



Environmental Assessment Office

Inspection Record

Project Name: <input type="text" value="Site C Clean Energy Project"/>	Inspection Status: <input type="text"/>
Certificate #: <input type="text" value="E14-02"/>	Inspection No: <input type="text"/>
Certificate Status: <u>Certified</u>	Inspection Date: <input type="text" value="2015-09-22"/>
Region: <u>Peace</u>	Office: <u>Victoria</u>
Trigger: <u>Planned</u>	Incidents of Non-Compliance Observed: <u>Yes</u>
Non-Compliance Decision Matrix Level: <u>Level 3 - Moderate temporary impact likely</u>	Non-Compliance Decision Matrix Category: <u>Few NCs, not aware/capable to comply</u>
Inspector Name(s): <input type="text" value="Chris Parks, Senior Compliance Officer, Environmental Assessment Office (EAO),"/>	
Audit Record(s): <input type="text" value="N/A"/>	Total Non-Compliance(s): <input type="text"/>
Proponents Name: <input type="text" value="BC Hydro"/>	
Proponents Contact(s): <input type="text" value="Bettina SANDER, Regulatory Manager, Site C Clean Energy Project"/>	
Mailing Address: <input type="text" value="BC Hydro
Four Bentall Centre
600-1055 Dunsmuir Street
Vancouver, B.C. V7X 1V5"/>	
Phone No: <input type="text" value="604.695.5234"/>	Fax No: <input type="text" value="604.695.5290"/>
Contact Email: <input type="text" value="bettina.sander@bchydro.com"/>	
Location Description: <input type="text" value="The Site C Project is an up-to 1100 megawatt hydroelectric facility located approximately 7 km southwest of Fort St. John BC. The Project includes an approximately 77km transmission line consisting of 2 500kV lines connecting the Project to the existing Peace Canyon Substation. The coordinates provided below are for the Site C dam location."/>	
Lat: <input n"="" type="text" value="56°11'37.72"/> N	Long: <input type="text" value="120°54'26.66" w"=""/> W
Sector: <u>Energy</u>	

Summary

MONITORING AND REPORTING REQUIREMENTS

Inspection Period:

From: 2015-09-22 **To:** 2015-09-23

Certificate or Act:

Certificate under the Environmental Assessment Act

Activity: On Site

Inspection Summary:

This record details the results of an inspection against conditions attached to EAC# E14-02, that occurred between September 22 and 23, 2015. The inspection was conducted by Chris Parks, Senior Compliance Officer, BC Environmental Assessment Office (C&E Parks). James Smith, Natural Resource Officer, Ministry of Forests, Lands, and Natural Resource Operations (NRO Smith), and Patrick Lemay, Compliance and Enforcement Officer, Canadian Environmental Assessment Agency (C&E Lemay), attended the Project at the same time and conducted inspections on behalf of their respective agencies.

In addition to NRO Smith and C&E Lemay, C&E Parks was accompanied during the inspection by the following: Autumn Cousins, Manager of Compliance, EAO, and Monica Perry, Executive Project Director, Power and Industrials Lead, EAO; Magali Francoeur, Compliance Program Manager, Canadian Environmental Assessment Agency; Bettina SANDER, AI STRANG, Cam FORRESTER, Nicole MALKINSON, and Alex GRAY (BC Hydro); and Jason YARMISH, Site C Independent Environmental Monitor (IEM), Environmental Dynamics Inc. Project contractors representatives attended various portions of the inspection specific to their contract area, including Scott RAMEY (Triton Environmental Consultants, on behalf of Morgan), Dave COBLE (Atco), Alex BRISSARD (Duz Cho), and Shaleena WATSON (Paul Paquette and Sons).

C&E Parks inspected construction works on the north and south side of the Peace River, including clearing for project components (dam footprint, access roads, camps, and substation), access and haul roads, worker accommodation camp construction, earthworks in and around the "L3" ravine, fuelling locations, and construction equipment.

C&E Parks, NRO Smith, and C&E Lemay completed a verbal debrief of inspection observations with BC Hydro and YARMISH at approximately 1630 on September 23, 2015. C&E Cousins, Monica Perry, and Magali Francoeur attended this debrief.

On October 9, 2015, C&E Parks provided SANDER with a copy of this inspection record in order for BC Hydro to have the opportunity to review the record, identify any factual errors or omission, and respond to findings of non compliance. On October 23, 2015, SANDER provided a response to the draft inspection record (Appendix G).

After review of observations and information obtained during the inspection, and BC Hydro's response to the draft inspection record the following compliance determinations have been made:

Response:

1. The Project is out of compliance with Conditions 2 and 69, with respect to erosion and sediment control requirements;
2. The project is in compliance with conditions 4 and 69, specific to the requirement to treat used wash water as an invasive species introduction and proliferation mitigation measure.
3. The Project is out of compliance with condition 18, with respect to the non compliant handling of anthropogenic wildlife attractants.
4. The Project is out of compliance with condition 18, specific to the requirement that all crews attend "Bear Aware" or similar training programs.
5. The Project is out of compliance with condition 35, with respect to posting speed limits on all construction access roads.
6. The Project is out of compliance with condition 69, with respect to conformance with the "Spill Prevention and Response Plan" and contractor Environmental Protection Plans (EPPs).

EAO COMPLIANCE AND ENFORCEMENT HAS CONFIRMED THAT BC HYDRO IS IN NON COMPLIANCE WITH CONDITIONS 2, 18, 35, AND 69 OF EAC#09-02, ISSUED FOR THE SITE C CLEAN ENERGY PROJECT. PLEASE REFER TO THE "ACTIONS REQUIRED BY PROPONENT" SECTION OF THIS INSPECTION RECORD FOR DETAILS OF ENFORCEMENT MEASURES.

Compliance Summary	In	Out	N/A	N/D
Automatically populated upon upload				

Inspection Details

Types of Compliance: Construction

Requirement Description:

Conditions 2 and 69, Erosion and Sediment Transport.

Erosion and sediment control measures are required to be implemented during construction in accordance with DFO's Land Development Guidelines for the Protection of Aquatic Habitat and MoE's Standards and Best Practices for Instream Works to prevent the erosion of soils and the entry of sediment into watercourses. Spoil piles are required to be covered or vegetated. Runoff is required to be directed away from construction areas where excavation, spoil placement, and staging activities occur. See appendices A (Table of Conditions) and B (CEMP) for detailed requirements.

Findings:

C&E Parks observed locations throughout the Project where loose, erodible soils were present and no erosion control or sediment control measures were in place. The L3 ravine location in particular is a steep sided ravine containing an ephemeral S6 watercourse in the upper reaches, and a flowing S3 (fish-bearing) watercourse in its lower reaches. Earthworks and access roads constructed in and around the L3 ravine have the potential to erode and transport sediment into this watercourse and the Peace River. In particular access tracks and the North Bank Road construction works will channel flow over erodible soils and transport sediment to this watercourse.

Erosion control measures installed in an ineffective or incorrect manner were observed (i.e. silt fences not dug-in or otherwise secured on the south bank (Duz Cho) construction area, and a silt fence installed across the S6 watercourse in the L3 ravine, downstream of the North Bank Road construction area). See Appendix C, photographs 1 through 5 for examples.

Note that in the IEM weekly report published on September 24 (Appendix D) , YARMISH identified that erosion and sediment control contingency materials were not readily available as required by the CEMP.

On October 31, 2015, NRO Smith communicated to C&E Parks that he had inspected the project that week, and had identified that the silt fencing on the south bank referenced above had not been remedied.

Compliance: Out

Types of Compliance: Construction

Requirement Description:

Condition 4 and 69, Vegetation and Invasive Species Management.

Contractors are required to treat used wash water to prevent seed dispersal and release of contaminants.

Findings:

The Morgan EPP does not include the requirement to treat used wash water to prevent seed dispersal, and specifies that used wash water will be used for dust suppression (Appendix E). Note that this is not compliant with the requirements of the CEMP, and may lead to dispersal of invasive weed species throughout the Morgan construction area. See appendix A and B for additional requirement details.

C&E Parks requests that BC Hydro confirm that Morgan and other contractors will not use machine wash water for dust suppression unless this water has been treated, as required by the condition. The October 23, 2015 BC Hydro submission confirms that used wash water has not and will not be used for dust suppression.

Compliance: In

Types of Compliance: Construction

Requirement Description:

Condition 18, Human-Wildlife Conflict.

Condition 18 requires that all construction areas be clean and free of discarded anthropogenic food sources, and that garbage be securely stored in verified bear-proof containers or removed from site.

Findings:

C&E Parks observed discarded anthropogenic food sources in three locations and garbage stored in non bear-proof containers in four locations in the north bank construction area. See photographs 6 through 8 for examples.

Compliance: Out

Types of Compliance: Construction**Requirement Description:**

Condition 18, Human-Wildlife Conflict.

Condition 18 requires that all crews have participated in "Bear Aware" or similar training programs.

Findings:

C&E Parks attended a project orientation presentation at the BC Hydro Offices in Fort St. John, and reviewed the "Site C Worker Accommodation HSE Orientation" and "Site C Worker Accommodation Environmental Orientation". These orientations do not provide or otherwise specify the requirement for "Bear Aware" or similar training programs.

The October 23, 2015 BC Hydro submission does not confirm that all crews had undertaken bear aware or similar training at the time of inspection.

Compliance: Out

Types of Compliance: Construction**Requirement Description:**

Condition 35 Traffic Management.

Condition 35 requires that speed limits be posted on all construction access roads.

Findings:

C&E Parks did not observe speed limits posted on access roads in the north bank construction area.

Compliance: Out

Types of Compliance: Construction**Requirement Description:**

Condition 69 CEMP, Spill Prevention and Response Plan

As a component of the CEMP, the Spill Prevention and Response Plan requires that fuel storage and handling procedures shall be consistent with "A Field Guide to Fuel Handling, Transportation, and Storage (BC MWLAP, 2002)(Appendix F).

The CEMP requires that contractors include spill prevention and response plans within their respective EPPs. The Duz Cho EPP for south bank construction activities requires that all vehicles and equipment on that site be equipped with spill kits

Findings:

C&E Parks and NRO Smith inspected vehicles and equipment on the north and south bank construction areas. Inspectors observed fuel transportation and storage practices contrary to the requirements of condition 69, including incomplete or missing spill kits on fuelling trucks and equipment as required

by "A Field Guide to Fuel Handling, Transportation, and Storage" (BC MWLAP, 2002)(Appendix F).

In the IEM weekly report published on September 24 (Appendix D) , YARMISH identified that spill containment barrels do not contain adequate supplies as per EPP and CEMP requirements, and noted that environmental monitoring staff were unsure of the location of bulk storage spill contingency supplies.

Compliance: Out

ACTIONS REQUIRED BY PROPONENT(S) & ADDITIONAL COMMENTS:

BC HYDRO IS HEREBY WARNED THAT THE PROJECT IS NOT COMPLIANT WITH CONDITIONS 2, 18, 35, AND 69 OF EAC#14-02. EAO C&E WILL CONDUCT AN INSPECTION TO DETERMINE IF THE SITE C CLEAN ENERGY PROJECT HAS BEEN BROUGHT BACK INTO COMPLIANCE WITH THESE REQUIREMENTS. CONTINUED NON COMPLIANCE WITH THESE REQUIREMENTS MAY RESULT IN ADDITIONAL ENFORCEMENT UNDER THE ENVIRONMENTAL ASSESSMENT ACT.

INSPECTION CONDUCTED BY:

Signature

Date Signed :

Chris Parks, Senior Environmental Assessment Compliance Officer

2015-11-13

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

Appendix A: Table of Conditions
Appendix B: Site C Construction Environmental Management Plan
Appendix C: Inspection Photographs
Appendix D: Independent Environmental Monitors Report, September 25, 2015
Appendix E: Excerpt from Morgan EPP specific to use of machine wash water for dust suppression
Appendix F: A Field Guide to Fuel Handling, Transportation, and Storage (BC MWLAP, 2002)
Appendix G: October 23, 2015 BC Hydro Response to Draft Inspection Record

REGULATORY CONSIDERATIONS:

This is the first inspection by EAO C&E against the requirements of EAC# E14-02.

Environmental
Assessment Office

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