permits and best practices.

If you have any questions, please do not hesitate to give me a call (604-345-4009).

Sincerely

Julia Mancinelli

Environmental Manager

INNERGEX

200 – 666 Burrard St., Park Place, Vancouver, British Columbia V6C 2X8
Tel. Vancouver. 604 633-9990 x231 | Tel. Pemberton 604 894-6862
Cell. 604 345-4009 | www.innergex.com

From: Schumacher, Tim D ENV:EX [<mailto:Tim.Schumacher@gov.bc.ca>]
Sent: March-30-15 3:20 PM
To: Julia Mancinelli
Subject: Worker safety and bears

Hey Julia,

I'm wondering if I can speak with you about worker safety and bears. I've recently heard some rumors about Innergex employees possibly carrying sidearms for bear protection. Could you please email me a phone number I can reach you at or give me a call at 604 905 2797. I'm in and out of the office so if you can't reach me by phone, I get emails immediately.

Thanks

C.O. Tim Schumacher
Sea To Sky Zone | Conservation Officer Service | Ministry of Environment
Whistler, BC
Phone: 604-905-2797
Email: Tim.schumacher@gov.bc.ca

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s): Anne Sutherland

Date (YYYY-MM-DD): 2015-05-03

Weather (cloud cover, precipitation and temperature): Sunny, no clouds, light wind



106-185 forester street, north vancouver, bc v7h 0a6
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to tom@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates (approximate center of observation area)	Daily Start Time (24hr clock)	Daily End Time (24hr clock)	Daily form #	1	of	1
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	11h25	13h10	If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.			
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	08h50	11h10				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	13h25	15h00				

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	Total # of Animals	Age/Sex <i>(if unknown - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG-OBS02	08h50	466760 5613967	MG	Visual siting	1	Adult male	Lying down ruminating	This goat was seen from the road as I drove to the monitoring station. Stopped to age and sex with scope, carried on to monitor st.. did not see from the :	2471
"	11h05	"	"	"	2	Not able to age or sex	Lying down when I looked with binocs, but gone into woods by the time I setup the scope.	The area I spotted goats was at the farthest edge of the scree slope away from the monitoring station.	
MG-OBS01	11h25	467989 5612934	Moose	Tracks	1	U/K	U/k	No siting of MG. Tracks of moose that look new from yesterday. Measured 9' from heel of one track to the next.	
MG-OBS03								No visual sitings.	

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s): Anne Sutherland

Date (YYYY-MM-DD): 2015-05-05

Weather (cloud cover, precipitation and temperature): New snow, 5C, winds 10-15 km



106-185 forester street, north vancouver, bc v7h 0a6
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to tom@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates (approximate center of observation area)	Daily Start Time (24hr clock)	Daily End Time (24hr clock)	Daily form #	1	of	1
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	14h45	16h00				
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	08h40	11h20				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	12h20	14h30				

If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	Total # of Animals	Age/Sex <i>(if unknown - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG-OBS02	09h00	466760 5613967	MG	Visual	2	1 yearling 1 sub-adult Sex unknown	Lying down, resting along top of forest edge close to monitoring station.	Yearling was in same spot (by orange flagging) lying down facing away. Later he changed position and I could see he was ruminating.	
MG-OBS03	12h40	469155 5614900	MG	Visual	1	Adult Sex u/k	Lying down on a ridge top. Grey/ red rock face closer to Truckwash tributary.	New snow last night. Snow line halfway down the mountain. Lone goat on rock bluff is not visible.	
MG-OBS03	14h00	"	MG	Visual	3	All adults, 1 billy, 1 with broken horn (fanny?), 1 sex u/k. Too far away to see.	Feeding and posturing with each other and back to feeding. Billy lead the way across across to other side of rock face.	The lying down goat has disappeared and 3 other goats are 50 m below where other goat was resting. Billy has small dirty patch on flank.	
MG-OBS01	14h45	467898 5614960	N/a	N/a	N/a	N/a	N/a	No goats observed	

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):

Weather (cloud cover, precipitation and temperature):



106-185 forester street, north vancouver, bc v7h 0a6
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to tom@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates (approximate center of observation area)	Daily Start Time (24hr clock)	Daily End Time (24hr clock)	Daily form #	1	of	2
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	08h45	10h15				
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967						
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	10h25	12h40				

If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	Total # of Animals	Age/Sex <i>(if unknown - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG -OBS01	09h40	467898 5612845						No goats or tracks. Note: heavily used trail by the creek which split into 2 directions. One trail crosses creek goes under bluff. Saw 3 deer on it today.	
MG -OBS03	10h25	469155 5614960	MG	Visual	2	Adult, sex and age u/k	Along the edge of woods on right side of grey/ red rock face . One resting other feeding.	No goats on the rock bluff.	
"	10h55	"	MG	Visual	3	All adult size . Sex u/k	The goats disappeared and then I saw 3 feeding in the woods close to the bottom of the right side of rock face.	When they feed in the woods they don't go very far from their " safe zone". They were only in woods for about 1/2hr.	
"	11h25	"	Mg	Visual	4	All adults. 1 billy, rest are unknown sex . One has a broken right horn.	They are feeding and have moved from the forest back to the rock face. Broken horn made a huge leap.	This is the first siting to confirm there are 4 goats in this group. They made their way to the toe of the rock face and are all heading back upslope. Feeding.	

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):

Weather (cloud cover, precipitation and temperature):



106-185 forester street, north vancouver, bc v7h 0a6
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to tom@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates (approximate center of observation area)	Daily Start Time (24hr clock)	Daily End Time (24hr clock)	Daily form #	1	of	1
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	13h30	14h35	If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.			
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	09h30	11h20				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	11h55	13h25				

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	Total # of Animals	Age/Sex <i>(if unknown - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG - OBS02	10h13	466760 5613967	MG	Visual	1	Yearling Sex u/k	Feeding at the very top of the mineral slide area. Moved down with the other 2 to the bedding area.	Along forest line. Minerals and shrubbery.	285,286, 300, 302-305
MG - OBS02	10h25	466760 5613967	MG	Visual	2	Sub-adult? Sex u/k	Feeding, resting momentarily. All three moved down to the usual bedding area below. Running down the hill.	Above the mineral slide on the forest line. Took a video. One of the goats has a bald spot on his right side. Seen "patch" here before. (Last year)	287-290, 301
MG - OBS03	12h15	469155 5614960	MG	Visual	1	Adult Billy?	Climbing up the rock face.	Rock face, forest above. Went into forest couldn't get a picture.	N/a
MG - OBS01	13h45	467898 5612845	MG	Visual	6	All unknown sex and age	Feeding, licking minerals, resting	Across on the south side. Little forest line above a mineral slide, just below the snow line. The mountain looked hazy, visibility was difficult.	313-316

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):

Weather (cloud cover, precipitation and temperature):



106-185 forester street, north vancouver, bc v7h 0a6
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to tom@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates (approximate center of observation area)	Daily Start Time (24hr clock)	Daily End Time (24hr clock)	Daily form #	1	of	2
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	10:40	12:30				
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	14:40	17:55				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	08:30	10:30				

If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	Total # of Animals	Age/Sex <i>(if unknown - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG - OBS03	08:45	10U 469155 5614960	MG	Visual	3	Adult Sex unknown	Feeding/Licking minerals, moved up into forest. One moved down to rest under trees below the other two.	Just to the left of the usual resting spot on the rock face. Can hear construction from 48km	317-320
"	10:15	10U 469155 5614960	MG	Visual	4	Unknown age and sex Adults?	Resting on rock bluffs. Not very far from each other.	Rock bluff in snow line. Hopefully by the end of the week I can get better pictures of the goats that far away.	325-331
MG - OBS01	10:50	10U 467898 5612845	None	N/A	0	N/A	N/A	No sightings. Construction behind me, rts, packer, dozer. Very loud and vibrating.	N/A
MG - OBS02	14:45	10U 466760 5613967	MG	Visual	3	Kid/yearling? (1) Subadult (2) Sex unknown	Resting, kid and 1 subadult got up feed for 10 min and went back to rest. "Patch" stayed laying down.	Below original bedding area near bottom of the slide area, under a tree. There is a lot of sloughing on the mineral slide area from the very top. Don't	334-389

