

Publication Date on Website	Assessment Rule Name	What's the Risk	Controls in Place	Location	Activity	Operator	Submission Type	Action/Next Step taken by the AER	When the action / next step may take place in the development life cycle	Justification for action
6-Nov-17	Watercourse Crossings	Watercourse shifting or flooding events (damaging pipeline), potentially leading to a loss of containment, resulting in impacts to the environment.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015</a> )  Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	Watercourse crossing	Larger liquid pipelines (oil, produced water, emulsion) under a waterbody not constructed using horizontal directional drilling (HDD) technology.	N/A	Application - New Construction Application - Amendments: Resumption; Route Change; Specification Change; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate, Operate	To ensure appropriate mitigations are in place to prevent a pipeline from being exposed during flooding. Additional review is required.
6-Nov-17	Participant Involvement	Stakeholders not sufficiently consulted/notified, potentially leading to unresolved stakeholder concerns, resulting in a loss of confidence in the AER.	Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	N/A	N/A	Participant involvement requirements not met, or there are outstanding stakeholder concerns	Application - New Construction Application - Amendments: Abandonment; Bi-directional Flow; Discontinuation; Facility Code; Flow Reversal; H2S Increase; H2S Decrease; Installations; Line Split; Liner Installation; MOP Increase; MOP Decrease; Not Constructed; Other; Reinstatement; Removal; Resumption; Route Change; Spec Change; Substance Change – Entire Licence;	Route the application for additional review.	Initiate, Operate	Unresolved concerns may lead to new information. Additional review required.
6-Nov-17	AER Areas of Focus	Pipeline activities within identified sensitive areas, potentially leading to siting (e.g., location related) issues, resulting in impacts to the environment (e.g., wildlife, ecology, dam safety).	Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	Activity falls within the following areas: Battle Lake Tier 1 Area, Sage Grouse Federal EPO prohibition area, and Brazeau Dam Buffer	N/A	N/A	Abandonment Application Discontinuation Application Installations Application Liner Installation Removal Application Resumption Application Route Change Application	Route the application for additional review.	Initiate, Operate	To ensure appropriate mitigations are in place, activities in sensitive areas require additional review.
6-Nov-17	Variance from CSA Z662 or Pipeline Rules	All variances from the AER's standard rules and requirements are reviewed.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015</a> )  Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	N/A	Pipeline does not meet all CSA Z662 standards or does not meet Pipeline Rules	N/A	Application - New Construction Application - Amendments: Abandonment; Discontinuation; H2S Increase; H2S Decrease; Liner Installation; MOP Increase; MOP Decrease; Reinstatement; Resumption; Spec Change; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate, Operate	A variance from AER requirements introduces uncertainty related to the risk of the proposed activity. Additional review required.
6-Nov-17	Higher Risk Substances	Pipe material loss (e.g., corrosion), strikes, slope movement, valve or joint failure, etc., potentially causing a loss of containment (e.g., the release of high-risk substances), resulting in impacts to public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/invt/27024912015</a> )  Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	N/A	Pipelines carrying HV, carbon dioxide, or "Other" substances	N/A	Application - New Construction Application - Amendments: H2S Increase; MOP Increase; MOP Decrease; Resumption; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate, Operate	Specific substances create uncertainty about the level of risk of the activity. Additional review is required to understand the uncertainty to ensure that appropriate mitigative/operational controls are in place and that more stringent guidelines and requirements are met.

6-Nov-17	Statement of Concern	A statement of concern, submitted in relation to the application, indicating unresolved stakeholder concerns.	Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	N/A	N/A	A statement of concern is filed by any stakeholder	Application - New Construction Application - Amendments: Abandonment; Bi-directional Flow; Discontinuation; Expiry Extension; Facility Code; Flow Reversal; H2S Increase; H2S Decrease; Installations; Line Split; Liner Installation; MOP Increase; MOP Decrease; Not Constructed; Other; Reinstatement; Removal; Resumption; Route Change; Spec Change; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate, Operate	A statement of concern may lead to new information. Additional review required.
6-Nov-17	Operator Criteria	A company may not be able or willing to carry out regulatory obligations (e.g., by operational or financial means) over the life cycle of the pipeline, potentially leading to a loss of containment, resulting in impacts to the environment and public safety.	Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	N/A	N/A	Applicant's corporate health status is identified as "Global Refer"	Application - New Construction Application - Amendments: Abandonment; Bi-directional Flow; Discontinuation; Expiry Extension; Facility Code; Flow Reversal; H2S Increase; H2S Decrease; Installations; Line Split; Liner Installation; MOP Increase; MOP Decrease; Not Constructed; Other; Reinstatement; Removal; Resumption; Route Change; Spec Change; Substance Change - Entire; Substance Change - Partial	Route the application for additional review.	Initiate, Operate	Licensee may not be capable of carrying out regulatory obligations in terms of pipeline safety; additional review is required.
6-Nov-17	Pipe Specifications	Pipe material loss and/or valve or joint failure due to incompatible combination of H <sub>2</sub> S, substance, pipe material, or operating conditions (e.g., maximum pressure), potentially leading to a loss of containment, resulting in impacts to the environment and public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )  Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )  Pipeline Rules Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )  Directive 056: Process for Pipeline Applications of Fibrespar, Flex Pipe, Flex Cord, or Flex Steel Composite Pipes ( <a href="http://www.aer.ca/documents/directives/Directive056_FibresparAndFlexpipe.pdf">http://www.aer.ca/documents/directives/Directive056_FibresparAndFlexpipe.pdf</a> )	N/A	Pipelines that exceed limitations listed in the <i>Directive 056</i> process for pipeline applications of Fibrespar, Flexpipe, Flexcord or Flexsteel Composite Pipes, <i>D056</i> , <i>Pipeline Rules</i> , <i>CSA Z662</i>	N/A	Application - New Construction Application - Amendments: H2S Increase; H2S Decrease; Liner Installation; MOP Increase; MOP Decrease; Other; Resumption; Spec Change; Substance Change - Entire; Substance Change - Partial	Route the application for additional review.	Initiate, Operate	Pipeline specifications (e.g., pipe material, joints) may not be compatible with operating conditions (e.g., MOP, H <sub>2</sub> S). This introduces uncertainty related to the integrity of the pipeline. Appropriate mitigative measures/controls must be in place. Additional review required.

6-Nov-17	Pipeline Tie-Ins	Pipe material loss and/or valve or joint failure due to incompatible combination of H2S, substance, pipe material, or operating conditions (e.g., maximum pressure), potentially leading to a loss of containment, resulting in impacts to the environment and public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )  Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )  Pipeline Rules Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	N/A	Pipeline location table has a facility code "pipeline"  and  Tie-in substance, H2S content, and/or maximum operating pressure (MOP) are incompatible with each other	N/A	Application - New Construction Application - Amendments: Abandonment; Bi-directional Flow; Discontinuation; Facility Code; Flow Reversal; H2S Increase; H2S Decrease; Line Split; MOP Increase; MOP Decrease; Reinstatement; Resumption; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate, Operate	Appropriate mitigative measures/controls must be in place to protect connecting pipelines from operating conditions (e.g., H2S content, substance, and/or MOP) that they are not originally designed for. Additional review required.
6-Nov-17	ALSA Compliance	Pipeline activities located in areas identified in regional plans (a designated conservation area, provincial park, provincial recreation area, or a public land area for recreation and tourism), potentially leading to siting (e.g., location related) issues, resulting in impacts to the environment.	Alberta Land Stewardship Act Regional Plans	Located within the boundaries of a designated conservation area, a provincial park, a provincial recreation area, or a public land area for recreation and tourism identified in regional plans	N/A	N/A	Application - New Construction Application - Amendments: Abandonment; Bi-directional Flow; Discontinuation; Expiry Extension; Facility Code; Flow Reversal; H2S Increase; H2S Decrease; Installations; Line Split; Liner Installation; MOP Increase; MOP Decrease; Not Constructed; Other; Reinstatement; Removal; Resumption; Route Change; Spec Change; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Initiate , Operate	To ensure appropriate mitigations are in place, pipeline activities located within the boundaries of a designated conservation area, a provincial park, a provincial recreation area, or a public land area for recreation and tourism identified in regional plans require more review. Also, to inform the Government of Alberta of these pipeline activities.
6-Nov-17	Pipeline Installation Activities	All variances from the AER's standard rules and requirements are reviewed.	Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	N/A	Pipeline installations do not meet noise, storage, spacing, or emissions requirements	N/A	Application - Amendments: Installations Substance Change – Entire Licence	Route the application for additional review.	Initiate, Operate	A variance from AER requirements introduces uncertainty related to the risk of the proposed activity that requires additional review.
6-Nov-17	Increase in CSA Z662 Class Location	Pipe material loss (e.g., corrosion), valve or joint failure, or strikes to pipelines if in close proximity to populations, potentially leading to a loss of containment, resulting in impacts to public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )	N/A	Increase in CSA Z662 class location	N/A	Application - Amendments: MOP Decrease; Other	Route the application for additional review.	Operate	A higher-class location (e.g., design and pipeline operation) is required to reflect the closer proximity of pipelines to human populations. Additional review is required.

6-Nov-17	Change of Substance to Sour Natural Gas OR Change to Sour Service	Pipe material loss (e.g., corrosion) and/or valve or joint failure, due to incompatible H2S, pipe material, or operating conditions (e.g., maximum pressure), potentially leading to a loss of containment, resulting in impacts to public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )  Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )  Pipeline Rules Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	N/A	Proposed change of service may trigger more <i>Pipeline Rules</i> requirements and/or <i>CSA Z662</i> sour-service requirements	N/A	Application - Amendments: H2S Increase; MOP Increase; Substance Change – Entire Licence; Substance Change – Partial Licence	Route the application for additional review.	Operate	Higher-risk substances require more stringent pipeline design/operation requirements.
6-Nov-17	Pipeline Operational Activities (e.g., Bi-directional Flow)	Valve or joint failure due to inadequate pipe design (e.g., wall thickness), potentially leading to a loss of containment, resulting in impacts to public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )	N/A	Request to allow bi-directional flow in larger-diameter pipelines	N/A	Application - Amendments: Bi-directional Flow	Route the application for additional review.	Operate	The existing pipeline design/operation may not be appropriate for the proposed operational activity. Additional review is required.
6-Nov-17	Resumption of Operation from Abandoned Status	Pipe material loss (e.g., corrosion), valve or joint failure, and existing damage to pipeline, potentially leading to a loss of containment, resulting in impacts to public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )  Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )  Pipeline Rules Alberta Regulation 91/2005: Pipeline Rules ( <a href="http://www.qp.alberta.ca/documents/Regs/2005_091.pdf">http://www.qp.alberta.ca/documents/Regs/2005_091.pdf</a> )	N/A	Request to resume operation of an abandoned pipeline	N/A	Application - Amendments: Resumption	Route the application for additional review.	Operate	Abandoned pipelines are not maintained and therefore are typically not candidates for resumption. Pipeline integrity may not be sufficient for return to service.
13-Dec-17	Fit for service	Pipe material loss and/or valve or joint failure due to incompatible combination of H2S, substance, and/or pipe material, potentially leading to a loss of containment, resulting in impacts on public safety.	Canadian Standards Association Z662: Oil and Gas Pipeline Systems ( <a href="http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015">http://shop.csa.ca/en/canada/petroleum-and-natural-gas-industry-systems/canca-z662-15-/inv/27024912015</a> )  Directive 056: Energy Development Applications and Schedules ( <a href="https://www.aer.ca/documents/directives/Directive056.pdf">https://www.aer.ca/documents/directives/Directive056.pdf</a> )	N/A	Request to resume operation of an abandoned or discontinued pipeline where the service conditions of the licence have been changed	N/A	Application - Amendments: Resumption	Route the application for additional review.	Operate	The existing pipeline design/operation may not be appropriate for the proposed operational activity. Additional review is required.