Canada Energy Regulator | Régie de l'énergie du Canada

Filing Manual

1 June 2026

Canada

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Glossary of Terms

Abandon	The permanent cessation of the operation of a pipeline which results in the discontinuance of service.
Abandoned Pipeline	A pipeline, the operation of which has been abandoned with leave of the Commission as required by subsection 241(1) of the *Canadian Energy Regulator Act*, and that remains in place.
Accountable Officer	Person appointed as accountable officer under subsection 6.2(1) of the *Canadian Energy Regulator Onshore Pipeline Regulations* [OPR section 1].
Action Plans	The competent minister is required to prepare one or more action plans based on the recovery strategy for a listed species. The action plan or plans and any amendments will be included in the public registry established under the *Species at Risk Act*.
Adverse Effect	The impairment of or damage to the environment or the health of humans, or damage to property or loss of reasonable enjoyment of life or property.
Allowance for Funds Used During Construction (AFUDC)	An amount allowed to be included in the construction costs of a project or the cost of funds used during the period of construction when a utility undertakes to construct its own facilities.
Baseline Information	The state of the environment, or environmental or socio-economic setting for a particular element providing a reference point for the element, with which to compare future conditions, and potential project effects.
Base Year	A period, usually a calendar year, of the most recent twelve consecutive months of actual data.
Booked Amount	The final amount recorded in the appropriate account under the *Gas Pipeline Uniform Accounting Regulations* or the *Oil Pipeline Uniform Accounting Regulations*.
Commission	The Commission of comprised of up to seven full-time Commissioners and may also include part-time Commissioners. The Commission makes regulatory decisions as set out in the *Canadian Energy Regulator Act* and other legislation.
Contaminant	A substance that is present or released in the environment at an amount, concentration, level or rate that results in or may result in an adverse effect.
Critical Habitat	The habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species' critical habitat in

	the recovery strategy or in an action plan for the species [*Species at Risk Act* subsection 2(1)].
Cumulative Effects	Changes to the environment that are caused by an action in combination with other past, present and future human actions. ('Action' includes projects and activities.)
Current Year	The 12-month period, usually a calendar year, preceding the test year. Amounts for a current year would usually involve data for a portion of the year and estimated data for the rest of the year.
Deleterious Substance	(a) any substance that, if added to any water, would degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water; or (b) any water that contains a substance in such quantity or concentration, or that has been so treated, processed or changed, by heat or other means, from a natural state that it would, if added to any other water, degrade or alter or form part of a process of degradation or alteration of the quality of that water so that it is rendered or is likely to be rendered deleterious to fish or fish habitat or to the use by man of fish that frequent that water [*Fisheries Act* subsection 34(1)].
Designated Project	A project designated under the *Physical Activities Regulations* as a physical activity requiring a federal impact assessment under the *Impact Assessment Act*.
Easement	An agreement under which a company acquires the right to use the land for the pipeline or powerline. It is a written contract that sets out the rights of the company and rights of the landowner for the use of the right of way.
Environmental Effect	In respect of a project, any change that a project may cause to a bio-physical element found in Table A-2, and any effect of any such change on a socio-economic element (see definition of Socio-economic effect).
Environmentally Sensitive Area	An area designated in regional or local land use plans, or by a local, regional, provincial or federal government body as being sensitive to disturbance or identified by an applicant as being sensitive for some reason.
Federal Lands	Under section 82 of the *Impact Assessment Act*, the CER must make a significance determination for any projects on federal lands. The *Impact Assessment Act* defines federal lands as: *(a)* lands that belong to Her Majesty in right of Canada, or that Her Majesty in right of Canada has the power to dispose of, and all

waters on and airspace above those lands, other than lands under the administration and control of the Commissioner of the Yukon, Northwest Territories or Nunavut;

(b) the following lands and areas:

i. the internal waters of Canada, in any area of the sea not within a province,

ii. the territorial sea of Canada, in any area of the sea not within a province,

iii. the exclusive economic zone of Canada, and

iv. the continental shelf of Canada; and

(c) reserves, surrendered lands and any other lands that are set apart for the use and benefit of a band and that are subject to the *Indian Act*, and all waters on and airspace above those reserves or lands.

Fee Simple Owner	The person or legal entity that is in the legal possession of land. Usually it is the person named on the title.
Fish	Includes (*a*) parts of fish, (*b*) shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and (*c*) the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals [*Fisheries Act* subsection 2(1)].
Fish Habitat	Means water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas [*Fisheries Act* subsection 2(1)].
Group 1 and Group 2 Companies	In 1985, for financial regulatory purposes, the National Energy Board divided the pipeline companies under its jurisdiction into two groups: Group 1 companies with more extensive systems; and Group 2 companies that operate smaller systems.
Heritage Resources	Cultural, historic, archaeological and paleontological resources are collectively known as heritage resources and can include pre-contact and post-contact features.
Human Health	A state of complete physical, mental and social well-being, and the ability to adapt to the stresses of daily life; it is not merely the absence of disease or infirmity.

Human Health Assessment	Considers the effect of hazardous substances, environmental factors and exposure conditions on local and regional populations. It may consist of qualitative and quantitative assessments.
Indigenous	Includes the First Nations, Inuit and Métis Peoples of Canada.
Management Systems	The management system set out in sections 6.1 to 6.6 of the *Canadian Energy Regulator Onshore Pipeline Regulations* [OPR section 1].
Migratory Bird	Includes the sperm, eggs, embryos, tissue cultures and parts of the bird [*Migratory Birds Convention Act, 1994 subsection* 2(1)].
Mitigation	In respect of a project, the elimination, reduction or control of the adverse environmental effects of the project, and includes restitution for any damage to the environment caused by such effects through replacement, restoration, compensation or any other means.
Monitoring	Activities for resolving specific outstanding environmental issues, observing the potential environmental effects of a project, assessing the effectiveness of mitigation measures undertaken, identifying unanticipated environmental issues and determining the action required based on the result of these activities.
Navigable Water or Waterway	Includes a canal and any other body of water created or altered as a result of the construction of any work. As well, a navigable water is considered as any body of water capable, in its natural state, of being navigated by floating vessels of any description for the purpose of transportation, recreation or commerce, and may also be a human-made feature such as a canal or reservoir.
Navigation	Use of a vessel for transportation, recreation, or commerce on a navigable waterway.
Owner	For the purposes of sections 320 to 334 of the *Canadian Energy Regulator Act*, the 'owner' is not restricted to the fee simple owner or to freehold lands[1]. In this regard, an owner may include any interest in, or possession of land, such as the fee simple owner, Indigenous title, the administrators of crown and public lands and occupants of land. The interest held may be registered or unregistered. With respect to sections 199 and 201 of the *Canadian Energy Regulator Act*, the owner of lands includes the fee simple owner and

[1] Sections 314 and 320 of the CER Act describe the nature of an 'owner'

314. A company must, in the exercise of the powers granted by this Act or a Special Act, do as little damage as possible, and must make full compensation in the manner provided in this Act and in a Special Act, to all persons interested, for all damage sustained by them by reason of the exercise of those powers.

320. In sections 321 to 334, ***owner*** means any person who is entitled to compensation under section 314.

	may also include any other interest held in the land, as described above. When determining the owners of lands required for the project, the applicant should consider all potential owners of the lands required and implement its notification and acquisition processes pursuant to the Act.
Physical Project	Applications being of a physical nature including those applications required by the *Canadian Energy Regulator Onshore Pipeline Regulations* and the *Canadian Energy Regulator Processing Plant Regulations* as well as some pursuant to the *Canadian Energy Regulator Act*.
Pipeline	A line that is used or to be used for the transmission of oil, gas or any other commodity and that connects a province with any other province or provinces or extends beyond the limits of a province or the offshore area as defined in section 368 of the *Canadian Energy Regulator Act*, and includes all branches, extensions, tanks, reservoirs, storage facilities, pumps, racks, compressors, loading facilities, interstation systems of communication by telephone, telegraph or radio and real and personal property and works connected therewith, but does not include a sewer or water pipeline that is used or proposed to be used solely for municipal purposes [*Canadian Energy Regulator Act* section 2].
Plant Account	An account listed in either Schedule IV of the *Gas Pipeline Uniform Accounting Regulations* or Schedule II of the *Oil Pipeline Uniform Accounting Regulations*, as appropriate.
Processing Plant	A plant used for the processing, extraction or conversion of fluids and all structures located within the boundaries of the plant, including compressors and other structures integral to the transportation of fluids [*Canadian Energy Regulator Processing Plant Regulations* section 1].
Rate Base	The net cost of investment on which an applicant expects to earn a return for a given test year.
Reclamation	The process of re-establishing a disturbed site to a former or other productive use, not necessarily to the same condition that existed prior to disturbance. The land capability may be at a level different (i.e., lower or higher) than that which existed prior to the disturbance, depending on the goal of the process. Reclamation includes the management of a contaminated site and revegetation where necessary. Reclamation is not considered complete until the goals for reclamation have been achieved.
Recovery Strategy	A strategy for the recovery of a listed extirpated, endangered or threatened species prepared by the competent minister (as defined under the *Species at Risk Act*, subsection 2(1)). If the recovery of the listed species is feasible, the recovery strategy must address the threats to the survival of the species identified by the Committee for the

	Status of Endangered Wildlife in Canada, including any loss of habitat. The recovery strategy and any amendments will be included in the public registry established under the *Species at Risk Act*.
Regulated Entity	An economic unit operating a pipeline and subject to oversight by a regulatory body having jurisdiction.
Residual Effects	Effects that are present after mitigation is app
Right of Entry	The right of access to, and use of, land surface.
Right-of-Entry Order	An order by the Commission of the Canada Energy Regulator made under the *Canadian Energy Regulator Act* granting a company access to, and use of, a defined portion of land for the purposes as set out in the order.
Right of Way (RoW)	The strip of land acquired for which a company has obtained the rights for the construction and operation of the pipeline or powerline.
Socio-economic Effect	In respect of a project, any effect on a socio-economic element found in Table A-3, including effects resulting from a change in the environment (see definition of Environmental Effect).
Species at Risk	A federally-listed extirpated, endangered or threatened species or a species of special concern [*Species at Risk Act* subsection 2(1)].
Species of Special Status	Species listed under provincial jurisdiction or of recognized importance because they are vulnerable, threatened, endangered or extirpated.
Study Area	The area within the spatial boundaries of the scope of the environmental and socio-economic effects assessment. Since the spatial boundaries of the assessment may vary with different biophysical and socio-economic elements, the study area may also vary.
Test Year	A future 12-month period, usually a calendar year, when the new tolls would be in effect.
Traditional Territory	Area where an Indigenous Nation has claimed or asserted the right to use the land for traditional purposes such as hunting, fishing, trapping, gathering or spiritual activities. One or more Indigenous Nations may claim the same lands as their traditional territory.

Valued Ecosystem Component (VEC)	Resources or environmental features that have all or some of the following features: • importance to local human populations; • regional, national or international profiles; or • if altered from their existing status will be important in evaluating the impacts of development or human actions, and in focusing management or regulatory policy.
Valued Socio-cultural Component (VSC)	Cultural, social, economic or health aspects of the study population that, if affected by the project, would be of concern to local human populations or government regulators.
Water Body	A water body, including a canal, reservoir, an ocean and a wetland, up to the high-water mark, but does not include a sewage or waste treatment lagoon or mine tailings pond.
Wetlands	Land where the water table is at, near, or above the surface, or which is saturated for a long enough period to promote wetland or aquatic processes as indicated by wet-altered soils, water tolerant vegetation and various kinds of biological activity which are adapted to a wet environment. Wetlands include organic wetlands or “peatlands”, and mineral wetlands or mineral soil areas that are influenced by excess water, but produce little or no peat.

List of Abbreviations

ADR	Alternative Dispute Resolution
AFUDC	allowance for funds used during construction
bbl	barrel
°C	degrees Celsius
CCME	Canadian Council of Ministers of the Environment
CER	Canada Energy Regulator
CER Act	*Canadian Energy Regulator Act*
cf	cubic feet
cf/d	cubic feet per day
CIF	cost, insurance and freight
CSA	Canadian Standards Association
CSA Z662	*Canadian Standards Association Standard Z662, Oil and Gas Pipeline Systems* latest version as amended from time to time
DOC	Depth of Cover
DFO	Fisheries and Oceans Canada
DPR – Authorizations	*Canadian Energy Regulator Damage Prevention Regulations – Authorizations*
ESA	environmental and socio-economic assessment
EPP	environmental protection plan
GPUAR	*Gas Pipeline Uniform Accounting Regulations*
G/OPUAR	*Gas/Oil Pipeline Uniform Accounting Regulations*
H_2S	hydrogen sulfide
IA Act	*Impact Assessment Act*
IAAC	Impact Assessment Agency of Canada
ISO	International Organization for Standardization
kPa	kilopascals
LNG	liquefied natural gas
m^3	cubic metre
MJ/m^3	megajoules per cubic metre
MOP	maximum operating pressure
MPa	megapascals
NEB	National Energy Board. On August 28, 2019 the NEB became the Canada Energy Regulator.
NEB Act	*National Energy Board Act*

NGL	natural gas liquids
NO_2	nitrogen oxide
NPRI	National Pollutant Release Inventory
O_3	ozone
OPR	*Canadian Energy Regulator Onshore Pipeline Regulations*
OPUAR	*Oil Pipeline Uniform Accounting Regulations*
Part VI Regulations	*National Energy Board Act Part VI (Oil and Gas) Regulations*
Post-construction report	post-construction environmental monitoring report
PPBoR	plans, profiles and books of reference
PPR	*Canadian Energy Regulator Processing Plant Regulations*
QA	quality assurance
Reporting Regulations	*National Energy Board Export and Import Reporting Regulations*
RoW	Right of Way
Rules	*National Energy Board Rules of Practice and Procedure, 1995*
SARA	*Species at Risk Act*
SCADA	supervisory control and data acquisition
SI	International System of Units
SO_2	sulphur dioxide
UTM	Universal Transverse Mercator
VEC	Valued Ecosystem Component
VSC	Valued Socio-cultural Component
Valued Component	VEC and VSC
10^6	million
10^9	billion

Filing Manual – Chapter 1 – Introduction

1.1 Background

The Canada Energy Regulator's (CER) purpose is to promote safety, security, environmental protection and economic efficiency in the Canadian public interest through its regulation of pipelines, energy development and trade as mandated by Parliament. As a result, companies regulated by the *Canadian Energy Regulator Act* (CER Act) are required to obtain the Commission's approval to, among other things:

- add new facilities or modify or abandon existing facilities;
- export or import oil and gas products; and
- set tolls and tariffs.

When seeking approval, applicants must submit to the CER applications or information filings (collectively referred to as filings) that are complete and that enable the Commission to:

- evaluate the overall public good that the request can create as well as its potential negative aspects;
- weigh the various impacts; and
- make an informed decision that balances, among other things, the economic, environmental and social interests at that point in time.

It is ultimately the responsibility of the applicant to make its case before the Commission, following the requirements of the CER Act and its regulations, as well as any other relevant legislation. This manual does not create new requirements, but has been developed to provide direction and guidance regarding the information the CER would typically expect to see addressed in a filing. The goal is to provide applicants with a clear definition of the CER's expectations for complete filings. Complete filings should allow the Commission to carry out more consistent assessments with fewer information requests and therefore, shorten timelines required to make a decision.

As will be seen in the detailed requirements, in the process of assessing proposed projects, the CER uses a risk-oriented approach to evaluate issues, considering the probability and consequence of potential issues.

The contents within this document are based on the requirements outlined within the *National Energy Board Rules of Practice and Procedure, 1995 (Rules)*. It is the CER's expectation that applicants will use this document to the extent necessary. Checklists of all the filing requirements (summarized) are included in Appendix 1. The CER encourages applicants to submit completed checklists with each application.

1.1.1 Transition from National Energy Board to Canada Energy Regulator

On August 28 2019 the *Canadian Energy Regulator Act* (CER Act) came into force, replacing the *National Energy Board Act*. The CER Act introduces a modern governance structure with clear separation between key functions:

- An independent Commission, headed by a Lead Commissioner, to adjudicate projects (e.g., hearings)

- A Board of Directors, led by a Chair, to provide strategic oversight
- A Chief Executive Officer, accountable for leading the organization and delivering results

Every decision or order made by the National Energy Board is considered to have been made under the CER Act and may be enforced as such. Every certificate, license or permit issued by the National Energy Board is considered to have been issued under the CER Act. Those instruments remain in force for the remainder of the period during which they would have been in force had the CER Act not come into force.

Regulations made under the National Energy Board Act remain in force under the CER Act until they are repealed or others made in their stead, as per the *Interpretation Act*. Updates to regulations are being implemented through a phased approach, starting with the *Transitional Regulations for the Purpose of the National Energy Board Cost Recovery Regulations*. The CER "Acts and Regulations" web page will be regularly updated with opportunities to provide feedback on regulatory development and notifications of regulatory changes.

1.2 Purpose

This manual is designed to:

- assist CER-regulated companies to identify the instances where a filing is necessary, pursuant to the CER Act and CER/National Energy Board (NEB) regulations;
- outline the filings needed for most applications within the jurisdiction of the CER; and
- provide guidance as to the type of information the Commission would typically need to make a decision.

Where a project does not appear to be addressed by this manual, the applicant is encouraged to contact the CER for assistance.

This manual is not explicitly applicable to:

- oil and gas activities regulated under other Acts for which the CER has responsibility, e.g., the *Canada Oil and Gas Operations Act* and the *Canada Petroleum Resources Act;*
- international and designated interprovincial electric power lines; or
- offshore pipelines.

Any party requiring Commission approval for these activities can refer to this manual for some guidance; however, it does not provide a comprehensive list of requirements for their filings.

1.3 Organization

This manual is organized to easily identify the information required for each type of filing that is being made. In addition to the introductory information provided in Chapter 1, this manual is divided into the following chapters:

- Chapter 2 describes how to use this manual and includes a flowchart that applicants can use to determine what elements are required in their filing.
- Chapter 3 is the initial chapter for all applications and identifies the information which must be addressed in every application. After completing the requirements of Chapter 3,

the applicant must then determine whether to proceed to Chapter 4 (physical projects) or Chapter 5 (non-physical projects).

- Chapter 4 identifies the information required for physical project applications.
- Chapter 5 identifies the information required for non-physical project applications.
- Chapter 6 identifies the information required for filings other than applications.
- Chapter 7 lists the CER documents referenced throughout this manual.
- Appendix 1 includes the filing requirements checklists which applicants are encouraged to complete and submit with each application.

1.4 Content Structure

The Filing Manual has been designed to assist applicants to clearly understand the information and level of detail required for a filing. The filing requirements are generally presented in the following format:

- a goal statement that clarifies the purpose of providing the information;
- filing requirements that specify the information details that are needed;
- a guidance section that provides direction regarding, for example, the level of detail, potential issues and information references; and
- grey boxes that provide direction to help determine if further information is required or not.

1.5 Confidential Filing

The CER is committed to transparency and accountability. As an administrative tribunal, the Commission holds hearings that are open to the public and makes its court record available for public viewing. However, some filings may need to be made confidentially for any of the reasons indicated in sections 60 or 61 of the CER Act. As confidentiality is an exception to the fundamental principle that proceedings are open to the public, the onus is on the applicant to show why this remedy should be granted to keep information in a public proceeding confidential.

Filings may also be required by the CER for matters beyond proceedings of the Commission. Such filings may still be made available to the public as part of the CER's commitment to transparency. Where a filing is unrelated to a Commission proceeding, sections 60 and 61 of the CER Act may not apply. However, an informal request can also be made of the CER not to make the filing public.

The CER will protect the confidentiality of Indigenous knowledge if provided in confidence pursuant to section 58 of the CER Act. Confidential Indigenous knowledge does not need to meet the requirements described here. In situations where such knowledge is being shared, the CER will discuss the process and requirements with the party who is sharing that information.

Please note that all filings, regardless of whether they are confidential or not, are nevertheless subject to the *Access to Information Act* and *Privacy Act*.

1.5.1 Filing Requirements

Applications for all requests to treat filings confidentially, whether in a proceeding or otherwise, must have sufficient detail and provide:

1. A cover letter containing:
    a. the request and reasons for the request;
    b. a summary of the nature of the information to be treated confidentially; and
    c. a detailed description of why the filing requires confidential treatment.
2. If possible, a redacted version of the filing that can be made public (with redactions to the information requested to be kept confidential).
3. One unredacted copy of the filing that the applicant requests to be kept confidential. The filing must be provided via hand delivery, ordinary mail, registered mail or courier to the Secretary of the Commission in a double sealed envelope under confidential cover.

Guidance

Sections 60 and 61 of the CER Act

Sections 60 and 61 of the CER Act allow for certain filings in a proceeding to be treated confidentially and protected from disclosure. These sections will generally apply in respect of a filing related to:

- any regulatory proceeding (i.e., applications filed under the CER Act or any other public hearing process under the CER Act);
- matters related to condition compliance where the condition is a “for approval” condition of the Commission; and
- in the case of section 61, information that is contained in any order under the CER Act.

For number 1c. above, the detailed description must indicate under which section or subsection of the CER Act confidentiality is being requested. Given the importance of maintaining open, accessible and transparent proceedings, any request for confidentiality should be as narrow as possible.

The detailed description must also clearly describe how the requirements of that section or subsection are met based on the language in the CER Act:

60 The Commission or a designated officer may take any measures and make any order that the Commission or designated officer considers necessary to ensure the confidentiality of any information likely to be disclosed in any proceedings under this Act if the Commission or designated officer is satisfied that

> **(a)** disclosure of the information could reasonably be expected to result in a material loss or gain to a person directly affected by the proceedings, or could reasonably be expected to prejudice the person’s competitive position;

(b) the information is financial, commercial, scientific or technical information that is confidential information provided to the Regulator and

(i) the information has been consistently treated as confidential information by a person directly affected by the proceedings, and

(ii) the Commission or designated officer considers that the person's interest in confidentiality outweighs the public interest in disclosure of the proceedings; or

(c) there is a real and substantial risk that disclosure of the information will compromise the safety and well-being of persons or cause harm to property or the environment.

61 The Commission or a designated officer may take any measures and make any order that the Commission or designated officer considers necessary to ensure the confidentiality of information that is contained in any order under this Act or that is likely to be disclosed in any proceedings under this Act if the Commission or designated officer is satisfied that

(a) there is a real and substantial risk that disclosure of the information will pose a risk to the security of pipelines, abandoned pipelines, power lines, offshore renewable energy projects, including buildings, structures or systems – including computer or communication systems, or methods employed to protect them – and the need to prevent disclosure of the information outweighs the public interest in disclosure of orders and proceedings; or

(b) there is a real and substantial risk that disclosure of the information will compromise the safety and well-being of persons or cause harm to property or the environment.

When considering the confidentiality request, the Commission or Designated Officer may establish a comment process to solicit feedback on the request and may post a notice of the request on the CER website to permit comments from the public.

If the Commission or Designated Officer is satisfied that the filing meets the requirements set out in sections 60 or 61, it may take measures that it considers necessary to ensure the confidentiality of the filing. One such measure is that only select CER staff, Commissioners or Designated Officers responsible for considering the filing would have access to the information, and the information would not be available to the public. In some proceedings it may be necessary for fairness reasons for another party or parties to have access to the confidential filing, subject to appropriate undertakings or other protective measures.

If a request for confidentiality is granted the Commission or Designated Officer will provide reasons and issue directions or an order. The confidential information will be protected by the CER.

If the Commission or Designated Officer is not satisfied that the applicant has demonstrated that the filing meets the requirements of sections 60 or 61, the document will be returned to the applicant and the applicant may refile the information on the public record, in order to have complete information for the application.

Other filings

Where a filing is unrelated to a Commission proceeding, sections 60 and 61 of the CER Act may not apply. However, an informal request can also be made of the CER not to make the filing public. Such informal requests can be made for filings that are unrelated to:

- regulatory proceedings;
- matters relating to condition compliance where the condition is a "for approval" condition of the Commission; and
- information contained in any order under the CER Act.

In determining whether a document should not be made public, the CER will consider the reasons provided for requesting confidentiality, such as: similar criteria as sections 60 and 61 applications, any other applicable legislation, as well as whether a filing is expected to attract significant third-party interest. As such, requesters are asked to consider the requirements in sections 60 and 61 when providing detailed information explaining why a filing should not be made public.

When considering the request, the CER may seek feedback and may post a notice of the request on its website to permit comments from the public, if appropriate.

If the CER is satisfied that the filing should not be made public, it may take measures that it considers necessary to ensure that this is accomplished, subject to specific disclosures as may be appropriate to fulfill the CER's mandate in conjunction with undertakings or other protective measures as necessary.

If the CER is not satisfied that the requester has demonstrated that the filing should be withheld from the public, the document will be returned to the requester and the requester may refile the information in a manner that would permit disclosure to the public.

Note: The CER will continue to treat all Emergency Response Manuals in accordance with Order MO-006-2016, as amended, even if treatment is not specifically requested. Therefore, no specific information that is protected from publication is necessary for the filing of Emergency Response Manuals where:

1. the omitted information is substituted with a description of the nature of the protected information and a statement explaining why it is protected; and
2. the filing is made in the following circumstances:
    a. outside of a regulatory proceeding; or
    b. condition compliance where the condition is not a "for approval" condition of the Commission.

Emergency Response Manuals being filed in the course of a regulatory proceeding or during condition compliance where the condition is a "for approval" condition of the Commission must be accompanied by a request that the CER treat a filing as confidential pursuant to sections 60 or 61 of the CER Act.

FYI – *Order MO-006-2016 Compelling Publication of Emergency Procedures Manuals* required under subsection 32(1.1) of the OPR

With respect to Emergency Procedures Manuals, applicants are reminded that, subject to redaction and exemption provisions set out in *Order MO-006-2016* [Filing A79720] as amended, companies are required to publish the entirety of their emergency procedures manuals applicable to their CER-regulated facilities on their or their affiliate's internet site for public viewing.

The CER anticipates that the version of the Emergency Procedures Manual published on a company's website would be sufficient for filing in most regulatory proceedings. Requests from regulatory proceeding participants for a version to be filed other than the version published on a company's website would be considered on an individual basis by the Commission and be subject to the considerations noted above in section 1.5 Confidential Filing.

1.6 Previously Filed Material

If an applicant wishes to refer to documents previously filed with the CER (e.g., company manuals, programs, standards or procedures) and those documents are still current, rather than resubmitting the documents, the applicant may:

- indicate when, under what circumstances and under what CER file number (if known) the information was filed;
- identify the version of the document referenced to indicate that it matches the previously filed version; and
- identify the section of the document being referenced (if applicable).

1.7 Pre-application Meetings – Guidance Notes

- Applicants may request a pre-application meeting to clarify filing requirements with the CER. The Pre-application Meetings – Guidance Notes on the CER website describes the process for requesting a meeting.
- For facilities projects, applicants should consult the Early Engagement Guide (Guide L) for guidance and requirements prior to filing an application with the CER.

1.8 Public Engagement Resources

The CER has a variety of public engagement resources, including videos and online or print publications, which applicants can use to inform potentially affected persons about the CER and its processes. On the CER website there is a detailed list of our publications and what each is used for (see Guidance for Companies on CER Publications under Participation & Lands).

1.9 Updates

It is the CER's intent to update this document on a scheduled basis and when updates are necessary. The CER would appreciate any comments readers might have with respect to the content, usability or other matters associated with this document that could assist with future updates and revisions.

All comments may be directed to the CER by:

E-mail: filingmanual@cer-rec.gc.ca

Facsimile: Secretary at 403-292-5503

Mail:

Secretary of the Commission
Canada Energy Regulator
210-517 10 Ave SW
Calgary AB T2R 0A8

The CER will communicate its future revision process and schedule and any interim updates at the website.

1.10 Measurement, Conversion Factors and Commodity Description

Where possible, the CER would prefer that information within applications be presented in the International System of Units (SI), although it is helpful to include the imperial equivalent as well.

The following conversion factors should be used:

- millimetre (mm) = 0.0394 inches (in)
- metre (m) = 3.28 feet (ft)
- kilometre (km) = 0.62 miles (mi)
- cubic metre (m^3) = 35.3 cubic feet (cf)
- cubic metre = 6.29 barrels (bbl)
- kilopascal (kPa) = 0.145 pounds per square inch (psi)

If other conversion rates are used, indicate this fact and provide the rates used.

Gas

For gas volumes, market requirements, estimates of reserves, and productive capacity estimates will be at a temperature of 15ºC and an absolute pressure of 101.325 kPa. Gas composition should be expressed in mole percent, and the heating value of the gas should be expressed in megajoules per cubic metre (MJ/m^3). Volumes are requested to be in metric units as cubic metres (m^3) and production rates as cubic metres per day (m^3/d). The imperial equivalent would be cubic feet (cf) and cubic feet per day (cf/d) respectively.

Liquids

Descriptions of crude oil and equivalents will include, at a minimum:

- classification of the crude oil;
- specific gravity;
- sulphur content upon which the classification is based; and
- other properties when they are important to the design of the facilities or third party interests, for example:
    - viscosity or water content could be important to the design of the facilities; or

- impurities could be of concern to third parties if more than one product is transported on the same pipeline.

Natural gas liquids (NGL) composition should be expressed as a percent and vapour pressure will be at a specified temperature.

Descriptions of refined hydrocarbons must include the type of product and any properties that might be important to the design of the facilities or third party interests.

All other liquid commodities must be described in sufficient detail for the CER to understand the nature of the commodity and how it might affect the design of the proposed facilities or third party interests.

All liquids volumes, with the exception of NGL and cryogenic liquids, will be submitted as the volume such product would occupy at a temperature of 15ºC and an absolute pressure of 101.325 kPa, unless otherwise stated in the application. For NGL and cryogenic liquids, the temperature and pressure at which the submitted volumes are measured will be provided.

Liquid volumes are requested to be expressed as m^3 and production rates as m^3/d. The imperial equivalent would be in barrels (bbl) and barrels per day (bbl/d), respectively.

1.11 Filing with the Canada Energy Regulator

Parties who have the ability to file documents electronically are expected to file documents through the CER's electronic document repository. Any person who has the ability to access documents through the repository must accept service of a notification that the document is in the repository rather than requiring a hard copy of the document be served.

For more information about filing electronically, please refer to the Filer's Guide to Electronic Submission [PDF 606 KB] and the Memorandum of Guidance on Electronic Filing. Both of these documents are available on the CER's website. Please note that e-mails are not considered electronic filing and will not be accepted in a hearing.

The CER's electronic document repository will contain the full text of only those documents filed electronically (following the procedures mentioned above) and in hard copy. When documents are filed by hard copy or facsimile, the CER will undertake to file the documents on the submitter's behalf. However, in some cases, the CER may choose to create an electronic placeholder for documents too large to submit electronically to the repository. In cases such as this, it will not be possible to view or search these documents. They will be made available for viewing in the CER's library.

Companies are reminded not to file their security documents electronically, although they need to be available for examination by the CER during audits, inspections or other CER regulatory activities. For further information please refer to the National Energy Board Security Advisory – NEB SA 2007-03 Security Sensitive Documents.

If you are filing an application as hard copies, you must file 25 copies. Please use pressboard report covers rather than plastic binders. Pressboard covers are more compact and durable, and a large amount of plastic waste will be avoided.

If you file electronically, one hard copy must be subsequently filed. The hard copy must have attached to it a signed copy of the Electronic Filing Receipt that the system will return to the filer upon receipt of the electronic document. Please file your completed application with the CER and address it to:

Secretary of the Commission
Canada Energy Regulator
210-517 10 Ave SW

Calgary AB T2R 0A8
Telephone: 403-292-4800
Facsimile: 403-292-5503

1.12 Filing Digital Location Data

Applicants are required to provide point, line or polygon layer data used to produce the maps submitted with the application. Layers may include, for example, proposed pipeline route, facility site, pipeline centre line, class location, Right of Way, project footprint or study area. The digital layer data shall be in one of the following spatial reference systems: WGS 84 (EPSG:4326), NAD83 CSRS (EPSG:4617) or Lambert Conic Conformal (EPSG: 3979). Data layers shall be submitted as compressed Esri file geodatabase or shapefile files.

Applicants are not required to submit the digital geospatial data files for background layers from publicly available sources that show, for example: federal, provincial or indigenous lands, locations of communities, existing provincial or municipal roads or natural features (e.g. water bodies, forest cover).

With each GIS filing please e-file a cover letter indicating your submission.

If the file is less than 10MB, please email it to secretary@cer-rec.gc.ca. In the email, please include any relevant information, listed below, to your filing:

Cover letter Filing ID:

Project:

Title:

File Number:

Hearing Order:

If the file size is over 10MB, please copy it to a USB drive and mail the USB drive to CER. Please include the above information in your mail. The mailing address is:

Secretary of the Commission

Canada Energy Regulator

210-517 10 Ave SW

Calgary AB T2R 0A8

Filing Manual – Chapter 2 – Instructions to Users

2.1 Process Flowchart

A flowchart has been provided in Figure 2-1 to guide applicants through the process of:

- determining what type of filing must be submitted (i.e., physical project application, applications not for physical projects or an information filing); and
- identifying what information must be included in the filing.

Figure 2-1: CER Filing Manual Flowchart

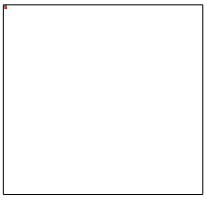
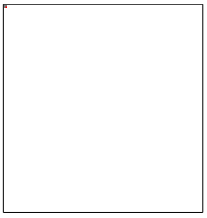
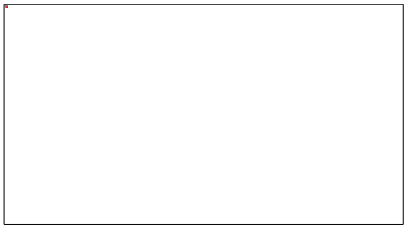
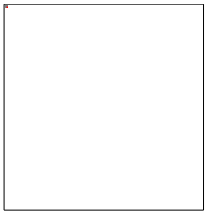
An important consideration for applicants to remember while working through the flowchart is that an application may trigger various sections of the CER Act and regulations, and therefore, applicants should work through all steps of the flowchart until reaching an end point.

The guidance boxes within the flowchart indicate the requirements that must be fulfilled and direct the applicant to the appropriate location in the Manual for the specific filing requirements. Following the flowchart from the start to finish assures that applicants will have identified each of the elements essential to a filing.

2.2 Steps to Work through the Flowchart

Flowchart Symbols

The flowchart uses standard symbols to represent the process for completing a filing. The symbols are as follows:

Flowchart Symbols			
	starting point		chapter identifiers
	decision required		CER referenced documents
	guidance or direction		stop point

	relevant guide and corresponding section of the CER Act or regulation identified

Please remember that the Manual and therefore this flowchart, applies only to applications and filings under the CER Act and the regulations under the CER Act.

Procedure

1. Begin at the green “Start” circle in the upper left corner.
2. Is the potential filing an application or information filing?
3. If the potential filing is an information filing, complete the appropriate reports (see Chapter 6 for details).
4. If the potential filing is an application, complete the common application information (outlined in the yellow box). See Chapter 3 for details.
5. If the application is for a physical project, complete the base application requirements and begin to work across the flowchart. Working across the flowchart will require that you answer certain questions to determine what sections of the CER Act or regulations are triggered (see also Table 2-1). Any sections triggered will require an application pursuant to the triggered section(s). See Chapter 4 for details.
6. If the application is not for a physical project, follow the flowchart down the left side and see Chapter 5 for supporting information.

2.3 Regulatory Listing

Table 2-1 lists the sections of the CER Act and regulations that have been identified within this Manual as requiring an application to the CER. The corresponding Guide is also included.

Table 2-1: Sections of CER Act and Regulations Requiring Applications

Application Description	Relevant Legislation	Section(s)	Guide ID
Addition or modification of facilities	CER Act	183, 214	Guide A
Abandonment	CER Act	241(1)	Guide B
Protection of Pipelines from Ground Disturbance, Facility Construction, Crossings and Mining Operations	CER Act	335, 338	Guide C
Deviations	CER Act	211	Guide D
Change in Class Locations	OPR	42	Guide E

Change of Service or Increase in Maximum Operating Pressure	OPR	43	Guide F
Deactivation	OPR	44	Guide G
Reactivation	OPR	45	Guide H
Processing Plants: Facility Deactivations and Reactivations	PPR	42, 43	Guide I
Commodity Pipeline Systems	CER Act		Guide J
Decommissioning	OPR PPR	45.1 43.1	Guide K
Applications to Review, Rescind, or Rehear	CER Act	69	Guide N
Variance Applications and Project Updates	CER Act	69, 190, 280, 288, 300, 348, 365	Guide O
Tolls and tariffs	CER Act	225 to 240	Guide P
Export & Import Authorizations	CER Act	343 to 380	Guide Q
Transfer of Ownership, Lease or Amalgamation	CER Act	181	Guide R
Access on a Pipeline	CER Act	239	Guide S
Leave to Open	CER Act	213	Guide T
Information Filed Respecting PPBoR and Notices	CER Act	201	Guide U
Right-of-Entry Application	CER Act	324	Guide V
Requirements for Substituted Service Applications	*National Energy Board Substituted Service Regulations*		Guide W
Post Certificate/Order Information			Guide AA
Financial Surveillance Reports			Guide BB

Import and Export Reporting Regulation Requirements	*National Energy Board Export and Import Reporting Regulations*		Guide CC
Leave to make contact with, alter, or remove an abandoned pipeline	CER Act	101	Contact the CER

Filing Manual – Chapter 3 – Common Information Requirements

While each application is unique, the CER expects to see the following common elements:

- a description of the action being sought by the applicant;
- a description of the purpose of the application;
- how the applicant's management system and related set of programs informs the application and project design;
- details regarding engagement activities and outcomes; and
- details regarding notification made to commercial third parties.

Note that any terms used in the application that are not considered to be broadly accepted or understood by industry should be defined.

The following sections describe these common information requirements. For further details on information required in applications, see Chapter 4 and Chapter 5.

3.1 Action Sought By Applicant

Goal

The application states the request being made and what action is being requested of the Commission.

Filing Requirements

1. Section 15 of the Rules requires the following information in an application:

15 (1) Every application shall

> **(a)** contain a concise statement of the relevant facts, the provisions of the Act or any regulations made under the Act under which the application is made and the nature of, and justification for, the decision or order sought;
>
> **(b)** contain, in addition to the information that is required by the Act and any regulations made under the Act, any other information that explains or supports the application, including information referred to in published policies and guidelines of the CER; and
>
> **(c)** set out the name, address, telephone number and any other telecommunications numbers of the applicant and the applicant's authorized representative, if any.

(2) Every application shall be divided into consecutively numbered paragraphs, each of which shall be confined as nearly as is practicable to a distinct portion of the subject-matter of the application.

Guidance

Applicants must, in addition to looking at the Filing Manual, have regard to the CER Act and regulations relevant to the filing for direction on what needs to be included.

3.2 Application or Project Purpose

Goal

The application provides clearly articulated reasons for the application.

Filing Requirements

1. Provide a description of the purpose of the proposed project.

Guidance

Explain the reason for the application, including a discussion of the need that would be addressed by the project.

3.3 Management Systems and Programs under the OPR

Goal

To demonstrate how an applicant's management system required under the *Canadian Energy Regulator Onshore Pipeline Regulations* will support and achieve adequate safety and environmental protection in the context of the current project application.

Filing Requirements

1. An applicant must provide an overview of its management system, including a description of:

    - how programs required under the OPR are coordinated within the management system to promote safety and environmental protection; and
    - the process for any necessary modifications to the management system.

Guidance

The CER conducts ongoing reviews of company management systems and compliance with the requirements of the OPR through its auditing oversight. However, in addition to this, it is important for public transparency and clarity that applicants explain how safety and environmental protection are integrated, coordinated and controlled within their management systems and will be ensured for any proposed new facility.

A carefully designed and well-implemented management system supports a strong culture of safety and is fundamental to keeping people safe and protecting the environment. Sections 6.1 to 6.6 of the OPR detail the required elements of a company's management system. It must be a systematic approach designed to effectively manage and reduce risk through necessary organizational structures, resources, accountabilities, policies, processes and procedures, and must include measures to evaluate effectiveness and promote continual improvement.

A company's management system must also coordinate the following five programs:

- Emergency Management Program to ensure appropriate emergency preparedness and response (OPR section 32).
- Integrity Management Program to ensure the pipeline system continually operates within its design parameters (OPR section 40).
- Safety Management Program to protect workers and the public from occupational and process hazards (OPR section 47).
- Security Management Program to protect people, property and the environment from malicious damage (OPR section 47.1).
- Environmental Protection Program to avoid or reduce adverse effects on the environment (OPR section 48).

Section 6.5 of the OPR lists a number of processes and requirements that must be part of a company's management system and each of the above five programs.

Section 6.2 requires the appointment of an Accountable Officer and that their name and acceptance of responsibilities be filed with the CER. For further information on the OPR and related supporting documentation, please refer to the CER's website.

A company's management system applies to the entire lifecycle of a project, from planning and design, through construction and operation, to abandonment. It is therefore relevant at all stages of a project, including the application stage.

FYI – Examples...

The information to fulfill many of the requirements in this Filing Manual for pipeline projects should be based upon a company's management system processes. For example:

- Engineering design details required in section A.1 for facilities applications should be based upon implementation of processes within the Integrity Management Program, such as hazard identification, risk assessment, development of control and monitoring measures, and identification of legal requirements. Such processes will be similarly applicable to applications for abandonment (Guide B), variances related to physical activities (Guide O), leave to open (Guide T), etc. Design details may also be affected by other programs, such as the security assessment for the project conducted under the Security Management Program.
- Implementation of processes within the Environmental Protection Program will support the information requirements for the environmental and socio-economic assessment, such as in section A.2.6.1 (identification and analysis of effects) and section A.2.8 (inspection, monitoring and follow-up). Processes related to accidents and malfunctions within the Emergency, Safety and Security Management Programs can similarly contribute to these Guide requirements.

Various management system processes will also apply throughout the application stage, such as ensuring the training and competency of those involved in the development of the project design and of the application documents; quality assurance; document and record control; management of change if design details are altered; and ensuring that work performed by

consultants and contractors is consistent with all obligations and responsibilities under the company's management system.

The CER expects an applicant to have applied relevant components of its management system and programs to the planning and design of the proposed project and related application documents, and to have reviewed those components for necessary modification in the event the proposed project goes ahead.

An application that is lacking (such as containing an incomplete discussion of hazards, risks and controls) might indicate that the applicant's management system and program components are inadequate. The CER expects companies to prevent such deficiencies, correct any that are identified, avoid similar deficiencies in future applications, and to apply lessons learned as broadly as possible.

3.4 Engagement

The CER expects an applicant to have a company-wide Engagement Program that establishes a systematic, comprehensive and proactive approach for the development and implementation of project-specific engagement activities. The following information is required within the application:

- an overview of the company-wide Engagement Program;
- an overview of the project-specific engagement activities; and
- a description of the outcomes of the project-specific engagement activities; or
- the circumstances and justification for not undertaking project-specific engagement activities.

Each of these information requirements is discussed in further detail in the following sections.

The CER also expects companies to continue effective engagement activities with the public and Indigenous Nations during the construction and operation phases of a project. The CER's requirements for engagement related to operations and maintenance activities on pipelines can be found on the CER's website in the Operations and Maintenance Activities on Pipelines Regulated Under the Canadian Energy Regulator Act: Requirements and Guidance Notes.

3.4.1 Company-wide Engagement Program

Goal

The application outlines the corporate policy or vision with respect to engagement and the principles and goals that guide the applicant's Engagement Program.

Filing Requirements

1. Provide an overview of the company's engagement approach, which should include:

    - the corporate policy or vision with respect to engagement;
    - the principles and goals established for the applicant's Engagement Program; and
    - a copy of the Indigenous engagement policy, along with any more specific related documented policies and principles, such as, for collecting Indigenous knowledge or traditional use information.

Guidance

The CER expects an applicant to have an Engagement Program to anticipate, prevent, mitigate and manage conditions which have the potential to affect persons and communities. An Engagement Program should be appropriately integrated into a company's overall management system to provide protection for the public, employees, property and the environment throughout the lifecycle (design, construction, operation, maintenance, abandonment) of a pipeline system. An Engagement Program should be based on the elements of a standard management system (for example, the management system elements described in the OPR). Additional guidance is provided in the NEB's Draft Expectations – Public Involvement Program. [Filing A22289].

The CER also expects applicants to consider the distinct language needs of the potentially affected persons and/or communities and include a description of this consideration in their application. Further to section 41 of the *Official Languages Act*, the CER is also committed to fostering the full recognition and use of both English and French in Canadian society. The CER recognizes the importance of considering official languages when developing and implementing an engagement program, to result in effective communication with potentially affected persons in the official language of their choice.

3.4.2 Designing Project-specific Engagement Activities

Goal

The application indicates why the design of project-specific engagement activities is appropriate for the nature of the project in alignment with the company's Engagement Program.

Filing Requirements

1. Provide an overview of the project-specific engagement activities and the factors that influenced the design, which should include:

    - a list of potentially affected persons or communities that were engaged for the project, including:
        - landowners, local residents, and land or waterway users;
        - government authorities; and
        - Indigenous Nations;
    - a sample of the information package that the applicant has provided to all potentially affected persons and communities as outlined in the CER Early Engagement Guide (Guide L);
    - methods, locations, and timing of engagement activities, including where community cultural protocols were identified and followed;
    - manner in which relevant languages were considered, including in particular how project information will be provided and communicated to potentially affected persons or communities in the official language of their choice to ensure effective and meaningful participation in the CER process;
    - procedure for responding to issues and concerns; and

- plans for future engagement and follow-up throughout the operations phase of a project, which may include activities such as public awareness programs, continuing education and engagement with persons regarding proposed operations that may potentially affect them.

Guidance

The CER expects that applicants will consider engagement for all projects. Depending on the project scope, that could mean carrying out extensive engagement activities or a simple engagement activity such as notifying a single landowner. Applicants must justify the extent of engagement carried out for each application. For additional details, applicants should refer to the Early Engagement Guide (Guide L).

Local and Indigenous Knowledge

The application should, where relevant, available and applicable to the effects of the Project, include local and Indigenous knowledge. This information and knowledge should be integrated, where appropriate, into the design of the project. Where local and Indigenous knowledge is obtained, provide an opportunity for the individual who provided the information to confirm the interpretation of the information and how it was used in the project design.

Applicants should identify and incorporate within their effects assessment, preferably beginning at the assessment design phase, those valued components that are most relevant for an assessment of the project's potential effects on the exercise of Indigenous rights (refer to section A.2 for additional details). Applicants should also engage with Indigenous Nations to ascertain whether any Indigenous knowledge is being provided in confidence, and if so, ensure that confidential Indigenous knowledge can be appropriately protected from unauthorized disclosure. Applicants should strive to reach agreements or utilize existing community protocols with respect to Indigenous knowledge.

3.4.3 Outcomes of Project-specific Engagement Activities

Goal

The application describes the results of the engagement activities conducted to date for the project, in sufficient detail to demonstrate:

- that all persons and communities potentially affected by the project are aware of: the project, the project application to the CER, and how they can contact the CER with outstanding application-related concerns;
- that those potentially affected by the project have been adequately engaged; and
- that any concerns raised have been considered, and addressed as appropriate.

Filing Requirements

1. Describe the outcomes of the engagement activities conducted for the project, including:

    - a summary of the comments and concerns expressed by potentially affected persons or communities;
    - a summary of the response made regarding each of the concerns or comments, including:

    - the measures taken, or that will be taken to address those concerns or an explanation of why no further action is required to address the concerns or comments; and
    - the methods and dates that the response was made to the person(s) who raised the concern(s);
  - how outstanding concerns will be addressed;
  - how input from persons or communities has influenced the design, construction or operation of the project;
  - details regarding discussions with Indigenous Nations, which includes each of the items listed above and:
    - the identity of all Indigenous Nations contacted, how they were identified, when and how they were contacted and who was contacted;
    - any relevant, non-confidential written documentation received regarding engagement;
    - any concerns about the project raised by Indigenous Nations that have been discussed with any government department or agency, including when contact was made and with whom; and
    - where there is any known involvement of the Crown in consultations with the Indigenous Nations with respect to the project, describe the Crown involvement; and
  - the details and results of the engagement activities undertaken with all persons who may be affected by any changes to the project (e.g., persons that would be uniquely impacted following changes to the project as a result of engagement activities).

2. Confirm that potentially affected persons or communities will receive adequate notice that:

   - the application has been filed with the CER;
   - the process by which potentially affected persons and communities can contact the CER at any point before the Commission makes its decision; and
   - the methods and timing of notification.

Guidance

The Applicant should maintain records and be prepared to further demonstrate the adequacy of engagement activities that have been conducted with all potentially affected persons and communities.

For engagement activities that could involve a large number of people, it might not be practical to list all individuals that were engaged. It may be more practical to describe the main groups and why they are identified. For example, where a group has a common concern or association, describe:

- the group;
- their location;
- their common concern; and

- the authority of any representatives of the group.

3.4.4 Justification for Not Undertaking Engagement Activities

Goal

The application provides justification as to why it was not necessary to carry out engagement activities with respect to the proposed project.

Filing Requirements

1. Explain why engagement activities were considered unnecessary, including:

    - the scenario or scenarios that are applicable to the application (i.e., equivalent engagement activities, no or negligible environmental or socio-economic effects, facilities within company owned or leased lands); and
    - evidence that these scenarios meet the requirements of this section of the manual.

Guidance

Engagement activities might not be necessary if the applicant can demonstrate that one or more of the following scenarios applies.

Equivalent Engagement Activities

Engagement has already been undertaken as required by another agency and the applicant can demonstrate it is relevant to the current project and is equivalent to the CER's guidance and requirements.

For example, where a road widening requires that an existing CER-regulated pipeline be relocated, the responsible transportation authorities might conduct engagement activities for the road widening that includes engagement regarding the relocation of the pipeline. The pipeline application would then include a description of these engagement activities and how it meets the requirements of this manual.

No or Negligible Environmental or Socio-economic Effects

Applicants will be conducting environmental and socio-economic assessments of the project in accordance with the requirements of the CER Act and this manual (see Guide A within Chapter 4).

Through this assessment process, applicants will determine the potential adverse effects of the project. If the project's potential environmental and socio-economic effects are negligible, engagement activities might be unnecessary. A project with negligible effects might exist where many or all of the following conditions are met:

- the proposed project is of a small scale and is localized;
- all construction is to occur on previously disturbed land;
- there is no potential for an impact on navigation;
- the land acquisition process is complete and landowner concerns have been addressed, or the project work is confined to company owned or leased land;

- there are no residents near the proposed project;
- no other land uses or waterway uses or interests would be affected;
- there is no potential for traditional use activities to be affected by the project;
- there is no potential for the rights of Indigenous Peoples to be affected by the project;
- there is no potential for cumulative environmental effects;
- there would be negligible environmental effects associated with construction and operation of the project;
- there is no increase in the storage or disposal of toxic substances;
- there is no increase in noise emissions;
- there is no increased emissions in air contaminants; and
- there is no potential for local nuisance, including potential for increased dust or traffic.

Because the identification of potential impacts may depend on engagement with those people potentially affected and because an impact assessment may not yet be completed, applicants should generally be conservative when contemplating the possibility that engagement may not be necessary. When and where recent previous project assessments or engagements are relied on, relevant details of these should be cited in the submission to the CER.

Facilities within Company Owned or Leased Lands

If the application is for a facility within company owned or leased land, engagement activities might be unnecessary. This may be the case where the application is a facilities application that relates to work contained within the confines of land the applicant owns or leases (as distinct from land upon which the applicant holds an easement only), except where those facilities or activities:

- relate to an increase in the storage or disposal of toxic substances;
- could result in impacts to traditional land and resource use;
- could result in increased noise emissions;
- could result in increased emissions of air contaminants; or
- could result in local nuisance, including the potential for increased dust or traffic.

3.5 Notification of Commercial Third Parties

Notification of commercial third parties is normally required when the outcome of the application will affect such matters as:

- tolls or tariffs;
- the ability of third parties to receive, transport or deliver commodities; and
- supply, transportation or sales contracts.

The Commission must be assured that all commercial third parties that could be affected by the decision are aware of the application and have had the opportunity to comment should they wish to do so.

Goal

The application includes evidence that all interested commercial third parties that could be potentially affected by the outcome of the application have been advised of the application.

Filing Requirements

1. Confirm that all commercial third parties that could potentially be affected in any way by the outcome of the application have been notified and include:

    - the method used to notify those parties; and
    - when the parties were notified.

2. Provide details regarding the concerns of third parties. This might include:

    - confirmation that no concerns were raised;
    - confirmation that concerns raised have been resolved; or
    - a list of the commercial third parties that have outstanding concerns and a discussion of their unresolved concerns.

3. List the self-identified interested third parties and confirm they have been notified.
4. Provide an explanation in the event that notification of commercial third parties was considered unnecessary.

Guidance

Identifying Commercial Third Parties

Commercial third parties include those that could be directly or indirectly commercially affected by the outcome of an application. This should include shippers and could also include commodity suppliers, end users and other pipelines. The following are examples of when to consider certain commercial third parties to be affected by an application:

- consider all shippers to be affected parties requiring notification of all tolls and tariff applications filed pursuant to sections 225 to 240 of the CER Act and all applications that could significantly affect tolls or tariffs;
- consider all shippers, suppliers and end users to be affected parties when the outcome of the application would significantly affect service on the pipeline; and
- consider operators of competitive facilities, whether regulated by the CER or not, to be affected commercial third parties when the outcome of the application could reasonably be expected to have a significant adverse impact on their operations.

Third parties involved in physical construction activities (e.g., contractors, material vendors, consultants) or that supply food and accommodation would not normally be considered to be affected commercial third parties.

Notification

Inform the commercial third parties that an application has been, or will be, submitted to the CER and provide a brief description. Notification should normally be done no later than the filing date of the application with the CER. A copy of the application may be provided with the notification, be provided upon request or may constitute notification.

When determining the level of detail in the notification, consider the:

- scope of the project;
- potential impact on commercial third parties;
- nature of any concerns raised by commercial third parties; and
- resolution of concerns raised.

In general, the greater the scope of the project and the potential impact on commercial third parties the more information would be required. Further, more detailed information would normally be required when concerns have been raised by commercial third parties and remain unresolved at the time of filing.

Where the outcome of the application could affect specific commercial third parties, notify the individual parties. However, where a group with similar interests might be affected, such as western Canada producers or a group of end users, the applicant may choose to notify a recognized organization representative of the group such as the Canadian Association of Petroleum Producers or the Industrial Gas Users Association.

Concerns

Where concerns have been raised and resolved, include a discussion of the resolution when it would assist the Commission in making a decision. When providing a list of unresolved concerns, provide any other information that would assist the Commission to understand the issues, including a discussion of any attempts to reach agreement, such as a summary of the consultative process that was used prior to filing the application.

Self-identified, Interested Third Parties

Self-identified, interested third parties refers to third parties who have indicated to the applicant that they have an interest in the application or one or more types of applications filed with the CER.

Whether any commercial third parties could be affected by the application or not, the CER expects that the applicant will notify all self-identified interested third parties.

When Notification is Not Required

Notification might not be required if the outcome of the application is not expected to result in any significant impacts on commercial third parties, for example:

- facilities applications for routine operational maintenance and repair where:
    - access to facilities might be temporarily interrupted during construction, but service will not be interrupted; or
    - the toll impact would be immaterial or considered to be a routine adjustment in a negotiated tolls agreement;

- applications for construction on an owner-operated pipeline where the owner is the sole shipper;
- applications concerning crossing matters, leave to open, deviation, change in class location or right of entry that would not affect tolls or the operation of the pipeline; and
- applications to change the name of a pipeline owner that does not involve the sale of the pipeline or a change in operation.

The requirements for engagement, described in section 3.4 – Engagement, continue to apply even if it is decided there are no commercial third parties to notify of an application.

Table 3-1: Other Potential Federal Contacts

Project Considerations	Contact
Does the project occur in a National Park or National Historic Site or is it likely to affect a National Park or National Historic site?	Parks Canada
Is the project likely to take place on, involve dredge or fill operations in, draw water from or discharge water to a historic canal administered by and operated by Parks Canada?	Parks Canada Public Services and Procurement Canada
Is the project likely to affect lands in a reserve within the meaning of subsection 2(1) of the *Indian Act*?	Crown-Indigenous Relations and Northern Affairs Canada
Will the project occur on lands in the Yukon or the Northwest Territories that are under the control, management and administration of Indigenous and Northern Affairs Canada and require the issuance of a Class A or Class B permit?	Crown-Indigenous Relations and Northern Affairs Canada

Is the project likely to result in international air pollution?	Environment and Climate Change Canada
Is the project likely to result in the deposition of materials into the marine environment?	Environment and Climate Change Canada
Does the project occur in a wildlife area as defined in the Wildlife Area Regulations?	Environment and Climate Change Canada
Could the project affect wildlife species at risk or their critical habitat or the residences of individuals of those species?	Environment and Climate Change Canada Fisheries and Oceans Canada Parks Canada
Is the project likely to result in: • killing, capturing, taking or possessing a migratory bird or its nest or eggs; • collecting eiderdown or depositing oils or other harmful substance in areas frequented by migratory birds; • an effect on migratory bird habitat within a bird sanctuary; or • the release of a species of bird not indigenous to Canada?	Environment and Climate Change Canada
Will the project affect the natural flow of an international river (i.e., water flowing from any place in Canada to any place outside Canada) or affect the actual or potential use of that river outside Canada?	Environment and Climate Change Canada
Is the project likely to result in the release of a deleterious substance?	Environment and Climate Change Canada
Is the project likely to affect wetland function?	Environment and Climate Change Canada Parks Canada
Is the project likely to affect the operation of a railway company or property owned or leased by a railway company, or require the installation of telephone, electricity, telegraph or other wire services for a railway facility?	Canadian Transportation Agency Transport Canada if *Railway Safety Act* is involved

Will the project result in cutting timber or constructing roads in a Federal Forest Experimental Area?	Natural Resources Canada
Does the project involve producing or holding explosives in a magazine?	Natural Resources Canada
Does the project involve replacing or repairing a bridge?	Public Services and Procurement Canada

Filing Manual – Chapter 4 – Physical Projects

An applicant must:

- complete the common application requirements outlined in Chapter 3;
- confirm that the application is for a physical project;
- address sections 4.1 Description of the Project and 4.2 Economic Feasibility, Alternatives and Justification; and
- identify which Guides within Chapter 4 are applicable (see Figure 2-1) and provide the required information in section 4.1.

4.1 Description of the Project

Goal

The application will include a clear description of the project, including:

- project components, activities and location;
- cost information;
- construction schedules; and
- related undertakings.

Filing Requirements

1. Identify and describe the project components, activities and related undertakings (e.g., pipe, valves, compressors, pumps, access roads including temporary and permanent bridges, construction camps, marine terminals and loading facilities).
2. Describe the project location and the criteria used to determine the proposed route or site.
3. Describe how and when the project will be carried out.
4. Provide a description of any facilities to be constructed by others which are required to accommodate the proposed facilities, including temporary facilities.
5. Provide an estimate of the total capital costs and incremental operating costs, if applicable; and changes to abandonment cost estimates, where applicable, for the following categories:

    - pipelines;
    - compression or pumps;
    - metering and regulating;
    - tankage;
    - other facilities;
    - allowance for funds used during construction (AFUDC) including rates used; and
    - capitalized overhead, showing a separate breakdown of the main cost elements such as materials, installation, land and land rights.

6. Indicate the expected in-service date.

Guidance

Description of Project Components

The description of the project components should address the following:

- what the project is, including:
    - a complete list and thorough description of the project components and activities, including any components or activities required for the project to proceed (e.g., construction camps, means of access including temporary and permanent bridges, electrical grid connections, marine terminals and loading facilities);
    - the location and size of any temporary work space;
    - a description of replacements or expansions of physical facilities and activities that are anticipated over the life of the project; and
    - preliminary drawings if available.
- where the project is located, including:
    - a general description of the route or facility location, including identification of:
        - general land tenure, including any federal lands;
        - navigable waterways;
        - current land uses;
        - nearest residences and communities;
        - unique features;
        - the positioning of project endpoints for linear developments;
        - the location of any alternate routes or sites considered; and
        - preliminary drawings, if available.
    - how the project will be carried out, including:
        - a thorough description of how project activities (e.g., clearing, hydrostatic testing, watercourse crossings, inspection, monitoring and surveillance programs) would be carried out during the construction and operations phases;
        - the anticipated workforce (i.e., person days and skills required for construction and operations activities); and
        - a list of other permits, licences, or authorizations that will be required before part or all of the project can proceed.
    - when the project would likely be carried out, including:
        - a breakdown of all construction and operations activities by major activity;
        - construction and operations schedules;
        - a description of how any changes to schedules can affect the project; and

- a description of when proposed decommissioning and abandonment of the project might take place.

Description of Project Costs

When describing any estimated capital costs, specify what year dollars are used, and describe whether the estimated costs include any inflation and contingency provisions. For any estimate of incremental operating costs, specify what year dollars are used.

When estimating new or changes to abandonment costs, follow the format set out in March 2010 Revisions to Preliminary Base Case Assumptions [Filing A24600], Table A-1, Table A-2, and Table A-4, as revised from time to time. Table A-3 was revised in December 2010 and is available at Filing A27778. All four of these tables are included as appendices in the MH-001-2012 Reasons for Decision.

For companies with no facilities currently regulated by the CER, the estimated costs will have some bearing on the allocation of CER costs, as set out in the *National Energy Board Cost Recovery Regulations*, subsection 5.2(1).

4.2 Economic Feasibility, Alternatives and Justification

Goal

The application includes an integrated discussion that demonstrates the economic feasibility, financial resources, and justification for the proposed project, including a description of any alternatives considered.

4.2.1 Filing Requirements – Economic Feasibility

1. Describe the economic feasibility of the project.

Guidance – Economic Feasibility

The discussion of economic feasibility should combine evidence provided elsewhere in the application with evidence provided according to section A.3 Economics and Financing, to show that the applied-for facilities are economically feasible. Also, the evidence should demonstrate plans to manage all potential costs associated with the risks and liabilities that may arise during the construction or operation of the Project, including an incident that harms people or the environment (see the Canada Energy Regulator Event Reporting Guidelines for a definition of "incident").

4.2.2 Filing Requirements – Alternatives and Justification

1. Describe the need for the project along with the rationale for selecting the applied for project over other possible options.
2. Describe and justify the selection of the proposed route and site including a comparison of the options evaluated using appropriate selection criteria.
3. Describe the rationale for the chosen design and construction methods. Where appropriate, describe any alternative designs and methods evaluated and explain why these other options were eliminated.

Guidance – Alternatives

Alternatives Evaluated

In the context of economic feasibility, alternatives are other technically, economically and environmentally feasible means of meeting the need for the project and its eventual retirement, such as a different:

- transportation mode;
- transmission system that could achieve the same purpose as the proposed facilities;
- route or site;
- facility design; or
- construction method, including different means of development, implementation and mitigation.

Selection Criteria

Different project, routing, design and construction alternatives must be summarized and compared using criteria that justify and demonstrate how the proposed option was selected and why it is the preferred option. The level of detail provided by the applicant may reflect the more conceptual nature of the options.

When comparing project routing, design or construction options, elaborate on the following criteria, as appropriate:

- engineering design;
- economic feasibility or life span[2] costs;
- effect on reliability and security of the existing system;
- demonstrated public concern; and
- environmental and socio-economic constraints or potential effects.

4.2.3 Filing Requirements – Justification

1. Provide a justification for the proposed project.

Guidance – Justification

Describe the needs that would be satisfied by the project and demonstrate that, taking into consideration all viable alternatives available, the proposed project is the most appropriate option to meet the needs while serving the public interest.

Next Steps...

Determine which of the Guides included within this chapter are applicable to the application being filed and complete the necessary filing requirements.

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[2] Life span includes planning, construction, maintenance, operation and abandonment.

Filing Manual – Guide A – Facilities Applications

For a proposed project that involves constructing or modifying facilities that require an application under the CER Act, the Commission must satisfy itself, or make recommendations to the Governor in Council, that the facilities are and will be required for the present and future public convenience and necessity. The Commission may consider information relating to:

- engineering;
- environment and socio-economics;
- economics and financial matters;
- lands; and
- any public interest that may be affected by the granting or refusing of the application.

Guide A establishes the information required in each of these instances.

Section 183 Applications

Applications under section 183 of the CER Act trigger a public hearing, either written or oral. Applicants should refer to the information requirements outlined in:

- Chapter 3 – Common Information Requirements;
- Chapter 4 – Physical Projects, including section 4.1, section 4.2, and all sections within Guide A – Facilities Applications (CER Act section 183 and section 214).

Section 214 Applications

Section 214 of the CER Act permits the Commission to make orders exempting certain facilities from any or all of the provisions of section 179, subsection 180(1), and sections 182, 198, 199, and 213 of the CER Act.

214 (1) The Commission may, by order, exempt from the application of any or all of the provisions of section 179, subsection 180(1), and sections 182, 198, 199 and 213.

> **(a)** pipelines or branches of or extensions to pipelines, of not more than 40 kilometres in length;
>
> **(b)** pipelines that have already been constructed; and
>
> **(c)** any tanks, reservoirs, storage or loading facilities, pumps, racks, compressors, interstation communication systems, real or personal property, or immovable or movable, and any connected works.

While applications made under section 214 do not automatically trigger a public hearing, the Commission will still assess the application with respect to:

- public engagement;

- engineering;
- environment and socio-economics;
- economics; and
- lands.

As such, applicants should refer to the information requirements outlined in:

- Chapter 3 – Common Information Requirements;
- Chapter 4 – Physical Projects, including section 4.1 and section 4.2, and all sections within Guide A – Facilities Applications (CER Act section 183 and section 214).

Operations and Maintenance Activities

Operations and maintenance activities are defined within the Operations and Maintenance Activities on Pipelines Regulated Under the Canadian Energy Regulator Act: Requirements and Guidance Notes. Operations and maintenance activities do not require an application under section 214 of the CER Act. The CER recommends that Companies review the requirements and guidance notes for operations and maintenance activities to determine if notification of these activities is required.

Section 214 Streamlining Order

This Order provides the Commission's approval for the construction and operation of certain classes of oil and gas projects regulated under the CER Act. If the proposed project meets all the requirements found within Schedule "A" attached to the Order, an application is not necessary.

The Order also contains guidance on the process for identifying and reporting on eligible projects.

- Section 214 Streamlining Order AO-001-XG/XO-100-2025, 22 January 2026 [Filing A9S2K1]

A.1 – Engineering

A.1.1 Engineering Design Details

Goal

The application includes all necessary design details of the proposed project to give the Commission an understanding of the nature of the proposed project.

Filing Requirements

1. Describe the fluid type and chemical composition.
2. If the proposed project involves line pipe, provide:

    - pipe outside diameters;
    - pipe material types, categories, and grades;
    - pipe wall thicknesses;
    - maximum operating pressures (MOP);
    - estimate of pipe length by province for each change in diameter, material grade and wall thickness;
    - valve spacing and a map showing valve locations;
    - minimum depth(s) of cover and typical drawings (e.g., crossings);
    - class locations;
    - description of proposed pipe coatings; and
    - general description of the corrosion control elements and facilities.

3. If the proposed project involves pigging facilities, provide:

    - pipe outside diameters;
    - pipe material types and grades;
    - pipe wall thicknesses;
    - MOP;
    - pig trap locations;
    - pig trap pressure ratings;
    - a description of the pig trap closure device; and
    - a general description of the corrosion control elements and facilities.

4. If the proposed project involves compressor or pump facilities, provide:

    - pipe outside diameters;

- pipe material types and grades;
- pipe wall thicknesses;
- MOP and inlet and outlet design pressures;
- an indication of the presence of surge control systems;
- type and power of pumps or compressor units;
- fuel type and source for pumps or compressor units;
- a station schematic showing buildings and all major piping and valves including connections to existing pipeline systems;
- a plot plan of the facility including the location of roads and fences;
- description of boilers and pressure vessels;
- a general description of the corrosion control elements and facilities and overpressure control; and
- a general description of the pressure control and overpressure protection devices.

5. If the proposed project involves pressure regulating or metering facilities, provide:

- a description of the gas or fluid analysis system;
- minimum and maximum station flows and associated inlet and outlet pressures;
- a general description of the pressure control and overpressure protection devices;
- a description of the type and frequency of H_2S analysis in the inlet gas stream;
- a station schematic showing buildings and all major piping and valves including connections to existing pipeline systems;
- a plot plan of the facility including the location of roads and fences;
- pipe outside diameter;
- pipe material type and grade;
- pipe wall thickness;
- MOP;
- a general description of the corrosion control elements and facilities; and
- if the measurement is being done for custody transfer purposes, include a description of the measurement equipment, including:
    - physical size;
    - flow capacity;
    - measurement accuracy;
    - meter type;
    - number of meters; and
    - proving method.

6. If the proposed project involves liquid tanks or other commodity storage facilities, provide:

    - nominal and working capacity;
    - maximum injection and takeaway flow rates;
    - seasonal demand for injection and takeaway capacity and flow rates;
    - a description of the containment and overflow prevention system;
    - a description of overpressure prevention systems;
    - a schematic showing storage tanks, buildings and all major piping and valves, including connections to existing pipeline systems;
    - a plot plan of the facility including the location of roads and fences;
    - pipe outside diameters;
    - pipe material types and grades;
    - pipe wall thicknesses;
    - MOP;
    - valve locations;
    - a description of the fire suppression system, if applicable;
    - a description of the vapour detection and containment system, if applicable;
    - a description of the flaring system, if applicable; and
    - a general description of the corrosion control elements and facilities, if applicable.

7. If the proposed project involves new control system facilities for a pipeline, plant or station, provide:

    - a basic description of the supervisory control and data acquisition (SCADA) system related to the proposed facility, including the parameters monitored;
    - a basic description of the leak detection system including its sensitivity and accuracy; and
    - a basic description of the emergency shut down system.

8. If the proposed project involves gas processing, sulphur or liquefied natural gas (LNG) plant facilities, provide:

    - an equipment and pipe list, including the pertinent engineering design information;
    - plant capacity and LNG storage capacity;
    - a process and instrumentation diagram (P&ID);
    - a process flow description;
    - plant feed and product specifications;
    - a general description of the corrosion control elements and facilities; and

- a risk management plan.

9. If the proposed project involves facilities not mentioned above, provide a technical description of the proposed facilities that includes an equivalent level of information to that listed above.
10. If the proposed project involves a building, include the building's use and dimensions.
11. If the proposed project is a new system that is a critical source of energy supply to an area, provide a description of the impact to the new system capabilities following the loss of any critical component such as a compressor, pump or pipeline.

A.1.2 Engineering Design Principles

Goal

The application includes information on the engineering codes, standards and regulations applicable to the project as well as information with respect to any special engineering design challenges associated with the project.

Filing Requirements

1. Confirm project activities will follow the requirements of the latest version of Canadian Standards Association Standard Z662, Oil and Gas Pipeline Systems (CSA Z662).
2. If the proposed project uses any of the Annexes, in whole or in part, that form part of CSA Z662, provide a statement indicating which Annex is being used and for what purpose.
3. If any portion of the proposed project involves a hydrocarbon pipeline, provide a statement confirming compliance with the latest version of the *Canadian Energy Regulator Onshore Pipeline Regulations* (OPR) or *Canadian Energy Regulator Processing Plant Regulations* (PPR).
4. Provide a listing of all primary codes and standards, including the version and date of issue that will be followed in the design, material selection, construction, operation and maintenance for each element of the applied-for facility, including:

    - pipe;
    - coatings;
    - valves;
    - fittings;
    - cathodic protection systems;
    - compressors and pumps;
    - regulators and control valves;
    - liquid tanks and other storage facilities;
    - boilers or pressure vessels (including certifying authority used or required);
    - electrical systems;
    - SCADA;

- pressure control and overpressure protection;
- leak detection; and
- buildings.

  Where there is a choice in the code or standard selected, provide a brief reason why the referenced code or standard is considered the appropriate code.

5. Provide confirmation that the project will comply with company manuals and confirm that, in turn, these manuals comply with the:

   - OPR, if applicable;
   - PPR, if applicable; and
   - the codes and standards for the project.

     Keep the latest versions of these manuals available for CER audit and file copies upon request.

6. If the proposed project involves any portion of a non-hydrocarbon commodity pipeline system provide a Quality Assurance (QA) program outlining the necessary action required to ensure the materials purchased for use in the proposed facility are appropriate for their intended service.
7. If the proposed facility will be subject to conditions not specifically addressed in CSA Z662 (e.g., seismic issues, fracture control, slope instability, pipe buoyancy, or lack of support due to streambank erosion) provide:

   - a written statement from a qualified professional engineer that the project has been assessed and designed for the potential effects of the condition that is not specifically addressed in CSA Z662; and
   - a description of the designs and measures required to safeguard the pipeline.

8. If the proposed project involves horizontal directional drilling, provide:

   - a preliminary feasibility report detailing the assessment that was completed to determine that horizontal directional drilling could be successfully completed; and
   - a description of the contingency plan to be used if the horizontal directional drill is not successful.

9. If the proposed project involves new materials, provide, in tabular format, material supply chain information (e.g., forming and manufacturing locations) and the associated Quality Assurance verification activity.
10. If the proposed project involves the reuse of materials, provide an engineering assessment in accordance with CSA Z662 that indicates its suitability for the intended service.

A.1.3 Canadian Energy Regulator Onshore Pipeline Regulations

Goal

The application meets the requirements of the OPR.

Filing Requirements

1. If any portion of the proposed project involves a hydrocarbon pipeline system requiring development of designs, specifications, programs, manuals, procedures, measures or plans for which no standard is set out in the OPR, provide copies to the CER for Commission approval. [OPR, subsection 5.1(1)].
2. If the project design is non-routine in nature or must incorporate unique challenges because of its geographical location (e.g., sub-sea pipelines; pipelines located north of the 60th parallel; pipelines transporting sour gas, acid gas or high vapour pressure products; or pipelines operating under any extreme or unusual circumstances), provide a QA program outlining the actions required to ensure the materials purchased for use in the proposed facility are appropriate for their intended service (OPR, section 15). See the Guidance topic below for further details.
3. If welding will be performed on a liquid-filled pipeline that has a carbon equivalent of 0.50% or greater and is a permanent installation, submit the following for approval (OPR, subsection 38(3)):

    - welding specifications;
    - procedures; and
    - the results of procedure qualification tests for approval.

Guidance

Quality Assurance Program for Materials

The QA program in the above filing requirement ensures that materials purchased meet the company's specified requirements. The rigor of the QA program should be consistent with the scale of the purchase order and its intended application (e.g., the purchase of a single small diameter fitting would not warrant the same degree of scrutiny as would a major pipeline construction project).

QA programs can include the elements of a recognized standard such as the International Organization for Standardization (ISO) 9000 series or quality management systems, and, where appropriate:

- requirements for the pipeline company's (or its agents) evaluation of the manufacturer's or supplier's quality management system prior to the award of any contract;
- requirements for company (or its agents) audits and inspections during manufacture and fabrication, shipping, storage, etc.;
- requirements for random and progressive product testing;
- inspection procedures and inspector qualifications;

- requirements for handling and review of documentation;
- a system for managing non-conformances to specifications; and
- procedures for company acceptance of products.

A.2 – Environmental and Socio-economic Assessment

A.2.1 Introduction

Section A.2 describes the CER's environmental and socio-economic assessment responsibilities and process and outlines the information required in a complete application. Additional filing requirements may exist for applications to other regulators[3]. Section A.2 consists of two broad parts.

Sections A.2.2 to A.2.4 will assist an applicant in understanding how a project is evaluated and how an applicant should provide information.

A.2.2 – The CER's Approach to Environmental and Socio-economic Assessment;

A.2.3 – Scope of an Environmental and Socio-economic Assessment; and

A.2.4 – Level of Detail.

The applicant should carefully review the information in subsections A.2.2 through A.2.4 to understand the requirements outlined in the sections that follow.

The second part, sections A.2.5 to A.2.8 describes the information applicants should include in a project-specific Environmental and Socio-economic Assessment (ESA):

A.2.5 – Description of the Environmental and Socio-economic Setting;

A.2.6 – Effects Assessment;

A.2.7 – Cumulative Effects Assessment; and

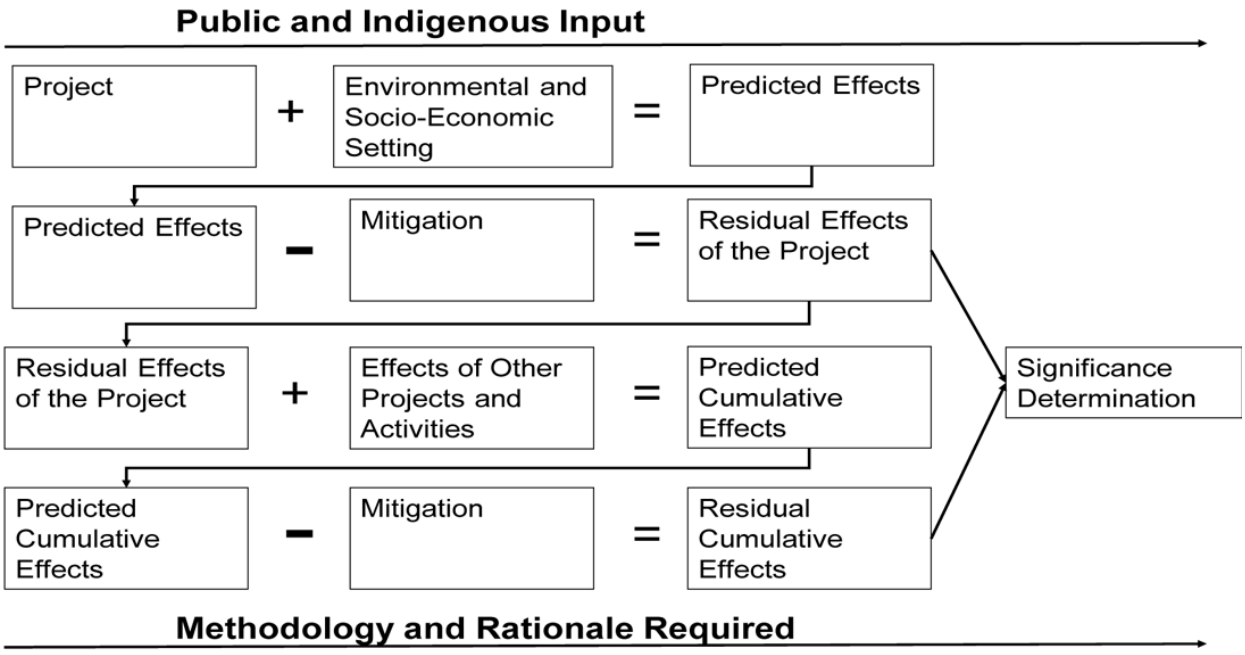
A.2.8 – Inspection, Monitoring and Follow-up.

In addition to the description of the project (discussed in section 4.1 of this Manual), the applicant should describe:

- the environmental and socio-economic baseline setting;
- the predicted beneficial and adverse effects of the proposed project on the socio-economic and biophysical environment over the life of the project;
- the methods used for effects analysis, and the rationale for selecting the methods chosen;
- the proposed mitigation measures; and
- the predicted significance of residual project effects and residual cumulative effects.

[3] Applicants should contact the CER and other relevant regulators, such as the Mackenzie Valley Environmental Impact Review Board, for more information on how to complete an application for authorizations in areas where other legislation may apply.

Figure A.2-1: The Applicant's ESA process



The level of detail the CER requires in an application will vary with:

- the nature and scale of the project;
- the predicted effects of the project; and
- the level of public interest in the project.

The applicant must provide a defensible line of reasoning, supported by facts, to support the analysis and conclusions on identified issues and the environmental and socio-economic effects of the project.

Table A-1 in section A.2.4 identifies circumstances that trigger the need for detailed information to be filed on specific biophysical or socio-economic components and considers all phases of an applied for project (construction, operation, maintenance and abandonment), including the potential for accidents and malfunctions during each phase. Table A-2 and Table A-3, which follow section A.2.7, identify those specific information requirements.

FYI – Additional information...

For non-hearing CER Act section 214 applications, the CER has an on-line application system (CER Portal) through which applicants can build and file their applications. Regardless of whether the CER Portal application templates are used, applicants should refer to the guidance set out in the filing manual when preparing an application. In all cases applicants must submit a completed Environmental and Socio-economic Interactions Table with their application. Depending on how the application questions are answered, the system guides the applicant back to the appropriate section of the filing manual to show the filing requirements necessary for a particular application. Generally, less complex projects will require less information to be filed, and more complex projects will result in larger and more complex applications. While an

applicant's full ESA is not required to be filed for applications using the CER Portal, it must still be prepared and may be requested at any time. It may be helpful to include the ESA for applications where there are multiple or complex issues, or to provide clarity and efficiency in the review of an application.

A.2.2 The CER's Approach to Environmental and Socio-economic Assessment

The Commission has a broad mandate under the CER Act and it may consider matters that appear to the Commission to be directly related to the pipeline and relevant to its decisions or recommendations. The Commission is responsible for assessing the environmental and socio-economic effects of energy projects within its jurisdiction, such as international and interprovincial pipelines in Canada, certain natural gas processing plants, and related facilities and activities[4]. The Commission's environmental and socio-economic assessment responsibilities cover four distinct phases:

- evaluating potential effects of constructing and operating proposed projects;
- monitoring and enforcing terms and conditions before, during and after construction;
- monitoring and regulating ongoing operations, including decommissioning; and
- evaluating potential effects of abandonment.

The Commission's objectives for environmental and socio-economic assessment are that:

- the potential effects of projects receive thorough consideration before any decisions on the project are made allowing a project to proceed;
- projects are not likely to cause significant adverse effects or contribute to significant adverse cumulative effects;
- there is an opportunity for meaningful public participation and the participation of Indigenous Peoples; and
- the Commission's process and its decisions or recommendations are transparent and reflect the input received from those participating in the environmental assessment and regulatory review process.

A.2.3 Scope of the Environmental and Socio-economic Assessment

What is Scoping?

Appropriate scoping is the foundation upon which an effective environmental and socio-economic assessment is built. The scope ensures that the assessment focuses on relevant issues and concerns, and assists in determining the appropriate level of detail to include in the assessment. Proper scoping reduces the risk of including unimportant or irrelevant information

[4] As noted in section 1.2, the ESA requirements described in the section are not explicitly applicable to:

- oil and gas activities regulated under other Acts for which the CER has responsibility, e.g., the *Canada Oil and Gas Operations Act* and the *Canada Petroleum Resources Act*;
- international and designated interprovincial electric power lines; or
- offshore pipelines.

in the assessment or excluding factors that should be assessed. Scoping is the process of identifying:

- the physical facilities and activities to include within the ESA; and
- what biophysical and socio-economic elements are likely to be affected.

FYI – See also...

Scoping information for cumulative effects assessment is provided in section A.2.7.

The Applicant's Role in Scoping

The applicant's role in scoping includes:

- providing sufficient information for the Commission to fully understand the nature of the project it is to assess;
- ensuring the applicant's ESA focuses on relevant issues and concerns, including those identified by affected parties, and that an appropriate level of detail is included in the ESA; and
- considering the factors set out in section 183 of the CER Act. The CER expects a complete ESA from an applicant.

To assist an applicant in scoping before filing an application, the CER encourages the applicant to:

- request a meeting with CER staff to discuss process-related matters and be guided to examples of complete ESAs filed previously with the CER (see Chapter 1, section 1.7 Pre-application Meetings – Guidance Notes);
- consult any relevant Impact Assessment Agency of Canada (IAAC) guidance documents and, if appropriate, discuss scoping any other relevant federal authorities (see Table 3-1 for potential considerations and contacts); and
- where appropriate, consult with other regulatory bodies at the provincial, territorial, regional, municipal or Indigenous levels of government.

An application must clearly identify, describe and substantiate:

- the scope of the applied for project;
- other physical facilities and activities necessary to enable the project to proceed, including directly-related ancillary facilities, such as access roads including temporary and permanent bridge crossings, construction camps, or pipe lay-up and storage areas, marine terminals and loading facilities; and
- other physical facilities and activities likely to occur if the applied for project is approved and proceeds, which may include power lines or upstream and downstream petroleum development activities and works directly related to the proposed project.

Scope of the assessment and the CER

The scope of the project includes the physical facilities and activities making up the project and enabling it to proceed as applied for by the applicant. It may also include other physical facilities and activities that would be undertaken if the applied for project is approved and proceeds.

The Commission determines the scope of the project by considering relevant case law, IAAC guidance and any other relevant commentary.

The Commission will review and assess the scope of the ESA based on the evidence before it. Although elements of the project or the scope of factors to be considered may change over the course of a proceeding (e.g., as a result of input from the public or Indigenous Peoples, or changes to the project), the application is usually the prime source of information and starting point for establishing what the Commission will consider in the environmental assessment of a project.

For projects subject to a public hearing, the Commission will release a List of Issues that sets out the issues it will consider in the hearing. Within the List of Issues, environmental matters are usually identified at a sufficiently broad level that all relevant environmental effects may be considered. It is important to note the requirements within this Filing Manual amount to a standing scoping document in lieu of the CER preparing a project-specific scoping document for every project.

FYI – Reminder...

The requirements contained within this Filing Manual are essentially a generic scope of the assessment document applicable to any facility project. The description of the project within the applicant's application sets out the scope of the project. If the information submitted is not sufficient for the Commission to be clear on scope, the Commission will request more information, which could lengthen the assessment process.

Guidance – Scope of the Project

In evaluating whether to include other physical facilities and activities directly related to the proposed project, but which may be outside of the CER's regulatory jurisdiction, the Commission may consider factors such as:

- is the physical facility or activity within the control of the applicant for the primary project being applied for under the CER Act?
- are mitigation measures and follow-up activities enforceable by the CER, another federal or provincial department or agency, or person or body that will ensure implementation?
- are effects from the other physical facilities and activities relevant to the Commission's decision or recommendation under the CER Act?

Impact Assessment Act Designated Physical Activities

Physical activities regulated by the CER and designated by the *Physical Activities Regulations*, are subject to the IA Act, and the IAAC will conduct an integrated impact assessment with

support from the CER. Subsection 22(1) of the IA Act sets out the factors to be considered by a review panel in an impact assessment of a designated project.

A.2.4 Level of Detail

The nature of the project, together with the environmental and socio-economic setting, establish the extent of interactions between the project and the environment. Those interactions form the basis on which effects are predicted, and for understanding the appropriate level of detail needed about the setting, interactions, and predicted effects. The extent of public interest may also guide the applicant in determining the level of detail necessary.

Where the project may impact Indigenous Nations and affect the use of traditional territory or potential or established treaty or Indigenous rights, applicants must identify the potentially-affected Indigenous Peoples and carry out effective engagement with them to determine their views and concerns. If there are potential impacts, applicants must file information about the Indigenous Nations affected, the concerns they have raised, how the applicant will address the concerns and identify any outstanding concerns. The level of detail provided should reflect the nature and extent of the impacts, the nature of the rights or interests affected and the degree of concern expressed by Indigenous Peoples.

Applicants must apply gender-based analysis plus (GBA+) to identify the potential for the project to impact diverse groups of people, including groups identified by gender, in different ways, and to design engagement processes to facilitate the effective involvement of such groups. If there are potential impacts, applicants must file information about how such groups were identified, the engagement methods employed to facilitate their involvement, as well as the concerns raised and how they will be addressed. The amount of detail and depth of all information should be commensurate with the scale and scope of the project, including its potential effects, and the degree of concern expressed. Projects that are smaller in scale, or have the potential for limited, low magnitude effects may not require highly detailed information.

The information provided by an applicant in its ESA must be of sufficient detail to allow the Commission to:

- identify the spatial and temporal extent of interactions between the project and the biophysical and human environments;
- identify the potential effects of the project;
- identify the potential for the environment to affect the project; and
- determine the significance of those effects.

FYI – Example...

As an example, a project crossing a small and ephemeral watercourse, during the dry period, with no activities or physical works within a fisheries-sensitive zone would likely require less detail on effects on fish and fish habitat than a project requiring in-stream construction work in a fish-bearing watercourse during spawning periods.

The applicant must clearly rationalize the level of detail provided. This is typically reflected through the following:

- Description of the project: information describing how the project would cross the watercourse, and whether any physical works or construction would be required in or immediately adjacent to the watercourse and, if so, what these could be and how they might take place;
- Environmental setting: information on the nature of the watercourse, shores, riparian zones, erosive features, its fisheries and fish habitat potential;
- Interactions: information describing the proposed timing of construction, the spatial extent of interactions, any loss of riparian or fish habitat, and extent of any potential release of a deleterious substance into the watercourse;
- Predicted effects: information on any direct and indirect effects on water quality, habitat, fish and on which life including if the project may result in a harm to fish or fish habitat, or any effects on other wildlife; and
- Results of engagement with other regulators: information detailing the results of any engagement with Fisheries and Oceans Canada should an aquatic species under SARA or its critical habitat be present; and the measures that will be taken to ensure compliance.

The ESA must include both quantitative and qualitative information. Applicants must consider the extent to which detailed maps, survey and trend data, or diagrams or figures relating to specific areas of biophysical or socio-economic elements of interest or concern may enhance the assessment. The number and nature of biophysical and socio-economic elements considered within an ESA, and the supporting level of detail necessary, will vary depending on the setting and issues raised about the project.

Table A-1 below provides examples of the range of circumstances that may lead to the need for detailed information and considers all phases of an applied for project (construction, operation, maintenance and abandonment), including the potential for accidents and malfunctions during each phase. Where circumstances described in Table A-1 exist, Table A-2 and Table A-3 describe the specific details to include in the assessment.

Table A-1: Circumstances and Interactions Requiring Detailed Biophysical and Socio-economic Information

Biophysical and Socio-economic Elements	Circumstances and Interactions Requiring Detailed Information (considering all phases of the project including potential accidents and malfunctions during each phase)
Physical and meteorological environment	• The project may affect the morphology of unique physical features (such as physiography, bedrock, permafrost, topography, geology or other local conditions). • The project may be affected by local or regional physical features, meteorological conditions or extremes, or other natural hazards.

	• There is outstanding concern about this element of the project, which has not been resolved through engagement.
Soil and soil productivity	• Any portion of the project would be located outside a previously-developed fenced or gravelled facility site. • Any portion of the project would be underground. • The project may result in a reduction in soil productivity or integrity. • Historical land use suggests soils or sediments may contain contaminants or the project may result in the contamination of soils. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Vegetation	• Any portion of the project would be located outside a previously-developed fenced or gravelled facility site. • Any portion of the project would cross through an area that may require ongoing vegetation control. • The project may result in the proliferation of invasive species. • The project may result in the damage or destruction of vegetative communities. • The project may affect vegetation of specific concern to an Indigenous Nation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Water quality and quantity	• The project would be within 30 m of a water body. • The project may reduce the quality or quantity of water. • The project would involve the likely release or leaching of a polluting substance into a water body or groundwater. • The project may result in a change in groundwater flows. • The project may result in the inter-basin transfer of water. • The project may affect a water body of specific concern to an Indigenous Nation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Fish and fish habitat	• The project is within 30 m of a fish-bearing water body or its tributaries. • The project may result in the deposit of a polluting or harmful (deleterious) substance into a water body.

	• The project may result in an impact to fish and fish habitat • The project may affect fish or fish habitat of specific concern to an Indigenous Nation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Wetlands	• The project would include physical facilities or activities within 30 m of a wetland. • The project would include activities or physical facilities within regionally, provincially, territorially or federally-established limits of a wetland with provincial, regional, territorial or federal status. • The project may result in loss of wetland functions. • The project may affect wetlands of specific concern to an Indigenous Nation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Wildlife and wildlife habitat	• The project would be located on or near lands that may constitute sensitive habitat for wildlife (e.g., nesting, denning, overwintering, migratory/staging, movement corridors, forest interior habitat, mineral licks). • The project would be located on or near an area of environmental significance or of natural or scientific Interest such as a National Park, a Migratory Bird Sanctuary, a National Wildlife Area, an Important Bird Area, a World Biosphere Reserve or a designated Environmentally-Sensitive Area. • The project may create new human access opportunities to important wildlife habitat. • The project may result in a loss or change to wildlife habitat function (e.g., nesting, foraging, migration). • The project may result in increased mortality or disturbance of wildlife. • The project may affect wildlife of specific concern to an Indigenous Nation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Species at risk or species of special status and related habitat	• The study area includes lands within the identified range of a species at risk or a species of special status, and includes habitat that could support these species. • There is outstanding concern about this element of the project, which has not been resolved through engagement.

Air emissions	• There may be increased air emissions from operating or maintaining the project. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Greenhouse gas (GHG) emissions and climate change	The CER Act requires, for applications for certain projects, that the Commission take into account a number of specified factors to consider including: "The extent to which the effects of the project/pipeline hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change." This requirement expressly applies to pipelines [paragraph 183(2)(j)], certificates for power lines [paragraph 262(2)(f)], and authorizations for offshore renewable energy projects or offshore power lines [paragraph 298(3)(f)]. This factor consists of two separate considerations: climate change commitments and environmental obligations. This section addresses the climate change commitments, while environmental obligations are addressed below.
Acoustic environment	• The project may result in increased noise levels during construction, operation or maintenance (e.g., blasting or noise from construction traffic). • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Human occupancy and resource use	• The project will not be located entirely within a previously-developed facility site, on company owned land zoned for industrial purposes. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Heritage resources	• The project would include clearing of vegetation, grading, trenching, excavating or drilling. • The project would create new human access opportunities to areas with heritage resources or heritage resource potential. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Navigation and navigation safety	• The project includes activities to be conducted or components to be located in, on, over, under, through or across a navigable

	waterway when the water is flowing (i.e., **not** seasonally dry or frozen). • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Traditional land and resource use	• The project would be located on, or traverse, Crown land or the traditional territory, lands in a reserve within the meaning of subsection 2(1) of the *Indian Act* or settlement area of an Indigenous Nation. • The project may adversely affect the current use of lands and resources by Indigenous people. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Social and cultural well-being	• The project may affect the social and cultural well-being of Indigenous Peoples, local residents or communities. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Human health and aesthetics	• The project may affect local or regional water quality and quantity, or air quality. • The project may change the existing environmental setting related to odours, visual aesthetics (beauty) or other sensory conditions. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Infrastructure and services	• The project may cause temporary or permanent damage, or require additions, modifications or repairs, to local or regional infrastructure. • The project may result in increased demands on local and regional services. • The project may affect the usage of roadways during construction and operation. • There is outstanding concern about this element of the project, which has not been resolved through engagement.
Employment and economy	• The project may affect local and regional employment, procurement (ordering) and contracting conditions or government revenues. • There is outstanding concern about this element of the project, which has not been resolved through engagement.

Environmental Obligations	The CER Act requires, for applications for certain projects that the Commission take into account a number of specified factors to consider. Among the factors to consider are: "The extent to which the effects of the project/pipeline hinder or contribute to the Government of Canada's ability to meet its environmental obligations and its commitments in respect of climate change." This requirement applies to, pipelines [paragraph 183(2)(j)], certificates for power lines [paragraph 262(2)(f)], and authorizations for offshore renewable energy projects or offshore power lines [paragraph 298(3)(f)]. This factor consists of two separate considerations: climate change commitments and environmental obligations. This section addresses environmental obligations, while climate change commitments are addressed above. **NOTE:** This section of the CER Act is consistent with paragraph 22(1)(i) of the IA Act. The IAAC has developed guidance related to the assessment of Canada's environmental obligations. Any future iterations of that guidance may influence future filing requirements for CER Act project applications.
Rights of Indigenous Peoples	The CER Act requires, for applications for certain projects, that the Commission take into account all considerations that appear to it to be relevant and directly related to the project, including a number of specified factors to consider. Among the factors to consider are: "The effects on the rights of the Indigenous Peoples of Canada recognized and affirmed by section 35 of the Constitution Act, 1982." This requirement applies to pipelines [paragraph 183(2)(e)], certificates for power lines [paragraph 262(2)(e)], and authorizations for offshore renewable energy projects or offshore power lines [paragraph 298(3)(e)]. **NOTE:** The CER is aware that the IAAC is developing guidance documents that will include guidance related to the assessment of effects on the rights of Indigenous Peoples. That guidance may influence future filing requirements for CER Act project applications and assessment by the Commission.

A.2.5 Description of the Environmental and Socio-economic Setting

A description of the existing environmental and socio-economic setting within the study area (also known as "baseline information") is necessary to predict the effects of a proposed project. This baseline information provides a backdrop against which a project's effects are assessed,

including the cumulative effects of a project. The applicant is not expected to provide extensive descriptions of features of the environment or socio-economic components that would clearly not be impacted by a proposed project.

Goal

The application describes the biophysical and socio-economic setting with sufficient detail to:

- identify the elements of importance in the area;
- identify project-environment interactions;
- identify, predict and determine the significance of effects of the project;
- identify and predict the effects of the environment on the project; and
- formulate appropriate mitigation measures and monitoring programs.

Filing Requirements

1. Identify and describe the current biophysical and socio-economic setting of each element (i.e., baseline information) in the area where the project is to be carried out. Include a map at an appropriate scale and describe:

    - the study area(s), and how the study area(s) were established;
    - the ecological land classification and key terrain features, such as mountains, rivers, lakes and other important features;
    - the locations of any nearby communities and residences (permanent and temporary) and significant landmarks;
    - current local economy and trends;
    - current land and resource uses, including traditional land and resource uses;
    - the potential to encounter heritage resources;
    - the areas of physical and environmental constraints (e.g., biophysical, land use or natural resource use);
    - navigable waters that may be affected by project components (e.g., temporary and permanent bridges, marine terminals and loading facilities;
    - consistency between the project and any regional land use plans;
    - any environmentally-sensitive areas, sensitive habitats or areas of special concern (e.g., existing and candidate protected areas), including those identified through engagement with the public or Indigenous Peoples, which influence facility routing or site locations;
    - the locations of all proposed facilities; and
    - a list of projects and/or activities in the project area.

FYI – Additional information...

Where the current state of the environment has been significantly altered from the past, the applicant must first describe how far back in time past activities are relevant and then also describe the past activities or past state of the environment. This may be particularly relevant for assessing cumulative effects or identifying a baseline for reclamation goals (e.g., for restoring native vegetation).

2. Describe which biophysical or socio-economic elements in the study area are of ecological, economic or human importance and require more detailed analysis taking into account the results of engagement (see Table A-1 for examples). Where circumstances require more detailed information in an ESA, see:

    - Table A-2: Filing Requirements for Biophysical Elements; or
    - Table A-3: Filing Requirements for Socio-economic Elements.

3. Provide supporting evidence (e.g., references to scientific literature, field studies, local and Indigenous knowledge, previous environmental assessment and monitoring reports) for:

    - information and data collected;
    - analysis completed;
    - conclusions reached; and
    - the extent of professional judgment or experience relied upon in meeting these information requirements, and the rationale for that extent of reliance.

4. Describe and substantiate the methods used for any surveys, such as those pertaining to wildlife, fisheries, plants, species at risk or species of special status, soils, heritage resources or traditional land use, and for establishing the baseline setting for the atmospheric and acoustic environment. If the season for a particular survey was not optimal, discuss the limitations of survey results or indicate when and how additional surveys will be conducted.
5. Applicants must consult with other expert federal, provincial or territorial departments and other relevant authorities on requirements for baseline information and methods.

Guidance

Study Area

The study area(s) must be of sufficient size to encompass the spatial boundaries of the project and any related physical facilities or activities (e.g., compressors, pump and meter stations, storage facilities, access roads). The study area must also be of sufficient size and orientation to encompass all areas where valued components may be affected by the project, for example:

- areas downstream and immediately upstream;
- areas downwind;
- areas in which the project may be within the range of vision;
- species' home ranges and migratory patterns;
- the emergency planning zone;

- affected communities and known or asserted areas of Indigenous traditional land and resource use; and
- areas in which infrastructure is affected or new or enhanced infrastructure would be needed.

Typically, the study area encompassing the above-noted areas extends beyond a narrow corridor or project site. Section A.2.7 provides additional guidance on the study area for a cumulative effects assessment.

Source of Baseline Information

Baseline information must include both scientific information and local and Indigenous knowledge.

Information sources and data collection methods used for describing the baseline environmental and socio-economic setting may consist of:

- field studies, including site-specific survey methods;
- database searches, including federal, provincial, territorial and local data banks;
- sailing directions, recreational waterway guides, etc.;
- field measurements to gather data on ambient or background levels for air quality or acoustic environment;
- remote sensing information;
- literature reviews;
- literature produced by government agencies and academic institutions;
- renewable resource harvest data;
- expert, community and Indigenous knowledge interviews (e.g., with regulatory agencies, Indigenous Peoples, community and nature conservation groups, local outfitters and recreational organizations including navigation user groups, as well as with local residents, landowners and land users); and
- statistical surveys, as applicable.

The validity and accuracy of baseline information used in the ESA must be supported by:

- describing and substantiating the sampling, survey and research protocols or techniques followed for each information source or data collection method used;
- indicating that proper record-keeping practices have been implemented to maintain survey results for future reference, including measures to respect confidentiality of sensitive information contained in Indigenous traditional land and resource use studies; and
- wherever appropriate, quantifying and analyzing any statistical survey data obtained.

FYI – See also...

Additional guidance on baseline information for a cumulative effects assessment is provided in section A.2.7.

Identifying Need for Detailed Biophysical and Socio-economic Information

Additional biophysical and socio-economic information must be included with the application if there is evidence of public concern, or if any of the circumstances identified in Table A-1 exist. Table A-2 and Table A-3 describe the specific details that should be included.

Applicants are reminded that detailed information is only required for the elements that are identified as having potential environmental or socio-economic effects. Further, a clear and defensible explanation should be provided as to why any element in Table A-1 is not addressed.

Gender-based analysis plus (GBA+)

The CER Act requires, for applications for certain projects, the Commission take into account a number of specified factors to consider. Among the factors to consider are:

> "The health, social and economic effects, including with respect to the intersection of sex and gender with other identity factors."

This requirement applies to, pipelines [paragraph 183(2)(c)], certificates for power lines [paragraph 262(2)(c)], and authorizations for offshore renewable energy projects or offshore power lines [paragraph 298(3)(c)].

NOTE – These sections of the CER Act are consistent with paragraph 22(1)(s) of the IA Act. The CER is aware that the IA Agency has developed guidance documents related to the intersection of sex and gender.[5] That guidance may influence future filing requirements for CER Act project applications and assessments by the Commission.

Gender-based analysis plus (GBA+) is a means of identifying and analyzing how sex, gender and other identity factors might result in different groups of people being affected by a pipeline or power line project in different ways. Individual and social identity factors can include sex, gender, religion, race, social position, income, age, ability, and education. By working through a GBA+ analysis, the Commission can better understand the possible disproportionate effects of a project on distinct groups of people, including on vulnerable populations and populations identified by gender.

Gender-based analysis is not new to impact assessment at the CER; however, the CER is making the following changes to guide companies in identifying and predicting a project's socio-cultural effects on communities. This includes guidance on how to address GBA+ in the CER Early Engagement Guide (Guide L), and also guidance below to address this factor in a project application.

[5] Practitioner's Guide to Federal Impact Assessments under the Impact Assessment Act

A.2.6 Effects Assessment

Goal

The application includes information on the potential biophysical and socio-economic effects of the project, with enough detail to:

- predict and analyze the nature and extent of those effects;
- identify mitigation options to protect the biophysical and socio-economic environment, and analyze their effectiveness; and
- determine the significance of any effects remaining following mitigation, including the significance of cumulative effects.

A.2.6.1 Identification and Analysis of Effects

Filing Requirements – Identification and Analysis of Effects

1. Describe the methods used to predict the effects of the project on the biophysical and socio-economic elements, and the effects of the environment on the project.

   This Manual assumes a valued component-based approach to effects assessment where the application focuses on those biophysical or socio-economic elements, or a subset of those elements (see guidance below), that may be affected by a project and are of concern or value to the public and Indigenous Peoples. Applicants must identify valued components for which effects are predicted and explain why and how the valued components were identified.

   If another method is used to assess potential effects on the biophysical and socio-economic elements described in Table A-1, Table A-2, and Table A-3, then provide the details and rationale on that method.

   Provide the details of any important aspects of uncertainty associated with the analysis.

   Where professional knowledge or experience is cited, describe the extent of professional judgment or experience relied upon, the rationale for that extent of reliance and how the resulting conclusions or decisions were reached.

2. Predict the effects associated with the proposed project, including those that could be caused by construction, operations, decommissioning or abandonment, as well as accidents and malfunctions. Also include effects the environment could have on the project.

FYI – Reminder...

If there are no predicted interactions between project activities and a particular biophysical or socio-economic element, then no further analysis is necessary for that element. Instead, provide a sufficient description of the project or setting to demonstrate why no interactions are predicted.

For those biophysical and socio-economic elements or their valued components that require further analysis (see Table A-1), provide the detailed information outlined in Table A-2 and Table A-3. This must include, but is not limited to, a description and quantification of:

- spatial and temporal boundaries for the effects analysis of each biophysical or socio-economic element or valued component associated with the project;
- local and regional conditions of each biophysical or socio-economic element or valued component (i.e., location, distribution, abundance, status, sensitivity to the project, ability to recover, and natural variation of valued components, as appropriate), including how this is expected to change from baseline if the project were to proceed;
- factors influencing change, the limiting factors, and the natural variation for each valued component, if known;
- magnitude and reversibility of any predicted change from baseline conditions;
- local, regional and federal management objectives (e.g., recovery strategies, action plans, management plans and land use plans) and thresholds, and identify how the effects of the project relate to such strategies, plans, objectives or thresholds;
- methods used for any modeling, including the assumptions used and limitations of the models; and
- information about reporting requirements for all levels of government (e.g., for GHGs), if applicable.

For each valued component, provide or reference any supporting information used in the project effects analysis, such as:

- public comments;
- engagement with other regulators and departments or agencies;
- scientific literature;
- local and Indigenous knowledge;
- status reports;
- approved recovery strategies, action plans and management plans for species at risk; and
- follow-up studies and case studies from other projects.

FYI – See also...

Filing requirements specific to cumulative effects assessment are provided in section A.2.7.

Guidance – Identification and Analysis of Effects

The identification and analysis of project effects builds directly on scoping, the description of the environmental and socio-economic setting, and the level of detail considerations described above.

Typically, applicants use a valued component approach to focus the effects analysis on practical and representative components of the biophysical and socio-economic environment. Valued components could be the broad elements described in Table A-1, Table A-2 and Table A-3 or a representative subset of those elements. In that way, the analysis of potential effects focuses on the components of those biophysical or socio-economic elements where project-environment interactions are more readily assessable, and on the interactions that may be of concern to the public or Indigenous Peoples (often termed Valued Environmental Components [VECs] or Valued Socio-economic Components [VSCs]). The valued components selected must:

- be indicative of predicted effects that could result from the project over time;
- have baseline data available in order to determine the significance of effects;
- be able to reflect measurable changes that result from the project effects over time;
- be sufficient to identify different effects on diverse groups of people, including groups identified by sex and gender, as identified through gender-based analysis plus (GBA+); and
- be sufficient to identify potential effects on the exercise of Indigenous rights, including effects on the resources involved in or required for the exercise of those rights, specific locations of cultural importance where those rights are exercised, and an Indigenous Nation's cultural traditions, laws and governance systems and how those systems inform the manner in which they exercise their rights.

The analysis should result in an understanding of where uncertainty about project-environment interactions may exist, or where information gaps necessary to predict effects may remain.

Spatial and Temporal Boundaries

The spatial and temporal boundaries must:

- be provided for each valued component, along with a rationale for selecting those boundaries;
- include the area over which effects on the valued components may occur. This area could include a population boundary, home range, airshed, watershed, Indigenous traditional land and resource use areas, or municipal or regional planning districts;
- include the duration that each valued component may be affected;
- consider the effects of the project on the valued component and the extent to which those effects are measurable;
- include all phases of the project; and
- not be constrained by jurisdictional boundaries.

Analysis

The analysis methods must be fully disclosed and meet the study needs. In addition to meeting the requirements of other regulations (e.g., *Species at Risk Act* [SARA], *Migratory Bird Convention Act* [MBCA], *Fisheries Act*, etc.), the analysis of project effects must take into account local, regional and federal policy or management objectives (e.g., recovery strategies, action plans, management plans and land use plans) and thresholds. Where there are no management objectives or thresholds, include information on the current state of knowledge on the valued component. After a review of the available literature, if the state of knowledge is incomplete or there is substantial uncertainty, identify any information gaps, and indicate if and how they will be filled. Where uncertainty exists about the project effects on a valued component, describe how the inspection and monitoring program will reduce the uncertainty.

Where there is applicable local and Indigenous knowledge, it must be included in the ESA. See section 3.4 Engagement, for further details on engaging with Indigenous persons and communities and gathering Indigenous knowledge.

Effects Assessment for Accidents and Malfunctions

The prevention of any accidents and malfunctions associated with CER-regulated projects is the CER's goal. In the event an accident or malfunction does occur, the CER will hold its regulated companies accountable for an appropriate response under their Emergency Management Program. This program is required by section 32 of the OPR (see also section 3.3).

The applicant's ESA must identify and assess the effects on workers, the public, and biophysical and socio-economic elements of all potential accidents and malfunctions.

Accidents and malfunctions and associated emergencies can result from numerous events, including pipeline and equipment failure, human error, natural perils such as tornadoes, hurricanes, floods, or earthquakes, and terrorism or other criminal activities. Multi-hazard emergencies, such as an earthquake, may cause pipeline breaks, fires and explosions, which result in injury and further property damage.

The level of detail provided on potential effects of accidents and malfunctions will depend on the:

- type, scale, and location of the proposed project;
- type(s) and characteristics of product(s) to be transported or processed;
- environmental and socio-economic sensitivities within potentially affected areas;
- the results of the applicant's engagement program regarding emergency management issues associated with the project; and
- extent to which an applicant's existing Emergency Management Program and other plans and manuals address the issues and concerns about the proposed project.

An applicant should describe its methodology for considering the potential effects of malfunctions and accidents associated with the project. As appropriate, information should include a description of how:

- project-specific information and circumstances informed the effects assessment;
- the applicant's existing Emergency Management Program and overall management system informed the design, planning, and proposed mitigation for the project regarding malfunctions and accidents and emergency management;
- the applicant used a risk informed approach in addressing issues related to malfunctions and accidents and emergency management. If a formal risk assessment was used, it should be described;
- engagement has informed emergency management planning for the project;
- tools and methods were used to calculate potential release volumes including a worst-probable release volume;
- tools and methodologies such as oil trajectory and spill transport modeling, fate and behaviour modeling, ecological risk assessment, human health risk assessment, and air dispersion modeling informed the effects assessment; and
- potential product fate and behaviour informed effects assessment and response planning.

Abandonment, Deactivation, and Decommissioning

As described in Guide B (Abandonment), an application for abandonment must be filed for all CER-regulated facilities when they have reached their end of life, including associated decommissioned facilities. Pipeline deactivation and decommissioning activities may also be subject to regulatory provisions within the OPR (Refer to Guide G for Deactivation and Guide K for Decommissioning). Applicants must consult those regulations and associated guidance notes as appropriate.

In an application for proposed new facilities, the Commission typically only examines abandonment and decommissioning activities in a broad context. A separate environmental and socio-economic assessment, specific to decommissioning or abandonment activities, will be required in the future when the facilities are ready to be decommissioned or abandoned.

The level of detail provided may be constrained by the uncertainties inherent with forecasting a phase of the project that may be several decades in the future. However, an applicant is still required to provide a preliminary abandonment plan as part of its ESA to support its estimates of funds required by the CER to be set aside during the life of the pipeline for abandonment.

The plan should:

- describe what pipeline components would be removed, reused or left in place and provide the rationale for doing so. Where site-specific situations require special methodology then details should be provided;
- provide the reclamation objectives or principles to be applied to abandonment;
- provide sufficient information to demonstrate that abandonment of the project will return the right of way to a state comparable with the surrounding environment;
- be developed through engagement with the persons or groups potentially affected;

- provide the estimated total cost to abandon, as well as the Collection Period over which revenue will be accumulated (if proposing a trust as a set-aside mechanism for abandonment funding); and
- determine the significance of any effects remaining following mitigation, including the significance of cumulative effects.

Post-Abandonment

Pursuant to subsection 95(1) of the CER Act no person shall, without the Commission's leave, make contact with, alter or remove an abandoned pipeline. Please contact the CER for filing requirements for proposed contact with, alteration or removal of an abandoned pipeline.

A.2.6.2 Mitigation Measures

Filing Requirements – Mitigation Measures

1. Describe the standard and project specific mitigation measures and their adequacy for addressing the project effects, or clearly reference specific sections of company manuals that provide mitigation measures. Ensure that referenced manuals are current and filed with the CER.

FYI – Reminder...

See section 1.6 Previously Filed Material, for guidelines on referring to information already filed with the CER.

- If more than one mitigation measure is proposed as a possibility for any particular effect, provide the applicable criteria for selecting the mitigation to use, or describe how measures would be combined to mitigate against a single effect.
- If new mitigation measures are to be used, provide any test results or a technically-based rationale for their use and describe how their effectiveness will be evaluated.
- Ensure mitigation measures are appropriate for the scale of impacts predicted.
- If project effects cannot be avoided, mitigation must reduce or compensate for them.
- Where an applicant hires a third party to prepare its ESA, provide a statement committing to adopting and implementing all mitigation recommendations included in the ESA. Explain any mitigation recommendations not adopted and provide alternative approaches, as appropriate.
- Identify the conditions of approvals or permits required by other regulatory bodies related to the mitigation of environmental or socio-economic effects.

2. Ensure that commitments about mitigative measures will be communicated to field staff for implementation through an Environmental Protection Plan (EPP). An EPP might be simple and concise for smaller, less complex projects but for certain projects (see guidance below), the Commission may require a comprehensive EPP. An EPP must include all environmental commitments specific to the project and include or cross-reference other plans and programs relied on. Describe any plans or programs that may be used to mitigate potential effects (e.g., waste management plans, invasive species plans, horizontal directional drill contingency plans, heritage resource discovery contingency plans, etc.).

3. Describe plans and measures to address potential effects of accidents and malfunctions during construction and operation of the project (see guidance under Identification and Analysis of Effects, Accidents and Malfunctions in section A.2.6). Under the OPR and associated guidance material, companies are required to have a Security Management Program and an Emergency Management Program (see section 3.3). These programs must be submitted or referenced for each application.

Guidance – Mitigation Measures

Mitigation measures are:

- developed during a project's feasibility study;
- developed during project design;
- defined in the project plan;
- refined as the ESA progresses and the project's predicted environmental and socio-economic effects become more certain; and
- may be standard or project-specific measures.

The identification and analysis of effects and mitigation measures may be presented together.

Mitigation Options

At the application stage of the proposed project, many mitigation measures may still be tentative, subject to further detailed design and to site-specific environmental conditions. For these cases, the ESA must describe:

- the different mitigative options available and being considered; and
- the criteria that would be used for selecting the actual mitigation to be implemented.

Including the options and selection criteria for contingency measures in an EPP may avoid having to submit variance applications to the CER if changes in field conditions require use of construction alternatives.

FYI – Reminder...

In some cases, the proposed route or site, route segments, facility design or construction methods may themselves be forms of environmental mitigation when compared to alternative routing, design or construction methods. This may be demonstrated in the application's discussion of alternatives (see section 4.2.2 and section A.2.3) by:

- identifying which design features and construction methods are considered to be mitigation;
- identifying any alternatives that were considered to these features or methods and the proposed routing; and
- providing a comparative analysis of the mitigation measures considered.

Construction Methods

An applicant must justify its proposed construction method and why this method is the best alternative. Applicants should consider construction methods that minimize environmental and socio-economic effects while allowing for safe and efficient installation of a pipeline. For example, low impact pipelining uses a narrower strip of land to excavate the trench, install the pipe, compact the subsoil and replace the topsoil all in one continuous operation. This method has been effective in minimizing adverse impact on agricultural land, forested land and sensitive habitats, such as native prairie. When using this method, topsoil disturbance is reduced, with stripping just slightly wider than the trench. Once the pipeline is lowered into place, the subsoil is returned to the trench and mechanically compacted in layers. The topsoil is then replaced over the levelled trench and land is immediately available for production.

The applicability of low impact pipelining methods will vary according to pipe diameter, topography, and other project-specific factors. However, the principles of minimizing disturbance to the land and optimizing construction efficiencies typically result in lesser environmental effects.

Additionally, avoiding instream construction across navigable waterways outside of seasonally dry and frozen conditions can result in less impact to navigation and navigation safety.

Environmental Protection Plan (EPP)

Although the CER expects an EPP to be prepared for all projects, the size and scope of an EPP will vary. An EPP is specific to a project or activity and is a tool to communicate a company's environmental protection procedures and mitigation measures to employees, contractors, and regulators. The purpose of an EPP is to document and communicate all project-specific environmental commitments made by an applicant and the associated mitigation measures in a clear and user-friendly format.

The Commission may request the EPP to be filed during the examination of an application, or as a condition of approval to be complied with before construction. The CER may expect a comprehensive EPP to be filed under the following circumstances:

- when the applicant does not have up-to-date company manuals on file with the CER that document its environmental protection procedures;
- if site-specific or project-specific mitigation or protection measures are provided by the applicant as commitments to avoid or address predicted adverse environmental effects in the application; or
- if the application and assessment process is lengthy or complex, and environmental protection measures and commitments are contained in several different places or documents. (e.g., responses to information requests).

A comprehensive EPP is typically required for larger facility applications under sections 183 or 214 of the CER Act. In these circumstances, the CER encourages companies to submit a draft EPP containing all preliminary environmental protection and mitigation measures with their application to assist the Commission in assessing the application. Should the project be approved, the Commission often requires the company to file an updated EPP before starting construction.

When preparing its EPP, an applicant should consider:

- identifying specific goals for protecting environmental elements and addressing socio-economic elements;
- describing the environmental protection objective for each goal, and providing mitigative options to meet those objectives based on site-specific conditions; and
- providing decision-making criteria for choosing which measures and procedures to implement and under what circumstances for each objective.

Draft EPP

If a draft EPP is filed with the application, it should contain:

- the purpose of the EPP, a summary of the project with a map, and a description of how environmental compliance would be met for the project;
- the resource-specific mitigation to be applied for the project, and the general environmental protection measures for each phase of construction;
- (or reference) relevant construction specifications and drawings to execute environmental mitigation measures, and the corresponding environmental alignment sheets;
- (or cross-reference) other more detailed plans as applicable (e.g., waste management plan, emergency and security management plans, contingency plans, and other element-specific management plans and programs);
- the assignment of accountabilities and responsibilities for carrying out practices and procedures, making criteria-based decisions and confirming compliance with the Environmental Protection Program (required by the OPR); and
- a table of contacts for reporting environmental incidents as required by other regulators (and the OPR).

Final EPP

A final comprehensive EPP must:

- include all items required in a draft EPP;
- if relevant, include an amendment or concordance table detailing changes from the draft to final version of the EPP;
- incorporate all environmental commitments made during the CER application assessment process, including all requirements set out in permits, orders, certificates, or any other authorizations;
- include a copy of any Commission discussion or assessment of environmental matters as set out in or attached to the CER certificate or order;
- include additional requirements as a result of season-specific field surveys conducted before construction;
- include the GPS locations for environmentally-sensitive areas identified in the surveys; and

- include updated environmental alignment sheets summarizing all pertinent environmental issues and the corresponding mitigation measures that will be implemented during construction.

Variances to the EPP

It is the responsibility of the company to apply to the CER for variances to the commitments made in the application, in the application assessment process or as required in the project approval conditions. It is therefore of benefit to the applicant to incorporate decision making criteria for choosing which measures and procedures to implement and under what circumstances. Where this is done, there may be sufficient flexibility to respond to changes that result in the field without filing a variance application.

Further information about variation applications can be obtained from the CER Operations Project Manager assigned to the project or activity.

Waste Management Plan

A waste management plan for the control of contaminated and non-contaminated waste from the project is required. The plan must describe the purpose of the plan, the types of waste anticipated, the resulting prevention and mitigation measures to be applied to manage that waste, and how any relevant reporting requirements will be met. The plan must also include a reporting structure, contact list and reference to other applicable legislation.

Mitigation for Potential Effects of Accidents and Malfunctions

Describe how the Company's programs, plans and manuals, required under the OPR, interact to prevent and mitigate potential accidents, malfunctions and their potential effects. There may also be project-specific plans and commitments an applicant should consider as part of its mitigation of potential effects of accidents and malfunctions. As noted in section 3.3, these must also be incorporated into a company's programs as appropriate.

Specifically, applicants must consider the following when preparing their application. The CER recognizes that some of this information may not be available until following regulatory approval if granted. Further, some of the following may be described on an applicant's publicly available website within its Emergency Management Program discussion as required by Order MO-002-2017 Compelling Publication of Emergency Management Program Information on Company Websites [Filing A81701]. If an applicant wants to rely on this information as part of the regulatory proceeding record, it should ensure that the information is accessible without a subscription or password, file a copy of the information with the CER, and comply with applicable rules of procedure and procedural directions for the proceeding.

As appropriate, applicants should provide a description of how the applicant has considered or will consider the following as relevant.

- relevant regulatory instruments such as Order MO-006-2016 [Filing A79720] regarding publication of emergency procedures manuals on company websites, sections 32 to 35 of the OPR, and incident notification and reporting requirements;
- project-specific response planning measures such as geographic response plans, response times including response in difficult to access areas and in adverse weather conditions, and the use and availability of models;

- specific mitigation related to the potential fate and behaviour of the product;
- personnel and response equipment available and their capabilities and limitations;
- responder health and safety;
- public safety through notification and evacuation planning or other means;
- training and exercises to inform response planning including training or funding arrangements with first responders and other organizations;
- coordination of company emergency response plans with relevant federal, provincial, municipal and Indigenous Nation emergency response plans and coordination of responding agencies within the incident management system;
- mutual aid agreements in place in the event that the incident exceeds company resources and how these resources would be cascaded in;
- volunteer management during an incident;
- development of a waste management plan as it pertains to waste generated during an emergency response; and
- financial liability and compensation mechanisms in place as required by regulation or through company commitments.

A.2.6.3 Evaluation of Significance

Filing Requirements – Evaluation of Significance

1. After taking into account any appropriate mitigation measures, identify any remaining residual effects from the project.
2. Describe the methods and criteria used to determine the significance of adverse effects, including defining the point at which any particular effect on a valued component is considered “significant”.
3. Evaluate the significance of residual adverse environmental and socio-economic effects against the defined criteria.
4. Evaluate the likelihood of significant, residual adverse environmental and socio-economic effects occurring and substantiate the conclusions made.

Guidance – Applicant’s Evaluation of Significance

Evaluating environmental and socio-economic effects consists of assessing:

- whether the effects are adverse;
- whether the adverse effects are significant; and
- whether the significant adverse effects are likely.

A common way for an applicant to assess project effects is to compare the quality of the existing environment with the predicted quality of the environment if the project is approved and built. The direction of change to the environment may be adverse, neutral or beneficial.

The following criteria may be useful in assessing the significance of a project’s adverse effects:

- magnitude;
- duration;
- frequency;
- geographic extent;
- ecological context; and
- reversibility or degree of permanence.

In applying these criteria to each residual effect, an applicant must define each criteria and the range considered within each criteria. To help evaluate the significance of a particular effect and define the point at which it becomes “significant", consider providing rating attributes (e.g., low / moderate / high) for each significance criteria and defining the range of each attribute. An applicant must also describe how each criterion or combination of criteria was used to reach the applicant’s significance conclusion.

Definitions for rating criteria are expected to be quantitative and based on standards, guidelines, objectives or other established and accepted ecological thresholds. In the absence of any such references or regulatory guidance, or where these are not quantitative (e.g., it may not be appropriate to set thresholds to determine “acceptable levels of change”, in relation to all socio-economic effects), then rating attribute definitions must be qualitative and based on available research literature. Applicants must also consider the level and nature of concerns raised by the public and address issues of concern to Indigenous Peoples potentially affected by the project.

The significance of adverse effects could also be assessed by comparing effects to conformity requirements within approved land use plans or conducting a quantitative risk assessment.

Where professional judgement is used to determine the significance of adverse effects, the extent of reliance on professional judgement must be described and rationale for the extent of the reliance must be provided. An applicant’s ESA must provide an evaluation of the likelihood and significance of any adverse environmental effects, for consideration by the Commission.

Assessing the likelihood of significant adverse effects must be based on the probability of occurrence and state the level of scientific uncertainty. If a qualitative determination of the likelihood of significant adverse effects is used, provide a clear rationale and supporting information.

A.2.7 Cumulative Effects Assessment

Goal

The application must include information about the interactions between predicted residual environmental and socio-economic effects of the project and effects from other projects or activities that have been or will be carried out. This information must provide enough detail to:

- identify and analyze predicted cumulative environmental and socio-economic effects;
- identify proposed mitigation measures to protect the environment and address socio-economic effects, and to analyze their effectiveness; and

- evaluate the significance of any predicted cumulative effects.

A.2.7.1 Scoping and Analysis of Cumulative Effects

Filing Requirements – Scoping and Analysis of Cumulative Effects

1. Identify the valued components for which residual effects are predicted, and describe and justify the methods used to predict any residual effects.

FYI – Additional Information...

Both significant and non-significant residual effects of a project may contribute to cumulative effects and must be considered. Residual effects are those effects remaining after implementing the applicant's mitigation measures. If the applicant can clearly demonstrate that no residual effects are predicted, further analysis of cumulative effects is not required.

2. For each valued component where residual effects have been identified, describe and justify the spatial and temporal boundaries used to assess the potential cumulative effects.
3. Identify other physical facilities or activities that have been or will be carried out within the identified spatial and temporal boundaries for the cumulative effects assessment.
4. Identify whether the effects of those physical facilities or activities that have been or will be carried out would be likely to produce effects on the valued components within the identified spatial and temporal boundaries.
5. Where other physical facilities or activities may affect the valued components for which residual effects from the applicant's proposed project are predicted, continue the cumulative effects assessment, as follows:

    - consider the various components, phases and activities associated with the applicant's project that could interact with other physical facilities or activities;
    - provide a description of the extent of the cumulative effects on valued components;
    - where professional knowledge or experience is cited, explain the extent to which professional knowledge or experience was relied upon and justify how the resulting conclusions or decisions were reached.

Guidance – Scoping and Analysis of Cumulative Effects

Cumulative Effects Assessment

Assessing cumulative effects typically requires the same method of analysis as described in the project-specific effects assessment. As discussed in subsections A.2.3 to A.2.6., the baseline information, project description and project-specific mitigation measures already captured in the application must be provided in enough detail to characterize the extent of the residual effects of the project.

Section A.2.6, Table A-2, and Table A-3 outline the type of information required for a project-specific effects assessment. Although the tables also make specific note of information required for a cumulative effects assessment for valued components, all information requirements contained in the tables should be evaluated, as appropriate, as a guide for applicants in completing a cumulative effects assessment.

A cumulative effects assessment differs from a conventional project-specific effects assessment in that it typically includes:

- larger geographic study areas;
- longer time frames;
- environmental and socio-economic effects associated with physical facilities or activities that may not be directly related to the applied for project (e.g., upstream or downstream facilities not within the CER's jurisdiction, a proposed highway project or residential sub-division in the study area, ongoing forestry or agricultural activities); and
- spatial boundaries that are generally not constrained by jurisdictional boundaries.

The level of effort and scale of the cumulative effects assessment should be appropriate to:

- the nature and context of the project under assessment;
- its potential residual effects; and
- the environmental and socio-economic setting (e.g., an increased level of detail may be required when rapid or intensive development of the region has occurred or is anticipated, or particular environmental or socio-economic sensitivities or risks are involved, such as significant Indigenous traditional use).

Applicants should also consult the CEA Agency's Operational Policy Statement – Assessing Cumulative Environmental Effects under the *Canadian Environmental Assessment Act*, 2012.

Other Physical Facilities or Activities

Provide clear reasoning, with supporting rationale, for selecting the other existing and future physical facilities or activities to be included within the cumulative effects assessment. When identifying other physical facilities or activities, include those physical facilities or activities likely to take place as opposed to those not reasonably foreseeable or hypothetical.

Consideration of other physical facilities or activities that have been or will be carried out within the defined spatial and temporal boundaries must, at minimum, include:

- existing projects and activities;
- those physical facilities or activities for which formal plans or applications have been made or are likely to occur; and
- other related project or activity development assumptions that support and are consistent with the long-term economic or financial assumptions (section A.3) and engineering assumptions (section A.1) made in the application, even if formal plans or applications have not yet been made.

The Courts have said that the decisions of responsible authorities are not required to "consider fanciful projects by imagined parties producing purely hypothetical effects"[6]. However, the Commission does have discretion to consider future development scenarios if it is reasonable to

[6] Bow Valley Naturalists Society v. Canada (Minister of Canadian Heritage), [2001] F.C.J. No. 18 (F.C.A.) at para. 75

anticipate that the applied for project could contribute to the potential cumulative effects resulting from such future development (i.e., if the economic feasibility of the applied for project is contingent upon the future development). The extent to which an applicant must consider the effects associated with other future physical facilities and activities and the associated depth of analysis will depend upon the relative contribution of the applied for project to the predicted cumulative effects.

Where intensive or expansive development of the region is occurring or anticipated, details regarding the flexibility of project-specific mitigation and monitoring strategies become particularly important and should also be provided with the application to demonstrate the ability of the applicant to adapt its plans in the future should the resulting cumulative effects differ from those predicted (further Filing Requirements and Guidance for project related monitoring are provided in section A.2.8 below).

The CER recognizes that an applicant's depth of analysis in assessing the effects associated with other future physical facilities and activities will depend on the feasibility and practicality of assessing the effects associated with those facilities and activities. For example, future effects associated with projects not within the direct control of the applicant and for which there is limited information, or which are still in early planning stages, are inherently more challenging to assess. Despite this, an applicant should use the best available information or undertake additional work to assess these potential effects. Any uncertainties associated with the information used and any assumptions or limitations associated with the analysis must be explained.

A.2.7.2 Mitigation Measures for Cumulative Effects

Filing Requirements – Mitigation Measures for Cumulative Effects

1. Describe the general and specific mitigation measures, beyond project-specific mitigation already considered, that are technically and economically feasible to address any cumulative effects.

    - If appropriate, provide any additional mitigation measures being considered as alternatives to the preferred cumulative effects-specific measures (e.g., adaptive or contingency measures).
    - If more than one mitigation measure is available for any particular cumulative effect, then provide the criteria that would be applied to select the mitigation to use (e.g., for the application of contingency plans).
    - If new or unproven mitigation measures are to be used, provide any test results or a technically-based rationale for their use and describe how their effectiveness would be evaluated.
    - Indicate the likelihood of success in reducing or avoiding cumulative effects by the application of the mitigation measures identified.

Guidance – Mitigation Measures for Cumulative Effects

Mitigation of cumulative effects may include broader-scale planning measures or initiatives to reduce interactions and effects from multiple projects or activities. Potentially effective mitigation of cumulative effects may not be within the direct control of, or undertaken by, the applicant. For example, operators may have cooperation plans in place to prevent simultaneous occurrence of

activities or projects, or multiple operators may cooperatively make use of existing disturbed areas to prevent new disturbances. Further, regional-level multi-stakeholder planning initiatives may also be evaluated as a means to mitigate cumulative effects. Where such measures or initiatives are in place, an applicant should clearly explain why the identified mitigation would be appropriate to mitigate any cumulative effects. If the mitigation is not within the direct control of the applicant, it should state who would implement the mitigation and how that responsible party intends to monitor implementation of the mitigation.

Various forms of compensation (e.g., habitat offsets) should also be considered as part of an applicant's proposed mitigation, as appropriate.

If monitoring or research programs are identified as a means to adaptively manage cumulative effects, the applicant should explicitly identify how those programs will be used to avoid or reduce effects (i.e., which management actions will be triggered when certain ecological or socio-economic effects are identified, or thresholds reached).

A.2.7.3 Applicant's Evaluation of Significance of Cumulative Effects

Filing Requirements – Applicant's Evaluation of Significance of Cumulative Effects

1. After taking into account any appropriate mitigation measures for cumulative effects, identify the remaining residual cumulative effects.
2. Describe the methods and criteria used to determine the significance of remaining adverse cumulative effects, including defining the point at which each identified cumulative effect on a valued component is considered "significant".
3. Evaluate the significance of adverse residual cumulative effects against the defined criteria. If the total cumulative effect on a given valued component is considered significant, describe the incremental increase in total cumulative effects caused by the project.
4. Evaluate the likelihood of significant, residual adverse cumulative environmental and socio-economic effects occurring and substantiate the conclusions made.

Guidance – Applicant's Evaluation of Significance of Cumulative Effects

Refer to section A.2.6 for guidance on evaluating the likelihood and significance of adverse residual environmental and socio-economic effects on a project-specific basis. The key difference between determining the significance of project-specific effects versus cumulative effects is the consideration of other physical facilities and activities. The evaluation of significance must focus on the total cumulative effect that may be created from all physical facilities and activities considered in combination with the proposed project. The definition of significance must be clearly explained and take into account local, regional and federal policy and management objectives (e.g., recovery strategies, action plans, management plans and land-use plans) and thresholds.

A.2.8 Inspection, Monitoring, and Follow-up

Goal

The application describes the inspection, monitoring and follow-up plans and programs that will be in place to prevent, identify, and address potentially adverse environmental effects over the life of the project.

Filing Requirements

1. Describe inspection plans to ensure compliance with biophysical and socio-economic commitments, consistent with sections 48, 53, and 54 of the OPR. Inspection plans must be sufficiently detailed to demonstrate adequacy and effectiveness and must:

    - identify those positions accountable and responsible for monitoring and ensuring environmental compliance, and confirm they are independent of the contractor, as required by sections 53 and 54 of the OPR;
    - reference inspection procedures, and describe the accountability and reporting structure for environmental inspectors; and
    - describe minimum qualifications and experience, including training requirements of individuals who will be undertaking inspection and monitoring responsibilities, as required by sections 46 and 54 of the OPR.

2. Describe the surveillance and monitoring program for the protection of the pipeline, the public and the environment as required by section 39 of the OPR. The monitoring program must be sufficiently detailed to demonstrate its adequacy and effectiveness and must:

    - include methods for:

        - identifying and tracking environmental and socio-economic issues;
        - resolving any environmental and socio-economic issues specific to the project, including any sampling programs or site-specific investigations as appropriate; and
        - monitoring the effectiveness of mitigation and reclamation, based on established reclamation criteria (see requirements of individual elements in Table A-2) as well as the applicant's performance measures and targets for each mitigation measure;
        - the frequency or schedule for implementing the procedures listed above; and
        - the criteria for assigning specific monitoring procedures to environmental and socio-economic issues;

3. Consider any particular elements in the Application that are of greater concern and evaluate the need for a more in-depth monitoring program for those elements.

Guidance

The CER recognizes three categories of verification conducted by the applicant. These apply both during and upon completion of construction through the life of the facility:

- Inspections to confirm both implementation of commitments made during the application process and fulfillment of CER-approval conditions to promote safety, security and environmental protection;
- Monitoring to confirm if mitigation objectives for a specific project, program, or the continued operation of the project have been met; and

- Identify and address any potential short-term and long-term issues or effects experienced, but not predicted.

A more rigorous type of monitoring program to confirm the effectiveness of an element-specific program may be appropriate when:

- the project or activity is contributing to regional issues of concern;
- the project involves new or unproven technology or is not routine in nature;
- the project involves uncertain effects;
- the project involves new or unproven mitigation measures whose effectiveness is uncertain;
- a familiar or routine project is proposed in a new or unfamiliar environmental and socio-economic setting.

A condition on the project certificate or order may be imposed to require the applicant to file post-construction monitoring reports after the completion of construction. The time period for required reporting can vary, but typically ranges from one to five years following the commencement of project operations. Projects requiring a longer period of time to reach reclamation goals (e.g., work in areas difficult to revegetate, such as native prairie) or requiring an in-depth, element-specific program may be required to submit monitoring reports of greater scientific rigour or over a longer time period.

- For IA Act designated physical activities, follow-up on identified elements or issues of concern to:
    - verify the accuracy of the environmental assessment; and
    - determine the effectiveness of any measures taken to mitigate the adverse effects of the project.

Follow-up would generally be an in-depth, scientifically rigorous program.

Revisions to Applicant Plans and Programs

The CER encourages applicants to use its current and relevant plans and programs to support the inspection, monitoring and follow-up components of its application. If these plans or programs have been previously filed with the CER, provide the document title, version number, latest revision date, date of filing and the CER file number. Refer to section 1.6 for more information regarding these documents. If a project is approved, applicants must file any updates required to incorporate the approved project.

FYI – Reminder...

Filing Requirements for an effects assessment are described in section A.2.5 and section A.2.6.

Table A-1 in section A.2.4 provides examples of the circumstances and interactions that lead to the need for detailed information and considers all phases of an applied for project (construction, operation, maintenance and abandonment), including the potential for accidents and malfunctions during each phase.

Table A-2 was designed to assist applicants in identifying the required information specific to individual biophysical elements. The elements and circumstances described in the tables are not exhaustive.

Applicants must adapt the framework below to logically present the detail and analysis of their particular projects. Where project effects may overlap different element categories, it may be appropriate to define a more suitable or specific element or valued component. For example, where there is a risk of soil contamination reaching groundwater, then "groundwater contamination" might be an appropriate element to assess. This could more accurately focus on the issue of concern, avoid repeating information under both soils and water categories, and provide a more focused assessment.

Table A-2: Filing Requirements for Biophysical Elements

Physical and Meteorological Environment	
Filing Requirements	**Guidance**
1. Describe the general topography of the project area and any particular physical features crossed by the project or which may affect the project. 2. Identify any areas of ground instability. 3. Identify areas of potential wind or water erosion. 4. Describe the local and regional climate. Also identify the potential for extreme weather events, such as wind, precipitation, and temperature extremes. 5. Identify any areas with potential for acid-generating rock and describe the effects if exposed as a result of the project. 6. Identify and describe any areas with permafrost conditions. 7. Describe how local or regional physical and meteorological conditions could affect the project, including how changing conditions may affect the project over the lifetime of the project.	This section provides information on factors or elements of importance that may affect project design. Give special consideration to the following components which may be either directly or indirectly affected by the project or which may impact project design: • unstable slopes or other unfavourable geotechnical conditions, including areas with the potential for landslides, mudflows, slumping, subsidence; • seismicity; • flooding, migrating watercourses and eroding banks; • extreme weather events; • seasonal and peak flow regime at stream crossings; • river ice processes and potential ice jams; • permafrost; and • areas with acid rock. Local and regional climate should be described in terms of the range of its variability and the severity (i.e., frequency and duration of maximums and minimums) as well as its averages.

	In regions with the potential for extreme weather events, describe and assess these events in terms of:
	
	• their frequency and intensity; and
	• how any applicable design standards reduce the potential threat (also see the Filing Requirements contained in section A.1.2 Engineering Design Principles).
	
	Meteorological impacts must be considered in the context of:
	
	• climate variability and trends (including changes in extreme weather events);
	• winter ground conditions; and
	• areas where warming trends may influence hydrologic conditions, such as runoff.
	
	In areas where permafrost regimes exist:
	
	• identify and quantify permafrost conditions, including:
	  ○ discontinuous permafrost;
	  ○ high ice content soils;
	  ○ thaw-sensitive slopes; and
	  ○ riparian areas.
	• develop baselines for:
	  ○ near-surface ground temperatures;
	  ○ active-layer conditions;
	  ○ slope stability; and
	  ○ movement potential on the approaches to river crossings.
	• describe how any changes in the permafrost regime may affect the project over its lifetime.

Soil and Soil Productivity	
Filing Requirements	**Guidance**

1. Describe general soil characteristics and the current level of disturbance associated with soils. 2. For agricultural lands or forested lands with agricultural capability, describe: • the soil classification, including the order, group, family, series and type of soil prior to construction, and quantify the soil classification; • the productivity of land and the type of agricultural resource; • the soil types in the study area highly susceptible to: 1. wind and water erosion; 2. soil compaction; and 3. loss of structure and tilth; • any other soil types needing specific management or mitigation measures; and • soil conservation and protection measures. 3. Describe any contaminants of concern potentially associated with the project that may affect soil. 4. Describe the historical land use and the potential for contamination of soils or sediments. Describe any known or suspected soil contamination within the study area that could be re-suspended, released or otherwise disturbed as a result of the project. 5. If sediments or soils are contaminated, describe the applicable regulatory standards and all remediation, mitigation and monitoring measures that will be undertaken. 6. Describe the criteria for evaluating reclamation success. Explain how this evaluation would be undertaken and	Soil profile descriptions for dominant soil types must consider: • soil horizons; • thickness of horizons; • texture; • colour; • chemical properties; and • organic content. The soils assessment and mitigative plan must consider: • soil salvage techniques (e.g., soil stripping, including proposed width, grubbing, and alternative soil handling techniques); • soil separation maintenance measures; • erosion control measures, including drawings of proposed techniques, particularly at watercourse crossings; • wind erosion and wet soil shutdown procedures; and • soil compaction prevention measures. Where there is a potential for human health effects, see Table A-3. Where soil contamination is suspected or may be present, consider the guidance provided in the Canadian Standards Association's (CSA) Z768-01 and Z769-00 standards for Phase I and II Environmental Site Assessments. In addition, the CER's Remediation Process Guide (2020) may also be of value. Additional guidance: • The Canadian Soil Information Service (under Agriculture and Agri-Food Canada) provides access to soils information, including the Canadian System of Soil Classification, which describes current accepted standards for soil classification in Canada.

documented. Reclamation measures could include: • erosion control, other than re-vegetation; • soil reclamation; • drainage tile repair; • soil compaction alleviation; and • soil salinity reduction. 7. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	• The Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (including Soil Quality).
Vegetation	
Filing Requirements	**Guidance**
1. For lands where vegetation may be affected by the project, describe: • the pre-project diversity, relative abundance and distribution of vegetation species and communities of ecological, economic or human importance (e.g., traditional use, tame pasture, native prairie, wetland or old growth); • the conservation status applicable to any particular species or communities; • the current level of disturbance associated with vegetation; and • the amount, merchantability and location of any merchantable timber to be removed during project construction. 2. Describe any weed infestations and other invasive and introduced species of concern. 3. Describe re-vegetation procedures to be implemented as part of the project, including:	The description of vegetated lands does not include industrial lands. Vegetation community descriptions must apply the most relevant and up to date ecological classification or mapping system. Reference any available provincial or territorial inventory and mapping standards and guidelines. Engagement with potentially affected Indigenous Nations may provide further information. Conservation status (provincial and COSEWIC) of ecological communities as well as plant species must be noted. Explain how communities in the study area were delineated (i.e., existing mapping, remote sensing interpretation, or field mapping). Indicate the date of spatial data collection. Provide justification if field work was not carried out. The effects analysis on vegetation must consider:

- re-vegetation techniques and the locations where they would be implemented;
- seed mixes to be used, their application rates, and the locations for their application, or the criteria for determining these specifications, and a discussion of the use of seed certificates;
- any fertilizers to be used, their application rates and locations, or the criteria for determining these specifications; and
- contingency planting and seeding plans that include a description of any species of vegetation to be replanted, the locations for replanting, or the criteria for determining these specifications.

4. Describe the condition(s) to which the RoW and temporary work space will be reclaimed and maintained once construction has been completed. Explain the extent to which the ROW needs to be kept cleared or could be left to grow and provide the criteria relied on to determine this.

5. Describe the vegetation standards and controls to be implemented while constructing and operating the project. Describe any integrated vegetation management program, including:

- the criteria and circumstances for applying chemical, biological or mechanical control methods;
- the selection of plant species to be kept and planted to promote naturally low growing plant communities; and
- the use of herbicides, tree growth regulators or other chemicals, their application rates and protocols.

6. Describe criteria for evaluating reclamation success related to vegetation

- change in vegetation cover caused by the project;
- alternatives to clearing the entire ROW (include options and decision criteria for retaining vegetation in order to break lines of sight, control access, maintain wildlife corridors, maintain habitat connectivity, reduce fragmentation and reducing overall cumulative effects);
- weed control measures (e.g., prevention, treatment);
- avoidance of any sensitive or rare communities and important individuals (e.g., vegetation important to wildlife); and
- seed mixes and replanting for re-vegetation purposes.

Native and indigenous species adapted to local conditions should be used when the goal of revegetation is to naturalize or regenerate the area.

Vegetation control programs, including the frequency of work, monitoring and inspection of RoW vegetation conditions, and control procedures, must consider:

- the nature of the vegetation cover (e.g., species mix, characteristics) occurring along the RoW, and variations over different biogeographical areas;
- the promotion or inhibition of different plant communities (naturally low or slow growing plant species versus predominantly tall or fast growing species); and
- the application of other integrated vegetation management practices.

If herbicides or other chemicals may be used, consider:

- the criteria for their use;
- the concentrations, rates and methods of application;

and how this evaluation would be undertaken and documented. 7. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	• their specificity and potential adverse environmental effects; and • referring to material safety data sheets.
Water Quality and Quantity	
Filing Requirements	**Guidance**
1. Provide a project-specific water use assessment identifying and describing the water resources and the quality of those resources potentially affected by the project, including: any need for water withdrawn from local waterbodies, the purpose, the quantities required, the waterbodies used as a supply source, the flow rate or volume of water available in the waterbody and how and where waste water would be discharged. 2. Describe any interactions between the project and groundwater. Where there is an interaction: • describe any potential changes in groundwater flows and any subsequent effects from the changes; and • identify any wells nearby, providing criteria for the spatial boundary considered, and describe the potential for well water quantity and quality to be affected. 3. Describe any contaminants potentially associated with the project that may affect water quality. 4. Describe mitigation for any potential effects on surface-, ground- or well-water quantity and quality, including the need for any specific pre- and post-construction monitoring.	The effects analysis regarding quality or quantity of ground or surface water (e.g., lakes, watercourses, riparian areas, or man-made water bodies or structures) must consider: • withdrawal or discharge needs for the proposed project; and • any potential inter-basin transfers that might introduce undesirable biota. In addition to meeting the requirements of section 24 of the OPR by obtaining permits for hydrostatic testing, applicants must consider hydrostatic test water needs and management in its environmental effects assessment. Where the final details of hydrostatic testing have yet to be confirmed, applicants must still identify their expected needs, options available to them and the criteria they intend to apply to ensure protection of water resources. Applicants may identify any alternative sources of water (e.g., recycled or brackish water) for the project. Also consider the potential to reuse test water from section to section for pipe testing. Project interactions with groundwater may result from crossing a shallow water table or specific project activities (e.g., blasting). In these cases, consider the spatial extent and depth levels as well as water characteristics (e.g., salinity). Consider and describe whether the project may affect evaporation and transpiration rates and

5. Describe any applicable water management plans. 6. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	therefore affect surface land use, especially in agricultural areas. If there is potential for contaminants affecting water resources, consider sediment or groundwater sampling for assessment of contaminants. Where there is a potential for human health effects, see Table A-3. Additional guidance: • The CCME's Canadian Environmental Quality Guidelines (including Water Quality). • Health Canada's Drinking Water Quality.
Fish and Fish Habitat	
Filing Requirements	**Guidance**
1. Identify fish species and their life stages in the study area, as well as their contribution to local fisheries or to ecological importance. 2. Describe the seasonal ranges, seasonal sensitive periods, habitat use, movements, and general population status of fish species identified above. 3. Identify any fisheries avoidance measures, mitigation, or other measures to protect and enhance fish and fish habitat, including protected areas in and near the study area. 4. Identify the need for an authorization under paragraph 35(2) (b) of the *Fisheries Act* for the harmful alteration, disruption of fish habitat. 5. Describe, in detail, sensitive areas and sensitive habitats, including wetlands and riparian habitat. 6. Where fish-bearing watercourses would not be crossed by trenchless methods,	Applicants should work with the relevant provincial or territorial fisheries authorities to identify issues and appropriate mitigative measures, and where appropriate, Indigenous Nations. Where an authorization is required from DFO, outline any appropriate offsetting and monitoring. Where effects on fish and fish habitat may affect human health, see Table A-3. DFO has several guidance documents and information pieces that could be useful in dealing with fish and fish habitat. Please refer to the DFO National website for applicable materials and guidance.

either describe and justify the watercourse-crossing techniques to be used or the criteria for determining the techniques proposed for each watercourse crossing. 7. Describe the timing of any instream work, including restricted activity periods and windows. 8. Describe the conditions to which the water crossings and riparian zones would be reclaimed and maintained once construction has been completed. 9. Describe criteria for evaluating success of reclamation of fish-bearing water bodies and their banks, as well as riparian areas. Describe how and when this evaluation would be undertaken and documented. 10. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	
Wetlands	
Filing Requirements	**Guidance**
1. Quantify, delineate and describe wetlands in the study area in the context of: • wetland class, ecological community type and conservation status; • abundance at local, regional and provincial scales; • distribution; and • current level of disturbance. 2. Identify and describe wetland capacities to perform hydrological, water quality, habitat or other ecological functions. 3. Identify a regional study area of sufficient size to capture effects on wetlands within the larger drainage area. Include wetlands	Wetlands include bogs, fens, marshes, swamps and shallow waters as defined in the Canadian Wetland Classification System (National Wetlands Working Group, 1997). The effects analysis regarding wetlands must consider any potential loss of wetland function. A higher level of assessment may be required for provincially or territorially significant wetlands, for wetlands of significance to Indigenous Peoples or for features of significance. Discuss any applicable provincial or territorial classification schemes, and protection policies and requirements.

located outside of the local study area that may be affected by hydrological changes as a result of cumulative effects. 4. Detail the efforts to be taken to avoid impacting wetlands, mitigation, monitoring and any applicable compensation measures, for potentially affected wetlands. 5. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	Applicants should consult with Environment and Climate Change Canada regarding mitigation for wetlands. Additional guidance: Useful information sources accessible from Environment and Climate Change Canada include: • The Federal Policy on Wetland Conservation; • The Federal Policy on Wetland Conservation Implementation Guide; • Wetland Ecological Functional Assessment: An Overview of Approaches; and • Wetlands Environmental Assessment Guideline.
Wildlife and Wildlife Habitat	
Filing Requirements	**Guidance**
1. Identify wildlife species of ecological, economic or human importance in the study area. Also describe the: • diversity, distribution and location; • abundance and population status; • life cycle; • seasonal ranges (e.g., migration); • habitat requirements; • movements (e.g., wildlife corridors); and • sensitive periods (e.g., seasonal, diurnal and nocturnal). 2. For the wildlife identified above, describe and quantify the habitat type, including its: • function; • location; • suitability;	The identification and description of wildlife presence in the area must include, but not be limited to, resident, temporary (e.g., migratory), unique species or populations, and umbrella and keystone species. Mammals, birds, amphibians, reptiles and invertebrates may be relevant. The identification and description of wildlife of human importance must also consider consumptive (e.g., hunting, harvesting) and non-consumptive (e.g., bird-watching) values, as well as species of importance to potentially affected Indigenous Nations. The identification, description and quantification of habitat must include, but not be limited to: • breeding or rutting grounds, • nesting and denning sites; • wintering grounds; • hibernation or hibernaculum sites; • moulting, migration and staging areas;

• structure; • diversity; • relative use; and • abundance as it exists prior to project construction. 3. Describe any lands in the study area that might constitute sensitive areas and habitat for wildlife, or nearby environmentally-significant areas, such as National Parks, areas of natural or scientific interest, Migratory Bird Sanctuaries or other important bird areas or sanctuaries, National Wildlife Areas, or World Biosphere Reserves. 4. Identify wildlife management areas and established or proposed sanctuaries or other areas in or near the study area. 5. Describe the levels of disturbance currently affecting wildlife and habitat, such as habitat fragmentation and the extent of human access and use. 6. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate. 7. Further, with respect to cumulative effects: • Describe the cumulative disturbance footprint of proposed and future physical facilities and activities within known key habitats (e.g., migration corridors, denning or calving areas, feeding areas) and distribution of that footprint, quantitatively where possible. Describe the effects on the connectivity of key habitats. • Describe the cumulative effects on wildlife that could occur as a result of the timing of the proposed project in	• movement corridors; • mineral licks; and • trees important to wildlife (e.g., bat trees). Other sensitive areas and habitats include: • wetlands (and associated upland habitats); • riparian habitat; • forest interior habitat; • old growth; and • grasslands / native prairie. The effects analysis regarding wildlife and wildlife habitat must consider factors such as: • ecosystem functions; • the timing of construction activities in relation to sensitive periods for wildlife (e.g., migratory bird breeding season); • varying degrees of wildlife habitat loss; • changes in habitat quality (e.g., fragmentation, edge effects); • changes in human access; • disturbance to wildlife, including sensory (light and noise) disturbance from operation of above-ground facilities, including on birds and nocturnal species; and, • direct and indirect wildlife mortality. Ensure spatial boundaries for the study area and assessment are specific to the valued component and ecologically defensible (e.g., winter range boundaries, migration routes, fawning and calving areas). When calculating the disturbance footprint or linear disturbance density, remember to include the total avoidance area experienced by the valued component, which may be considerably larger than the physical footprint itself depending on the valued component. Temporal considerations are also relevant. For example, effects on wildlife from noise and

combination with other physical facilities or activities.
• Describe how cumulative changes in access would affect wildlife mortality risk or habitat quantity and quality.
• Compare the cumulative effect on each species assessed to any available species-specific thresholds or policies, and indicate to what degree a threshold is approached or exceeded.
	sensory disturbance, water usage or divergence, or waste stream emissions to air, land or water can be exacerbated by having a number of projects taking place simultaneously (or continuously over more than one season) in a watershed, breeding area or migratory pathway.
	
	Increased access to project areas, whether temporary or permanent, affects wildlife habitat, populations, distribution and interactions. Access may include not only human access but increased ease of access by predators or competing species.
	
	Examples of tools that may be used to assess cumulative effects on valued components include scenario-based models, spatial analysis using a geographic information system, and landscape level indicators of change (e.g., linear density) (see the CEA Agency's Cumulative Effects Assessment Practitioners' Guide, 1999).
	
	Applicants should note the requirements of applicable provincial, territorial and federal regulations (e.g., the federal *Migratory Birds Regulations*).
	
	Additional guidance:
	
	Environment and Climate Change Canada and its Divisions (e.g., Canadian Wildlife Service) are sources of relevant information on:
	
	• wildlife and wildlife habitat;
	• Acts and Regulations, including the *Migratory Birds Convention Act*, 1994;
	• locations of National Wildlife Areas and Migratory Bird Sanctuaries; and
	• environmental assessment guides, including:
	  ○ Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada; and
	  ○ relevant Canadian Wildlife Service Technical Report Series publications.

	The Important Bird Areas database may be accessed through Bird Studies Canada or Nature Canada.
Species at Risk or Species of Special Status	
Filing Requirements	**Guidance**

1. For effects related to wildlife, fish and plant species at risk or species of special status:
 	
• identify the species and their status;
• provide the appropriate references to the SARA Schedules, or Committee on the Status of Endangered Wildlife in Canada (COSEWIC), provincial or territorial listing;
• identify their habitat(s), including any critical habitat(s) identified in a Recovery Strategy or an Action Plan listed on the SARA public registry;
• determine whether the species, its habitat, or the residences of those species could be affected by project activities;
  ○ if not, explain why not;
  ○ if yes, describe any predicted effects;
  ○ identify any critical timing windows (e.g., denning, rutting or spawning), setback distances, or other restrictions;
  ○ identify if a provincial, territorial or federal (e.g., SARA) permit will be required; and
  ○ identify any proposed mitigative measures (e.g., improved project design or construction timing or compensation plan).
 	
2. Where the project may result in the destruction of any part of the critical habitat of a wildlife species listed on Schedule 1 of SARA, describe:
	Many rare species (e.g., endangered or threatened species under the SARA) are at risk in large part as a result of the past cumulative effects on their population or habitat. Their inclusion on official lists reflects their status as having crossed a threshold requiring special actions for their protection and recovery. Any additional residual effects have the potential to further contribute to this existing situation. Consequently, proposed projects must preferably avoid, or fully mitigate or compensate for any residual project contribution to cumulative effects.
	
	Status refers to designation under federal, provincial or territorial legislation or guidelines (e.g., extirpated, endangered, threatened or of special concern).
	
	Consult the SARA public registry for Schedule 1, the List of Wildlife Species at Risk, and Schedules 2 and 3 of SARA. Consult with Environment and Climate Change Canada (Canadian Wildlife Service), Fisheries and Oceans Canada, or Parks Canada on species at risk or their critical habitat in the study area.
	
	Where critical habitat has not been defined, field studies may be necessary, as well as identifying, with federal, provincial or territorial authorities, mitigation measures that effectively avoid sensitive interaction periods or activities. Field surveys may be useful in identifying mitigation needs or locally common populations not substantially affected.
	
	For species at risk listed on Schedule 1 of SARA, the proposed mitigative measures must be consistent with any applicable Recovery

• any discussions with the appropriate Federal Authority (Environment and Climate Change Canada, Fisheries and Oceans Canada, Parks Canada) on obtaining a permit under section 73 of the SARA; • all reasonable alternatives to the project that would avoid the effect on the species' critical habitat; and • all feasible measures that will be taken to eliminate the effect of the work or activity on the species' critical habitat. 3. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical works or activities and expand on the matters described above as appropriate.	Strategies and Action Plans listed on the SARA public registry. Consult with appropriate provincial or territorial authorities on species listed under those jurisdictions. For species at risk with no recovery strategy or action plan, applicants should use the best available information, such as COSEWIC status reports, draft recovery strategies or action plans, existing plans or input from the recovery team and specific advice (or management plans) from any jurisdiction that manages the species. Describe how measures to avoid, fully mitigate or compensate project effects would align with the best available information. When relying on compensation plans, describe the details of engagement with relevant experts, the options available, and criteria for selecting the options relied on, and for assessing the adequacy (sufficiency and validity) of any compensation measures or offsets. Applicants should conduct a thorough inventory of all areas potentially affected by the project that are expected to support any species at risk or species of special status. Consult federal, provincial, territorial, regional and local databases (e.g., conservation data centres) and any other information associated with species of special status. Species data in existing databases may not be systematically collected or updated and, therefore, a database search may not be sufficient to support a conclusion about the absence of a species in the area. Additional guidance, including direction to relevant federal, provincial, territorial and other related information, is available from the COSEWIC and Environment and Climate Change Canada.
Air Emissions	
Filing Requirements	**Guidance**

1. Provide an assessment of air emissions from construction equipment and vehicular traffic. 2. For pipeline and gas plant projects that result or may result in an increase in air emissions during operations or maintenance: • describe local and regional meteorological conditions, including a description and rationale for the meteorological data used in any quantitative assessment; • describe existing background concentrations in the surrounding airshed and the methodology used to determine baseline concentrations; • describe the source characteristics (e.g., point emissions, area sources, flaring and incineration emissions, and fugitive sources); • provide a quantitative assessment of any potential air emissions (e.g., nitrogen dioxide, hydrogen sulphide, sulphur dioxide, ozone, volatile organic compounds, benzene, toluene, ethylbenzene and xylene (BTEX), mercaptans and particulate matter), including fugitive emissions generated by activities and systems associated with the project. Also provide a comparison to all relevant regulatory ambient air quality criteria (both provincial and federal); • identify maximum discharge limits associated with the project including assumptions, inputs and any variables associated with the maximum discharge; • describe the mitigation measures and how they would be implemented to protect the local airshed conditions; and • describe participation in national or regional air emission tracking and reporting programs, or provide rationale why participation is not required.	The effects assessment must consider: • how volumes and modeled changes to ground-level and receptor-level concentrations during normal operations, maintenance, upsets, start-ups, shut-downs, and worst-case scenarios comply with federal, provincial and local objectives; • compliance with the CCME National Emission Guideline for Stationary Combustion Turbines, details of the leak detection and repair program in place if fugitive VOC emissions are a concern for the project, and the CCME Environmental Guidelines for Controlling Emissions of VOCs from Above Ground Storage Tanks; • compliance with applicable provincial regulations on benzene emissions from processing facilities or CAPP's Best Management Practice: Control of Benzene Emissions from Glycol Dehydrators; • compliance with applicable provincial flaring, incinerating and venting guidelines and regulations or CAPP's Best Management Practice: Facility Flare Reduction; • compliance with applicable provincial smoke management / venting guidelines and smoke control regulations; and • reporting requirements to the National Pollutant Release Inventory. Where ecological and human health effects are predicted to result from the project, see Table A-3. Monitoring and follow-up must consider: • requirements under federal (CCME) as well as provincial guidelines and permit requirements; validation of predictions in the event of possible exceedances of ambient air quality objectives; • uncertainty or absence of data to model or assess air quality; and • public concerns about air quality.

3. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	Where the project may result in an increase in GHG emissions during construction, operations or maintenance, see the GHG emissions section.
GHG Emissions and Climate Change	
Filing Requirements	**Guidance**
1. **Direct emissions** – for project construction and for project operations (including maintenance): • describe the sources of GHG emissions; • provide a quantitative estimate of total GHG emissions and net GHG emissions [a]; • identify and explain which climate change laws, regulations and policies apply to the GHG emissions and to what extent; • provide a comparison of the project's predicted GHG emissions to total national sector-based GHG emissions, total provincial GHG emissions, and to Canada's GHG reduction targets; and • describe the mitigation measures to be implemented for GHG emissions reduction and for continuous improvement of GHG emissions management. 2. **Construction and operational emissions from acquired energy sources** – if there are electrical or other energy requirements for project construction and operations that are not considered in the direct emissions assessment: • describe those requirements and the expected sources of that energy; • provide a quantitative estimate of GHG emissions associated with the	The guidance around GHG Emissions and Climate Change considers the principles and objectives of Environment and Climate Change Canada's (ECCC) *Strategic Assessment of Climate Change*. As noted in section A.2.4, the level of detail and analysis should be commensurate with the nature of the project and the potential for effects. A scalable approach, as provided in Figures A.2-2 to A.2-5, should inform the level of information an applicant may file. Refer to section A.2.9 for further guidance around whether a project's effects could hinder or contribute to the Government of Canada's ability to meet climate change commitments. **Quantification of direct and acquired GHG emissions** The GHG emissions assessment should, as appropriate: • include point and area sources, such as combustion (e.g. flaring and incineration), venting (e.g. planned depressurizations) and anticipated fugitive sources; • include other sources, including emissions from changes in land use and burning of vegetation during land clearing; • include a description and justification of the methods (including emission factors used) and assumptions used in the estimation; and • clarify the approach to determine avoided domestic emissions, including what project-specific mitigation and offset measures have been accounted for in the quantitative

generation of those energy requirements; • identify and explain which climate change laws, regulations and policies apply to those GHG emissions and to what extent; and • provide the GHG emissions as a percentage of total national sector-based emissions and as a percentage of total provincial GHG emissions. 3. **Credible plan to achieve net zero** – for projects with a lifetime beyond 2050, applications must include a credible plan to achieve net-zero emissions by 2050 (hereafter referred to as "net-zero plan"). 4. **Climate change resilience** – provide an assessment of the resilience of the project to climate change impacts. 5. **Impact of the project on Canada's efforts to reduce GHG emissions** – discuss how the project may hinder or contribute to Canada's efforts to reduce GHG emissions.	estimate of GHG emissions, and describe the criteria used for this. In addition, quantitative estimates should, as appropriate: • be provided as quantities of individual gases and in terms of carbon dioxide equivalent for both project GHG emissions and net GHG emissions; • for project operations, be provided on an absolute annual basis and in emissions intensity terms; and • describe engineering design assumptions to reduce or avoid uncontrolled methane releases during operations and maintenance activities. Applicants may consider using appropriate industry-wide estimates for their assessment of GHG emissions, insofar as these are currently up to date. If project operations depend on electrical or other energy requirements (e.g., to supply power for facility stations) that must be acquired from a third party or other corporate entity, these must be included in the project's GHG emissions assessment. For guidance on avoided emissions and offset measures, see ECCC's Draft technical guide related to the strategic assessment of climate change: *Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment*. **Mitigation measures (including offset measures) and net-zero plan** Discussion of mitigation measures, including the use of best available technologies/best environmental practices, should include the alternative means considered to reduce GHG emissions and justification for why the preferred option was chosen, such as technical and economic feasibility. Offset measures (such as carbon dioxide captured and stored, corporate-level initiatives,

	and use of offset credits) should generally be considered a last resort when reasonable efforts at avoiding and mitigating the GHG emissions have been exhausted. The appropriateness and potential of offsets for residual emissions, including timing and implementation of these offsets, should be explained. Further mitigation can also be included in the net-zero plan. All projects will be assumed to have lifetimes beyond 2050, unless otherwise demonstrated. A net-zero plan should be based on the principles outlined in the SACC and related Technical Guides. The plan should include: • actions that will be taken to achieve net-zero emissions by 2050, including an implementation schedule for the actions (such as a timeline for technology upgrades or replacements); • a description of the approach to determining avoided emissions and using offset credits; • any additional project-specific mitigation and offset measures that will be implemented for the project to achieve net-zero emissions by 2050; • a description of the process that will be followed in order to make the decisions and investments needed; • supporting information and/or assumptions for each action or measure, including a discussion of factors such as associated costs, potential impacts on tolls, technical challenges, risks, infrastructure requirements, and any other relevant considerations; and • periodic project milestones that demonstrate GHG reductions towards net-zero. The periodic milestones should incorporate assumptions and emissions intensities and account for evolving regulatory measures and policies.

	Consistent with the requirements contained in section 3.4 of this manual around engagement, applicants should engage with potentially affected Indigenous Peoples on the GHG mitigation and net-zero plans. **Climate resilience** The GHG emissions assessment should undertake an assessment of the resilience of the project to climate change impacts. This assessment should, as appropriate, include: • methods used to identify, evaluate and manage the climate risks that could affect the project itself and the surrounding environment; and • the project's vulnerabilities to climate change, for example impacts of extreme weather events on project infrastructure, on water quality and availability, etc. See Table A-2 Physical and Meteorological Environment for further requirements and guidance. **Impact of the project on Canada's efforts to reduce GHG emissions** The discussion of laws, regulations, and policies should cover those at relevant regional, provincial, federal, and international levels. Examples might include targets, carbon pricing, mandatory reductions or offsets, reporting programs, and evolving guidance on best-in-class GHG emissions performance by oil and gas projects. In assessing the extent of emissions, consider relevant national sector-based totals as well as provincial emissions for comparison. Regional airshed-based studies may also be applicable. Discuss how the project's predicted GHG emissions impact Canada's GHG reduction targets. **Reference documents** The GHG emissions assessment should consider relevant estimating, reporting, and other applicable technical guidance, such as:

	• ECCC's *Strategic Assessment of Climate Change* and related Technical Guides (as released and updated)
	• ECCC's Reporting greenhouse gas emissions
	• Regulations Respecting Reduction in the Release of Methane and Certain Volatile Organic Compounds (Upstream Oil and Gas Sector) (SOR/2018-66)
	• ECCC's sector-specific tools to calculate emissions
	• The Natural Gas Combustion Emissions Calculator produced by Canadian Energy Partnership for Environmental Innovation (CEPEI)
	• Impact Assessment Agency of Canada's Policy Context: Considering Environmental Obligations and Commitments in Respect of Climate Change under the *Impact Assessment Act*
	• The GHG Protocol Corporate Accounting and Reporting Standard (World Resources Institute and World Business Council for Sustainable Development)
	• International Standards Organization standards:
	  ○ ISO-14064:1
	  ○ ISO-14064:2
	Provincial estimating and reporting guidance could also be followed, such as:
	• Alberta Energy Regulator Manual 015: Estimating Methane Emissions (2020)
	• Update of Equipment Component and Fugitive Emission Factors for Alberta Upstream Oil and Gas (prepared by Clearstone)
	• Greenpath 2016 Alberta Fugitive and Vented Emissions Inventory Study

GHG Emissions and Climate Change – Assessment of Upstream GHG Emissions	
Filing Requirements	**Guidance**
1. **Upstream GHG emissions** • Applicants should indicate if the upstream emissions associated with the project are likely to be above or below the applicable threshold presented in section 3.2 of ECCC's *Strategic Assessment of Climate Change.* • If above the identified threshold, provide an assessment of upstream GHG emissions based on currently available ECCC guidance.	In accordance with the SACC guidance, the assessment of upstream GHG emissions should consist of two parts: • Part A should provide a quantitative estimate based on the project's maximum throughput (or additional throughput for expansion or replacement projects). • Part B should provide a qualitative discussion of the extent to which those upstream emissions may (or may not) be incremental as a result of the project. This assessment should describe the methodology, data, and assumptions used and explain how the assessment is consistent with the supply forecast and analysis of the need for the project. The net-zero plan does not apply to upstream GHG emissions, even if an upstream GHG emissions assessment is conducted. Further guidance and practice for upstream GHG emissions estimation can be found in ECCC's *Strategic Assessment of Climate Change* and related Technical Guides (as released and updated).
Acoustic Environment	
Filing Requirements	**Guidance**
1. Where there is a public concern associated with an increase in noise levels during construction, provide a noise impact assessment, including an overview of the concerns. 2. For projects that result or may result in an increase in noise emissions during operations or maintenance (e.g., pump stations, compressor stations, gas plants):	The effects assessment must consider: • any effects from inaudible noise (e.g., low frequency noise); and • the effects of noise on wildlife. Noise management plans must consider: • notification and scheduling of maintenance activities, such as blowdowns and

• describe existing ambient noise levels in the area, including the methods and data sources used to determine the ambient levels; • identify the potentially affected receptors and permissible sound levels for each receptor; • quantify noise levels at appropriate distances from the facility (e.g., at edges of the RoW/facility and at the affected receptor) and describe the frequency, duration and character of noise; • provide the predicted sound levels from the project alone and predicted cumulative sound levels in combination with other existing and future physical facilities and activities in the area, including an assessment of low frequency noise; • describe engagement with regulators, stakeholders, community groups, landowners and Indigenous Nations about potential effects of the project on the acoustic environment; • identify and justify the applicable guidelines used to determine the significance of the effects of the predicted emissions associated with the project; • provide a noise management plan, including identification of noise sources, an assessment of current noise mitigation measures, performance effectiveness of noise control devices, best practices programs and continuous improvement programs; and • identify the need for a follow-up monitoring for the purposes of validation of the model or as a result of any concerns raised by the public. 3. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or	equipment venting during daylight hours; and • notification of nearby residences and local authorities of plans and procedures for preventing and managing noise. Where there is a potential for human health effects see Table A-3. Additional guidance: • AER's Directive 038: Noise Control • Alberta Utilities Commission's Rule 012 – Noise Control (AUC Rule 012) • BC Energy Regulator's British Columbia Noise Control Best Practices Guideline For projects in provinces with no guidelines, please refer to AER Directive 038 or AUC Rule 012, whichever is the most appropriate.

activities and expand on the matters described above as appropriate.	
Environmental Obligations	
Filing Requirements	**Guidance**
1. Provide a listing of Government of Canada environmental obligations that may potentially be relevant to the project. 2. Provide an appropriate summary or concordance table summarizing where in the application each of the Government of Canada environmental obligations identified and listed have been considered. 3. Where the environmental obligations are addressed in the application, this must be part of an appropriate assessment of potential effects and applicable mitigation. The assessment should include discussion of how the project may hinder or contribute to Canada's efforts to meet any relevant environmental obligations.	As noted in section A.2.4 Level of Detail, the depth of analysis should be commensurate with the nature of the project and the potential for effects. As noted in both the existing Filing Manual guidance on Engagement (section 3.4.2) and in the CER Early Engagement Guide, applicants should also consult with appropriate federal government agencies for assistance in identifying federal environmental obligations relevant to the project. • Canada's environmental obligations may cover a range of environmental issues and refer to the obligations of Canada in domestic and international law in relation to the protection of the natural environment. Environmental obligations are set out in domestic instruments such as federal legislation and regulations, with which compliance is a requirement. • In addition to obligations implemented in Canadian law and regulation, other domestic instruments developed to implement federal environmental obligations may include policy documents, plans, frameworks, and targets or quantitative goals. • Legal requirements, policy direction, plans, frameworks, and targets or quantitative goals will often be specific to a particular environmental issue and should inherently be covered in an applicant's environmental and socio-economic assessment. In the applicant's assessment of potential effects on any particular valued component, applicants should relate this to any relevant requirements or standards being met. From this, applicants should also identify any related Canadian environmental obligations.

	• The listing of environmental obligations may be organized by biophysical element or valued environmental component, or be organized by any other alternative method of categorization that is systematic in approach. Consider also including the associated domestic instruments. • Project routing, design features and proposed mitigation measures may limit or reduce the extent to which a project hinders Canada's ability to meet its environmental obligations. In some instances, they may also result in contributing to meeting those obligations. Example – the Federal Wetland Policy would typically be referenced and inform an applicant's environmental assessment of wetlands. In addition to the policy being considered in the assessment of project impacts on wetlands, it should also be cited in the listing of Government of Canada environmental obligations and the assessment should be referenced.
[a] Net GHG emissions = Direct GHG emissions + Acquired energy GHG emissions – Avoided domestic GHG emissions – Offset measures (see section 3 of SACC).	

Figure A.2-2: Scalable approach to climate change factor assessment

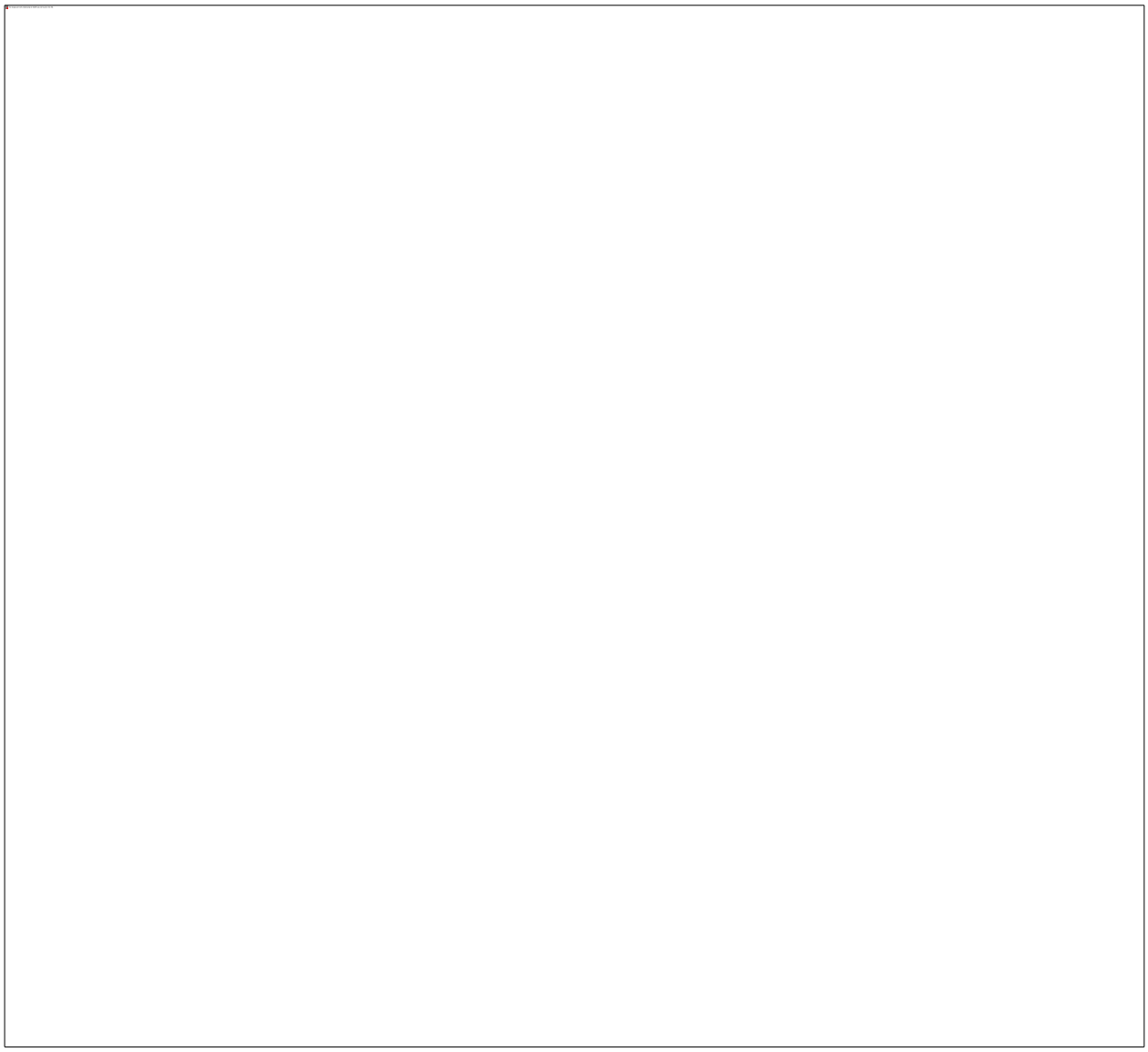


Figure A.2-3: Scalable approach – construction GHG emissions

Figure A.2-4: Scalable approach – operational GHG emissions

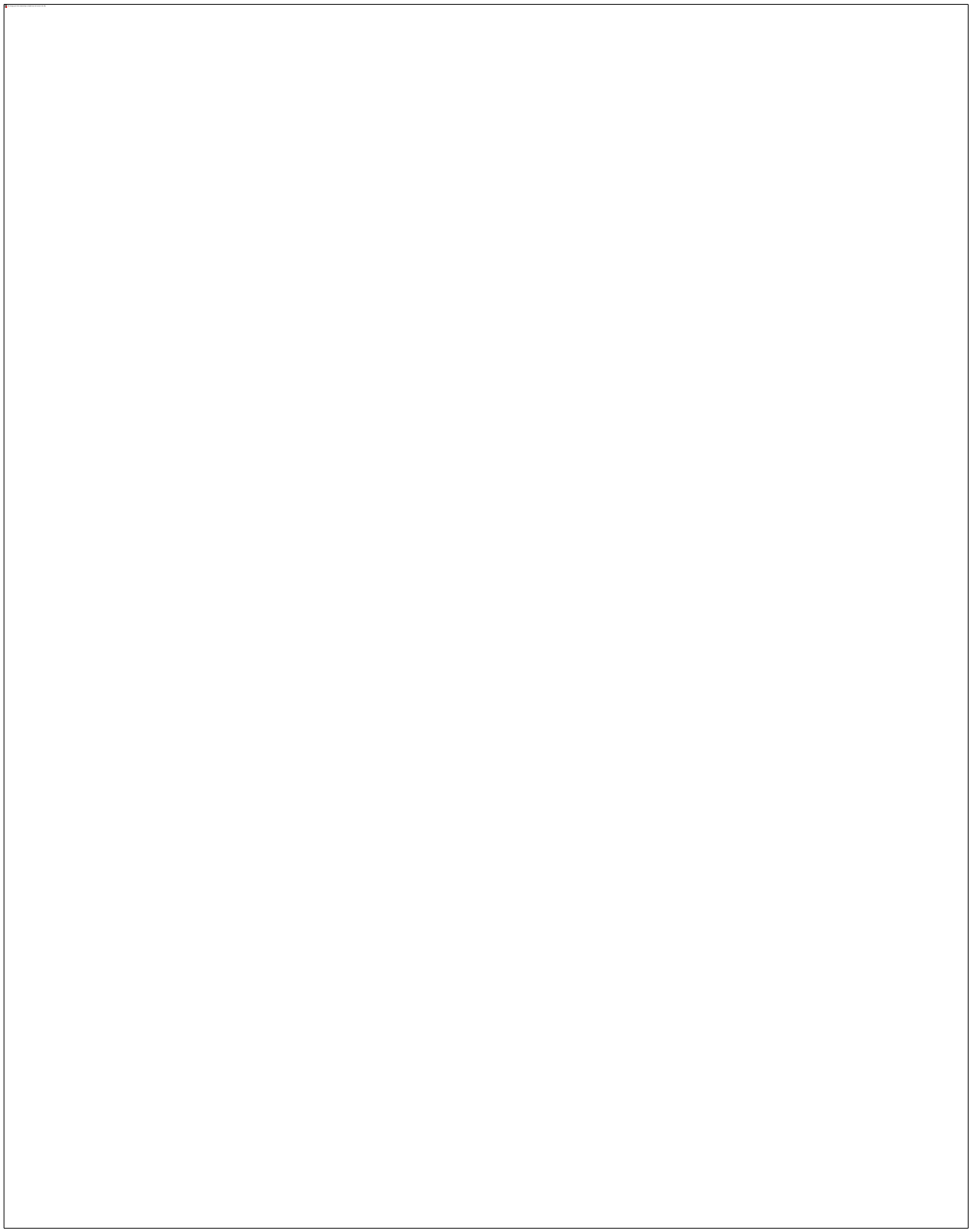
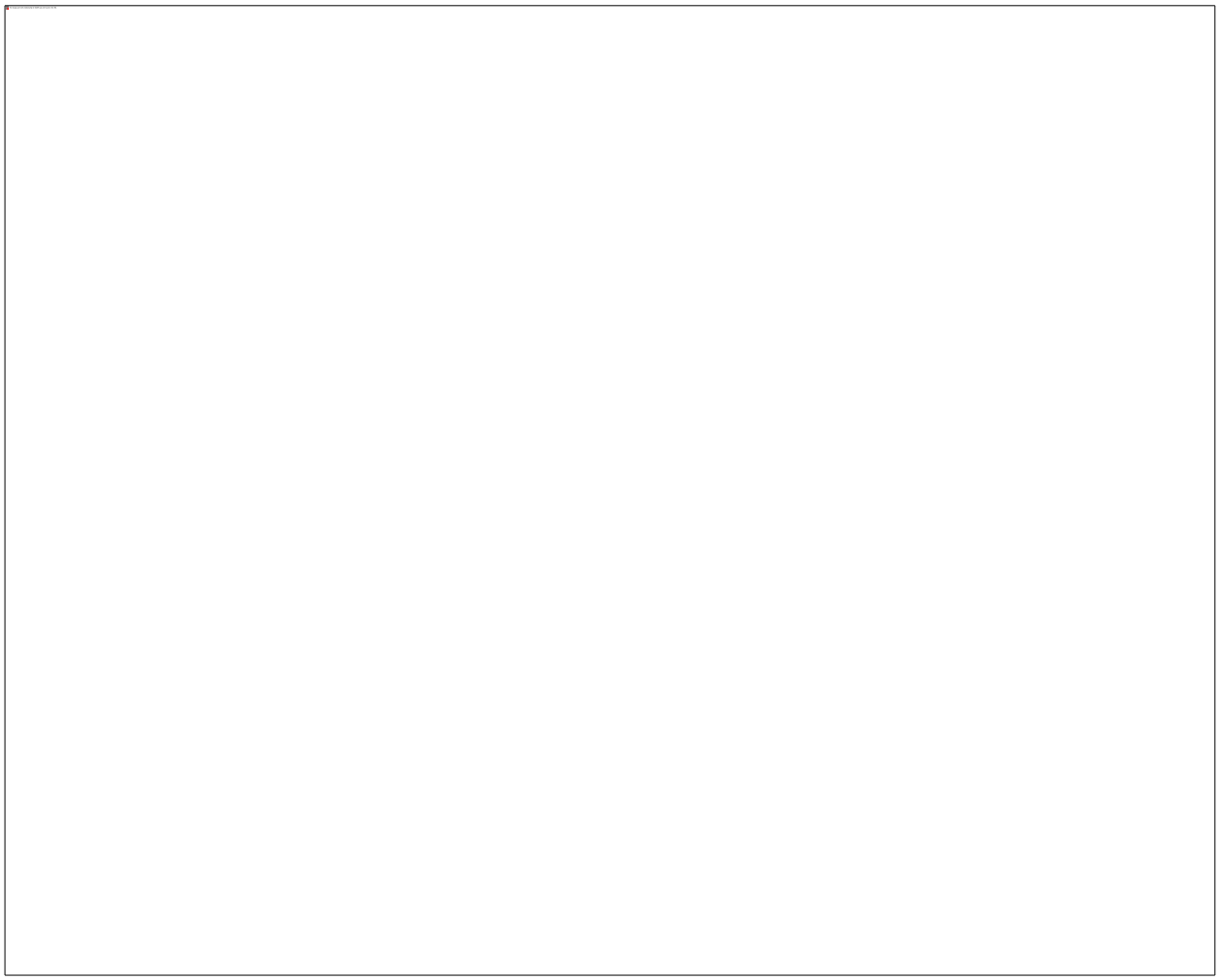


Figure A.2-5: Scalable approach – upstream GHG emissions



A.2.9 Supplemental Guidance on Greenhouse Gas Emissions and Climate Change

The GHG emissions and Climate Change factor is one of several factors that the Commission considers when making certain public interest decisions or recommendations for proposed projects. The information provided in an application and related submissions addressing the GHG emissions and climate change factor will support the Commission in determining the extent to which the effects of the project may hinder or contribute to Canada's climate change commitments.

The following sections provide additional context for applicants on GHG emissions and climate change assessments in relation to CER-regulated projects.

Considerations for assessing the effects of a project on the Government of Canada's climate change commitments

This guidance is intended to be considered along with other filing requirements and guidance in Guide A of this manual.

Key elements that the Commission may consider on a project's potential hindrance or contribution to Canada's climate change commitments include:

1. Magnitude of GHG emissions;
2. Mitigation measures for GHG emissions;
3. Applicability of relevant laws, regulations and policies;
4. Net-zero plan;
5. Impact of the project on Canada's efforts to reduce GHG emissions;
6. Climate change resilience; and
7. Upstream emissions.

The following sections expand on each element above. Guiding questions for each element are also provided.

1. Magnitude of GHG emissions

In assessing the magnitude of emissions, the Commission considers the sources of direct and acquired energy (purchased from a third-party) that would be expected throughout the entire lifecycle of a project. The potential GHG emission sources for a proposed project or activity will vary, depending on the type of facility and planned activities.

GHG emissions associated with **project construction** generally stem from sources such as operation of construction equipment, land-use change (e.g., clearing), and biomass burning. These sources illustrate some examples and could include other sources as well. Emissions from construction equipment are dependent on variables such as terrain complexity and season.

GHG emissions associated with **project operation** vary based on product carried, throughput capacity, individual design, and component counts. Line compression is typically the largest direct GHG emission source for natural gas pipeline projects, and operational emissions associated with natural gas pipeline projects are generally larger than those associated with operating oil pipeline projects (depending on the electrical grid drawn from). Other sources of operational emissions may include: maintenance and inspection activities (including aerial

patrols); additional process equipment (such as glycol heating boilers or onsite generators); and fugitive emissions from valves, connectors, pumps, and tanks. For facilities with electrically driven equipment (such as pumps on oil pipelines), GHG emissions could stem from onsite power generation (direct emissions) or energy purchased from a third-party source (indirect emissions).[7]

As explained in Table A-2 of this manual, applicants are expected to provide the methods and assumptions used to quantify project-related GHG emissions. Applicants are expected to use recent scientifically recognized emissions estimate equations and emission factors. Applicants are also encouraged to use the most current annually released ECCC's National Inventory Report's emission factors when calculating estimated vehicle and equipment emissions.

Applicants should provide a comparison of the project's predicted GHG emission intensity to the emissions intensity of projects similar in nature, scope, and scale. Applicants should also provide a comparison of the project's magnitude of predicted project emissions to national sector-based GHG emissions, total provincial GHG emissions, as well as to Canada's GHG reduction targets (discussed below).

Magnitude of GHG emissions: Guiding Questions that the Commission may consider in its assessment

- *Is the project likely to generate high, medium, or low volumes of GHG emissions during any phase of the project when compared to similar projects in nature, scope, and scale?*
- *How does the GHG emissions intensity for the proposed facility compare to projects similar in nature, scope, and scale?*
- *Are the methods, data sources, rationale for the chosen method, and assumptions to estimate the project emissions appropriate?*
- *How does the project's predicted emissions compare to national sector-based GHG emissions, total provincial GHG emissions, and to Canada's GHG reduction targets?*

2. *Mitigation measures for GHG emissions*

Applicants are expected to undertake a comprehensive assessment of the various mitigation measures and best available technologies and environmental practices to minimize GHG emissions in each phase of the lifecycle, from clearing through to abandonment. Considering potential mitigation measures early in the design and planning phase offers opportunities to identify and plan GHG reductions. For example, in a project application, an applicant may propose situating a project in a location that requires less biomass removal, or they may propose capturing or flaring natural gas instead of venting.

Efforts to mitigate GHG emissions continue to evolve and improve. As such, applicants are encouraged to include a discussion of alternative measures or means that were considered and the rationale for selecting or eliminating certain measures.

Where GHG emissions cannot be avoided or reduced, the additional measures above and beyond standard mitigation (i.e., offset measures) to further reduce GHG emissions, including carbon dioxide captured and stored, corporate-level initiatives, and use of offset credits, may be considered.

[7] Indirect GHG emissions associated with electricity generation may be subject to provincial regulation.

Section 5.1.4 of the SACC outlines information requirements for mitigation measures. Section 3 of the Draft technical guide related to the strategic assessment of climate change: *Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment* provides further details on principles and on how applicants can follow the best available technologies/best environmental practices determination process to mitigate the project's GHG emissions.

Mitigation Measures: Guiding Questions that the Commission may consider in its assessment

- *How were GHG emissions considered in the project design?*
- *What mitigation measures are proposed to avoid, reduce or capture GHG emissions from the project and how do these compare to current best practices?*
- *Were innovative approaches proposed for managing emissions over the life of the project?*
- *Are there any additional measures (e.g., offset measures) being implemented for the project?*

3. Applicability of relevant climate change laws, regulations, and policies

The Filing Manual sets out that applicants are expected to provide a list of the federal, provincial, or territorial GHG legislation, regulations, and policies that will apply to the project, and explain any implications for the project.

Given the rapidly evolving space of climate change policy within Canada and internationally, applicants are encouraged to plan for how further changes to laws, regulations, and policies may potentially impact the economic feasibility of a project. Potential risks of changes to the regulatory environment that could require adaptive management by the applicant could include a project's available supply, market demand, utilization, costs, and financing.

Relevant Climate Change Laws, Regulations, and Policies: Guiding Questions that the Commission may consider in its assessment

- *How are the applicable provincial or federal carbon pricing requirements (including reporting) being managed for the project?*
- *How have the potential risks associated with future changes to climate change laws, regulations, and policies been quantified and planned for? Are there adaptive management plans in place for these risks?*

4. Net-zero Plan

Unless clearly articulated in a project application, the Commission assumes that all new project applications will have a lifetime beyond 2050. As such, applicants are expected to provide a net-zero plan for projects beyond 2050. Both the SACC and the Filing Manual specify that applicants may submit either a project-specific or a corporate net-zero plan, depending on the nature, scope, and scale of the project.

The level of detail that the Commission expects in a net-zero plan will depend on the nature of the project. For example, a compressor station that has significant point source GHG emissions released continually over the operating life are likely to require a net-zero plan to explain how

the applicant will avoid, reduce, mitigate, or offset these emissions in either a stepwise or gradual manner by the year 2050. For projects where the primary GHG emission sources are driven by the system of which it is a part (such as maintenance inspections, aerial patrols) or are managed at a corporate level (such as compliance with a company-wide fugitive emission management program), adherence to a corporate plan for achieving net-zero emissions by 2050 may be more appropriate.

Section 5.3 of the SACC and section 3.5 of the ECCC's Draft Technical Guide Related to the Strategic Assessment of Climate Change: *Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment* provide further details on the principles, development, and contents of a net-zero plan. The plan will complement and be informed by the GHG mitigation measures planned by the applicant.

Net-zero plan: Guiding Questions that the Commission may consider in its assessment

- *What specific actions or measures will be undertaken to achieve net-zero emissions by 2050?*
- *What are the associated costs of implementing each action or measure; potential impacts on tolls, technical challenges, risks, infrastructure requirements, and any other relevant considerations?*
- *Has the applicant committed to providing periodic project milestones that demonstrate progress in GHG reductions towards net zero?*
- *How does the net-zero plan impact the economic feasibility of the project?*

5. Impact of the project on Canada's efforts to reduce GHG emissions

In recent years, there has been a substantial evolution in Canada's climate policy environment, shaping the future context for Canadian energy supply, demand, trade, and infrastructure. Among these commitments are the Paris Agreement, Canada's 2030 target, the goal of Canada achieving net-zero emissions by 2050[8], and other obligations. Given the magnitude of change required for Canada and the world to reach net-zero emissions by 2050, future policy, market, and technology changes will continue to shape energy in Canada over the next three decades. Examples of key developments include the 2016 Pan-Canadian Framework on Clean Growth and Climate Change, the *Canadian Net-Zero Emissions Accountability Act* (including the 2030 Emissions Reduction Plan.)[9], A Healthy Environment and a Healthy Economy, and Canada's National Adaptation Strategy.

The Commission recognizes that displacing high emission intensity projects with lower emission intensity projects or facilitating GHG removals can contribute to Canada's climate change commitments.

8 See Strategic Assessment of Climate Change.

9 For additional and updated information, please see ECCC's Canada's climate plans and targets - Canada.ca.

Impact of the project on Canada's efforts to reduce GHG emissions: Guiding Question that the Commission may consider in its assessment

- *Is the project contributing to the Government of Canada's ability to meet its commitments in respect of climate change by reducing or eliminating GHG emissions or by facilitating GHG removals?*

6. Climate change resilience

Applicants are expected to undertake an assessment of the resilience of the project to climate change impacts. The scope and scale of an assessment of a project's climate related-risks and development of a risk treatment plan should be tailored to the individual project, depending on the potential vulnerabilities and complexity of interactions.

The Draft technical guide related to the strategic assessment of climate change: *Assessing Climate Change Resilience* sets out an approach to assessing how a project is resilient to, and at risk from, both the current and future impacts of a changing climate.

Climate change resilience: Guiding Questions that the Commission may consider in its assessment

- *How is the project at risk from climate change impacts?*
- *Has the applicant considered the magnitude and probability of these climate-related risks and identified appropriate risk treatments and adaptive management measures (as necessary) in the project design?*

7. Upstream emissions

The Filing Manual sets out when applicants are required to provide an estimate of upstream emissions and the extent to which those emissions would be incremental as a result of the project. The SACC provides guidance on the thresholds for consideration of upstream emissions, and these thresholds are applied in the context of CER-regulated projects. Consideration of upstream emissions will typically include quantitative estimates of emissions, as well as a qualitative discussion about the incrementality of these emissions. The qualitative discussion provides context in which the project will be operating, and whether the estimated upstream emissions would occur with or without the project.

Upstream emission assessments may also be a key element in considering the overall cumulative effects of any proposed project. The Commission expects that the scope of the upstream assessment be consistent with the development assumptions that support a given project (see section A.2.7). Further, the Commission expects the assessment to be consistent with the long-term economic, financial, and engineering assumptions made in an application.

Sections 3.2 and 3.3 of the SACC outline information requirements for an upstream GHG emissions and uncertainty assessment. Further guidance on upstream GHG assessment is provided in section 5 of the Draft technical guide related to the strategic assessment of climate

change: *Guidance on quantification of net greenhouse gas (GHG) emissions, impact on carbon sinks, mitigation measures, net-zero plan and upstream GHG assessment*.

Upstream Emissions: Guiding Questions that the Commission may consider in its assessment

- *Are the project-related upstream emissions above the thresholds outlined in the SACC? If yes, did the applicant undertake a quantitative assessment of upstream GHG emissions associated with the project?*
- *Did the applicant follow the methodology outlined in ECCC's draft Technical Guides?*
- *Will the project result in incremental upstream GHG emissions? Has the applicant appropriately addressed the impact of cumulative and incremental emissions on Canada's climate change commitments?*
- *How have the potential risks associated with future changes to climate change laws, regulations, and policies applicable to upstream emissions been quantified and planned for?*

Decision making and conditions

The information contained in the application, and any additional information provided through the adjudicative process, will inform the Commission's assessment of the GHG emissions and climate change factor. The Commission may impose conditions related to this factor. These conditions would vary based on the scope, scale, and nature of projects under review. Conditions may refer to additional mitigation measures and other requirements to avoid or reduce a project's GHG emissions. Conditions may also include a reporting requirement in which the applicant would be expected to demonstrate progress toward implementing these mitigation measures as well as the plan for reaching net-zero emissions by 2050 (for projects with a lifetime beyond 2050).

FYI – Reminder...

Filing Requirements for an effects assessment are described in section A.2.5 and section A.2.6.

Table A-1 in section A.2.4 provides examples of the circumstances and interactions that lead to the need for detailed information and considers all phases of an applied for project (construction, operation, maintenance and abandonment), including the potential for accidents and malfunctions during each phase. Table A-3 was designed to assist Applicants in identifying detailed information needs specific to individual socio-economic elements. The elements and circumstances described in the table are not exhaustive.

Table A-3: Filing Requirements for Socio-economic Elements

GBA+ throughout

Both the adverse effects of the project, as well as project benefits, can impact people in different ways depending on a variety of identity factors, such as sex, gender, age, culture, Indigeneity, and ability. Gender-based analysis plus (GBA+) can help to consider such differences. In the context of assessing the effects of a proposed project, this includes asking questions such as:

- What are the relevant identity factors that might determine the extent to which someone is positively or negatively affected by the project?
- How are adverse effects and benefits of a project expected to vary according to these relevant identity factors?
- Are tailored mitigation measures available to address the expected differences in the impact of adverse effects and distribution of benefits?
- Are such measures practical for the project, and can effectiveness be monitored over time?

GBA+ should be applied when considering each of the socio-economic elements in the following tables. In addition, where project impacts may have specific or adverse effects on Indigenous women within potentially affected Indigenous Nations, these potential impacts and the measures proposed to mitigate such impacts should be discussed. Note that differing identity factors might be relevant within different elements – for example, the group of people that may be differentially affected by project impacts on resource use might differ from the group of people that may be differentially affected by project impacts on human health or project-related employment. Where any issues relating to the privacy of individuals are raised, or where information is considered confidential or is otherwise unavailable, a rationale for the approach taken should be provided.

Further discussion on GBA+ is available via the Women and Gender Equality Canada federal government website. Specific guidance on the application of GBA+ to impact assessments has been developed by IAAC and should also be consulted.

Human Occupancy and Resource Use	
Filing Requirements	**Guidance**
1. Describe the general patterns of human occupancy and resource use in the study area. 2. Describe the potential interactions of the project with local and regional human occupancy and resource development activities. Include effects the project may have on the maintenance of those activities and on the livelihood of local workers, business owners and operators. 3. Describe the goals of any applicable local or regional land use plans or local or regional development plans and the extent to which the project is aligned with such plans.	The assessment of potential impacts on human occupancy and resource use must evaluate: • rural and urban residential areas (includes both year-round and seasonally-occupied facilities), lands in a reserve within the meaning of subsection 2(1) of the *Indian Act*, Indigenous Nations and Indigenous traditional territories; • agricultural areas (including specialty crops, orchards and vineyards); • health and productivity of livestock;

4. Identify predicted effects of the project on the quality and quantity of ground or surface water used for domestic, commercial, agricultural or recreational uses. 5. Identify any predicted visual or other aesthetic effects of the project on existing land use in the study area. 6. Identify any predicted effects of the project on livestock health and productivity. 7. Describe any site specific and project wide mitigation to address identified effects. 8. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	• recreation and park areas (including local and provincial or territorial parks and recognized scenic areas); • lands under Parks Canada's jurisdiction, conservation areas, International Biological Program Sites or other ecological reserves or preserves; • industrial and commercial areas; • controlled or managed forest areas (including agreement forests and timber sales areas); • registered or recognized hunting, trapping or guiding areas and commercial and sport fishing areas; • water reserves and licences, and water supply sources or intakes for agricultural, industrial, commercial, residential and municipal users; and • transportation infrastructure, which, in addition to road and rail infrastructure, would also include navigable waterways. The project should be assessed for compatibility with local and regional land use and development plans. Where "multiple-use" is permitted, it should also be assessed for compatibility with existing uses. If there is a predicted effect on the use of traditional territory or potential or established treaty or Indigenous rights, refer to the Traditional Land and Resource Use element within this table. If there is a predicted effect on a biophysical component (e.g., Water Quality and Quantity, Acoustic Environment) that could affect Human Occupancy and Resource Use, refer to that biophysical component in Table A-2. If there is a predicted effect on visual or other aesthetic qualities, refer to the guidance under the Human Health element within this table.
Heritage Resources	

Filing Requirements	Guidance
1. Describe any known heritage resources in the study area. 2. Determine the potential for any undiscovered heritage resources in the study area. 3. Describe what contingency plans and field measures would be undertaken if a heritage resource is discovered during construction. 4. Provide copies of correspondence from provincial or territorial authorities responsible for heritage resources with comments on any heritage resource assessment and proposed mitigation measures. 5. Indicate whether the applicant would implement the recommendations of the provincial or territorial heritage resource authorities. 6. If a previous heritage resource assessment has been completed in the study area, a summary should be filed along with any additional mitigation measures specific to the applied for project. 7. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	Applicants must be aware of federal, provincial or territorial legislation or guidelines for identifying and protecting heritage resources. Applicants must engage with Indigenous Nations with concerns about heritage resources in the project area. Although lands may be previously disturbed, an archaeological and paleontological assessment may still be required. The heritage resources assessment must be completed by a qualified archaeologist or paleontologist and include details of the field methodology used in the study. Where there is potential for discovery of heritage resources during construction or operations activities, a heritage resources contingency plan must be submitted. The plan must state, at a minimum, who would be contacted and under what conditions work would stop and resume.
Traditional Land and Resource Use	
Filing Requirements	**Guidance**
1. Describe how lands and resources in the study area are currently used by Indigenous persons or communities for traditional purposes. 2. Identify the Indigenous persons or communities currently carrying out traditional land and resource use activities, the spatial	An assessment of impacts on current use of lands and resources for traditional purposes by Indigenous people is required for the ESA. Indigenous people may use lands for various traditional activities, such as hunting, fishing, trapping, berry picking and plant gathering for

and temporal extent of use and how the project could impact this use. 3. Describe all reasonable alternatives considered that would avoid the impact on the Indigenous traditional land and resource use considered during project development. 4. Describe all feasible measures that would be taken to mitigate the impact of the activity on Indigenous traditional land and resource use. 5. Describe the methodology used to collect the Indigenous traditional land and resource use information and provide a listing, and the rationale for the listing, of all Indigenous persons and communities contacted. 6. Demonstrate that those Indigenous persons and communities participating in collecting traditional use information have had the opportunity to review the information and proposed mitigation. Include any comments from the Indigenous participants on the information and proposed mitigation. 7. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	medicinal, cultural or household use, as well as cultural or spiritual ceremonies. In assessing the temporal aspects of traditional land and resource use, note the frequency, duration and seasonal aspects of each activity. In assessing the spatial aspects of traditional land and resource use, note that some activities could be site specific (e.g., berry-picking areas) but others may not (e.g., hunting may extend over a broad area and temporal considerations may be more relevant). Applicants must also refer to the assessment of the applicable biophysical element (wildlife and wildlife habitat, vegetation and fish and fish habitat) when considering traditional land and resource use. Where confidentiality of the traditional land and resource information is a concern, this information may be provided in the following manner (in order of preference): • a traditional land use study in which the information is provided using a system of data classification to protect the confidentiality of site-specific details; • a traditional land use study with site-specific information blacked out; or • a summary of the traditional land use study, including the methodology and proposed mitigation. Alternatively, applicants may ask permission to file the study confidentially, in accordance with the criteria set out in section 60 of the CER Act.
Social and Cultural Well-Being	
Filing Requirements	**Guidance**
1. Describe the socio-cultural setting of the study area, indicating the:	Socio-cultural effects on local communities may arise from various sources, including:

• predominant cultural communities and Indigenous Nations; • demographic features of the local population and workforce; and • prevalent socio-cultural concerns of residents, families and workers in the study area. 2. Provide an overview of the predicted socio-cultural effects on the local community from the project. 3. Describe the predicted interactions of project construction, operations, and maintenance workforces with the local community, residents and businesses. 4. Describe any mitigative measures to address identified effects. 5. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	• an increase in temporary or permanent residents to an area; • location of construction camps within, beside or near local communities; • a significant increase to, or uneven distribution of, personal income at the community level; and • disruptions to cultural traditions and institutions. The potential effects from the sources listed above may include: • stresses on community, family and household cohesion; • alcohol and substance abuse; or • illegal or other potentially disruptive activities. The identification and evaluation of potential effects must: • be conducted at the community level rather than the individual level to protect the privacy of individuals; and • include engagement with local, regional and Indigenous social and cultural service providers, agencies and institutions as appropriate. The local community could include: • more than one inhabited area within the study area; and • more than one cultural group within an inhabited area.
Human Health	
Filing Requirements	**Guidance**
1. Describe and quantify: • the project-related activities, toxic components, nuisances and environmental	Applicants must consider the potential for effects to human health to determine the level of assessment required. For example, where the project may cause nuisance-related

changes that could potentially be sources of adverse human health effects; and • the potential human receptors of these effects. 2. Where the project could create air, water or noise emissions or effluent discharge levels that meet local, provincial, territorial or federal guidelines (e.g., CCME Guidelines, AER Directive 038, AUC Rule 012), yet public concerns regarding human health effects have been raised, provide a description of the public concerns and how they would be addressed. 3. Where the project could create health effects, summarize how these effects would be mitigated. 4. Where it is reasonable to assume there could be a potentially high or significant risk to human health from the project, provide a human health risk assessment. 5. Provide a description of any predicted visual or other aesthetic effects of the project on residents or other potentially affected persons or users in the study area. 6. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	health concerns, applicants must summarize the effect, outline mitigation measures to minimize the effect (e.g., regular road watering to reduce dust), and give appropriate details of analytical procedures used (e.g., a source and release assessment, exposure assessment, dose response assessment or risk characterization). Quantification of sources of health effects and potential human receptors must consider: • ambient conditions; • distances to edge of RoW, nearest residences, schools and other public institutions; • modeling and prediction of environmental conditions during construction and operations at the above distances; and • distance to where predicted conditions would meet any applicable standards and populations within that radius. Identifying and evaluating potential human health effects must include engagement with local, regional, Indigenous, provincial or territorial, and federal health service providers, agencies and institutions, as appropriate. Applicants must consider the potential effects of the project on the health of susceptible groups, such as: • local residents, landowners and tenants; • the elderly and children; and • others who may regularly use the study area such as recreationalists, hunters and trappers. Applicants must also consider how the project may affect the health of those using traditional areas for hunting, trapping, fishing, berry picking, and medicinal plant collection. This consideration must be linked with the applicant's assessment of traditional land and resource use.

	As the definition of human health includes consideration of mental and social well-being, applicants must also consider any adverse emotional or social stressors potentially resulting from the project, including: • concern for public safety from construction or operations-related accidents or malfunctions; or • disruption of normal, daily living activities. Where a particular project emission or effluent discharge level falls below or within applicable limits, additional mitigation may not be required. However, where the change may be substantial (even if within set limits) due to local or regional circumstances or the extent of the change, the applicant must provide any other additional mitigation to minimize pollution and human health risks. A visual impact assessment must consider and describe factors such as, but not limited to: • whether landforms, vegetation cover and other landscape features screen or visually absorb the project; • how the project will compare with other nearby built features; • identification of view points and areas from which the project will be visible; • views affected by the project; and • the extent to which views are obstructed by the project. Applicants must clearly link this portion of their assessment to those sections of their assessment that consider the biophysical elements affecting human health (e.g., Acoustic Environment or Water Quality and Quantity). Consult Health Canada for information on human health impact assessments and to

	access The Canadian Handbook on Health Impact Assessment. Health indicator data is available from Statistics Canada.
Infrastructure and Services	
Filing Requirements	**Guidance**
1. Describe the existing local and regional infrastructure in the study area, including: • railways; • roads, highways and their traffic usage levels and patterns; • pipelines, water mains and sewage lines; • navigable waterways; • existing power lines; and • any other potentially affected facilities. 2. Describe the existing local and regional services in the study area and the predicted effects on those services. Include an assessment of effects to: • accommodation, including camping facilities; • recreation; • waste disposal; • police; • fire-fighting; • ambulance; and • health care services. 3. Describe any need for government and applicant expenditures for new or expanded services or infrastructure, arising out of project-related effects. 4. Describe any mitigative measures, including applicable plans, to address identified effects.	The assessment must consider and, where possible, quantify how project construction and operation activities may affect local or regional infrastructure and services, such as: • housing; • educational facilities; • essential and emergency services (fire, police, ambulance, hospital) including the standard of service provided (e.g., response time); • recreational requirements; • transportation; and • utilities including water, sewer, waste disposal, electricity. Effects related to the above-noted factors must be assessed from the perspectives of both: • the project's needs for infrastructure and services (e.g., to meet workers' needs for housing or transportation); and • the project's effects on local infrastructure and services, and consequent effects on local residents (e.g., project effects on availability of housing for local residents or on traffic flows and delays to the local population). Applicants must consider any local and provincial or territorial guidelines regarding emergency services or requirements for heavy load vehicles and construction access permits.

5. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	
Navigation and Navigation Safety	
Filing Requirements	**Guidance**
1. Provide a listing of proposed navigable waterways that the pipeline corridor will pass in, on, under, over, through or across, the proposed crossing methodology, and the contingency plans for horizontal directional drilling. 2. Provide a listing of ancillary project components that will be constructed in, on, under, over, through or across navigable waterways to support the pipeline project (e.g., temporary and permanent bridges, marine terminal). 3. Provide a listing of potentially affected waterway users and describe the engagement conducted with waterway users and Indigenous Nations regarding navigational use, issues raised, and how issues have been addressed. 4. Describe project effects on navigation and navigation safety. 5. Describe proposed mitigation measures to address project effects on navigation and navigation safety.	Where there are waterways which are considered navigable and there are project effects on navigation and navigation safety, Applicants must assess who navigates the affected waterways (e.g., tourism groups, guide outfitters, anglers, kayaking organizations), the type of craft, the ability to notify waterway users of impediments, the project effects/impacts on safe and reliable navigation and identify mitigation measures to minimize or eliminate project effects to navigation and navigation safety.
Employment and Economy	
Filing Requirements	**Guidance**
1. Describe the local and regional employment situation in the study area. 2. Describe any local or regional training and employment development plans.	The assessment must include a quantitative and qualitative review of: • local and regional employment and unemployment levels;

3. Describe the ability of local and Indigenous residents and businesses to provide labour services, equipment, supplies and other contracting needs during construction, operation and maintenance of the project. 4. Describe plans to encourage local and Indigenous employment, procurement and contracting opportunities. 5. Describe any training programs the applicant is supporting to enhance employment opportunities for local and Indigenous residents. 6. Provide an estimate of the anticipated levels of local and regional economic participation in the project in comparison to the total project requirements (e.g., number of workers and total dollar value of contracts). 7. If the project has the potential to directly affect local, regional, provincial, territorial or federal government revenues from tax levees or other means during construction and operation, provide a quantitative assessment of the potential effects. 8. Where residual effects have been predicted, identify whether those residual effects would be likely to act in combination with the effects of other physical facilities or activities and expand on the matters described above as appropriate.	• education and skill levels; • local and regional economic conditions; and • direct government revenues expected to be generated by the project. Construction and operations workforce numbers and contract values must be provided, where possible, on a month-to-month basis through the construction phase of the project and on a yearly basis for the operations phase of the project. For smaller projects, only an estimate of the construction workforce and the full-time operations workforce is required. The assessment must describe those situations when the project may directly or indirectly create economic hardship or the displacement of workers or businesses, including any mitigative measures to address these effects. If the applicant has prepared an economic benefits plan or has entered into specific cooperation agreements with communities or Indigenous Peoples, the applicant should provide a summary of the employment, training and business commitments made.
Rights of Indigenous Peoples	
Filing Requirements	**Guidance**
1. Describe the Indigenous and Treaty rights of the potentially affected Indigenous Peoples in the project area.	Applicants should describe for each potentially impacted Indigenous Nation, to the extent known or based on information that is available, the Indigenous and Treaty rights of the Indigenous Peoples in the project area that may be impacted by the proposed project. The information provided on the Indigenous rights in the project area should be sufficiently

	detailed to allow the Commission to understand and assess the potential effects of the proposed project on the Indigenous rights and, as appropriate, consider relevant mitigation measures. The amount of detail and depth of information relating to potential project effects on Indigenous rights should be commensurate with the scale and scope of the project, including its potential effects. Projects that are smaller in scale, have the potential for limited, low magnitude effects or do not require new lands may not require highly detailed information. Applicants should engage with potentially impacted Indigenous Nations to seek to understand the Indigenous rights as they are asserted by rights-bearing communities. Applicants should review the CER Early Engagement Guide, and should engage with potentially impacted Indigenous Nations as soon as is practicable in the project's development in order to allow adequate time to discuss and understand each community's understandings, practices and assertions related to their rights. Where one or more Indigenous Nations have not provided information, or where information is considered confidential, applicants should provide a rationale for the approach taken. Where Indigenous Nations do not wish to provide information, applicants are encouraged to continue sharing information and analysis with the Indigenous Nations on the potential effects of the project, and to use available public sources of information to support the assessment. Applicants may also wish to consult other relevant government departments or Indigenous organizations that may have information or expertise. Applicants are encouraged to discuss with Indigenous Nations their views on how to reflect the assessment of impacts on rights in their application.

2. Describe how Indigenous and Treaty rights are exercised or practiced in the project area.	In describing the ways in which Indigenous rights are exercised, applicants should engage directly with Indigenous Peoples to seek to understand and document the values, practices, activities, customs or traditions that are connected to and are undertaken in relation to the rights identified. Applicants may also wish to consult and document any relevant secondary information sources that may assist in describing the exercise of Indigenous rights in the project area. When engaging with Indigenous Nations, or based on any secondary information sources, applicants should provide sufficient detail to describe how general or specific rights are being exercised, such as: • the quality, quantity or distribution of resources involved in or required for exercise of the rights (for example, any preferred wildlife or plant species utilized, the cultural, ceremonial or nutritional uses or importance of resources, and perception of quality, cultural connections to a particular species); • access to the resources used or required to exercise the rights (for example, physical access or travel ways to access culturally important or harvesting locations, and distance from communities of residence); and • locations or areas of cultural importance where Indigenous rights are exercised. Applicants should identify and incorporate within their effects assessment, preferably beginning at the assessment design phase, those valued components that are most relevant for an assessment of the project's potential effects on the exercise of Indigenous rights. Applicants should also engage with Indigenous Nations to ascertain whether any Indigenous knowledge is being provided in confidence, and if so, ensure that confidential Indigenous knowledge can be appropriately protected from unauthorized disclosure.

	Applicants should strive to reach agreements or utilize existing community protocols with respect to Indigenous knowledge. Applicants should also describe how other information in their application, including information about traditional land and resource uses, effects on heritage resources, or environmental, health, social and economic conditions in the project area, are relevant to and have been used to describe the practice of Indigenous rights. Applicants may therefore, as appropriate, refer to information throughout their application or consolidate required information in order to adequately describe how rights are exercised in the project area, to reduce duplication of information.
3. Describe the context in which the Indigenous and Treaty rights are exercised or practiced in the project area.	When describing the rights exercised in the project area, and the ways in which they are being exercised, consider the cultural, social, and bio-physical context in which the exercise of the right occurs. Applicants should engage with Indigenous Nations to seek to understand, document and address wherever possible, the underlying values, traditions and cultural practices associated with the exercise of rights that may be affected by the project, where such information has been provided or is not considered confidential. This context may consider, as appropriate to the project, matters such as: • relevant circumstances that may affect traditional Indigenous practices, such as the availability of lands or resources for the exercise of rights in the project area; or, • how the Indigenous Nations' cultural traditions, laws and governance systems inform the manner in which they exercise their Indigenous rights.
4. Describe the project's potential effects on the exercise or practice of Indigenous and Treaty rights in the project area.	Applicants should, based on available information, describe the potential adverse effects of the project's components and physical activities on the exercise or practice

	of Indigenous rights of each of the potentially impacted Indigenous Nations, including (but not limited to): • effects on the quality, quantity or distribution of resources involved in or required for exercise of the right; • effects on access to the resources used or required to exercise the right; • effects relating to timing and seasonality of the exercise of rights; • effects on specific areas of cultural importance where Indigenous rights are exercised; and • effects on an Indigenous Nation's cultural traditions, laws and governance systems that inform the manner in which they exercise their Indigenous rights. Where communities have identified or provided thresholds or criteria that describe levels or conditions relating to their ability to meaningfully exercise Indigenous rights, applicants should, as applicable: • describe the threshold or criteria, including quantitative or qualitative measures; and • describe how those thresholds or criteria have been used, as applicable or appropriate, in the assessment.
5. Describe the measures to be implemented by the applicant to avoid, reduce or eliminate potential adverse effects of the project on the exercise of Indigenous and Treaty rights. Also describe any measures that would enhance or support the exercise or practice of Indigenous rights in the project area. 6. Where there may be any residual effects, after mitigation measures are implemented and that are related to the project, describe the nature and extent of these, including their contribution to any potential cumulative effects.	Describe those measures that, when implemented for the project, would avoid, reduce or eliminate the potential adverse impacts of the project on the exercise of Indigenous rights. These measures must clearly describe how the applicant intends to implement them. Applicants should ensure that they describe: • how the measures directly address the project's potential effects on the exercise of rights; • the extent to which the measures will avoid, reduce or eliminate the potential

	adverse impacts of the project on the exercise of Indigenous rights; and • whether any residual effects of the project on the exercise of rights would remain after the measures are implemented. Where provided, applicants should include specific mitigation suggestions or recommendations raised by potentially impacted Indigenous Nations regarding the measures for the project that would address such impacts. Applicants should also describe any responses, as applicable, to the views provided by potentially impacted Indigenous Nations. Applicants should also consider measures that can be implemented in relation to the project that would support, improve or provide benefit to the exercise of Indigenous rights. Where such measures are described elsewhere in an application (such as measures relating to employment, procurement, or monitoring), this should be referenced or consolidated. Where such measures are proposed, applicants should describe how these measures have been discussed with potentially impacted Indigenous Nations, including any comments or recommendations made by Indigenous Nations, or any agreements entered into that specify benefits or compensation measures relating to the project.

A.3 – Economics and Financing

Information on economics is required in an application when the applied-for facilities would result in one or more of the following:

- the construction of a new pipeline;
- an increase in pipeline capacity or throughput on an existing regulated pipeline; or
- a change in the type of commodity being transported on an existing regulated pipeline.

Economics information must include details on:

- supply;
- transportation;
- markets; and
- financing.

The overall purpose for filing information on facility economics is to demonstrate that the applied-for facilities will be used, will be useful, and that demand charges will be paid and that sufficient funds will be available for abandonment requirements.

Meeting climate change commitments could influence the market, supply, and economic conditions in which the project will operate. Climate change laws, regulations and policies enacted to meet Canada's commitments may affect markets and consequently may influence the need for the project and its economic feasibility. Therefore, in addition to the filing guidance below, the following information is also requested.

Table A-4: Filing Requirements for Economics and Financing

Economics and Financing	
Filing Requirements	**Guidance**
Provide an explanation of how current climate change laws, regulations and policies, and financial risks or other uncertainties around commitments and future changes have been incorporated in the economic analysis of the project.	As noted in section A.2.4 Level of Detail, the depth of analysis should be commensurate with the nature of the project and the potential for effects. For all projects, the applicant should, at a minimum, describe how current climate change laws, regulations, and policies have been considered in assessing the expected utilization of the project, and discuss if and how the economic feasibility of the project may be impacted by financial risks and other uncertainties around changes to such climate change laws, regulations, and policies. For a larger project, the applicant should also describe how existing climate change laws, regulations, and policies have been included in

	relevant economic analysis and assumptions. Also include those laws and regulations that are reasonably expected to come into force, and policies reasonably expected to come into place, which have been drafted and tabled at a provincial or federal level and are not purely speculative. Discuss implications of these laws, regulations, and policies for supply and markets in any scenario analysis or risk assessment of these factors (e.g., applicant may consider doing a sensitivity analysis of supply and markets based on carbon pricing levels). Applicants should also describe the extent to which climate change commitments have been considered. ECCC's *Strategic Assessment of Climate Change* should be consulted for its project requirements and the potential implications for the project's economic analysis. Applicants should describe how the net-zero plan may impact the economic feasibility of the project.

A.3.1 Supply

Goal

The application includes information indicating that there is or will be adequate supply to support the use of the pipeline, taking into account all potential supply sources that could reasonably be expected to be sourced by the applied-for facilities over their expected economic life.

Filing Requirements

Provide:

1. A description of each product to be transported (e.g., crude oil, natural gas, or NGL).
2. A discussion of all potential supply sources and their competitiveness in the markets they will supply.
3. A forecast of the productive capacity for each product over the economic life of the facilities.
4. For pipelines with contracted capacity, a discussion of the contractual arrangements underpinning the supply.
5. A discussion of the physical capacity of upstream facilities to deliver the incremental volumes.
6. An indication of whether the proposed pipeline relies on, or joins with, any other proposed upstream facility or facilities which have been approved but not yet brought into service.

Guidance

Given the abundant supply of hydrocarbons in North America, the CER must be satisfied there is, or will be, adequate, competitive supply available to the pipeline such that the applied-for

facilities could be expected to be used at a reasonable level over their economic life and would be in the public interest.

The level of detail in the supply information would normally correspond to:

- the projected increase in capacity or throughput;
- the nature and complexity of the supply source; and
- the potential impact on the public interest, commercial or otherwise.

Generally, the greater the projected increase in capacity or throughput, the greater the amount of supply information that would be required. Additional information might be required for proposed projects that have a larger potential impact on third parties or the environment to demonstrate that the project is in the public interest.

Product Description

Describe each product that would be transported by the applied-for facilities. Adhere to the guidelines for describing products provided in Section 1.10 Measurement, Conversion Factors and Commodity Description.

Resources

Describe each current and potential supply source that the applied-for facilities are relying upon, including methods used to derive any estimates of resource potential, if provided.

Competitiveness

Describe the economic competitiveness of the supply source, for example, by comparing supply costs in both upstream and downstream areas. Discuss the competitiveness of the supply source and other sources supplying the same downstream markets. Consider how climate policy or other policies, legislation, or agreements (including land use planning frameworks or agreements) might affect competitiveness (see Table A-4 for more guidance on climate considerations).

Productive Capacity

Forecast the current and future production over the economic life of the project. Include forecasts from:

- the various supply sources; and
- conventional and unconventional production as well as production from other basins that could be sourced.

Clearly describe the sources for and the methods used to derive the forecasts. Consider how climate policy or other policies, legislation, or agreements (including land use planning frameworks or agreements) might affect productive capacity (see Table A-4 for more guidance on climate considerations).

Data for any tables and charts should be provided in machine-readable format, e.g., .csv or .xlsx files, arranged as flat data (one record per row).

Contractual Arrangements

For pipelines with contracted capacity, include a description of any relevant contractual arrangements underpinning the supply arrangements. Also include key contractual terms such as length of contract and volumes under contract, where available.

Ability of Upstream Facilities to Deliver Incremental Volumes

Where the applied-for facilities would be receiving product(s) from an upstream facility, provide a description of the connecting facilities which are physically able to deliver the additional volumes being received.

If this project relies on, or joins with, other proposed upstream projects or projects which have been approved but not yet built, confirm that there would be sufficient upstream capacity for this project if the other project(s) were not to proceed. For example, discuss for the proposed facilities and any other facilities:

- the capacity;
- current and incremental contracted volumes;
- current summer/winter capabilities and projected flows; and
- a schematic linking other upstream projects to this project (new, approved but not yet built, or proposed) that have common connections, including related pipelines and shared facilities.

A.3.2 Transportation Matters

Goal

The application includes information indicating that the volumes to be transported are appropriate for the applied-for facilities and that the proposed facilities are likely to be utilized at a reasonable level over their economic life.

Filing Requirements

Pipeline Capacity

1. In the case of an expansion to an existing pipeline, provide:
    - the pipeline capacity before the expansion capacity is added;
    - the added capacity of the expansion project;
    - the pipeline capacity as it would be following the expansion; and
    - a justification that the capacity of the pipeline expansion is appropriate in terms of incremental volumes to be shipped on the expanded facility.
2. In the case of a new pipeline, provide:
    - the pipeline capacity of the new pipeline; and
    - a justification that the capacity of the new pipeline will be appropriate for the productive capacity or supply that would be available to the pipeline.

Throughput

1. For pipelines with contracted capacity, provide information on contractual arrangements underpinning the projected throughput volumes.
2. For all pipelines other than pipelines with contracted capacity, provide a forecast of projected throughput volumes by commodity type, receipt location and delivery destination on an annual basis over the economic life of the applied-for facilities.

3. If the proposed project results in an increase in throughput capacity, provide:
    - the theoretical and sustainable daily, seasonal and annual capabilities of the existing and the proposed facilities versus the current and forecasted requirements, indicating any contracted interruptible quantities; and
    - the flow formulae and flow calculations used to determine the daily or hourly (as appropriate) capabilities of the proposed facilities and the underlying assumptions and parameters, including a description of the gas or fluid properties.
4. Where more than one type of commodity would be transported in the same pipeline, describe the segregation of the commodities, including where applicable, potential contamination issues or cost impacts.

Guidance

Information submitted on transportation matters should:

- demonstrate that the capacity of the applied-for facilities is appropriate for the commodities and volumes that would be transported in the pipeline; and
- provide sufficient evidence to assure the Commission that the applied-for facilities will be used at a reasonable level over their economic life.

Information on pipeline capacity, projected throughput or contracted volumes and, if applicable, supply available to the pipeline, could be provided in tabular format. Where it would provide clarity, a graphical representation could also be included.

Pipeline Capacity

Provide an estimate of the average annual capacity of the pipeline for the commodity or commodities transported. Where pipeline capacity would be increased as a result of the construction of the applied-for facilities, include the pipeline capacity that would be added as well as the resultant total capacity of the pipeline.

In all cases where there will be a substantial difference between pipeline capacity and contracted volumes or projected throughput, include an explanation of the difference. In the case where the subject pipeline is one of a number of pipelines serving a particular supply area, provide a description of the overall service for the area and the role the subject pipeline plays in serving the area relative to throughput volumes and productive capacity for the supply area.

Contractual Arrangements

Transportation agreement evidence is required when the applied-for facilities relate to the transportation of natural gas.

Describe the contracted volume and term by shipper. When possible, submit evidence of the transportation agreements, such as signed execution sheets and copies of the contracts. Contractual evidence must be of sufficient detail to assure the Commission that the facilities will be used at a reasonable level and that demand charges will be paid.

Projected Throughput

A throughput forecast is required for liquids facilities (e.g., crude oil and NGL).

Also include a forecast of supply that could reasonably be expected to be available to the pipeline over the economic life of the applied-for facilities.

Describe the projected annual throughput of each commodity by source, location and delivery destination over the expected economic life of the applied-for facilities.

Commodity Integrity on Multi-Product Pipelines
(where applicable)

In the case of multi-product pipelines for a new pipeline, or where the applied-for facilities could affect the integrity of any of the transported commodities, include a discussion of the methods that will be used to segregate or protect the integrity of the commodity types. Describe any potential contamination issues or cost impacts and strategies that will be used to mitigate any potential problems.

A.3.3 Markets

Goal

The application includes information indicating that adequate markets exist for the incremental volumes that would be available to the marketplace as a result of the applied-for facilities.

Filing Requirements

Provide:

1. An analysis of the market in which each product is expected to be used or consumed.
2. A discussion of the physical capability of downstream facilities to accept the incremental volumes that would be delivered.
3. An indication of whether the proposed pipeline relies on, or joins with, any other proposed downstream facilities or facilities which have been approved but not yet brought into service.

Guidance

Information on markets is required to demonstrate that there is sufficient demand to absorb the incremental volumes and, where applicable, physical capability in the downstream facilities for the incremental volumes. Where long-term transportation and downstream arrangements are in place, the required market information will be more general in nature but must be adequate to allow the Commission to determine whether market demand will be sufficient to support the economic feasibility of the pipeline.

The level of detail will correspond to:

- the magnitude of the incremental volumes that would be delivered into the market;
- the degree of competition from other supply areas and from other fuels in the market to be served; and
- the potential impact on the public interest, commercial or otherwise.

The greater the projected increase in volumes delivered to the marketplace, the greater the amount of market information that would be required. Proposed projects that have a larger potential impact on third parties or the environment may require filing additional information to demonstrate that the project is in the public interest.

Description of the Market

Describe the market(s) that will receive the product or products, including:

- detailed information about where the product or products could be delivered (e.g., specific gas hubs or designated refineries);
- the potential competition to serve the market(s) from other
    - pipelines;
    - energy sources
- transportation systems; and
- how climate policy might affect the market's demand for the product or products (see Table A-4 for more guidance).

Data for any tables and charts should be provided in machine-readable format, e.g., .csv or .xlsx files, arranged as flat data (one record per row).

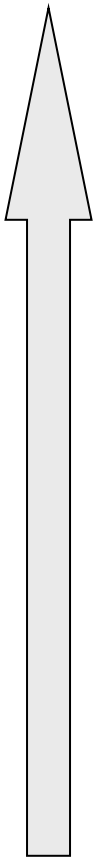
Ability of Downstream Facilities to Accept Incremental Volumes

In cases where the applied-for facilities would be delivering product(s) to downstream facilities, provide a description of the connecting facilities which are physically able to accept the additional volumes being delivered.

If this project relies on, or joins, with other proposed downstream projects or projects which have been approved but not yet built, confirm that there would be sufficient downstream pipeline capacity for this project if the other project(s) were not to proceed. For example, discuss for the proposed facilities and any other facilities:

- the capacity;
- current and incremental contracted volumes;
- current summer/winter capabilities and projected flows;
- a schematic linking other projects to this project (new, approved but not yet built, or proposed expansions/extensions) that have common connections, including related pipelines and shared facilities.

Table A-5: Overview of Supply, Transportation and Markets Filing Requirements

Scope of Project	Source	Supply	Transportation		Markets	
Major Project  Local Connection	Basin-wide supply source (e.g., a transmission line not dedicated to a specific supply area)	Resources: • Description of conventional and/or unconventional resources available to the proposed project. • Description of the sources and methods used to derive resource estimates, if any. Competitiveness: • Description of economic competitiveness of the resources listed above. • Description of the sources and methods used to derive economic assessments, if any. Productive Capacity: • Table and graph providing productive capacity estimates for each of the resources listed above over the life of the project. • Description of the sources and methods used to derive these estimates. Contractual Arrangement(s): • A detailed description of the contractual arrangements. Upstream Facilities • A description of the upstream facilities which are physically	New Pipeline (larger project)	Pipeline Capacity: • Total capacity of the pipeline. • Justification that pipeline capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point.	More shippers	Comprehensive market analysis with justification that incremental or new volumes will be absorbed. A description of the downstream facilities which are physically able to receive incremental volumes.

		able to deliver incremental volumes.	Expansion (larger project)	Pipeline Capacity: • Before expansion. • Incremental capacity added and total capacity following expansion. • Justification that the additional capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point.	Fewer shippers	Comprehensive market description and assurance of demand for incremental volumes. Assurance that downstream facilities are physically able to receive incremental volumes.
	Regional-resource supply source (e.g., transmission extension or expansion in new or growing supply area)	Resources: • Description of conventional and unconventional resources and table of resource estimates. • Description of the sources and methods used to derive the estimates. Competitiveness: • Description of economic competitiveness of the resources listed above, including in downstream markets. • Description of the sources and methods used to derive economic assessments, if any. Productive Capacity: • Table and graph providing productive capacity estimates for each of the resources listed above over the life of the project.	New Pipeline (larger project)	Pipeline Capacity: • Total capacity of the pipeline. • Justification that pipeline capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point. • A description of the upstream facilities which are physically able to deliver incremental volumes.	More shippers	Comprehensive market analysis with justification that incremental or new volumes will be absorbed. A description of the downstream facilities which are physically able to receive incremental volumes.
			Expansion (larger project)	Pipeline Capacity: • Before expansion. • Incremental capacity added and total capacity following expansion.	Fewer shippers	Comprehensive market description and assurance of demand for incremental volumes.

		• Description of the sources and methods used to derive these estimates. Contractual Arrangement(s): • A detailed description of the contractual arrangements. Upstream Facilities • A description of the upstream facilities which are physically able to deliver incremental volumes.		• Justification that the additional capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point.		Assurance that downstream facilities are physically able to receive incremental volumes.
	Localized supply source (e.g., part of a gathering system)	Resources: • Table with resource estimates. • Description of the sources and methods used to derive the estimates. Competitiveness: • Description of economic competitiveness of the resources listed above. • Description of the sources and methods used to derive economic assessments, if any. Productive Capacity: • Table and graph providing productive capacity estimates for each of the resources listed for the economic life of the project. • Description of the sources and methodology used to derive these estimates. Contractual Arrangement(s):	New Pipeline (smaller project)	Pipeline Capacity: • Total capacity of the pipeline. • Justification that the pipeline capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point.	Fewer shippers	Market description and assurance of demand for incremental volumes. Assurance that downstream facilities are physically able to receive incremental volumes.
			Expansion (smaller project)	Pipeline Capacity: • Before expansion • Incremental capacity added and total capacity following expansion. • Justification that the additional capacity is appropriate. Contractual Arrangement(s): • Pipelines with contracted capacity: a detailed description of the transportation	No third party shippers	Assurance of demand for incremental volumes.

		• A description of any relevant supply arrangements. Upstream Facilities • A description of the upstream facilities which are physically able to deliver incremental volumes.		contract arrangements underpinning the projected throughput. • Other: forecast of projected throughput by product, receipt location and delivery point.		
	Change in commodity	Supply information is appropriate to the scope of the project, as above.	When more than one commodity: Discussion pertaining to segregation of commodities and potential contamination issues or costs.		Market information is appropriate to scope of the project, as above.	

A.3.4 Financing and Financial Resources

See also the letter issued on 29 March 2019 regarding Pipeline Financial Requirements Guidelines.

Goal

The application provides a discussion of the following points:

- the applicant's ability to finance the proposed facilities;
- the method of financing the facilities and the potential costs associated with the risks and liabilities that arise during the construction and operation of the Project, including an incident that harms people or the environment (see the Canada Energy Regulator Event Reporting Guidelines for a definition of "incident");
- any changes to the financial risk of the company associated with its intended method of financing the facilities;
- the impact of the proposed facilities on the applicant's abandonment cost estimate and the collection of these costs; and
- the toll impact of the proposed facilities including the extent of any cross-subsidization.

Filing Requirements

Additional information...

All applications submitted pursuant to either section 183 or 214 of the CER Act must include the information stated in requirements 1 through 4.

In addition, applications with significant toll impacts must also include the information stated in requirement 5.

1. Provide evidence of the ability to finance the proposed facilities.
2. Provide evidence that the applicant can manage the potential costs associated with the risks and liabilities that arise during the construction and operation of the Project, including an incident that harms people or the environment.
3. Indicate the estimated toll impact for the first full year that the facilities are expected to be in service.
4. Confirm shippers have been apprised of the project and associated toll impact. Provide a summary of their concerns, if any, and the plans to address these concerns.
5. Provide a discussion on how the applicant will address the impact of the proposed facilities on funding for abandonment.
6. For applications with significant toll impacts, provide additional toll details for:
    - existing facilities;
    - the aggregate of existing and proposed facilities; and

- the first five years that the proposed facilities are forecast to be in service.

Guidance

The Commission needs sufficient information to allow it and interested parties to understand the application and the impacts on third parties, and to make a decision. The information provided should demonstrate that the applied-for project is financially sound given the approved toll methodology and that it is not being cross-subsidized in an inappropriate manner.

While the Commission would find the information identified in the filing requirements to be satisfactory in most instances, it may be necessary to provide further information. In general, more detailed information should be provided for projects that are greater in complexity and scope. Examples of factors that could affect the complexity and scope of a project include the:

- toll impact of the proposed facilities;
- proposed toll design methodology;
- level of market power held by the applicant, including its affiliates;
- number of shippers on the system;
- number of third parties that could be affected by the proposed facilities and the level of effect on these parties; and
- the financial risk assumed by the applicant.

Determine the level of information to include for each filing requirement based on the factors described above, and provide any additional information that would be pertinent.

Finance Information

Evidence that the applicant has the ability to finance the proposed facilities should include, but not be limited to:

- a description of the intended methods and sources of financing the proposed facilities;
- a description of any financing already in place; and
- a description of any restrictive provisions concerning future financing, any changes in capital structure, the impact on interest coverage ratios and other factors that could affect the financing of the proposed facilities.

Ownership Structure

The applicant should describe the corporate structure, including at a minimum:

a. The corporate structure chart showing the applicant, its subsidiaries, owning entities and affiliates; and
b. A description summarizing each entity’s ownership and the operating relationships with each other.

This chart in a. and the description in b. must show, but need not be restricted to:

i. the ownership of each entity and their jurisdiction of incorporation or registration; and

Where limited partnerships are involved, a description of:

ii. the general and limited partners in each limited partnership; and

iii. the respective roles and responsibilities of each of these entities in managing the limited partnerships and operating the pipeline and related facilities.

Financial Resources

Oil pipeline projects with a capacity of 250,000 bbl per day or more are expected to provide information on how the applicant can sustain management of the potential costs associated with the risks and liabilities that arise during the construction and operation of the Project, including an incident that harms people or the environment:

a. A description of the applicant's various types and amounts of financial resources, including the applicant's readily accessible financial resources;
b. Key features with respect to third party liability insurance coverage plus description of whether the coverage is for the applicant or project alone or part of an umbrella coverage policy;
c. The basis for determining the amount of the financial resources required, taking into account the risk assessment for the Project, the costs of accidents and malfunctions, and any and all threats;
d. With respect to the costs of a hydrocarbon spill, identification of different cost categories (e.g.: clean up and remediation versus compensation) and location variables that would influence total costs;
e. Evidence of how the risk assessment results have been applied to anticipate, prevent, manage, and mitigate potential hazards during the design and operation of the project to minimize the quantity of hydrocarbons in the event of a spill;
f. An overview of plans for operating practices to avoid human error; and
g. An overview of how the applicant has factored its Emergency Prevention, Preparedness and Response Plan into its estimates of spill quantities and costs of an accident or malfunction.

(Additional information would be expected where marine shipping is involved.)

For the meaning of "risk assessment" and "risk assessment results" see CSA Z662, Clause 3, and Annex B, Guidelines for Risk Assessment of Pipeline Systems.

Toll Details

Toll details will include:

- the annual toll impact;
- where tolls are cost-based, the cost of service and rate base by main elements;

- where tolls are not cost-based, the revenues from and costs of providing service by main elements;
- the method and rates of depreciation by plant accounts, if different from those approved by the Commission; and
- if not already filed with the CER, copies of the relevant additional tariffs, transportation contracts or operating agreements associated with the new facilities.

Abandonment Funding Information

In 2008 the NEB identified the following issue: What is the optimal way to ensure that funds are available when abandonment costs are incurred?

According to the RH-2-2008 Reasons for Decision [Filing A21835], abandonment costs are a legitimate cost of providing service and are recoverable upon Commission approval from users of the system. RH-2-2008 also stated that landowners will not be liable for costs of pipeline abandonment.

All pipeline companies regulated under the CER Act are required to comply with the regulatory decisions regarding abandonment funding.

Applicants with existing CER-regulated facilities must use their Commission-approved Abandonment Cost Estimate to calculate the annual amount to be set aside. Each Applicant must use the specific methodology that was approved for it in the MH-001-2013 Reasons for Decision [Filing A60676].

For Group 1 companies, calculate the change in Abandonment Cost Estimate relative to the total Commission-approved Abandonment Cost Estimate for this system.

For Group 2 companies, calculate the change in Abandonment Cost Estimate relative to the total Abandonment Cost Estimate for all your CER-regulated pipelines.

Information on abandonment funding should include the following:

- Current Commission-approved Abandonment Cost Estimate.
- Change these proposed facilities will have on the Commission-approved Abandonment Cost Estimate.
- Description on how you intend to address the change in your Abandonment Cost Estimate (i.e., how will this impact your set aside mechanism, collection mechanism, tolls or tariffs).

Applicants new to the CER's regulation require approval of the Abandonment Cost Estimate for the proposed facilities, as well as a process and mechanism for setting-aside abandonment funds. Information on abandonment funding should include the following:

- Proposed Abandonment Cost Estimate for the facilities;
- Description on how you intend to set-aside funds (either a trust, letter of credit, or surety bond) and a draft copy of the proposed set-aside mechanism;

- If using a trust, a proposed trustee for the trust, and a description of whether or not the trustee is regulated under the *Trust and Loan Companies Act*; and

- Description on how you intend to collect the funds.

A.3.5 Non-CER Regulatory Facility Approvals

Goal

The application includes information on other regulatory processes that are being undertaken with respect to the project.

Filing Requirements

1. Confirm that all non-CER regulatory approvals required to allow the applicant to meet its construction schedule, planned in-service date and to allow the facilities to be used and useful are or will be in place.
2. If any of the approvals referred to in #1 may be delayed, describe the status of those approval(s) and provide an estimation of when the approval is anticipated.

Guidance

The Commission requires information regarding the status of all required federal, provincial and municipal approvals or authorizations to be reasonably assured that there are no issues before other regulators that would prevent or delay either the construction or use of the applied-for facilities. Updates on status may also be provided after an application has been submitted.

A.4 – Lands Information

Goal

The application includes accurate documentation on land areas, land rights, the service of notice, the land acquisition process, and includes sample agreements and notices.

A.4.1 Filing Requirements – Land Areas

Ensure the land documentation includes the following:

1. the width of the RoW including the locations where the width varies;
2. the locations and dimensions of known temporary work space required for the project or, if locations are not known, a drawing showing the typical dimensions of the temporary work space required for road, watercourse and other crossings, storage areas and camps; and
3. the locations and dimensions of any new lands required for all associated facilities.

Guidance – Land Areas

A description of the requirements and rationale for both temporary and permanent lands allows the Commission to assess the appropriateness of the land areas. The description should include the dimensions of the:

- RoW;
- temporary working space;
- valve sites;
- cathodic beds;
- pole lines;
- access roads;
- meter stations; and
- facilities such as compressor or pumping stations.

Describe the location and distance of any changes to RoW width and the reasons for the change.

Where new lands under any type of agreement are not required for the project, this should be clearly stated in the application and no further land area information needs to be filed.

A.4.2 Filing Requirements – Land Rights

1. Provide a description of the type of land rights proposed to be acquired for the project and related facilities.
2. Provide a description of the nature and relative proportions of land ownership along the proposed route (i.e., freehold, Crown or public lands).

3. Where no new land rights are required, provide a description of the existing land rights that allow for the project.

Guidance – Land Rights

The description of the land rights will inform the Commission and landowners of the different types of land rights needed for the project (e.g., option, easement, fee simple, statutory RoW, temporary work space, permit or licence, etc.) and the areas where existing land rights allow for the project.

A description of the land ownership informs the Commission of the land acquisition areas and agreements required for the project.

Alternative Dispute Resolution (ADR)

The CER fosters open and respectful discussion between parties affected by CER-regulated projects to settle issues that may arise between parties throughout the project lifecycle. The CER recognizes that a range of interest-based dispute resolution techniques, appropriate to the circumstance, are available and may be effective in dealing with such issues and disagreements. Interest-based techniques should be considered as alternative or complementary to traditional regulatory or litigated processes, such as the Detailed Route Hearing, and at the earliest opportunity for best results.

Parties are encouraged to consider ADR in their project planning and as soon as possible to resolve issues and manage conflict. CER staff with ADR specialization are available to assist stakeholders identify and design dispute resolution processes appropriate to their unique needs at any stage of the project.

A.4.3 Filing Requirements – Lands Acquisition Process

1. Provide a description of the proposed process for acquiring the lands required for the project.
2. Provide the timing of acquisition and the current status of acquisition.
3. Provide the status of service of notices on all owners of lands to be acquired pursuant to subsection 322(1) of the CER Act.

Guidance – Lands Acquisition Process

A description of the land acquisition process to be implemented will allow the Commission to assess the process and to be aware of the timing of acquisition.

The land acquisition information should describe the:

- numbers of landowners and tenants;
- numbers of option or easement agreements signed;
- numbers of notices served; and
- timing of service of remaining notices.

This information may be provided in a table form.

A.4.4 Filing Requirements – Land Acquisition Agreements

1. Provide a sample copy of each form of land acquisition agreement proposed to be used (includes option and easement). The agreement shall be in the form required by section 321(2) of the CER Act:

321 (2) A company must not acquire or lease lands for a pipeline under an agreement referred to in subsection (1) unless the agreement includes provision for

> **(a)** compensation for the acquisition or lease of lands to be made, at the option of the owner of the lands, by one lump sum payment or by periodic payments of equal or different amounts over a specified period of time;
>
> **(b)** review every five years of the amount of any compensation payable in respect of which periodic payments have been selected;
>
> **(c)** compensation for damages caused by the company's operations, pipelines or abandoned pipelines;
>
> **(d)** indemnification from all liabilities, damages, claims, suits and actions resulting from the company's operations, pipelines or abandoned pipelines, other than liabilities, damages, claims, suits and actions resulting from
>
> > **(i)** in Quebec, the gross or intentional fault of the owner of the lands, and
> >
> > **(ii)** elsewhere in Canada, the gross negligence or willful misconduct of the owner of the lands;
>
> **(e)** restriction of the use of the lands to the line of pipe or other facility for which the lands are, by the agreement, specified to be required unless the owner of the lands consents to any proposed additional use at the time of the proposed additional use;
>
> **(f)** compensation to the owner of the lands if the use of those lands is restricted by the operation of section 335;
>
> **(g)** compensation to the owner of the lands for any adverse effect on the remaining lands of the owner, including the restriction of their use by the operation of section 335; and
>
> **(h)** any additional terms that are, at the time the agreement is entered into, required to be included in it by any regulations made under paragraph 333(d).

2. Provide a sample copy of any proposed agreements for:

   - fee simple ownership;
   - temporary work space;
   - an access road; or

- other agreements for the lands required for the project.

Guidance – Lands Acquisition Agreements

A sample copy of the acquisition agreement(s) enables the Commission to verify that the agreement complies with the requirements of section 321 of the CER Act and that landowner's rights are protected.

Additional information...

Where lands will not be acquired pursuant to the above filing requirements, it is not necessary to file the respective sample copy of agreement.

A.4.5 Filing Requirements – section 322 Notices

1. Provide a sample copy of the notice proposed to be served on all owners of land pursuant to subsection 322(1) of the CER Act:

322 (1) If a company has determined the lands that may be required for the purposes of a section or part of a pipeline, the company must serve a notice on all owners of the lands, to the extent that they can be ascertained, which notice must set out or be accompanied by

(a) a description of the lands of the owner that are required by the company for that section or part;

(b) details of the compensation offered by the company for the lands required;

(c) a detailed statement made by the company of the value of the lands required in respect of which compensation is offered;

(d) a description of the procedure for approval of the detailed route of the pipeline;

(e) a description of the procedure available under this Part in the event that the owner of the lands and the company are unable to agree on any matter respecting the compensation payable; and

(f) any prescribed information.

In addition, where an application will be filed pursuant to section 214 of the CER Act the notice should describe:

- the process for approval of the detailed route of the pipeline, and
- a statement that sections 201 to 206 of the CER Act will not apply in respect of the procedure for approval of the detailed route of the project.

Guidance – section 322 Notices

Notice

Viewing a sample copy of the notice assists the Commission in verifying that the notice complies with the requirements of subsection 322(1) of the CER Act and that landowners and others persons are adequately notified.

Exemption from section 199 of the CER Act

Where an application is filed pursuant to section 214 of the CER Act, the procedure for approval of the detailed route of the pipeline, as described in sections 201 to 206 of the CER Act, may not apply. In this situation, the subsection 322(1) notice will describe the procedure for approval of the detailed route of the pipeline and will also include a statement that subsections 201 to 206 of the CER Act will not apply in respect to the procedure for approval of the detailed route of the pipeline.

Section 214 Application Conditions

In the event the Commission grants an order approving the section 214 application, it may condition the order such that prior to commencement of construction of the project on those lands where new land rights are required, the applicant will demonstrate in writing to the Commission that either:

- those lands have been acquired; or
- where any required lands have not been acquired, the rights, as prescribed by the CER Act, of those landowners will not be prejudiced by the construction of the project.

Lands not Acquired

In the event that a section 183 certificate is issued, the applicant would file the plans, profiles and books of reference (PPBoR) for the pipeline and serve notices pursuant to the requirements of subsection 201(1) of the CER Act on those landowners from which land rights have not been acquired. The Commission may allow construction of the project for those portions where the lands have been acquired, with the exception of a buffer zone near the lands not yet acquired pending the applicant demonstrating to the Commission that either the lands have been acquired, or the rights of the landowners have not been prejudiced.

A.4.6 Filing Requirements – section 214 Application to Address a Complaint

1. Where a section 214 application proposes work or construction to address a landowner or public complaint that has been filed with the CER, the application should include:

    - a statement that the purpose of the work or construction proposed by the application is in response to a complaint that has been filed with the CER;
    - the name and location of the complainant;
    - the nature and date of the complaint; and
    - how the activities proposed within the section 214 application will address the complaint.

FYI – Reminder: See section A.4.2.4

The CER encourages ADR interest-based approaches as alternative or complementary to traditional regulatory or litigated dispute resolution processes.

- For best results consider interest-based techniques to resolve issues at earliest opportunity.
- CER ADR specialists are available to assist parties identify and design processes appropriate to their situation and unique circumstances.

Next Steps...

File the complete application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide B – Abandonment

The first section, B.1, is about filing requirements applicable to all CER-regulated pipeline companies. These information requirements relate to funding for abandonment and are largely financial in nature.

The second section, B.2, concerns filing requirements for abandoning a pipeline.

The final section, B.3, provides filing requirements for those companies wanting to apply to access funds held in Abandonment Trusts.

B.1 Funding for Abandonment

CER-regulated pipeline companies must have a process and mechanism in place that will provide adequate funds to pay for pipeline abandonment. Companies are also expected to institute governance practices relating to pipeline abandonment, which are one component of the systematic approach required by the OPR.

Goal

Companies provide the CER with all required information, documents, and reports related to abandonment costs and abandonment funding.

B.1.1 Cost Estimates

The Commission calculates abandonment cost estimates (ACEs) for all companies using the geographic information system (GIS)-based ACE Calculation Method. Detailed information regarding ACE Calculation Method is provided on the CER website: Pipeline Abandonment.

The Commission will regularly review the ACE Calculation Method[10], in consultation with companies, Indigenous Peoples, landowners, and other parties, to ensure an appropriate level of funds is being set aside by companies for abandonment.

Filing Requirements

1. Companies are required to file geospatial data to support the calculation of their ACEs. Instructions for filing this data are provided with the ACE Calculation Method information on the CER website. Once a company's ACE is established, the Commission may request updated geospatial data be filed when the ACE requires updating (e.g., when material changes to a company's pipeline system occur).

[10] The 2021 ACE Calculation Method was introduced by the Commission in June 2023 (Filing C24949).

B.1.2 Protection of Funds

Filing Requirements

1. Pipeline companies are required to have a set-aside mechanism in place that will provide adequate funds to pay for pipeline abandonment. The set-aside mechanism must be filed with the CER and approved by the Commission.
2. There are specific filing requirements for a trust, a letter of credit, or a surety bond, specified in sections B.1.2.1 to B.1.2.3 below. Pipeline companies must establish a trust, or provide either a letter of credit issued by a bank listed in Schedule 1 of the Bank Act[11] or a surety bond supplied by a surety company regulated by the Office of Superintendent of Financial Institutions. Models of a letter of credit, surety bond, and trust agreement can be found on the CER's website under Pipeline Abandonment.

   B.1.2.1 Trusts

   A trust can be a suitable mechanism to set aside funds for pipeline abandonment. However, the question of whether any particular trust is suitable depends on the terms and conditions that govern the trust. In its Reasons for Decision MH-001-2013, the National Energy Board set out the Indicative Terms for companies proposing to use a trust in Appendix VI, PDF pages 135-139.

   1. Companies using trusts must file a Statement of Investment Policies and Procedures (SIPP) with the CER, the minimum requirements for which can be found in Chapter 3 of the Reasons for Decision MH-001-2013. In 2024 the Commission provided additional guidance on the requirement for SIPPs to include a de-risking phase (C29751-1, C31218-1).
   2. Companies proposing to collect abandonment funds from shippers to be set aside in a trust must file a tariff application, which includes their annual contribution amount, for Commission approval. The requirements are set out in the Reasons for Decision MH-001-2013 on PDF page 118. The annual contribution amount calculation form can be found on the CER's website under Pipeline Abandonment.

   B.1.2.2 Letter of Credit

   If a company is using a letter of credit in regard to their funding for abandonment, the letter of credit must meet the criteria included in the checklist below. Companies must file the letter of credit with the CER for approval by the Commission. Companies should review the model letter of credit before filing and may contact CER staff at financial.regulation@cer-rec.gc.ca if they have any questions.

   Letter of credit checklist

   1. Ensure that the physical letter of credit is filed by courier or registered mail with the CER. It must be the original signed letter of credit and not a duplicate copy nor a draft. Do not

[11] Bank Act, S.C. 1991, c.46, Schedule I.

file an electronic copy of the letter of credit through the Electronic Document Submission System (E-file).

2. Amount: The letter of credit must be equal to the future-proofed amount of a company's approved ACE.
3. Beneficiary: The beneficiary must be identified as "His Majesty the King in Right of Canada, as represented by the Canadian Energy Regulator (CER) or any successor administrative body".
4. The letter of credit must reference the underlying regulatory obligations of the principal. Specifically, the letter of credit should reference the CER Act, RH-2-2008 Reasons for Decision, MH-001-2013 Reasons for Decision, and the Commission letter decision approving the pipeline company's ACE.
5. Duration: The letter of credit must automatically renew on an annual basis without notice or amendment, and without a maximum number of renewals.
6. Issuer: The issuer of the letter of credit must be a Canadian chartered bank set out on Schedule 1 to the Bank Act.
7. Access to funds: The full amount of the letter of credit must be payable to the Beneficiary on demand upon presentation of the letter of credit at the bank's main Calgary branch. Alternatively, presentation of documents can be made by fax[12] where there is not a Calgary, Alberta branch.
8. Notification: The Beneficiary must be notified by fax and registered mail/courier (to the attention of the Secretary of the Commission) at least 60 days before the letter of credit may be cancelled or not renewed. Upon notification the Beneficiary must be entitled to draw the entire amount of the letter of credit.
9. Additional terms: The letter of credit must be irrevocable and must be subject to the International Chamber of Commerce Uniform Customs and Practice for Documentary Credits, 2007 revision (UCP600).[13]

B.1.2.3 Surety Bond

If a company is using a surety bond in regard to their funding for abandonment, the surety bond must meet the criteria included in the checklist below. Companies must file the surety bond with the CER for approval by the Commission.

Surety bond checklist

- Ensure that the physical surety bond is filed by courier or registered mail with the CER. It must be the original signed surety bond and not a duplicate copy nor a draft. Do not file an electronic copy of the surety bond through the Electronic Document Submission System (E-file).

[12] The CER will periodically consider whether alternative methods of presentation and notification are acceptable, generally concurrent with the timing of the review of set-aside and collection mechanisms.

[13] The CER will consider updates to UCP600 when they are available, to be addressed concurrent with the timing of the review of set-aside and collection mechanisms.

- Amount: The surety bond must be equal to the future-proofed amount of a company's approved ACE.
- Beneficiary: The Obligee must be identified as "His Majesty the King in Right of Canada as represented by the Canadian Energy Regulator or any successor administrative body".
- The surety bond must reference the underlying regulatory obligations of the principal. Specifically, the bond should reference the CER Act, RH-2-2008 Reasons for Decision, MH-001-2013 Reasons for Decision; and the Commission letter decision approving the pipeline company's ACE.
- Duration: The term of the surety bond must be indefinite. The surety bond may have a form of evergreen provision that automatically renews the surety bond unless notice of termination is given.
- Issuer: The surety must be regulated by the Office of the Superintendent of Financial Institutions.
- Access to funds: The surety bond must be structured as an on-demand instrument. This may be accomplished by requiring the surety to pay the surety bond amount upon receiving a written demand of the Obligee.
- Notification: The surety bond must be terminable by the surety providing 60 days' notice, with the Obligee then having a further 60 day period to make a written demand of the surety.

B.1.3 Regular Reporting

Filing Requirements

1. All companies must file an annual reporting form with respect to abandonment funding. Companies should make sure they are using the most recent reporting form. The annual reporting form for companies using a trust must be filed by 30 April each year. The annual reporting form for companies using a set-aside mechanism other than trusts (such as a letter of credit or surety bond) and exempt companies must be filed by 31 January each year. Both forms can be found on the CER Pipeline Abandonment page.

B.2 Applications to Abandon (CER Act subsection 241(1) and OPR section 50)

Section 50 of the OPR states:

50. A company shall include in an application made under section 241 of the Act for leave to abandon a pipeline or a part of one, the reasons, and the procedures that are to be used, for the abandonment.

Goal

The application includes the rationale for the abandonment project, the method(s) of abandonment, and the measures to be employed as well as evidence that:

- the proposed abandonment will be carried out in a safe manner; and

- potential environmental, socio-economic, lands, economic and financial effects are identified.

B.2.1 Notice ***of Proposed Abandonment***

Section 241 of the CER Act states:

241 (2) If a company has submitted to the Regulator an application to abandon a pipeline, the company must, in the form and manner specified by the Commission,

(a) serve a notice on all owners of lands through which the pipeline passes, insofar as they can be ascertained; and

(b) publish a notice in at least one issue of a publication, if any, in general circulation within the area in which the lands are situated.

Filing Requirements

1. The applicant must confirm that it will serve the Notice of Proposed Abandonment within 72 hours of filing the application with the CER. This confirmation must include a list of the Indigenous Peoples to whom the notice will be served.
2. The applicant must also confirm the name of the publication and anticipated date of publication of the notice.

Guidance

The form of notice indicated in subsection 241(2) of the CER Act is the following template: Notice of Proposed Abandonment. https://www.cer-rec.gc.ca/en/applications-hearings/pipeline-abandonment/forms/notice-proposed-abandonement-subsection-241-1-canadian-energy-reglator-act.docx The CER expects companies to follow the form of notice specified by the Commission.

Indigenous Peoples that may be affected by the project can be identified by:

- requesting at any time from process.help@cer-rec.gc.ca a preliminary list of Indigenous Peoples that may be affected;
- reviewing the list of Indigenous Peoples that may be affected by the project, which will be provided by the CER after an application has been received;
- considering the location of Indian reserve lands, Métis settlements, Métis or other Indigenous populations, and the traditional territory that may be claimed by one or more Indigenous Peoples;
- contacting regional Indigenous organizations or relevant federal, provincial or territorial government departments or agencies;
- consulting the Government of Canada's Aboriginal and Treaty Rights Information System; and
- taking into consideration past experience working in the area.

When publishing notices, consider the availability of English and French newspapers and their respective regional coverage. The CER expects companies to publish notice in the respective language in both an English and French newspaper in general circulation in the region or, in the event that newspapers in the region are published in only one official language, publish both the French and English versions side by side in compliance with the Official Languages Act.

If the applicant is unable to serve the notice of proposed abandonment on owners of land and Indigenous Peoples within 72 hours of filing the application with the CER, or have to change the anticipated date of publication, it must inform the Commission.

B.2.2 Application to Abandon a Pipeline

Filing Requirements

General

1. A complete description of the pipeline(s) and facility(ies) being abandoned. For pipelines, this must include, but not be limited to, the history of products carried, length, diameter, wall thickness and coating type. Companies should consider any other information that is relevant to the pipeline(s) and facility(ies), and its operation that would assist the Commission in assessing the abandonment application.
2. Reasons for abandonment of operation of the pipeline and facility(ies). See section 3.2 of this manual.
3. Appropriately scaled map(s) or site plan(s) which shows the locations and dimensions of the pipeline right of way and the facility(ies) to be abandoned.
4. The digital location data of pipeline segment(s) and facility(ies) to be abandoned. The data should accurately represent the location of pipeline segments and right-of-way, or facility footprint and it can be derived from any available sources.
5. A description of known temporary work space required for abandonment activities, including location and dimensions.
6. Photomosaic maps or alignment sheet(s) which show the pipeline right of way and facility(ies) overlain on satellite or aerial imagery and any areas of temporary work space. If not available, provide photographs showing the pipeline right of way and facility(ies).
7. An explanation of the abandonment method options (abandonment in-place, removal, segmentation, fill) considered, and rationale for the chosen option(s), including how factors such as current and future land use, safety, effects on the rights of Indigenous Peoples, how individuals and communities may be affected by the proposed abandonment, property, land acquisition or lease agreements, impacted and potentially impacted engineered structures[14], environment and economics were identified, considered and managed.
8. A description of the proposed activities to be carried out to abandon the pipeline and facility(ies).

[14] "Engineered structures" include foundations (buildings, bridges, towers, rail beds, etc.,), slope stability structures, water drainage structures, and crossings of other infrastructure (powerlines, other pipelines, telecom systems, etc.).

9. Proposed schedule for the various abandonment activities to be conducted, including any reclamation to be conducted.
10. A monitoring plan which describes the type, frequency and duration of monitoring to be conducted for the pipeline(s) and facility(ies) that will remain in place. This plan should include considerations for maintaining depth of cover and potential environmental and socio-economic risks of the abandoned pipeline remaining in-place (e.g., water conduit, subsidence and pipe exposure), as informed by the company's environmental and socio-economic assessment and engagement activities.

Engineering

1. For pipeline(s) and facility(ies) to be abandoned in place or removed, confirmation that the abandonment activities will follow the requirements of the latest version of CSA Z662.
2. For the pipeline(s) to be decommissioned, confirm the following, and provide an explanation of how the results were or will be achieved and maintained:

    - no internal pressure remaining;
    - purged and cleaned and left in a state of minimal residual contamination, including the pipe cleaning plans, procedures or standards to be used;
    - left in a state where road, railway or utility crossings are not at significant and unmanaged risk of disturbance due to settlement;
    - equipped with signage;
    - a description of the fill material to be used for railway and road crossings, if applicable (abandonment in place with special treatment), including where along the pipeline fill material will be used and why; and
    - a description of the potential soil subsidence, pipe exposure, water conduit, corrosion, and pipe collapse effects for pipelines to be abandoned in place, including anticipated duration to failure, and a plan to monitor these potential effects.

3. In the event that cathodic protection is not maintained, identify and justify if ground bed anodes will be removed or left in place.
4. Confirmation that abandonment activities and the abandoned pipeline will not impact engineered structures (e,g., roads, utilities, infrastructure, drainage, modified slopes, foundations).

Guidance – Engineering

- Companies may be required to submit a plan that identifies, evaluates, and manages all hazards and risks associated with the abandonment activity and for areas where the pipeline is abandoned in place, including a description of the controls used to address these hazards and risks. The plan shall include a cleaning plan for any pipeline that will be abandoned in place.
- CSA Z662 contains requirements for abandonment of pipeline systems. This standard is referenced in the OPR and must be adhered to as such. Companies are advised that the standard is updated on an ongoing basis and to remain current in their adherence to the requirements.

- CSA Z341 contains requirements for abandonment of underground formations used for the storage of hydrocarbons.

Environmental and Socio-economic Assessment

1. Describe the biophysical and socio-economic setting found at the project location. The description should indicate whether or not the proposed abandonment is located on federal lands[15].
2. For pipelines to be abandoned, use Table B-1 of this guide:

    a. Categorize the pipeline right of way by land use (for example, agricultural lands, forested lands, native prairie, developed lands, wetlands, watercourse crossings). If any known or reasonably foreseeable development is anticipated for any part of the right of way, include these areas in the table; and

    b. For each land-use segment of the pipeline, provide a high-level assessment of the potential short-term and long-term environmental and socio-economic effects on each valued environmental and socio-economic component that may result from the pipeline being abandoned in place and/or removed, regardless of the preferred abandonment method.

3. For the preferred abandonment method(s), complete the environmental and socio-economic interactions table (see Table B-2 of this guide), or provide an environmental and socio-economic assessment.
4. Provide a copy of the Phase I Environmental Site Assessment conducted for the pipeline right of way and associated facility(ies), as per the guidance in the most recent version of CSA Standard Z768. The Phase I Environmental Site Assessment should identify all areas of existing and/or potential contamination, and include an evaluation of the status of any existing contamination currently documented or contamination previously remediated. Provide a list of previously reported contaminated sites within the pipeline right of way and associated facility(ies), including CER-assigned Remediation Event Number(s).
5. If the results of the Phase I Environmental Site Assessment indicate that a Phase II Environmental Site Assessment is warranted, provide a copy of a Phase II plan that describes the procedures to be implemented for investigating all existing and/or potential contamination identified in the Phase I assessment, including sampling methodology. The Phase II assessment should be conducted per the guidance provided in the most recent version of CSA Standard Z769-00, Phase II Environmental Site Assessment.
6. Provide an Environmental Protection Plan (EPP), or a description of the environmental protection procedures, mitigation measures, and commitments that will be implemented during the abandonment activities, including remediation, reclamation, and reclamation activities monitoring, to avoid or minimize potential adverse environmental and socio-economic effects. The level and detail of information should be commensurate with the nature and scale of the project.
7. Describe the desired goal(s) for reclamation, including restoration (where applicable), for the entire length and width of the pipeline right of way and facility sites (not just limited to the

[15] See definition of "federal lands" in section 2 of the Impact Assessment Act; and refer to sections 81 and 84 of the *Impact Assessment Act.*

disturbance sites), and provide a plan for how the environment will be reclaimed to achieve the desired goal(s).

8. Provide a preliminary Reclamation Monitoring Plan which describes the reclamation/restoration parameters to be monitored, the criteria that will be used to monitor the success of those parameters, and the monitoring methods that will be used. Describe the criteria for when adaptive or corrective actions will be implemented, and provide a schedule of when monitoring will be conducted and the results reported to the CER.

Guidance – Environmental and Socio-economic Assessment

- As noted in section A.2.4 Level of Detail, the depth of analysis should be commensurate with the nature of the project and the potential for effects.
- Assessments and studies should be provided to support the selection of abandonment in place or removal of the pipeline.
- Refer to Table A-2 and Table A-3 of this manual for the circumstances and interactions that lead to the need for detailed information.
- While an Applicant's full environmental and socio-economic assessment is not required to be filed, it must still be prepared and may be requested at any time. It may be helpful to include the environmental and socio-economic assessment for applications where there are multiple or complex issues, or to provide clarity and efficiency in the review of an application.
- For pipeline segments which are being proposed to be abandoned in place, the following information should be considered in the assessments provided (including the required Table B-1 and Table B-2 of this guide):
    - the potential environmental and socio-economic effects that may result from the abandonment activities (including reclamation);
    - the potential environmental and socio-economic effects that may result from the abandoned pipeline remaining in place over the long term; and
    - the environmental and socio-economic risks of the abandoned pipeline remaining in place (e.g., water conduit effect, pipeline exposure, ground subsidence) and the mitigation measures to be implemented to reduce those risks (e.g., segmentation, fill), including an explanation of how those measures will sufficiently reduce the risks identified.
- The environmental and socio-economic assessment should include a discussion of means that were considered to reduce any potential greenhouse gas emissions of the project, and how the preferred option was chosen (for example, alternatives to venting gas).
- The environmental and socio-economic assessment should discuss the effects of the proposed method of abandonment on the rights of Indigenous Peoples.
- If cathodic protection systems are proposed to be abandoned in place, the assessment should include consideration of the potential effects that may result from that infrastructure remaining in place over the long term (e.g., soil and groundwater contamination potential).

- For pipelines proposed to be abandoned in place, the assessment should include consideration of the potential risk to land and resource use (e.g., forestry, agriculture, urban development) over the long term, and the mitigation measures that will be implemented to reduce those risks.
- For projects that may traverse through the Environment and Climate Change Canada (ECCC)-designated critical habitat, the CER expects applicants to consider that critical habitat when determining reclamation goals. In these cases, additional restoration measures (e.g., tree planting, access control measures) may be warranted to align the goals with the relevant ECCC Recovery Strategy or Action Plan for that species. Applicants should consult with appropriate federal authorities (e.g., ECCC (Canadian Wildlife Service), Fisheries and Oceans Canada, Parks Canada), and appropriate provincial authorities regarding the proposed project prior to application submission.
- Once contamination has been confirmed by analytical testing, a notice of contamination must be submitted to the CER as soon as possible in accordance with the CER's Remediation Process Guide.
- Applicants are expected to prepare an EPP for all projects. While it is not a requirement for an EPP to be filed as part of an application, it must be available for review if requested or may be a condition of approval to be complied with before construction. Refer to section A.2.6.2 for more detail regarding EPPs.
- The EPP, or the environmental protection procedures, should include a contingency plan to be implemented in the event that previously unidentified contamination is identified (including measures to be implemented in accordance with the CER's Remediation Process Guide).
- A condition on the Abandonment Order may be imposed to require the applicant to file reclamation/restoration monitoring reports after the completion of abandonment activities. The time period for required reporting can vary and is dependent upon the method of abandonment, mitigation measures applied and nature of the environmental setting. Projects requiring a longer period of time to reach reclamation/restoration goals may be required to submit monitoring reports of greater scientific rigor or over a longer time period.

Engagement

The CER expects applicants to perform engagement activities for all projects depending upon the respective project scope. Companies must justify the extent of engagement carried out for each project. In designing engagement activities, companies can refer to section 3.4 and section 3.5.

1. Provide a summary of the engagement activities undertaken with individuals and communities, which may be affected by the proposed abandonment including:
    - landowners;
    - land users;
    - Indigenous Peoples;
    - occupants;
    - land managers (Crown);

- federal, provincial or municipal agencies or levels of government;
- shippers; and
- other commercial third parties who could be affected by the project, including prospective future shippers.
- The summary of engagement should include, at minimum:
    - a description of any issues or concerns for each abandonment method(s) identified;
    - how input from the engagement activities was considered in determining the proposed abandonment method(s);
    - how input from the engagement activities was considered in the development of the applicant's preliminary reclamation plan;
    - a description of how the applicant has addressed or will address any concerns or issues raised and when;
    - a description of any concerns or issues raised that will not be addressed and why; and
    - a description of any outstanding concerns, including how the applicant intends to address any outstanding concerns, or an explanation as to why no further steps will be taken.

2. Provide any details of consultation undertaken for developing reclamation and abandoned pipeline monitoring plans.

Lands

1. Describe any land rights proposed to be acquired for the abandonment, including the location and dimensions of the land rights that have not already been acquired or leased (for example, temporary work space). Provide a description (for example in a table) of the land tenure along the right of way, including the approximate length of the pipeline segments that are located respectively along freehold, Federal or Provincial Crown land. For a description of types of land rights, refer to section A.4.
2. If any land acquisition or lease agreements will be disposed:

    a. identify the locations where land acquisition or lease agreements will be disposed;
    b. identify the proposed timing of disposition and process to notify landowners; and,
    c. describe the process available to the landowner should subsequent land issues or concerns arise following the abandonment of the facility and disposition of the easement.

Economics and Finance

1. Provide details of the estimated costs associated with the proposed abandonment, including details of any estimated annual costs for post-abandonment maintenance and monitoring, as well as contingency funds for unforeseen events, for any pipelines abandoned in place.

2. Confirm that funding is and will be available to finance the proposed abandonment project and indicate how the proposed abandonment project will be funded (through the trust, tolls or other).

    a. If funding is through the abandonment trust, indicate whether the company is applying to access the abandonment trust in this application or will be in a subsequent application.

        i. If applying to access the abandonment trust to pay for the abandonment activities in this application, provide the information required for accessing a trust found in section B.3.

    b. If the pipeline is to be abandoned in place, explain how funding will remain available for the Provisions for Abandoned Pipelines in a company's ACE.[16]

3. Indicate whether any service would be terminated as a result of the proposed abandonment. If an existing or prospective future commercial party or other user could be negatively impacted by the termination of service, provide evidence that:

    a. the company has been responsive to the needs, inputs, and concerns of commercial parties or other users;
    b. the estimated relative impacts to all parties from the abandonment of the facilities versus continuation of service have been considered;
    c. alternatives to the abandonment of the facilities were considered (including physical and tolling alternatives) and that abandonment is the optimal outcome; and
    d. impacted parties will be able to wait until after the Commission issues its decision on the application to make any potentially costly, irreversible choices necessary to continue their business operations after any approved abandonment activities have begun. If this is not the case, provide evidence justifying why not.

4. Provide the original book cost of the facilities and accumulated depreciation to the retirement date.

    a. Describe whether the retirement is ordinary or extraordinary.
    b. Explain any impact on remaining rate base, providing accounting details as outlined in the Gas Pipeline Uniform Accounting Regulations (GPUAR) or Oil Pipeline Uniform Accounting Regulations (OPUAR).

5. Provide, along with supporting documentation, any relevant exemptions the Applicant has been granted by the Commission with respect to 3 or 4 above.

6. If a trust is used to set aside funds for abandonment, explain whether the abandonment of facilities in the application represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date an updated

[16] Report of the Commission of the CER ACE Review 2021 and SAM-COM Review 2021, Section 4.4.7 Provisions for Abandoned Pipelines, PDF pages 43-49 of 78, C24949-3.

Abandonment Funding Plan will be submitted to the CER, using Abandonment Funding Plans – required tables on the CER Pipeline Abandonment page.

Guidance – Economics and Finance

Abandonment Costs

Describe the methodology and assumptions used to estimate costs. Provide a level of detail and technical description appropriate to allow regulators, the public, and others to understand the estimates to a reasonable level. For example, where pipe is proposed to be left in the ground, describe plugging intervals and costs. Where facilities are proposed to be removed, identify the costs for dismantling and removal, reclamation, any remediation, and, where relevant, the costs and expected proceeds from salvage activities, including the timing of receipts of salvage proceeds.

In addition, include information on the topics below in the submission:

Liability Exposure

A description of future liabilities including:

- the types of each liability and an estimate of the associated cost; and
- a statement of which abandonment work is associated with a legal obligation and which work is not.

Financing

The confirmation that funding is and will continue to be available to fund the abandonment should include:

- an explanation of the economic feasibility of the abandonment; and
- the expected toll treatment and toll impact, including:
    - an explanation of how the tolls were determined;
    - the expected impact, if any, on shippers and other parties;
    - a statement regarding the extent of shippers' and other parties' support for any toll impact; and
    - describe any funding, financial guarantees or other arrangements designed to cover these costs.

If applying to access the trust, see guidance under section B.3.

Provisions for Pipelines Abandoned in Place

These provisions are split into two cost categories in a company's ACE: Provision for Monitoring of Abandoned Pipeline; and Provision for Addressing Unforeseen Events Associated with Abandoned Pipeline.

- Provide a description of the mechanisms to be used to set aside funds for these activities.

- Provide information for landowners regarding the company's intent to access the trust.
- Provide estimates of average annual future costs based on the company's most recently-approved ACE, in current year dollars, for these activities, as well as the number of years for which the company believes it is to be responsible for such activities. If the company's estimated costs differ from the costs provided in the most recent approved ACE, provide explanation for why these costs differ.[17]

Termination of Service

In addition to the information required and guidance provided in section 3.5, if the application would result in the termination of service currently provided to any party, and a commercial party or other user could be negatively impacted by the termination of service, provide the following:

- A description of the process used to assess and identify facilities for abandonment on the pipeline system. In addition, describe how this process was developed (including the consultations that informed the process), how it provides shippers or other users with the ability to meaningfully plan for and mitigate the impacts of potential terminations of service, how it has been communicated to parties and how it ensures equitable treatment of shippers and other users across the pipeline system.
- Sufficient detail to demonstrate that the proposed abandonment construction schedule does not create unnecessary uncertainty for impacted commercial parties or other users, requiring them to make costly, irreversible choices to continue their operations prior to a Commission decision on the abandonment application.

Accounting Treatment

The GPUAR or OPUAR prescribe the accounting treatment for both ordinary and extraordinary retirements, including informing the CER if the gain or loss on an extraordinary retirement is material.

B.2.3 Reference materials – physical and technical issues related to abandonment

The National Energy Board, in 2009, published a Land Matters Consultation Initiative (A21836) report which recommended that knowledge gaps on the physical issues of pipeline abandonment be addressed. Det Norske Veritas (DNV) was commissioned to conduct a literature review regarding the current understanding worldwide with respect to the physical and

[17] Report of the Commission of the CER ACE Review 2021 and SAM-COM Review 2021, Section 4.4.7 Provisions for Abandoned Pipelines, PDF page 44 of 78, C24949-3.

technical issues associated with onshore pipeline abandonment and use the results of the literature review to critically analyze and identify gaps in current knowledge, and make recommendations as to potential future research projects that could help to fill those gaps (DNV Scoping Study (A2Y0S9)).

The Petroleum Technology Alliance Canada website has various studies and reports which address knowledge gaps summarized in the DNV Scoping Study. The reports can be found by searching keywords related to abandonment.

B.3 Applications to Access Funds from the Trust to Fund Abandonment

In the MH-001-2013 Reasons for Decision and the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021, the National Energy Board and Commission of the CER re-affirmed that funds set aside for pipeline abandonment purposes can be made available for abandonments, decommissioning and deactivation.

Goal

Submissions to access funds which have been set aside fully describe and explain the context, objectives, and impacts of the request.

Filing Requirements

Access to funds in a trust is assessed on a case-by-case basis.[18]

1. Provide an outline of how the timing of the applied-for withdrawal compares with what was anticipated in the pipeline's abandonment funding plan and annual contribution amount derivation.
2. Provide an explanation of the impact on the coverage for other future costs of remaining activities needed to complete abandonment. Where the actual timing or size of trust withdrawals differ materially from those anticipated in the pipeline's abandonment funding plan (as a result of either single or numerous applications), provide an explanation of why the applied-for withdrawal remains appropriate considering the potential underfunding risk. The amount of information and level of detail provided should correspond to the degree to which withdrawals deviate from the pipeline's abandonment funding plan.
3. Explain whether the abandonment or decommissioning of facilities in the application represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date when an updated Abandonment Funding Plan will be submitted to the CER, using the form Abandonment Funding Plans- required tables.[19]
4. Provide a justification for requesting access to funds from the trust. Include:
    a. In the case of decommissioning or deactivation activities:

[18] In the MH-001-2013 Decision, the NEB stated that it expects that pipeline companies would seek funding in advance only when it is not possible for the pipeline company to pay for the physical activities in advance. Withdrawal of funds from the trust in advance would be infrequent and only be permitted if justified.

[19] The reporting form "Tables – Abandonment Funding Plan – required details" was released as an appendix of the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021.

i. why other revenue is not sufficient to undertake the work; and;

ii. the impact on future tolls or abandonment surcharges, relative to other funding options.

b. Any impacts on the abandonment cost estimate and annual contribution amount from removing funds for end of life work.

5. Provide project costs using the "Tables – Reporting actual costs of abandonment or decommissioning"[20] available on the CER's website, with specific sections completed as follows:

   a. When applying after completing the abandonment or decommissioning activities:

      i. Actual cost information, including an estimated breakdown of actual costs consistent with Part D of the reporting form, except in the case of the smallest projects for which actual costs do not need to be in this format (e.g., those undertaken pursuant to Exemption Order XO/XG-200-2025 related to decommissionings).

      ii. The ACE-implied cost estimate (AICE)[21], including a breakdown consistent with Part E of the reporting form, and a variance analysis when actual costs are at least 15 per cent above or below the AICE.

   b. When applying in advance of the abandonment or decommissioning activities:

      i. The project cost estimate, including an estimated breakdown of the project cost estimate consistent with Part D of the reporting form.

      ii. The AICE, including a breakdown consistent with Part E of the reporting form, and a variance analysis when the project cost estimate is at least 15 per cent above or below the AICE.

6. Describe the accounting treatment that will be used for net salvage (salvage value less end of life costs), if any, and any associated impacts on rate base.

7. If the costs were for decommissioning activities, confirm that the activities done during decommissioning will not need to be repeated at time of abandonment and therefore the costs that have been incurred will not need to be repeated.

8. If the abandonment or decommissioning activities have been completed, provide the Order number for all relevant approvals for those activities.

Next Steps...

Companies are encouraged to include the completed relevant checklists from Appendix 1.

[20] The reporting form "Tables – Reporting actual costs of abandonment or decommissioning" was released as Appendix 4(e) of the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021.

[21] The AICE is a cost estimate for a piece of a pipeline system, generated by applying the methodology used to derive the overall ACE for the entire pipeline system to the piece of the system in question (e.g., a particular decommissioning or abandonment project). The AICE should be net of (i.e., excluding) the Provisions for Abandoned Pipelines because those costs are anticipated to be incurred after abandonment. For clarity, the AICE is distinct from a company's actual project cost estimate, which would be based on a project-specific cost estimation process.

Table B-1: Pipelines – Comparison of predicted effects from *a*bandoning in place and removal

(**Note:** This table is provided as a template, and Applicants should modify the table to ensure that all applicable land uses are identified)

Table B-1: Pipelines – Comparison of predicted effects from abandoning in place and removal [WORD 18 KB]

Valued Component	Land-use											
	E.g. Forested lands		E.g. Native Prairie		E.g. Wetlands		E.g. Watercourse crossings		E.g. Developed lands		E.g. Agricultural lands	
	Effects of Abandon in place	Effects of Removal	Effects of Abandon in place	Effects of Removal	Effects of Abandon in place	Effects of Removal	Effects of Abandon in place	Effects of Removal	Effects of Abandon in place	Effects of Removal		
Physical and Meteorological Environment												
Soil and Soil Productivity												
Vegetation												
Water Quality and Quantity												
Fish and Fish Habitat												

Wetlands												
Wildlife and Wildlife Habitat												
Species at Risk, or Species of Special Status, and Related Habitat												
Air Emissions												
GHG Emissions												
Acoustic Environment												
Human Occupancy and Resource Use												
Heritage Resources (both Crown and private lands)												
Navigation and Navigation Safety												
Indigenous Traditional Land and Resource Use												

Socio and Cultural Well-Being												
Human Health or Aesthetics												
Infrastructure and Services												
Employment and Economy												
Rights of Indigenous Peoples												
Accidents and Malfunctions												
Effects of the Environment on the Project												
Other (please specify)												

Table B-2: Environmental and Socio-Economics Interactions

(**Note:** This table is provided as a template, and Applicants should modify the table to ensure that all applicable land uses are identified)

Table B-2: Environmental and Socio-Economics Interactions [WORD 18 KB]

Element	Interaction (Yes or No)	Description of Interaction(s) (if no interaction is predicted, provide justification)	Status of element – specific study or survey (complete, underway, date expected, or underway)	Description of potential effects	Mitigation will be implemented to address potential adverse effects (Yes or No)	Description of mitigation to be applied	Description of residual effects after mitigation, including the spatial and temporal extent of the effects	Specify if there will likely be an interaction between the predicted residual effects of the project and the effects of other projects or activities that have been or will be carried out (Yes or No). If Yes, describe the cumulative effects.	Monitoring Plan and Details
Physical and Meteorological Environment									
Soil and Soil Productivity									
Vegetation									
Water Quality and Quantity									
Fish and Fish Habitat									
Wetlands									
Wildlife and Wildlife Habitat									
Species at Risk, or Species of Special Status,									

and Related Habitat									
Air Emissions									
GHG Emissions									
Acoustic Environment									
Human Occupancy and Resource Use									
Heritage Resources (both Crown and private lands)									
Navigation and Navigation Safety									
Indigenous Traditional Land and Resource Use									
Socio and Cultural Well-Being									
Human Health or Aesthetics									
Infrastructure and Services									
Employment and Economy									

Rights of Indigenous Peoples									
Accidents and Malfunctions									
Effects of the Environment on the Project									
Other (please specify)									

Filing Manual – Guide C – Protection of Pipelines From Ground Disturbance, Facility Construction, Crossings and Mining Operations (CER Act section 335 and section 338)

C.1 Ground Disturbance, Facility Construction and Crossings Near Pipelines (CER Act section 335, *Canadian Energy Regulator Damage Prevention Regulations* – Authorizations)

Goal

The application includes information with respect to:

- a facility proposed for construction across, on, along or under a pipeline;
- a proposed activity that causes a ground disturbance[22] within the prescribed area, which is a strip of land measured 30 m perpendicularly on each side from the centre line of the pipe (*Canadian Energy Regulator Damage Prevention Regulations* – Authorizations (DPR – Authorizations));
- vehicle or mobile equipment proposed to operate across the pipeline outside the travel portion of a highway or public road; or
- a facility across, on, along or under the pipeline that is to be reconstructed, altered or removed.

Filing Requirements

Construction of facilities across pipelines and activities causing ground disturbance

1. For an application to construct a facility across, on, along or under a pipeline where consent has not been obtained from the pipeline company or measures outlined in the DPR – Authorizations cannot be met, provide:

    - the purpose and location of the proposed facility;
    - a description of the proposed facility; and
    - the rationale for seeking approval from the Commission.

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[22] CER Act, section 2: "ground disturbance": means a ground disturbance other than one that caused by:

- (a) is caused by any activity that is specified in the orders or regulations made in respect of pipelines under section 335 or made in respect of international or interprovincial power lines under section 275;
- (b) is, in relation to a pipeline, caused by cultivation to a depth of less than 45 cm below the surface of the ground; or
- (c) is, in relation to a pipeline, caused by any other activity to a depth of less than 30 cm and that does not result in a reduction of the earth cover over the pipeline to a depth that is less than the cover provided when the pipeline was constructed.

2. For an application to conduct an activity causing a ground disturbance in the prescribed area where consent has not been obtained from the pipeline company or measures outlined in the DPR – Authorizations cannot be met, provide:

    - the purpose and location of the activity;
    - a description of the activity(s) resulting in a ground disturbance; and
    - the rationale for seeking approval from the Commission.

3. For applications to construct a facility or to conduct an activity causing a ground disturbance in the prescribed area, provide an ESA (see section A.2).

Crossing pipelines with vehicles and mobile equipment

4. For an application to operate a vehicle or mobile equipment across a pipeline where consent has not been obtained from the pipeline company, provide:

    - the purpose and location of the activity;
    - a description of the vehicle or equipment; and
    - the rationale for seeking approval from the Commission.

5. For an application to direct the owner of a facility constructed across, on, along or under a pipeline, to reconstruct, alter or remove the facility, provide:

    - the purpose and location of the facility;
    - the purpose for the reconstruction, alteration or removal of the facility; and
    - the rationale for seeking approval from the Commission.

Guidance

Construction of facilities across pipelines and activities causing ground disturbance

An application is not required for activities (construction of facilities, activities causing ground disturbance, crossings) for which the requirements outlined in the DPR – Authorizations have been met.

An application for activities causing a ground disturbance is not required where the activity is:

- caused by cultivation to a depth that is less than 45 cm below the surface of the ground; or
- caused by any other activity to a depth of less than 30 cm and that does not result in a reduction of the earth cover over the pipeline to a depth that is less than the cover provided when the pipeline was constructed.

Crossing pipelines with vehicles and mobile equipment

Crossing along a travelled portion of a highway or public road

An application for a mobile equipment or vehicle crossing is not required if the crossing is to occur along the travelled portion of a highway or public road.

Crossing with vehicles for agricultural activity

Equipment that is used to perform an agricultural activity may cross a pipeline if the following conditions are met:

- the loaded axle weight and tire pressures are within the manufacturers approved limits and operating guidelines; and
- the point of crossing has not been identified by the pipeline company as a location where agricultural activities have the potential to damage the pipeline.

Multiple Activities

Where multiple activities are proposed (e.g., both a crossing and ground disturbance), an application may be required for one of the activities even though the other activity may fall within one of the above-mentioned categories that do not require an application.

Filing an Application

The information required for this application can be filed with the CER in the form of a letter. A copy of the letter should be sent to all affected parties (including the pipeline company) so they can review the information and forward any comments they may have to the CER.

Provide as much information as possible about the efforts made to obtain the pipeline company's consent for the activity prior to making the application to the CER including the reasons given by the pipeline company for withholding its consent. If applicable, please provide an explanation why certain measures outlined in the DPR – Authorizations cannot be met.

This may include copies of letters exchanged with all affected parties or minutes of meetings. The Commission may request additional information when an application is filed, depending on the circumstances of the project.

Applicants can refer to section A.2 for guidance with respect to the ESA process. CER staff can provide assistance in determining whether the project requires an ESA. In general, smaller projects that landowners may want to carry out may result in a less extensive ESA.

C.2 Protection of Pipelines from Mining Operations (CER Act section 338)

This section is applicable to proposed mines or mineral work that will take place within 40 metres of the RoW of a federally regulated pipeline.

An application under section 338 may involve pipeline crossings and therefore, an application pursuant to section 335 may also be required.

Goal

The application includes information with respect to:

- the portion of the pipeline affected by the proposed mines or mineral work;
- an environmental screening;
- any crossings; and
- any seismic program or explosives involved.

Filing Requirements

1. As required by subsection 338(3) of the CER Act, provide a plan and profile for the portion of the pipeline to be affected.
2. For applications filed under section 338 of the CER Act, provide an ESA (see section A.2).
3. Provide all reasonable and necessary information and details respecting the proposed mine or mineral work, including:

    - project title and contact information for the company, contractors and sub-contractors;
    - the name and contact information of the affected pipeline company;
    - legal description of the lands to be affected;
    - a map indicating the location of the pipeline(s); and
    - a statement certifying that the pipeline company and the CER will be contacted at least 72 hours prior to conducting the project.

4. If the project involves crossing a pipeline, also include:

    - the proposed crossing date; and
    - evidence that an approved crossing agreement is in place.

5. If the application is for a seismic program or involves explosives:

    - indicate the type of seismic program (e.g., 2D, 3D);
    - provide the plat of the seismic program;
    - identify the source (e.g., dynamite or vibroseis);
    - identify the size of the dynamite charge, if applicable; and
    - confirm that the program will be conducted in accordance with all applicable regulations.

Guidance

Submitting a Pipeline Notification Form to the CER is not considered an application or an approval for the activity.

Conditions of approval may include the requirement for mitigation plans that ensure public safety if live charges cannot be removed from the ground.

Applicants can refer to section A.2 for guidance with respect to the ESA process. CER staff can provide assistance in determining whether the project requires an ESA. In general, smaller projects that landowners may want to carry out may result in a less extensive ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide D – Deviations (CER Act section 211)

In some cases during construction the pipeline has to be relocated due to new facts or changes in design (e.g., a new river or railroad crossing or newly found archaeological site). In those situations, only a section 211 application is required.

Section 211 requires a company to file a plan, profile and book of reference when changing the location of a pipeline. This applies whether the pipeline is approved and located or is already constructed. However, section 211 does not give authority to construct; therefore, in cases where the pipeline is already constructed, an application under section 183 or 214 must also be filed, unless the facilities fall within the Section 214 Streamlining Order.

Goal

The application should include the rationale for the deviation as well as information with respect to the proposed route, the landowner's comments (if any), the service of notices on landowners, and the land acquisition process.

D.1 Filing Requirements – Lands

1. Provide the order number and date of the approval of the original PPBoR.
2. Provide a PPBoR drawing showing the approved route.
3. Provide a PPBoR drawing showing the location of the proposed deviated, changed or altered route for approval.
4. Provide the starting and ending points of the deviation (kilometre post to kilometre post).
5. Include a map at an appropriate scale that indicates the location of the deviation, alteration or change in relation to both the approved detailed route and the certificated route of the pipeline. Include surrounding natural and man-made features on the map.
6. Describe any new lands required including the status of acquisition of the lands and the status of service of subsection 322(1) notices.
7. Describe any landowner concerns and how those concerns will be addressed, including the date(s) responses will be provided to the landowner(s) or evidence to demonstrate that the affected landowners consent to the deviation.
8. For an application filed pursuant to subsection 211(3) of the CER Act for an exemption from the provisions of section 211, include:

    - the order number and date of the approval of the original PPBoR;
    - the starting and ending points of the deviation (kilometre post to kilometre post);
    - the maximum distance of deviation from centre line;
    - a PPBoR drawing showing the approved route and the proposed deviation;
    - a map at an appropriate scale that indicates the location of the deviation, alteration or change in relation to both the approved detailed route of the pipeline and the certificated route of the pipeline. Include the surrounding natural and man-made features on the map;

- a description of any new lands required including the status of acquisition of the lands and the status of service of subsection 322(1) notices;
- a description of landowner concerns and how those concerns will be addressed, including the date(s) responses will be provided to the landowner(s); or
- evidence to demonstrate that the affected landowners consent to the deviation.

D.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the effects have already been considered in an ESA by the Commission; or
2. If the environmental and socio-economic effects have not been previously addressed by an ESA, provide the filing requirements outlined in section A.2.

Guidance

To address the environmental and socio-economic effects of a deviation that have not been previously assessed, applicants are referred to section A.2. Applicants should carefully review the sections discussing the scoping of the ESA and the level of detail required. Appropriate scoping ensures the ESA will focus on relevant issues and concerns, and assists in determining the appropriate level of effort to be used to prepare the ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide E – Change in Class Location (OPR section 42)

These revised guidelines detail the CER's expectation that companies report any change in class location to a higher designation and submit the proposed plan to deal with the change to the CER. Companies are to use the class location change notification module under the OPR section of the Online Event Reporting System for the submission.

A class location change is a change from a previous class location designation (not design class location) to the current higher class location designation as defined by CSA Z662.

Filing must occur within six months after the change occurred. The operator is responsible for monitoring pipeline sections that may be subject to a class location change with sufficient frequency and for engaging and communicating with local authorities or developers in order to be aware of the time of change.

Goal

The submission includes a plan that describes how the company proposes to deal with class location changes to a section(s) of its pipeline to a higher class location designation.

It is the CER's expectation that the proposed plan demonstrates the adequacy and effectiveness of the company's integrity management program to ensure the affected section of the pipeline is suitable for continued service at the new class location designation. The CER evaluates the plan for its impact on safety, security, and the protection of the environment.

The plan is submitted within six months after the change of class location occurred.

Identifying Assessment and Filing Requirements

Figure E-1 summarizes the filing requirements to be submitted to the CER for review within six months after a change in class location occurs.

If the class location of a section of a pipeline changes to a higher designation, within six months after the change occurred, submit a **primary assessment** as part of the proposed plan (as described in E.1) with the CER for review[23].

When the section of the pipeline with the change in class location meets the requirements in CSA Z662 for a new class location, within six months after the change in class location occurred, file only a **primary assessment** as the proposed plan (as described in E.1) with the CER for review.

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[23] Review: A critical evaluation of the submitted documentation and the proposed plan that may result in requests for further information, acceptance or rejection of the proposed plan, or conditions of operation. Before submission and/or during the review process, the company is expected to:

- perform integrity measures following the integrity management program to ensure the affected section of the pipeline is suitable for continued service at the new class location designation;
- implement interim corrective and mitigative measures as soon as practicable;
- discuss company concerns with CER staff.

When the section of the pipeline with the change in class location does not meet CSA Z662 Clause 10.7.2 requirements for a new class location, the design requirements of CSA Z662, Clause 4 may be applied, or a valve spacing analysis and/or an Engineering Assessment (EA) (as described in E.2) may be performed to determine the suitability for continued service at the new class location designation. In such circumstances, in addition to a **primary assessment**, file either (1), (2), and/or (3) below, as appropriate, within six months after the change in class location occurred:

1. When a company follows the design requirements of CSA Z662, Clause 4, file with the CER for review, the following information:

    a. The **plan for design changes**[24] with a proposed timeline for completion, and

    b. The **interim corrective and mitigative measures** (as applicable and as described in E.3).

2. When a company carries out a valve spacing analysis to determine the suitability for continued service of the pipeline section at the new class location designation, file with the CER for review, the following information:

    a. The **valve spacing analysis** (as described in E.2),

    b. The **interim corrective and mitigative measures** implemented to safeguard the public, and

    c. The **long-term corrective and mitigative measures** (as applicable and as described in E.3).

3. When a company carries out an EA to determine the suitability for continued service of the pipeline section at the new class location designation, file with the CER for review, the following information:

    a. The **EA** (as described in E.2)

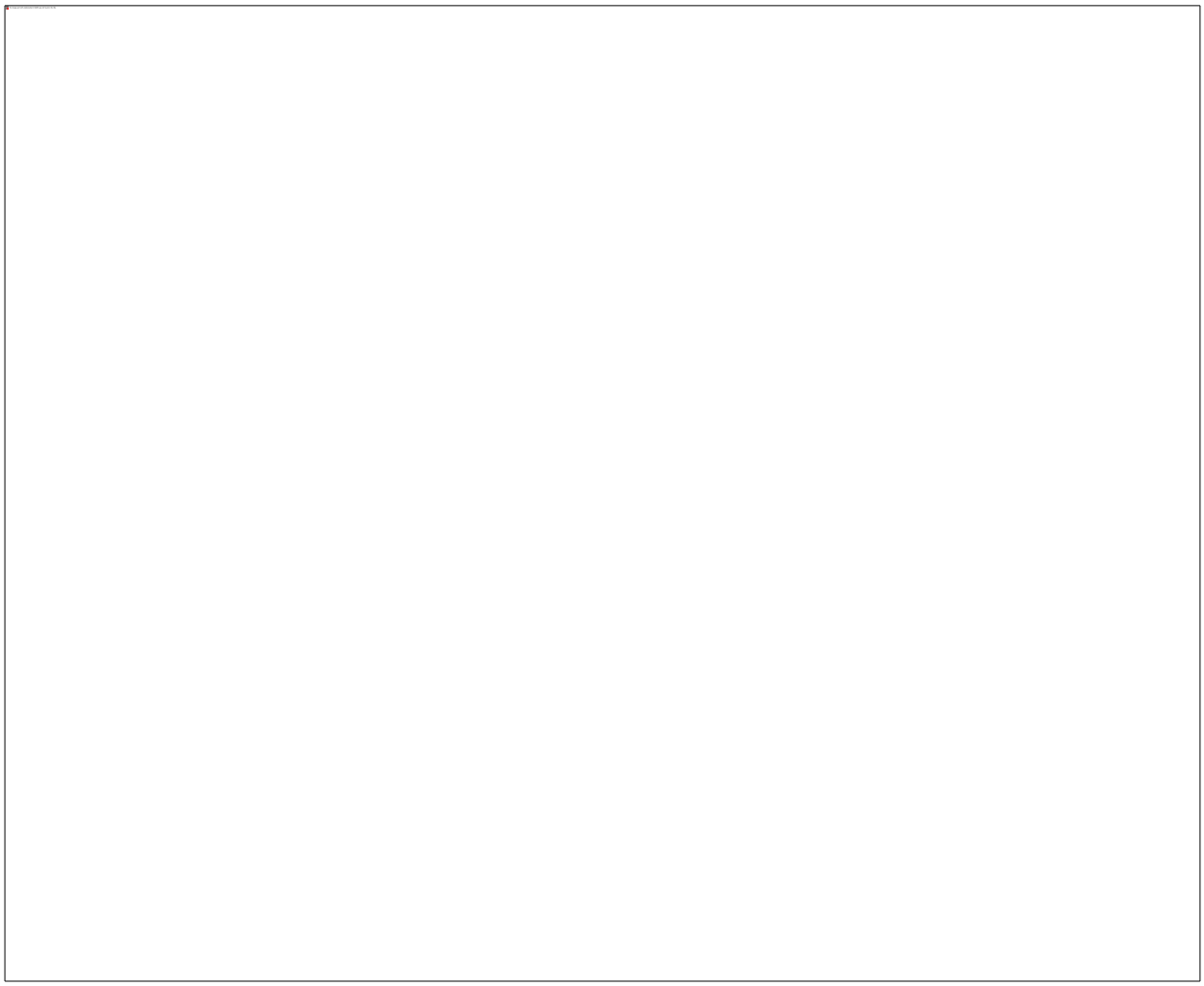
    b. The **interim corrective and mitigative measures** implemented to safeguard the public, and

    c. The **long-term corrective actions** (as described in E.3)

    d. If a company cannot complete an EA within six months after the change occurred, include in the proposed plan **the timeline for completion and implementation of the EA** and provide the **interim corrective and mitigative measures** (as described in E.3) implemented to safeguard the public.

[24] Consult the document Operations and Maintenance Activities on Pipelines Regulated Under the Canadian Energy Regulator Act: Requirements and Guidance Notes to determine if a separate application is required.

Figure E-1: CER Filing Manual Guide E Filing Requirements to be submitted to the CER for review within six months after the change of class location occurred.



E.1 Primary Assessment

Filing Requirements

Subject to the class location change to a higher designation, file with the CER a plan that includes a primary assessment of the pipeline segment[25] that includes the following information.

1. Identification of changes in circumstances that have occurred and resulted in the change of class location, including:

[25] For the purposes of this document, a section of pipeline that changes to a higher class location designation may be comprised of several individual segments with unique pipeline properties or characteristics. A company is expected to file a Primary Assessment for each pipeline segment.

a. maps of current and previous circumstances in a large enough scale to clearly indicate the following on the map:
    i. north arrow;
    ii. scale indicated and scale bar;
    iii. reasons for the change in class location;
    iv. location and type of any crossings;
    v. location and spacing of valves;
    vi. class location assessment area;
    vii. area of potential impact[26];

b. description of development within class location assessment area, including number and type of dwelling units, outside areas or buildings as described in CSA Z662 for class location designations;

c. the date or, if not available, the most likely date of the class location change event.

2. Requirements of CSA Z662 for a change of class location, including, as applicable:

a. design factor or location factor, as applicable:
    i. effect of the new location factor(s) on design pressure and hoop stress used in stress analyses for any location on the affected pipeline segment, including road and railway crossings;

b. valve spacing;

c. depth of cover (DOC) (comparison of minimum requirements versus actual DOC);
    i. results and source of most recent DOC measurements;

d. pressure testing;

e. evaluation and repair of imperfections as specified in CSA Z662:
    i. report the presence of incomplete records or no records of assessed/repaired imperfections on the affected segment of the pipeline;
    ii. clarify if a pipeline segment has been inspected with in-line inspection (ILI) tools. Report the latest dates and types of in-line inspection tools used, if applicable;
    iii. report integrity assessment methods other than in-line inspections (e.g., above-ground surveys, integrity excavations, etc.);
    iv. when pressure testing is performed as an integrity assessment, report the date of the final pressure test and the hoop stress at the test pressure as a percentage of the specified minimum yield strength.

[26] The area of potential impact is considered to be the area surrounding the pipeline within which the potential failure of a pipeline could have significant impact on people, property, or the environment.

3. Design and operating conditions of the pipeline system, including service fluid, design operating stress, maximum operating pressure (MOP), joint and temperature factors, and the presence of potential geohazards:

    a. report if the pipeline segment is under a regulatory or self-imposed operating pressure restriction.

4. Material and pipeline properties, including in-service year, seam weld type, outside diameter, wall thickness, specified grade, yield strength, tensile strength, and toughness, and how the material properties were obtained.
5. Coating type and condition of the coating applied to the pipeline body, girth welds, and repairs:

    a. report the source of the coating information, which may be inferred from specifications, construction records, and indirect inspection (e.g., ILI, electromagnetic acoustic transducer (EMAT) inspection, above-ground inspections (e.g., direct current voltage gradient (DCVG), alternating current voltage gradient (ACVG), alternating current coating attenuation (ACCA), etc.)), and excavation results.

6. Level of cathodic protection (CP):

    a. report the date of the last potential survey (e.g., test lead survey, closed interval survey (CIS), etc.).

7. Confirmation that girth welds of the affected segment of the pipeline were subjected to 100% Non-Destructive Examination (NDE).
8. The damage prevention activities at the location of the pipeline segment subject to the increase in class location (e.g., additional signage, slabs, patrol frequency, etc.).
9. The presence of a school, hospital, day home, assisted living facility, prison, or other facilities that may be difficult to rapidly evacuate **and/or** where evacuation from such facility can only be achieved by entering the areas of potential impact.
10. Failure history of the valve section containing the affected segment of the pipeline.

E.2 Determining the Suitability for Continued Service

Filing Requirements for a Valve Spacing Analysis

When the valve spacing requirement of CSA Z662-19 is not met for the higher class location designation, a valve spacing analysis following CSA Z662-19 Clause 4.4 is required to demonstrate the suitability of the valve spacing for the new class location. File this analysis and include the following information, as applicable:

1. A listing of the upstream and downstream sectionalizing valves, including a map that shows the spacing of the valves;
2. A listing and a schematic of the current configuration of the branches, cross-overs, risers and other piping that feed service fluid between the two sectionalizing valves, including:

a. confirmation that the additional feed from each source is accounted for in the calculation of the blowdown volumes;
b. details on the cross-over valve assembly;
c. normal operating settings for each of the valves (e.g., normally closed or open);

3. Information on both 1 and 2, including:

a. valve mechanism (remote, automatic or manual);
b. clarification whether valves are equipped with emergency shutdown mechanisms;
c. valve maintenance frequency;

4. A risk analysis that demonstrates that the risks of the pipeline at the existing valve spacing are equal to or lower than the risks of the pipeline at a valve spacing that meets the requirement of CSA Z662-19 Clause 4.4 for the changed class location.

Filing Requirements for an Engineering Assessment

When the requirements of CSA Z662-19, Clause 10.7.2 other than the valve spacing are not met for the higher class location designation, an EA is required that includes, as applicable:

1. Primary assessment (as described in E.1);
2. The EA must meet CSA Z662 requirements for engineering assessments of existing pipelines, including, as applicable:

a. manufacturing process and installation method;
b. construction and testing specifications;
c. the physical configuration and constraints of the affected section of the pipeline that is the subject of the engineering assessment;
d. condition of the piping, including types of imperfections, dimensions, and dimensional uncertainty;
e. mechanism or mode of imperfection formation, growth, and failure;
f. service, operating, failure, and maintenance history, including a CP effectiveness evaluation;
g. appropriateness of repair methods used;
h. consideration of combined stresses, for example:

i. where existing pipelines are crossed by roads or railways, upgrade the pipelines to meet the applicable design requirements for the new class location or perform a detailed analysis of all loads expected to be imposed on the pipeline during operation of the crossing. Consider the condition of the pipeline when determining the resulting combined stresses in the pipeline. Consider fatigue stress or fluctuating stress if heavy equipment crosses the pipeline at high frequencies.

3. A comprehensive hazard identification and assessment is required with regard to the condition of the piping, performed by a professional engineer who is competent in assessing the hazard, considering as applicable:

    a. corrosion (e.g., external, internal, microbiologically influenced corrosion (MIC), alternating current induced corrosion, etc.):

        i. apply additional coating inspection and testing if the information of the coating condition of the pipe body and girth weld is lacking;

        ii. perform additional coating assessment or apply additional safety measures depending on how effectively the coating protects the pipe or depending on the probability that it may support the presence of a corrosive environment on the pipe;

    b. cracking (e.g., environmentally-assisted, fatigue, etc.);

    c. mechanical damage (e.g., dents, wrinkles, buckles, and gouges):

        i. visually inspect all dents on the top half of the pipe (8 o'clock to 4 o'clock) and all dents with a length to depth ratio less than 20 for cracks, gouges, corrosion, and interaction with welds unless the company can demonstrate the absence of stress concentrators and interactions with welds;

    d. geohazards (e.g., soil movement, seismically-triggered hazards, scour, erosion);

    e. manufacturing and construction-related imperfections (e.g., imperfections in welds, in the pipe, or imperfections of pipeline components);

    f. equipment malfunction (e.g., malfunction of control or relief equipment as a result of ice formation in cold weather);

    g. incorrect operation (e.g., overpressure, incorrect operating procedures, introduction of out of specifications fluids);

    h. potential stresses as a result of thermal expansion or contraction;

    i. material-related issues (e.g., low toughness);

    j. interaction of identified hazards.

    Include the tool performance specification and tool performance validation in a hazard assessment using in-line inspection (ILI) results. Include all excavation results on the pigged pipeline section and all false negatives in unity plots.

    Performance history alone is not an adequate hazard evaluation technique; the absence of a previous leak or rupture caused by a hazard on the pipeline is not proof of the absence or control of a hazard.

    Evaluate and repair all imperfections identified in the assessment of the condition as needed. The repair must meet the requirements of CSA Z662 Clause 10 and be scheduled appropriately, independent of the EA timeline.

4. Consider the potential for collateral damage to pipelines or other buried facilities caused by the failure of adjacent pipelines (e.g., thermal radiation causing coating damage or reducing the strength of adjacent pipe).
5. Submit a risk assessment that identifies and quantitatively demonstrates that the risks of the existing pipeline are equal to or lower than the risks of a pipeline that is at least at the DOC of the existing pipeline and meets all the requirements of the OPR and CSA Z662 (e.g., such a pipeline may have a heavier wall, be constructed of a higher grade, or may be operating at a lower pressure).[27] Examples of quantitative risks for gas pipelines are individual and societal risks. Include the following information in the risk assessment:

    a. a reliability or probability of failure (POF) assessment that includes:

        i. all identified hazards and potential interactions;

        ii. the source of failure probabilities (i.e., references) used in the assessment, where the methodology is representative and specified;

        iii. long-term plan on maintaining the reliability of the POF level;

    b. a consequence analysis and results:

        i. for HVP and sour service pipelines, consider the potential effects of fire and the potential effects of drifting hazardous gas mixtures beyond the area of potential impact prior to ignition;

    c. identification of long-term mitigative measures that the company identifies as necessary to achieve an acceptable risk level:

        i. document the evidence supporting the effectiveness of the mitigation methods and measures considered and proposed, and provide this with the EA.

E.3 Long-term and Interim Corrective and Mitigative Measures

Filing Requirements

1. Provide a description of long-term corrective and mitigative measures and an implementation plan with timeline for completion, where applicable, to address the identified potential concerns. Implement long-term corrective and mitigative measures as soon as practicable.[28]
2. Provide a description of interim corrective and mitigative measures taken until the requirements of CSA Z662 are met, or long-term mitigative measures are implemented. Implement interim corrective and mitigative measures as soon as practicable. Include:

    a. explanations as to why each interim measure was determined to be appropriate to ensure continued safe operation until the completion of the long-term corrective and mitigative measures;

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[27] A full reliability based method may be used, provided that an appropriate level of safety is demonstrated.

[28] Practicable means that something can and will be done even if it may not be practical (OPR Guidance Notes).

b. confirmation that each recommended interim measure was implemented, and will stay in place until the completion of the identified long-term corrective and mitigative measures:

    i. if a recommended interim measure has not been implemented, provide a plan for implementation;

c. demonstration that the pipeline segments can be operated safely without any additional interim measures until the completion of the identified long-term corrective and mitigative measures, if no interim measures are recommended.

Corrective and mitigative measures may include:

a. modifications to the pipeline system, which may include consideration of pipeline replacement;
b. reduction of the operating pressure to that specified for the changed class location:

    i. reduce the operating pressure as a corrective or mitigative measure as soon as practicable following its decision, with an explanation as to what was considered in assessing the timing of the practicability of implementation;
    ii. the approved MOP will be adjusted to the new reduced operating pressure, following CER approval of a long-term corrective measure of a reduction in operating pressure as per the proposed plan pursuant to OPR section 42;

c. increased public communications on the location of the pipeline;
d. installation of structures or materials (e.g., concrete slabs, steel plates) for mechanical damage protection or for protection against other external loads;
e. increased integrity assessments (e.g., in-line inspections), and repairs;
f. restricted access to the pipeline right of way; and
g. increased signage and right of way patrols frequency.

Filing Manual – Guide F – Change of Service or Increase In Maximum Operating Pressure (OPR section 43)

Section 43 of the OPR states:

If a company proposes a change of service or an increase in the maximum operating pressure for the pipeline, the company shall submit an application for the change or increase to the [CER].

Goal

The application includes technical information with respect to the proposed change in service or increase in maximum operating pressure (MOP), as well as identifies all potential impacts.

F.1 Filing Requirements – Engineering

1. Confirm project activities will follow the requirements of the latest version of CSA Z662.
2. Provide details of the current state of service and proposed service.
3. Provide an engineering assessment in accordance with CSA Z662 demonstrating the integrity of the pipeline system and its suitability for the proposed service, and identifying the updates and revisions which will be incorporated into the Integrity Management Program.

F.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the effects have already been considered in an ESA by the Commission; or
2. If the environmental and socio-economic effects have not been addressed by a previous ESA, provide the filing requirements outlined in section A.2.

F.3 Filing Requirements – Economics and Finance

1. Provide the necessary economic information as outlined in section A.3.

Guidance

Engineering

Any application for a change in service or change in MOP should meet the minimum requirements as set out in CSA Z662.

A change of service occurs when the fluids being transported by the pipeline are changed. CSA Z662 defines “service fluid” as “the fluid contained, for the purposes of transportation, in an in-service pipeline system”.

To clarify, a change in flow direction or pressure of the pipeline contents does not constitute a change in service.

Environment

To address the environmental and socio-economic effects of a change in service or increase in MOP that have not been previously assessed, applicants are referred to section A.2. Applicants should carefully review the sections discussing the scoping of the ESA and the level of detail required. Appropriate scoping ensures the ESA will focus on relevant issues and concerns, and assists in determining the appropriate level of effort to be used to prepare the ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide G – Deactivation (OPR section 44)

Section 44 of the OPR states:

(1) If a company proposes to deactivate a pipeline or part of one for 12 months or more, has maintained a pipeline or part of one in a deactivated mode for 12 months or more or has not operated a pipeline or part of one for 12 months or more, the company shall submit an application for the deactivation to the [CER].

(2) The company shall include in the application the reasons, and the procedures that were or are to be used, for the activity that is the subject of the application.

Goal

The application explains the need for the proposed deactivation, includes a description of the proposed activities, and identifies all potential impacts.

G.1 Filing Requirements – Engineering

1. Describe the rationale for the deactivation and the measures to be employed or that were employed for the deactivation to maintain the integrity of the pipeline and protect the public and the environment.
2. Provide a schedule outlining when the deactivations are planned for completion.
3. Describe the activities associated with the deactivations.
4. Provide an estimate of the costs associated with the deactivations.
5. Confirm deactivation activities will follow the requirements of the latest version of CSA Z662.
6. Provide the details of the ongoing monitoring of the deactivated pipeline or a section of it to verify that the public and the environment are continually protected.

G.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the environmental and socio-economic effects have already been considered in an ESA by the Commission.
2. If the environmental and socio-economic effects have not been addressed by a previous ESA, provide the filing requirements outlined in section A.2.

G.3 Filing Requirements – Economics

1. Provide the necessary economic information as outlined in section A.3.

Guidance

Deactivation is defined in section 1 of the OPR as meaning “to remove temporarily from service”. An improperly deactivated pipeline or a section of it may be a source of risk to the public and the environment.

The definition of “pipeline” in the CER Act applies to the OPR and therefore, this section applies to portions of the pipeline other than line pipe (such as above ground facilities) that are not being maintained for peak flow, standby (ready for immediate use) or emergency use.

For a pipeline or a section of it that is expected to be idle or otherwise not operating for periods of 12 months or more, the CER expects a company to apply for deactivation in accordance with section 44 of the OPR.

In practice, it is accepted that portions of pipeline, though maintained in a deactivated state:

- may never be returned to service;
- may be maintained in a deactivated state for an unspecified length of time; and
- may ultimately be addressed in an application to abandon the operations of the pipeline.

Deactivation may impose a higher level of risk to the integrity of the pipeline depending on the measures specified for the maintenance of the deactivated pipe.

Deactivation of pipelines may impact shippers and upstream and downstream users of the pipeline. Companies proposing deactivations could consider using an engagement approach with stakeholders similar to that which is used for applications made pursuant to section 214 of the CER Act (see Guide A). Engagement should address all issues arising from the deactivation that relate to the protection of property and the environment as well as the safety of persons.

Approvals of applications for deactivation may be subject to conditions and will normally include a requirement for periodic status reporting.

Notification should address all issues arising from the deactivation that relate to the protection of property and the environment as well as the safety of persons.

If deactivation results in a suspension of service, an application pursuant to either section 239 or section 240 of the CER Act may also be required.

For a pipeline or a section of it that has been idle or otherwise not operating for periods of 12 months or more, the CER expects a company to apply in advance for leave of the Commission to reactivate the pipeline or a section of it in accordance with section 45 of the OPR. Information regarding reactivation applications is found in Guide H.

Engineering

Any application for a reactivation must meet the minimum requirements as set out in CSA Z662.

Environmental and Socio-economic Effects

To address the environmental and socio-economic effects of a deactivation that have not been previously assessed, applicants are referred to section A.2. Applicants should carefully review the sections discussing the scoping of the ESA and the level of detail required. Appropriate scoping of the ESA ensures the ESA will focus on relevant issues and concerns, and assists in determining the appropriate level of effort to be used to prepare the ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide H – Reactivation (OPR section 45)

Section 45 of the OPR states:

(1) If a company proposes to reactivate a pipeline or part of one that has been deactivated for 12 months or more, the company shall submit an application for the reactivation to the [CER].

(2) The company shall include in the application the reasons, and the procedures that are to be used for the reactivation.

Goal

The application explains the need for the proposed reactivation, includes a description of the proposed activities, and identifies all potential impacts.

H.1 Filing Requirements – Engineering

1. Describe the rationale for the reactivation and the measures to be employed for the reactivation.

2. Provide a schedule outlining when the reactivations are planned for completion.

3. Provide a complete description of the activities associated with the reactivations.

4. Describe the operating conditions under which the reactivated facility will operate.

5. Provide an engineering assessment in accordance with CSA Z662 demonstrating the integrity of the pipeline system and its suitability for the proposed service, and identifying the updates and revisions which will be incorporated into the Integrity Management Program.

6. Provide an estimate of the costs associated with the proposed reactivations.

7. Confirm reactivation activities will follow the requirements of the latest version of CSA Z662.

H.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the effects have already been considered in an ESA by the Commission; or
2. If the environmental and socio-economic effects have not been addressed by a previous ESA, provide the filing requirements outlined in section A.2.

H.3 Filing Requirements – Economics

1. Provide the necessary economic information as outlined in section A.3.

Guidance

Engineering

Any application for a reactivation must meet the minimum requirements as set out in CSA Z662.

Environmental and Socio-economic Effects

To address the environmental and socio-economic effects of a reactivation that have not been previously assessed, applicants are referred to section A.2. Applicants should carefully review the sections discussing the scoping of the ESA and the level of detail required. Appropriate scoping of the ESA ensures the ESA will focus on relevant issues and concerns, and assists in determining the appropriate level of effort to be used to prepare the ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide I – Processing Plants: Deactivation and Reactivation (PPR section 42 and section 43)

Sections 42 and 43 of the PPR state:

- **42 (1)** If a company proposes to deactivate its processing plant for 12 months or more, has maintained the processing plant in a deactivated mode for 12 months or more or has not operated the processing plant for 12 months or more, the company shall notify the [CER] of that fact.
- **(2)** The company shall set out in the notification the reasons for the deactivation or the cessation of operations and the procedures used or to be used in the deactivation.
- **43 (1)** If a company proposes to reactivate a processing plant that has been deactivated for 12 months or more or to resume operating a processing plant that has not been operated for 12 months or more, the company shall notify the [CER] of that fact before the reactivation or the operation resumes.
- **(2)** The company shall set out in the notification the reasons for the reactivation or the resumption of operations and the procedures to be used in the reactivation.

Goal

The application explains the need for the proposed deactivation or reactivation, includes a description of the proposed activities, and identifies all potential impacts.

I.1 Deactivation

I.1.1 Filing Requirements – Engineering

1. Explain the reasons for the deactivation or the cessation of operations and the procedures used or to be used in the deactivation.
2. Provide the date the processing plant was or will be removed from service.
3. Describe the provisions for the management of change.
4. Describe the general condition of equipment to be deactivated.
5. Describe the means of isolation.
6. Describe the instrumentation status.
7. Provide the lay-up conditions.
8. Describe the inspection and testing requirements during deactivation.
9. Describe the intent of future equipment use, if any.

I.1.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the effects have already been considered in an ESA by the Commission; or
2. If the environmental and socio-economic effects have not been addressed by a previous ESA, provide the filing requirements outlined in section A.2.

I.1.3 Filing Requirements – Economics

1. Provide the necessary economic information as outlined in section A.3.

I.2 Reactivation

I.2.1 Filing Requirements – Engineering

1. Explain the reasons for the reactivation or the resumption of operations and the procedures to be used in the reactivation.
2. Provide the date the processing plant will be returned to service.
3. Describe the provisions for the management of change.
4. Describe the general condition of equipment to be reactivated.
5. Describe the instrumentation status.
6. Provide the lay-up conditions.
7. Describe the inspection and testing requirements prior to reactivation.

I.2.2 Filing Requirements – Environment and Socio-economic Assessment

1. Describe how the effects have already been considered in an ESA by the Commission; or
2. If the environmental and socio-economic effects have not been addressed by such an ESA, provide the filing requirements outlined in section A.2.

I.2.3 Filing Requirements – Economics

1. Provide the necessary economic information as outlined in section A.3.

Guidance

Deactivation is defined in section 1 of the PPR as meaning “to remove temporarily from service”. In practice, it is accepted that portions of a plant, though maintained in a deactivated state:

- may never be returned to service;
- may be maintained in a deactivated state for an unspecified length of time; and
- may ultimately be addressed in an application to abandon the operations of the plant.

Deactivation may impose a higher level of risk to the integrity of the plant, or systems therein, depending on the measures specified for the maintenance of the deactivated systems or plant.

Deactivation of plants, or systems within plants, may impact upstream and downstream users of the plant.

If deactivation results in a suspension of service, an application pursuant to either section 239 or 240 of the CER Act may also be required.

Companies are required to notify the CER of any plans for the deactivation of a plant (or portions thereof) for 12 months or more.

Notification should address all issues arising from the deactivation that relate to the protection of property and the environment as well as the safety of persons.

Environmental and Socio-economic Effects

To address the environmental and socio-economic effects of a deactivation or reactivation that have not been previously assessed, applicants are referred to section A.2. Applicants should carefully review the sections discussing the scoping of the ESA and the level of detail required. Appropriate scoping of the ESA ensures the ESA will focus on relevant issues and concerns, and assists in determining the appropriate level of effort to be used to prepare the ESA.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide J – Commodity Pipeline Systems

As a result of the *Canada Transportation Act*, which came into force on 1 July 1996, jurisdiction over interprovincial and international commodity pipelines in Canada was transferred from the National Transportation Agency (now the Canadian Transportation Agency) to the NEB. In order to assume this jurisdiction, the definition of “pipeline” in the NEB Act was broadened to include pipelines transporting commodities other than oil or gas, but excluding municipal sewer and water lines.

Due to the wide variety of fluids transported on commodity pipelines, the NEB determined that it would be more practical to regulate these lines on a case-by-case basis, rather than developing new regulations that would address all potential commodity issues. The NEB, therefore, issued Order MO-CO-3-96, which exempted commodity pipelines from the provisions of the OPR.

The first application filed for the construction and operation of a commodity pipeline was on 10 October 1997 by Souris Valley Pipeline Limited for the construction and operation of a carbon dioxide transmission pipeline in southern Saskatchewan. The NEB made the decision that any certificate issued in respect of the proposed facilities would be conditioned to reflect many of the issues addressed by the OPR.

In regard to the application of this manual, while the requirements pursuant to sections of the CER Act apply to commodity pipelines just as they would to traditional hydrocarbon pipelines, specific sections of the OPR do not. However, the relevant Guides within this manual may still be applicable to commodity pipelines.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide K – Decommissioning (section 45.1 of the OPR)

K.1 Decommissioning a Pipeline

Section 45.1 of the OPR states:

45.1 (1) If a company proposes to decommission a pipeline or part of one, the company shall submit an application for the decommissioning to the Commission.

(2) The company shall include in the application the reasons, and the procedures that are to be used, for the decommissioning.

Goal

The application includes the rationale for decommissioning, the method(s) of decommissioning, and the measures to be employed as well as evidence that:

- the proposed decommissioning will be carried out in a safe manner;
- potential environmental, socio-economic, lands, economic and financial effects are identified; and
- sufficient notification has been given to all owners and users of lands, including landowners, Indigenous Peoples, and other persons who anticipate that their lands are/may be potentially affected.

Filing Requirements

General

Provide the following:

1. A complete description of the pipeline(s) and facility(ies) being decommissioned. For pipelines, this must include, but not be limited to, the history of products carried, length, diameter, wall thickness and coating type. Companies should consider any other information that is relevant to the pipeline(s) and facility(ies), and its operation that would assist the Commission in assessing the decommissioning application.
2. Reasons for decommissioning of the pipeline(s) and facility(ies), including a description of any adjacent pipeline(s) and facility(ies) that are impediments to abandonment. See section 3.2 of this manual.
3. Appropriately scaled map(s) or site plan(s) which show the locations and dimensions of the pipeline right of way and the facility(ies) to be decommissioned.
4. The digital location data of pipeline segment(s) and facility(ies) to be decommissioned. The data should accurately represent the location of pipeline segments and right-of-way, or facility footprint and it can be derived from any available sources.
5. A description of known temporary work space required for decommissioning activities, including location and dimensions.

6. Photomosaic maps or alignment sheet(s) which show the pipeline right of way and facility(ies) overlain on satellite or aerial imagery and any areas of temporary work space. If not available, provide photographs showing the pipeline right of way and facilities.
7. Indicate whether any service would be terminated as a result of the proposed decommissioning. If a commercial party or other user could be negatively impacted by the termination of service, provide evidence that:
    a. the Company has been responsive to the needs, inputs, and concerns of commercial parties or other users;
    b. the estimated relative impacts to all parties from the decommissioning of the facilities versus discontinuation of service have been considered;
    c. alternatives to the decommissioning of the facilities were considered (including physical and tolling alternatives) and that decommissioning is the optimal outcome; and
    d. impacted parties will be able to wait until after the Commission issues its decision on the application to make any potentially costly, irreversible choices necessary to continue their business operations after any approved decommissioning activities have begun. If this is not the case, provide evidence justifying why not.
8. An explanation of the decommissioning method options (decommissioning in-place, removal, segmentation, fill) considered, and rationale for the chosen option(s), including how factors such as current and future land use, safety, effects on the rights of Indigenous Peoples, how individuals and communities may be affected by the proposed decommissioning, property, land acquisition or lease agreements, impacted and potentially impacted engineered structures[29], environment and economics were identified, considered and managed.
9. A description of the proposed physical activities to be carried out to decommission the pipeline(s) and facility(ies).
10. Proposed schedule for the various decommissioning activities, including any reclamation, to be conducted.
11. A monitoring plan which describes the type, frequency and duration of monitoring to be conducted of the pipeline(s) and facility(ies) that will remain in place. This plan should include considerations for maintaining depth of cover and potential environmental and socio-economic risks of the decommissioned pipeline and facility(ies) remaining in-place (e.g., water conduit, subsidence and pipe exposure), as informed by the company's environmental and socio-economic assessment and engagement activities.
12. Provide the anticipated timing of future abandonment activities for each pipeline and facility being decommissioned, if known.

[29] "Engineered structures" include foundations (buildings, bridges, towers, rail beds, etc.,), slope stability structures, water drainage structures, and crossings of other infrastructure (powerlines, other pipelines, telecom systems, etc.,).

Guidance – General Requirements

Companies should demonstrate how they are planning for eventual abandonment of decommissioned pipeline(s) and facility(ies). An application for abandonment must be filed for all CER-regulated pipeline(s) and facility(ies) when they have reached their end of life, including those pipeline(s) and facility(ies) that have been previously decommissioned.

Refer to Guidance notes for the Decommissioning Provisions under the OPR in determining the circumstances under which a decommissioning application may be appropriate.

If the decommissioning activities are similar to the activities being undertaken at the time of the abandonment, refer to Guide B – Abandonment.

Refer to Guide B – Guidance – Economics and Finance in regards to termination of service.

Engineering

Provide the following:

1. For the pipeline(s) to be decommissioned, confirm the following, and provide an explanation of how the results were or will be achieved and maintained:

    a. no internal pressure remaining;

    b. purged and cleaned and left in a state of minimal residual contamination, including the pipe cleaning plans, procedures or standards to be used;

    c. left in a state where road, railway or utility crossings are not at significant and unmanaged risk of disturbance due to settlement;

    d. a description of the potential soil subsidence, pipe exposure, water conduit, corrosion, and pipe collapse effects for pipelines to be decommissioned in place, and a plan to monitor these potential effects;

    e. equipped with signage; and

    f. a description of the fill material, if used, to be used for railway and road crossings, if applicable (abandonment in place with special treatment), including where along the pipeline fill material will be used and why.

2. In the event that cathodic protection is not maintained, identify and justify if ground bed anodes will be removed or left in place.

Guidance – Engineering

- Note, for the purposes of engineering related to decommissioning, the CER requires most of the same elements of abandonment under CSA Z662 and CSA Z341, as applicable.
- The company should explain how the integrity of remaining engineered facilities and structures, regulated by the CER or not, will be impacted and those impacts managed while the decommissioned pipeline and/or facility remains in place.

Environmental and Socio-economic Assessment

1. Describe the biophysical and socio-economic setting found at the project location. The description should indicate whether or not the proposed decommissioning is located on federal lands[30].
2. For the preferred decommissioning method, complete the environmental and socio-economic interactions (see Table K-1 of this guide), or provide an environmental and socio-economic assessment.
3. Provide a copy of the Phase I Environmental Site Assessment conducted for the pipeline right of way and associated facility(ies), as per the guidance in the most recent version of CSA Standard Z768. The Phase I Environmental Site Assessment should identify all areas of existing and/or potential contamination, and include an evaluation of the status of any existing contamination currently documented or contamination previously remediated. Provide a list of previously reported contaminated sites within the pipeline right of way and associated facility(ies), including CER-assigned Remediation Event Number(s).
4. If the results of the Phase I Environmental Site Assessment indicate that a Phase II Environmental Site Assessment is warranted, provide a copy of a Phase II plan that describes the procedures to be implemented for investigating all existing and/or potential contamination identified in the Phase I assessment, including sampling methodology. The Phase II assessment should be conducted per the guidance provided in the most recent version of CSA Standard Z769-00, Phase II Environmental Site Assessment.
5. Provide an Environmental Protection Plan (EPP), or a description of the environmental protection procedures, mitigation measures, and commitments that will be implemented during the decommissioning activities, including remediation, reclamation, and reclamation monitoring activities to avoid or minimize potential adverse environmental and socio-economic effects. The level and detail of information should commensurate with the nature and scale of the project.
6. Provide a monitoring plan outlining how the decommissioned pipeline(s) and facility(ies) will be monitored for the period of time between decommissioning and abandonment.

Guidance – Environmental and Socio-economic Assessment

- As noted in section A.2.4 Level of Detail, the depth of analysis should be commensurate with the nature of the project and the potential for effects.
- Refer to Table A-2 and Table A-3 for the circumstances and interactions that lead to the need for detailed information.
- While an Applicant's full environmental and socio-economic assessment is not required to be filed, it must still be prepared and may be requested at any time. It may be helpful to include the environmental and socio-economic assessment for applications where there are multiple or complex issues, or to provide clarity and efficiency in the review of an application.

[30] See definition of "federal lands" in section 2 of the *Impact Assessment Act;* and refer to sections 81 and 84 of the *Impact Assessment Act.*

- For pipeline segments which are being proposed to be decommissioned in place, the following information should be considered in the assessments provided:
    - the potential environmental and socio-economic effects that may result from the decommissioning activities;
    - the potential environmental and socio-economic effects that may result from the decommissioned pipelines and facilities remaining in place over the long term; and
    - the environmental and socio-economic risks of the decommissioned pipeline remaining in place (e.g., water conduit effect, pipeline exposure, ground subsidence) and the mitigation measures to be implemented to reduce those risks (e.g., segmentation, fill), including an explanation of how those measures will sufficiently reduce the risks identified.
- The environmental and socio-economic assessment should include a discussion of means that were considered to reduce any potential greenhouse gas emissions of the project, and how the preferred option was chosen (for example, alternatives to venting gas).
- The environmental and socio-economic assessment should discuss the effects of the proposed method of decommissioning on the rights of Indigenous Peoples.
- If cathodic protection systems are proposed to be decommissioned in place, the assessment should include consideration of the potential effects that may result from that infrastructure remaining in place over the long term (e.g., soil and groundwater contamination potential).
- For pipelines proposed to be decommissioned in place, the assessment should include consideration of the potential risk to land and resource use (e.g., forestry, agriculture, urban development) over the long term, and the mitigation measures that will be implemented to reduce those risks.
- Once contamination has been confirmed by analytical testing, a notice of contamination must be submitted to the CER as soon as possible in accordance with the CER's Remediation Process Guide.
- Applicants are expected to prepare an EPP for all projects. While it is not a requirement for an EPP to be filed as part of an application, it must be available for review if requested or may be a condition of approval to be complied with before construction. Refer to section A.2.6.2 for more detail regarding EPPs.
- The EPP, or the environmental protection procedures, should include a contingency plan to be implemented in the event that previously unidentified contamination is identified (including measures to be implemented in accordance with the CER's Remediation Process Guide).

Engagement

The CER expects applicants to perform engagement activities for all projects depending upon the respective project scope. Companies must justify the extent of engagement carried out for each project. In designing engagement activities, companies can refer to section 3.4 and section 3.5.

1. Provide a summary of the engagement activities undertaken with individuals and communities, which may be affected by the proposed decommissioning, including:

    - landowners;
    - land users;
    - Indigenous Peoples;
    - occupants;
    - land managers (Crown);
    - federal, provincial or municipal agencies or levels of government;
    - shippers; and
    - other commercial third parties who could be affected by the project, including prospective future shippers.
    - The summary of engagement should include, at minimum:

        - a description of any issues or concerns for each decommissioning method(s) identified;
        - how input from the engagement activities was considered in determining the proposed decommissioning method(s);
        - a description of how the applicant has addressed or will address any concerns or issues raised and when;
        - a description of any concerns or issues raised that will not be addressed and why; and
        - a description of any outstanding concerns, including how the applicant intends to address any outstanding concerns, or an explanation as to why no further steps will be taken.

2. Provide notice to all individuals and communities which may be affected by the proposed decommissioning of the actual date of application filing, provided within 72 hours of filing the application with the CER, including information where to find the application and associated documents on the CER website.
3. Provide a plan describing how consultation with affected individuals and communities will be maintained during the period of time between decommissioning and abandonment.

Lands

1. Describe any land rights proposed to be acquired for the decommissioning, including the location and dimensions of the land rights that have not already been acquired or leased (for example, temporary work space). Provide a description (for example in a table) of the land tenure along the right of way, including the approximate length of the pipeline segments that are located respectively along freehold, federal or provincial Crown land. For more information, refer to section A.4.

Economics and Finance

Decommissioning Costs

1. Describe the methodology and assumptions used to estimate costs. Identify and describe any associated section 183 or 214 applications. Provide a level of detail and technical description appropriate to allow regulators, the public, and others to understand the estimates to a reasonable level.
2. If a trust is used to set aside funds for abandonment, explain whether the decommissioning of facilities in the application represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date when an updated Abandonment Funding Plan will be submitted to the CER, using the form "Tables – Abandonment Funding Plan ".[31]

For more information, refer to the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021 Report [C24949.], RH-2-2008 [A21835], and MH-001-2013 [A60676].

Financing

1. Provide confirmation that funding is available for the decommissioning work, and funding will continue to be available to fund the future final abandonment, including updated description of any funding, financial guarantees or other arrangements designed to cover these costs.
2. If the pipeline will still be providing service to third party shippers, describe the expected toll treatment and toll impact, including:

    a. an explanation of how the tolls were determined;

    b. the expected impact, if any, on shippers and other parties; and

    c. a statement regarding the extent of shippers' and other parties' support for any toll increase.
3. Explain how this decommissioning plan compares to the abandonment plan for these facilities or this site.

[31] The reporting form "Tables – Abandonment Funding Plan – required details" was released as an appendix of the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021.

Accounting

1. The GPUAR or OPUAR prescribe the accounting treatment for both ordinary and extraordinary retirements, including informing the CER if the gain or loss on an extraordinary retirement is material.

K.2 Applications to Access Funds from the Trust to Fund Abandonment

1. Refer to section B.3 for information on accessing funds for decommissioning activities.

Next Steps...

Companies are encouraged to include the completed relevant checklists from Appendix 1.

Table K- 1: Environmental and Socio-Economics Interactions

(**Note:** This table is provided as a template, and Applicants should modify the table to ensure that all applicable land uses are identified)

Table K-1: Environmental and Socio-Economics Interactions [WORD 18 KB]

Element	Interaction (Yes or No)	Description of Interaction(s) (if no interaction is predicted, provide justification)	Status of element – specific study or survey (complete, underway, date expected, or underway)	Description of potential effects	Mitigation will be implemented to address potential adverse effects (Yes or No)	Description of mitigation to be applied	Description of residual effects after mitigation, including the spatial and temporal extent of the effects	Specify if there will likely be an interaction between the predicted residual effects of the project and the effects of other projects or activities that have been or will be carried out (Yes or No). If Yes, describe the cumulative effects.	Monitoring Plan and Details
Physical and Meteorological Environment									
Soil and Soil Productivity									
Vegetation									
Water Quality and Quantity									
Fish and Fish Habitat									
Wetlands									
Wildlife and Wildlife Habitat									
Species at Risk, or Species of Special Status, and									

Related Habitat									
Air Emissions									
GHG Emissions									
Acoustic Environment									
Human Occupancy and Resource Use									
Heritage Resources (both Crown and private lands)									
Navigation and Navigation Safety									
Indigenous Traditional Land and Resource Use									
Socio and Cultural Well-Being									
Human Health or Aesthetics									
Infrastructure and Services									
Employment and Economy									

Rights of Indigenous Peoples									
Accidents and Malfunctions									
Effects of the Environment on the Project									
Other (please specify)									

Filing Manual – Guide L – Early Engagement Guide

Early Engagement Guide

Filing Manual – Chapter 5 – Applications not for Physical Projects

An applicant must:

- complete the common application requirements outlined in Chapter 3;
- confirm that the application is not for a physical project; and
- identify which Guides within Chapter 5 are applicable (see Figure 2-1) and provide the required information.

Filing Manual – Guide N – Applications to Review, Rescind or Rehear

The Commission is authorized to review, vary, or rescind any decision or order it makes, or re-hear any application before deciding it, under section 69 of the CER Act, as are Designated Officers and Inspection Officers.

This Guide addresses filing requirements for applications seeking to overturn and/or rescind a Commission, Designated Officer, or Inspection Officer decision or order in its entirety through a review or rehearing. It should be used when a reversal to such a decision or order is requested.

Where the request is for a specific variance, such that a Commission, Designated Officer, or Inspection Officer decision or order remains the same but a specific detail requires changing (e.g., timing relief or a change to the project specifications), please see Guide O.

Unlike many other types of applications, there are no service standards or time limits associated with applications to review, rescind, or rehear Commission, Designated Officer, or Inspection Officer decisions.

Goal

Submissions identify the decision or instrument affected and include the grounds for reviewing, rehearing, or rescinding the decision or order.

Filing Requirements

Applications seeking to overturn and/or rescind a Commission, Designated Officer, or Inspection Officer decision or order through a review or rehearing must meet the requirements set out in Part III of the Rules, which may be summarized as follows:

1. The application must be in writing, signed by the applicant (the person requesting the review or rehearing) or the applicant's authorized representative, filed with the CER and served on all parties to the original proceeding that gave rise to the decision or order in respect of which the review or rehearing is sought.
2. The application must contain:
    a. a concise statement of the facts;
    b. the grounds that the applicant considers sufficient to raise a doubt as to the correctness of the decision or order, or to establish the requirement for rehearing, including:
        i. any error of law or jurisdiction;
        ii. changed circumstances or new facts that have arisen since the close of the original proceeding; or
        iii. facts that were not placed in evidence in the original proceeding and that were then not discoverable by reasonable diligence;
    c. the nature of the prejudice or damage that has resulted or will result from the decision or order; and
    d. the nature of the relief sought.

Note: Although service is required by the Rules, the Commission can change the requirement if the circumstances warrant. Where there are concerns with service, include an explanation of the concerns.

Guidance

There is no automatic right of review or rehearing. In other words, the power under section 69 of the CER Act is discretionary. In past decisions, the Commission has stated this discretion must be exercised sparingly and with caution.

Part III of the Commission's Rules[32] specifies the requirements for applications for review or rehearing. Section 45 of the Rules establishes a discretionary two-step process for review or rehearing applications:[33]

- In the first step, the Commission determines whether the decision or order should be reviewed or the application reheard. In order to find that a review or rehearing is required, the Commission must be satisfied that an applicant has met its onus to raise a doubt as to the correctness of the decision or order under review or has demonstrated that a rehearing is required. Before making its determination, the Commission may, but is not required to, give interested parties the opportunity to file submissions; and
- In the second step, which follows if the first test is satisfied, the Commission considers the review or rehearing application on its merits. In doing so, the Commission may establish a process to govern the conduct of the review or rehearing.

Where applicable, a Designated Officer or an Inspection Officer may follow a similar two-step process.

Please note that reviews and rehearings are not meant to be opportunities to re-argue the same points previously raised or to provide new arguments that could have been raised originally, but were not.

An applicant may apply for an order staying the decision or order in respect of which a review is sought pending the review or staying the original proceeding pending the rehearing by meeting the requirements of section 47 of the Rules.

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[32] The National Energy Board Rules of Practice and Procedure, 1995, SOR/95-208 (Rules) outlines the requirements for Commission hearings.

[33] In some instances the Commission may decide to combine step 1 and step 2 of a review or rehearing application.

Filing Manual – Guide O – Variance Applications and Project Updates

The Commission is authorized to review, vary, or rescind any decision or order it issues under section 69 of the CER Act. It also may vary certificates, licences, and permits under sections 190, 280, 288, 300, 348, and 365 of the CER Act. This Guide addresses filing requirements for variance applications, including name changes and project updates.

For changes to the Commission's decision through a review or rehearing, please see Guide N.

Goal

The submission includes sufficient information to describe and support requested changes to the details of a regulatory instrument.

O.1 Changes to the Name of a Holder of a Certificate, License, Permit, or Order

O.1.1 Filing Requirements for transfer of ownership, lease, or amalgamation pursuant to section 181 of the CER Act

See Guide R.

Guidance

A variance to a certificate or order under section 190 of the CER Act is required where the company that owns the pipeline will change, for example, in the event of a sale, purchase, transfer or lease of a pipeline, or amalgamation, for which leave was granted by the Commission under section 181 of the CER Act. Refer to Guide R Transfer of Ownership, Lease or Amalgamation (CER Act section 181).

O.1.2 Filing Requirements for Corporate Name Changes (without a change in ownership, lease, or amalgamation) pursuant to section 181 of the CER Act

Provide the following:

1. State the name change, including all previous known names.
2. A list of all regulatory instruments including orders and certificates that will require changes.
3. An update of all documents associated with Financial Resource Requirements and Abandonment Funding as needed to reflect the name change, including:
    a. financial instruments used for abandonment funding including as applicable, updated letters of credit, surety bonds, and/or abandonment trusts; and
    b. financial instruments used for demonstration of proof of financial resources.
4. A map (or maps) detailing all facilities for which the corporate name change applies (see section 1.12).

5. The Variance Application shall include a letter signed by the company's Accountable Officer confirming the requested name change.

Guidance

Where the company that is authorized under the order or certificate to own the pipeline has not changed (e.g., in the event of a mere corporate name change), the Commission expects companies to notify the Commission and request a change to their order or certificate. At a minimum, and if not done at the time the name is changed by the company, the changes should be noted when filing certain annual compliance information each January for companies using set-aside mechanisms other than trusts and exempt companies, and April for companies using trusts as set-aside mechanisms, such that the Commission can update certificates and orders accordingly[34].

In either instance, in the event of variances because of a change in ownership or corporate name: emergency contact and damage prevention information for landowners must be updated as soon as practicable; signage on facilities and the rights of way must be updated within 90 days with the new emergency contact information; and the company must ensure that the emergency numbers and related services are uninterrupted for the duration of the transition of ownership to facilitate communication and safety reporting (see OPR, paragraph 36(f)).

O.2 Variances

Filing Requirements

Applications for variances must include the following:

1. A concise summary of the changes the applicant is requesting the CER to assess.
2. All necessary design details of the proposed changes.
3. A statement that no material changes to the facility economics will result from the variance request, or provide documentation or information to explain any changes to facility economics.
4. Any supporting documentation or information to explain and support the change.
5. Any applicable references to the Filing Manual.

[34] See MH-001-2013 Reasons for Decision Set-aside and collection mechanisms May 2014 Pipeline Abandonment – Financial issues, Appendix XV Reporting Form – Companies using Trusts for Set-aside mechanism, Appendix XVI and Appendix XVI Reporting Form – companies using Set-aside mechanisms other than trusts, and Exempt Companies, page 157-8, pdf 175-6 [Filing_A60676].

Guidance

Companies are expected to file a variance request when making substantive changes to a previously granted authorization or condition. Substantive changes are changes that may, for example, introduce project risks, activities or elements that:

- are material technical changes;
- were not anticipated or addressed in the ESA;
- are not covered by existing standard mitigation measures or commitments;
- are not described in existing permits or authorizations; or
- create issues that have not been resolved with directly affected individuals or Indigenous Peoples.

To vary an existing order, certificate, licence or permit, companies must include the reason the variance is required and all information necessary to support the change proposed, including the information required by the relevant Filing Manual Guide(s). For example, an application seeking to vary a certificate of public convenience and necessity to reflect a design change must include all information required under Guide A, and any other relevant guides, to support the proposed change. The CER will issue a formal response, and when applicable, will vary regulatory instruments to reflect the approved changes.

Companies are expected to clearly explain what the request is. If the variance application includes multiple requests, applicants must clearly explain each request and provide the necessary information to assess each request.

Unlike many other types of applications, there are no service standards associated with variance filings. Companies are encouraged to plan accordingly and to ensure the variance application is complete prior to submission.

Examples of substantive changes that require a variance application

The following list includes examples of substantive changes that require a variance application, but is not meant to be exhaustive.

General

- any additions to the project that were not contemplated in the original application
- undertaking project activities in different seasons than planned, unless the possibility:
    a. was addressed in the ESA;
    b. is covered by existing standard mitigation measures or commitments, or existing permits or authorizations; and
    c. there are no unresolved issues with directly affected individuals or Indigenous Peoples

- scope, scale and/or nature of activities have changed such that there may be new or increased environmental or socio-economic impacts (e.g., the addition of a workcamp for accommodation of project workers)
- addition of any permanent or temporary land or work space that was not assessed in the original application, unless the possibility:
    a. was addressed in the ESA;
    b. is covered by standard mitigation measures or commitments, or existing permits or authorizations; and
    c. there are no unresolved issues with directly affected individuals or Indigenous Peoples

Engineering

- change in project type (e.g., deactivation to decommissioning or abandonment)
- change of facility type
- change in pipe material and other specifications (e.g., steel to HDPE, pipe grade, wall thickness, seam type, coating type) not subject to a condition of the regulatory instrument (e.g., technical specification updates)
- change in start and end points (e.g., location)
- change in methodology of project activities (e.g., at water crossings, also see environment section below)
- change in flow direction for projects that were not designed and approved for bi-directional flow
- change in design temperature
- addition of contingency crossovers
- changes to Schedule A details (e.g., wall thickness, approximate pipe length)

Environment

- change in watercourse crossing contingency method that was not considered in the original application and is not authorized by the regulatory instrument

Socio-Economic

- for those previously identified as directly affected individuals or Indigenous Peoples, any changes to effects or effects pathways (for example noise, dust, light emissions, vehicle traffic, etc.) that result in unresolved issues and concerns from directly affected persons
- for any individuals or Indigenous people not previously identified as being affected, any effects that result in unresolved issues and concerns from those previously not identified as directly affected persons

Rights of Indigenous Peoples

- changes, not considered in the original application, that affect the ability to exercise or practice Indigenous and treaty rights

The CER expects applicants to consider engagement for all projects. Please refer to section 3.4 for additional information on what should be included in a variance application.

O.3 Project Updates

Guidance

The CER expects the company to notify ("update") the CER of any non-substantive changes to an approved project, as soon as practicable, and prior to the completion of construction. Non-substantive changes must not adversely impact environmental protection or safety of people and property.

As they are of a non-substantive nature, project updates do not require a variance application unless the authorizing instrument indicates otherwise, e.g., by specifying or limiting the scope of project updates.

The filing will be assessed by the CER, but project updates will not receive a formal response from the CER unless the assessment results in a variance to regulatory instruments. There are no service standards associated with project updates.

Companies are expected to ensure that all project updates are shared with potentially affected parties as committed to in the originally approved application.

Examples of non-substantive changes (i.e., project updates) that do not require a variance application

The following list includes examples of non-substantive changes that do not require a variance application, but is not meant to be exhaustive.

General

- non-compliances that were identified during the construction phase, but were corrected at the time, unless otherwise reported to the CER; notification details should include:
    - non-compliance summary including date;
    - activity that was in non-compliance to a commitment, condition or regulation (e.g., EPP, OPR, etc.);
    - steps taken to rectify the non-compliance; and
    - steps taken to ensure the non-compliance would not be repeated.
- incorporation of a new staging area for the project

- non-substantive expansion of previously-approved permanent or temporary land or work space if the possibility was addressed in the ESA, and is covered by standard mitigation measures or commitments, existing permits or authorizations, and there are no unresolved issues with directly affected individuals or Indigenous Peoples
- filing additional documents with respect to historical or archaeological resources (e.g., clearances)

Engineering

- relocation of the suction and discharge station tie-in piping within a station
- increase or decrease in the size of buildings within a station
- change in length of the project pipe with the same specifications as already approved insofar as the change is not outside the parameters of the assessed project footprint or design intent
- addition of one valve/valve assembly with the same specifications as already approved
- updates to previously approved Leave to Open exemptions for tie-in assemblies, auxiliary systems and utility gas systems
- during fit-up, the addition of a new connection, including installation of a ‘T’ with the same specifications as already approved
- increased number of non-hydrotested field welds
- change in the number of tie-in assemblies
- change in type of valves
- additional station piping
- additional isolation valves
- partial additions to previously-approved exemptions for added components (e.g., Leave to Open, non-destructive examination)

O.4 Changes to Conditions

The CER considers the rights and interests of affected parties when setting conditions. It expects companies to comply with conditions and to proactively manage changes leading up to and during the construction and condition tracking phase of a project. However, it recognizes that there will be times when companies may require some relief including relief requests from:

- timing of condition filings (e.g., to reduce the number of days a filing must be made prior to commencing construction or extend a post-construction filing)
- requirements of condition filings (e.g., a company files a request to not include certain details for proprietary reasons or certain components of the condition can no longer be satisfied)
- request to file a redacted document

A company seeking relief from a condition or a component of a condition must include:

- the reason the relief is required;
- the identity of all parties that have been notified or consulted on this request;
- a description of any issues or concerns raised;
- a description of how the applicant has addressed or will address any concerns or issues raised and when;
- a description of any outstanding concerns, including how the applicant intends to address any outstanding concerns, or an explanation as to why no further steps will be taken; and
- all information necessary to support the proposed relief.

The CER will issue a formal response regarding the relief request.

Next Steps…

Companies are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide P – Tolls and Tariffs (sections 225 to 240 of CER Act)

Additional information…

Pursuant to section 227 of the CER Act, all companies may only charge tolls specified in a tariff that has been filed with the CER and is in effect or that have been approved by an order of the Commission.

Pipeline companies regulated by the CER are divided into two groups for financial regulation purposes. Group 1 companies are generally identified as those with extensive systems under the CER's jurisdiction, whereas those with lesser operations are designated as Group 2 companies. Companies may be designated as Group 1 either in the GPUAR or OPUAR, or by direction of the Commission. Group 1 companies are listed in section P.6 of Guide P.

A Group 1 pipeline company not regulated on a complaint basis (see footnote 16 in Guide R) that has not reached a negotiated settlement with its interested parties is regulated on a cost-of-service basis and is required to provide the information outlined in the filing requirements within sections P.1 to P.5 of Guide P.

If a company has reached a negotiated settlement with its interested parties, the filing requirements are outlined in the Revised Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs [Folder 157025] dated 12 June 2002.

For Group 2 companies, the requirements are outlined in section P.6 Regulation of the Traffic, Tolls and Tariffs of Group 2 Companies.

All companies must comply with the RH-2-2008 Reasons for Decision [Filing A21835]. A summary of the filing requirements in respect of this decision is included in section P.7 Abandonment Costs.

This guide addresses:

- cost of service;
- rate base;
- financial statements;
- cost of capital; and
- tolls and tariffs.

Level of Detail

The information required for these applications will generally vary with the complexity of the issues and the degree of change from previously approved applications. Some factors to consider in determining the amount of information to provide include:

- the proposed toll design methodology;
- the number of shippers on the system;

- the level of market power held by the applicant, including its affiliates; and
- the size of the toll increase or decrease.

Definitions

In general, the accounting terminology used in this portion of the manual is defined in either the GPUAR or the OPUAR, as appropriate.

Goal

The tolls and tariffs application includes a discussion of the following points:

- the revenue requirement that the applicant is seeking to recover in its tolls and how the revenue requirement is determined;
- the applied-for toll design and tolls, including evidence that the tolls are just and reasonable and not unjustly discriminatory; and
- any revisions to the applicant's tariff.

P.1 Cost of Service

Filing Requirements

1. Describe the steps that were taken with interested parties to discuss issues and to attempt to reach a negotiated settlement.
2. Provide a summary schedule of the total cost of service (i.e., total revenue requirement), showing booked amounts for the base year, and projected amounts for the current year and test year, as well as year-to-year changes for the following cost components:

    - operating, maintenance and administrative expenses;
    - transmission by others;
    - depreciation and amortization of plant;
    - income taxes;
    - taxes other than income taxes;
    - miscellaneous revenues;
    - return on rate base;
    - deferred items; and
    - other items.

3. Provide an analysis of each cost component of the cost of service listed above, showing, by major cost category:

    - the total booked amounts for the base year;
    - the current year projection; and

- the test year projection.

Provide explanations for significant year-to-year increases or decreases.

Where costs result from an allocation between regulated and non-regulated business entities, the analysis must include:

- the gross costs;
- the costs allocated to each of the regulated entities;
- the total costs allocated to the non-regulated entities;
- a description of the cost allocation methodology; and
- an explanation of the appropriateness of the allocation methodology.

4. For any deferral account, provide schedules showing the derivation and monthly accumulation of balances and the calculation of any carrying charges, indicating which amounts are actual and which are estimated.
5. Provide a schedule reconciling the additions to the plant accounts with additions to income tax Capital Cost Allowances for the base, current and test years.
6. Provide a schedule detailing the changes in the deferred tax balance for the base, current and test years.
7. Provide the estimated total cost to abandon, as well as the Collection Period over which revenue will be accumulated (see Chapter 7 – Referenced Documents – Abandonment Funding and Planning, for related guidance).

Guidance

Major Cost Category Information

Provide information for major cost categories at a sufficient level of detail to allow intervenors to assess the reasonableness of the costs. The CER expects the application to include at least the following:

- For municipal taxes, provide a schedule comparing base, current and test year amounts by province, breaking down variances into amounts due to changes in:
    - mill rates;
    - reassessments; and
    - facility additions.
- For income tax, provide schedules for the income tax provisions of each of the base, current and test years, with cross-references to supporting schedules as applicable, showing:
    - the derivation of the utility income after tax;
    - the carrying charges on deferrals;
    - the effective income tax rate;

    - the Capital Cost Allowances;
    - the disallowable expenses;
    - the interest portion of the allowance for funds used during construction (AFUDC);
    - the utility capital and non-capital losses carried forward;
    - the Large Corporation Tax; and
    - other significant items.
- For salaries and wages, provide cost schedules for the base, current and test years, with explanations of changes from year to year, detailing the following:
    - general salary increases;
    - merit increases;
    - promotions and progressions;
    - management incentive compensation;
    - severance payments;
    - staffing levels (full time equivalents, if appropriate);
    - any allocation methodology; and
    - other relevant factors.

Support the cost schedules with schedules showing the number of permanent and temporary employees (or full time equivalents) for each period.

For oil pipelines, provide:

- schedules of fuel and power costs, for the base, current and test years, that illustrate the derivation of the energy requirements and corresponding costs; and
- a schedule showing the derivation of a five-year historical oil loss or gain as a percentage of receipts of oil or other products transported through the pipeline system.

Abandonment Funding

See Chapter 7 – Referenced Documents – Abandonment Funding and Planning for documents that describe the requirements for pipeline abandonment cost estimates, set-aside and collection mechanisms and other CER direction regarding abandonment funding.

Foreign Currency

Where a transaction occurred in a foreign currency, include a description of the method used to derive the exchange rate that was applied.

Transactions Involving an Affiliate

Where contracted services are either from or to an affiliate, provide the details of the transactions, including evidence that the cost of the contracted services is reasonable.

P.2 Rate Base

Filing Requirements

1. Provide detailed schedules for rate base with supporting assumptions and calculations, where applicable, for the following:

    - monthly additions, retirements and month-ending balances for the base year, current year and test year by plant account;
    - cash working capital; and
    - average amounts and month-end balances for the base year, current year and test year for all other items included in rate base.

Guidance

Include complete documentation of the investment in the pipeline on which a return is expected, and verification that rate base additions and retirements were authorized by the Commission. Such evidence usually includes:

- the method used to determine the average amounts of the rate base (i.e., either the 13-point or 24-point method); and
- a schedule showing additions to the plant accounts between the end of the base year and the end of the test year, broken down by project and referring to the applicable CER order number approving the project (including the Section 214 Streamlining Order).

Break down forecasted amounts by plant account and only include costs for approved projects in the rate base. Information should include:

- explanations for amounts booked in the plant accounts that will not be used in pipeline operations during the test year, including the rationale for keeping these items in rate base or deleting them from rate base;
- a variance analysis showing, for each project, the amount proposed to be added to rate base compared to the original cost estimate provided to the CER in any application filed pursuant to Part III of the CER Act;
- an explanation of variances exceeding either $100,000 or 10 percent, whichever is greater;
- retirements from the plant accounts broken down by CER order number, if applicable;
- for AFUDC and overhead, the rate and method of calculation used for projects transferred to Plant in Service between the end of the base year and the end of the test year;
- for cash working capital, a time lag analysis for the base year if a change is proposed from the most recent Commission-approved average number of days between operating expense payment dates and revenue receipt dates; and
- a list of depreciation rates by major account groups applied in the test year, together with a justification for any proposed changes from the most recent Commission-approved rates.

P.3 Financial Statements

Filing Requirements

1. Provide the current annual report to shareholders for the regulated entity. If the regulated entity is part of a larger corporate structure, also provide the current corporate annual report to shareholders.
2. Provide the financial statements for the base year for the regulated entity, segmented from published financial statements if the regulated entity is part of a larger corporate structure, and provide, where necessary:

    - an explanation of the major assumptions used to prepare the financial statements of the regulated entity; and
    - a statement regarding the consistency of application of accounting principles to the regulated entity.

Guidance

The annual report and financial statements should:

- identify similarities and differences between the financial policies applied to the regulated entity and those applied to the corporation;
- identify possible instances of cross-subsidization;
- provide an understanding of the policies of the corporation; and
- assist in testing the reasonableness of the operating results for the regulated activities.

P.4 Cost of Capital

Filing Requirements

1. **Invested Capital:** The application shall describe the applicant's sources of capital, including outstanding balances for each class of capital on a yearly basis, invested in the system's rate base and plant under construction for the past five years and the year(s) covered by the application. The application shall also describe all relevant attributes for each class and issuance of capital, including, but not limited to:

    - cost;
    - covenants;
    - embedded options, including call, put, or convertibility features;
    - seniority; and
    - voting/ non-voting features.

2. **Methodology/Techniques/Methods/Models:** The application shall include a description of the methodology used to estimate cost of capital and overall return, as well as all the techniques/methods/models within it, including:

- justification for the methodology and techniques/methods/models chosen;
- description of, and justification for, underlying assumptions and principles;
- implications of using the methodology and techniques/methods/models; and
- description of alternative methodologies and techniques/methods/models considered or utilized, and how and why these alternatives were or were not incorporated in the analysis.

3. **Data Supporting Methodology:** The application shall include a rationale for the specifically chosen data used in the estimation of cost of capital. This may include, but is not limited to:

    - forecasts;
    - bond yields;
    - risk-free rate;
    - market returns and prices;
    - market risk premiums; and
    - growth rates.

4. **Debt Costs**: The application shall include a description of, and justification for, the proposed treatment of debt costs as part of the return on rate base. The application shall also describe in detail, with supporting schedules, how debt costs to be recovered during the year(s) covered by the application were calculated.
5. **Business Risk:** The application shall include a detailed assessment of the applicant's business risks including market, supply, competitive, operating, and regulatory risks.
6. **Financial Risk:** The application shall include a description of, and justification for, how the applicant has considered financial risk in estimating cost of capital, and in establishing the applied-for rate of return and capital structure (if applicable). The application should also describe alternative ways of considering financial risk and how and why these alternatives were or were not incorporated.
7. **Regulated Assets:** The application shall include a high-level assessment of how the cost of capital for the facilities subject to the application is impacted by other assets and liabilities of the applicant or of the applicant's parent company[35] (if applicable), taking the stand-alone principle into account. The application shall include the following:

    - a high-level schedule reconciling the balance sheet of the facilities subject to the application with the consolidated balance sheet of the applicant or applicant's parent company;
    - an explanation of this reconciliation, detailing the allocation of equity and debt; and
    - an interpretation of the impact of this information on the applicant's cost of capital and access to capital markets.

[35] Throughout the Cost of Capital section of this manual, the expression "parent company" is meant broadly, so as to encompass situations where the applicant may have one or more parent or hierarchy of parents.

8. **Comparable Companies or Assets:** When comparable companies or assets are relied upon to estimate cost of capital, the application shall contain a discussion of business risks including market, supply, competitive, operating, and regulatory risks faced by these individual comparable companies or assets, and a description of any adjustment(s) made or considered to optimize comparability. More specifically, the application shall include:

    - justification for the selection of comparable companies used in the analysis;
    - description of comparables' business structure and legal structure and related impact on cost of capital estimations;
    - justification for the relative weight assigned to the results of each comparable company or asset;
    - discussion of the business risk faced by comparable companies or assets, including discussion of unregulated business activities; and
    - discussion of the financial risk faced by comparable companies or assets.

9. **Data from Other Countries:** Where an application utilizes financial data from countries other than Canada, the application shall include an assessment of the resulting impacts of using this data as opposed to data from Canada, including, but not limited to, impacts from any differences in tax regimes, currencies, securities exchanges, regulatory risk or systematic risks. The application should also assess whether and how adjustments should be made to the data from these other countries.
10. **Financial Statements:** The application shall include the applicant's most recent audited financial statements and notes, or, if not available, those of the applicant's parent company.
11. **Credit Rating:** The application shall include the applicant's two most recent credit rating reports issued from each recognized rating agency, including those issued by DBRS, Moody's, Standard & Poor's, and Fitch. If not available for the applicant, the application shall include those reports of the applicant's parent company.
12. **Historical Returns and Capital Structure:** The application shall include a description and summary schedule (where appropriate), for the past five years, of:

    - the applicant's actual balances for each class of capital, and resulting actual capital structures;
    - actual returns;
    - assumptions used to determine these actual returns;
    - allowed return(s) and deemed capital structure(s);
    - explanations of any variances between allowed and actual returns; and
    - explanations of any variances between deemed and actual capital structure(s).

13. **Capital Issuances:** The application shall include a description, for the past five years, of any debt, equity, and other capital issuances, their net/gross proceeds, and description of their use.
14. **Summary Schedule:** The application shall include a summary schedule for the year(s) covered by the application, showing the requested rates of return for each class of capital (if

applicable), deemed capital structure (if applicable) and derivation of the return on rate base.

15. **Fair Return Standard:** The application shall explicitly demonstrate how the applied-for total return on capital meets all requirements of the fair return standard by describing the extent to which the applied-for return:

    - is comparable to the return available from the application of the invested capital to other enterprises of like risk (the comparable investment requirement);
    - enables the financial integrity of the regulated enterprise to be maintained (the financial integrity requirement); and
    - permits incremental capital to be attracted to the enterprise on reasonable terms and conditions (the capital attraction requirement).

P.5 Tolls and Tariffs

Filing Requirements

1. Provide a concise description of the regulated pipeline system and operations, including a system map showing any toll zones or delivery areas.
2. Describe the applied-for toll design and explain any changes in the toll design from that previously approved by the Commission, including:

    - a description of the classes or types of services offered;
    - the method used to allocate costs to major pipeline functions and to classify costs between fixed and variable costs;
    - details of the cost allocation units used to derive the proposed test year tolls;
    - the method used to allocate costs to toll zones or areas, customers and classes or types of service, and the details and bases for such allocations; and
    - for oil pipelines, supporting information and calculations to illustrate the determination of toll differentials for each product type or charges for special services.

3. Provide a comparative schedule of test year revenues for each class or type of service under the existing and the proposed tolls.
4. Describe requested tariff revisions together with the rationale for the revisions with schedules comparing the proposed changes to existing tariff sheets.

Guidance

Include sufficient information to allow the Commission to assess whether the proposed tolls are just and reasonable and not unjustly discriminatory. The application should also include evidence that the proposed tolls are designed to recover the requested revenue requirement, including funding required for abandonment.

For a pipeline company with a complex toll design, include sufficient information to fully explain the toll design for the test year, with a focus on changes from that previously approved by the Commission. Provide detailed information and schedules to explain:

- the allocation units used in the toll design, including contract and throughput volumes for each customer and class of service where appropriate; and
- the methods used to allocate costs to various customers, toll zones and delivery areas.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

P.6 Regulation of the Traffic, Tolls and Tariffs of Group 2 Companies

Any pipeline company regulated by the CER which is not a Group 1 company is considered to be a Group 2 company. The following companies are designated as Group 1 companies:

Group 1 Companies	
Natural Gas	**Oil and Products**
Alliance Pipeline Ltd.	Enbridge Pipelines Inc.
Foothills Pipe Lines Ltd.	Enbridge Pipelines (NW) Inc.
Gazoduc Trans Québec & Maritimes Inc.	Kinder Morgan Cochin ULC
Maritimes & Northeast Pipeline Management Ltd.	Trans Mountain Pipeline ULC
NOVA Gas Transmission Ltd.	Trans-Northern Pipelines Inc.
TransCanada PipeLines Limited	TransCanada Keystone Pipeline GP Ltd.
Westcoast Energy Inc.	

All other pipeline companies regulated by the CER are Group 2 companies for traffic, tolls, tariff and financial regulation.

Tolls and Tariffs

The financial regulation of Group 2 companies is normally carried out on a complaint basis, with a consequent reduction in financial reporting requirements.

Group 2 companies are not normally required to provide the detailed information to support a tariff filing required of Group 1 companies. The CER regulates the traffic, tolls and tariffs of Group 2 companies on a complaint basis. Group 2 companies are required to include in their tariffs the following explanatory note:

The tolls of the Company are regulated by the CER on a complaint basis. The Company is required to make copies of tariffs and supporting financial information readily available to interested persons. Persons who cannot resolve traffic, toll and tariff issues with the Company may file a complaint with the CER. In the absence of a complaint, the CER does not normally undertake a detailed examination of the Company's tolls.

It is the responsibility of a Group 2 company to provide its shippers and interested parties with sufficient information to enable them to determine whether a complaint is warranted. Upon receipt of a written complaint, an application under sections 225 to 240 of the CER Act or on its own initiative, the Commission may decide to examine a toll and to make the toll interim, pending completion of this examination. In this circumstance, the Commission may request additional information including some or all of the information required of Group 1 companies as specified in sections P.1 through P.5 in Guide P.

Accounting Requirements and Financial Reporting

Group 2 companies are not required to keep their books of account pursuant to the code of accounts prescribed in the G/OPUAR. The G/OPUAR require that Group 2 companies maintain separate books of account in Canada in a manner consistent with generally accepted accounting principles and file audited financial statements within 120 days after the end of each fiscal year. Such statements should provide details of revenue and costs associated with the regulated pipeline. Where a Group 2 company operates a joint venture pipeline, it is required to disclose in its audited financial statements its beneficial share of revenue and costs associated with the regulated pipeline and to file a gross operating statement for the joint venture pipeline indicating whether, and if so by whom, this statement has been audited.

In some instances, the Commission has granted relief from the requirement to file financial statements. These instances have primarily concerned small shipper-owned pipelines with no direct dealings with third parties. A Group 2 company may apply for similar relief explaining the particular circumstances which would justify an exemption from this requirement.

The Commission has exempted Group 2 companies from the *Toll Information Regulations*. The Commission does not require Group 2 companies to provide periodic financial information, such as quarterly surveillance reports, for the purpose of monitoring the financial performance of these companies. As circumstances dictate, the CER may perform an audit of the company's records.

Whether they charge tolls or not, Group 2 companies are required to report to the CER on funding for abandonment. See Chapter 7 – Referenced Documents – Abandonment Funding and Planning for future guidance on details of pipe location, abandonment plans and cost estimates, as well as Collection Period.

P.7 Abandonment Costs

As of 1 January 2015 CER-regulated pipeline companies must have a mechanism in place that will provide adequate funds to pay for pipeline abandonment. Pipeline companies must establish a trust or provide a letter of credit issued by a bank listed in Schedule I of the Bank Act, or a surety bond supplied by a surety company regulated by the Office of Superintendent of Finance Institutions. A model trust agreement, letter of credit and surety bond can be found in the MH-001-2013 Reasons for Decision [Filing A60676].

Filing Requirements

1. A company's application should include any changes related to abandonment funding. Provide a discussion and justification of these changes, including any changes related to the total cost estimated for abandonment, the manner which the funds will be set-aside, and how the funds are to be collected, including the pace of collecting funds.

   Companies are encouraged to consult Chapter 7 Referenced Documents, Abandonment Funding and Planning, to learn more about the principles, estimation methods, filing formats and other expectations regarding funding abandonment.

Filing Manual – Guide Q – Export Authorizations (sections 344 to 347 of the CER Act and Associated Regulations)

Introduction

Sections 344 to 345 of the CER Act authorize the Commission to issue licences for the exportation of oil or gas. The CER Act no longer requires companies to obtain authorization for importation of natural gas, effective 29 August 2022. See the letter to All Gas Importation Authorization Holders issued 3 February 2023.

The National Energy Board Act Part VI (Oil and Gas) Regulations (Part VI Regulations) set out the information to be filed for licences and provides for the issuance of orders for the exportation of gas and oil.

Please see the Interim Memorandum of Guidance Concerning Oil and Gas Export Applications and Gas Import Applications under Part VI of the National Energy Board Act, dated 11 July 2012.

This guide describes the filing requirements for natural gas (including LNG) export licence applications.

Filing Requirements

Provide:

1. The source and volume of gas to be exported.
2. A description of gas supplies, including Canadian gas supply, expected to be available to the Canadian market (including underlying assumptions) over the requested licence term.
3. A description of expected gas requirements (demand) for Canada (including underlying assumptions) over the requested license term.
4. The implications of the proposed export volumes on the ability of Canadians to meet their gas requirements.

Further Guidance:

The onus is on the Applicant to demonstrate that the criteria in section 345 of the CER Act are met. The filing requirements, by their very nature, are not prescriptive and can be met in a variety of ways, including quantitatively or qualitatively. In meeting the filing requirements, the Applicant may want to consider:

- trends in Canadian gas demand and supply and the availability of the sources of gas to Canadians.
- available gas supply from the United States and other global sources.
- past trends in gas discoveries and whether, in the Applicant's opinion, these trends can be extrapolated into the future and why.
- the expected technological improvements in resource assessment and innovations.

For additional guidance, please see Reasons for Decision [Filing A50334] respecting the LNG Canada Development Inc. application for a licence to export LNG, issued on 4 February 2013.

Filing Manual – Guide R – Transfer of Ownership, Lease, or Amalgamation (CER Act section 181)

A company must not complete certain transactions unless the Commission has granted leave, by order, under section 181 of the CER Act. This includes:

- selling or otherwise transferring, or leasing, in whole or in part, a pipeline or abandoned pipeline to any person;
- purchasing or otherwise acquiring, or leasing, in whole or in part, a pipeline or abandoned pipeline from any person; or
- if a company is authorized to construct or operate a pipeline or owns an abandoned pipeline, amalgamating with any other company.

(collectively, **Proposed Transaction**)

The failure to obtain the required leave under subsection 181(1) of the CER Act **before** completing a Proposed Transaction is designated as a violation in Schedule 1 of the *Administrative Monetary Penalties Regulations*.

The meaning of "pipeline" and "abandoned pipeline" in the context of a section 181 application is set out in section 2 and subsection 181(2) of the CER Act and captures pipelines that are regulated by the CER or would be regulated by the CER after the Proposed Transaction. The definition of pipeline includes connected works such as tanks, pumps, valves, compressors, and meter stations.

A section 181 application may, depending on the circumstances, include or be followed by one or more of the following applications:

- Variation or transfer of a certificate(s) under section 190 of the CER Act.
- Variance of a decision(s) or order(s) under section 69 of the CER Act.
- Leave to open under section 213 of the CER Act, or a leave to open exemption under section 214.
- Certificate or order authorizing operation under sections 183 and 214 of the CER Act, respectively.
- Implementation or modification to tolls and tariffs under sections 225 to 240 of the CER Act.

For a sale, transfer, lease, or purchase under paragraphs 181(1)(a) and (b), the applicant is:

- the company proposing to sell, transfer, or lease (become the lessor of) the pipeline or abandoned pipeline (**Seller**);
- the company proposing to purchase, acquire, or lease (become the lessee of) the pipeline or abandoned pipeline (**Purchaser**); or
- both the Seller and Purchaser depending on whether the pipeline or abandoned pipeline is entering into, remaining in, or leaving the CER's jurisdiction.

In the case of a proposed amalgamation under paragraph 181(1)(c), the applicant is the company whose pipeline or abandoned pipeline is presently regulated by the CER (or both companies, if they both have a pipeline or abandoned pipeline regulated by the CER).

Goal

The application includes information to satisfy the Commission that the public interest would not be harmed as a result of the Proposed Transaction to sell, purchase, lease or amalgamate.

Filing Requirements

Detailed filing requirements are specified in the Transfer of Ownership, Lease, or Amalgamation Application Form. The filing requirements in the Form cover topics such as:

- applicant(s) and application details;
- operations;
- notification and engagement;
- pipeline specifications, operating status, and maps; and
- financial matters, including abandonment funding and financial resources.

Guidance

R.1 Guidance for instances where the pipeline or abandoned pipeline is currently regulated by the CER and would remain regulated by the CER after a Proposed Transaction (i.e., CER Regulated to CER Regulated)

- The Seller and the Purchaser are strongly encouraged to apply jointly. In these circumstances both the Seller and Purchaser involved in the Proposed Transaction are required to apply for leave to sell and leave to purchase, respectively, prior to completing the transaction. Both the Seller and the Purchaser need an order of the Commission under paragraph 181(1)(a) and (b), respectively.
- After the Commission grants leave under section 181, the companies must notify the CER when the transaction has been completed.
- Companies must apply to have the existing order(s) or certificate(s) amended to reflect the transaction (e.g., under sections 69 or 190, see Guide O), which may be included in the section 181 application.
- If the operation of the pipeline is to be changed, the Purchaser must also meet the requirements of the relevant section(s) of the CER Onshore Pipeline Regulations (OPR) or CER Processing Plant Regulations (PPR), and possibly either section 183 or section 214 of the CER Act.
- Group 1 pipeline companies[36] not regulated on a complaint basis may be required to apply under the CER Act if tolls and tariffs matters need to be addressed (see Guide P – Tolls and Tariffs).

[36] In 1985, for financial regulatory purposes, the National Energy Board divided the pipeline companies under its jurisdiction into two groups: Group 1 companies with more extensive systems; and Group 2 companies that operate

R.2 Guidance for instances where the pipeline is not currently regulated by the CER and would become regulated by the CER after a Proposed Transaction (i.e., Non-CER Regulated to CER Regulated)

- The Purchaser is required to submit the application for leave under paragraph 181(1)(b) of the CER Act.
- The Purchaser should concurrently submit a facilities application under either section 214 or section 183 of the CER Act (see Guide A as applicable) for authorization to operate the pipeline. This would provide the Commission with the information it requires to approve the pipeline and grant an order or certificate as appropriate.
- To operate a pipeline, a company is also required to apply for leave to open under section 213 (see Guide T as applicable) or a leave to open exemption under section 214. Pipelines that may be exempted from leave to open include pipelines that have already been constructed.
- The Commission expects companies to demonstrate that a pipeline entering CER regulation can be operated safely.

R.3 Guidance for instances where the pipeline or abandoned pipeline is currently regulated by the CER and would no longer be regulated by the CER after a Proposed Transaction (i.e., CER Regulated to Non-CER Regulated)

- The Seller is required to submit the application for leave under paragraph 181(1)(a) of the CER Act. The Seller must also apply for the revocation or amendment, as appropriate, of the existing certificate(s) or order(s) for the pipeline or abandoned pipeline.
- The Seller should include information in its application about the Purchaser, including contact information and an explanation of the Purchaser's ability to finance the ongoing operations of the pipeline or, if the pipeline is already abandoned, any post-abandonment activities.
- The Seller should also provide confirmation that the regulator that would gain jurisdiction over the pipeline or abandoned pipeline has been or will be notified of the transaction.
- The Seller must include a proposal for the treatment of any abandonment funds set aside in a trust (e.g., to keep funds in trust or to release funds from trust to the Purchaser, the Seller or to shippers, etc.).

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smaller systems. The decision stated that Group 1 companies were required to file tolls and tariffs for approval, along with several reporting requirements. The decision also stated that Group 2 pipeline companies were to be regulated using the complaint approach. The NEB decided the complaint approach could also be used for certain Group 1 pipelines.

Under the complaint approach, the pipeline is responsible for providing shippers and other interested parties with sufficient information to enable them to ascertain whether the tolls are reasonable. Tolls, once filed with the CER, automatically become effective and are presumed to be just and reasonable unless a complaint is filed and the Commission is convinced that it needs to examine the tolls.

R.4 Guidance where the Proposed Transaction is an amalgamation with another company

- When a company with a CER-regulated pipeline or abandoned pipeline is amalgamating with another company, the company(ies) with CER authorizations are required to submit the application for leave under paragraph 181(1)(c) of the CER Act.
- In order to give sufficient time for the Commission to assess the application, it is strongly recommended that the application for leave to amalgamate be submitted at least 40 days prior to the scheduled amalgamation close date.
- The company with CER authorization(s) should also apply for amendment(s), as appropriate, of the existing certificate(s) or order(s) for the CER-regulated pipeline or abandoned pipeline.

Next Steps...

File the completed application. The CER's preferred filing method is online through the e-filing tool, which provides step-by-step instructions.

Filing Manual – Guide S – Access on a Pipeline (CER Act section 239)

An application pursuant to subsection 239(1) of the CER Act may request exemption from the requirement that a company operating a pipeline for the transmission of oil shall, according to its powers, without delay and with due care and diligence, receive, transport and deliver all oil offered for transmission by means of its pipeline.

An application pursuant to subsection 239(2) of the CER Act may request that the Commission require a gas pipeline or pipeline transporting a commodity other than oil to receive, transport and deliver a commodity offered for transmission.

An application pursuant to subsection 239(3) of the CER Act may request that the Commission require a company operating a pipeline for the transmission of hydrocarbons or any other commodity authorized by a certificate issued under section 183 to provide adequate and suitable facilities for:

- the receiving, transmission and delivering of the hydrocarbons or other commodity offered for transmission by means of its pipeline;
- the storage of the hydrocarbons or other commodity; and
- the junction of its pipeline with other facilities for the transmission of the hydrocarbons or other commodity;

if the Commission finds that no undue burden will be placed on the company by requiring the company to do so.

Goal

The application includes information describing:

- the reason for the application; and
- the circumstances and correspondence between parties preceding the application.

Filing Requirements

1. Provide a detailed summary of the circumstances leading to the application.
2. Provide copies of all relevant correspondence between the applicant, the operator of the subject facility and any other parties that may be involved with the application.
3. For applications for an exemption from subsection 239(1), provide evidence that:

    - an open season was held offering all of the capacity to be contracted to anyone interested in shipping; and
    - allowing the exemption is in the public interest.

4. In the case of an application pursuant to subsection 239(3), the applicant should provide a description of the facilities that the pipeline company would need to install, including a cost estimate.

Guidance

The application should clearly explain what action the applicant would like the Commission to take and indicate whether the application raises any associated toll methodology issues. The applicant may provide potential alternative actions and reasons for selecting the requested action.

The application should also clearly explain the applicant's need for the requested service or facilities and include all relevant information that could help the Commission understand the situation that has led to the filing.

A subsection 239(1) application should include copies of all notices of the open season, the timing and method of providing notice, all correspondence between the pipeline and parties interested in contracting with the pipeline and any expressions of interest in or concerns regarding the application. The applicant should also provide an indication of the results of the open season and a sample or standard form contract to indicate the arrangements contemplated.

The open season must be conducted in a manner which provides all interested shippers the same opportunity to participate and allows adequate time for their consideration of the issues.

The Commission expects that the applicant under subsection 239(2) or (3) would have requested the subject pipeline operator to provide access or adequate and suitable facilities and that request would have been rejected prior to filing an application. The Commission would

normally seek comments from the pipeline operator after an application has been filed before determining how to proceed with the application.

For subsection 239(2) or (3) applications, all relevant correspondence between the applicant and the subject pipeline operator should be included so the Commission is aware of the issues that have been discussed. Correspondence with other affected parties should be included where the correspondence would provide clarity and assist the Commission in its decision.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide T – Leave to Open (CER Act section 213)

In accordance with the CER Act, a company requires permission from the Commission before opening a pipeline or a section of pipeline for the transmission of hydrocarbons or any other commodity.

The Commission may grant leave under section 213 of the CER Act if satisfied that the pipeline can be safely opened for transmission.

Additional information...

Pursuant to section 214 of the CER Act, the Commission may make orders exempting certain facilities from the provisions of section 213.

Goal

An application for leave to open will include information detailing the facilities for which leave is being sought as well as certain test information.

Filing Requirements

1. For leave to open applications for line pipe or a section of line pipe (including new piping for storage tanks), provide:

    - the Commission certificate or order number under which the work was carried out;
    - a list of standards, specifications and procedures to and under which the facilities were designed, constructed and tested;
    - a description of the pressure-tested facilities including:
        - the MOP;
        - the location;
        - the piping specifications, including the pipe manufacturer;
        - a schematic of the pressure-tested facilities; and
        - where applicable, the elevation profile of the test section, including the high, low and test point elevations;
    - a summary of continuous pressure and temperature readings over the test period, including:
        - the date of the test;
        - the test medium; and
        - the minimum and maximum allowable test pressures (where applicable, reconcile any significant pressure deviations);
    - a summary of all piping, welds, and valves not subjected to a pressure test following installation (e.g., pre-tested pipe and assemblies) with justification for not pressure testing following installation;

- a statement that all control and safety devices were or will be inspected and tested for functionality;
- confirmation that all field joints were non-destructively examined;
- confirmation that any permits required for the use and disposal of water were obtained;
- test equipment calibration certificates;
- confirmation that pressure testing was performed under the direct supervision of a company representative;
- all logs, test charts and other test records, signed and dated by the company representative;
- confirmation that the test pressure did not fall below 97.5 percent of the minimum strength test pressure; and
- details regarding any unsuccessful pressure tests, including the cause of the test failure.

2. For a leave to open application for a tank, provide:

    - the Commission certificate or order under which the work was carried out;
    - a list of standards, specifications and procedures to and under which the facilities were designed, constructed and tested;
    - a statement confirming that post-weld vacuum tests were conducted and deemed acceptable;
    - a statement that hydrostatic testing was completed and found acceptable;
    - a confirmation of the water source and a copy of any permits required for the use and disposal of water, if applicable;
    - a statement confirming that the fire protection facilities were constructed and tested in accordance with CSA Z662;
    - a statement confirming that the containment area or system was built to meet the requirements of CSA Z662;
    - a statement confirming that non-destructive examination of the welds was conducted and found to be acceptable; and
    - a statement that all control and safety devices (e.g., overflow alarms) have been inspected and tested for functionality.

Guidance

Section AA.1 in Guide AA outlines when the CER expects leave to open applications and pressure testing programs to be filed.

It is recommended that the application contain a signed statement from a professional engineer, indicating the application has been assessed and reviewed.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide U – Information Filed Respecting Plan, Profile, Book of Reference and Notices (CER Act section 199 and section 201)

Goal

Documentation on the detailed route of the pipeline and notification to potentially affected landowners and others persons regarding the approval process and their rights will be provided in accordance with sections 199 and 201 of the CER Act.

U.1 Plan, Profile, Book of Reference (PPBoR)

Filing Requirements

Section 199 of the CER Act requires:

199 (1) The company must submit the plan, profile and book of reference referred to in paragraph 198(c) to the Regulator.

(2) The plan and profile must include any details that the Commission may require.

(3) The book of reference must describe the portion of land proposed to be taken in each parcel of land to be traversed, giving the numbers of the parcels, and the area, length and width of the portion of each parcel to be taken, and the names of the owners and occupiers insofar as they can be ascertained.

(4) The plan, profile and book of reference must be prepared to the satisfaction of the Commission, and the Commission may require the company to provide any additional information that the Commission considers necessary.

In addition, the plan and profile of the project must be drawn to a scale of 1:10 000 or larger and, if appropriate, should show:

1. the proposed route of the pipeline.

2. property boundaries; and

3. the numbers of the parcels of land to be traversed (i.e., legal land descriptions).

Guidance

When the Commission issues a certificate of public convenience and necessity under the CER Act, the company may provide a draft version of the PPBoR.

Upon receipt of the certificate, the company shall file PPBoRs pursuant to section 199 of the CER Act for approval pursuant to section 203 of the CER Act. The applicant may consider using a photomosaic overlay for the final PPBoR. A photomosaic can provide a high level of visual information about the detailed route of the project. The PPBoR will allow landowners and other persons to examine the PPBoR to determine the precise location of the proposed detailed route,

the lands that will be crossed, the type of land rights that will be required and the landowners who will be affected.

In the event the Commission approves the PPBoR for a project, the company is required to file the PPBoR with the registrar of deeds in the appropriate land titles or land registry office before carrying out any work in respect of the approved PPBoR.

U.2 Section 201 Notices

When plans, profiles and a book of reference are filed with the CER (pursuant to subsection 199(1) of the CER Act) a sample notice shall be filed for Commission approval prior to service and publication. The notice will meet the requirements of section 201 of the CER Act, section 50 of the Rules and the additional filing requirements.

Filing Requirements

Section 201 of the CER Act states:

Notice to owners

201 (1) If a company has submitted to the Regulator a plan, profile and book of reference under subsection 199(1), the company must, in the form and manner specified by the Commission,

> **(a)** serve a notice on all owners of lands proposed to be acquired, leased, taken or used, insofar as they can be ascertained; and
>
> **(b)** publish a notice in at least one issue of a publication, if any, in general circulation within the area in which the lands are situated.

(2) The notices mentioned in subsection (1) must describe the proposed detailed route of the pipeline, the location of the head office of the Regulator and the right of the owner and of persons referred to in subsection (4) to make, within the period referred to in subsection (3) or (4), as the case may be, representations to the Commission respecting the detailed route of the pipeline.

(2.1) The Regulator must publish on its website any notice that is published under paragraph (1)(b).

(3) If an owner of lands who has been served with a notice under subsection (1) wishes to oppose the proposed detailed route of a pipeline, the owner may, within 30 days after the day on which the notice is served, file with the Regulator a written statement setting out the nature of their interest and the grounds for their opposition to that route.

(4) A person who anticipates that their lands may be adversely affected by the proposed detailed route of a pipeline, other than an owner of lands referred to in subsection (3), may oppose the proposed detailed route by filing with the Regulator, within 30 days after the day on which the last notice referred to in subsection (1) is published, a written statement setting out the nature of their interest and the grounds for their opposition to that route.

Section 50 of the Rules states:

50. (1) Before any notice in respect of a plan, profile and book of reference of a pipeline or an international or interprovincial power line is served or published by an applicant under section [201] of the Act, the applicant shall

(a) submit to the [CER] for approval as to form a sample notice for service and a sample notice for publication, both of which shall include a sample description of the proposed detailed route of the pipeline or the international or interprovincial power line that is to be included in each notice; or

(b) identify in writing, for the approval of the [Commission], one or more forms of notices previously approved by the [Commission] that the applicant proposes to serve or publish in relation to the plan, profile and book of reference.

(2) The submission required under paragraph (1)(a) shall include

(a) a copy of any map that the applicant proposes to publish; and

(b) a list of the titles and the number of issues of the publications in which the applicant proposes to publish the notice.

(3) Any notice served or published under section [201] of the Act shall not depart in any material respect from the notice approved by the [Commission] under subsection (1).

In addition, the applicant must provide the following information.

1. File a copy of the notice that will be served on landowners. At a minimum, the notice will include:

    - a description of the requirements described within sections 202 to 206 of the CER Act;
    - a map of the proposed detailed route of the pipeline or powerline;
    - a plan of the lands proposed to be acquired, which:
        - reference to legal survey points, if such points are available; and
        - is of a scale sufficient to identify, with reasonable accuracy, the location, dimensions and area of lands in relation to the remaining adjacent lands of the owner, if any.

2. Provide a copy of the notice that will be included in local publications. At a minimum, the notice will include:

    - a description of the requirements described within sections 202 to 206 of the CER Act;
    - a description of the proposed detailed route of the pipeline;
    - a plan of a scale sufficient to identify, with reasonable accuracy, the location of the proposed detailed route in relation to:
        - topographical features;

    - population centres;
    - highways;
    - utilities; and
    - other such prominent local landmarks;
- a schedule that lists each land parcel that is proposed to be affected by the detailed route and identifies each by its legal description, including as appropriate the:
    - municipal address;
    - parcel number;
    - registered plan number;
    - lot;
    - concession;
    - township;
    - parish;
    - range;
    - county; or
    - other equivalent land divisions, as are sufficient to identify the lands of each such owner;
- the location within or near the area covered by the plan where the PPBoR for that area are available for public inspection;

3. The list of publications that will be used will include:

- proposed dates of publication;
- submission deadlines;
- frequency (daily, weekly, monthly) of publication; and
- language of publication (French, English or both).

4. Where the applicant completes the service and publication of notice under section 201 of the CER Act, it shall forthwith notify the Commission in writing of the dates of the last service and publication. The company shall file a tear sheet of the newspapers.

Guidance

After the Commission has issued a certificate and the PPBoRs have been filed with the CER pursuant to section 199 of the CER Act, the company must provide a sample notice, in both English and French, of the proposed section 201 notices, or identify notices previously approved by the Commission that the applicant proposes to serve or publish. CER staff can provide assistance in order to ensure that the notices comply with the CER Act requirements. Once Commission approval has been obtained, the company can serve and publish its section 201 notices.

When publishing notices, consider the availability of English and French newspapers and their respective regional coverage. In the event that newspapers in the region are published in only one official language, publish both the French and English versions side by side in compliance with the *Official Languages Act*.

The Rules require that where an applicant completes the service and publication of any notice under section 201 of the CER Act, the company shall forthwith notify the Commission in writing of the dates of the last service and publication. This allows the Commission to determine when the notices were served and published which commences the comment period set out in subsection 201(3) and subsection 201(4) of the CER Act. The Commission will not approve any PPBoR prior to expiry of these timelines.

Detailed Route Hearing

If an objection is received by the Commission pursuant to subsection 201(3) or (4) of the CER Act, the Commission will, pursuant to subsection 202 (1) of the CER Act, order a public hearing be conducted with respect to the detailed route and method and timing of construction of the pipeline.

Following the issuance of a Hearing Order by the Commission, consider filing the following information:

- a description of any landowner concerns with respect to the detailed route and the methods and timing of construction of the project; and
- comments on the potential for using the CER's Alternative Dispute Resolution (ADR) services.

U.3 Application to Correct a PPBoR Error (CER Act section 208)

Goal

The application includes documentation with respect to the omission, misstatement or error in a registered PPBoR. The documentation will address all land matters related to the request for a permit in order to correct the error.

Filing Requirements

1. An application pursuant to subsection 208(1) of the CER Act should include:

- the Order number and date of the original PPBoR approval;
- the nature and description of the error in the PPBoR;
- the accurate information (i.e., related to the plan, profile or book of reference); and
- confirmation that, pursuant to subsection 208(3), copies of the permit will be provided to the offices of the registrars or appropriate land title offices.

Guidance

Section 41 of the CER Act provides a company with the means to correct an omission, misstatement or error in its registered PPBoR.

Pursuant to subsection 208(2) of the CER Act, the Commission may, at its discretion, issue a permit setting out the nature of the omission, misstatement or error and the correction allowed.

Subsection 208(3) of the CER Act provides that the permit and supporting documentation are considered to be corrected once registered at the appropriate land titles office.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide V – Right-of-Entry Application (CER Act section 324)

Where a company does not acquire land required for an approved pipeline through negotiations with the landowner, it may apply to the CER for a right-of-entry order pursuant to section 324 of the CER Act and the Rules.

Guide V of this manual provides guidance regarding the information that the company must give to the landowner, under section 324 of the CER Act, prior to applying for a right-of-entry order.

Guide V further outlines the information required in an application to the CER for a right-of-entry order, as established in section 55 of the Rules. As set out in the guidance below, the Rules state that the filing to the CER must indicate, among other things, that the notification to the landowner contained all the information as required under section 324 of the CER Act.

Goal

The application contains documentation with respect to the right-of-entry process. The documentation addresses all matters related to the request for an immediate right-of-entry order demonstrating that landowners and other persons have been notified and their rights have been protected.

Section 324 of the CER Act states:

324 (1) Subject to subsection 317(1), if the Commission considers it appropriate to do so, the Commission may, by order, on application to the Regulator in writing by a company, grant to the company an immediate right to enter any lands on any conditions specified by the Commission in the order.

(2) The Commission is not authorized to make an order under subsection (1) unless the Commission is satisfied that the owner of the lands in question has, not less than 30 days and not more than 60 days before the date of the application, been served with a notice setting out:

(a) the purpose of the right of entry referred to in subsection (1);

(b) the date on which the company intends to make its application to the Regulator under subsection (1);

(c) the date on which the company intends to enter the lands and the period during which the company intends to have access to the lands;

(d) the address of the Regulator to which any objection in writing that the owner may make concerning the issuance of the order may be sent; and

(e) a description of the right of the owner to an advance of compensation under section 325 if the order is issued and the amount of the advance that the company is prepared to make.

Filing Requirements

In accordance with the CER Act and the Rules, in order to apply for a right-of-entry order under section 324 of the Act, a company shall:

1. File an application with the CER not less than 30 days and not more than 60 days after the date of service of the notice on the owner of the lands, as set out in subsection 324(2) of the Act.
2. The application must be served on the owner of the lands on the same day that the application is filed with the CER.
3. The application must contain:

    a. a copy of the notice described in subsection 324(2) of the Act;

    b. evidence that the notice has been served on the owner of the lands;

        i. not less than 30 days and not more than 60 days prior to filing the application with the CER; and

        ii. in accordance with subsection 8(8) of the Rules, or in any manner ordered by the Commission;

    c. a schedule that is proposed to be made part of the order sought and that contains, in a form suitable for depositing or registering in the appropriate land registry or land titles office, a description of:

        i. the lands in respect of which the order is sought;

        ii. the rights, titles or interests applied for in respect of the lands; and

        iii. any rights, obligations, restrictions or terms and conditions that are proposed to attach to:

            A. the rights, titles or interests applied for in respect of the lands;

            B. any remaining interest or interests; or

            C. any adjacent lands of the owner;

d. a current abstract of title to the lands, a certified copy of the certificate of title to the lands or a certified statement of rights registered with the appropriate land registrar;

e. a copy of the relevant provisions of the Rules, outlining how an objection may be made to the CER; and

f. evidence that the application, including the information set out in sections a. to e., has been served on the owner of the lands.

In addition to the requirements of section 324 of the CER Act and the Rules, applications shall also include the following information:

1. A summary of the land negotiation process conducted between the applicant and the owner of the lands for which a right-of-entry order is sought, including the dates of meetings held between the applicant and the owner of the lands;
2. The date of service of notice on the landowner pursuant to subsection 322(1) of the CER Act;
3. If applicable, the date of service of notice on the landowner pursuant to section 201 of the CER Act; and
4. A discussion of outstanding issues and the reason(s) that a voluntary agreement could not be reached.

Guidance

Pursuant to the Rules, the landowner may file a written objection with the CER any time after receipt of the notice up to 10 days after the date the company files the right-of-entry application.

In the event the Commission approves the right-of-entry order, the order must be deposited in the appropriate land registry or land titles office, pursuant to section 326 of the CER Act.

The date of service of notice on the landowner pursuant to section 201 of the CER Act will provide the CER with confirmation that, where the lands that are the subject of the right-of-entry application are required for the detailed route of a project, the landowner was served notice of the filing of the plan, profile and book of reference for the detailed route.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Guide W – Requirements for Substituted Service Applications

Goal

Applications filed are complete and contain accurate documentation for substituted service to allow the Commission to understand the rationale and all steps taken by the company to attempt to serve a landowner and why the company was not able to do so.

Filing Requirements

Sections 3 to 5 of the *National Energy Board Substituted Service Regulations* state:

3 (1) Subject to subsection (2), where a company has been unable to effect personal service of a notice on a person after having made reasonable attempts to do so, the [Commission] may, on application by the company, order substituted service of the notice on the person by one or more of the methods referred to in subsection 5(1).

(2) The [Commission] shall not order substituted service of a notice on a person unless

(a) the [Commission] is satisfied that personal service of the notice on the person is impractical in the circumstances; and

(b) the information provided in accordance with paragraph 4(c) discloses that there is a reasonable possibility that substituted service of the notice on the person will bring the notice to the attention of that person.

4 An application for an order under section 3 shall be made by filing with the [CER] five copies of a written application, with evidence by affidavit disclosing

(a) the efforts made to effect personal service;

(b) the prejudice to any person that would result from further attempts at personal service; and

(c) the last known address of the person on whom a notice is required to be served, the address of the residence or place of business of the person or any other place thought to be frequented by the person, the names and addresses of any persons who may be in communication with the person, or any other information respecting where the person might be found.

5 (1) Substituted service of a notice may be effected by one or more of the following methods:

(a) leaving the notice with an adult person at the residence or place of business of the person or at any other place thought to be frequented by the person;

(b) leaving the notice with any other adult person who may be in communication with the person;

(c) sending the notice by registered mail to the last known address of the person;

(d) publishing the notice in one or more publications in general circulation in the area where the person was last known to be or is thought to be; or

(e) any other method that appears to the [Commission] more likely to bring the notice to the attention of the person.

Guidance

This section applies to notices pursuant to sections 201 and 322 and subsection 324(2) of the CER Act. Where a company is required to effect personal service of a notice on a person and has made reasonable attempts to do so, the company may apply to the CER for approval of substituted service. This may be the case where the whereabouts of a landowner is unknown and the company has made reasonable attempts to locate the landowner. Personal service is defined in the *National Energy Board Substituted Service Regulations* as any manner permitted by the general rules of practice in the Federal Court of Canada.

Next Steps...

File the completed application. Applicants are encouraged to include the completed relevant checklists from Appendix 1.

Filing Manual – Chapter 6 – Non-Application Information Filings

An applicant must:

- confirm that an information filing is required; and
- identify which Guides within Chapter 6 are applicable (see Figure 2-1) and provide the required information

Filing Manual – Guide AA – Post Certificate or Order Requirements

Goal

Information is provided to validate the applicant's approach to the proposed facility and to facilitate the CER's audit and inspection processes.

AA.1 Filing Requirements – Engineering and Technical

Pipe Joining Program

1. Two weeks prior to the start of construction, provide a pipe joining program **if** the proposed project involves:

    - pipe, other than auxiliary systems pipe, carrying any substance other than sweet natural gas, oil or refined products;
    - the joining of any non-routine material;
    - non-routine joining procedures; or
    - a pipe grade higher than 483 MPa.

Pressure Testing and Leave to Open

1. Two weeks prior to pressure testing, provide a pressure testing program if exemption has not been granted from section 213 of the CER Act (i.e., leave to open).
2. Prior[37] to the start of operations, make an application for leave to open if exemption from section 213 of the CER Act has not been granted (see Guide T for details).

Construction Safety Manual

1. Four weeks prior to the start of construction, submit a construction safety manual pursuant to OPR subsection 20(1) and PPR subsection 27(1). Refer to section 1.6 if this manual has been previously filed with the CER. Note that a complete construction safety manual is required to include information specific to the current application. A company may provide reference to documents previously filed but a construction safety manual specific to the current application needs to be filed at least four weeks prior to the start of construction unless otherwise directed by the CER.

Emergency Procedures Manual

1. Two weeks prior to the start of operations, submit an emergency procedures manual and any updates that are made to it pursuant to OPR subsection 32(2) or PPR subsections 35(b) and (c).

[37] Applications for leave to open should allow sufficient time for assessment, which may vary according to the complexity of the application.

- Refer to section 1.6 if this manual has been previously filed with the CER. File any updates required to incorporate the current project.

Gas Processing, Sulphur or LNG Plant Facilities

1. If the proposed project involves gas processing, sulphur or LNG plant facilities, submit a program for the design, operation and abandonment of pressure vessels and pressure piping at the processing plant pursuant to PPR section 9. Also include provisions for document handling and record retention.

AA.2 Filing Requirements – Post Construction Environmental Monitoring Reports

1. Provide reference information including:

    - the CER order or certificate and condition number under which the report is being filed;
    - the year of reporting (e.g., 6 month, 1 year);
    - pipeline specifications (e.g., outside diameter of pipe, length of pipe, and product being transported); and
    - a map of the region displaying the location of the pipeline as it was built in relation to provincial, territorial or national boundaries, and the nearest town.

2. Identify on a map, or with reference to a map, the locations of the following, as appropriate, in relation to the location of the pipeline as constructed:

    - sites requiring ongoing monitoring (e.g., steep slopes, erosion-affected areas, areas that have weed problems, specific wildlife habitat, trees, rare plant transplant and donor sites or riparian areas);
    - watercourse crossings, as well as any locations in which offsetting has been completed as required under a *Fisheries Act* authorization. These locations are also to be provided in an electronic spreadsheet format and should include the name of the pipeline, name of the watercourse, type of watercourse, fish presence, the UTM location including zone in NAD83 datum and the crossing methodology implemented for each crossing;
    - wetlands;
    - access control features;
    - temporary work space boundaries and access roads;
    - planted tree bands;
    - areas of identified landowner concerns such as subsidence or soils issues; and
    - other project-specific sites of importance or interest.

3. Provide a discussion of the effectiveness of mitigation, reclamation, or compensation measures that were committed to and implemented. If measures were not successful, provide a description of what type of remedial measures were applied to accomplish the goals of mitigation or reclamation.

4. Identify the outstanding environmental issues, the plans for their resolution and any discussions held with interested parties regarding the issues.
5. Provide contact names and phone numbers of company representatives should there be questions from CER staff about the report or future inspections by CER staff that need to be arranged.

Additional information...

It is only necessary to address outstanding issues in subsequent reporting years. Once an issue has been reported as being resolved, it no longer needs to be addressed in subsequent reports unless the issue redevelops. Each issue should be demonstrated as being resolved in a report prior to being removed from the list in a subsequent report.

Guidance

Report Content

These information requirements are intended to guide companies in developing post-construction environmental monitoring reports (post-construction report). Companies are encouraged to submit the listed information in an appropriate format such as:

- text;
- tables;
- diagrams; or
- photographs.

The initial post-construction report, also known as the as-built report, should be the most detailed post-construction report. The as-built report should focus on the issues from construction, and should be used as a building block upon which additional post-construction reports are based. The subsequent post-construction reports should focus on the applied-measures and status of issues since the last post-construction report filing.

Photos can be used throughout the report to give the reader a better understanding of the issues, the state of the RoW, and the comparison between pre- and post-construction conditions.

The locations of specific environmental features and issues should be identified so that CER or company employees can easily locate areas on the ground. The locations may be marked on the map or may be identified in a list with reference to a map (e.g., alignment sheets). Locators such as latitude and longitude or Universal Transverse Mercator (UTM) coordinates should be used, and may be used in combination with kilometre- or mile-posts for use in flyovers.

The as-built report should discuss the mitigation implemented during construction and reclamation, and should include specific detail on unique or novel mitigation applied. Subsequent post-construction reports should discuss measures implemented since the submission of the previous post-construction report and update the status of issues and the effectiveness of mitigation, as appropriate.

Biophysical and Socio-economic Elements

Guidance for specific information that could be provided for biophysical and socio-economic elements is provided in Table AA-1. To determine which biophysical elements should be addressed, refer to Table A-1 in section A.2.

Highlight any new or innovative mitigation used and provide an evaluation of its success.

Table AA-1: Specific Information for Biophysical and Socio-economic Elements

Biophysical and Socio-economic Element	Information
Physical environment	• Confirm the mitigation that was applied for issues related to topography, permafrost, or acid-generating rock. • Discuss the results of any monitoring related to these issues.
Soil and soil productivity	• Identify areas where substantial admixing, erosion or compaction has occurred and discuss the mitigation applied. • Discuss any wind and water erosion control measures that were undertaken. • Identify and discuss any contamination encountered, and any proposed remediation.
Vegetation	• Discuss the methods of re-vegetation (e.g., natural recovery or seeding) and where the methods were applied along the RoW. • Evaluate the success of re-vegetation (e.g., percent cover achieved, species diversity and survival of rare plant transplants). • Provide labelled photos including location, date and direction of photo comparing the RoW to surrounding vegetation. Random permanent photo reference points representative of the different habitats and re-vegetation methods along the RoW could be used. • Discuss whether any weeds have been identified, their type and locations, and proposed control measures. • Identify the seed mix(es) used and in which location, and provide copies of seed certificates. • Discuss and compare agricultural productivity on and off the RoW • Identify areas where remedial seeding is required and discuss plans for this seeding.
Water quality and quantity	• Identify watercourse crossing construction method(s) used in the field. • Provide locations of temporary structures and confirm temporary structures have been removed (e.g., bridges or sediment fences).

	• Provide labelled photos for sensitive crossings, such as fish bearing streams, or those streams that may affect public health such as community watershed crossings. Photos should include upstream, downstream, left-bank, right-bank, pre-construction and post-construction views if possible. • Discuss the results of any water quality or quantity monitoring that occurred during the project.
Fish and fish habitat	• Further to the information provided for “Water Quality and Quantity”, describe mitigation that was applied at each fish bearing watercourse as well as any *Fisheries Act* authorization offsetting measures implemented. • Identify the location of sensitive sites identified during construction (e.g., spawning sites) and discuss the mitigation used at these sites as well as the residual effects.
Wetlands	• Identify and discuss the specific crossing method and mitigation measures applied at each wetland. • Discuss the removal or maintenance of permanent or semi-permanent access structures to ensure proper drainage and flow through the wetlands.
Wildlife and wildlife habitat	• Provide the location of sensitive sites identified during construction or through the application process (e.g., denning sites or evidence of nesting). • Discuss the impacts to these sites that occur from construction and associated mitigation measures.
Species at Risk or Species of Special Status	• Identify and discuss any Species at Risk or Species of Special Status observed in the project area during project activities. • Describe the mitigation that was applied with respect to Species at Risk or Species of Special Status.
Air quality	• Confirm the mitigation that was applied with respect to air quality. • Discuss the results of any monitoring related to air quality.
Acoustic environment	• Confirm the mitigation that was applied with respect to noise. • Discuss the results of any monitoring related to noise.
Heritage resources	• Discuss heritage sites that were previously known sites or identified during construction and the mitigation applied during construction to protect them.
Navigation and navigation safety	• Discuss any project effects on navigation and navigation safety along the right of way and the mitigation which has been implemented.

Summary Tables – Examples

Table AA-2 is an example of a summary table of outstanding issues. Table AA-3 is an example of a summary table of discussions with interested parties about outstanding issues.

Table AA-2: Example of a Summary Table of Outstanding Issues

Biophysical Element	Location	Outstanding Issue	Potential Adverse Environmental Effect	Proposed Action and Schedule
Watercourse	Big Hill Creek (latitude and longitude, UTM)	Creek bank erosion	Input of fine sediments to water column affecting fish reproduction	Install silt fence, June 20XX
Vegetation	John Doe's Farm (legal land location, and latitude and longitude or UTM)	Soil compaction	Poor root penetration resulting in poor growth	Deep rip the land, June 20XX

Table AA-3: Example of a Summary Table of Discussions Regarding Outstanding Issues

Biophysical Element	Location	Contact Information and Results of Discussion
Watercourse	Big Hill Creek (latitude and longitude, UTM)	Contacted Jane Smith from Alberta Environment (phone xxx xxx-xxxx) on 15 March 20xx. Ms. Smith was satisfied with the proposed action to address the creek bank erosion.
Vegetation	John Doe's Farm (legal land location, and latitude and longitude or UTM)	Met with John Doe on 24 November 20xx to discuss compaction. Mr. Doe was not entirely convinced of the effectiveness of the mitigation approach suggested, but agreed that it is a good first step. He would like to see the results of the change in compaction of the soil prior to determining whether he will be satisfied with the approach.

Filing Manual – Guide BB – Financial Surveillance Reports (*Toll Information Regulations*)

The *Toll Information Regulations* require pipeline companies that charge tolls to file quarterly surveillance reports and traffic data.

Goal

The reports contain information which enables the CER to monitor a pipeline's financial performance and the basis for calculating tolls and to monitor the results for each company over time. Interested parties such as shippers may also monitor these reports as they are publicly available on the CER's website.

BB.1 Financial Surveillance Reporting Requirements for Group 1 Companies

Filing Requirements

1. Unless the Commission otherwise directs or section 8 applies, a Group 1 pipeline company shall file the information set out in requirements 2 to 7.
2. All companies shall file their quarterly surveillance reports in the format set out in Schedules 1 to 3 of this Guide.
3. A company shall file its surveillance report:

    - for the first three quarters of each year, no later than 45 days after the quarter; and
    - for the year-end report, no later than 60 days after the quarter.

4. An interim surveillance report shall be filed when the tolls of a pipeline company are set as interim and replaced with a report based on final tolls as soon as they are made final by the Commission.
5. Provide an explanation for all variances as described in the following table:

Table BB-1: Variance Reporting Thresholds for Group 1 Companies
Filing Guide BB.1 Surveillance Reports

	Annual Revenue of a Group 1 Company		
Items in Guide BB Surveillance Reports Requiring Variance Explanations	**Less than $200 million**	**$200 million to $500 million**	**Greater than $500 million**
Annual revenue variance by each service or tariff no. making up more than 10% of total annual revenue	$1 million or greater Note a	$5 million or greater	$10 million or greater
Variances for each of: operations, maintenance and administration, depreciation, financial charges, integrity spending, income taxes	$500,000 or greater	$3 million or greater	$5 million or greater
Rate base variance (year-over-year change)	$3 million or greater	$10 million or greater	$20 million or greater
[a] For this revenue category a variance explanation for the total revenue rather than for individual services and tariffs is acceptable.			

6. Provide details of related-company transactions over $100,000.
7. File in the year-end report, five years of time-series data on the actual and approved rates of return on common equity and the actual and approved rates of return on rate base.
8. Notwithstanding filing requirements included in its negotiated settlement, a Group 1 pipeline company regulated under an incentive type settlement may negotiate filing requirements other than those specified in requirements 2 to 7 with its shippers and stakeholders, so long as:

    - the reports include the following base level information:
        - income statement, including revenues and expenses broken down by major categories;
        - details of deferral account balances (if applicable);
        - rate of return on common equity and on total capital;
        - rate base information, if applicable, broken down by major categories; if not applicable, gross and net plant in service, broken down by major categories;
        - traffic data as described in section BB.2;
        - details on incentive sharing mechanisms; and
        - details of all related-company transactions over $100,000.
    - the reports are submitted at least annually for all information, except traffic data, which shall be submitted quarterly; and

- the reports are not suspended during periods of interim tolls.

Guidance

Related-company transactions would include all transactions with affiliates and other related companies that are not at arms' length.

The company may file performance measures that it considers may be useful to the CER.

The CER may publish the data filed pursuant to this section and section BB.2 from time to time.

BB.2 Traffic Data

Filing Requirements

1. A company shall file its traffic data for the first three quarters of each year, no later than 45 days after the quarter and for the year-end report, no later than 60 days after the quarter.

    - Data must be provided in machine readable format (e.g., .csv or .xls files);
    - Ten years of historical data must be provided initially (i.e., one-time); and
    - Five years of historical data must be provided with each year-end filing.

2. The company shall file data for key points on its system.

    - The number of reporting points will vary on the system. A "bullet line" may report data at only one point while more complex systems may report at more than ten points.
    - Key points may be determined in consultation with CER staff and the company shall provide the CER with latitude and longitude coordinates for each key point.

3. Companies shall report the capacity of the system at each key point and explain the reason for any deviations from the nameplate capacity of the pipeline.
4. Gas pipelines shall report the daily volume of gas flowed (with imports and exports reported separately; not netted) in cubic metres and GJ for key points on the system.
5. Oil pipelines shall report the following monthly data:

    - For key points on the system volume in cubic metres of oil flowed by product (e.g., synthetic oil, condensate, blended bitumen, domestic light, domestic heavy, imported light, imported heavy, refined petroleum products, natural gas liquids);
    - Density in kilograms per cubic metre at 15 degrees Celsius for the system; and
    - Total monthly nominations in cubic metres and apportionment data.

BB.3 Financial Surveillance Reporting for Group 2 Companies

The Commission has exempted Group 2 companies from the *Toll Information Regulations*. The CER does not generally require Group 2 companies to provide periodic financial information,

such as quarterly surveillance reports, for the purpose of monitoring the financial performance of these companies. As circumstances dictate, the CER may perform an audit of a company's records.

See section P.6 Regulation of the Traffic, Tolls and Tariffs of Group 2 Companies in Guide P for a discussion of financial reporting.

BB.4 Integrity Spending

Filing Requirements

1. Effective 1 March 2017, the CER requires each Group 1 pipeline company to file with the CER actual expenditure information made under the pipeline company's integrity management program. The required information is described below:

   Facilities included: As defined under "pipeline" in section 2 of the CER Act and shall include hydrocarbon processing plants subject to the PPR.

   Integrity Spending: The actual annual capital expenditures and actual annual operating expenditures made under each pipeline company's integrity management program as mandated by the OPR and the PPR.

   Historical Integrity Spending data: Integrity Spending separated into capital and operating components for each calendar year from 2012 to 2016.

   Integrity Spending data filing requirements for 2017 and later years: Integrity Spending for each calendar year for each pipeline company, which shall be filed with the CER no later than 60 days after the close of the calendar year as part of the year-end quarterly surveillance report filing.

   Integrity expenditure categories: Integrity Spending must be provided and separated into total capital and total operating expenditures. To the extent possible, additional categorizations should be provided, as illustrated by Schedules 4 and 5. For instance, subject to a Group 1 pipeline company's available records, a Group 1 pipeline company might identify capital and operating components of their Integrity Spending by the following broad categories:

   a. Program management: Expenditures may include program development, implementation and improvement, records management, program audits, data collection and analysis, and risk assessment.
   b. Surveillance, condition monitoring and integrity hazard assessment: Expenditures in this category may include right of way surveys, corrosion monitoring and control surveys, in-line inspections, and geotechnical and water crossing surveys.
   c. Mitigation and remediation: Expenditures in this category may include preventative actions, the repair and replacement of pipeline systems and processing plants. Both planned and unplanned expenditures should be included.
   d. Other expenditures: Any expenditures not captured in the above categories.

Schedules 1 to 5 – Income Summary, Average Rate Base, Deferral Accounts, Historical annual integrity spending ($), and Integrity spending for 2017 to later years ($) [WORD 152 KB]

Filing Manual – Guide CC – Import and Export Reporting Regulation Requirements

The *National Energy Board Export and Import Reporting Regulations* (Reporting Regulations) require that on or before the last day of each month, the holder of a licence or order for the exportation or importation of gas, propane, butanes, ethane, refined petroleum products or crude oil submit a report to the CER summarizing the previous month's activities.

This information is used, in aggregate, to:

- monitor the flow of natural gas volumes, costs and prices through various export points and issue monthly reports for use by external parties;
- monitor the flow of ethane and record export prices;
- monitor the flow of propane and butanes, record prices and issue monthly reports for use by external parties; and
- monitor the flow of crude oil and refined petroleum products, record prices and issue monthly reports for use by external parties.

Additional information...

All individual filings are kept confidential and are not available to other parties.

CC.1 Gas other than Propane, Butanes and Ethane Reporting

Goal

The filing includes information with respect to inter-provincial and international natural gas movements, by volume and prices.

Filing Requirements

Section 4 of the Reporting Regulations states:

4 Subject to sections 5 and 6, every holder of a licence or an order for the exportation, importation, exportation for subsequent importation or importation for subsequent exportation of gas shall submit to the [CER], on or before the last day of each month, a return for the previous month that contains, for each licence or order, the following information set out by point of exportation or importation:

(a) the licence number or order number;

(b) the total quantity exported or imported;

(c) the highest quantity exported or imported in any one day during the month;

(d) the average heating value of the gas exported or imported;

(e) the value or price, at the international border, of all gas exported or imported, expressed in Canadian currency;

(f) the name of the export customer of the gas exported or the name of the seller of the gas imported;

(g) the province in which the gas was produced for all gas exported and the country and state in which the gas was produced for all gas imported;

(h) the transportation costs associated with the gas exported;

(i) whether the exportation or importation of gas was firm or interruptible;

(j) the geographical region within a country of destination to which gas was exported or within Canada for gas that was imported; and

(k) the name and telephone number of the person who prepared the return.

CC.2 Propane and Butanes Reporting

Goal

The filing includes information with respect to international propane and butane movement, by volume and prices.

Filing Requirements

Section 5 of the Reporting Regulations state:

5 Every holder of a licence or an order for the exportation of propane or butanes shall submit to the [CER], on or before the last day of each month, a return for the previous month that contains, for each licence and order, the following information:

(a) the licence number or order number;

(b) the total quantity exported;

(c) the export price of the propane and butanes at the point of loading or injection into a pipeline, expressed in Canadian currency;

(d) the province where the exportation occurs;

(e) the country to which the propane or butanes were exported and the destination within the importing country;

(f) the mode of transport used in the exportation;

(g) information respecting

(i) the opening and closing inventory levels of the propane and butanes,

(ii) the supply sources of the propane and butanes,

(iii) the final disposition of the propane and butanes, and

(iv) inter-provincial transfers of the propane and butanes; and

(h) the name and telephone number of the person who prepared the return.

CC.3 Ethane Reporting

Goal

The filing includes information with respect to international ethane movement, by volume and prices.

Filing Requirements

Section 6 of the Reporting Regulations state:

6 Every holder of a licence or an order for the exportation of ethane shall submit to the [CER], on or before the last day of each month, a return for the previous month that contains, for each licence and order, the following information:

(a) the licence number or order number;

(b) the province where the exportation occurs;

(c) the total quantity exported;

(d) the total revenue generated by the exportation calculated at the point of loading or injection into a pipeline, expressed in Canadian currency;

(e) the destination of the exportation of the ethane;

(f) the mode of transport used in the exportation of the ethane; and

(g) the name and telephone number of the person who prepared the return.

CC.4 Oil Reporting

Goal

The filing includes information with respect to international crude oil and petroleum products movement, by volume and prices.

Filing Requirements

Section 7 of the Reporting Regulations state:

7 Every holder of a licence or an order for the exportation of oil shall submit to the [CER], on or before the last day of each month, a return for the previous month that contains, for each licence and order, the following information:

(a) the licence number or order number;

(b) in the case of oil other than refined petroleum products,

(i) the crude oil stream exported,

(ii) the consignee and destination of the oil within the importing country,

(iii) the total quantity exported,

(iv) the mode of transport used in the exportation,

(v) the point of sale,

(vi) the export price of the oil at the point of sale, expressed in Canadian currency, and

(vii) the marine freight cost of the cost, insurance and freight (CIF) sales, expressed in Canadian currency;

(c) in the case of refined petroleum products,

(i) the type of petroleum product exported,

(ii) the total quantity exported, expressed in cubic metres,

(iii) the export price at the point of loading or injection into a pipeline, expressed in Canadian currency,

(iv) the province where the exportation occurs,

(v) the mode of transport used in the exportation, and

(vi) the country to which the products were exported and the destination within the importing country; and

(d) the name and telephone number of the person who prepared the return.

Guidance

Section 3 of the Reporting Regulations states:

3 A copy of each return required to be submitted to the [CER] pursuant to these Regulations shall be kept by the person submitting the return for a period of three years from the month to which the return relates.

Monthly reports are a mandatory condition of any order or licence that may be issued in respect of the import or export of natural gas, ethane, propane, butanes, refined petroleum products or crude oil.

Filing Manual – Chapter 7 – Referenced Documents

- *Canada Energy Regulator Act*
- *Canadian Energy Regulator Onshore Pipeline Regulations*
- *Canadian Energy Regulator Processing Plant Regulations*
- *National Energy Board Rules of Practice and Procedure, 1995*
- *National Energy Board Act Part VI (Oil and Gas) Regulations*
- *National Energy Board Substituted Service Regulations*
- *National Energy Board Export and Import Reporting Regulations*
- *Canadian Energy Regulator Damage Prevention Regulations – Authorizations*
- *National Energy Board Cost Recovery Regulations*
- Section 214 Streamlining Order AO-001-XG/XO-100-2025, 22 January 2026 [Filing A9S2K1]
- Decommissioning Exemption Order AO-001-XG/XO-200-2025, 22 January 2026 [Filing A9S2K3]
- Order MO-002-2017 – Compelling Publication of Emergency Management Program Information on Company Websites [Filing A81701]
- Order MO-006-2016 – Compelling Publication of Emergency Procedures Manuals [Filing A79720]
- Order MO-CO-3-96 – Exemption of Commodity Pipelines from the OPR
- Guidelines for Negotiated Settlements of Traffic, Tolls and Tariffs, dated 12 June 2002 [Folder 157025]
- Pre-application Meetings – Guidance Notes, dated July 2017
- Electronic Filing – Memorandum of Guidance [PDF 71 KB], dated 21 March 2002
- Filer's Guide to Electronic Submission [PDF 606 KB]
- Investigative Digs and Related Pipeline Repairs/Replacements, dated 2 December 2002 [Filing A04591]
- Security and Emergency Preparedness and Response Programs, Appendix II to Guidance Notes for the *National Energy Board Processing Plant Regulations*, dated 24 April 2002 [PDF 257 KB]
- In the Matter of an Application under the *National Energy Board Act* of Review of Natural Gas Surplus Determination Procedures (July 1987), No. GHR-1-87 (CER) [Folder 90505]
- In the Matter of an Application under the *National Energy Board Act* of Proposed Changes to the Application of the Market-Based Procedure (May 1992), No. GHW-1-91 (CER) [Folder 90494]
- Pipeline Abandonment, A Discussion Paper on Technical and Environmental Issues dated November 1996
- *Impact Assessment Act* (go to the Impact Assessment Agency of Canada website for access to guidance documents)

- *Official Languages Act*
- Canadian Standards Association Standard Z662, Oil and Gas Pipeline Systems

Abandonment Funding and Planning

- May 2009, Reasons for Decision RH-002-2008, Land Matter Consultation Initiative Stream 3 Pipeline Abandonment – Financial Issues [Filing A21835]
  Contains relevant principles, a preliminary Base Case and the 5-year Action Plan
- 4 March 2010, Base Case Revisions to Preliminary Base Case Assumptions [Filing A24600]
  Contains further detail on cost definitions and on collection periods and expected earnings on set-aside funds. Also contains details on filing formats
- 21 December 2010, Unit Costs [Filing A27778]
  Contains estimates of individual cost components derived through discussions with industry
- 7 March 2011, Letter in response to CEPA [Filing A28440]
- February 2013, Reasons for Decision MH-001-2012, Applications filed in November 2011 for approval of preliminary cost estimates for abandonment cost funding [Filing A50478]
- 14 February 2013 Board Letter to Group 2 Companies on Abandonment Cost Estimates [Filing A50479]
- May 2014, Reasons for Decision MH-001-2013, Applications for Approval of Set-Aside and Collection Mechanisms for Abandonment Cost Funding [Filing A60676],
  Contains Model Trust Agreement, Model Letter of Credit, and Model Surety Bond
- National Energy Board Decisions on Compliance with Reasons for Decision MH-001-2013 – Companies filing Trusts [Filing A64904]

Filing Manual – Appendix 1 Filing Manual Checklists

The filing requirements included in this manual have been summarized in the following checklists. The CER encourages applicants to complete all the relevant checklists and include them as part of the application. **Using these checklists alone does not constitute a complete application.**

Chapter 1 – Introduction

	Filing Requirements	In Application? References	Not in Application? Explanation
1.5 Confidential Filing			
1.	A cover letter containing: a. the request and reasons for the request; b. a summary of the nature of the information to be treated confidentially; and c. a detailed description of why the filing requires confidential treatment.		
2.	If possible, a redacted version of the filing that can be made public (with redactions to the information requested to be kept confidential).		
3.	One unredacted copy of the filing that the applicant requests to be kept confidential. The filing must be provided via hand delivery, ordinary mail, registered mail or courier to the Secretary of the Commission in a double sealed envelope under confidential cover.		

Chapter 3 – Common Information Requirements

	Filing Requirements	In Application? References	Not in Application? Explanation
3.1 Action Sought by Applicant			
1.	Requirements of section 15 of the Rules.		
3.2 Application or Project Purpose			

1.	Purpose of the proposed project.		
3.3 Management Systems and Programs under the OPR			
1.	An overview of its management systems, including a description of: • how programs required under the OPR are coordinated within the management system to promote safety and environmental protection; and • the process for any necessary modifications to the management system.		
3.4 Engagement			
3.4.1 Policies and Goals of Engagement			
1.	Provide an overview of the company's engagement approach, which should include: • the corporate policy or vision with respect to engagement. • the principles and goals established for the applicant's Engagement Program; and • a copy of the Indigenous engagement policy, along with any more specific related documented policies and principles, such as, for collecting Indigenous knowledge or traditional use information.		
3.4.2 Designing Project-specific Engagement Activities			
1.	Provide an overview of the project-specific engagement activities and the factors that influenced the design, which should include: • a list of potentially affected persons or communities that were engaged for the project, including: o landowners, local residents, and land or waterway users; o government authorities; and o Indigenous Nations; • a sample of the information package that the applicant has provided to all potentially affected		

	persons and communities as outlined in the CER Early Engagement Guide (Guide L); • methods, locations, and timing of engagement activities, including where community cultural protocols were identified and followed; • manner in which relevant languages were considered, including in particular how project information will be provided and communicated to potentially affected persons or communities in the official language of their choice to ensure effective and meaningful participation in the CER process; • procedure for responding to issues and concerns; and • plans for future engagement and follow-up throughout the operations phase of a project, which may include activities such as public awareness programs, continuing education and engagement with persons regarding proposed operations that may potentially affect them.		
3.4.3 Implementation and Outcomes of Project-specific Engagement Activities			

1.	Describe the outcomes of the engagement activities conducted for the project, including:
	• a summary of the comments and concerns expressed by potentially affected persons or communities;
	• a summary of the response made regarding each of the concerns or comments, including:
	  ○ the measures taken, or that will be taken to address those concerns or an explanation of why no further action is required to address the concerns or comments; and
	  ○ the methods and dates that the response was made to the person(s) who raised the concern(s);
	• how outstanding concerns will be addressed;
	• how input from persons or communities has influenced the design, construction or operation of the project;
	• details regarding discussions with Indigenous Nations, which includes each of the items listed above and:		

	○ the identity of all Indigenous Nations contacted, how they were identified, when and how they were contacted and who was contacted; ○ any relevant, non-confidential written documentation received regarding engagement; ○ any concerns about the project raised by Indigenous Nations that have been discussed with any government department or agency, including when contact was made and with whom; and ○ where there is any known involvement of the Crown in consultations with the Indigenous Nations with respect to the project, describe the Crown involvement; and • the details and results of the engagement activities undertaken with all persons who may be affected by any changes to the project (e.g., persons that would be uniquely impacted following changes to the project as a result of engagement activities).		
2.	Confirm that potentially affected persons or communities will receive adequate notice that: • the application has been filed with the CER; • the process by which potentially affected persons and communities can contact the CER at any point before the Commission makes its decision; and • the methods and timing of notification.		
3.4.4 Justification for Not Undertaking Engagement Activities			
1.	Explain why engagement activities were considered unnecessary, including: • the scenario or scenarios that are applicable to the application (i.e., equivalent engagement activities, no or negligible environmental or socio-economic effects, facilities within company owned or leased lands); and • evidence that these scenarios meet the requirements of this section of the manual.		
3.5 Notification of Commercial Third Parties			

1.	Confirm that all commercial third parties that could potentially be affected in any way by the outcome of the application have been notified and include: • the method used to notify those parties; and • when the parties were notified.		
2.	Provide details regarding the concerns of third parties. This might include: • confirmation that no concerns were raised; • confirmation that concerns raised have been resolved; or • a list of the commercial third parties that have outstanding concerns and a discussion of their unresolved concerns.		
3.	List the self-identified interested third parties and confirm they have been notified.		
4.	Provide an explanation in the event that notification of commercial third parties was considered unnecessary.		

Chapter 4 – Sections 4.1 and 4.2: Common Requirements for Physical Projects

	Filing Requirements	In Application? References	Not in Application? Explanation
4.1 Description of the Project			
1.	Identify and describe the project components, activities and related undertakings (e.g., pipe, valves, compressors, pumps, access roads including temporary and permanent bridges, construction camps, marine terminals and loading facilities).		
2.	Describe the project location and the criteria used to determine the proposed route or site.		
3.	Describe how and when the project will be carried out.		

4.	Provide a description of any facilities to be constructed by others which are required to accommodate the proposed facilities, including temporary facilities.		
5.	Provide an estimate of the total capital costs and incremental operating costs, if applicable; and changes to abandonment cost estimates, where applicable, for the following categories: • pipelines; • compression or pumps; • metering and regulating; • tankage; • other facilities; • allowance for funds used during construction (AFUDC) including rates used; and • capitalized overhead, showing a separate breakdown of the main cost elements such as materials, installation, land and land rights.		
6.	Indicate the expected in-service date.		
4.2 Economic Feasibility, Alternatives and Justification			
4.2.1 Economic Feasibility			
1.	Describe the economic feasibility of the project.		
4.2.2 Alternatives			
1.	Describe the need for the project along with the rationale for selecting the applied for project over these other possible options.		
2.	Describe and justify the selection of the proposed route and site including a comparison of the options evaluated using appropriate selection criteria.		
3.	Describe the rationale for the chosen design and construction methods. Where appropriate, describe any alternative designs and methods evaluated and explain why these other options were eliminated.		
4.2.3 Justification			

1.	Provide a justification for the proposed project		

Guide A – A.1 Engineering

	Filing Requirements	In Application? References	Not in Application? Explanation
A.1.1 Engineering Design Details			
1.	Fluid type and chemical composition.		
2.	Line pipe specifications.		
3.	Pigging facilities specifications.		
4.	Compressor or pump facilities specifications.		
5.	Pressure regulating or metering facilities specifications.		
6.	Liquid tank specifications or other commodity storage facilities.		
7.	New control system facilities specifications.		
8.	Gas processing, sulphur or LNG plant facilities specifications.		
9.	Technical description of other facilities not mentioned above.		
10.	Building dimensions and uses.		
11.	If project is a new system that is a critical source of energy supply, a description of the impact to the new system capabilities following loss of critical component.		
A.1.2 Engineering Design Principles			
1.	Confirmation project activities will follow the requirements of the latest version of CSA Z662.		
2.	Provide a statement indicating which Annex is being used and for what purpose.		
3.	Statement confirming compliance with OPR or PPR.		

4.	Listing of all primary codes and standards, including version and date of issue.		
5.	Confirmation that the project will comply with company manuals and confirm manuals comply with OPR/PPR and codes and standards.		
6.	Any portion of the project a non-hydrocarbon commodity pipeline system? Provide a QA program to ensure the materials are appropriate for their intended service.		
7.	If facility subject to conditions not addressed in CSA Z662: • written statement by qualified professional engineer; and • description of the designs and measures required to safeguard the pipeline.		
8.	If directional drilling involved: • preliminary feasibility report; and • description of the contingency plan.		
9.	If new materials are involved, provide material supply chain information, in tabular format.		
10.	If reuse of material is involved, provide an engineering assessment in accordance with CSA Z662 that indicates its suitability for the intended service.		
A.1.3 *Canadian Energy Regulator Onshore Pipeline Regulations*			
1.	Designs, specifications programs, manuals, procedures, measures or plans for which no standard is set out in the OPR or PPR.		
2.	A quality assurance program if project non-routine or incorporates unique challenges due to geographical location.		
3.	If welding performed on a liquid-filled pipeline that has a carbon equivalent of 0.50% or greater and is a permanent installation: • welding specifications and procedures; and		

	• results of procedure qualification tests.		

Guide A – A.2 Environment and Socio-economic Assessment

	Filing Requirements	In Application? References	Not in Application? Explanation
A.2.5 Description of the Environmental and Socio-economic Setting			
1.	Identify and describe the current biophysical and socio-economic setting of each element (i.e., baseline information) in the area where the project is to be carried out.		
2.	Describe which biophysical or socio-economic elements in the study area are of ecological, economic or human importance and require more detailed analysis taking into account the results of engagement (see Table A-1 for examples). Where circumstances require more detailed information in an ESA, see: • Table A-2: Filing Requirements for Biophysical Elements; or • Table A-3: Filing Requirements for Socio-economic Elements.		
3.	Provide supporting evidence (e.g., references to scientific literature, field studies, local and Indigenous knowledge, previous environmental assessment and monitoring reports) for: • information and data collected; • analysis completed; • conclusions reached; and • the extent of professional judgment or experience relied upon in meeting these information requirements, and the rationale for that extent of reliance.		
4.	Describe and substantiate the methods used for any surveys, such as those pertaining to wildlife, fisheries, plants, species at risk or species of special status, soils, heritage resources or traditional land use, and for establishing the baseline setting for the atmospheric and acoustic environment.		

5.	Applicants must consult with other expert federal, provincial or territorial departments and other relevant authorities on requirements for baseline information and methods.		
A.2.6 Effects Assessment			
A.2.6.1 Identification and Analysis of Effects			
1.	Describe the methods used to predict the effects of the project on the biophysical and socio-economic elements, and the effects of the environment on the project.		
2.	Predict the effects associated with the proposed project, including those that could be caused by construction, operations, decommissioning or abandonment, as well as accidents and malfunctions. Also include effects the environment could have on the project. For those biophysical and socio-economic elements or their valued components that require further analysis (see Table A-1), provide the detailed information outlined in Table A-2 and Table A-3.		
A.2.6.2 Mitigation Measures for Effects			
1.	Describe the standard and project specific mitigation measures and their adequacy for addressing the project effects, or clearly reference specific sections of company manuals that provide mitigation measures. Ensure that referenced manuals are current and filed with the CER.		
2.	Ensure that commitments about mitigative measures will be communicated to field staff for implementation through an Environmental Protection Plan (EPP).		
3.	Describe plans and measures to address potential effects of accidents and malfunctions during construction and operation of the project.		
A.2.6.3 Evaluation of Significance			
1.	After taking into account any appropriate mitigation measures, identify any remaining residual effects from the project.		
2.	Describe the methods and criteria used to determine the significance of adverse effects, including defining the point at which any particular effect on a valued component is considered “significant”.		

3.	Evaluate the significance of residual adverse environmental and socio-economic effects against the defined criteria.		
4.	Evaluate the likelihood of significant residual adverse environmental and socio-economic effects occurring and substantiate the conclusions made.		
A.2.7 Cumulative Effects Assessment			
A.2.7.1 Scoping and Analysis of Cumulative Effects			
1.	Identify the valued components for which residual effects are predicted, and describe and justify the methods used to predict any residual effects.		
2.	For each valued component where residual effects have been identified, describe and justify the spatial and temporal boundaries used to assess the potential cumulative effects.		
3.	Identify other physical works or activities that have been or will be carried out within the identified spatial and temporal boundaries for the cumulative effects assessment.		
4.	Identify whether the effects of those physical works or activities that have been or will be carried out would be likely to produce effects on the valued components within the identified spatial and temporal boundaries.		
5.	Where other physical works or activities may affect the valued components for which residual effects from the applicant's proposed project are predicted, continue the cumulative effects assessment, as follows: • consider the various components, phases and activities associated with the applicant's project that could interact with other physical work or activities; • provide a description of the extent of the cumulative effects on valued components; and. • where professional knowledge or experience is cited, explain the extent to which professional knowledge or experience was relied upon and justify how the resulting conclusions or decisions were reached.		
A.2.7.2 Mitigation Measures for Cumulative Effects			

1.	Describe the general and specific mitigation measures, beyond project-specific mitigation already considered, that are technically and economically feasible to address any cumulative effects.		
A.2.7.3 Applicant's Evaluation of Significance of Cumulative Effects			
1.	After taking into account any appropriate mitigation measures for cumulative effects, identify any remaining residual cumulative effects.		
2.	Describe the methods and criteria used to determine the significance of remaining adverse cumulative effects, including defining the point at which each identified cumulative effect on a valued component is considered "significant".		
3.	Evaluate the significance of adverse residual cumulative effects against the defined criteria.		
4.	Evaluate the likelihood of significant, residual adverse cumulative environmental and socio-economic effects occurring and substantiate the conclusions made.		
A.2.8 Inspection, Monitoring and Follow-up			
1.	Describe inspections plans to ensure compliance with biophysical and socio-economic commitments, consistent with sections 48, 53, and 54 of the OPR.		
2.	Describe the surveillance and monitoring program for the protection of the pipeline, the public and the environment, as required by section 39 of the OPR.		
3.	Consider any particular elements in the Application that are of greater concern and evaluate the need for a more in-depth monitoring program for those elements.		
Table A-1: Circumstances and Interactions Requiring Detailed Biophysical and Socio-economic Information			
Physical & meteorological environment			
Soil and soil productivity			
Vegetation			
Water quality and quantity			

Fish and fish habitat, including any *Fisheries Act* Authorization offsetting measures required		
Wetlands		
Wildlife and wildlife habitat		
Species at Risk or Species of Special Status and related habitat		
Air emissions		
Greenhouse gas (GHG) emissions and climate change		
Acoustic environment		
Human occupancy and resource use		
Heritage resources		
Navigation and navigation safety		
Traditional land and resource use		
Social and cultural well-being		
Human health and aesthetics		
Infrastructure and services		
Employment and economy		

Guide A – A.3 Economics and Financing

	Filing Requirements	In Application? References	Not in Application? Explanation
A.3.1 Supply			
1.	A description of each product to be transported (e.g., crude oil, natural gas, or NGL).		
2.	A discussion of all potential supply sources and their competitiveness in the markets they will supply.		

3.	A forecast of the productive capacity for each product over the economic life of the facilities.		
4.	For pipelines with contracted capacity, a discussion of the contractual arrangements underpinning the supply.		
5.	A discussion of the physical capacity of upstream facilities to deliver the incremental volumes.		
6.	An indication of whether the proposed pipeline relies on, or joins with, any other proposed upstream facility or facilities which have been approved but not yet brought into service.		
A.3.2 Transportation Matters			
Pipeline Capacity			
1.	In the case of an expansion to an existing pipeline, provide: • the pipeline capacity before the expansion capacity is added; • the added capacity of the expansion project; • the pipeline capacity as it would be following the expansion; and • a justification that the capacity of the pipeline expansion is appropriate in terms of incremental volumes to be shipped on the expanded facility.		
2.	In the case of a new pipeline, provide: • the pipeline capacity of the new pipeline; and • a justification that the capacity of the new pipeline will be appropriate for the productive capacity or supply that would be available to the pipeline.		
Throughput			
1.	For pipelines with contracted capacity, provide information on contractual arrangements underpinning the projected throughput volumes.		

2.	For all pipelines other than pipelines with contracted capacity, provide a forecast of projected throughput volumes by commodity type, receipt location and delivery destination on an annual basis over the economic life of the applied-for facilities.		
3.	If the proposed project results in an increase in throughput capacity, provide: • the theoretical and sustainable daily, seasonal and annual capabilities of the existing and the proposed facilities versus the current and forecasted requirements, indicating any contracted interruptible quantities; and • the flow formulae and flow calculations used to determine the daily or hourly (as appropriate) capabilities of the proposed facilities and the underlying assumptions and parameters, including a description of the gas or fluid properties.		
4.	Where more than one type of commodity would be transported in the same pipeline, describe the segregation of the commodities, including where applicable, potential contamination issues or cost impacts.		
A.3.3 Markets			
1.	An analysis of the market in which each product is expected to be used or consumed.		
2.	A discussion of the physical capability of downstream facilities to accept the incremental volumes that would be delivered.		
3.	An indication of whether the proposed pipeline relies on, or joins with, any other proposed downstream facilities or facilities which have been approved but not yet brought into service.		
A.3.4 Financing and Financial Resources			
1.	Evidence that the applicant has the ability to finance the proposed facilities.		
2.	Evidence that the applicant can manage the potential costs associated with the risks and liabilities that arise during		

	construction and operation, including an incident that harms people or the environment.		
3.	Estimated toll impact for the first full year that facilities are expected to be in service.		
4.	Confirmation that shippers have been apprised of the project and toll impact, their concerns and plans to address them.		
5.	Information on abandonment costs and the set-aside and collection of them.		
6.	Additional toll details for applications with significant toll impacts.		
A.3.5 Non-CER Regulatory Approvals			
1.	Confirm that all non-CER regulatory approvals required to allow the applicant to meet its construction schedule, planned in-service date and to allow the facilities to be used and useful are or will be in place.		
2.	If any of the approvals referred to in #1 may be delayed, describe the status of those approval(s) and provide an estimation of when the approval is anticipated.		

Guide A – A.4 Lands Information

	Filing Requirements	In Application? References	Not in Application? Explanation
A.4.1 Land Areas			
1.	Width of right of way and locations of any changes to width.		
2.	Locations and dimensions of known temporary work space and drawings of typical dimensions.		
3.	Locations and dimensions of any new lands for facilities.		
A.4.2 Land Rights			
1.	Provide a description of the type of land rights proposed to be acquired for the project and related facilities.		

2.	Provide a description of the nature and relative proportions of land ownership along the proposed route (i.e., freehold, Crown or public lands).		
3.	Where no new land rights are required, provide a description of the existing land rights that allow for the project.		
A.4.3 Lands Acquisition Process			
1.	The process for acquiring lands.		
2.	The timing of acquisition and current status.		
3.	The status of service of section 322 notices.		
A.4.4 Land Acquisition Agreements			
1.	A sample copy of each form of agreement proposed to be used pursuant to subsection 321(2) of the CER Act.		
2.	A sample copy of any proposed fee simple, work space, access or other land agreement.		
A.4.5 Section 322 Notices			
1.	A sample copy of the notice proposed to be served on all landowners pursuant to subsection 322(1) of the CER Act.		
A.4.6 Section 214 Application to Address a Complaint			
1.	A statement that the purpose of the work or construction proposed by the application is in response to a complaint that has been filed with the CER; the name and location of the complainant; the nature and date of the complaint; and how the activities proposed within the section 214 application will address the complaint.		

Guide B – Abandonment

	Filing Requirements	In Application? References	Not in Application? Explanation
B.1 Funding for Abandonment			
B.1.1 Cost Estimates			
1.	Companies are required to file geospatial data to support the calculation of their ACEs. Instructions for		

	Filing Requirements	In Application? References	Not in Application? Explanation
	filing this data are provided with the ACE Calculation Method information on the CER website. Once a company's ACE is established, the Commission may request updated geospatial data be filed when the ACE requires updating (e.g., when material changes to a company's pipeline system occur).		
B.1.2 Protection of Funds			
1.	Pipeline companies are required to have a set-aside mechanism in place that will provide adequate funds to pay for pipeline abandonment. The set-aside mechanism must be filed with the CER and approved by the Commission.		
2.	There are specific filing requirements for a trust, a letter of credit, or a surety bond, specified in sections B.1.2.1 to B.1.2.3. Pipeline companies must establish a trust, or provide either a letter of credit issued by a bank listed in Schedule 1 of the Bank Act[2] or a surety bond supplied by a surety company regulated by the Office of Superintendent of Financial Institutions. Models of a letter of credit, surety bond, and trust agreement can be found on the CER's website under Pipeline Abandonment.		
B.1.3 Regular Reporting			
1.	All companies must file an annual update with respect to abandonment funding. Companies should make sure they are using the most recent form. The updated annual reporting form for companies using a trust must be filed by 30 April each year and can be found here: Pipeline Abandonment. https://www.cer-rec.gc.ca/en/applications-hearings/pipeline-abandonment/forms/reporting-form-companies-using-trusts-set-aside-mechanism.pdf. The updated annual reporting form for companies using a set-aside mechanism other than trusts (such as a letter of credit or surety bond) and exempt companies must be filed by 31 January and can be found here: https://www.cer-rec.gc.ca/en/applications-hearings/pipeline-abandonment/forms/companies-using-set-aside-mechanisms-other-than-trusts-exempt-companies-reporting-form.pdf Pipeline Abandonment.		
B.2 Applications to Abandon (CER Act subsection 241(1) and OPR section 50)			
B.2.1 Notice of Proposed Abandonment			

	Filing Requirements	In Application? References	Not in Application? Explanation
1.	The applicant must confirm that it will serve the Notice of Proposed Abandonment within 72 hours of filing the application with the CER. This confirmation must include a list of the Indigenous Peoples who will be served.		
2.	The applicant must also confirm the name of the publication and anticipated date of publication of the notice.		
B.2.2 Application to Abandon a Pipeline			
General			
1.	A complete description of the pipeline(s) and facility(ies) being abandoned. For pipelines, this must include, but not be limited to, the history of products carried, length, diameter, wall thickness and coating type. Companies should consider any other information that is relevant to the pipeline(s) and facility(ies), and its operation that would assist the Commission in assessing the abandonment application.		
2.	Reasons for abandonment of operation of the pipeline and facility(ies). See section 3.2 and section 3.5 of this manual.		
3.	Appropriately scaled map(s) or site plan(s) which shows the locations and dimensions of the pipeline right of way and the facility(ies) to be abandoned.		
4.	The digital location data of pipeline segment(s) and facility(ies) to be abandoned. The data should accurately represent the location of pipeline segments and right-of-way, or facility footprint and it can be derived from any available sources.		
5.	A description of known temporary work space required for abandonment activities, including location and dimensions.		
6.	Photomosaic maps or alignment sheet(s) which show the pipeline right of way and facility(ies) overlain on satellite or aerial imagery and any areas of temporary work space. If not available, provide photographs showing the pipeline right of way and facility(ies).		
7.	An explanation of the abandonment method options (abandonment in-place, removal, segmentation, fill) considered, and rationale for the chosen option(s),		

	Filing Requirements	In Application? References	Not in Application? Explanation
	including how factors such as current and future land use, safety, effects on the rights of Indigenous Peoples, how individuals and communities may be affected by the proposed abandonment, property, land acquisition or lease agreements, impacted and potentially impacted engineered structures , environment and economics were identified, considered and managed.		
8.	A description of the proposed activities to be carried out to abandon the pipeline and facility(ies).		
9.	Proposed schedule for the various abandonment activities to be conducted, including any reclamation, to be conducted.		
10.	A monitoring plan which describes the type, frequency and duration of monitoring to be conducted for the pipeline(s) and facility(ies) that will remain in place. This plan should include considerations for maintaining depth of cover and potential environmental and socio-economic risks of the abandoned pipeline remaining in-place (e.g., water conduit, subsidence and pipe exposure), as informed by the company's environmental and socio-economic assessment and engagement activities.		
Engineering			
1.	For pipeline(s) and facility(ies) to be abandoned in place or removed, confirmation that the abandonment activities will follow the requirements of the latest version of CSA Z662.		
2.	For the pipeline(s) to be decommissioned, confirm the following, and provide an explanation of how the results were or will be achieved and maintained: • no internal pressure remaining; • purged and cleaned and left in a state of minimal residual contamination, including the pipe cleaning plans, procedures or standards to be used; • left in a state where road, railway or utility crossings are not at significant and unmanaged risk of disturbance due to settlement; • equipped with signage;		

	Filing Requirements	In Application? References	Not in Application? Explanation
	• a description of the fill material to be used for railway and road crossings, if applicable (abandonment in place with special treatment), including where along the pipeline fill material will be used and why; and • a description of the potential soil subsidence, pipe exposure, water conduit, corrosion, and pipe collapse effects for pipelines to be abandoned in place, including anticipated duration to failure, and a plan to monitor these potential effects.		
3.	In the event that cathodic protection is not maintained, identify and justify if ground bed anodes will be removed or left in place.		
4.	Confirmation that abandonment activities and the abandoned pipeline will not impact engineered structures (e,g., roads, utilities, infrastructure, drainage, modified slopes, foundations).		
Environmental and Socio-economic Assessment			
1.	Describe the biophysical and socio-economic setting found at the project location. The description should indicate whether or not the proposed abandonment is located on federal lands.		
2.	For pipelines to be abandoned, use Table B-1 of this guide: a. Categorize the pipeline right of way by land use (for example, agricultural lands, forested lands, native prairie, developed lands, wetlands, watercourse crossings). If any known or reasonably foreseeable development is anticipated for any part of the right of way, include these areas in the table; and b. For each land-use segment of the pipeline, provide a high-level assessment of the potential short-term and long-term environmental and socio-economic effects on each valued environmental and socio-economic component that may result from the pipeline being abandoned in place and/or removed, regardless of the preferred abandonment method.		

	Filing Requirements	In Application? References	Not in Application? Explanation
3.	For the preferred abandonment method(s), complete the environmental and socio-economic interactions table (see Table B-2 of this guide), or provide an environmental and socio-economic assessment.		
4.	Provide a copy of the Phase I Environmental Site Assessment conducted for the pipeline right of way and associated facility(ies), as per the guidance in the most recent version of CSA Standard Z768. The Phase I Environmental Site Assessment should identify all areas of existing and/or potential contamination, and include an evaluation of the status of any existing contamination currently documented or contamination previously remediated. Provide a list of previously reported contaminated sites within the pipeline right of way and associated facility(ies), including CER-assigned Remediation Event Number(s).		
5.	If the results of the Phase I Environmental Site Assessment indicate that a Phase II Environmental Site Assessment is warranted, provide a copy of a Phase II plan that describes the procedures to be implemented for investigating all existing and/or potential contamination identified in the Phase I assessment, including sampling methodology. The Phase II assessment should be conducted per the guidance provided in the most recent version of CSA Standard Z769-00, Phase II Environmental Site Assessment.		
6.	Provide an Environmental Protection Plan (EPP), or a description of the environmental protection procedures, mitigation measures, and commitments that will be implemented during the abandonment activities, including remediation, reclamation, and reclamation activities monitoring, to avoid or minimize potential adverse environmental and socio-economic effects. The level and detail of information should be commensurate with the nature and scale of the project.		
7.	Describe the desired goal(s) for reclamation, including restoration (where applicable), for the entire length and width of the pipeline right of way and facility sites (not just limited to the disturbance sites), and provide a plan for how the environment will be reclaimed to achieve the desired goal(s).		

	Filing Requirements	In Application? References	Not in Application? Explanation
8.	Provide a preliminary Reclamation Monitoring Plan which describes the reclamation/restoration parameters to be monitored, the criteria that will be used to monitor the success of those parameters, and the monitoring methods that will be used. Describe the criteria for when adaptive or corrective actions will be implemented, and provide a schedule of when monitoring will be conducted and the results reported to the CER.		
Engagement			
1.	Provide a summary of the engagement activities undertaken with individuals and communities, which may be affected by the proposed abandonment including: • landowners; • land users; • Indigenous Peoples; • occupants; • land managers (Crown); • federal, provincial or municipal agencies or levels of government; • shippers; and • other commercial third parties who could be affected by the project, including prospective future shippers. • The summary of engagement should include, at minimum: o a description of any issues or concerns for each abandonment method(s) identified; o how input from the engagement activities was considered in determining the proposed abandonment method(s); o how input from the engagement activities was considered in the development of the applicant's preliminary reclamation plan;		

	Filing Requirements	In Application? References	Not in Application? Explanation
	○ a description of how the applicant has addressed or will address any concerns or issues raised and when; ○ a description of any concerns or issues raised that will not be addressed and why; and ○ a description of any outstanding concerns, including how the applicant intends to address any outstanding concerns, or an explanation as to why no further steps will be taken.		
2.	Provide any details of consultation undertaken for developing reclamation and abandoned pipeline monitoring plans.		
Lands			
1.	Describe any land rights proposed to be acquired for the abandonment, including the location and dimensions of the land rights that have not already been acquired or leased (for example, temporary work space). Provide a description (for example in a table) of the land tenure along the right of way, including the approximate length of the pipeline segments that are located respectively along freehold, Federal or Provincial Crown land. For a description of types of land rights, refer to section A.4.		
2.	If any land acquisition or lease agreements will be disposed: a. identify the locations where land acquisition or lease agreements will be disposed; b. identify the proposed timing of disposition and process to notify landowners; and, c. describe the process available to the landowner should subsequent land issues or concerns arise following the abandonment of the facility and disposition of the easement.		
Economics and Finance			
1.	Provide details of the estimated costs associated with the proposed abandonment, including details of any estimated annual costs for post-abandonment maintenance and monitoring, as well as contingency		

	Filing Requirements	In Application? References	Not in Application? Explanation
	funds for unforeseen events, of any pipelines abandoned in place.		
2.	Confirm that funding is and will be available to finance the proposed abandonment project and indicate how the proposed abandonment project will be funded (through the trust, tolls or other). a. If funding is through the abandonment trust, indicate whether the company is applying to access the abandonment trust in this application or will be in a subsequent application. i. If applying to access the abandonment trust to pay for the abandonment activities in this application, provide the information required for accessing a trust found in section B.3. b. If the pipeline is to be abandoned in place, explain how funding will remain available for the Provisions for Abandoned Pipelines in a company's ACE.		
3.	Indicate whether any service would be terminated as a result of the proposed abandonment. If an existing or prospective future commercial party or other user could be negatively impacted by the termination of service, provide evidence that: a. the Company has been responsive to the needs, inputs, and concerns of commercial parties or other users; b. the estimated relative impacts to all parties from the abandonment of the facilities versus continuation of service have been considered; c. alternatives to the abandonment of the facilities were considered (including physical and tolling alternatives) and that abandonment is the optimal outcome; and d. impacted parties will be able to wait until *after* the Commission issues its decision on the application to make any potentially costly, irreversible choices necessary to continue their business operations after any approved abandonment activities have		

	Filing Requirements	In Application? References	Not in Application? Explanation
	begun. If this is not the case, provide evidence justifying why not.		
4.	Provide the original book cost of the facilities and accumulated depreciation to the retirement date. a. Describe whether the retirement is ordinary or extraordinary. b. Explain any impact on remaining rate base, providing accounting details as outlined in the Gas Pipeline Uniform Accounting Regulations (GPUAR) or Oil Pipeline Uniform Accounting Regulations (OPUAR).		
5.	Provide, along with supporting documentation, any relevant exemptions the Applicant has been granted by the Commission with respect to 3 or 4 above.		
6.	If a trust is used to set aside funds for abandonment, explain whether the abandonment of facilities in the application represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date an updated Abandonment Funding Plan will be submitted to the CER, using the form “Tables – Abandonment Funding Plan required details”.		
B.3 Applications to Access Funds from the Trust to Fund Abandonment			
1.	Provide an outline of how the timing of the applied-for withdrawal compares with what was anticipated in the pipeline’s abandonment funding plan and annual contribution amount derivation.		
2.	Provide an explanation of the impact on the coverage for other future costs of remaining activities needed to complete abandonment. Where the actual timing or size of trust withdrawals differ materially from those anticipated in the pipeline’s abandonment funding plan (as a result of either single or numerous applications), provide an explanation of why the applied-for withdrawal remains appropriate considering the potential underfunding risk. The amount of information and level of detail provided should correspond to the degree to which withdrawals deviate from the pipeline’s abandonment funding plan.		
3.	Explain whether the abandonment or decommissioning of facilities in the application		

	Filing Requirements	In Application? References	Not in Application? Explanation
	represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date when an updated Abandonment Funding Plan will be submitted to the CER, using the form "Tables – Abandonment Funding Plan required details".		
4.	Provide a justification for requesting access to funds from the trust. Include: a. In the case of decommissioning or deactivation activities: i. why other revenue is not sufficient to undertake the work; and ii. the impact on future tolls or abandonment surcharges, relative to other funding options. b. Any impacts on the abandonment cost estimate and annual contribution amount from removing funds for end of life work.		
5.	Provide project costs using the "Tables – Reporting actual costs of abandonment or decommissioning"[38] available on the CER's website, with specific sections completed as follows: 9. When applying after completing the abandonment or decommissioning activities: i. Actual cost information, including an estimated breakdown of actual costs consistent with Part D of the reporting form, except in the case of the smallest projects for which actual costs do not need to be in this format (e.g., those undertaken pursuant to Exemption Order XO/XG-200-2025 related to decommissionings). ii. The ACE-implied cost estimate (AICE)[39], including a breakdown		

[38] The reporting form "Tables – Reporting actual costs of abandonment or decommissioning" was released as Appendix 4(e) of the Five-Year Review of Abandonment Cost Estimates and Set-Aside and Collection Mechanisms 2021.

[39] The AICE is a cost estimate for a piece of a pipeline system, generated by applying the methodology used to derive the overall ACE for the entire pipeline system to the piece of the system in question (e.g., a particular decommissioning or abandonment project). The AICE should be net of (i.e., excluding) the Provisions for

	Filing Requirements	In Application? References	Not in Application? Explanation
	consistent with Part E of the reporting form, and a variance analysis when actual costs are at least 15 per cent above or below the AICE. 10. When applying in advance of the abandonment or decommissioning activities: a. The project cost estimate, including an estimated breakdown of the project cost estimate consistent with Part D of the reporting form; b. The AICE, including a breakdown consistent with Part E of the reporting form, and a variance analysis when the project cost estimate is at least 15 per cent above or below the AICE.		
6.	Describe the accounting treatment that will be used for net salvage (salvage value less end of life costs), if any, and any associated impacts on rate base.		
7.	If the costs were for decommissioning activities, confirm that the activities done during decommissioning will not need to be repeated at time of abandonment and therefore the costs that have been incurred will not need to be repeated.		
8.	If the abandonment or decommissioning activities have been completed, provide the Order number for all relevant approvals for those activities.		

Abandoned Pipelines because those costs are anticipated to be incurred after abandonment. For clarity, the AICE is distinct from a company's actual project cost estimate, which would be based on a project-specific cost estimation process.

Guide C – Protection of Pipelines from Ground Disturbance, Facility Construction, Crossings and Mining Operations (CER Act section 335 and section 338)

	Filing Requirements	In Application? References	Not in Application? Explanation
C.1 Ground Disturbance, Facility Construction and Crossings Near Pipelines (CER Act section 335, *Canadian Energy Regulator Damage Prevention Regulations* – Authorizations)			
1.	For an application to construct a facility across, on, along or under a pipeline: • purpose and location of the proposed facility; • description of the proposed facility; and • rationale for seeking approval from the Commission.		
2.	For an application to conduct an activity causing a ground disturbance in the prescribed area (a strip of land measured 30 m perpendicularly on each side from the centre line of the pipe): • purpose and location of the activity; • description of the activity(s) resulting in a ground disturbance; and • rationale for seeking approval from the Commission.		
3.	ESA (environmental and socio-economic assessment)		
4.	For an application to operate a vehicle or mobile equipment across a pipeline: • purpose and location of the activity; • description of the vehicle and/or equipment; and • rationale for seeking approval from the Commission.		
5.	For an application to direct the owner of a facility to reconstruct, alter or remove the facility:		

	• purpose and location of the facility; • purpose for the reconstruction, alteration or removal of the facility; and • rationale for seeking approval from the Commission.		
C.2 Protection of Pipelines from Mining Operations (CER Act section 338)			
1.	Plan and profile for the portion of the pipeline affected.		
2.	ESA (or environmental and socio-economic assessment)		
3.	Information and details respecting proposed operations: • project title and contact information for company, contractors and subcontractors; • name and contact information of the pipeline company; • legal description of the lands to be affected; • map indicating the location of the pipeline; and • statement certifying that the pipeline company and the CER will be contacted at least 72 hours prior to conducting the project.		
4.	If crossing a pipeline: • proposed crossing date; and • evidence that an approved crossing agreement is in place.		
5.	If the application is for a seismic program or involves explosives: • type of seismic program; • plat of the seismic program; • identify the source; • size of the dynamite charge; and • confirmation that the program will be conducted in accordance with all applicable regulations.		

Guide D – Deviations

	Filing Requirements	In Application? References	Not in Application? Explanation
D.1 Lands			
1.	Order number and date of the approval of original PPBoRs.		
2.	PPBoR drawing showing approved route and proposed deviation.		
3.	PPBoR drawing showing location of the proposed deviated, changed or altered route.		
4.	Starting and ending points of the deviation.		
5.	Map indicating location of deviation in relation to approved detailed route and certificated route.		
6.	Description of any new lands required including status of acquisition and service of subsection 322(1) notices.		
7.	Concerns expressed by landowners affected, how the company proposes to address concerns and date response provided or evidence that the affected landowners consent.		
8.	For an exemption from the provisions of section 211: • order number and date of the approval of original PPBoRs; • starting and ending points of the deviation; • maximum distance of deviation from centre line; • PPBoR drawing showing approved route and proposed deviation; • map indicating location of deviation in relation to approved detailed route and certificated route; • description of any new lands required; • concerns expressed by landowners affected, how the company proposes to address concerns and date response provided; and • evidence that the affected landowners consent.		

D.2 Environment and Socio-economic Assessment			
1.	How the effects have been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		

Guide E – Change in Class Locations

	Filing Requirements	In Application? References	Not in Application? Explanation
E.1 Primary Assessment			
1.	Identification of changes in circumstances that have occurred and resulted in the change of class location, including: a. maps of current and previous circumstances in a large enough scale to clearly indicate the following on the map: i. north arrow; ii. scale indicated and scale bar; iii. reasons for the change in class location; iv. location and type of any crossings; v. location and spacing of valves; vi. class location assessment area; vii. area of potential impact; b. description of development within class location assessment area, including number and type of dwelling units, outside areas or buildings as described in CSA Z662 for class location designations; c. the date or, if not available, the most likely date of the class location change event.		
2.	Requirements of CSA Z662 for a change of class location, including, as applicable: a. design factor or location factor, as applicable:		

	i. effect of the new location factor(s) on design pressure and hoop stress used in stress analyses for any location on the affected pipeline segment, including road and railway crossings; b. valve spacing; c. depth of cover (DOC) (comparison of minimum requirements versus actual DOC); i. results and source of most recent DOC measurements; d. pressure testing; e. evaluation and repair of imperfections as specified in CSA Z662: i. report the presence of incomplete records or no records of assessed/repaired imperfections on the affected segment of the pipeline; ii. clarify if a pipeline segment has been inspected with in-line inspection (ILI) tools. Report the latest dates and types of in-line inspection tools used, if applicable; iii. report integrity assessment methods other than in-line inspections (e.g., above-ground surveys, integrity excavations, etc.); iv. when pressure testing is performed as an integrity assessment, report the date of the final pressure test and the hoop stress at the test pressure as a percentage of the specified minimum yield strength.		
3.	Design and operating conditions of the pipeline system, including service fluid, design operating stress, maximum operating pressure (MOP), joint and temperature factors, and the presence of potential geohazards: a. report if the pipeline segment is under a regulatory or self-imposed operating pressure restriction.		

4.	Material and pipeline properties, including in-service year, seam weld type, outside diameter, wall thickness, specified grade, yield strength, tensile strength, and toughness, and how the material properties were obtained.		
5.	Coating type and condition of the coating applied to the pipeline body, girth welds, and repairs: a. report the source of the coating information, which may be inferred from specifications, construction records, and indirect inspection (e.g., ILI, electromagnetic acoustic transducer (EMAT) inspection, above-ground inspections (e.g., direct current voltage gradient (DCVG), alternating current voltage gradient (ACVG), alternating current coating attenuation (ACCA), etc.)), and excavation results.		
6.	Level of cathodic protection (CP): a. report the date of the last potential survey (e.g., test lead survey, closed interval survey (CIS), etc.).		
7.	Confirmation that girth welds of the affected segment of the pipeline were subjected to 100% Non-Destructive Examination (NDE).		
8.	The damage prevention activities at the location of the pipeline segment subject to the increase in class location (e.g., additional signage, slabs, patrol frequency, etc.).		
9.	The presence of a school, hospital, day home, assisted living facility, prison, or other facilities that may be difficult to rapidly evacuate **and/or** where evacuation from such facility can only be achieved by entering the areas of potential impact.		
10.	Failure history of the valve section containing the affected segment of the pipeline.		
E.2 Determining the Suitability for Continued Service			
Filing Requirements for a Valve Spacing Analysis			
1.	A listing of the upstream and downstream sectionalizing valves, including a map that shows the spacing of the valves;		

2.	A listing and a schematic of the current configuration of the branches, cross-overs, risers and other piping that feed service fluid between the two sectionalizing valves, including: a. confirmation that the additional feed from each source is accounted for in the calculation of the blowdown volumes; b. details on the cross-over valve assembly; c. normal operating settings for each of the valves (e.g., normally closed or open);		
3.	Information on both 1 and 2, including: a. valve mechanism (remote, automatic or manual); b. clarification whether valves are equipped with emergency shutdown mechanisms; c. valve maintenance frequency;		
4.	A risk analysis that demonstrates that the risks of the pipeline at the existing valve spacing are equal to or lower than the risks of the pipeline at a valve spacing that meets the requirement of CSA Z662-19 Clause 4.4 for the changed class location.		
Filing Requirements for an Engineering Assessment			
1.	Primary assessment (as described in E.1);		
2.	The EA must meet CSA Z662 requirements for engineering assessments of existing pipelines, including, as applicable: a. manufacturing process and installation method; b. construction and testing specifications; c. the physical configuration and constraints of the affected section of the pipeline that is the subject of the engineering assessment; d. condition of the piping, including types of imperfections, dimensions, and dimensional uncertainty; e. mechanism or mode of imperfection formation, growth, and failure; f. service, operating, failure, and maintenance history, including a CP effectiveness evaluation;		

	g. appropriateness of repair methods used; h. consideration of combined stresses, for example: i. where existing pipelines are crossed by roads or railways, upgrade the pipelines to meet the applicable design requirements for the new class location or perform a detailed analysis of all loads expected to be imposed on the pipeline during operation of the crossing. Consider the condition of the pipeline when determining the resulting combined stresses in the pipeline. Consider fatigue stress or fluctuating stress if heavy equipment crosses the pipeline at high frequencies.		
3.	A comprehensive hazard identification and assessment is required with regard to the condition of the piping, performed by a professional engineer who is competent in assessing the hazard, considering as applicable: a. corrosion (e.g., external, internal, microbiologically influenced corrosion (MIC), alternating current induced corrosion, etc.): i. apply additional coating inspection and testing if the information of the coating condition of the pipe body and girth weld is lacking; ii. perform additional coating assessment or apply additional safety measures depending on how effectively the coating protects the pipe or depending on the probability that it may support the presence of a corrosive environment on the pipe; b. cracking (e.g., environmentally-assisted, fatigue, etc.); c. mechanical damage (e.g., dents, wrinkles, buckles, and gouges): i. visually inspect all dents on the top half of the pipe (8 o'clock to 4 o'clock) and all dents with a length to depth ratio less than 20 for cracks, gouges, corrosion, and interaction with welds unless the company can demonstrate the absence of stress concentrators and interactions with welds;		

	d. geohazards (e.g., soil movement, seismically-triggered hazards, scour, erosion); e. manufacturing and construction-related imperfections (e.g., imperfections in welds, in the pipe, or imperfections of pipeline components); f. equipment malfunction (e.g., malfunction of control or relief equipment as a result of ice formation in cold weather); g. incorrect operation (e.g., overpressure, incorrect operating procedures, introduction of out of specifications fluids); h. potential stresses as a result of thermal expansion or contraction; i. material-related issues (e.g., low toughness); j. interaction of identified hazards.		
4.	Consider the potential for collateral damage to pipelines or other buried facilities caused by the failure of adjacent pipelines (e.g., thermal radiation causing coating damage or reducing the strength of adjacent pipe).		
5.	Submit a risk assessment that identifies and quantitatively demonstrates that the risks of the existing pipeline are equal to or lower than the risks of a pipeline that is at least at the DOC of the existing pipeline and meets all the requirements of the OPR and CSA Z662 (e.g., such a pipeline may have a heavier wall, be constructed of a higher grade, or may be operating at a lower pressure). Examples of quantitative risks for gas pipelines are individual and societal risks. Include the following information in the risk assessment: a. a reliability or probability of failure (POF) assessment that includes: i. all identified hazards and potential interactions; ii. the source of failure probabilities (i.e., references) used in the assessment, where the methodology is representative and specified; iii. long-term plan on maintaining the reliability of the POF level; b. a consequence analysis and results:		

	i. for HVP and sour service pipelines, consider the potential effects of fire and the potential effects of drifting hazardous gas mixtures beyond the area of potential impact prior to ignition; c. identification of long-term mitigative measures that the company identifies as necessary to achieve an acceptable risk level: i. document the evidence supporting the effectiveness of the mitigation methods and measures considered and proposed, and provide this with the EA.		
E.3 Long-term and Interim Corrective and Mitigative Measures			
1.	Provide a description of long-term corrective and mitigative measures and an implementation plan with timeline for completion, where applicable, to address the identified potential concerns. Implement long-term corrective and mitigative measures as soon as practicable.		
2.	Provide a description of interim corrective and mitigative measures taken until the requirements of CSA Z662 are met, or long-term mitigative measures are implemented. Implement interim corrective and mitigative measures as soon as practicable. Include: a. explanations as to why each interim measure was determined to be appropriate to ensure continued safe operation until the completion of the long-term corrective and mitigative measures; b. confirmation that each recommended interim measure was implemented, and will stay in place until the completion of the identified long-term corrective and mitigative measures: i. if a recommended interim measure has not been implemented, provide a plan for implementation; c. demonstration that the pipeline segments can be operated safely without any additional interim measures until the completion of the identified long-term corrective and mitigative measures, if no interim measures are recommended.		

Guide F – Change of Service or Increase in Maximum Operating Pressure

	Filing Requirements	In Application? References	Not in Application? Explanation
F.1 Engineering			
1.	Confirm project activities will follow the requirements of the latest version of CSA Z662.		
2.	Provide details of the current and proposed state of service.		
3.	Provide an engineering assessment in accordance with CSA Z662 demonstrating the integrity of the pipeline system and its suitability for the proposed service, and identifying the updates and revisions which will be incorporated into the Integrity Management Program.		
F.2 Environment and Socio-economic Assessment			
1.	How the effects have already been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		
F.3 Economics			
1.	Necessary economic information in section A.3.		

Guide G – Deactivation

	Filing Requirements	In Application? References	Not in Application? Explanation
G.1 Engineering			
1.	Describe the rationale for the deactivation and the measures to be or were employed for the deactivation to maintain the integrity of the pipeline and protect the public and the environment.		
2.	Provide a schedule for the deactivations.		
3.	Describe the activities associated with the deactivations.		

4.	Provide an estimate of the costs associated with the deactivation.		
5.	Confirm project activities will follow the requirements of the latest version of CSA Z662.		
6.	Provide details of the ongoing monitoring of the deactivated pipeline or a section of it to verify that the public and the environment are continually protected.		
G.2 Environment and Socio-economic Assessment			
1.	How the environmental and socio-economic effects have already been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		
G.3 Economics			
1.	Necessary economic information in section A.3.		

Guide H – Reactivation

	Filing Requirements	In Application? References	Not in Application? Explanation
H.1 Engineering			
1.	Describe the rationale for the reactivation and the measures to be employed for the reactivation.		
2.	Provide a schedule for the reactivations.		
3.	Describe the activities associated with the reactivations.		
4.	Describe the operating conditions under which the reactivated facility will operate.		
5.	Provide an engineering assessment in accordance with CSA Z662 demonstrating the integrity of the pipeline system and its suitability for the proposed service, and identifying the updates and revisions which will be incorporated into the Integrity Management Program.		
6.	Provide an estimate of the costs associated with the reactivations.		

7.	Confirm reactivation activities will follow the requirements of the latest version of CSA Z662.		
H.2 Environment and Socio-economic Assessment			
1.	How the effects have already been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		
H.3 Economics			
1.	Necessary economic information in section A.3.		

Guide I – Processing Plants: Deactivation and Reactivation

	Filing Requirements	In Application? References	Not in Application? Explanation
I.1 Filing Requirements – Deactivation			
I.1.1 Engineering			
1.	Explain the reasons for the deactivation or the cessation of operations and the procedures used or to be used in the deactivation.		
2.	Provide the date the processing plant was or will be removed from service.		
3.	Describe the provisions for the management of change.		
4.	Describe the general condition of equipment to be deactivated.		
5.	Describe the means of isolation.		
6.	Describe the instrumentation status.		
7.	Provide the lay-up conditions.		
8.	Describe the inspection and testing requirements during deactivation.		
9.	Describe the intent of future equipment use, if any.		

I.1.2 Environment and Socio-economic Assessment			
1.	How the effects have already been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		
I.1.3 Economics			
1.	Necessary economic information in section A.3.		
I.2 Filing Requirements – Reactivation			
I.2.1 Engineering			
1.	Explain the reasons for the reactivation or the resumption of operations and the procedures to be used in the reactivation.		
2.	Provide the date the processing plant will be returned to service.		
3.	Describe the provisions for the management of change.		
4.	Describe the general condition of equipment to be reactivated.		
5.	Describe the instrumentation status.		
6.	Provide the lay-up conditions.		
7.	Describe the inspection and testing requirements prior to reactivation.		
I.2.2 Environment and Socio-economic Assessment			
1.	Describe how the effects have already been considered in an ESA by the Commission.		
2.	If the environmental and socio-economic effects have not been addressed, provide requirements in section A.2.		
I.2.3 Economics			
1.	Necessary economic information in section A.3.		

Guide K – Decommissioning (section 45.1 of the OPR)

	Filing Requirements	In Application? References	Not in Application? Explanation
K.1 Decommissioning a Pipeline			
General			
1.	A complete description of the pipeline(s) and facility(ies) being decommissioned. For pipelines, this must include, but not be limited to, the history of products carried, length, diameter, wall thickness and coating type. Companies should consider any other information that is relevant to the pipeline(s) and facility(ies), and its operation that would assist the Commission in assessing the decommissioning application.		
2.	Reasons for decommissioning of the pipeline(s) and facility(ies), including a description of any adjacent pipeline(s) and facility(ies) that are impediments to abandonment. See section 3.2 of this manual.		
3.	Appropriately scaled map(s) or site plan(s) which shows the locations and dimensions of the pipeline right of way and the facility(ies) to be decommissioned.		
4.	The digital location data of pipeline segment(s) and facility(ies) to be decommissioned. The data should accurately represent the location of pipeline segments and right-of-way, or facility footprint and it can be derived from any available sources.		
5.	A description of known temporary work space required for decommissioning activities, including location and dimensions.		
6.	Photomosaic maps or alignment sheet(s) which show the pipeline right of way and facility(ies) overlain on satellite or aerial imagery and any areas of temporary work space. If not available, provide photographs showing the pipeline right of way and facilities.		
7.	Indicate whether any service would be terminated as a result of the proposed decommissioning. If a commercial party or other user could be negatively impacted by the termination of service, provide evidence that: a. the Company has been responsive to the needs, inputs, and concerns of commercial parties or other users;		

	Filing Requirements	In Application? References	Not in Application? Explanation
	b. the estimated relative impacts to all parties from the decommissioning of the facilities versus discontinuation of service have been considered; c. alternatives to the decommissioning of the facilities were considered (including physical and tolling alternatives) and that decommissioning is the optimal outcome; and d. impacted parties will be able to wait until *after* the Commission issues its decision on the application to make any potentially costly, irreversible choices necessary to continue their business operations after any approved decommissioning activities have begun. If this is not the case, provide evidence justifying why not.		
8.	An explanation of the decommissioning method options (abandonment in-place, removal, segmentation, fill) considered, and rationale for the chosen option(s), including how factors such as current and future land use, safety, effects on the rights of Indigenous Peoples, how individuals and communities may be affected by the proposed decommissioning, property, land acquisition or lease agreements, impacted and potentially impacted engineered structures, environment and economics were identified, considered and managed.		
9.	A description of the proposed activities to be carried out to decommission the pipeline and facility(ies).		
10.	Proposed schedule for the various decommissioning activities to be conducted, including any reclamation, to be conducted.		
11.	A monitoring plan which describes the type, frequency and duration of monitoring to be conducted for the pipeline(s) and facility(ies) that will remain in place. This plan should include considerations for maintaining depth of cover and potential environmental and socio-economic risks of the decommissioned pipeline remaining in-place (e.g., water conduit, subsidence and pipe exposure), as informed by the company's environmental and socio-economic assessment and engagement activities.		

	Filing Requirements	In Application? References	Not in Application? Explanation
12.	Provide the anticipated timing of future abandonment activities for each pipeline and facility being decommissioned, if known.		
Engineering			
1.	For the pipeline(s) to be decommissioned, confirm the following, and provide an explanation of how the results were or will be achieved and maintained: • no internal pressure remaining; • purged and cleaned and left in a state of minimal residual contamination, including the pipe cleaning plans, procedures or standards to be used; • left in a state where road, railway or utility crossings are not at significant and unmanaged risk of disturbance due to settlement; • a description of the potential soil subsidence, pipe exposure, water conduit, corrosion, and pipe collapse effects for pipelines to be decommissioned in place, and a plan to monitor these potential effects; • equipped with signage; and • a description of the fill material, if used, to be used for railway and road crossings, if applicable (abandonment in place with special treatment), including where along the pipeline fill material will be used and why.		
2.	In the event that cathodic protection is not maintained, identify and justify if ground bed anodes will be removed or left in place.		
Environmental and Socio-economic Assessment			
1.	Describe the biophysical and socio-economic setting found at the project location. The description should indicate whether or not the proposed decommissioning is located on federal lands.		
2.	For the preferred decommissioning method, complete the environmental and socio-economic interactions table (see Table K-1 of this guide), or provide an environmental and socio-economic assessment.		

	Filing Requirements	In Application? References	Not in Application? Explanation
3.	Provide a copy of the Phase I Environmental Site Assessment conducted for the pipeline right of way and associated facility(ies), as per the guidance in the most recent version of CSA Standard Z768. The Phase I Environmental Site Assessment should identify all areas of existing and/or potential contamination, and include an evaluation of the status of any existing contamination currently documented or contamination previously remediated. Provide a list of previously reported contaminated sites within the pipeline right of way and associated facility(ies), including CER-assigned Remediation Event Number(s).		
4.	If the results of the Phase I Environmental Site Assessment indicate that a Phase II Environmental Site Assessment is warranted, provide a copy of a Phase II plan that describes the procedures to be implemented for investigating all existing and/or potential contamination identified in the Phase I assessment, including sampling methodology. The Phase II assessment should be conducted per the guidance provided in the most recent version of CSA Standard Z769-00, Phase II Environmental Site Assessment.		
5.	Provide an Environmental Protection Plan (EPP), or a description of the environmental protection procedures, mitigation measures, and commitments that will be implemented during the decommissioning activities, including remediation, reclamation, and reclamation monitoring activities, to avoid or minimize potential adverse environmental and socio-economic effects. The level and detail of information should be commensurate with the nature and scale of the project.		
6.	Provide a monitoring plan outlining how the decommissioned pipeline(s) and facility(ies) will be monitored for the period of time between decommissioning and abandonment.		
Engagement			
1.	Provide a summary of the engagement activities undertaken with individuals and communities, which may be affected by the proposed decommissioning, including:		

	Filing Requirements	In Application? References	Not in Application? Explanation

	• landowners;
	• land users;
	• Indigenous Peoples;
	• occupants;
	• land managers (Crown);
	• federal, provincial or municipal agencies or levels of government;
	• shippers; and
	• other commercial third parties who could be affected by the project, including prospective future shippers.
	• The summary of engagement should include, at minimum:
	  ○ a description of any issues or concerns for each decommissioning method(s) identified;
	  ○ how input from the engagement activities was considered in determining the proposed decommissioning method(s);
	  ○ a description of how the applicant has addressed or will address any concerns or issues raised and when;
	  ○ a description of any concerns or issues raised that will not be addressed and why; and
	  ○ a description of any outstanding concerns, including how the applicant intends to address any outstanding concerns, or an explanation as to why no further steps will be taken.		

2.	Provide notice to all individuals and communities which may be affected by the proposed decommissioning of the actual date of application filing, provided within 72 hours of filing the application with the CER, including information where to find the application and associated documents on the CER website.		
3.	Provide a plan describing how consultation with affected individuals and communities will be		

	Filing Requirements	In Application? References	Not in Application? Explanation
	maintained during the period of time between decommissioning and abandonment.		
Lands			
1.	Describe any land rights proposed to be acquired for the decommissioning, including the location and dimensions of the land rights that have not already been acquired or leased (for example, temporary work space). Provide a description (for example in a table) of the land tenure along the right of way, including the approximate length of the pipeline segments that are located respectively along freehold, federal or provincial Crown land. For more information, refer to section A.4.		
Economics and Finance			
Decommissioning Costs			
1.	Describe the methodology and assumptions used to estimate costs. Identify and describe any associated section 183 or 214 applications. Provide a level of detail and technical description appropriate to allow regulators, the public, and others to understand the estimates to a reasonable level.		
2.	If a trust is used to set aside funds for abandonment, explain whether the decommissioning of facilities in the application represents a material change in the previously filed Abandonment Funding Plan. If there has been a material change, provide the date when an updated Abandonment Funding Plan will be submitted to the CER, using the form “Tables – Abandonment Funding Plan ”.		
Financing			
1.	Provide confirmation that funding is available for the decommissioning work, and funding will continue to be available to fund the future final abandonment, including updated description of any funding, financial guarantees or other arrangements designed to cover these costs.		
2.	If the pipeline will still be providing service to third party shippers, describe the expected toll treatment and toll impact, including:		

	Filing Requirements	In Application? References	Not in Application? Explanation
	d. an explanation of how the tolls were determined; e. the expected impact, if any, on shippers and other parties; and f. a statement regarding the extent of shippers' and other parties' support for any toll increase.		
3.	Explain how this decommissioning plan compares to the abandonment plan for these facilities or this site.		
Accounting			
1.	The GPUAR or OPUAR prescribe the accounting treatment for both ordinary and extraordinary retirements, including informing the CER if the gain or loss on an extraordinary retirement is material.		
K.2 Applications to Access Funds from the Trust to Fund Abandonment			
1.	Refer to section B.3 for information on accessing funds for decommissioning activities.		

Guide N – Applications to Review, Rescind or Rehear

	Filing Requirements	In Application? References	Not in Application? Explanation
1.	The application must be in writing, signed by the applicant (the person requesting the review or rehearing) or the applicant's authorized representative, filed with the CER and served on all parties to the original proceeding that gave rise to the decision or order in respect of which the review or rehearing is sought.		
2.	The application must contain: a. a concise statement of the facts; b. the grounds that the applicant considers sufficient to raise a doubt as to the correctness of the decision or order, or to establish the requirement for rehearing, including: i. any error of law or jurisdiction;		

	ii. changed circumstances or new facts that have arisen since the close of the original proceeding; or iii. facts that were not placed in evidence in the original proceeding and that were then not discoverable by reasonable diligence; c. the nature of the prejudice or damage that has resulted or will result from the decision or order; and d. the nature of the relief sought.		

Guide O – Variance Applications and Project Updates

	Filing Requirements	In Application? References	Not in Application? Explanation
O.1.2 Corporate Name Changes (without a change in ownership, lease, or amalgamation) pursuant to section 181 of the CER Act			
1.	State the name change, including all previous known names.		
2.	A list of all regulatory instruments including orders and certificates that will require changes.		
3.	An update of all documents associated with Financial Resource Requirements and Abandonment Funding as needed to reflect the name change, including: a. financial instruments used for abandonment funding including as applicable, updated letters of credit, surety bonds, and/or abandonment trusts; and b. financial instruments used for demonstration of proof of financial resources.		
4.	A map (or maps) detailing all facilities for which the corporate name change applies (see section 1.12).		
5.	The Variance Application shall include a letter signed by the company's Accountable Officer confirming the requested name change.		

O.2 Variances			
1.	A concise summary of the changes the applicant is requesting the CER to assess.		
2.	All necessary design details of the proposed changes.		
3.	A statement that no material changes to the facility economics will result from the variance request, or provide documentation or information to explain any changes to facility economics.		
4.	Any supporting documentation or information to explain and support the change.		
5.	Any applicable references to the Filing Manual.		

Guide P – Tolls and Tariffs

	Filing Requirements	In Application? References	Not in Application? Explanation
P.1 Cost of Service			
1.	Description of steps taken with parties to discuss issues and attempts to reach negotiated settlement.		
2.	Summary schedule of total cost of service, with amounts for the base, current and test years and year-to-year changes for following cost components: • operating, maintenance & administrative; • transmission by others; • depreciation and amortization of plant; • income taxes; • taxes other than income taxes; • miscellaneous revenues; • return on rate base; • deferred items; and • other items.		

3.	Analysis of each cost component listed above, by major cost category, with explanations for significant year-to-year changes. Allocations between regulated and non-regulated entities must include gross costs, allocated costs, the methodology used and rationale.		
4.	Schedules to show derivation of monthly deferral account balances, including carrying charges and which amounts are actual and which are estimated.		
5.	Schedule reconciling additions to plant accounts with additions to income tax CCA for base, current and test years.		
6.	Schedule detailing changes in the deferred tax balance for base, current and test years.		
7.	Provide the estimated total cost to abandon, as well as the Collection Period over which revenue will be accumulated.		
P.2 Rate Base			
1.	Detailed schedules for rate base with assumptions and calculations for additions, retirements, cash working capital.		
P.3 Financial Statements			
1.	Current annual report to shareholders. Current corporate annual report of parent if applicable.		
2.	Financial statements for base year plus explanation of major assumptions used to prepare statements.		
P.4 Cost of Capital			
1.	Invested Capital: The application shall describe the applicant’s sources of capital, including outstanding balances for each class of capital on a yearly basis, invested in the system’s rate base and plant under construction for the past five years and the year(s) covered by the application. The application shall also describe all relevant attributes for each class and issuance of capital.		
2.	Methodology/Techniques/Methods/Models: The application shall include a description of the methodology used to		

	estimate cost of capital and overall return, as well as all the techniques/methods/models within it.		
3.	Data Supporting Methodology: The application shall include a rationale for the specifically chosen data used in the estimation of cost of capital.		
4.	Debt Costs: The application shall include a description of, and justification for, the proposed treatment of debt costs as part of the return on rate base. The application shall also describe in detail, with supporting schedules, how debt costs to be recovered during the year(s) covered by the application were calculated.		
5.	Business Risk: The application shall include a detailed assessment of the applicant's business risks including market, supply, competitive, operating, and regulatory risks.		
6.	Financial Risk: The application shall include a description of, and justification for, how the applicant has considered financial risk in estimating cost of capital, and in establishing the applied-for rate of return and capital structure (if applicable). The application should also describe alternative ways of considering financial risk and how and why these alternatives were or were not incorporated.		
7.	Regulated Assets: The application shall include a high-level assessment of how the cost of capital for the facilities subject to the application is impacted by other assets and liabilities of the applicant or of the applicant's parent company (if applicable), taking the stand-alone principle into account.		
8.	Comparable Companies or Assets: When comparable companies or assets are relied upon to estimate cost of capital, the application shall contain a discussion of business risks including market, supply, competitive, operating, and regulatory risks faced by these individual comparable companies or assets, and a description of any adjustment(s) made or considered to optimize comparability.		
9.	Data from Other Countries: Where an application utilizes financial data from countries other than Canada, the application shall include an assessment of the resulting impacts of using this data as opposed to data from Canada, including, but not limited to, impacts from any		

	differences in tax regimes, currencies, securities exchanges, regulatory risk or systematic risks. The application should also assess whether and how adjustments should be made to the data from these other countries.		
10.	Financial Statements: The application shall include the applicant's most recent audited financial statements and notes, or, if not available, those of the applicant's parent company.		
11.	Credit Rating: The application shall include the applicant's two most recent credit rating reports issued from each recognized rating agency, including those issued by DBRS, Moody's, Standard & Poor's, and Fitch. If not available for the applicant, the application shall include those reports of the applicant's parent company.		
12.	Historical Returns and Capital Structure: The application shall include a description and summary schedule (where appropriate), for the past five years, of: • the applicant's actual balances for each class of capital, and resulting actual capital structures; • actual returns; • assumptions used to determine these actual returns; • allowed return(s) and deemed capital structure(s); • explanations of any variances between allowed and actual returns; and • explanations of any variances between deemed and actual capital structure(s).		
13.	Capital Issuances: The application shall include a description, for the past five years, of any debt, equity, and other capital issuances, their net/gross proceeds, and description of their use.		
14.	Summary Schedule: The application shall include a summary schedule for the year(s) covered by the application, showing the requested rates of return for each class of capital (if applicable), deemed capital structure (if applicable) and derivation of the return on rate base.		

15.	Fair Return Standard: The application shall explicitly demonstrate how the applied-for total return on capital meets all requirements of the fair return standard.		
P.5 Tolls and Tariffs			
1.	Concise description of pipeline system & operations, including system map showing toll zones and delivery areas.		
2.	Describe applied-for toll design, with rationale for any proposed changes.		
3.	Comparative schedule of test year revenues for each class/type of service under existing and proposed tolls.		
4.	Describe any tariff revisions with rationale for revisions and comparative schedules showing proposed changes to existing tariff sheets.		
P.7 Abandonment Costs			
1.	A company's application should include any changes related to abandonment funding. Provide a discussion and justification of these changes, including any changes related to the total cost estimated for abandonment, the manner which the funds will be set-aside, and how the funds are to be collected, including the pace of collecting funds.		

Guide Q – Export Authorizations

	Filing Requirements	In Application? References	Not in Application? Explanation
Natural Gas (including LNG) Export License Applications			
1.	The source and volume of gas proposed to be exported.		
2.	Description of gas supplies, including Canadian gas supply, expected to be available to the Canadian market (including underlying assumptions) over the requested licence term.		
3.	Description of expected gas requirements (demand) for Canada (including underlying assumptions) over the requested licence term.		

4.	Implications of the proposed export volumes on the ability of Canadians to meet their gas requirements.		

Guide R – Transfer of Ownership, Lease or Amalgamation

	Filing Requirements Refer to detailed filing requirements specified in the Transfer of Ownership, Lease, or Amalgamation Application Form.	In Application? References	Not in Application? Explanation
1.	Information of applicant(s) and application details		
2.	Information on operations		
3.	Information on notification and engagement		
4.	Information on the pipeline		
5.	Information on financial matters		
6.	Information on jurisdiction		

Guide S – Access on a Pipeline

	Filing Requirements	In Application? References	Not in Application? Explanation
1.	Provide a detailed summary of the circumstances leading to the application.		
2.	Provide copies of all relevant correspondence between the applicant, the operator of the subject facility and any other parties that may be involved with the application.		
3.	For applications for an exemption from subsection 239(1), provide evidence that: • an open season was held offering all of the capacity to be contracted to anyone interested in shipping; and • allowing the exemption is in the public interest.		
4.	In the case of an application pursuant to subsection 239(3), the applicant should provide a		

	description of the facilities that the pipeline company would need to install, including a cost estimate.		

Guide T – Leave to Open

	Filing Requirements	In Application? References	Not in Application? Explanation
For a Pipeline or a Pipeline Section:			

	• CER certificate or order under which work was carried out
	• List of standards, specifications and procedures
	• Description of the pressure tested facilities
	• Summary of continuous pressure and temperature readings
	• Summary of all piping, welds, and valves not subjected to a pressure test following installation, with justification for not pressure testing
	• Statement that all control and safety devices were or will be tested for functionality
	• Confirmation that:
	  ○ required tests were taken and met requirements; and
	  ○ all permits were acquired when necessary;
	• Test equipment calibration certificates
	• All logs, test charts, etc. are signed and dated by company representative
	• Details regarding unsuccessful pressure tests, including the cause of failure		

For a Tank			

	• CER certificate or order under which work was carried out
	• Standards, specifications and procedures
	• Confirmation that:
	  ○ required tests were taken and met requirements; and
	  ○ all permits were acquired when necessary		

	• Statement that all control and safety devices were inspected and tested for functionality		

Guide U – Information Filed Respecting Plan, Profile, Book of Reference (PPBoR) and Notices

	Filing Requirements	In Application? References	Not in Application? Explanation
U.1 Plan, Profile, Book of Reference (PPBoR)			
	PPBoR meets requirements of section 199 of the CER Act?		
	In addition, the plan and profile of the project drawn to a scale of 1:10 000 or larger, if appropriate, should show: • the proposed route of the pipeline; • property boundaries; and • the numbers of the parcels of land to be traversed (i.e., legal land descriptions).		
U.2 Section 201 Notices			
	Requirements pursuant to section 201 of the CER Act.		
	Requirements pursuant to section 50 of the Rules.		
1.	File a copy of the notice that will be served on landowners.		
2.	Provide a copy of the notice that will be included in local publications.		
3.	File a list of the publications that will be used.		
4.	Where the applicant completes the service and publication of notice under section 201 of the CER Act, it shall forthwith notify the CER in writing of the dates of the last service and publication. The company shall file a tear sheet of the newspapers.		
U.3 Application to Correct a PPBoR Error			
1.	An application pursuant to subsection 208(1) of the CER Act should include:		

	• the Order number and date of the original PPBoR approval; • the nature and description of the error in the PPBoR; • the accurate information (i.e., related to the plan, profile or book of reference); and • confirmation that, pursuant to subsection 208(3), copies of the permit will be provided to the offices of the registrars or appropriate land title offices.		

Guide V – Right of Entry Applications

	Filing Requirements	In Application? References	Not in Application? Explanation
	Requirements pursuant to section 324 of the CER Act.		
	Requirements pursuant to section 55 of the Rules.		
1.	A summary of the land negotiation process conducted between the applicant and the owner of the lands for which a right-of-entry order is sought.		
2.	The date of service of notice on the landowner pursuant to subsection 322(1) of the CER Act.		
3.	If applicable, the date of service of notice on the landowner pursuant to section 201 of the CER Act.		
4.	A discussion of outstanding issues and the reason(s) that a voluntary agreement could not be reached.		

Guide W – Requirements for Substituted Service Applications

	Filing Requirements	In Application? References	Not in Application? Explanation
	Requirements pursuant to sections 3, 4 and 5 of the *National Energy Board Substituted Service Regulations*.		