

Cook Inlet Pipeline Integrity Assessment

Update to Cook Inlet Regional Citizens Advisory Council

April 5th 2019

Goals

- Anticipate potential problems as Cook Inlet pipeline infrastructure ages
- Recommend risk reduction measures for implementation *before* further loss-of-integrity issues
- Ensure high quality recommendations by gaining input from *experts, operators,* and the Cook Inlet *public*

Phases

- **Phase 1** – Describe the regulatory framework for pipelines and inventory pipelines in Cook Inlet
- **Phase 2** – Validate and improve the inventory with the pipeline operators and investigate loss of integrity events
- **Phase 3** – Expert panel reviews information collected, interacts with the operators and public, and develops and documents their recommendations

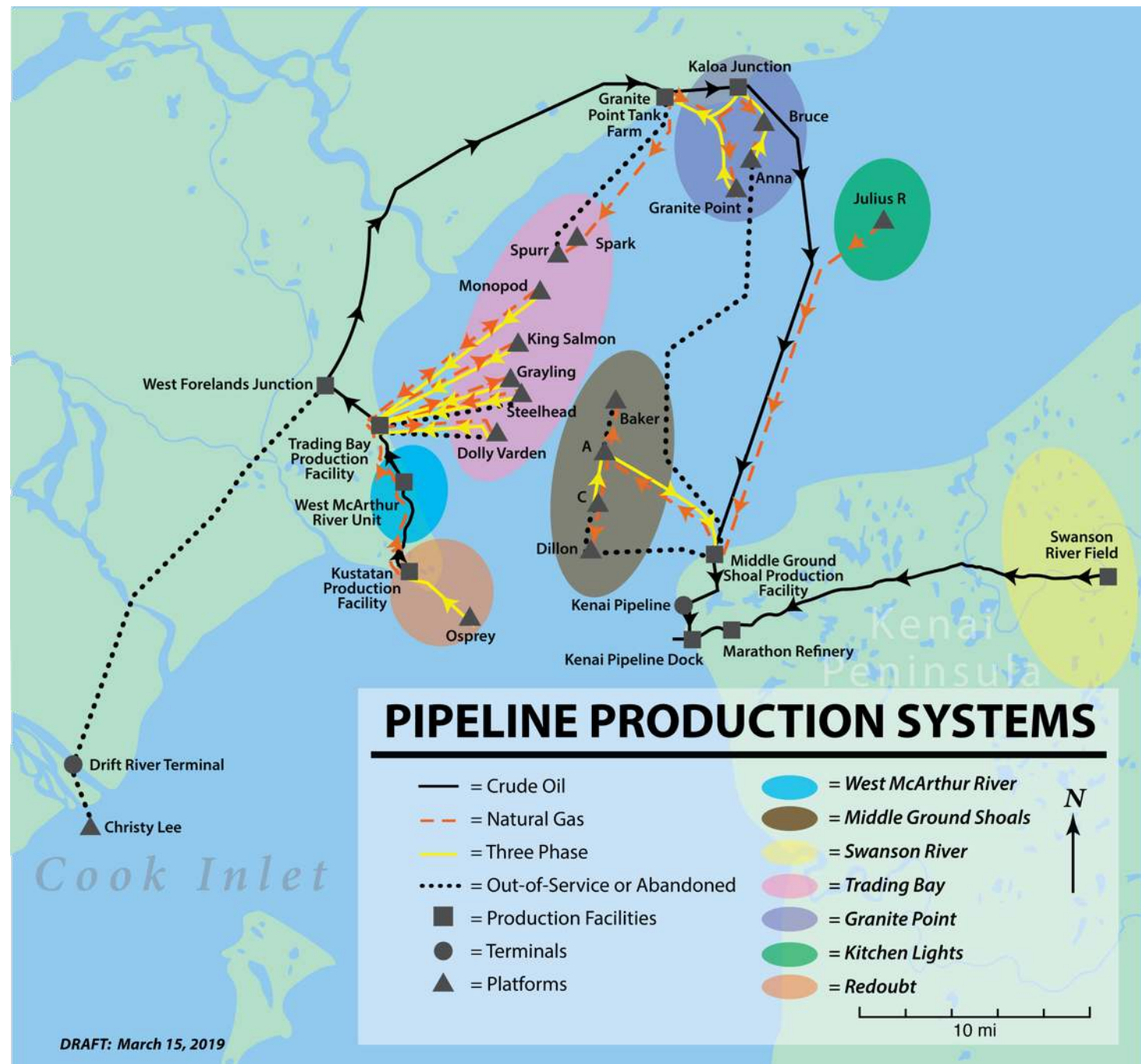
Scope

- Cook Inlet area (on land & subsea)
- Pipelines that transport oil, gas, or three-phase liquid *associated with oil production*
- Preventing & promptly detecting spills (age, material, maintenance/integrity management, leak detection, security)
- So...**not** including:
 - Refined product
 - Gas lines associated with gas production or commercial distribution
 - Spill preparedness or response

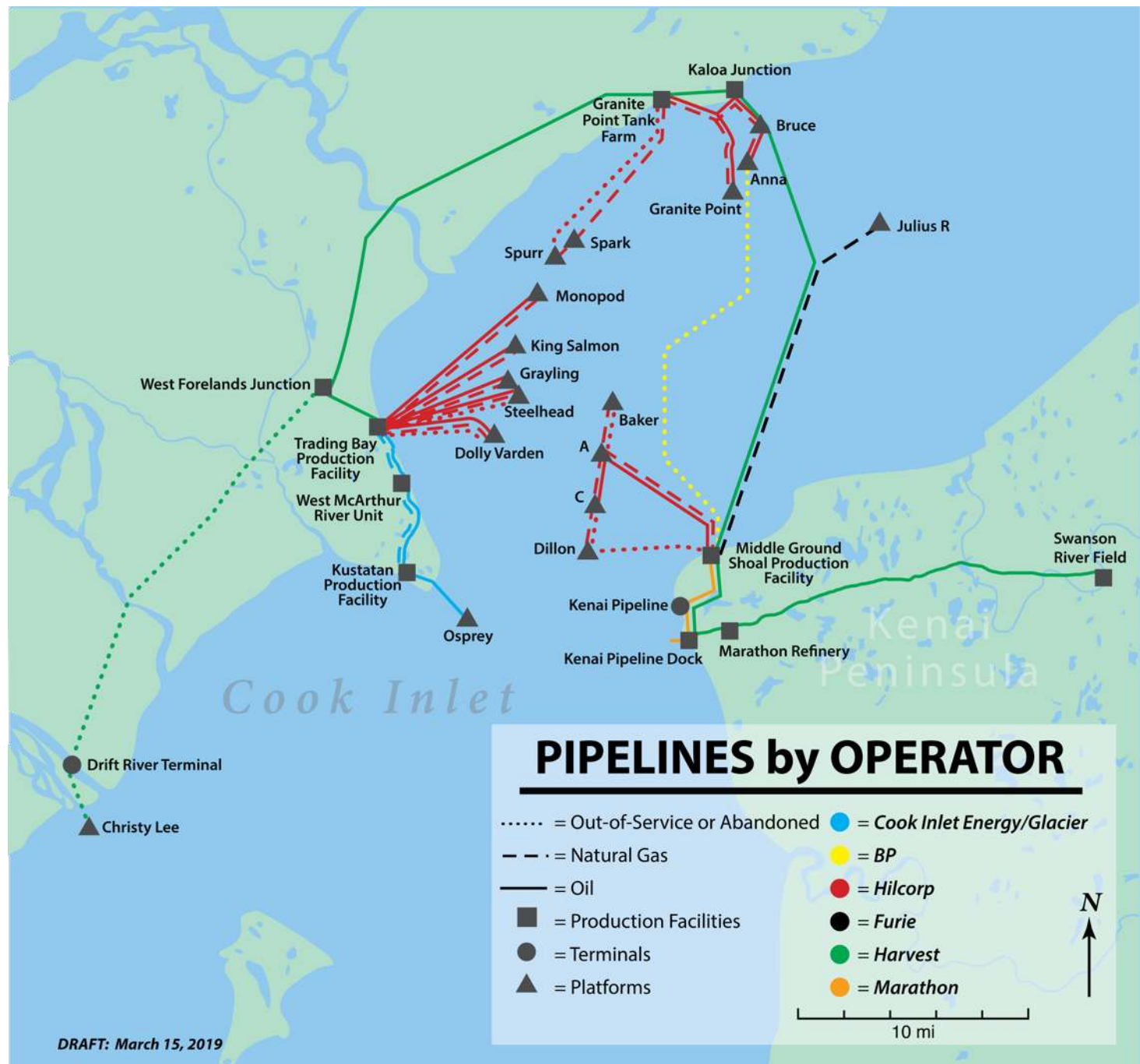
Scope



Systems

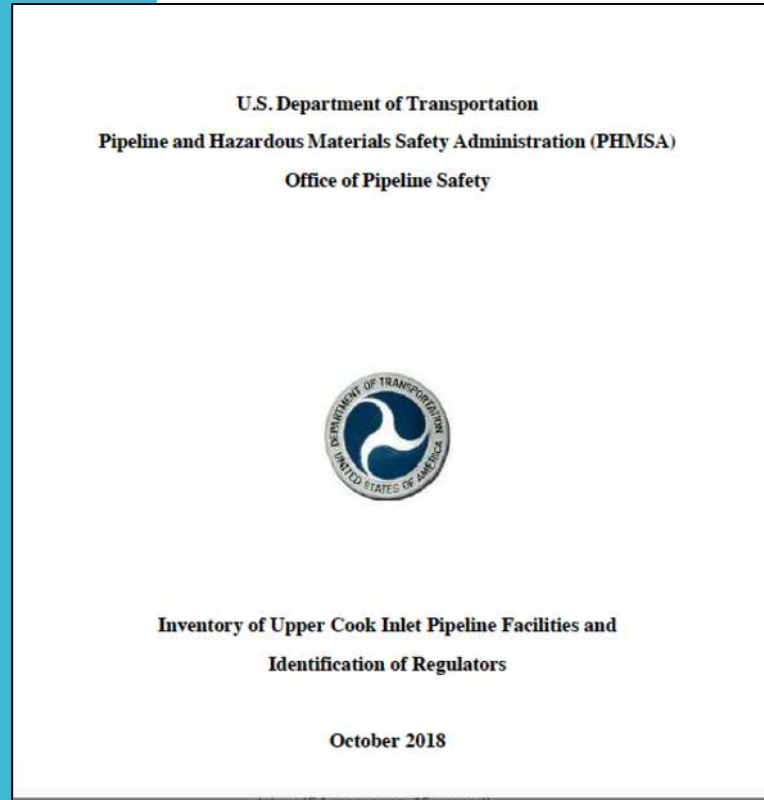


Operators



PHASE 1 –

Regulatory Report and Inventory Overview



- PHMSA Task Force concluded public report
- Reviewed by ADEC

PHASE 2 – Inventory

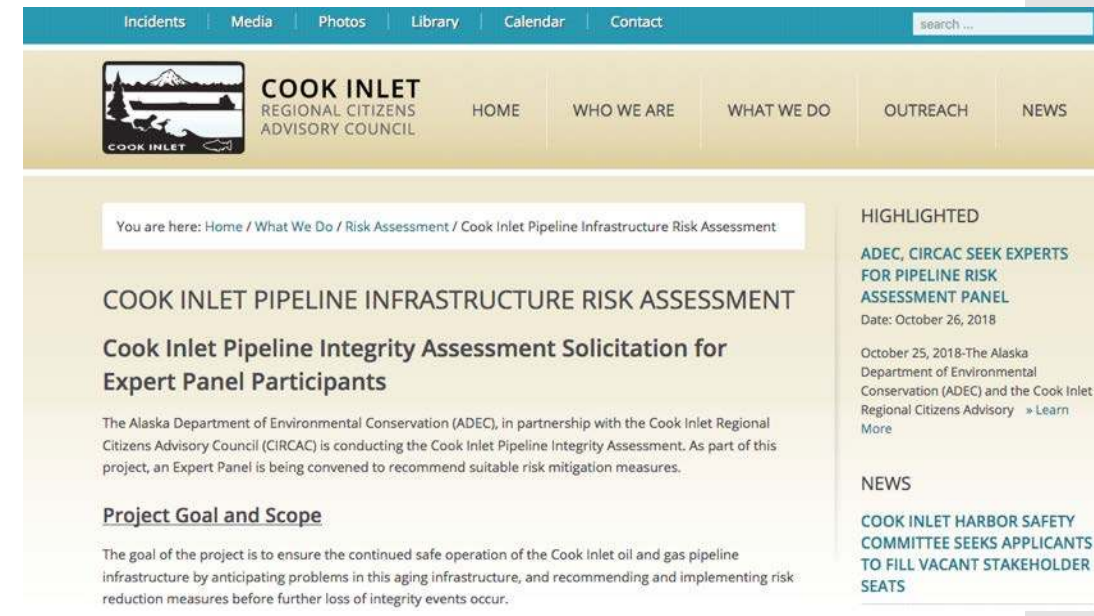
- Incorporating information from PHMSA report
- ADEC and PHMSA loss-of-integrity spill data is reviewed and compiled into database
- Meetings with Operators to review information collected and ask questions about pipeline questions
- Any information/feedback received from operators has been incorporated into the database
- All operators with active lines within Cook Inlet have been given the opportunity to provide feedback

PHASE 3 –

Expert Panel

Sought experts in:

- Crude oil production operations and measures used to
 - Inspect for aging conditions
 - Detect leaks
 - Prevent leaks and spills
- Pipeline design and specifications
- Loss-of-integrity root cause investigations and common cause analysis
- Analysis of leak data and general engineering practices



PHASE 3 – Expert Panel



Chris Dash

Chris Dash

- Worked in many different aspects of integrity management in Alaska:
 - Began working on corrosion issues in a large oil company's research division.
 - Other jobs include various environmental, corrosion monitoring, corrosion chemical, and inspection-related jobs.
 - Current duties focused on chemical injection and corrosion monitoring

PHASE 3 – Expert Panel



Joe Howell

- Has worked in the Alaska oil industry in both upstream production activities and crude oil transportation for the last 35 years.
- Joe's experience includes:
 - Field development and planning, project engineering, project management, extensive facility engineering and operations support.
 - Risk assessment and identification, process safety and process risk mitigation
 - Currently role as a process safety subject matter expert

PHASE 3 – Expert Panel



Andrew Kendrick

- His work focuses on risk analysis, regulatory compliance, and integrity management in the natural gas, petroleum and pipeline industry.
- Certifications include:
 - American Institute for Professional Geologists
 - American Society of Mechanical Engineers
 - American Gas Association
 - National Association of Corrosion Engineers
 - Common Ground Alliance

PHASE 3 – Expert Panel



Chris Myers

- Over his 32-year career he was responsible for all aspects of daily operations from maintenance and well head to sales on all oil and gas properties in the Cook Inlet area.
- Fulfilled a variety of industry duties including:
 - Roustabout
 - Assistant welder
 - All operator positions
 - Field Foreman
 - Field Superintendent
 - Area Manager

PHASE 3 – Expert Panel



Dr. Shirish Patil

- 33 years of global experience in oil and gas R&D and transportation projects
- Research experience spans various areas of oil and gas research and development of new technologies for improved oil and gas recovery and infrastructure integrity.

PHASE 3 – Expert Panel

Expert Panel Charter:

Goal: Maintain the structural integrity of Cook Inlet pipelines by recommending measures to reduce the risk of failures of this aging infrastructure.

Charge: provide recommendations on measures, programs, and practices to monitor and address common causes of failures identified in the analysis of spill data. These recommendations should focus on issues associated with the age-related factors.

The Expert Panel is **not** being charged with providing a critique of past or present integrity management and spill mitigation programs in the Cook Inlet area.

The Panel will strive for consensus in their recommendations.

PHASE 3 –

Expert Panel

Next Steps

- Expert panel will receive and review the pipeline inventory report in April.
- They will meet together and then with the operators in May
- They will work together to develop recommendations on ways to keep the pipelines safe and producing into the future. They will meet by webinar and may hold another in-person meeting if necessary.
- Their recommendations will be contained in a report that is expected to be issued this fall.

PHMSA Technical Assistance Grant

Cook Inlet Pipeline Infrastructure
Public Outreach Campaign

Purpose

This project provides an opportunity for Cook Inlet communities and the public to engage in developing strategies for pipeline safety and heightened emergency response for Cook Inlet pipelines. The project is funded under a Technical Assistance Grant provided by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Public Website

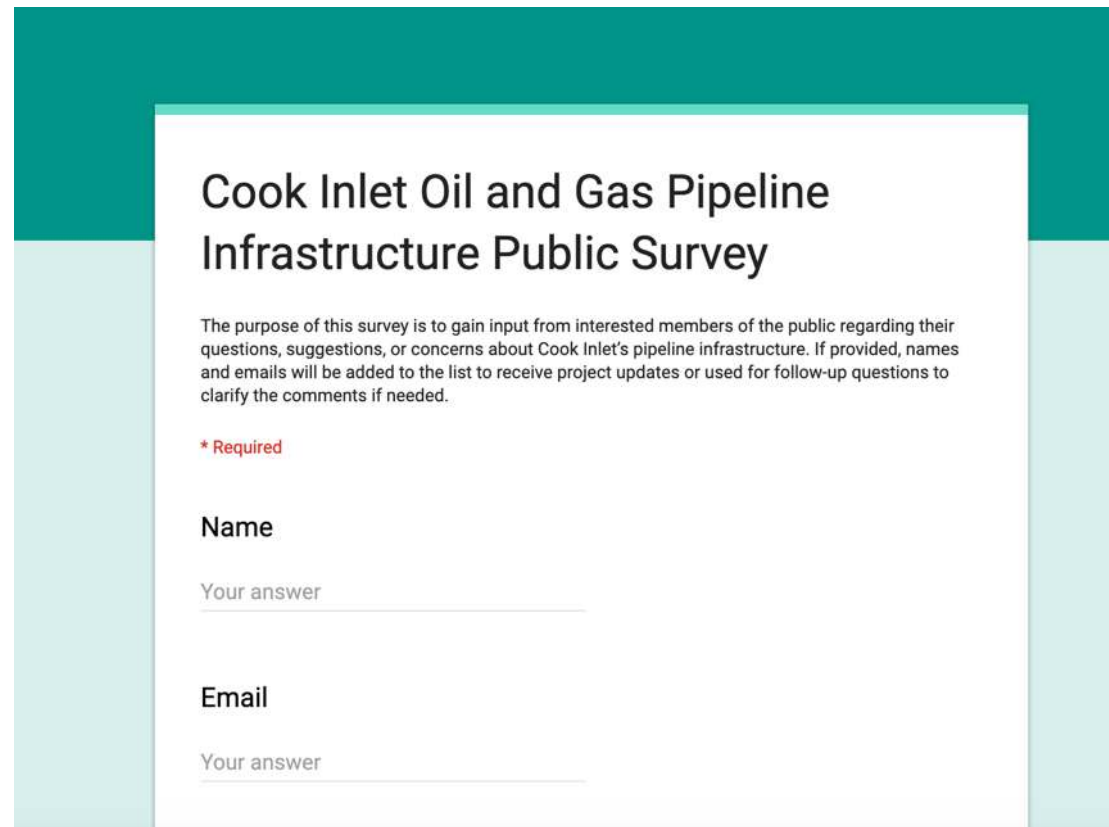
The website provides background information on Cook Inlet pipelines as well as information about a public webinar and public meeting opportunities offered as part of the same project. It also includes an online survey intended to elicit either concerns, questions, or suggestions from interested members of the public. Information exchanged and comments provided by the public will be compiled into a summary report that will be shared with the public, operators, and state and federal agencies.



Public Survey

Online Survey

The purpose of this survey is to gain input from interested members of the public regarding their questions, suggestions, or concerns about Cook Inlet's pipeline infrastructure. If provided, names and emails will be added to the list to receive project updates or used for follow-up questions to clarify the comments if needed.



The screenshot shows a web-based survey form titled "Cook Inlet Oil and Gas Pipeline Infrastructure Public Survey". The form is set against a teal header and light blue sidebars. It includes a purpose statement, a red asterisk indicating required fields, and input sections for "Name" and "Email", each with a "Your answer" label and a text entry line.

Cook Inlet Oil and Gas Pipeline Infrastructure Public Survey

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*** Required**

Name

Your answer

Email

Your answer

Public Engagement

- **Public Webinar**

Date: April 25, 2019 (time TBD)

This open webinar will provide an opportunity for interested members of the public to offer questions, suggestions, or any concerns they have concerning Cook Inlet pipeline infrastructure.

- **Public Meeting** May 8, 2019 (1-5pm)

Location: UAA Anchorage

This meeting will provide an opportunity for interested members of the public to learn more about Cook Inlet pipeline infrastructure, how it works, and how it is maintained. It will include an opportunity to ask questions of the pipeline operators

Thank you

Questions?