



**Notice of Issuance of an  
Order  
Pursuant to section 94 of the  
*Canadian Environmental Assessment Act, 2012***

April 21, 2017

File #: CEAA Registry - 63919

**PURPOSE OF THE NOTICE**

The purpose of this Notice is to notify British Columbia Hydro and Power Authority (the proponent), to whom the Order is directed, that the undersigned Enforcement Officer designated under section 89 of the *Canadian Environmental Assessment Act, 2012*, (CEAA 2012) has issued an Order.

**AUTHORITY**

This document constitutes an Order issued to the proponent of the Site C Clean Energy Project, pursuant to section 94 of CEAA 2012.

**NAME OF PERSON(S) TO WHOM THIS ORDER IS DIRECTED**

This Order is directed to the following:

British Columbia Hydro and Power Authority  
333 Dunsmuir St.  
Vancouver, B.C.  
V6B 5R3

*c/o*

Mr. Greg Scarborough  
Manager, Site C Environmental Compliance, Mitigation and Monitoring  
British Columbia Hydro and Power Authority  
1055 Dunsmuir Street  
Vancouver, BC  
V7X 1V5



## **ORDER**

After conducting an inspection, the undersigned has reasonable grounds to believe that the following provisions of the federal decision statement have allegedly been violated:

1. Failure of the proponent to comply with condition 7.5 – Water quality, which states:

“7.5 The Proponent shall implement the plan and provide to the Agency an analysis and summary of the implementation of the plan, as well as any amendments made to the plan in response to the results, on an annual basis throughout construction and during operation until such time as the threshold values established in condition 7.2.2 have not been exceeded for five consecutive years.”

2. Failure of the proponent to comply with condition 8.7- Fish and fish Habitat, which states:

“8.7 The Proponent shall implement the plan and provide to the Agency an analysis and summary of the implementation of the plan, as well as any amendments made to the plan in response to the results, on an annual basis during construction and for the first ten years of operation and once every five years for the next 20 years.”

By failing to comply with conditions of the decision statement issued by the Minister of the Environment and Climate Change for the Site C Clean Energy Project, the proponent has allegedly contravened paragraph 6(b) of CEAA 2012. In so doing, the proponent has allegedly committed an offence contrary to subsection 99(1) of CEAA 2012, punishable on summary conviction and liable, for a first offence, to a fine of not more than \$200,000 and, for any subsequent offence, to a fine of not more than \$400,000. Furthermore, subsection 99(4) of CEAA 2012 states that if an offence under subsection 99(1) of CEAA 2012 is committed or continues on more than one day, it constitutes a separate offence for each day on which it is committed or continued.

### **REASONABLE GROUNDS**

I, Nicolas Courville, Senior Enforcement Officer, employed by the Compliance Promotion and Enforcement Unit of the Canadian Environmental Assessment Agency (Agency) and designated under section 89 of CEAA 2012, have reasonable grounds to believe that these are the relevant facts surrounding the alleged contravention(s).

### **FACTS**

A site inspection of the Site C Clean Energy Project was conducted between March 24, 2017 and March 28, 2017 by Enforcement Officers Nicolas Courville, Kristin Coverley and Charlie Pitts. During the inspection, three distinct sites listed below were inspected.

- Unnamed Creek 3, downstream of River Road crossing at STA 72+150; and

- Blind Corner and River Road Remediation Works.
- Area A

In the course of the inspection, the undersigned observed that any erosion and sediment mitigation measures in place were not effective in preventing sediment laden water from entering fish bearing waters.

***Unnamed Creek 3 catchment area downstream of River Road crossing at STA 72+150***

A segment of Unnamed Creek 3 is considered fish bearing waters<sup>1</sup>. The proponent's Construction Environmental Management Plan (CEMP) and Fisheries and Aquatic Habitat Management Plan are applicable and shall be implemented as required by conditions 7.5 and 8.7 of the federal decision statement.

The undersigned is aware of previous independent environmental monitor reports and inspection reports from British Columbia's Environmental Assessment Office which indicate sediment laden water has been directed into Unnamed Creek 3 from ponds at the River Road crossing at STA 72+150 and from failed water management structures at the Howe Pit.

The undersigned observed during the inspection that sediment laden contact water from River Road was entering the Unnamed Creek 3 downstream of River Road crossing at STA 72+150 (Figure 1). The undersigned observed the water in Unnamed Creek 3 to be turbid (Figure 2).

In the CEMP - Water Management, Erosion and Sediment Control Plan, the proponent commits to the following, in order to isolate contact water from local water courses:<sup>2</sup>

"Collect and treat contact water in centralised BMP locations with sufficient capacity to manage the design storm (primarily temporary sediment ponds)."

AND

"Treat and discharge high quality water to a designated water course, infiltration areas or other area with a direct connection to a natural water course."

***Blind Corner & River Road Remediation Works***

In the course of the inspection, the undersigned observed sediment laden water flowing down the ditch adjacent to River Road at the area known as Blind Corner. The

<sup>1</sup> Golder Associates Ltd. (October 17, 2014). *Fish and Fish Habitat Assessments of L3 Creek*. Memorandum prepared for BC Hydro, Vancouver BC. Retrieved April 4, 2017. Page 13.

<sup>2</sup> British Columbia Hydro and Power Authority. (July 8, 2016). *Appendix I - Erosion and Sediment Control Plan*. Retrieved March 28, 2017. Page 11. <https://www.sitecproject.com/sites/default/files/CEMP-Appendices-2-20160708.pdf>.

undersigned observed that the sediment and erosion control measures in place were ineffective in preventing sediment transport in the ditch adjacent to River Road at Blind Corner within the work area boundary established within the Environmental Protection Plan (EPP) titled "BC Hydro Blind Corner & River Road Remediation Works" (Figure 3).

The aforementioned EPP contains more specific requirements for the work area as required and established by the overarching CEMP. In particular, the EPP states that (See Annex II for excerpt from EPP):

"Priority will be placed on proactively implementing erosion control measures prior to starting work to minimize the need for sediment control. General measures applicable to this project include: ... Installing silt fence or other measures between the work area and any watercourse or wetland where there is the potential for sediment to reach it..."

The undersigned witnessed that sediment laden water flowed from the ditch, was directed through a culvert and entered the Peace River (Figure 4 and Figure 5).

#### **Area A Excavation**

In the course of the inspection, the undersigned observed sediment laden water flowing in ditches around the stockpiles. The undersigned observed that the sediment and erosion control measures in place were ineffective in retaining surface water containing suspended sediments from leaving the Area A work area and at preventing that water to reach the Peace River as indicated in the EPP title "Site C Clean Energy Project Main Civil Works Area A Excavation Environmental Protection Plan" (Figure 6, Figure 7 and Figure 8).

The aforementioned EPP, states that (See Annex III for excerpt from EPP):

"The primary approach to mitigate this concern it to retain all surface water on site within the Area A work area and to allow it to infiltrate into the permeable ground.

- All surface water is to remain within the Area A work boundary."

#### **MEASURES TO BE TAKEN**

Under the authority given to me pursuant to subsection 94(1) of CEAA 2012, I hereby order you to take the following measures:

**Unnamed Creek 3 catchment area downstream of River Road crossing at STA 72+150**

By April 30, 2017:

1. Implement measures to prevent the introduction of turbid runoff into Unnamed Creek 3;
2. Provide, to the Agency, photographic evidence of the implementation of the measures described at item 1; and
3. Implement the following measures:
  - (a) take a sample of water from the fish-bearing segment of Unnamed Creek 3 immediately before the deposit of run-off resulting from any activity of the designated project in the Unnamed Creek 3 catchment area, and determine the turbidity of the sample;
  - (b) following the step set out in paragraph (a), take a sample of the water from the fish-bearing segment of Unnamed Creek 3, once every hour while physical activities are taking place within or water is discharged into the Unnamed Creek 3 catchment area, and test the sample for turbidity;
  - (c) if the result of any turbidity test referred to in paragraphs (b) exceeds the water quality objective for turbidity established in the CEMP, stop all physical activities of the designated project within or discharges of into the Unnamed Creek 3 catchment area until the turbidity levels in Unnamed Creek 3 have returned to the turbidity levels found in paragraph (a); and
  - (d) report to the Agency the results of any turbidity test referred to in paragraphs (a) and (b) if the water quality objective for turbidity is exceeded, such report to be submitted to the Agency within 5 days of the exceedance.

**Blind Corner & River Road Remediation Works**

By April 30, 2017:

4. Implement erosion and sediment control (ESC) measures in the ditch between the outfall at STA. 12+420 and the culvert of Unnamed Creek 3 under River Road;
5. Implement ESC measures between the outfall at STA. 12+420 and STA 12+900;
6. Provide, to the Agency, photographic evidence to demonstrate that the measures described in 4 and 5 above have been implemented;

7. Provide, to the Agency, a statement signed by a Certified Professional in Erosion and Sediment Control (CPESC) that the implementation of ESC measures were designed and supervised by the CPESC; and,
8. Provide, to the Agency, an updated implementation schedule for works described in the EPP for the BC Hydro Blind Corner & River Road Remediation Works.

The measures described in item 4 shall remain in place until:

- A CPESC has submitted an assessment of whether permanent erosion and sediment control measures are necessary to prevent sediment transport between STA 12+420 and the Unnamed Creek 3 culvert under River Road. This assessment shall be sent to the undersigned at [compliance.conformite@ceaa-acee.gc.ca](mailto:compliance.conformite@ceaa-acee.gc.ca); and,
- The repair of the outfall at STA 12+420 as described in the EPP titled "BC Hydro Blind Corner & River Road Remediation Works" is complete and the plug is removed by the proponent or a contractor hired by the proponent.

The measures described in item 5 shall remain in place until:

- A CPESC has submitted an assessment of whether permanent erosion and sediment control measures are necessary to prevent sediment transport between STA 12+420 and STA 12+570. This assessment shall be sent to the undersigned at [compliance.conformite@ceaa-acee.gc.ca](mailto:compliance.conformite@ceaa-acee.gc.ca); and,
- The installation of a bentonite lined ditch described in the EPP titled "BC Hydro Blind Corner & River Road Remediation Works" in the between STA 12+570 and STA 12+900 is complete.

#### ***Area A work area***

By April 30, 2017:

9. Implement erosion and sediment control (ESC) measures to prevent surface water from leaving the Area A work area and from entering the Peace River;
10. Provide, to the Agency, photographic evidence to demonstrate that the measures described in 9 above have been implemented; and,
11. Provide, to the Agency, a statement signed by a CPESC that the implementation of ESC measures were designed and supervised by the CPESC.

### **EFFECTIVE DATE OF THE ORDER**

This Order takes effect immediately on April 21, 2017 at the time of delivery of the order to the proponent. Nothing in this Order shall be construed as reducing, increasing, or otherwise affecting what may be required of the Proponent to comply with all applicable legislative or legal requirements.

### **COMPLIANCE WITH THIS ORDER IS MANDATORY**

Failure to comply with an Order issued under section 94 of CEEA 2012 is an offence under subsection 99(2) of CEEA 2012. The penalty for a first offence is a fine of not more than \$200,000, and the penalty for any subsequent offence is a fine of not more than \$400,000. If the offence of failure to comply with this Order continues on more than one day, each day that the proponent fails to comply with the Order constitutes a separate offence (subsection 99(4) of CEEA 2012). A court may apply a penalty for each day that the non-compliance with the Order continues.

### **REVIEW OF THE ORDER**

Within 30 days from the date of your receipt of the Order, the proponent may request, in writing, a review of the Order by an Agency Official.

The proponent may address its request to:

CEAA Review Officer  
Place Bell Canada, 22<sup>nd</sup> Floor  
160 Elgin Street  
Ottawa, Ontario  
K1A 0H3

A request for a review does not suspend the operation of the Order and compliance is mandatory. Should the proponent want the Order to be suspended while it is being reviewed, that demand must be included in its request. If the proponent is not satisfied with the outcome of the review, the proponent can apply for judicial review of the Order by the Federal Court of Canada (Trial Division).

Should the proponent not wish to seek review of the Order with the Agency, the proponent may directly apply for judicial review of the Order by the Federal Court of Canada (Trial Division).

Should a person seek judicial review of the Order by the Federal Court of Canada (Trial Division), the Order is not automatically suspended. The person must specifically make that request to the Court.

**DATE OF ISSUANCE**

This Order is issued on April 21, 2017, by Senior Enforcement Officer Nicolas Courville.

<Original signed by>

Nicolas Courville  
Senior Enforcement Officer  
Compliance Promotion and Enforcement Unit  
Canadian Environmental Assessment Agency

Please note that in accordance with the Compliance and Enforcement Policy for the *Canadian Environmental Assessment Act, 2012* and the Canadian Environmental Assessment Agency's policy on transparency, this Order will be posted on the Agency's Compliance Promotion and Enforcement website.

DRAFT

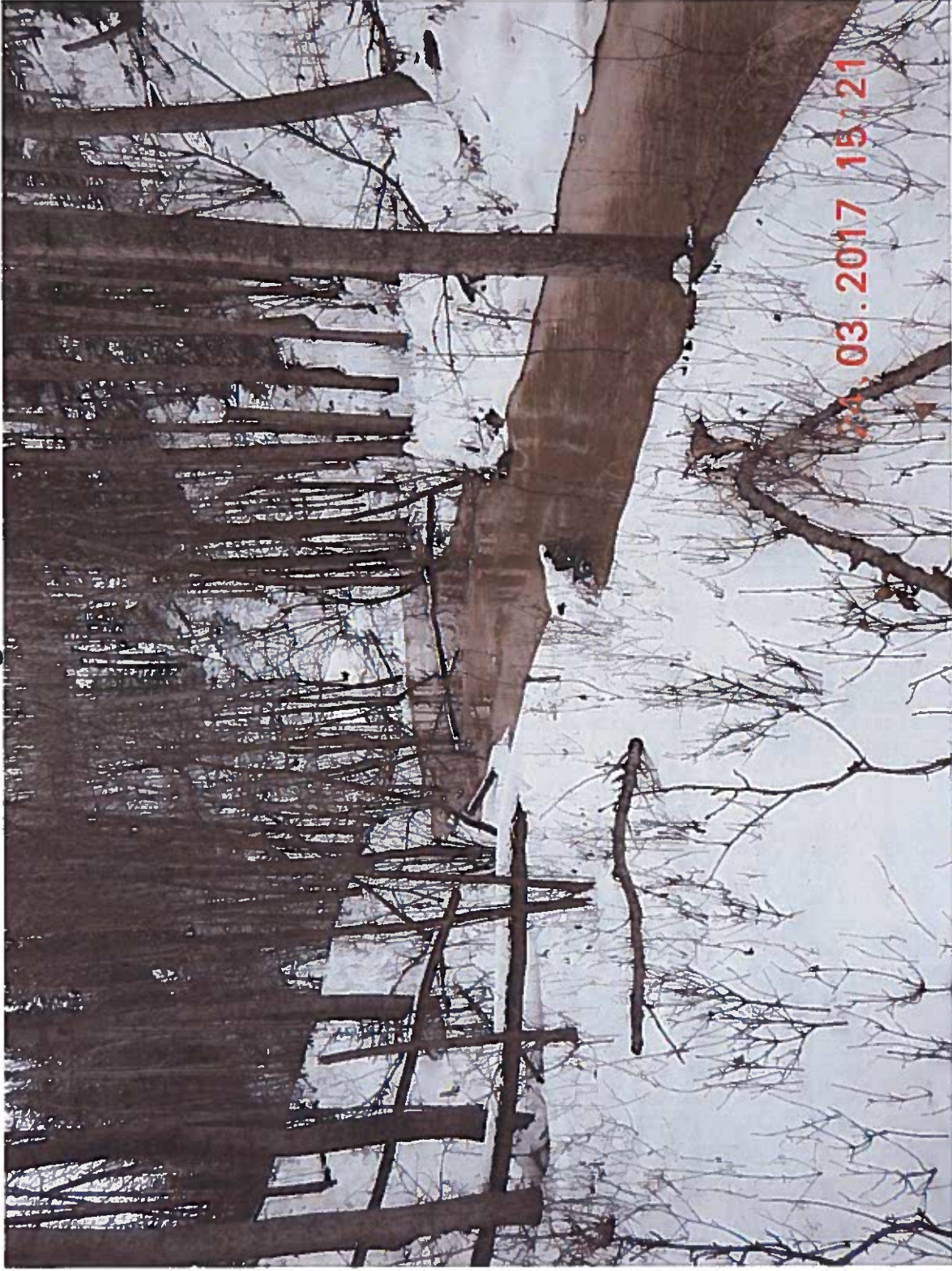


Figure 1



Figure 1: River Road Crossing upstream of Unnamed Creek 3

**Figure 2**



**Figure 2: Turbid water in Unnamed Creek 3**

Figure 3



Figure 3: Sediment laden water flowing in ditch adjacent to River Road

Figure 4



Figure 4: Sediment laden water exiting Unnamed Creek 3 culvert and entering the Peace River

Figure 5

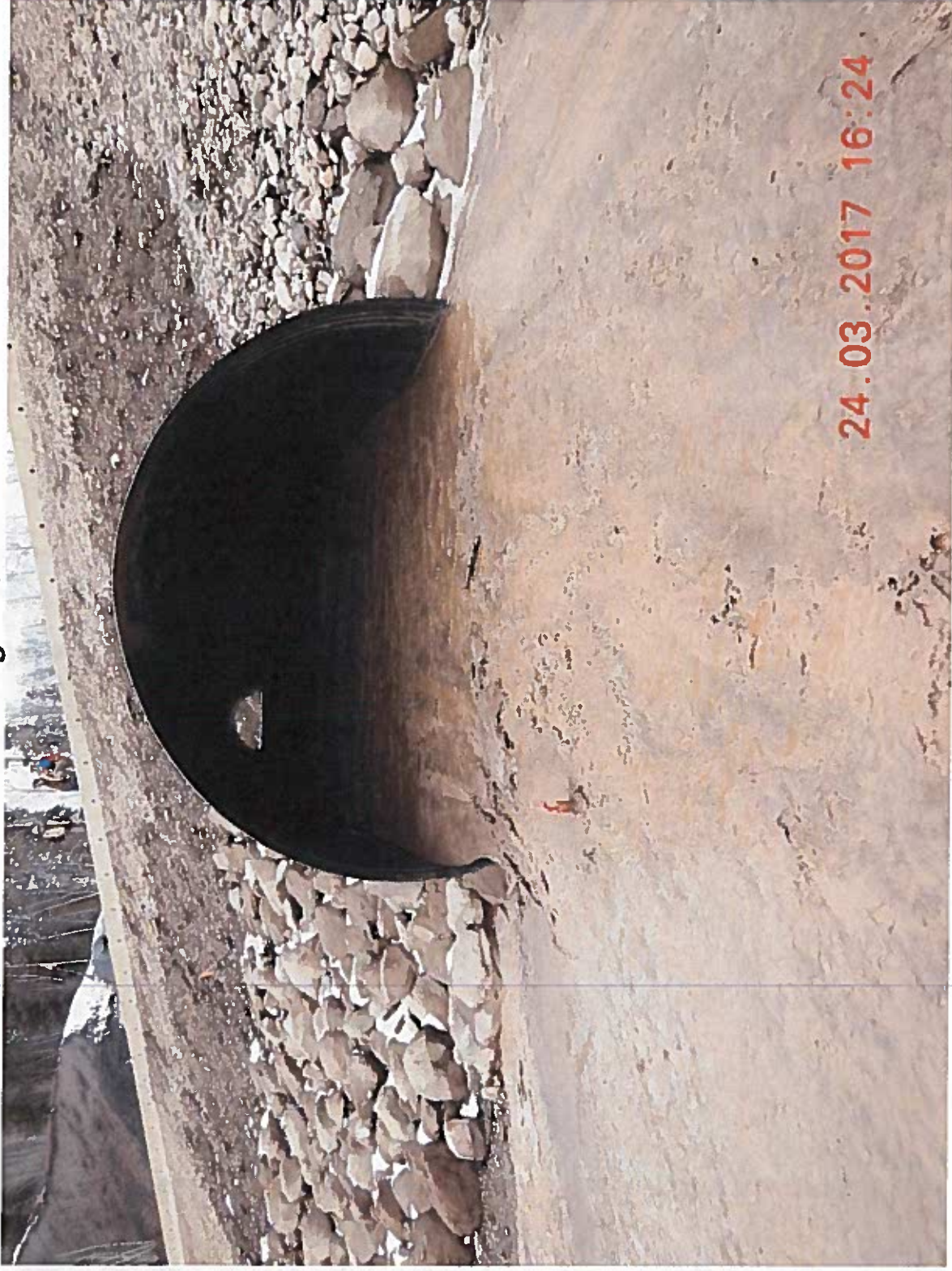


Figure 5: Sediment Laden water flowing through culvert under River Road

Figure 6

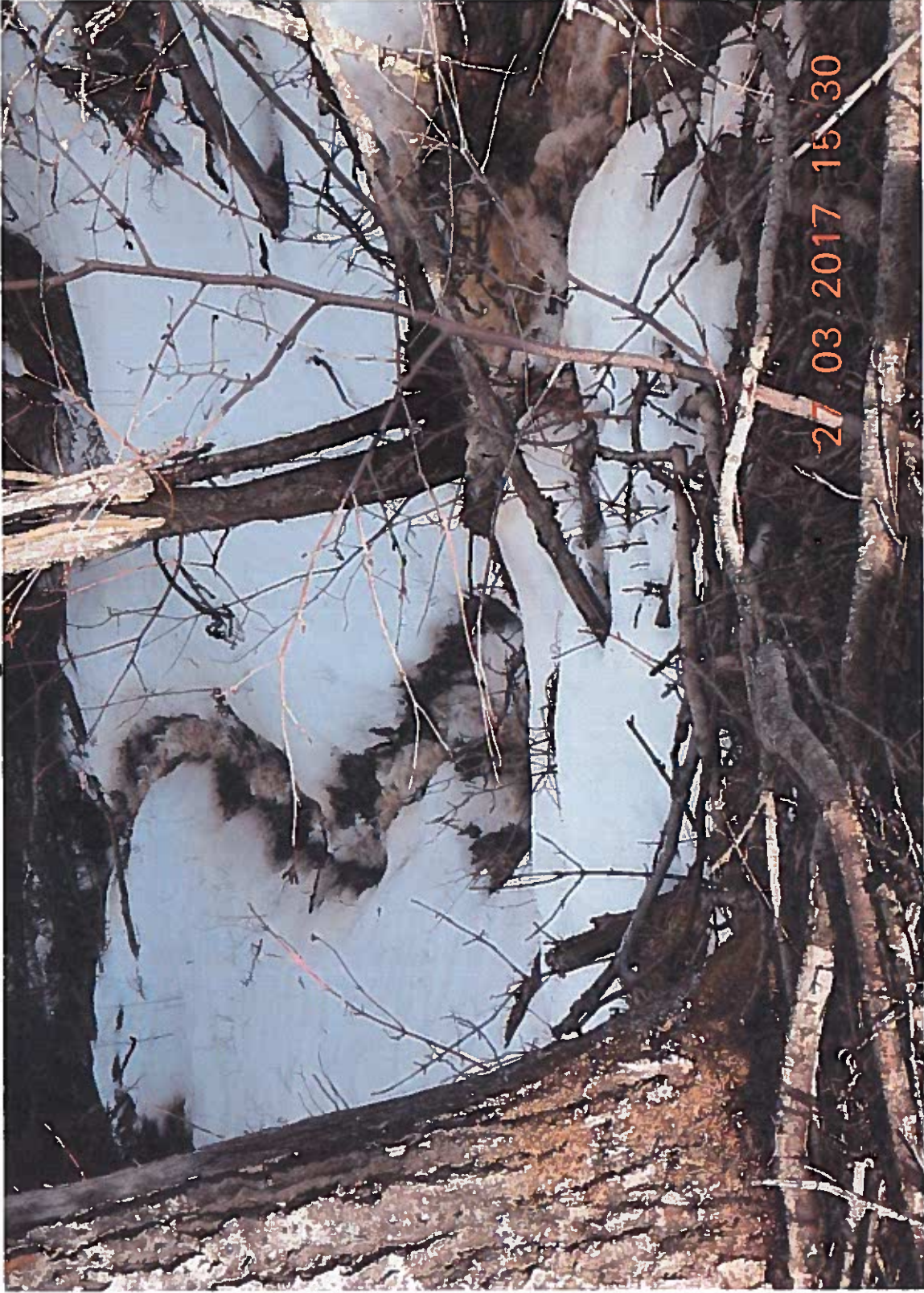


Figure 6: Sediment Laden water flowing down toward the Peace River

Figure 7



Figure 7: Sediment Laden water leaving Area A work area

Figure 8



Figure 8: Sediment Laden water leaving Area A work area



## ANNEX II – Excerpt from EPP titled “BC Hydro Blind Corner & River Road Remediation Works”



BC Hydro, Environmental Protection Plan (EPP)  
Blind Corner & River Road Remediation Project

### 7.3 Noise and Vibration Management

Construction activities will occur away from residences and campgrounds; therefore, disturbance from noise and vibration are not anticipated. It is expected that noise levels for this project will not exceed noise standards as the project site is located far enough from urban settings. To reduce noise impacts for rural residents, the following practices will be implemented:

- Equipment will be maintained in good working order;
- Equipment will be equipped with the appropriate silencers and mufflers, as designed (as per CEMP 4.11)
- Drive-thru pathways will be used for material drop off or pick up whenever possible to reduce the use of back-up beepers; and,
- No unnecessary idling of vehicles.

### 7.4 Erosion Prevention and Sediment Control Management

A CPESC will monitor and prescribe field-fit erosion and sediment control measures following BMPs as per Appendix G of the EPP and Appendix I of the CEMP. These will be presented in as and when needed. The CPESC will supervise the implementation of the ESC measures, document the completion of the ESC work plan and any field fit changes to the original work plan if they were required, and conduct ongoing monitoring inspections to verify the effectiveness of the measures and/or the need for additional works.

Priority will be placed on proactively implementing erosion control measures prior to starting work to minimize the need for sediment control. General measures applicable to this project include:

- Minimizing ground disturbance that could expose erodible materials and cover exposed materials as soon as possible with seed and mulch, erosion control blankets/matting or gravel;
- At stream crossings, direct clean water around the area and direct any sediment-laden water away from all watercourses and wetlands;
- Installing silt fence or other measures between the work area and any watercourse or wetland where there is the potential for sediment to reach it;
- Remove any sediment build-up from any sediment and erosion control measure once it reaches one-third to one-half capacity;
- Ensure any rip rap is clean and free of debris before using at any stream crossing;
- Locate stockpiles a minimum of 15 m from any watercourse and/or wetland. Cover stockpiles within 15 m of any watercourse and/or wetland with polysheeting, tarps or similar and surrounded by silt fence; minimize the amount of time that stockpiles are kept on site;
- Prior to applying seed and mulch, roughen soil surface;
- Inspect sediment and erosion control measures a minimum of a weekly basis and after any storm event greater than 12 mm of rainfall in a 24-hour period, a heavy snowmelt or combination of rain on melting snow and on wet or thawing soil;

## ANNEX II – Excerpt from EPP titled “BC Hydro Blind Corner & River Road Remediation Works”



BC Hydro, Environmental Protection Plan (EPP)  
Blind Corner & River Road Remediation Project

- Inspect and repair as needed erosion and sediment control measures following an extreme weather event (great than 25 mm in a 24-hour period); and,
- Temporarily delaying work if high precipitation levels could result in erosion.

Contingency supplies of sediment and erosion control materials shall be maintained at each construction site and workers shall be sufficiently trained in their appropriate installation and maintenance. Minimum supply of contingency supplies to be kept onsite will include:

- 10 rolls of silt fence;
- 5 rolls of polyethylene sheeting;
- 1 length of turbidity curtain;
- 3 Sediment booms;
- 10 straw wattles;
- 5 bales of certified weed-free straw;
- 5 Bundles of wooden survey stakes;
- 20 sandbags (empty or filled);
- 1 roll of page wire;
- 10 5' lengths of angle iron;
- 5 meter bags; and,
- 2 shovels and a Pulaski.

### 7.5 Fisheries and Aquatic Habitat Management

There is no instream work planned as part of the current scope of the Blind Corner and River Road Remediation works.

### 7.6 Groundwater Protection

Works associated with the Blind Corner and River Road Remediation Project are not anticipated to have any impacts to groundwater. Potential sources would be a result of any large spills of hydrocarbons onto the ground. All spills will follow Section 7.9 for response and clean-up procedures.

### 7.7 Hazardous Waste Material

Hazardous materials such as fuels, oil, grease, lubricants and batteries may be onsite. Hazardous waste spills could affect water quality, air quality, fish and wildlife habitat and workers using the products.

- Store, handle and transport hazardous materials in a manner that avoids loss and allows containment and recovery in the event of a spill, in accordance with all applicable legislation;
- Hazardous materials will be stored in locked storage areas when not in use;
- All hazardous materials and wastes must be stored a minimum 30 m from any wetland, watercourse or environmentally sensitive area;
- Appropriate areas for the transfer and limited temporary storage of hazardous materials and wastes will be designated if required;
- Material Safety Data Sheets (MSDS) will be available on-site for all chemicals and products and employees will be trained in Workplace Hazardous Material Information System (WHMIS);
- Personnel will be adequately trained in the handling and transportation of hazardous materials;

## **ANNEX III – Excerpt from EPP titled “Area A Excavation Environmental Protection Plan”**

### **2.2.7 Surface Water Management**

The surface water quality/quantity management concept consists of the following elements, which are currently under design/review by the hydrotechnical engineering design team:

- The primary water quality concern associated with the excavation at Area A is the potential for surface water containing suspended sediments to reach the Peace River. The primary approach to mitigate this concern is to retain all surface water on site within the Area A work area and to allow it to infiltrate into the permeable ground.
- All surface water is to remain within the Area A work boundary. No surface water will leave Area A during the excavation activities.
- Excavation depths are expected to vary up to 15 m or more below the existing ground surface. Therefore the excavation areas will serve as local collection sumps. Water will be collected in the excavation areas and allowed to infiltrate into the permeable alluvial ground material.
- In sloped excavation surfaces perimeter berms will be maintained at all times to prevent contact surface runoff from escaping the Area A work area.