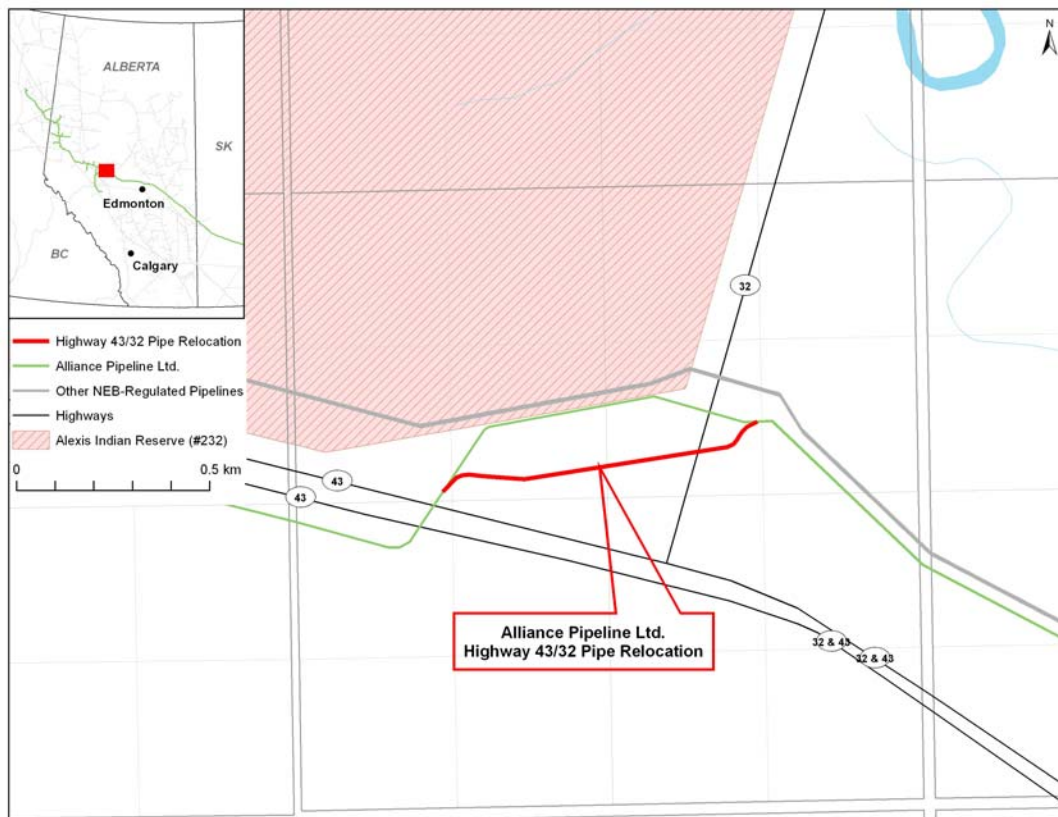




ENVIRONMENTAL SCREENING REPORT (ESR)
Pursuant to the *Canadian Environmental Assessment Act* (CEA Act)

Alliance Pipeline Ltd – Highway 43-32 Pipe Relocation Project

Applicant Name:	Alliance Pipeline Ltd		
Application Date:	27 April 2012	CEA Act Registration Date:	4 May 2012
National Energy Board (NEB or Board) File Number:	OF-Fac-Gas-A159-2012-02 01	Canadian Environmental Assessment Registry Number:	12-01-67940
CEA Act Law List Trigger:	Section 58 of the <i>National Energy Board Act</i> (NEB Act)	CEA Act Determination Date:	12 June 2012



1.0 INTRODUCTION

1.1 Project Overview

Alliance Pipeline Ltd (Alliance) is proposing to relocate a portion of their existing dense phase natural gas pipeline further from the Eagle River Casino on the Alexis Nakota Sioux Nation Reserve (the Project). The Project is located approximately eight kilometres northwest of Whitecourt, Alberta, near the junction of Highways 32 and 43.

Section 4.0 provides a detailed description of the work associated with the Project.

1.2 Rationale for the Project

On 30 April 2008, Alliance filed a plan to address a change in class location for the segment of its mainline in proximity to the Eagle River Casino development. On 11 December 2009 the Board directed Alliance to either replace the pipeline segment or decrease its maximum operating pressure (with clarification provided on 14 January 2010). On 1 October 2010, Alliance submitted a *Review and Variance Application* requesting the Board to rescind that direction.¹ On 26 October 2011, the Board directed Alliance to either modify the pipeline segment, reduce its pressure, or consider alternate options such as re-routing the segment due to the proximity of the Eagle River Casino. The present application is in response to that direction.

1.3 Baseline Information and Sources

The analysis for this Environmental Screening Report (ESR) is based on Alliance's application materials (including an Environmental and Socio-economic Assessment (ESA)), updates to those materials (including Supplementary Wildlife and Wetland Surveys), and responses to an information request. Information pertaining to the Project can be found within 'Regulatory Documents' on the NEB's website (www.neb-one.gc.ca). For more details on how to obtain documents, please contact the Secretary of the NEB at the address specified in Section 8.0 of this report.

2.0 ENVIRONMENTAL ASSESSMENT (EA) PROCESS

The application for this Project was filed pursuant to subsection 58(1) of the NEB Act which, being on the CEA Act *Law List Regulations* thereby requires the preparation of this ESR.

The NEB is the Federal Environmental Assessment Coordinator for this project. On 8 May 2012 the NEB issued a Federal Coordination Notification (FCN) letter pursuant to section 5 of the CEA Act regulations *Respecting the Coordination by Federal Authorities of Environmental Assessment Procedures and Requirements* (Federal Coordination Regulations) to identify the

¹ *Review and Variance Application - Class Location Change Plan for Mainline KP 367.5*, available at <https://www.neb-one.gc.ca/l1-eng/livelink.exe?func=ll&objId=639827&objAction=browse>.

potential involvement of federal departments in the EA process. The FCN letter was also sent to provincial agencies in Alberta.

No other agencies declared themselves as Responsible Authorities. Environment Canada (EC) declared themselves to be in possession of specialist advice or expert information or knowledge, and provided a letter of comment.

3.0 NOTIFICATION AND CONSULTATION

Alliance's application materials included a description of the notification and consultation activities it has undertaken. These included consultation with Alexis Nakota Sioux First Nation and Alberta Ministry of Transportation, contact with the Alberta Environment and Sustainable Resource Development (AESRD) Wildlife Biologist and Forest Officer for the area, and notification of other First Nations identified by AESRD and Aboriginal Affairs and Northern Development Canada (AANDC).

Alliance reported that no environmental concerns were identified during this consultation, and that through this consultation Alliance determined that the Project is not located in an area identified as having specific traditional land or resource uses.

4.0 DESCRIPTION OF THE PROJECT

The following table provides information on each Project component throughout the three phases of the Project: construction, operations and abandonment.

Physical Work and/or Activity
<i>Construction Phase – Timeframe: Proposed to take place between 13 August 2012 and 4 October 2012</i>
<ul style="list-style-type: none"> Installation of approximately 831 metres of new heavy-wall 914 mm outside diameter buried pipeline. Drilling a bore under Highway 32. Clearing (including merchantable timber), stripping salvage, grading (where required), excavation, backfilling, clean-up and reclamation. No new access is proposed to support construction and operation of the Project. Hydrostatic test water would be withdrawn from the Athabasca River and trucked in to the site. Evacuation of the natural gas at Mainline Block Valve (MLBV) 3-A. The section to be evacuated is from MLBV 3-1, located east of Highway 32, to MLBV 3-A, located within the Windfall Compressor Station, approximately 29.6 kilometres upstream from MLBV 3-1. Tie-in of the new pipeline segment into the mainline. Deactivation of the redundant pipeline segment, to be left in the ground with appropriate integrity controls
<i>Operation Phase – Timeframe: Service life of the Project (>40 yrs)</i>
<ul style="list-style-type: none"> Integrated into Alliance Mainline operation procedures and schedules.
<i>Abandonment Phase – Timeframe: At the end of the service life of the Project</i>
<ul style="list-style-type: none"> Pursuant to the NEB Act, an application would be required to abandon the facility, at which time the environmental effects would be assessed by the NEB.

5.0 DESCRIPTION OF THE ENVIRONMENT

The proposed route is on Crown land and crosses previously cleared land between Highways 32 and 43 and the Eagle River Casino, except for an approximately 100 metre long patch of forested land adjacent to Highway 32. The proposed route crosses a shrubby swamp for approximately 125 metres at one of the tie-in points; the disturbance of which does not trigger provincial approval or notification requirements. The route is over 200 metres south of the Eagle River Casino.

Previous vegetation assessments found that vegetation in the Project area was dominated by non-native invasive species, with few native species present, due to surrounding existing disturbances (such as the existing Alliance pipeline, Highways 32 and 43, the Eagle River Casino, other roads and pipelines, and an actively mined gravel pit just south of the highway junction). Also, previous wildlife assessments found that wildlife habitat in the Project area was limited due to surrounding existing disturbances. No rare vascular plant species, rare ecological communities or wildlife species of concern were observed during the assessments. The supplemental wildlife survey detected one frog species, ten bird species and three mammal species. One of these is designated (pileated woodpecker, listed as sensitive by AESRD). No other species with special conservation status were observed, nor were migratory bird nests or wildlife features such as active stick nests, dens or amphibian breeding ponds.

The environmental setting for the Windfall Compressor Station was not included in the ESA or subsequent materials provided.

6.0 ENVIRONMENTAL ASSESSMENT

6.1 Methodology

In assessing the environmental effects of the Project, the NEB used an issue-based approach. The NEB first considered how the Project would interact with the environment, including those elements listed in Section 6.2 below. The NEB also considered the factors set out in paragraphs 16(1)(a) through (d) of the CEA Act. The Board considers the scope of the Project to include the evacuation planned to occur at the Windfall Compressor Station.

For those environmental elements for which Project interactions were predicted, the NEB then identified any potential adverse environmental effects. These were compared with any mitigating circumstances or company proposed measures and any effects still potentially present after mitigation were assessed for their significance (Sections 6.3 and 6.4). The NEB also considered cumulative effects, the need for any issue-specific regulatory condition, and for additional mitigation or monitoring, as appropriate.

6.2 Project – Environment Interactions

In assessing the environmental effects of the Project, the NEB considered whether the Project would interact with the following elements:

- Terrain and Physical Environment
- Soil and Soil Productivity
- Vegetation
- Water Quality and Quantity

- Fish and Fish Habitat
- Wetlands
- Wildlife and Wildlife Habitat
- Species at Risk or of Special Status (federal & provincial)
- Noise
- Air Quality
- Human Occupancy and Resource Use
- Traditional Land and Resource Use
- Heritage Resources
- Socio and Cultural Well-being
- Human Health and Aesthetics
- Accidents and Malfunctions
- Effects of the Environment on the Project

6.3 Potential adverse Environmental Effects and Standard Mitigation Measures

Evacuation of the dense phase natural gas (product) from the portion of the mainline to be replaced is discussed in Section 6.4. In relation to the other proposed activities, Alliance has identified routine design and best practice measures to mitigate the potential adverse environmental effects. The table below summarizes the elements with which the Project is likely to interact with, as well as Alliance's proposed mitigation measures.

As part of the mitigation measures, Alliance has provided a list of contingency plans that would be used as warranted, such as: Waste Management Plan, Wet Soils Contingency Plan, Wind Erosion and Water Erosion of Soils Contingency Plans, Emergency Preparedness and Response Plan, Spill Contingency Plan, Fire Contingency Plan, Traffic Management Plan, Heritage Resource Discovery Contingency Plan.

Potential Adverse Environmental Effect	Proposed Standard Design or Mitigation Measures
Soils – previous site contamination, strippings/subsoil admixing, compaction, loss of strippings through wind or water erosion	<ul style="list-style-type: none"> ▪ Any contaminated material encountered to be managed according to appropriate guide/plan(s). ▪ Stripping, salvage, storage, and grading to be performed properly and according to appropriate plan(s). ▪ Potential for spills to be minimized, and spill response to be implemented immediately according to appropriate plan(s).
Water quality and quantity – alteration of surface water flow patterns, reduction of groundwater quality	<ul style="list-style-type: none"> ▪ Pre-construction drainage contours away from roads to be maintained. ▪ Potential for spills to be minimized, and spill response to be implemented immediately according to appropriate plan(s). ▪ All applicable provincial regulations in relation to the hydrostatic testing to be complied with.
Atmosphere – air and GHG emissions	<ul style="list-style-type: none"> ▪ Evacuation of product – discussed in Section 6.4.
Acoustic environment – noise	<ul style="list-style-type: none"> ▪ Evacuation of product – discussed in Section 6.4. ▪ Construction activities limited to daytime hours.
Wetlands – alteration of function	<ul style="list-style-type: none"> ▪ Unnecessary clearing to be avoided.
Vegetation – disturbance and weed introduction/spread	<ul style="list-style-type: none"> ▪ Natural regeneration to be allowed or seeded with appropriate mix. ▪ Equipment to be cleaned prior to arrival on-site.

Potential Adverse Environmental Effect	Proposed Standard Design or Mitigation Measures
Wildlife and wildlife habitat – disturbance, attraction of nuisance animals, mortality	<ul style="list-style-type: none"> ▪ Harassment and attraction of animals to be minimized. ▪ Trench to be inspected daily for trapped animals. ▪ Construction activities scheduled to be outside of the Key Wildlife and Biodiversity Zone timing restriction (Jan 15 to Apr 30) and outside of the migratory bird nesting period (May 1 to July 31).
Species at risk or of special status, and related habitat – disturbance	<ul style="list-style-type: none"> ▪ Potential habitat limited by previous disturbance. ▪ If a species with special conservation status or additional wildlife habitat features are observed during construction, additional measures will be determined in consultation with AESRD and/or EC.
<i>Alliance's ESA and Supplementary Wildlife and Wetland Surveys specify further details on standard mitigation.</i>	

Alliance committed to develop and implement a project-specific Environmental Protection Plan (EPP) that will reference mitigation measures outlined in its existing corporate environmental plans. Alliance additionally commits to a post-construction monitoring program (PCMP), to be conducted during the first growing season after construction/final clean-up activities, which will include an assessment of reclamation, re-vegetation, erosion control and any weed problem areas along the Project. EC requested the results of the PCMP.

The NEB is of the view that, in relation to these routine activities, potential adverse environmental effects are limited, given the small scale of the Project, the short duration of construction activities, and the Project location. The NEB is therefore of the view that, if Alliance follows its standard design and mitigation measures and plans, potential adverse environmental effects in relation to these routine activities are not likely to be significant.

6.4 Section Evacuation and Gas Management

Alliance proposed a single venting event in order to evacuate the product from the portion of the mainline to be replaced. In its *Review and Variance Application* (1 October 2010) Alliance estimated that approximately 1150 10³m³ (40 MMcf) of product would be released in the vent. In *Highway 43-32 Pipeline Relocation Project - Response to NEB IR No. 1* (18 May 2012) regarding this event, Alliance stated that venting the product would evacuate the section faster than flaring, incineration, or the use of a pull-down compressor, minimizing the duration that the mainline will be out of service. Alliance also considered the existing infrastructure at the Windfall Compressor Station, and its access to specialised equipment.

The Board notes the large quantity of gas to be evacuated and is aware of provincial initiatives surrounding the reduction of venting volumes. The Board is of the view that when planning pipeline maintenance or replacement activities, timing is only one of many factors to be considered in selecting an appropriate method of gas management. Also relevant, for instance, are:

- industry-wide best management practices;
- how or if the entrained natural gas liquids would be removed;

- what additional safety measures would be undertaken in preparation for and during such an event; and,
- the biophysical and human environment in the area surrounding the Windfall Compressor Station, together with what types of notification or consultation have been undertaken in that area, given that it is outside the spatial boundaries of the ESA provided.

The Board thus recommends that Alliance be required to file, for approval, a *Gas Management – Safety and Environment Plan*. Please see Recommendation B for details.

The Board is of the view that, with an appropriate *Gas Management – Safety and Environment Plan* in place, potential adverse effects in relation to the removal of gas from the pipeline section are not likely to be significant.

6.5 Cumulative effects assessment

The NEB has considered the potential for cumulative environmental effects and determined that any adverse environmental effects that are likely to result from this Project in combination with other projects or activities that have been or will be carried out would be temporary, localized, and minor. Therefore, it is unlikely that there would be any significant cumulative environmental effects resulting from this Project.

6.6 Recommendations

It is recommended that in any Order that the NEB may grant, the following be included as conditions.

- A.** Alliance shall implement or cause to be implemented all of the policies, practices, programs, mitigation measures, recommendations, procedures and commitments for the protection of the environment included in or referred to in its application or as otherwise agreed to in its related submissions.
- B.** Alliance shall file with the Board for approval, at least 30 days prior to the commencement of construction, a project specific *Gas Management – Safety and Environment Plan* in relation to the removal of natural gas from the mainline section. The Plan shall include:
 - a. proposed goals and measurable objectives for safety and environmental protection;
 - b. an evaluation of alternative gas management methods, including a rationale supporting the best available method, specific to the nature and scale of the event;
 - c. evidence that best management practices are being applied to the method, timing, and quantities of gas to be removed from the pipe section;
 - d. composition, quantification and dispersion modelling of gas emissions, using local meteorological and terrain data;

- e. the environmental characteristics of the potentially affected area;
- f. analysis of potential safety risks and predicted environmental effects;
- g. the location and approximate number of people that may be affected, and related consultation activities;
- h. the methods and procedures to be used to mitigate safety risks and environmental effects;
- i. the criteria to determine the success of the mitigation;
- j. the nature and frequency of monitoring activities pre-, during and post-event; and
- k. planned timing of a report to the Board on the success of the measures implemented.

7.0 THE NEB'S CONCLUSION

The NEB is of the view that with the implementation of Alliance's environmental protection procedures and mitigation measures and the NEB's recommendations, the proposed Project is not likely to cause significant adverse environmental effects.

8.0 NEB CONTACT

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