January 31, 2020

Transport Canada
Navigation Protection Program
800 Burrard St #1100, Vancouver, BC V6Z 2J8
Attention: Eric Leung, Navigation Protection Officer

Re: Site C Clean Energy Project – Canadian Navigable Waters Act, Notice of Work
For Temporary Moberly River Debris Boom

Dear Eric Leung:

Introduction

This letter provides supplemental information for a Notice of Work submittal from BC Hydro for a temporary debris boom on a non-scheduled waterway under the *Canadian Navigable Waters Act*. This boom would replace the boom design proposed to Transport Canada and later permitted under *Navigation Protection Act Approval 2014-500334*, issued for the Site C Clean Energy Project (the Project) on September 28, 2015. Approval 2014-500334 authorizes the construction and operation of a debris boom on the Peace River near the Moberly River confluence (i.e. the Moberly debris boom).

Proposed Amendments

The Moberly River debris boom location and general arrangement design have been revised. In the approved boom package, which was not constructed, two booms were proposed; one on the upstream side of the temporary bridge (NPA approval #2015-500045), and one on the downstream side. In the revised booms design, a single boom is proposed for the upstream side of the temporary bridge (see attached map figure and design drawing). This revised boom alignment is located downstream of the debris pile structure, recently approved by Transport Canada (CWNA approval # 2019-500365).

The revisions proposed for the debris boom are not expected to result in any incremental changes to boater access.

Revised Boom Location and Land Information

The approximate location of the revised boom at the point where it crosses the Moberly River channel is: 56° 11’ 51.62” N 120° 55’ 44.89”.

The boom and anchors are located on BCH-owned and crown lands with the following description.

BC Hydro land: District Lot 4426 Peace River District as shown on Plan EPP85446
Crown:
• Unsurveyed Crown Land North East 1/4 Section 16 Township 83 Range 19 West of The 6th Meridian Peace River District
• Crown Foreshore covered by water and within the high water boundary being part of the bed of the Moberly River, Peace River and the Peace River lying within Section 16 Township 83 Range 19 West of The 6th Meridian and within District Lot 4425 Peace River District; and
• That area of Unsurveyed Crown Land within the Peace River District as shown on the attached application

Signage

The signs placed on the Moberly River, ~1,700 m upstream of the Moberly River confluence (1,000 m upstream of the piles), serve to alert boaters arriving from upstream, of the river being closed to navigation\(^1\). Similarly, signage placed near the Moberly River confluence, in compliance with the debris piles CNWA approval conditions, would alert boater to an upstream closure. The proposed boom would be marked in accordance with the terms and conditions listed in Approval #2014-500334.

Closure

We appreciate Transport Canada’s involvement the Site C debris structure reviews to date and I would be pleased to arrange a further meeting to discuss the proposed boom changes and answer any questions. In the meantime, do not hesitate to contact me if you have any further questions.

Regards,

Michael McArthur
Senior Environmental Coordinator
Site C Clean Energy Project
PH: (604) 699-5119
Michael.McArthur2@bchydro.com

Attachments: Map figure, Navigation Protection Act Approval #2014-500334

Cc: Roberta Dight, NPA Area Officer, Navigation Protection Program
    Tanya Martin, Aboriginal Relations Advisor, Navigation Protection Program
    Karen von Muehldorfer, Regulatory Manager, Site C Project

\(^1\) Condition #3 of the CNWA Approval 2019-500365
Attachments

Map Figure Showing Original and Revised Debris Boom

Engineering Design Drawing (Dwg No. 1020-C18-00185 R2)

*Navigation Protection Act* Approval for
Temporary Boom on the Moberly River (Approval # 2014-500334)
Construction of the Site C Clean Energy Project is subject to required regulatory and permitting approvals.

Map Notes:
1. Datum: NAD83
2. Projection: UTM Zone 10N
3. Imagery: © Digital Globe September 18, 2019

Legend:
- PRHP Original Boom Alignment
- PRHP Modified Boom Alignment
- Float
- Safety Buoys

Moberly River Temporary Debris Boom: Original and Modified Alignment

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BC Hydro
Suite 600 - Four Bentall Ctr, 1055 Dunsmuir St.
PO Box 49260
Vancouver, BC V7X 1V5

Attention: Bettina Sander

RE: Notice to the Minister under the Navigation Protection Act for review of a Debris Boom, located on the Peace River at the confluence of the Moberly River, Site C Dam, on unsurveyed foreshore or land covered by water being part of the bed of Peace River, Site C, lying within Sec 16 TP 83, Rge 19, West of the 6th Meridian Peace River District, City of Fort St. John, in the Province of British Columbia

Enclosed please find the Approval for the above-noted work issued by the Minister of Transport in accordance with subsection 6 (1) Placement, of the Navigation Protection Act (NPA).

Pursuant to Sec. 34 of the Navigation Protection Act, the owner shall provide unimpeded access to the Minister and their representative for inspection purposes.

Pursuant to Sec. 5 of the Navigable Waters Works Regulations, all temporary piles, false works, silt curtains, construction material or debris, etc. are to be completely removed from the waterway.

Please note that the attached document relates only to the effect of your work on navigation under the NPA. It is the owner’s responsibility to comply with any other applicable laws and regulations.

Should you have any questions, please do not hesitate to contact our office in Vancouver by phone at (604) 775-8867 or by e-mail at NPPPAC-PPNPAC@tc.gc.ca.

Respectfully,

Ryan Greville
Navigation Protection Program
Programs Group
Transport Canada
Pacific Region

CP/co

cc DFO- Brain Naito
CEAA – Steve Chapman
MPMO – Timothy Archer
NAVIGATION PROTECTION ACT
Section 6 (1)

2014-500334

Approval

APPLICANT: BC Hydro
Suite 600 - Four Bentall Ctr, 1055 Dunsmuir St.
PO Box 49260
Vancouver, BC V7X 1V5

WORK: Debris Boom

SITE LOCATION: Located at Approximately 56° 12’ 01.00" N x 120° 55’ 32.71" W,
Peace River, Site C Dam, located on unsurveyed foreshore or land
covered by water being part of the bed of Peace River at the
confluence of the Moberly River, Site C, lying within Sec 16 TP 83,
Rge 19, West of the 6th Meridian Peace River District, City of Fort St.
John, in the Province of British Columbia.

Regarding the application (detailed above) to the Minister of Transport, submitted pursuant to the
Navigation Protection Act, for an approval of the work per the attached plans (2), the Minister hereby
approves the work pursuant to subsection s.6(1) Placement in accordance with the following terms and
conditions:

1. The NPA Approval and its Terms and Conditions shall be posted at an easily accessible place
   at the worksite.

2. In the event that the operation of the above works is terminated, it will be the proponent’s
   responsibility to remove the works and associated equipment in its entirety including any
   anchors and pilings. The banks and bed of the waterway disturbed by the works should be
   contoured to match the local conditions if required.

3. If the boom is placed downstream of the proposed bridges on the Moberly River, then yellow
   cautionary buoys no less than 0.6m in diameter shall be fitted to the boom at intervals of no
   greater than 220m

4. Debris boom shall only be in place if active construction is underway, unless otherwise
   authorized by TC.

5. Install and maintain a warning sign on the Moberly River at a location approximately 600m
   upstream of the construction site advising of the work in progress. Sign shall be a minimum of
   72” x 48”, a white background with black lettering, with text as outlined below. Sign to be
   emplaced prior to and for the duration of construction and placement.

   WARNING CONSTRUCTION AND BOOM AHEAD

6. If boom location is downstream of either of the proposed bridges on the Moberly River and
   vessel traffic on the Peace River is not blocked, the following conditions apply:

   • Install and maintain warning signs at locations approximately 100m upstream and
     downstream on the Peace River advising of the work in progress. Signs shall be a minimum of
     72”x 48”, a white background with black lettering, with text as outlined below. Sign to be
     emplaced prior to and for the duration of construction.

   WARNING BOOM AHEAD
   RIVER RIGHT

   • The outermost extent of the work above the surface shall be marked with orange High
     visibility markers on the upstream and downstream corners.

   • The outermost extent of the work above the surface shall be marked with a flashing yellow
     light on the upstream and downstream corners. The lights are to be in operation in
     darkness or limited visibility.

   • Construction machinery left in the water during darkness or limited visibility shall be
     marked with a flashing yellow light, visible to upstream and downstream traffic.
• Any construction equipment anchored or left in or on the waterway shall be marked with a yellow flashing light placed on the outermost extremity from dusk to dawn.

7. If boom location is within 100m upstream of either of the proposed bridges on the Moberly River and vessel traffic on the Peace River is not blocked, the following conditions apply:

• Install and maintain warning signs at locations on the downstream side of the bridge structure, facing the upcoming traffic advising of the work in progress. Signs shall be a minimum of 72"x 48", a white background with black lettering, with text as outlined below. Sign to be emplaced prior to and for the duration of construction.

WARNING BOOM AHEAD

• The outermost extent of the work above the surface shall be marked with orange High visibility markers on the upstream and downstream corners.

8. Proponent may use the Canadian Dam Association signage standards in regards to shape, colour and size. Locations and wording are to be as per the Terms and Conditions of the permit or approval.

SIGNED in two copies on Sept 23/15 in, Vancouver BC

[Signature]

Ryan Greville
Manager
Navigation Protection Program
Programs Group
Transport Canada
Pacific Region
for the Minister of Transport
Figure 5: Typical configuration of natural debris boom

Typical Natural Log Debris Boom
Example: Fraser River