



Request for Proposals

PARSC 017

Review of Previous Pipeline Abandonment Programs, Phase 4 – Field Study of Pipeline Segments Abandoned on Farmland

Date: May 21, 2019

Purpose

On behalf of the Pipeline Abandonment Research Steering Committee (PARSC), PTAC wishes to retain the services of a research organization or consulting firm (the Contractor) to provide the services described in this document (the Project). Interested parties are invited to submit full proposals according to the specification provided herein.

Background

Pipeline abandonment¹ refers to the permanent removal from service of a pipeline. Pipelines have previously been abandoned in Canada and other jurisdictions. A review of the approved abandonment plans would result in a general understanding of the approaches taken. In addition, the analysis of available information, supplemented by site visits, would provide an assessment of abandonment outcomes and valuable information would be obtained on post-abandonment conditions and performance of the abandonment procedures that were used.

This issue was reviewed in the prior DNV Scoping Study found on the website of the National Energy Board (<http://www.neb-one.gc.ca/prtcptn/pplnbndnmnt/pplnbndnmntscpngstd.pdf>). Applicants are expected to read relevant sections of the Study, as this project was informed by it and information is not repeated herein.

In 2017, PARSC commissioned a study titled “Review of Previous Pipeline Abandonment Programs, Phase 3 – Abandonment on Farmland” to conduct an initial surficial observation of a previous pipeline abandonment program, which involved a surface assessment of three 34-inch-diameter pipeline segments that Enbridge Pipelines Inc. (Enbridge), abandoned between 1978 and 1980. The pipeline segments were both areas where the abandoned pipeline segment was removed and where the pipeline was abandoned in place.

This purpose of this RFP is to commission an additional study that builds on the work completed through the “Review of Previous Pipeline Abandonment Programs, Phase 3 – Abandonment on Farmland” PARSC 015 study. The final report is available at: <https://www.ptac.org/review-of-previous-pipeline-abandonment-program-phase-3-abandonment-on-farmland/>

¹ In the context of the present technical topic, pipeline abandonment and pipeline decommissioning are considered similar as they both imply permanent removal from service.



Project Objective

The objective of this Project is to implement recommendations from project PARSC 015, which was an initial surficial observation of the present-day state of areas where pipeline segments were abandoned between 1972 and 1979.

Project Scope

The Project will access Enbridge's Line 3 abandoned pipe located in the Edmonton/Hardisty region between active Enbridge Lines 2 and 4, make onsite technical observations and measurements, and take samples for laboratory testing after the site visit. The Project will take place at the same time and in the same area as a separate 2019 work by Enbridge. Synergies, efficiencies and the avoidance of duplication will be sought as appropriate between the separate PTAC Project and the Enbridge work.

As described herein, at some locations, Enbridge will perform activities that will partially expose the abandoned Line 3 segments, providing the opportunity for the Contractor to make observations and measurements and take samples. In area where the Contractor and Enbridge will be operating at the same time, the Contractor will collaborate with Enbridge to maximize efficiency and will comply with Enbridge site safety and operating requirements.

The Contractor will perform site work as needed, acquire data and samples, and perform all the data analysis and reporting. The Project is composed of the tasks described below.

Task 1. Field Work at Enbridge Abandoned Line 3 Segments

- At Line 3, located in the Edmonton/Hardisty region, the Contractor will:
 - Prepare the site inspection plan with Enbridge.
 - Perform and document a visual inspection of the Line 3 abandoned pipe, its coating, and any evidence of soil contamination, including photos.
 - Take samples of the pipe coating and of the surrounding soil. The Contractor will determine the number and location of the samples to ensure sufficient data to draw meaningful conclusions.
 - Perform a laser scan of the exposed pipe to record dimensions and other structural data in a manner that the data can be inputted into existing numerical models alongside past laser scans.
 - Note that Enbridge will expose the abandoned segments and will cover and restore the excavated area after the Contractor completes the inspection.
 - The number of sites to be inspected is set at 3 sites for the purpose of cost estimating this RFP. After project award, the Contractor and Enbridge will finalize the number of sites and their location, maximizing synergies and logistics but keeping within the approved project budget.



Task 2. Laboratory Analysis

- The Contractor will arrange for relevant analyses of the collected samples (pipe coating and soil).
- The proposal should indicate the recommended analyses:
 - Test methods and purpose
 - Number of samples to be tested.

Task 3. Information Analysis and Reporting

- The Contractor will summarize Project activities and outcomes in a final report that will include methodologies and results, analysis and observations, and conclusions.
- The Contractor will also report to PARSC about progress at periodic intervals.

Information about pipeline history and the abandonment program will be made available to the Contractor. The Project will review the abandonment program that was implemented at the time and acquire and compile information necessary to assess the outcome of the abandonment program.

The Contractor will work with Enbridge teams (R&D, Land Services, and Western Region) and include site visits to accessible sites in order to evaluate present day surface conditions.

The final report will detail the approaches taken and results achieved in each task.

Reporting and Payment Milestones

The Contractor will provide short monthly status reports and will be available to teleconference with PARSC during its meetings, which are generally held every six weeks. The applicant will also propose major project milestones when the Contractor will provide a progress report about deliverables and PTAC will make progress payments.

Deliverables

1. Field work and laboratory analyses as described above.
2. Brief status and progress reviews with PARSC after each task
3. Draft reports at each project milestone
4. Draft final report, update of the final report per PARSC feedback, final version of the final report, and final presentation to PARSC

Budget

The applicant will indicate the cash budget and any other resources required to complete the Project. Contractor costs should include corrosion measurement, soil sampling, searching for



residual or leaked hydrocarbons and pipe pigging fluids, contamination testing, laser scanning, studying the coating condition, and logistics for getting the contractor to site.

Confidentiality and Indemnity

The proposal should only contain non-confidential information. Information deemed proprietary should not be included in the proposal.

The Contractor will be required to sign an agreement related to the project, which agreement will include confidentiality obligations. Disclosure of any project information will be at the discretion of PARSC. PARSC intends that key results and outcomes will eventually be made public. As PTAC will only facilitate Steering Committee decisions, the agreement will also contain an indemnity in favor of PTAC.

Intellectual Property

All intellectual property rights and publication rights for the deliverables and reports produced by the Contractor in this project (but not including Contractor models and tools) will be the property of the funding organizations in PARSC.

RFP Schedule

May 21, 2019	RFP issued
June 11, 2019	Deadline for receipt of full proposals by PTAC
July 2, 2019	Invitation to a short list of applicants to present and discuss their full proposal with PARSC
Between July 8 and July 25, 2019	Meeting of shortlisted applicants with PARSC
August 15, 2019	Selection of the best value proposal by PARSC

Contents of Full Proposals

The requested full proposal should contain a detailed Project description, budget, and schedule which would be used as the basis of a contract. A 5 to 10-page document addressing the following elements must be delivered electronically to PTAC by the deadline stated above:

- Scope of work
- Methodology
- Deliverables
- Schedule
- Personnel assigned to the project
- Qualifications



- Budget and costs, including information on breakdown by major scope element and
- Allocation of personnel and applicable rates
- Milestone payment information

The page count does not include any attachment such as CVs, company description or literature references that the applicant may wish to include.

Qualifications

The Contractor will have the following qualifications:

- At least ten years relevant to pipeline engineering, environmental assessment or regulatory reviews; experience in pipeline abandonment will be an asset.
- Demonstrated experience and skills in project management and report writing.

Selection Process

PARSC is composed of industry stakeholders with relevant expertise pertaining to pipeline technical and environmental considerations. PTAC will facilitate PARSC proceedings but will not be a decision-maker.

All submitted proposals will be provided to PARSC for review. PARSC will determine if proposals meet the requirements herein and provide an overall ranking based on proposal quality and Contractor qualifications. PARSC will make the final decision.

Once a selection of the best proposal has been made, all submission contacts will be notified by email regarding the outcome of their proposal.

Contact Information

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Attachment 1 - PARSC Program Background

Pipeline abandonment refers to the permanent removal from service of a pipeline. Depending on a number of factors, sections of pipeline may be abandoned in place or removed.

CEPA, the National Energy Board (NEB), the Alberta Energy and Utilities Board (AEUB) and the Canadian Association of Petroleum Producers (CAPP) have collaborated on technical and environmental issues associated with pipeline abandonment, which issues were discussed in the documents referenced below. In 1996, the NEB published a review document titled "[Pipeline Abandonment – A Discussion Paper on Technical and Environmental Issues](#)". In 2007, CEPA published a report titled "[Pipeline Abandonment Assumptions](#)" which discussed technical and environmental considerations for development of pipeline abandonment strategies. A comprehensive review was undertaken by the NEB as part of the Land Matters Consultation Initiative (LMCI) which involved four discussion papers on the different topic areas, 45 meetings and workshops in 25 communities across Canada, and written submissions from 13 parties. The [final LMCI report](#)², published in 2009 recommended that knowledge gaps on the physical issues of pipeline abandonment be addressed. Thus, Det Norske Veritas (DNV) was commissioned to conduct a literature review regarding the current understanding worldwide with respect to the physical and 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 published this [Scoping Study](#) in November 2010.

CEPA and PTAC have established the Pipeline Abandonment Research Steering Committee (PARSC) as a framework for collaboration to guide and direct innovation and applied research, technology development, demonstration, and deployment in order to address knowledge gaps summarized in the DNV Scoping Study.

Research findings from the PARSC projects will be shared on a broad scale throughout the pipeline industry, the oil and gas industry, as well as with regulators, government agencies, and other stakeholders.

² Online at http://publications.gc.ca/collections/collection_2010/one-neb/NE23-152-2009-eng.pdf