

Guide K – Decommissioning (section 45.1 of the OPR)

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.

The application must include 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 communities, and other persons who anticipate that their lands are/may be potentially affected.

K.1 Filing Requirements

–General Requirements

~~1.~~ Provide at the following:

1. A complete description of the ~~facilities~~ pipelines and facility(ies) being decommissioned. ~~This should include~~ 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 and its operation that would assist the Commission in assessing the decommissioning application.
2. 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.
3. The GPS data coordinates of the locations of pipeline right of way and facility(ies) to be decommissioned.
4. A description of known temporary workspace required for decommissioning activities, including location and dimensions.
5. 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 workspace. If not available, provide photographs showing facilities and at sufficient intervals to show the full length of the right of way.
- ~~1.6.~~ Reasons for decommissioning of the pipeline and facility(ies), including a description of any adjacent facilities that are impediments to ~~allowing the facility to be abandoned~~ physical abandonment.

- ~~7. 2. An application for abandonment must be filed for all CER-regulated~~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 relative impacts to all parties from the decommissioning of the facilities ~~when they~~versus discontinuation of service ~~have reached their end of life, including associated decommissioned~~been considered;
 - c) alternatives to the decommissioning of the facilities. ~~Therefore companies should demonstrate that they are planning for eventual abandonment of decommissioned~~ 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 to continue their business operations after decommissioning activities have been completed. 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 such factors as land use, safety, potentially affected peoples and communities, property, impacted and potentially impacted engineered structures¹, environment and economics were identified, considered and managed.
9. A description of the proposed physical activities to be carried out to decommission the pipeline and facility(ies).
10. Proposed schedule for the various decommissioning activities, including any reclamation, to be conducted.
11. A description of the type, frequency and duration of monitoring to be conducted of the facilities ~~by providing~~that will remain in-place.
- ~~2.12. Provide the anticipated timing of future abandonment activities (as best known at this time) for each pipeline and facility being decommissioned as well as any measures taken to prepare for this eventual abandonment.~~

K.2 Filing Requirements –

Guidance – General Requirements

Companies should demonstrate how they are planning for eventual abandonment of decommissioned facilities. An application for abandonment must be filed for all CER-regulated facilities when they have reached their end of life, including those facilities that have been previously decommissioned.

¹ “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.).

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.2 - Applications to Abandon.

Refer to Guide B.2.1 – Economics and Finance, Guidance in regards to termination of service.

Engineering

1. Pipeline:

Provide ~~details to confirm that the pipeline is going to be~~following:

- ~~emptied of service fluids;~~

1. purged or appropriately cleaned or both in a manner that leaves Confirm the following, and provide an explanation of how the results were/will be achieved and maintained:

- ~~no mobile materials remaining in the pipeline;~~
- ~~physically separated from any in-service piping;~~
- ~~capped, plugged, or otherwise effectively sealed;~~
- left without any internal pressure remaining;
- purged and cleaned and left in a state of minimal residual contamination, including the pipe cleaning procedures and 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
- monitored as appropriate for subsidence and to maintain 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; and
- a plan for maintaining adequate depth of cover and adequate spacing for existing and future land use.

Note: Pipelines containing liners or constructed of polymeric pipe may require repeat purging and maintenance to accommodate out-gassing of hydrocarbon or H₂S. See

~~CSA Z662 clause 13.2.8.6, as informed by the company's environmental and socio-economic assessment and engagement activities.~~

~~2. Surface Equipment:~~

~~Provide details on
In the removal of pipeline related surface equipment.~~

- ~~• describe equipment to be removed to pipeline depth, except where surface equipment is within~~

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.

~~an existing surface facility event that is in continuing operation, or is required for the operation of any other remaining pipelines.~~

~~Examples of such equipment could be, but are not limited to: pipeline risers, liner vent piping, casing vents, underground vault vents or valve extenders, inspection bell holes, and cathodic protection rectifiers, test posts, or anode wiring, storage tanks and associated piping and equipment.~~

- ~~• describe how above ground pipelines and all related surface equipment are to be decommissioned except where they are part of or within an existing surface facility that is in continuing operation, or is required for the operation of any other remaining pipelines.~~

~~3. Facilities:~~

~~Provide details on decommissioning of pipeline related facilities such as compressors and pump stations unless they are still part of an operating site. Disposition of associated piping, supports and foundations shall also be described.~~

~~4. Underground Components:~~

~~Provide details on the decommissioning of underground vaults and closed top pits. Discuss the decommissioning of any underground tanks in relation to requirements in API 1604.~~

~~5. Records:~~

~~Describe the records that are to be is not maintained of all pipeline components and facilities that are to be decommissioned.~~

~~K.3 Filing Requirements—Environmental & Socio-economic~~

~~1. Describe the ecological setting and current land use of the project footprint as well as adjacent areas.~~

~~2. Describe any known areas of contamination in the project areas as well as historical, ongoing or planned remediation activities associated with those sites. Describe any regulatory requirements for the reclamation and remediation of these sites and how these requirements, identify and justify if ground bed anodes will be met.~~

~~3. Provide an Environmental and Socio-economic Assessment (ESA) (see guidance notes below).~~

~~4. For decommissioning projects that are located outside of lands owned or leased by the applicant, provide a monitoring plan outlining how the decommissioned facility will be monitored for the period of time between decommissioning and abandonment. This plan should include:~~

- ~~• a description of the baseline data that has been collected or obtained for future monitoring results to be measured against. Baseline data should be of sufficient scale, scope and intensity to meet project monitoring requirements.~~
- ~~• A description of how soils, vegetation establishment, invasive weeds, wetland hydrology and surface and ground water quality will be monitored.~~
- ~~• Contingency plans for the discovery of soil and water contamination, loss of depth of cover, or extreme weather events affecting the integrity of the decommissioned facilities.~~
- ~~• Input from interested parties. Any comments from stakeholders should be considered and, where appropriate, incorporated into the plan.~~

~~5. For decommissioning projects that are located outside of lands owned or leased by the applicant, provide an explanation of how natural regeneration of the project footprint in forested areas or native prairie have been considered in the planning for decommissioning. This should include:~~

- ~~• a discussion of whether or not non-agricultural lands will be allowed to naturally re-vegetate while the facility is in a decommissioned state; and~~
- ~~2. a discussion of any limitations that this would have on the ability to monitor the facilities. A discussion of whether allowing re-vegetation of the project footprint would limit future physical abandonment choices (i.e., pipeline removal vs. abandonment removed or left in place). And if so, how that has been factored into decommissioning planning.~~

~~K.4 Filing Requirements—Economics~~

~~1. Provide details of the costs associated with the proposed decommissioning.~~

~~2. Confirm that funding is and will be available to finance the proposed decommissioning project.~~

~~3. Where the pipeline has or is likely in future to have third party shippers, provide:~~

- ~~• Information on the original book cost of the facilities and accumulated depreciation to the retirement date;~~
- ~~• Explain any impact on remaining rate base, providing accounting details as outlined in the GPUAR or OPUAR, including details of whether the retirement is ordinary or extraordinary.~~

~~4. Explain the impact on the company's abandonment funding program or verify that the decommissioning does not impact it. For example, explain:~~

- ~~• Any resulting changes to the abandonment cost estimate for the system, or to the estimated timing of abandonment for various segments;~~
- ~~• Any resulting changes to the plans to fund future abandonment costs.~~

~~K.5 Filing Requirements~~ — ~~Lands~~ ~~Information~~

~~1. Describe the location and the dimensions of the existing RoW or facility lands that would be affected by the decommissioning activities.~~

~~2. Provide a map or site plan of the facilities to be decommissioned.~~

~~3. Identify the locations and dimensions of any temporary workspace required for decommissioning activities.~~

~~4. Provide a record of public engagement activities that have been undertaken with affected landowners. This record should include a description of:~~

- ~~• All discussions with landowners regarding the proposed decommissioning activities;~~
- ~~• A summary of any issues or concerns identified by the landowner; and~~
- ~~• How the applicant proposes to address any concerns or issues raised by potentially affected people or landowners or an explanation as to why no further action is required.~~

~~5. Provide a plan for how engagement with affected people or landowners will be conducted during the period of time between decommissioning and abandonment.~~

~~K.6 Filing Requirements~~ — ~~Engagement~~

~~1. The CER expects applicants will consider engagement for all projects. Please refer to Chapter 3, section 3.4 for additional information. Sharing contamination remediation plans, if any, with landowners, stakeholders — refer to Abandonment Guide B, section B.2.~~

Guidance

Environment and Socio-economic

Environmental and Socio-economic Assessment

1. Describe the ecological and socio-economic setting found at the project location. For projects that are situated in a forested or native prairie setting, additional detailed baseline vegetation information may be required. The description should indicate whether or not the proposed decommissioning is located on federal lands².
2. Complete the environmental and socio-economic interactions (Table 1) set out in this guide.
3. Provide an environmental and socio-economic assessment when the circumstances outlined in Table A-1 of the Filing Manual indicate that additional detailed biophysical and socio-economic information is required. The filing requirements are outlined in Table A-2 (Biophysical Elements) and Table A-3 (Socio-Economic Elements) of the CER's Filing Manual.
4. Provide a copy of the Phase I Environmental Site Assessment (ESA) 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 ESA should identify all areas of known and potential soil contamination, and include an evaluation of the status of any existing contamination currently documented or contamination previously remediated, as per the most recent version of CER's *Remediation Process Guide*. Provide a list of previously reported contaminated sites along the pipeline right of way(s) and associated facilities, including CER-assigned Remediation Event Number(s).
5. If the results of the Phase I ESA indicate that a Phase II ESA is warranted, provide a copy of a Phase II ESA plan that describes the procedures to be implemented for investigation of all existing or potential contamination identified in the Phase I ESA, including sampling methodology. The Phase II ESA should be conducted as 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 and measures that will be implemented during the decommissioning, remediation, and reclamation 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.
7. Provide a monitoring plan outlining how the decommissioned pipelines and facilities will be monitored for the period of time between decommissioning and abandonment.

<u>Guidance – Environmental and Socio-economic Assessment</u>

² 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*

- As noted in the section A.2.4 of the Filing Manual 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 decommissioning-in place or removal of the pipelines.
- Where a detailed environmental and socio-economic assessment is required, refer to Tables A-2 and A-3 of Filing Manual.
- 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 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 alternative 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).
- 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).
- 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*.
- 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 requires proponents to conduct an ESA for all valued components for which decommissioning activities may potentially interact. ESA requirements are outlined in Guide A, section A.2 of this Filing Manual. Section A.2.4 describes the level of detail required in an ESA, and Table A-1 provides examples of the range of circumstances that may lead to the need for detailed information.~~

~~For smaller projects that may have fewer interactions with the valued components, proponents may choose to file an environmental and socio-economic interactions table with their application. This table should include a description of any potential adverse effects that may result from the project, the mitigation that would be implemented to avoid or minimize those effects, and any potential residual effects, as well as cumulative effects.~~

~~Decommissioning Plan~~

~~An application to decommission the operation of a pipeline could include a decommissioning plan tailored to the individual project and should include input from interested parties such as:~~

- ~~• landowners;~~

~~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 Chapter 3.4 of the Filing Manual.~~

~~1. Provide a summary of the engagement activities that have been undertaken for the decommissioning project, with potentially impacted persons and communities, including:~~

- ~~• owners and users of lands;~~
- ~~• Indigenous peoples and communities;~~
- ~~• occupants;~~
- ~~• land managers; (Crown);~~

- ~~• lessees;~~

- ~~• federal, provincial or municipal agencies (federal or provincial); levels of government;~~
- ~~• shippers; and~~

- ~~• upstream and downstream users.~~

~~If a decommissioning plan is shared with interested parties, any comments from these stakeholders should be considered and, where appropriate, incorporated into the plan.~~

- ~~• Environmental, safety and land use issues may all be other commercial third parties who could be affected by the project.~~

~~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 evidence in the application. ~~The~~ of sufficient notification of the application ~~may also address reclamation of sites where surface facilities have been or will be removed~~ to the CER.
- 4.3. Provide a plan for how consultation with potentially impacted persons and the management of any pipeline components that will ~~communities, landowners or Indigenous peoples will~~ be maintained in a ~~deactivated state~~ during the period of time between decommissioning and abandonment.

Lands

Describe any land rights proposed to be acquired for the decommissioning, including the location and dimensions of the land rights. Provide a description 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 Guide A.4 of the Filing Manual.

Economics and Finance

Decommissioning Costs

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.

As decommissioning is not the final stage in the lifecycle of a CER-regulated pipeline, provide estimates of average annual future costs for post-any activities to be done after the decommissioning ~~activities.~~

Provide estimates of:

- any future costs, in current year dollars, associated with maintaining these facilities in a decommissioned state, up until the commencement of the final abandonment of these and nearby facilities.
- the costs to complete the abandonment of these facilities ~~+~~, including recognition of costs of post abandonment activities (i.e., for any facilities proposed to be left in the ground, the costs of monitoring and contingent remediation of any discoveries of contamination or subsidence).

explain ~~Explain~~ if and how the total cost estimate to abandon the entire pipeline system ~~have~~ has been adjusted for the decommissioning of these facilities, and any related impact ~~on funding to~~

~~the pipeline system's total cost estimate for the abandonment of those future costs facilities that remain.~~

~~For more information, refer to RH 2 2008 [Filing A40277], MH 001 2012 [Filing A50478], MH 001 2013 [Filing A60676] and the 4 March 2010 Revisions to the Base Case [Filing A24600]. For more information, refer to RH-2-2008, MH-001-2012, MH-001-2013 and the 4 March 2010 Revisions to the Base Case.~~

Liability Exposure

As decommissioning is not the final stage in the lifecycle of CER-regulated pipelines, the description of future liabilities should include:

- the type of each liability and an estimate of the associated cost; and
- a statement of which decommissioning work is associated with a legal obligation and which work is not.

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.

Financing

~~The~~**Provide** confirmation that funding is available for the decommissioning work, and ~~the~~ 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.

If the pipeline will still be providing service to third party shippers, **include:**

describe 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; and
- a statement regarding the extent of ~~shippers'~~**shippers'** and other ~~parties'~~**parties'** support for any toll increase.

Explain how this decommissioning plan compares to the abandonment plan for these facilities or this site.

Accounting

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.

Next Steps...

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

K.2 Applications to Access Funds from the Trust to Fund Abandonment

Refer to Guide B, Abandonment, section B.3 for information on accessing funds for decommissioning activities.

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Table 1 – Environmental and Socio-Economics Interactions Table

<u>Element</u>	<u>Interaction (Yes or No)</u>	<u>Status of element – specific study or survey (complete, underway, date expected , or underway)</u>	<u>Description of potential effects</u>	<u>Mitigation will be implemented to address potential adverse effects (Yes or No)</u>	<u>Description of mitigation to be applied</u>	<u>Description of residual effects after mitigation, including the spatial and temporal extent of the effects</u>	<u>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.</u>	<u>Monitoring Plan and Details</u>
<u>Physical and Meteorological Environment</u>								
<u>Soil and Soil Productivity</u>								
<u>Vegetation</u>								
<u>Water Quality and Quantity</u>								
<u>Fish and Fish Habitat</u>								
<u>Wetlands</u>								
<u>Wildlife and Wildlife Habitat</u>								

<u>Species at Risk, or Species of Special Status, and Related Habitat</u>								
<u>Air Emissions and GHG Emissions</u>								
<u>Acoustic Environment</u>								
<u>Human Occupancy and Resource Use</u>								
<u>Heritage Resources (both Crown and private lands)</u>								
<u>Navigation and Navigation Safety</u>								
<u>Aboriginal Traditional Land and Resource Use</u>								
<u>Socio and Cultural Well-Being</u>								

<u>Human Health or Aesthetics</u>								
<u>Infrastructure and Services</u>								
<u>Employment and Economy</u>								
<u>Rights of Indigenous peoples</u>								
<u>Accidents and Malfunctions</u>								
<u>Effects of the Environment on the Project</u>								
<u>Other (please specify)</u>								