

**ACTION PLAN FOR AER DECISION 2016-004**

**PEMBINA PIPELINE CORPORATION**

**APPLICATIONS FOR TWO PIPELINES - PIPELINE EXPANSION PROJECT, FOX CREEK TO NAMAQ**

ACTION ITEM	REQUIRED ACTION/COMMENTS	DECISION: 2016-004	AER PROCESS TO ENSURE FOLLOW-UP	STATUS & EVIDENCE
1 Mr. Nielsen's Property	Pembina must reduce the permanent right-of-way (ROW) across Mr. Nielsen's property from a width of 35 m to a maximum width of 25 m.	Section: Appx. 2 P. 88	Pembina will submit a letter to the AER confirming that the requirement has been met, including an updated right of way plan that shows the updated ROW width.	Completed - Required materials were submitted by Pembina to the AER on November 1, 2016, and were approved by the AER on November 22, 2016.
2 Block Valves	Pembina must install an additional block valve on each pipeline at a location chosen with the goal of further reducing potential release volumes into the Paddle River.	Section: Appx. 2 P. 88	Pembina will submit a letter to the AER confirming that the requirement has been met.	Completed - Required materials were submitted by Pembina to the AER on November 4, 2016, and were approved by the AER on November 22, 2016.
3 Green Area Vegetation Management Control Plan	Pembina must submit an updated Green Area vegetation management control plan to the panel for review within 120 days of this decision. In this plan, Pembina must assess opportunities to minimize the extent of post-construction, ongoing vegetation control to maintain line of sight for monitoring in the Green Area (see figure 4). Such opportunities might include use of drones or other evolving technologies, where appropriate, with a goal of allowing as much of the ROW as is practicable to revegetate given the requirement to be able to visually monitor the line. Following receipt and review of this plan, the panel will either accept it as filed as a condition of the authorization or provide Pembina with further direction.	Section: Appx. 2 P. 88	Pembina will submit the plan to the AER within 120 days of 2016-004 AER decision (by August 19, 2016) for review and further direction.	Completed - Pembina submitted the plan to the AER on August 12, 2016. The AER approved the plan on September 8, 2016 and requested Pembina to provide three assessments of the effectiveness of the plan to the AER for information purposes only, at year two, five, and ten. In addition, if Pembina becomes concerned that the plan is impeding safe pipeline operations, Pembina is to submit a revised plan to the AER for consideration at any time it deems appropriate.

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4 PLA Pipeline Agreement Conditions	<p>Pembina must comply with the following conditions as they are set out in the PLA pipeline agreement Notice of Decision documents:</p> <p>a) Pembina must comply with Alberta Environment and Parks (AEP) timing constraints and setbacks when working in key wildlife and biodiversity zones (KWBZs).</p> <p>b) Pembina must not undertake ongoing vegetation management or brush control for tree species in KWBZs following construction.</p> <p>c) If Pembina clears tree species within horizontal directional drilling entry and exit points in KWBZs, it must undertake a revegetation program to re-establish these tree species.</p> <p>d) Pembina must comply with the topsoil salvage standards in the Integrated Standards and Guidelines – Enhanced Approval Process.</p>	Section: Appx. 2  P. 88	Pembina will submit a letter to the AER confirming that the requirement has been met.	Pending -
5 Mitigation Measures	<p>Where Pembina is not able to adhere to AEP or Environment Canada recommended spatial setbacks or construction timing constraints for species of concern or sensitive habitat zones or features, it must consult with the AER to determine appropriate mitigation measures.</p>	Section: Appx. 2  P. 88	Pembina will consult with the AER to determine appropriate mitigation measures where necessary and submit a letter to the AER confirming that the requirement has been met.	Pending -
6 Grassroots Lands	<p>Pembina must undertake pre-construction soil surveys on Grassroots lands not accessed previously.</p>	Section: Appx. 2  P. 88	Pembina will submit the pre-construction soil surveys to the AER for review.	Completed - Pembina submitted the survey on September 21, 2016, which was accepted by the AER on September 28, 2016. In a letter dated January 13, 2017 the AER confirmed that Pembina has met the requirements of the condition.

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7 Clubroot Management Plan	<p>Pembina must submit within 120 days of this decision an updated clubroot management plan to the EPEA director for review, in accordance with the EPEA approval for this project. Following receipt of this plan, the director will either accept it as filed as a condition of the approval or provide Pembina with further direction. Pembina's updated plan must include the following:</p> <ul style="list-style-type: none"> <li>-A sampling method that identifies three levels for designating clubroot presence in fields: low, moderate, or high.</li> <li>-Level 3 disinfecting cleaning when topsoil stripping equipment is moving from high- to moderate- or low-risk fields.</li> <li>-Equipment moving between high-risk or moderate-risk fields have: <ul style="list-style-type: none"> <li>-- level 3 cleaning when equipment is being moved between different landowners, and</li> <li>□level 2 or 1 cleaning when equipment is being moved between fields owned by the same landowner and the landowner agrees.</li> </ul> </li> <li>-□The use of high-risk mitigation measures when there is uncertainty regarding the presence of clubroot.</li> <li>-□Level 1 cleaning of all equipment moving between clubroot-detected fields, regardless of the direction of travel.</li> <li>-□Sampling for clubroot and cleaning of equipment between fields rather than only between quarter sections.</li> </ul>	<p>Section: Appx. 2 P. 89</p>	<p>Pembina will submit the plan to the AER within 120 days of 2016-004 AER decision for review and further direction.</p>	<p>Completed - Pembina submitted the plan to the AER on May 10, 2016. The AER requested revisions to the plan.</p> <p>On July 2, 2016 Pembina submitted a revised plan to the AER. The plan was approved by the AER on July 7, 2016.</p>
8 Pre-construction Weed Surveys	<p>Pembina must conduct any outstanding pre-construction weed surveys in the White Area. Where Pembina is unable to complete a pre-construction survey (e.g., due to a timing restriction), it must assume that weed infestation is present and mitigation measures must be applied accordingly.</p>	<p>Section: Appx. 2 P. 89</p>	<p>Pembina will submit the pre-construction weed surveys to the AER for review.</p>	<p>Ongoing - Pembina submitted 2015 and 2016 pre-construction weed surveys for the White Area to the AER on December 19, 2016 and confirmed that 1.6% of the pipeline alignment in the White Area has not been accessed for construction, restating its commitment to adhere to the condition requirements should access to those areas be required. The plans have been accepted by the AER on January 13, 2017.</p>

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9 Pressure Wash Protocol	To reduce risk to certified seed grower lands, Pembina must pressure wash all equipment before entering those lands regardless of whether Pembina's equipment is coming from another weed-free site. Footwear and vehicles must also be cleaned in accordance with this protocol.	Section: Appx. 2  P. 89	Pembina will submit a letter to the AER confirming that the requirement has been met.	Pending -
10 Natural Revegetation Assessment	To demonstrate the effectiveness of its natural revegetation approach, Pembina is required to assess one or more reclaimed sites on the ROW that are significant to Driftpile First Nation (Driftpile) for traditional use. Specifically, Pembina must do the following: -With the assistance of Driftpile, identify at least one site on the ROW in the Green Area containing plant species of importance to traditional use. If Driftpile does not wish to participate in the identification of a site, then Pembina will select a site based on the presence of plants it understands are important for traditional use. -Assess and document the effectiveness of its ROW reclamation measures in the first growing season after completing construction and the following four growing seasons. Documentation should include a photographic record of natural vegetation recovery on the ROW at each selected site. -Share each assessment with Driftpile (and Gunn Métis Local 55 [Gunn Métis] and Alexander First Nation if interested) and the AER for information purposes.	Section: Appx. 2  P. 90	Pembina will submit to the AER a copy of each assessment.	Ongoing - On November 4, 2016 Pembina submitted a final plan outlining how it will assess reclaimed sites along the right-of-way that are significant to Driftpile First Nation. The AER accepted the plan on November 22, 2016.

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11 Deadman Lake	Pembina must review and amend, if necessary, its planned route or construction technique in the area south of Deadman Lake so that it avoids any adverse impacts on the bed and shores of Deadman Lake, as defined by the Aboriginal Consultation Office (ACO). Pembina must provide prior to construction written confirmation from the ACO that the route addresses the concern that it identified.	Section: Appx. 2  P. 90	Pembina will submit a letter to the AER outlining results of the review. Prior to construction Pembina will submit to the AER a written confirmation from the ACO that the route addresses the concern that it identified.	Pending -

*The conditions imposed in approvals/licence(s) are monitored by the Alberta Energy Regulator (AER). The AER has developed a process whereby an action plan is developed internally to ensure that AER staff monitor conditions arising from decision reports for compliance. The conditions are managed in an action plan that is updated quarterly with statuses of conditions. The action plan defines the action required, timeframes for completion, and a summary of the evidence provided to confirm a condition was met. For more information, please contact the Action Plan Administrator at (403) 297-4289.*