



Brunswick Pipeline Saint John Community Liaison Committee

Minutes
Thursday, September 18, 2008
Fort Howe Hotel & Convention Centre

Robin McAdam, President Brunswick Pipeline
Claude MacKinnon, Co-Chair
Susan Harris, Brunswick Pipeline Community Relations Manager
Al McDougall
David Peterson
Christine Saumure
Horst Sauerteig
Midge Thompson

Guests: Tara Lakeman, Environmental Lead, Brunswick Pipeline
Tony Vadlja, Environmental Permitting Manager, Spectra Energy

1. Review of Agenda

The agenda was accepted as presented.

2. Review of Minutes from July 17 and August 21, 2008 meeting

Review and approval of Minutes to be completed at next meeting. It was agreed that the agenda of the meeting between Horst Sauerteig, Bernard Ball, Leyland Thomas, David Thompson and Joan Pearce be attached to the minutes for information. That agenda is attached to these minutes.

3. Action Items

All action items have been completed and the list is up to date.

4. Presentation

Tara Lakeman, Environmental Lead for Brunswick Pipeline, gave a presentation about pipeline installation in wet and dry watercourse crossings.

There are over 130 watercourse crossings on the Brunswick Pipeline Project. Pipeline installation across watercourses is typically achieved through one of three methods:

1. dry crossings (for winter & summer work)
2. wet crossings (for which 2 are planned and 9 wet contingencies have been applied for), and

3. HDD crossings (2 have been completed: the St. Croix River and the St. John River)

Dry Crossings

Dry watercourse crossings are achieved by damming the flow upstream of the crossing and diverting the water around the construction area using water pumps and culverts.

Water flow downstream is maintained using appropriately sized pumps and hoses or culverts to accommodate the anticipated flow over the duration of the crossing.

Netting keeps fish away from the area of the pumps and the construction work. Fish are removed from the crossing area by applying a low electrical charge to the water to stun the fish. Fish are removed by net to outside the netting.

Once the watercourse flow is successfully diverted, construction of the crossing can be conducted in a dry watercourse bed.

Wet Crossings

Wet crossings are constructed directly through the undiverted flow of the watercourse. This method of crossing watercourses is avoided to the extent practical and is only used when dry crossings are not practical. They may also be used as a contingency if HDDs fail or are not practical.

Watercourses with a measured flow of $>1 \text{ m}^3/\text{s}$ are considered as candidates for wet crossings by the federal Department of Fisheries and Oceans (DFO). As a general guideline, watercourses wider than 10 m are also considered candidates for wet crossings.

Sedimentation occurs as part of this process. However, it is sediment from the river bottom and therefore native to the area, and not new material added through the construction process. The permitting process has set restrictions on the amount of sedimentation that is allowed, and all efforts are made to ensure construction remains within these limits. Testing is done both by Brunswick Pipeline and by the NB Department of Environment.

There was an issue reported with the Magaguadavic River crossing. Tara provided a demonstration of the different water colour levels that are acceptable and not acceptable when performing wet crossings. The water at the Magaguadavic River site changed colour and caused some upset in the community above Lake Utopia. The community was not adequately forewarned about the water discoloration they should expect.

HDD Crossings

Horizontal directional drilling (HDD) is a trenchless watercourse crossing method that is considered for large watercourses that must be crossed or where in-stream activity is not preferred.

It involves drilling a tunnel below a watercourse of sufficient size for the pipe, through the use of a drill that can be steered as it progresses.

The drill rig can be set up above the approach slope on one side of the watercourse, or two drill rigs can be set up on either side of the watercourse depending on its width and length of the drill. A small diameter pilot hole is drilled under the watercourse to the target point on the

opposite side of the watercourse. Independent survey verification wires provide magnetic tracking of the crossing profile, to monitor the position and depth of the drill throughout the pilot hole drill process.

Consecutively larger reams are then used to enlarge the hole until the pipe can be pulled through. Typically, the tunnel is up to 50 percent larger than the diameter of the pipe. Under the St. John River, the 30" pipe was pulled through a 42" solid rock tunnel.

In some instances, the HDD crossing method may not be possible or cost effective depending on subsurface geotechnical conditions. Watercourses crossed using the HDD method were the St. John and the St. Croix Rivers.

5. Progress Report

The HDD under the St. John River is now complete. Work is 80% complete in the urban/city spread with the majority of the work remaining including road crossings, tying in, backfilling and initial clean up. Work is progressing more slowly now as road boars are completed. In the rural spread, 50% of construction is complete. There is still a lot of pipe to go into the ground. Grading, trenching, welding and laying in of pipe are under way in various areas between St. Stephen and Saint John. The wet weather has been challenging in both areas and the amount of acid rock that needed to be removed slowed down the progress in the rural area.

Overall, the project is approximately one month behind, with an expected completion date of mid-November. The remaining grading and ditching are slow and the contractor is also working to complete the water crossings. The company is attempting to coordinate with the Department of Fisheries and Oceans to prioritize the wet crossings, in hopes of getting the larger, most sensitive ones completed first. This will mean that remaining watercourse crossings will be in minor streams and have limited impact on the environment.

Brunswick Pipeline is working with the NB Southern Rail Company to develop a plan to use their access road as an alternate emergency access for the Milford area residents. This road is gated at the end of Carie Avenue off Manchester Avenue. NB Southern Rail has agreed to allow access to this road for emergency purposes and have agreed that no train cars will be parked across the road or tracks and snow clearing will be a priority for that area. NB Southern Rail has also made an agreement to include these processes in their operating procedures registered with the Department of Transportation. Saint John Fire Chief Rob Simonds and Deputy Fire Chief Mark Gillen are satisfied with the arrangement with NB Southern Rail.

The Emergency Response Plan has been revised and submitted to the NEB. Copies will be distributed to the Committee members when ready.

6. Updates- Rockwood Park and Southwest NB Committee

The SNBCLC met on September 10th for a brief meeting then a tour of the Milford set up for the pull-through under the St. John River. They will meet again on October 8, 2008.

The Rockwood Park Committee has not been as active. The new trail in Rockwood Park is almost finished. The Committee will meet again after completion of the trail then will disband until the spring when they will meet to see how well the right of way survived the winter.

7. Other Items

A video of the St. John River pull through of 1.3 km of welded pipe was shown.

8. Next Meeting

Thursday, October 18, 2008, Fort Howe Hotel & Convention Centre.