Request for Proposals
PARSC 006 – Decomposition of Pipe Coating Materials in Abandoned Pipelines

Date: July 16, 2014

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. Interested parties are invited to submit full proposals according to the specification provided herein.

Background

Soil and groundwater contamination risks exist for pipelines abandoned in-place. The pipe will eventually degrade, allowing contaminants that may be present to migrate into the surrounding environment. Decomposition products of pipe materials may present contamination risks. In particular, coating materials, particularly those used in the 1950's and 1960's could present risks to the environment.

These issues were reviewed in the prior DNV Scoping Study referenced in Attachment 1. Applicants are expected to read relevant sections of the Study, as this project was informed by it and information is not repeated herein.

Project Objective

The objective of this project is to acquire scientific information about the decomposition products of pipeline coating materials to enable the soil and groundwater contamination risks associated with abandonment to be understood and managed. Such information would be assembled from past studies, from the experience of pipeline operators, products and service suppliers and regulators, as well as from new laboratory studies, if required to fill knowledge gaps.

Project Scope

The types of material associated with pipelines coatings are coal tar, enamel, polyethylene tape, asbestos, asphalt, high density polyethylene and fusion bonded epoxy. Presently, polyethylene and fusion bonded epoxy are the most widely used coatings. Pipeline coatings used in the 1950's and 1960's included blown bitumen or coal-tar pitch covered by glass-fibre cloth, bituminized paper, hessian, or asbestos felt.

This project will involve a study of the potential contamination of soil or groundwater by pipe coatings and their degradation products. Consideration should be given to the environmental and human health effects of the chemicals, the rate and nature of chemical decomposition, potential for soil and groundwater transport and recommendations leading toward improved abandonment/disposal practices.

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 6 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. Assessment of pipe coating decomposition products and their potential for contamination
2. Status and progress reviews with PARSC
3. Draft reports at each project milestone
4. Final report and presentation to PARSC

Budget

The applicant will indicate the cash budget and any other resources required to complete the project.

Confidentiality

The Contractor will be required to sign a confidentiality agreement related to the project. Disclosure of any project information will be at the discretion of PARSC. It is the intention of PARSC that key results and outcomes will eventually be made public.

RFP Schedule

July 16, 2014	RFP issued
August 29, 2014	Deadline for receipt of Full Proposals by PTAC
September 16, 2014	Invitation to a short list of applicants to present and discuss their full proposal with PARSC
October 15, 2014	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 or by mail 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.

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, 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.