

## **Comments and Requests for Additional Information**

Regarding

# Cook Inlet Energy, LLC

## Cook Inlet Area Production Operations Oil Discharge Prevention and Contingency Plan

Submitted

By

## **COOK INLET REGIONAL CITIZENS ADVISORY COUNCIL**

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## Overview

The ADEC web page included a redline version of the plan but does not provide a complete updated (redline incorporated) clean version with which to compare changes noted in the redline version provided. This makes clarification of changes more difficult when reviewing the plan for comments. The practice of providing the red line version and clean (incorporated) version varies from plan to plan.

*RFAI:* Recommend standardizing "Plan Under Review" information by including both red line revision and clean incorporated versions to facilitate easier plan review for comments.

## Basis for Determination of Significant and Substantial Harm

This section mentions both an offshore length of pipeline in Foggy Island Bay (which is near Prudhoe Bay, not Cook Inlet) and an onshore portion that crosses tundra.

RFAI: Please correct reference to pipeline location.

## PART 1 RESPONSE ACTION PLAN

#### **1.1 EMERGENCY ACTION CHECKLIST**

#### **Figure 1.1-1 Initial Phone Tree**

The flow chart on page 1-2 (which we understand to be replacement of the other flow chart that was in the plan previously) indicates that the first person to identify a spill should contact the Site Lead. However, the table listing "Actions Taken by First Person to Discover Spill" indicates that this could be either the Site Lead or the Chief Operating Officer.

RFAI: Please ensure that the flow chart and table are consistent.

#### Action Taken by the First Person To Discover The Spill

This checklist does not have a figure or table number associated with it. The list also does not ask if any personnel have sustained injuries or how severe. This is crucial information if anyone has been severely injured it is important to get medical assistance on its way as soon as possible to be standing by for entry as soon as the site is safe to do so.

*RFAI: Please add query regarding injured personnel. Add figure number to checklists where appropriate.* 

#### Site Lead Initial Action Checklist

This checklist asks if the spill is affecting or about to enter a stream. While this is a good question to ask, subsequent plan sections indicate that spills could potentially

reach Cook Inlet as well. Additionally, this checklist does ask about Injuries, but directs information to "medic" for location and extent of injury. Safe entry location should also be included here to ensure facility medical staff and paramedics will enter the area from the closest and safest entry point and exit safely. This checklist indicates the information should be passed to Trading Bay Production Facility and all other onsite personnel. However, it does not direct the information to be shared with the Kustatan Production Facility.

RFAI: Recommend rephrasing question about streams to include any streams, lakes, or marine waters. Recommend adding language to "identify safest entry and exit points"" to access injured personnel and to depart spill site. Please clarify if the Site Lead Initial Checklist is meant to be used solely at the Kustatan Production Facility or adjust language accordingly.

#### **Operations Chief Checklist**

This checklist addresses and is titled, "Identify and Verify Hazardous Materials involved in Risk Assessment. While technically correct in description, it may be better to use response terminology to describe this work, i.e., "Site Characterization". This checklist also addresses evacuation of the area. However, the Site Lead has already initiated evacuation of on-site personnel if appropriate. It may be more appropriate for the Operations Chief to verify evacuation status and/or the return of evacuated personnel along with verifying safety for responders. Additionally, site entry and exit points should be established to accommodate safe movement of personnel and equipment in all environmental and operational conditions.

*RFAI:* Consider using standard response terminology like "Site Characterization." Additionally, recommend coordinating evacuation of facility personnel and verification by Operations Chief and Site Lead.

#### HSE Lead Initial Checklist

This checklist has the HSE receiving information from the Operations Chief. However, while it seems implied it does not indicate what information is supposed to be provided/received, nor does it direct the HSE to verify any of it. This important function by the HSE Lead ensures all conditions are safe for responders and facility personnel along with the surrounding environment, especially when the initial advisory is provided to the Incident Commander. Additionally, this checklist directs HSE lead to see Figure 1.1-1 for Initial Spill Report Form. Based on current plan revisions, the Spill Report Form (not "Initial" Spill Report Form) is now Figure 1.1-2

RFAI: Recommend HSE Lead document their verification and assessment of the physical situation and documented information received from the Operations Chief prior to advising Incident Commander. Please also verify and update figure reference.

#### Figure 1.1-2 Spill Report Form

This spill report form is referenced in the HSE Lead checklist. However, it is not clear whether this particular form is intended for use as an after-action report tool, an emergency response tool or presumably, both. If it is intended for use as a response tool, it should provide prompts to document the information cited within the various checklists (First Person, Site Lead, Incident Commander, and HSE Lead) to aid those individuals and to serve as a comprehensive document meant to capture the information collected by individual responders.

*RFAI: Please clarify use of the Spill Report Form. Recommend adjusting this form and the initial checklists to compliment and support each other in order to capture essential information to support safe response operations and to document the response actions.* 

#### **1.2 REPORTING AND NOTIFICATION**

#### Table 1.2-2 Agency Notification Chart

This section lists various agencies and individuals for notification. However, several personnel listed are no longer in those positions. Philip Johnson with the U.S. Department of Interior has retired and Eric Mohrmann is no longer the Emergency Manager with the Kenai Peninsula Borough LEPC.

RFAI: Recommend verifying all contacts to ensure accuracy.

#### 1.3 SAFETY

#### **1.3.3 Personal Protective Equipment**

This section lists Personal Protective equipment articles responders are expected to use. Along with hard hats and safety glasses oil resistant boots are listed. However, it does not list safety toe boots.

RFAI: Recommend including oil resistant safety toed boots.

#### 1.3.4 Evacuation Plans

#### Figure 1.3-6 Evacuation Plan for Mosquito Pad

This figure is illegible in the electronic version.

#### Figure 1.3-7 Evacuation Plan for West Foreland Pad

This figure is illegible in the electronic version.

RFAI: Please verify and replace/repair as needed.

#### **1.4 COMMUNICATION**

#### 1.4.1 General

This section describes the communications systems used in various response phases. Citing CIE's on-site telephone/fax communications network will be used. However, it does not mention email or texting as alternate methods of communications. While fax is still used by many for various security reasons, its use during response operations may prove to be slower than and not as portable as other methods.

*RFAI*: *Please clarify the rationale for not including email or texting as an alternate communication method.* 

#### **1.5 DEPLOYMENT STRATEGIES**

#### **1.5.2 Immediate Response Strategies**

#### UTILIZATION OF ON-SITE RESOURCES

This section indicates that on-site personnel numbers are provided in Table 2.1-1 in Section 2.1. However, Section 2 Table of Contents indicates that this table (Summary of Typical Onsite Personnel, Duties/Job Description, Training & Frequency) is actually Table 2.1-2 with Table 2.1-1 being "Part 2 ADEC References". Moreover, while Table 2.1-2 is meant to indicate on-site personnel numbers, it is not clear by looking at the table how many personnel are supposed to be on-site. The table only lists 9 position titles, position descriptions, and required training for each.

Additionally, Sections 2.1.1 and 2.1.2 text discusses facility personnel but does not indicate numbers of personnel. Table 2.1-2 Summary of Typical Onsite Personnel, Duties/Job Description, Training & Frequency does not indicate the numbers of each category of personnel.

*RFAI: Please clarify where numbers of onsite personnel are shown to facilitate a fair evaluation of the onsite workforce.* 

#### 1.5.3 Utilization of Spill Contractor

#### GENERAL STRATEGY

This section indicates that for a major spill response, the Chief Executive Officer responsible for Cook Inlet Energy operations in Alaska will assume the role of the Incident Commander. However, Section 1.5.2 "Immediate Response Strategies, General Strategy" states that. "the President acts as the Incident Commander (IC); the Chief Operating Officer is the Alternate IC."

*RFAI: Please clarify which CIE officers will act as the Incident Commander.* 

#### **ON-LAND SPILL RESPONSE**

This section discusses transportation of response equipment to the west side of Cook Inlet and indicates that, "weather conditions, spill site location, and equipment capabilities will play a significant factor in the deployment of resources for spill response. Section 2.4 addresses adverse weather conditions." This section also indicates that, "Barges could haul possibly eight or more [200-240 bbl] tanker trucks at a time." then goes on to say "Adverse weather conditions (ice) may preclude the ability to use vessels to transport heavy equipment." Section 2.4.1 states, "Especially adverse weather may limit spill response activities." And Section 2.4.7 indicates that. "Ice can be present in Cook Inlet during the months of November through April. Specific information on sea ice conditions and how it may impact response actions are discussed in CISPRI's Technical Manual (Appendix B)." However, none of these discussions address barges landing response equipment in the winter.

RFAI: Please clarify how response equipment will be landed by barge in ice conditions.

#### **OFFSHORE SPILL RESPONSE**

This section indicates that, "CISPRI spill response equipment is pre-positioned in their Nikiski warehouse ready for transportation to the spill site and deployment. Typical transportation times for mobilizing CISPRI response vessels with equipment to the spill location is normally 2 to 6 hours, depending upon the specific vessel or equipment to be deployed." Then goes on to say "Typical transportation times for mobilizing CISPRI's response equipment loaded on vehicles and deployed to the spill location is normally 2 to 5 hours, depending upon the specific equipment to be deployed." These statements seem contradictory, if not somewhat misplaced. One statement refers to transportation via vessel, which is appropriate for offshore spill response. While the next statement seems to refer to onshore response.

RFAI: Please clarify these statements regarding offshore spill response.

#### **1.6 RESPONSE STRATEGIES**

#### 1.6.1 Procedures to Stop the Discharge

This section states that the individual that discovers a spill is required to notify the Lead Operator. Once the Site Lead is informed of the situation, he carries out a series of steps to ensure the safety of the facility. While it can be assumed that the Lead Operator and the Site Lead are one-in-the-same, it shouldn't have to be. Mixed terminology can lead to misunderstanding and confusion.

RFAI: Please clarify the rationale for using mixed terminology. Recommend standardized terms and phrases to avoid confusion.

This section also addresses five techniques to stop the source. The order of precedence is unclear. It seems source control should start, depending on the source, with pump

or valve shutdown (including blowout preventer), isolating, then transfer (re-routing), draining, pumping, etc. and the last effort should be plugging and patching as this could put responders in direct contact with the product and may not be safe or preferable.

RFAI: Please clarify the priority order for source control.

#### 1.6.11 Wildlife Protection

This section references two links to wildlife protection guidance documents. However, neither link is active. This may be a function of the redline edit version of the plan or they may not, in fact, be active. But in at least one version it was not possible to check the links functionality.

*RFAI:* Recommend including a complete clean version of the ODPCP revision to allow review in context of changes and revisions, and to allow links to be tested.

#### 1.6.13 Response Scenarios and Strategies

#### 1.6.13.1 Major Onshore COTP Spill

#### **Discharge Tracking**

This portion of the scenario references Figures 1.6-1, Spill Map for Redoubt Shoal Unit Onshore COTP to describe the spill's flow through the area and local drainage affecting the movement of oil towards Upper Lieza Creek and the immediate vicinity of the rupture along with other features. However, the electronic figure and the printed page at 100% does not represent the details described very well. Only when you magnify the figure above 200% can the detail be read. Likewise, the detail isn't very abundant. It would have been helpful to include an overview of the area showing the valve locations mentioned in relation to the spill site to convey a sense of proportion.

*RFAI: Recommend providing a spill map with clear and descriptive graphics matching the written description for clarity.* 

#### **Containment, Control and Recovery Actions**

This section references the utilization of burning oiled vegetation (CI-NM-4) in the wetlands to provide lower impact to the wetlands compared to digging up contaminated vegetation. Burning of oiled vegetation is a good way to reduce waste and preserve the affected environment while also removing spilled oil. However, this spill takes place in July, when in any given year open burning could be a severe fire hazard. While all safety concerns and considerations would be addressed during the permitting process, the plan doesn't include much discussion about some of the additional safety concerns associated with this scenario. It seems that some discussion or detail beyond, *"Begin open burn* 

*permitting process for burning oiled vegetation tactic between the spill site and lake..."* at hour 4.5, and *"Commence burning of oiled vegetation..."* at hour 8.5 should be included. In situ burning is not a tactic that has been used very often, nor should it be unless the conditions and expectations for success are very favorable. Likewise, the Incident Commander, Environmental Unit, and Operations Section should have the best understanding of the parameters of the tactic and operational controls to successfully execute the tactic. Therefore, some detailed discussion should be included here to help guide those efforts.

RFAI: Recommend including additional detail regarding In Situ burning on land.

#### 1.6.13.2 Major Onshore Storage Tank Failure

#### DESCRIPTION OF THE EVENT

This section references Figure 1.6-2 Tank Spill at the Kustatan Production Facility. This facility diagram shows the facility in a fair degree of detail. However, it is very difficult to discern exactly what that detail represents until the diagram is magnified to 200% or over.

RFAI: Recommend using a better scale for this representation of spill location and movement.

#### PROTECTION OF SENSITIVE AREAS

Last character of the paragraph seems to be a typographic error. There were several other such errors noted thus far in the review of this document.

RFAI: Recommend reviewing the entire document for other typographic errors.

#### Table 1.6-9 Timeline for the Onshore Tank Spill Response

At hour+1.5 CIE personnel set up decon zones for the vac truck operations. However, there is no further mention of Vac truck operations until Table 1.6-10 Day one Response Timeline for Onshore Tank Spill. And then it only mimics what has been established in Table 1.6-9. Table 1.6-8 Summary of Tactics and Equipment for Onshore Tank Spill Response also does not indicate use of Vac trucks. While it is entirely feasible and expected that vac trucks could and probably would be used, this time line and other tables do not demonstrate how, where or when they would come into play.

*RFAI: Please clarify with specificity how, when, and where various response tactical actions will take place.* 

## PART 2 PREVENTION PLAN

#### 2.3 Potential Discharge Analysis

#### 2.3.2 Spill Probability

This section provides a thorough overview of potential spills and spill rates based on published literature. Updated spill probability analyses for Cook Inlet have been conducted by the Bureau of Ocean Energy Management (BOEM) since the studies from the late 1990s that are cited.

RFAI: Consider using updated spill calculators developed by BOEM for this section.

#### 2.4 Operational and Site-Specific Conditions

#### 2.4.4 Winds

This section, which is otherwise excellent, references an Advance Notice of Proposed Rulemaking that we believe is an outdated reference to language now captured in regulations under 33 CFR 155.

*RFAI:* Suggest updating reference to Coast Guard open water operating environment conditions.

### PART 3 SUPPLEMENTAL INFORMATION

#### 3.1 Facility Description and Operational Overview

#### 3.1.1 General

Several tables in this section require multiple pages, yet are given a new table number on each page. This means that the table references included in figures earlier in the section are incorrect. For example, Table 3.1-2 Summary of Potential Spill Sources for the West McArthur River Unit starting on page 3-26 should not be called Table 3.1-3 when it continues on page 3-27, etc. Additionally, it appears that the numbering of potential spill sources in the tables is not always consistent between the figures and tables.

*RFAI: Please correct table numbering and ensure table references in figures or text are correct. Please also ensure the numbers within the tables and figures align.* 

#### 3.2 Receiving Environments

#### 3.2.2 Sensitive Receiving Environments

Figures 3.2-4 to 3.2-6 present model outputs showing where oil would reach from a spill starting at the Osprey Platform location. We suggest that this should also include

the size and type of spill assumed, as this would make a significant difference in the modeled results. The model shows no more than 2 percent likelihood of oil in most places.

RFAI: Recommend adding some additional information about the assumptions used in modeling.

#### 3.11 Additional information

#### 3.11.1 List of Acronyms

Some acronyms appear to be missing (e.g., "EFA system" in Section 1.6.13.1). The updated use of "OSV" appears inconsistent with the use of that acronym in CISPRI's Technical Manual (2019), and inconsistent within the Technical Manual as well.

*RFAI:* Recommend verifying all Acronyms and Abbreviations for incorporation into the List of Acronyms, including "OSV."