



REQUEST FOR PROPOSALS

Title	<i>Crude Oil Piping Inspections Review</i>
LRFP Number	<i>5591.20.01</i>
Project Manager	Austin Love
Submittal Deadline	April 3, 2020
Award Announcement	May 15, 2020

Submit Proposals to:

Austin Love, PWSRCAC Project Manager
Prince William Sound Regional Citizens' Advisory Council
P.O. Box 3089
Valdez, AK 99686

or

via email at the following address:
austin.love@pwsrcac.org

To verify receipt of proposal, proposer must contact **Austin Love** before the submittal deadline.

Proposal submission requirements:

- a. Proposals shall be submitted in electronic form in Adobe Portable Document form (PDF) (Acrobat 7.0 or later). The PDF file for the proposal itself shall be created directly from the authoring application. It is permissible but not preferred for appendices and other attachments to the proposal to be submitted in scanned PDF format.
- b. To assure consideration, proposals must be received by Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) by the deadline. Proposals received after the deadline may be considered but only if they can be accommodated by PWSRCAC's review process. Additional information provided after the deadline may also be considered but only if such information can be accommodated by the review process.

Inquiries regarding this request for proposals shall be directed to the project manager named above via email.

REQUEST FOR PROPOSALS

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC) is inviting proposals for a project to review procedures and results pertaining to internal and in-line crude oil piping inspections that took place at the Valdez Marine Terminal (VMT) from 2016 through 2018. Additionally, this project should educate PWSRCAC about the work done to prepare for, execute, and complete the 2016 – 2018 piping inspection projects that took place at the VMT.

The final work product of this effort is a report:

- summarizing the 2016 – 2018 internal and in-line piping inspection projects;
- summarizing the pertinent procedures and results;
- commenting on the extent to which Alyeska Pipeline Service Company (Alyeska) implemented best industry practices;
- commenting on the extent to which the 2016-2018 inspections were in alignment with 49 CFR Part 195;
- if warranted, provide recommendations regarding how Alyeska could improve the performance of internal and in-line inspections of crude oil piping at the VMT.

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ABOUT PWSRCAC

MISSION STATEMENT: Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers.

PWSRCAC was formed following the Exxon Valdez oil spill to advise Alyeska Pipeline Service Company and the public on issues related to oil spill prevention and response and mitigating the environmental impacts of terminal and tanker operations. PWSRCAC also advises oil shippers, regulatory agencies and elected officials on these issues.

PWSRCAC's membership is comprised of communities affected by the Exxon Valdez oil spill and interest groups with a stake in safe oil transportation in the region. PWSRCAC's 18 member organizations are communities and boroughs impacted by the 1989 Exxon Valdez oil spill, as well as Native, commercial fishing, aquaculture, recreation, tourism and environmental representatives.

PWSRCAC was chartered as a non-profit corporation by the State of Alaska on December 26, 1989. PWSRCAC is funded under a contract with Alyeska, and is certified as the alternative voluntary advisory group for Prince William Sound under the Oil Pollution Act of 1990 (OPA90).

Please note: All of PWSRCAC's products and the products resulting from contracts are considered public information. Proposals and work plans may be distributed throughout the organization for review and comment. Proprietary information should not be submitted in any proposal. PWSRCAC will not knowingly reveal the contents of a proposal that is not subsequently accepted for contract; however, PWSRCAC accepts no liability should such contents inadvertently be revealed to third parties.

1. PROJECT

INTRODUCTION

From 2016 through 2018 Alyeska undertook substantial projects to internally inspect the majority of large diameter crude oil piping at the VMT. Those inspections involved the use of a few types of in-line or internal inspection tools that assessed the remaining wall thickness and geometry of the piping segments. The piping segments included the majority of on-land crude oil piping and essentially all of the large-diameter crude piping that extends over the water out to the ends of Berths 4 and 5 (the only in-service berths at the VMT). To enable the internal and in-line inspections, Alyeska significantly modified portions of the VMT’s crude oil piping system including the installation of two pig launchers, two pig receivers, and multiple split-tee pieces. Overall, the results of those inspections indicated that no significant repairs were needed to any of the piping sections evaluated; in other words, the piping looked to be in good condition after 40-plus years of service.

Table 1. Segments of piping that were internally inspected at the Valdez Marine Terminal from 2016-2018. Magnetic flux leakage was used to determine remaining wall thickness for all the segments listed in this table.

Piping Segment	Relief Piping (36")	Process Piping (24")	Process Piping (48")	Inspection Tool Type
East Metering Building	455'	425'		Robotic Crawler
East Metering Building to East Tank Farm	1,100'		2 x 1,100'	Robotic Crawler (Relief Piping) & Smart PIG (Process Piping)
East Tank Farm			2 x 2,135'	Smart PIG
East Tank Farm to West Metering Building			2 x 2,900'	Smart PIG
West Metering Building to Berths 4 & 5			~1,300' and ~1,100'	Robotic Crawler
Berth 4 & 5 Over-Water Piping			1,000' and 1,500'	Robotic Crawler

It is the Council’s understanding that these substantial inspections were done in the absence of any regulatory requirement on the VMT’s crude oil piping system. However, the Council is aware that for other crude oil piping systems, regulations contained in 49 CFR Part 195 spell out internal or in-line inspection requirements. In 2014, the Council’s contractor, Dynamic Risk Assessment Systems Inc., recommended 49 CFR Part 195 as “guidance when developing the inspection program for the VMT piping.” Despite there being no current regulatory requirement for the VMT’s crude oil piping, the Council would like to know if these 2016-2018 piping inspections were in alignment with the requirements of 49 CFR Part 195.

To date, Alyeska has provided the Council with regular, general updates regarding the planning, execution, and results of these projects, but the Council has not reviewed any of the inspection reports and current procedures used to document and perform this work. In 2014, the Council conducted a project reviewing the planning of these 2016-2018 piping inspection projects, and that report is available upon request. That 2014 Council project reviewed some older piping inspection procedures. For this project, the Council would like to hire a consultant to conduct a third-party technical review of the internal and in-line inspection projects Alyeska conducted at the VMT from 2016-2018, and the procedures Alyeska used and developed in regards to that piping inspection work.

GOALS

The primary goals of this project are to evaluate if Alyeska implemented best industry practices in regards to the 2016-2018 internal and in-line inspection projects of crude oil piping at the VMT, promote where best practices were used, ensure that hazards were properly addressed, and if warranted, identify how to improve the procedures used to manage such piping inspection work. In addition to those primary goals, this project is meant to be educational, it should help PWSRCAC's Board of Directors generally understand how the inspections were done, the essential results of these inspections, and how Alyeska plans to use the data gained from these projects in the overall integrity management of crude oil piping at the VMT. Finally, the Council would like to understand if the 2016-2018 crude oil piping inspections were in alignment with the requirements of 49 CFR Part 195.

DELIVERABLES

Scope of Work. The scope of work shall include, but is not limited to the following:

- 1. Document Review** – The consultant would review procedures and inspection reports associated with the 2016-2018 crude oil piping internal and in-line inspection projects at the VMT. The procedures reviewed should be those developed and currently used by

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Alyeska. The inspection reports would be those written by Alyeska's inspection contractors (there are likely at least three of those reports to review) and/or Alyeska staff. Those procedures and reports would need to be requested from Alyeska by the consultant.

As needed, this may also require the review of other related documentation from Alyeska, such as piping and instrumentation diagrams and descriptions of Alyeska's 2016-2018 crude oil piping internal and in-line inspection projects. Such additional documentation would also need to be obtained from Alyeska. A document control system and or non-disclosure agreement may be needed between Alyeska and the consultant to protect confidential information.

A progress report shall be submitted to the project manager upon preliminary completion of the Document Review phase. At a minimum, the progress report shall include:

- An introduction;
- An overview of progress to date;
- Identification of any difficulties encountered in accomplishing the work;
- A schedule for completion of the remaining tasks;
- Specific recommendations concerning the matters addressed.

2. Site Visit and Discussion– The consultant would travel to Valdez, Alaska to conduct a site visit at the Valdez Marine Terminal to familiarize themselves with the crude oil piping system and learn more about the 2016-2018 internal inspections from Alyeska staff. Ideally, at least one Alyeska manager or engineer and field technician involved in the 2016-2018 internal and in-line inspection projects would accompany the consultant during the field visit to answer questions and provide information regarding those inspections. This site visit and discussions with Alyeska staff should help the consultant clarify or address questions that arise during the document review phase of this project. This site visit would involve meetings with Alyeska staff to share information that

enables the consultant to achieve the goals of this project. Part of this phase could also include meetings with Alyeska staff in Anchorage, Alaska to share information about the 2016-2018 VMT piping inspection projects because many Alyeska managers are based in Anchorage rather than Valdez.

This deliverable is flexible, if a proposer believes the information exchange needed to complete this project does not require a site visit, PWSRCAC would be interested in proposals suggesting alternatives to this deliverable.

A progress report shall be submitted to the project manager upon completion of the Site Visit and Discussion phase.

- 3. Draft Report** – The consultant would write a report summarizing the results of the Document Review and Site Visit and Discussion phases of the project. The primary audiences of the report are the PWSRCAC Board of Directors and Alyeska management. This draft report would include sections addressing all the stated goals of this project. The written report shall be of a professional quality suitable for public release. The draft report would be submitted to PWSRCAC for review and comment. The consultant would meet, via teleconference, with PWSRCAC staff and members of the Terminal Operations and Environmental Monitoring Committee to address all comments and questions regarding the draft report. The consultant would work with the PWSRCAC project manager to revise the draft report.

The report should address the following questions, but not necessarily limited to these:

- What was done to prepare the VMT crude oil piping for internal or in-line inspection (e.g. piping modifications, cleaning, etc.)?
- What kind of tools and detection technology were used to inspect the piping (e.g. robotic crawler, magnetic flux leakage, etc.)?

- Were the inspection tools and technologies appropriate given the characteristics of the VMT's crude oil piping system?
- What crude oil piping segments were included in these inspections? Which were not?
- What were the overall results of all the 2016-2018 internal or in-line inspections (e.g. maximum wall loss encountered, corrosion rates, etc.)?
- Were the final inspection reports in alignment with best industry practices and with 49 CFR Part 195?
- Was the inspection data properly quality controlled, validated, analyzed, and stored for future use?
- Were appropriate supplementary, follow-up actions taken in response to anomalous inspection data?
- What minor or major repairs were needed after the inspections were complete?
- How were the inspection results used to determine future internal or in-line inspection periodicity? Were appropriate factors of safety considered in this determination?
- Are Alyeska's, VMT specific, internal and in-line inspection procedures in alignment with best industry practices (e.g. API 1163, API 1160) and with 49 CFR Part 195?

4. Final Report – The consultant would revise the draft report, based on comments received from PWSRCAC staff and members of the Terminal Operations and Environmental Monitoring Committee, and submit a draft-final report to PWSRCAC. The consultant would meet, via teleconference, with PWSRCAC staff and members of the Terminal Operations and Environmental Monitoring Committee, to address all

comments and questions regarding the draft-final report. The consultant would work with the PWSRCAC project manager to revise the draft-final report. The draft-final report would undergo a comprehensive copyedit by the PWSRCAC Director of Communications and the consultant would work with the PWSRCAC project manager to incorporate copyedits as deemed mutually appropriate. After all mutually agreeable content and copyedit revisions are made to the report it will be considered final.

- 5. Results Presentation** – The final version of the report will be presented to the PWSRCAC Board of Directors during their May 2021 meeting in Valdez, Alaska. This meeting will be the venue wherein the PWSRCAC Board will decide whether or not to accept the final report from the contractor, as meeting the terms of the contract and being suitable for public release. Once the Board of Directors accepts the final report it will officially be considered complete.

For the May 2021 Board meeting, the Council’s project manager, Austin Love would prepare and deliver a project summary presentation, and the contractor would attend this presentation via teleconference to answer questions about the project and final report. The contractor would help the project manager prepare this presentation, providing technical feedback on its content. The purpose of this presentation is to provide a summary overview of the project, highlight critical findings, and discuss recommendations identified by the contractor, such that the Board of Directors can decide which recommendation(s) they might endorse and recommend that Alyeska Pipeline Service Company take action on.

PROPOSED SCHEDULE

1. May 15, 2020 – Contract Award Announcement
2. May through June 2020 – Finalize Contract, Begin Project and Document Review
3. August or September 2020 – Complete Site Visit
4. October through December 2020 – Complete Draft Report
5. January through March 2021 – Complete Final Report
6. May 2021 – Results Presentation

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BUDGET

PWSRCAC has budgeted \$60,000.00 for a contractor to complete this project. Proposers should treat that amount as a maximum for this project.

2. GENERAL REQUIREMENTS

PWSRCAC Costs. PWSRCAC is not liable for any costs incurred by the proposer during the proposal preparation.

Single Point of Contact. The contractor will designate one person as the project manager and point of contact with PWSRCAC. In the case of multiple investigators, one shall be designated as the lead to serve as the project manager and point of contact.

Subcontracts. Proposers may subcontract minor portions of the contract. However, the proposer must have the major elements of expertise in house and demonstrate the ability to manage the subcontractor.

Final Report. The contractor shall submit a written final report. The final written report shall include an executive summary and be of a professional quality suitable for release.

The Final report must be submitted in an electronic file in PC format in MSWord, and data in Excel or Access. Project maps, photos or other graphics shall be included as part of the digital submittal in a common graphic format. Any data or collection of information resulting from work done under the contract is the property of PWSRCAC and shall be submitted in Microsoft Access or Excel to PWSRCAC.

Final Payment. A portion of the total payment to the contractor will be withheld until all requirements are met. No interest will be paid on any withheld payments.

3. REQUIRED PROPOSAL CONTENTS

Any submitted proposal shall include the following as appropriate to the requirements of the scope of work:

Cover Sheet

- Name, address, telephone number and email address of proposer.
- RFP Title and Number
- Name of Principal Consultant(s)
- Cost of Proposal

Table of Contents. May include a list of Tables and Figures if appropriate.

Introduction. This section shall include the RFP title and number, brief general discussion of the problem and the proposed project. Scientific and technical terms shall be clearly defined and a list of pertinent enclosures included.

Goals and Deliverables. Describe how the proposer intends to address the specific goals and provide the deliverables of the work requested, as listed above.

Materials and Methods. Describe in detail the methods to be used and how they will produce the deliverables. Cite references and provide background information where applicable and as needed.

Project Duration and Work Schedule. Describe the schedule in which the proposed work will be completed. Include specific milestones, work phase completion dates and the timing of progress reports. Indicate what will be achieved by the completion of each milestone or phase of work.

Management Scheme. Clearly describe how the work will be managed including the role of each key individual expected to be involved in the work. Provide names and resumes of each. This section should also include information on how the scope, time and costs of the project will be controlled.

Budget. Include information about the total costs (cited in U.S. Dollars), professional fees, expenses and contingencies. In case of overhead rates or administrative fees, give percent of direct personnel cost. Provide a breakdown of hours per individual and rates per individual. If subcontractors are used, indicate the percentage of work to be performed by each subcontractor with respect to the entire proposed scope of work.

Consultant/Contractual Services. Indicate if, how, and why a subcontractor will be used for any portion of the work.

Logistics and On-Site Visits. Describe logistics and schedules for all travel in conjunction with the proposed work.

Statement of Qualifications. Describe, relevant to the proposed work, previous work experience, related technical accomplishments and educational background of each of the principal investigators and subcontractors if used. If multiple investigators are involved, describe the role of each individual.

References. The names, contact persons, and telephone numbers of firms for which the respondent recently performed services shall be included. A minimum of three such references is suggested.

Conflict of Interest. Describe all financial, business or personal ties contractor has to Alyeska Pipeline Service Company or members of the Alyeska consortium, excluding normal commercial purchases of petroleum products.

4. SUBMITTAL AND EVALUATION PROCESS

A. Evaluation Criteria. Proposals will be evaluated based on, but not limited to, the following:

- 1) **Proposal Format.** Does the proposal follow the requested format?
- 2) **Proposed Scope of Work.** Does the proposal clearly address the requested scope of work?
- 3) **Technical Approach.** Is the proposed approach to the scope of work technically feasible?
- 4) **Qualifications.** Does the principal investigator possess expertise and experience to assure successful completion of the scope of work?
- 5) **Management Scheme.** Will the proposed management scheme reasonably lead to successful development of the deliverables?
- 6) **Schedule.** Is the proposed schedule for completion of the scope of work in accordance with the requested project duration and schedule?
- 7) **Deliverables.** Are the proposed deliverables in accordance with the deliverables requested in the scope of work?
- 8) **References and Conflicts of Interest.** Does a reference check indicate proposer has the potential to successfully complete the proposed scope of work? If conflicts of interest are stated, are they sufficiently relevant to preclude an offer to perform the work for PWSRCAC?
- 9) **Budget and Cost Justification.** Is the budget reasonable and adequate for the work proposed? Does the budget provide good value for the funds requested?

B. Contract Award. The successful proposal will be the one that, in PWSRCAC sole opinion, best meets the needs as outlined in this RFP. In the event that PWSRCAC determines that no proposal completely meets all of the needs as outlined in the RFP, PWSRCAC shall have the option not to accept any proposal or enter into any contract whatsoever. In the alternative,

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PWSRCAC may select the proposal or proposals that, in its sole view, most nearly conform to its needs as outlined in this RFP; and then negotiate directly with that contractor to refine the proposal to achieve a contract that fully satisfies PWSRCAC needs.

C. Professional Services Contract. A copy of PWSRCAC's standard professional services contract form can be found at http://www.pwsrcac.org/wp-content/uploads/filebase/newsroom/rfps/professional_services_agreement.pdf or can be made available upon request.

D. PWSRCAC Information. The following information about PWSRCAC is available upon request to the project manager:

PWSRCAC/Alyeska Contract

PWSRCAC Bylaws

PWSRCAC Observer Newsletter

PWSRCAC Brochure

PWSRCAC Annual Report