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**The *Workers Compensation Act* requires that the employer must post a copy of this report in a conspicuous place at or near the workplace inspected for at least seven days, or until compliance has been achieved, whichever is the longer period. A copy of this report must also be given to the joint committee or worker health and safety representative, as applicable.**

A revised version of the *Workers Compensation Act* took effect on April 6, 2020. The B.C. government's revisions aim to make the Act easier to read and understand, and to reorganize the numbering to make laws easier to find. The revisions make no changes to B.C.'s laws concerning workers' compensation, occupational health and safety, and employers' assessment premiums. Please be aware there may be a transitional period where correspondence from WorkSafeBC may include references to either the previous Act or the revised Act. For more information, visit [www.worksafebc.com/WCA2019](http://www.worksafebc.com/WCA2019) or call the Prevention Information Line at 604.276.3100, or toll free within BC at 1.888.621.7233 (SAFE).

### Inspection Report #202213605002A

Employer Name	Jobsite Inspected	Scope of Inspection
FORTISBC INC	3750 British Columbia 3A Central Kootenay F BC V1L 6T1	Lower Bonnington Dam (LBO) #3 Tailrace Incident

Date of Initiating Inspection	Date of This Inspection	Delivery Date of This Report	Delivery Method
Dec 01, 2021	Dec 01, 2021	Jan 13, 2022	In Person

**THERE ARE FIVE (5) ORDERS OR OTHER ITEMS OUTSTANDING**

**ACTION REQUIRED**

### Summary of Orders or other Items

See "Orders/Items – Full Details" section of this Inspection Report for orders/items cited

Order/Item No.1 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS10.2</b>
Notice of Compliance Report Required.		
Order/Item No.2 <input checked="" type="checkbox"/>	Status: <b>Complied</b>	Cited: <b>WCA71(1)</b>
Order/Item No.3 <input checked="" type="checkbox"/>	Status: <b>Complied</b>	Cited: <b>WCA72(1)</b>
Order/Item No.4 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS4.13(2)</b>
Notice of Compliance Report Required.		
Order/Item No.5 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS4.14(3)</b>
Notice of Compliance Report Required.		
Order/Item No.6 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>WCA24(1)(b)</b>
Notice of Compliance Report Required.		

### Summary of Orders or other Items

See "Orders/Items – Full Details" section of this Inspection Report for orders/items cited

Order/Item No.7 ☐

Status: **Outstanding**

Cited: **WCA24(1)(a)**

Notice of Compliance Report Required.

#### ORDER STATUS LEGEND

Order Status	Description
Outstanding	Order Outstanding - Action Required to Achieve Compliance
Complied	Compliance Achieved - No Further Action Required
Closed	Order is Closed
Rescinded	Order has been cancelled – No Further Action Required

## **INSPECTION NOTES**

Based upon the violation(s) cited in this inspection report (and any previous relevant violations) WorkSafeBC has determined that there are grounds for imposing an administrative penalty and/or OHS Citation. If WorkSafeBC decides to take further enforcement, additional information will be provided.

The employer, FortisBC Inc. (FBC), operates four hydroelectric generating plants that are in close proximity around Bonnington Falls, BC. The employer owns approximately 7,300 kilometers of transmission and distribution power lines. One of the hydroelectric generating plants is #1 Plant Lower Bonnington (LBO). LBO has three hydroelectric generating units.

I conducted a site inspection, accompanied by Prevention Officer, Trevor Reid, following a report of scaffold related incidents at LBO, related to concrete repair work in the unit #3 tailrace area.

FBC had contracted Hil-tech Contracting Ltd. (HCL) to perform concrete repairs to the Lower Bonnington (LBO) unit #3 tailrace area with work commencement on July 20, 2021.

FBC had retained prime contractor responsibilities for this project.

A ring lock suspended scaffold was installed by Chinook Scaffold Systems Ltd. (Chinook) down to one foot above water level (free board) to provide HCL workers access to the tailrace area.

FBC advised they were having this work performed with one foot of free board while working under a "Water Level Work Approval". FBC representatives advised that the System Control Centre (SCC) could maintain water levels in the tailrace area and that the normal operations of the generating units would not impact the workers safety while working on the scaffold.

During the start-up phase of the generators, a water surge event would occur at LBO. The resulting surge of water increased the water level beyond the 1 foot free board impacting the scaffold. Workers on the scaffold reported shaking of the scaffold along with flooding and lifting of the lowest scaffold deck. Damage to the scaffolding was reported to have occurred following these events.

Surge events were reported to have impacted the work site as follows:

- August 19, 2021 water flooded the lower scaffold deck and workers reported the scaffold structure was shaking and the lower deck was lifting. Workers evacuated the scaffold and stopped work for the day.
- October 23, 2021 water flooded and lifted scaffold decking and workers reported the scaffold was shaking. Six workers evacuated the scaffold and stopped work for the day.
- October 30 through to November 1, 2021 there were surge events when the #3 unit was started and stopped. There were no workers on the scaffold on these days and Hil-Tech workers were not onsite. Hil-Tech workers discovered damaged scaffold sections and missing decks, planks and ledgers, when they returned to work on November 1, 2021.
- Throughout the repair work, the startup of the LBO #3 unit could have been repeatedly impacting the scaffold from the water surges and vibration while workers were not onsite.

The employer stopped tailrace work and removed the scaffold following the last water surge incident.

## ORDERS/ITEMS

**An employer who fails to comply with Occupational Health and Safety ("OHS") provisions of the *Workers Compensation Act*, the Occupational Health & Safety Regulation, or WorkSafeBC orders may be subject to monetary or other sanctions as prescribed by the *Workers Compensation Act*.**

### Orders/Items - Full Details

Order/Item No.1 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS10.2</b>
<p>Surge of water incidents occurred at this employer's worksite, Lower Bonnington #3 Tailrace, impacted the scaffold installed for a contractor to perform concrete repairs. Workers were at risk of being knocked into the water when scaffold planks were dislodged by the water surge. The ability of the scaffold to support workers could have been compromised by the shaking and lifting forces of the water. The water below the scaffold system is considered as "swiftwater" that would pose a increase risk of drowning.</p> <p>This employer did not isolate and effectively control the hazardous water energy in the LBO unit #3 Tailrace.</p> <p>This is in contravention of the Occupational Health and Safety Regulation Section 10.2.</p> <p>If the unexpected energization or startup of machinery or equipment or the unexpected release of an energy source could cause injury, the energy source must be isolated and effectively controlled.</p> <p><u>Measures to Ensure Compliance:</u> Prior to commencement of concrete work in the LBO tailrace water energy must be effectively controlled.</p> <p>Pursuant to section 88 (1) of the Workers Compensation Act, the employer must prepare a Notice of Compliance report. In accordance with section 88 (2), this report must detail what has been done to comply with the order, and where compliance has not been achieved by the time the report has been submitted, include a plan of what will be done to comply and when compliance will be achieved. Please submit the report no later than February 10, 2022 .</p>		
Order/Item No.2 <input checked="" type="checkbox"/>	Status: <b>Complied</b>	Cited: <b>WCA71(1)</b>
<p>Surge of water incidents occurred at this employer's worksite, Lower Bonnington #3 Tailrace, which had the potential for causing serious injury or death to workers on August 19, 2021, October 23, 2021 and October 30, 2021 to November 1, 2021. For all of these three separate incidents preliminary investigations were not completed within 48 hours of the occurrence. The employer failed to identify and implement interim measures to prevent a re-occurrence of the incident until the full Employer Incident Investigation Report was completed.</p> <p>The employer has not conducted a preliminary investigation as required by section 71(1) of the Workers Compensation Act.</p> <p>This is in contravention of the Workers Compensation Act Section 71(1).</p> <p>An employer must, immediately after the occurrence of an incident described in section 69, undertake a preliminary investigation to, as far as possible,</p> <p>(a) identify any unsafe conditions, acts or procedures that significantly contributed to the incident, and</p> <p>(b) if unsafe conditions, acts or procedures are identified under paragraph (a) of this subsection, determine the corrective action necessary to prevent, during a full investigation under section 72, the recurrence of similar incidents</p> <p><u>Measures to Ensure Compliance:</u> The employer provided a full investigation dated November 30, 2021.</p>		

**Orders/Items - Full Details**

Order/Item No.3 <input checked="" type="checkbox"/>	Status: <b>Complied</b>	Cited: <b>WCA72(1)</b>
<p>Surge of water incidents occurred at this employer's worksite, Lower Bonnington #3 Tailrace, which had the potential for causing serious injury to workers on August 19, 2021, October 23, 2021 and October 30, 2021 to November 1, 2021. For all of these incidents a full investigation was not completed within 30 days of occurrence and submitted to the Board. Causes of the incidents were not determined, unsafe conditions, acts or procedures which contributed to the incidents were not identified and corrective actions necessary to prevent recurrence were not implemented.</p> <p>The employer has not conducted a full investigation as required by section 72(1) of the Workers Compensation Act.</p> <p>This is in contravention of the Workers Compensation Act Section 72(1).</p> <p>An employer must, immediately after completing a preliminary investigation under section 71, undertake a full investigation to, as far as possible,</p> <ul style="list-style-type: none"><li>(a) determine the cause or causes of the incident investigated under section 71,</li><li>(b) identify any unsafe conditions, acts or procedures that significantly contributed to the incident, and</li><li>(c) if unsafe conditions, acts or procedures are identified under paragraph (b) of this subsection, determine the corrective action necessary to prevent the recurrence of similar incidents</li></ul> <p><u>Measures to Ensure Compliance:</u></p> <p>The employer provided a full investigation for the October 23 incident dated November 30, 2021.</p>		
Order/Item No.4 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS4.13(2)</b>
<p>An engineered suspended scaffold was installed by Chinook Scaffold Systems Ltd. to access the Lower Bonnington (LBO) unit #3 tailrace area for concrete repairs. The method of access and egress from the scaffold was by climbing one of two 35 foot fixed vertical ladders. The need to rescue an injured worker or evacuate workers from the scaffold may arise. The employer advised work commenced on the LBO unit #3 tailrace on July 20, 2021.</p> <p>The owner provided rescue procedures with a document dated September 22, 2021. Rescue procedures were not established between July 20, 2021 and September 22, 2021 and evacuation procedures were never established.</p> <p>The employer had not conducted a risk assessment and developed evacuation and rescue procedures prior to the scaffold being used by workers.</p> <p>The required risk assessment shows a need for evacuation or rescue, and appropriate written procedures were not developed or implemented, or a worker was not assigned to coordinate their implementation.</p> <p>This is in contravention of the Occupational Health and Safety Regulation Section 4.13(2).</p> <p>If the risk assessment required by Subsection 4.13(1) shows a need for evacuation or rescue, appropriate written procedures must be developed and implemented, and a worker assigned to coordinate their implementation.</p> <p><u>Measures to Ensure Compliance:</u></p> <p>The employer is required to establish evacuation and rescue procedure prior to commencement of tailrace work.</p> <p>Pursuant to section 88 (1) of the Workers Compensation Act, the employer must prepare a Notice of Compliance report. In accordance with section 88 (2), this report must detail what has been done to comply with the order, and where compliance has not been achieved by the time the report has been submitted, include a plan of what will be done to comply and when compliance will be achieved. Please submit the report no later than February 19, 2022.</p>		

**Orders/Items - Full Details**

Order/Item No.5 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>OHS4.14(3)</b>
<p>The employer did not have evidence of emergency drills for evacuation of the LBO #3 unit tailrace scaffold</p> <p>This is in contravention of the Occupational Health and Safety Regulation Section 4.14(3).</p> <p>At least once each year emergency drills must be held to ensure awareness and effectiveness of emergency exit routes and procedures, and a record of the drills must be kept.</p> <p><u>Measures to Ensure Compliance:</u></p> <p>Prior to commencement of work on tailrace scaffold emergency drills must be held.</p> <p>Pursuant to section 88 (1) of the Workers Compensation Act, the employer must prepare a Notice of Compliance report. In accordance with section 88 (2), this report must detail what has been done to comply with the order, and where compliance has not been achieved by the time the report has been submitted, include a plan of what will be done to comply and when compliance will be achieved. Please submit the report no later than February 10, 2022 .</p>		
Order/Item No.6 <input type="checkbox"/>	Status: <b>Outstanding</b>	Cited: <b>WCA24(1)(b)</b>
<p>The prime contractor did not maintain a system or process to ensure compliance with the OHS provisions and the regulations at the Lower Bonnington tail race cement repair project as evidenced by the following:</p> <p>a) Lock out was not established when working near the water level to protect the workers from the surge of water which occurred during start-up of LBO #3 unit.</p> <p>b) The prime contractor failed to ensure that incident investigations were conducted immediately following the surge of water events to determine the cause(s) and failed to implement corrective actions to prevent their reoccurrence. Further to this the prime contractor failed during the preliminary investigations to include worker representatives.</p> <p>c) The prime contractor failed to ensure that a rescue and evacuation risk assessment was conducted and rescue and evacuation procedures were developed prior to commencement of LBO #3 tailrace work.</p> <p>This is in contravention of the Workers Compensation Act Section 24 (1)(b).</p> <p>The prime contractor of a multiple-employer workplace must do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the OHS provisions and the regulations in respect of the workplace.</p> <p><u>Measures to Ensure Compliance:</u></p> <p>Pursuant to section 88 (1) of the Workers Compensation Act, the employer must prepare a Notice of Compliance report. In accordance with section 88 (2), this report must detail what has been done to comply with the order, and where compliance has not been achieved by the time the report has been submitted, include a plan of what will be done to comply and when compliance will be achieved. Please submit the report no later than February 10, 2022.</p>		

**Orders/Items - Full Details**Order/Item No.7 ☐Status: **Outstanding**Cited: **WCA24(1)(a)**

The prime contractor/facility operator failed to ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated as evidenced by:

The prime contractor failed to ensure that operation of the LBO #3 unit and the work being conducted by a sub-contractor where coordinated, which resulted in workers being exposed to hazards that placed these workers at risk of serious injury or death.

This is in contravention of the Workers Compensation Act Section 24 (1)(a).

The prime contractor of a multiple-employer workplace must ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated.

**Measures to Ensure Compliance:**

Pursuant to section 88 (1) of the Workers Compensation Act, the employer must prepare a Notice of Compliance report. In accordance with section 88 (2), this report must detail what has been done to comply with the order, and where compliance has not been achieved by the time the report has been submitted, include a plan of what will be done to comply and when compliance will be achieved. Please submit the report no later than February 10, 2022.

## REFERENCES

In addition to any orders, or other items, and the information provided in the Inspection Notes section in this Inspection Report, the officer may discuss other health and safety issues with the employer arising out of the inspection. The information below sets out the health and safety requirements discussed with the employer, and unless otherwise noted, violations of these requirements were not observed.

Reference	Details Discussed
<b>WCA88(1)</b>  This Inspection Report contains one or more orders requiring you to submit a Notice of Compliance report. This report must be prepared in accordance with section 88(2) of the Workers Compensation Act.	Requirement to submit Notice of Compliance Report set out in applicable order.
<b>WCA88(2)</b>  The employer or other person directed by an order under subsection (1) must prepare a compliance report that specifies:  (a) what has been done to comply with the order, and (b) if compliance has not been achieved at the time of the report, a plan of what will be done to comply and when compliance will be achieved.	Requirement to submit Notice of Compliance Report set out in applicable order.



Employer #	Mailing Address	Classification Unit #	Operating Location
467545	<div>16705 FRASER HWY SURREY BC V3S 2X7</div>	767003	015

Lab Samples Taken	Direct Readings	Results Presented	Sampling Inspection(s)	Workers onsite during Inspection	Notice of Project Number
N	N	N		3	

Inspection Report Delivered To	Employer Representative Present During Inspection	Worker Representative Present During Inspection	Labour Organization & Local
Paul Matteucci	Paul Matteucci		

WorkSafeBC Officer Conducting Inspection	Contact Details	
Glen Dunsmore	Phone: (250) 354-5702	Email: Glen.Dunsmore@worksafebc.com

Inspection Time*	Travel Time*
29 hrs	3 hrs

\*The time recorded above reflects the inspection time and travel time associated with this inspection report and includes time spent on pre and post-inspection activities. Additional time may be added for subsequent activity.

### **Request a Review**

**Any employer, worker, owner, supplier, union, or a member of a deceased worker's family directly affected may, within 45 calendar days of the delivery date of this report, in writing, request the Review Division of WorkSafeBC to conduct a review of an order, or the non-issuance of an order, by contacting the Review Division. Employers requiring assistance may contact the Employers' Advisers Office at 1-800-925-2233.**

**To submit a request online, visit <https://www.worksafebc.com/en/review-appeal/submit-request>**

**WorkSafeBC values your feedback. To obtain that feedback, an external market research provider may be contacting you to complete a survey.**

FORTISBC INC

[REDACTED]

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16705 FRASER HWY

SURREY BC V3S 2X7