

January 14, 2011

File: A2005807

Emergency Management BC (EMBC)
P.O. Box 9223 Stn Prov Govt
Victoria, BC V8W 9J1

Attention: Ann Griffin

Re: Application for approval to make changes in and about Fraser River (Tranmer Bar and Spaeti Bar) Approval 2005807

An approval for the proposed changes in and about Fraser River (Tranmer Bar and Spaeti Bar) has been granted, subject to the conditions noted on the attached Approval document 2005807.

It is the responsibility of the Approval holder to ensure any proposed development does not impact traditional or special sites in accordance with the Heritage Conservation Act. If archaeological deposits or features are encountered during construction of the works, the Approval holder must stop work and contact the BC Archeology Branch for further direction.

Further to condition (w) of the Approval document 2005807, the Environmental Monitor's post-extraction report must include the Approval file number, site location, frequency of monitoring, a brief description and date of completion for each work stage, the total volume of sediment removed, description of the type and extent of any direct environmental impacts that were not described in the application (such as removal of vegetation at additional locations) and description of any difficulties and incidents and how these were addressed.

Reports for the biophysical assessments described in condition (x) of the Approval document 2005807 must be provided as hard copies labeled with the Approval file number. The final monitoring report for the 2011 sturgeon assessment shall be submitted by December 30, 2011 unless an alternate timeframe is required by the Assistant Regional or Regional Water Manager. Monitoring reports for other biophysical assessment activities shall be submitted by March 30 after each year of sampling is completed.

The Ministry of Natural Resource Operations contact information for reporting requirements described in the Approval document 2005807 is as follows:

- To report incidents, please call the Assistant Regional Water Manager, Timothy Bennett, at 604-582-5227 (office) or 604-314-4943 (cell) or the Regional Water Manager, Julia Berardinucci, at 604-582-5353 (office) or 604-816-5934 (cell).

- Monitoring reports should be mailed to the office address listed in this letter and addressed to the Water Officer, Rachael Eedy.

If you have any questions or concerns please contact the Water Information Technician at 604-582-5200.

Yours truly,



Julia Berardinucci
Regional Water Manager

Enclosure

pc: Jim Scott, Scott Resource Services Ltd.
Clem Shae, Links Contracting and Aggregate Supply Ltd.
E. Ellis P.Geo., D. Murray, P.Eng., Kerr Wood Leidal
Lotte Flint-Peterson, Ministry of Natural Resource Operations
Laura Rempel, Fisheries and Oceans Canada

RE / sj

APPROVAL

WATER ACT - Subsection 9(1), Clauses (a), (b) and (c)
(Changes in and about a stream)

Emergency Management BC (EMBC)

is hereby authorized to make changes in and about a stream as follows:

- (a) The name of the stream is Fraser River (Tranmer Bar and Spaeti Bar), herein referred to as "the stream".
- (b) The changes to be made in and about the stream are:

To install and remove a temporary bridge, culverts, and haul road; to remove a maximum of 190,000 m³ of gravel and other sediment; and to conduct the proposed associated activities (dry screening, use of sediment weigh stations, watering of haul roads with water obtained from another site, and use of a temporary sediment borrow pit approximately 2,500 m³ in volume on Spaeti Bar) all within the unsurveyed foreshore or land covered by water being part of the bed of the Fraser River in the area known as Spaeti Bar and Tranmer Bar and that part of Southeast 1/4 lying West of the Fraser River, East of District Lot 38 and South and East of Higginson's Lot, Section 20, Township 3, Range 28, West of the 6th Meridian, Yale Division Yale District and District Lot 154, Yale Division Yale District.

- (c) This Approval does not authorize entry on privately held land or Crown land.
- (d) This Approval does not constitute authority of any other agency. The holder of this Approval shall have the necessary permits from other agencies concerned prior to the commencement of the works authorized herein.
- (e) All sediment removal shall comply with the sediment removal site plan drawings SW7 Rev'3 and SW9 Rev'3 and access routes shall be located as shown in the overview plan drawing SW8 Rev'1, all prepared by Kerr Wood Leidal Associates Limited.

The temporary bridge work shall comply with the engineering drawings 08-GC-0174-1/Sheet 1 Rev'0, Sheet 2 Rev'0, Sheet 3 Rev'0, Sheet 4 Rev'1 and Sheet 5 Rev'0 prepared by All North Consulting Engineers and Surveyors referencing engineering drawings 3751-SK-511 Rev'2, 3751-SK-512 Rev'3, 3751-SK-513 Rev'3, and 3751-SK514 Rev'1 prepared by Associated Engineering.

All work shall be carried out in accordance with environmental protection measures proposed by Scott Resource Services in Section 4.6. "General mitigation measures" and Section 4.5.2 "Bridge" of the report titled "Fish Habitat Assessment Mitigation Plan and Monitoring Program - Tranmer Bar, Fraser River", dated Nov. 9, 2010.

- (f) The holder of this Approval shall take reasonable care to avoid damaging any land, works, trees, or other property and shall make full compensation to the owners for any damage or loss resulting from the exercise of rights granted hereunder.
- (g) The work authorized shall be completed on or before March 15, 2011 and the holder of this Approval shall advise the Assistant Regional or Regional Water Manager (604-582-5200) when the changes have been completed.
- (h) The holder of this Approval shall advise the Assistant Regional or Regional Water Manager prior to commencement of construction of the works.
- (i) Prior to the commencement of the works authorized under this Approval, the holder of this Approval shall obtain authorization from Fisheries and Oceans Canada.
- (j) A copy of this Approval (and associated plans/drawings listed on this Approval) must be available for inspection, upon request, at any location where the authorized changes in and about a stream are being undertaken.
- (k) Work within the wetted perimeter of the stream shall be undertaken during the period of January 1 to March 15, so that the fisheries interests are protected.
- (l) Upon commencement of the project, the work shall be pursued to completion as quickly as possible.
- (m) All sediment excavation for removal purposes shall be completed in isolation of the stream flows.
- (n) Care shall be exercised during all phases of the work to minimize siltation of the stream and to eliminate the release of raw concrete, concrete leachate, and any other debris or deleterious substances.
- (o) Care shall be exercised during sediment screening so that fine size fractions are not introduced into wetted areas or left in dry areas of the stream channel following the completion of work.
- (p) All hydraulic machinery used in the channel of the Fraser River will use environmentally sensitive hydraulic fluids which are non-toxic to aquatic life and which are readily or inherently bio-degradable.
- (q) Vegetation shall be disturbed as little as possible. Any plants that are removed for the purpose of site access must be replaced by planting.
- (r) Culverted crossings shall be placed so as not to adversely impact fish or restrict fish passage.
- (s) All temporary works shall be removed on completion of the project.
- (t) The holder of this Approval shall retain qualified Environmental Monitors to supervise all instream works authorized under this Approval according to the "Specifications for On-site Environmental Monitoring of Active Sediment Removal Projects" (copy attached in Appendix 1) and the following clarifications and conditions. Environmental monitoring

shall include a minimum of three site visits by a Registered Professional Biologist, including but not limited to: one to examine the bridge location and meet with contractors before the bridge is installed, another during excavation area perimeter layout, and another at a time near to the end of sediment removal to review plans for completion of the excavation and decommissioning of access structures.

- (u) The Environmental Monitors, by this Approval, are hereby granted authority to take immediate action to halt and/or address activities that are perceived to be non-compliant, harmful to the environment or pose a significant risk to fish. In the event of an environmental incident or non-compliance with any of the terms or conditions of this Approval (including changes to the design of instream works that have not been authorized under the *Water Act*), the Environmental Monitor shall notify the Assistant Regional or Regional Water Manager by phone within two hours.
- (v) The holder of this Approval shall retain a Professional Engineer to oversee the bridge works authorized under this Approval and to monitor in person, pile driving and work at critical points of bridge installation and removal when and where there is a possibility or risk of detrimental impacts to the environment.
- (w) An environmental monitor's post-extraction report shall be completed and a hard copy submitted to the Water Officer within 60 days of completion of the work.
- (x) The holder of this Approval shall designate appropriately qualified environmental professionals to complete the biophysical monitoring activities described in the application. Biophysical assessment shall include pre-extraction and post-extraction sampling of sediment size and invertebrates, as well as sturgeon sampling and habitat assessment, according to the specifications provided by Emergency Management BC, Fisheries and Oceans Canada, Ministry of Natural Resource Operations and Ministry of Environment staff.
- (y) The Environmental Monitor shall inspect the extraction area for fish stranding at least once during summer or fall of 2011 after water levels have declined.



Julia Berardinucci
Regional Water Manager

Appendix I- Specifications for On-site Environmental Monitoring of Active Sediment Removal Projects

Specifications for On-site Environmental Monitoring of Active Sediment Removal Projects

Sediment removal for flood protection purposes is one component of a provincial flood protection strategy. Emergency Management BC (EMBC) contracts registered professional biologists to conduct on-site environmental monitoring of all sediment removal projects. The purpose of this document is to articulate standard practices acceptable to Federal Fisheries and Oceans Canada (DFO), the Ministry of Environment (MoE) and EMBC regarding the environmental monitoring of active sediment removal projects.

All works at each permitted location that has, in the opinion of DFO or MoE, the potential for adverse impacts to fish or fish habitat resources, shall be monitored by appropriately qualified individual(s), deemed to be satisfactory for the project. The Environmental Monitor (the Monitor) shall monitor and direct all works on the project to ensure compliance with the *Fisheries Act* and the *Water Act*, and the conditions of all permitting authorizations.

Prior to the beginning of sediment removal, the Monitor will meet with the sediment removal contractor (the Contractor) for a pre-start up meeting. At this meeting the Contractor will provide the Monitor with a detailed schedule of work outlining hours of operation, key timelines for the various elements of work, confirmed times for daily communication (in person and/or by telephone) and any other pertinent information. The Contractor will update this schedule as often as necessary to keep it current.

Sediment removal projects typically occur between January 1 and March 15. The length of day can be up to 24 hours. The Monitor must be prepared to provide on-site environmental monitoring whenever sediment is being removed or when equipment is on site. This could include twenty-four hours a day, seven days a week. Ultimately it is at the discretion of the registered professional to objectively determine when it is necessary to be on site, but generally the following standards shall serve to guide those decisions.

- The Monitor will be on site at all times during mobilization and site layout (when crews are working or equipment is being transported to the site). This period will last approximately 5 days and possibly longer if a complex access structure is being installed.
- The Monitor will be on site at all times when an access structure or causeways is being installed or decommissioned and for all wet crossings
- The Environmental monitor will be on site at all times when work is occurring within any wetted areas of the river, or when work is occurring in proximity to sensitive fish or riparian habitat, or when the work is within 15m of any wetted areas of the river channel.
- Once the project is progressing smoothly it is at the discretion of the Monitor whether an on-site presence is required, and if so for how long.
- At a minimum the Monitor will be on site once per day to assess progress and worksite conditions.
- The Monitor and the Contractor will be in daily discussion to review and agree upon the day's activities.
- The Monitor will notify MoE, DFO and EMBC of incidents potentially resulting in negative environmental impacts

within two hours of occurrence. Contact can be initiated through e-mail or by telephone call to the key contacts at each agency. The key contacts for MOE, DFO and EMBC for incidents reporting will be specified and communicated to the Monitor by EMBC prior to the commencement of work on any given project.

The monitor will have the authority to take immediate action to address activities that are perceived to be non-compliant with the environmental monitoring program or other permit or regulations and/or are perceived to be harmful or pose a significant risk to fish stocks or fish habitat.

The Monitor shall be responsible for:

- Monitoring of works or undertakings associated with the Project, ensuring that all works are in compliance with the conditions laid out in the authorizations and all other applicable legislation;
- Ensuring that all works are in accordance with acceptable practices;
- Maintaining a daily journal which shall be submitted daily (for the first seven days and weekly thereafter) to EMBC;
- Maintaining a daily accurate tally of the sediment that has been removed;
- Collecting records on daily water levels, monitoring turbidity, collecting information of activities occurring on the site, and recording of any site visits by outside agencies or persons;
- Notifying the Agencies of potentially environmentally damaging events;
- Preparing post-construction monitoring reports.

The Monitor has the authority to stop any or all work at his/her discretion.

Neither DFO nor MoE delegate any authority under the *Fisheries Act* or the *Water Act* to the Monitor. The Monitor does not have the authority to change, modify or revise either the project or the terms and conditions of any authorization.