EXHIBIT A

ADEC Decision:
Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, ADEC Plan No. 14-CP-4057, Amendment 2017-1, Approved October 23, 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution

THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation
DIVISION OF SPILL PREVENTION AND RESPONSE
Prevention, Preparedness, and Response Program
555 Cordova Street
Anchorage, AK 99501-2617
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OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN APPROVAL

October 23, 2017

Tom Stokes
Alyeska Pipeline Service Company
P.O. Box 196660, MS 502
Anchorage, AK 99519-6660

Subject: **Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, ADEC Plan #: 14-CP-4057; Amendment 2017-1 Approval**

Dear Mr. Stokes:

The Alaska Department of Environmental Conservation (department) has completed its review of the major plan amendment application package for the Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (plan) that was received on February 28, 2017. The department coordinated the State of Alaska's public review for compliance with 18 AAC 75, using the review procedures outlined in 18 AAC 75.455. Based on our review, the department has determined that your plan is consistent with the applicable requirements of the referenced regulations and is hereby approved. The department is still reviewing Amendment 2017-2; any changes approved in this Amendment (2017-1) that affect pages in Amendment 2017-2 will be incorporated as the review continues.

This approval applies to the following plan:

Plan Title:	**Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan**
Documents:	**N/A**
Plan Holder:	**Alyeska Pipeline Service Company**
Covered Facilities:	**Valdez Marine Terminal**

PLAN APPROVAL: The approval for the referenced plan is hereby granted **effective October 23, 2017.** A Certificate of Approval stating that the department has approved the plan is enclosed.

EXPIRATION: This approval **expires November 21, 2019.** Following expiration, Alaska law prohibits operation of the facility until an approved plan is once again in effect. All terms and conditions of the department's existing approval letter, dated January 14, 2015, remain in effect, with the extension in the department's April 4, 2017 letter. The expiration date of this amendment coincides with the existing plan

approval. This amendment fulfills the requirements of Condition of Approval No. 5 and No. 6 of the January 14, 2015 approval letter. An amended certificate of approval is attached.

CONDITION(S) OF APPROVAL: The approval is subject to the following additional conditions:

Condition of Approval No. 1: Requirement to Make Administrative Edits and Factual Corrections Prior to Publication.
Prior to publication of the approved plan, APSC is required to make the following corrections. In addition, APSC must update the list of names, titles addresses, and telephone numbers of spill command and response personnel listed in the plan.

Volume 1
Section 3.9 Figure 3.9-4. Include before publication the addition of the Open Water Crucial Skimmer Suite to the Open Water Task Force Leader training, for Open Water Task Force Leaders that will be on the Open Water barge with the Crucial Skimmer system.

TERMS: The approval is subject to the following terms:

1. **PROOF OF FINANCIAL RESPONSIBILITY:** The plan holder has provided the department with proof of financial responsibility per the requirements of AS.46.04.040 and 18 AAC 75.205 – 18 AAC 75.290.

2. **PUBLICATION OF PLAN:** The plan holder shall provide copies of the approved plan to the parties and in the format indicated in the enclosed distribution list in accordance with 18 AAC 75.408(c) not later than 30 days of this approval.

3. **AMENDMENT:** Except for routine updates under 18 AAC 75.415(b), an application for approval of an amendment must be submitted by the plan holder and approved by the department before a change to this plan may take effect. This is to ensure that changes to the plan do not diminish the plan holder's ability to respond to a discharge and to evaluate any additional environmental considerations that may need to be taken into account (18 AAC 75.415).

4. **RENEWAL:** To renew this plan, the plan holder must submit an application package to the department no later than 180 days prior to the expiration of this approval. This is to ensure that the submitted plan is approved before the current plan in effect expires (18 AAC 75.420).

5. **REVOCATION, SUSPENSION OR MODIFICATION**: This approval is effective only while the plan holder is in compliance with the plan as defined in AS 46.04.030(r) and with all of the terms and conditions described above. The department may, after notice and opportunity for a hearing, revoke, suspend, or require modification of the approved plan if the plan holder is not in compliance with the plan or for any other reason stated in AS 46.04.030(f). In addition, Alaska law provides that a vessel or facility that is not in compliance with a plan may not operate (AS 46.04.030). The department may terminate approval prior to the expiration date if deficiencies are identified that would adversely affect spill prevention, response or preparedness capabilities.

6. **DUTY TO RESPOND**: Notwithstanding any other provisions or requirements of this plan, a person causing or permitting the discharge of oil is required by law to immediately control, contain, and cleanup the discharge regardless of the adequacy or inadequacy of the plan (AS 46.04.020).

7. **NOTIFICATION OF NON-READINESS**: The plan holder must notify the department in writing, within 24 hours, after any significant response equipment as specified in the plan is removed from its designated storage location or becomes non-operational. This notification must provide a schedule for equipment substitution, repair, or return to service as described in 18 AAC 75.475(b).

8. **CIVIL AND CRIMINAL SANCTIONS**: Failure to comply with the plan may subject the plan holder to civil liability for damages and to civil and criminal penalties. Civil and criminal sanctions may also be imposed for any violation of AS 46.04, any regulation issued thereunder or any violation of a lawful order of the department.

9. **INSPECTIONS, DRILLS, RIGHTS TO ACCESS, AND VERIFICATION OF EQUIPMENT, SUPPLIES, AND PERSONNEL**: The department has the right to verify the ability of the plan holder to carry out the provisions of this plan and to access inventories of equipment, supplies, and personnel through such means as inspections and discharge exercises without prior notice to the plan holder. The department has the right to enter and inspect the facility in a safe manner at any reasonable time for these purposes and to otherwise ensure compliance with the plan and the terms and conditions (AS 46.04.030(e) and AS 46.04.060). The plan holder shall conduct exercises for the purpose of testing the adequacy of the plan and its implementation (18 AAC 75.480 and 485).

10. **FAILURE TO PERFORM**: In granting approval of the plan, the department has determined that the plan, as represented to the department by the applicant in the application package for approval, satisfies the minimum planning standards and other requirements established by applicable statutes and regulations, taking as true all information provided by the applicant. The department does not warrant to the applicant, the plan holder, or any other person or entity: (1) the accuracy or validity of the information or assurances relied upon; (2) that the plan is or will be implemented; or (3) that even full compliance and implementation with the plan will result in complete containment, control or clean-up of any given oil spill, including a spill specifically described in the planning standards. The plan holder is encouraged to take any additional precautions and obtain any additional response capability it deems appropriate to further guard against the risk of oil spills and to enhance its ability to comply with its duty under AS 46.04.020(a) to immediately contain and clean up an oil discharge.

11. **COMPLIANCE WITH APPLICABLE LAWS**: The plan holder must adhere to all applicable state statutes and regulations as they may be amended from time to time. This approval does not relieve the plan holder of the responsibility to secure other federal, state, or local approvals or permits or to comply with all other applicable laws.

12. **INFORMAL REVIEWS AND ADJUDICATORY HEARINGS:** If aggrieved by the department's decision, the applicant or any person who submitted comments on the application not later than the close of the public comment period set out under 18 AAC 75.455 may request an adjudicatory hearing in accordance with 18 AAC 15.195 –18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185.

    Informal review requests must be delivered to the Director, Spill Prevention and Response, 555 Cordova Street, Anchorage, Alaska 99501, within 15 days of the plan approval. A request for informal review is not required prior to making a request for adjudicatory hearing. A copy of the request should be sent to the undersigned.

Adjudicatory hearing requests must be delivered to the Commissioner, Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days of the plan approval. If a hearing is not requested within 30 days, the right to appeal is waived. A copy of a hearing request must be served on the undersigned and the permit applicant as required by 18 AAC 15.200(c). A copy of the request must also be provided to the department in an electronic format, unless the department waives this requirement because the requestor lacks a readily accessible means or the capability to provide the items in an electronic format.

13. **NOTICE OF CHANGED RELATIONSHIP WITH RESPONSE CONTRACTOR:** Because the plan relies on the use of response contractor(s) for its implementation, the plan holder must immediately notify the department in writing of any change in the contractual relationship with the plan holder's response contractor(s), and of any event including but not limited to any breach by either party to the response contract that may excuse a response contractor from performing, that indicates a response contractor may fail or refuse to perform, or that may otherwise affect the response, prevention, or preparedness capabilities described in the approved plan.

If you have any questions regarding this process, please contact Ron Doyel at 907-835-8012 or ron.doyel@alaska.gov.

Sincerely,

Graham Wood
Program Manager

Enclosures: Certificate of Approval, Number: 14CER-016.4
Summary of Basis for Decision
Approved Plan Distribution List

cc with enclosure:
Scott Hicks, APSC
Lori Burroughs, APSC
Martin Parsons, APSC
Sue Wood, APSC
Amanda Hatton, APSC
Sarah Moore, ADEC
Geoff Merrell, ADEC
Ron Doyel, ADEC
Melissa Woodgate, ADEC
Anna Carey, ADEC
Pete LaPella, ADEC
Shannon Miller, ADEC
Dan Allard, ADEC
Lee McKinley, ADF&G
Contingency Plan Reviewer, ADNR
Alyssa Sweet, BLM
Bonnie Friedman, BLM

cc with enclosure (cont'd):
Erika Reed, BLM
Kevin Kearney, BLM
Matt Carr, EPA
Graham Smith, SPCO
Jason Walsh, SPCO
David Lehman, USDOT PHMSA
CDR Michael Franklin, USCG
LT Jason Scott, USCG MSU Valdez
SPCO Records Center
BLM Records Center
Donna Schantz, PWS RCAC
Linda Swiss, PWS RCAC
Chuck Totemoff, Village of Chenega
Travis King, Village of Chenega
Kimber Moonin, Village of Tatitlek
Mark Lynch, City of Whittier
AnnMarie Lain, City of Valdez
Tracy Raynor, Valdez Fire Department
Randy Robertson, City of Cordova
Mike Wells, Valdez Fisheries Development Association
Rachel Kallander, Cordova District Fishermen United
Ruth Knight, City of Valdez
Tom Lakosh

Application Package Distribution List

Recipient	Organization	Address	City	State	Zip	Format requested	Email
Geoff Merrell	ADEC SPAR Central Area	555 Cordova Street	Anchorage	AK	99501	Paper and CD redacted	geoff.merrell@alaska.gov
Ron Doyel	ADEC SPAR/PWS Unit	P.O. Box 1709, 213 Meals Avenue, #17	Valdez	AK	99686	Paper and CD redacted and non redacted	ron.doyel@alaska.gov
Shannon Miller	SPAR/PPR/Interagency Coordination	555 Cordova Street	Anchorage	AK	99669	Electronic web access	shannon.miller@alaska.gov
Tom DeRuyter	SPAR/PPR/Northern Alaska Region	610 University Avenue	Fairbanks	AK	99709	Electronic web access	tom.deruyter@alaska.gov
Lee McKinley	Alaska Department of Fish and Game	3651 Penland Parkway	Anchorage	AK	99508	Electronic web access	lee.mckinley@alaska.gov
Marie Steele	Alaska Department of Natural Resources	550 West 7th Avenue, Suite 1400	Anchorage	AK	99501	Redacted CD	dnr.cplans@alaska.gov
SPCO Records	Alaska Department of Natural Resources	3651 Penland Parkway	Anchorage	AK	99508	Electronic web access	spco.records@alaska.gov
Jason Walsh	Alaska Department of Natural Resources	3651 Penland Parkway	Anchorage	AK	99508	Electronic web access	jason.walsh@alaska.gov
Alyssa Sweet	Bureau Of Land Management, Office of Pipeline Monitoring	222 W. 7th Avenue Box 13	Anchorage	AK	99513	Paper and CD	asweet@blm.gov
Erika Reed	Bureau Of Land Management, Office of Pipeline Monitoring	222 W. 7th Avenue Box 13	Anchorage	AK	99513	Electronic web access	e05reed@blm.gov
Rhonda Williams	Bureau Of Land Management, Office of Pipeline Monitoring	P.O. Box 990 MS 729	Valdez	AK	99686	Electronic web access	rwilliams@blm.gov
David Lehman	Office of Pipeline Safety (Attn: Response Plan Reviewer) Pipeline and Hazardous Materials Safety Administration U.S. Department of Transportation	PHP-5, East Bldg., 2nd Floor, E22-321 1200 New Jersey Avenue, SE	Washington	D.C.	20590	Paper and CD	PHMSA.OPA90@dot.gov

Application Package Distribution List

Recipient	Organization	Address	City	State	Zip	Format requested	Email
Matt Carr	U.S. EPA Region 10 - Alaska Operations Office	Federal Bldg. Rm 537, 222 West 7th Avenue #19	Anchorage	AK	99513	Paper and CD	Carr.Matthew@epa.gov
CDR Michael Franklin	U.S. Coast Guard - Sector Anchorage, Marine Safety Unit, Valdez	P.O. Box 486	Valdez	AK	99686	Paper and CD	Michael.R.Franklin@uscg.mil
Linda Swiss	Prince William Sound RCAC	3709 Spenard Road, Suite 100	Anchorage	AK	99503	Redacted Paper and CD	swiss@pwsrcac.org
Donna Schantz	Prince William Sound RCAC	P.O. Box 3089	Valdez	AK	99686	Redacted Paper and CD	schantz@pwsrcac.org
AnnMarie Lain	City of Valdez	P.O. Box 307	Valdez	AK	99686	Electronic web access	alain@ci.valdez.ak.us
Tracy Raynor	Valdez Fire Department	P.O. Box 307	Valdez	AK	99686	Electronic web access	traynor@ci.valdez.ak.us
Chuck Totemoff	Village of Chenega	P.O. Box 8079	Chenega Bay	AK	99574	Electronic web access	cwt@chenegacorp.com
Kimber Moonin	Village of Tatitlek	P.O. Box 171	Tatitlek	AK	99677	Electronic web access	tatitlek.ira@yahoo.com
Mark Lynch	City of Whitter	P.O. Box 608	Whittier	AK	99693	Electronic web access	mayor@whittieralaska.gov
Randy Robertson	City of Cordova	P.O. Box 1210	Cordova	AK	99574	Electronic web access	citymanager@cityofcordova.net

*web access is available at http://dec.alaska.gov/Applications/SPAR/PublicMVC/IPP/CPlansUnderReview

OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN
BASIS OF DECISION

October 23, 2017

Plan Title: Alyeska Pipeline Service Company Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan

Plan #: 14-CP-4057

Plan Holder: Alyeska Pipeline Service Company

Basis of Decision Prepared by: Ron Doyel

Findings

This document presents the final findings that support the decision of the Alaska Department of Environmental Conservation (department) regarding the major amendment application package for the Alyeska Pipeline Service Company Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (plan).

Findings are provided to assist the interested public and participating reviewers in understanding the department's analysis of selected priority issues addressed as part of the decision process. In developing the findings, the department reviewed all public, agency and plan holder comments. This document is intended to respond to the most substantive issues raised by commenting parties. All department decisions must be supported by the regulations.

Proposed Activity

Alyeska Pipeline Service Company is requesting approval of its plan to amend the Valdez Marine Terminal. The proposed amendment includes changes for Volumes 1, 2 and 3 and addresses part of the departments's condition of Approval (COA) Number 6 which requires submission of a update for VMT Scenario 4 by March 1, 2017. The proposed amendment also addressed the departments COA Number 5 which required the update of the non-mechianical response monitoring in the plan. Incorporation of new mechanical recover technology and tactictics into the Open Water response system was also a major componet of this amendment.

Location

Alyeska Pipeline Service Company conducts operations at the Valdez Marine Terminal.

Environmental Risk

A potential risk exists of oil spills entering the lands or waters of the state as a result of this operation.

Authority

Under AS 46.04.030, an owner or operator of a terminal facility must have an approved oil discharge prevention and contingency plan covering the facility. Through the plan review process, the department's objective is to ensure that the plan provides prevention and response measures that satisfy the state's regulatory requirements.

Review

The department received a major amendment application package in accordance with AS 46.04.030 and 18 AAC 75.415. The application package was distributed to the following reviewers: Jason Walsh, SPCO; Graham Smith, SPCO; Lee McKinley, ADF&G; Marie Steele, ADNR; Erika Reed, BLM; Bonnie Friedman, BLM; Kevin Kearney, BLM; Alyssa Sweet, BLM; Matt Carr, EPA; David Lehman, USDOT PHMSA; CDR Joseph Lally, USCG; LT Jason Scott, USCG MSU Valdez; SPCO Records Center; BLM Records Center; Donna Schantz, PWS RCAC; Linda Swiss, PWS RCAC; Larry Evanoff, Village of Chenega; David Totemoff, Village of Tatitlek; Mark Lynch, City of Whittier; AnnMarie Lain, City of Valdez; Tracy Raynor, Valdez Fire Department; Randy Robertson, City of Cordova..

The department completed a review and analysis of the application package using the procedures outlined in 18 AAC 75.455 to ensure that the plan conforms to the applicable requirements and regulations. The major milestones during the review process were as follows:

Event/Action	Date
Application received	2/28/2017
Sufficient for review determination	3/6/2017
Start of comment period	3/15/2017
End of comment period	4/13/2017
1st Request for additional information (RFAI) issued	4/27/2017
Response to 1st RFAI received	5/31/2017
2nd Request for additional information (RFAI) issued	6/20/2017
Response to 2nd RFAI received	7/28/2017
Start of comment period for additional information	8/14/2017
End of comment period for additional information	8/23/2017
Application package determined complete	8/31/2017
Department's decision	10/23/2017

Comments

Comments and requests for additional information were received from [Prince William Sound Regional Advisory Council, Valdez Fisheries Development Association, City of Valdez, Cordova District Fishermen United and Tom Lakosh]. The comments and requests that met the department's statutory and regulatory requirements were included with the department's own comments in an RFAI to Plan Holder. The following is a discussion of the major issues that were addressed:

Issue #1 Crucial Skimmers and Buster Booming Systems

Statement of Issue

As part of this amendment the Crucial skimmers with the buster booming systems are being incorporated as response equipment for open water recovery in the VMT plan.

Regulatory Authority

Under 18 AAC 75.445(g) response equipment identified in the plan must meet the following conditions:

(2) identified equipment must reflect the best available technology at the time the plan is submitted or renewed;

(5) the number and size of skimmers and pumps to be used must be appropriate and adequate for recovery of the response planning standard volume of the type of oil discharged within the response planning standard time frame for cleanup established under 18 AAC 75.430 - 18 AAC 75.442, using an effective oil recovery capacity of 20 percent of equipment manufacturer's rated throughput capacity over a 24-hour period, unless an analysis demonstrates to the satisfaction of the department that another effective daily oil recovery capacity is appropriate; equipment types must be compatible with each other as necessary to ensure an efficient response;

Under 18 AAC 75. 445(k)(1), the department will review a plan and make a best available technology determination with the following criteria:

"technology used for oil discharge containment, storage, transfer, and cleanup to satisfy a response planning standard in 18 AAC 75.430 - 18 AAC 75.442 will be considered best available technology if the technology of the applicant's oil discharge response system as a whole is appropriate and reliable for the intended use as well as the magnitude of the applicable response planning standard;"

Finding

The department has reviewed the Crucial skimmers and buster booming systems as applicable in 18 AAC 75.445(g) and approved the incorporation of this technology into the VMT Plan as response equipment to be utilized to meet APSC's response planning standard (RPS). The Crucial skimming technology has been studied by the department through efficiency evaluations, tank testing, exercises, and testing in Prince William Sound. During these processes other technologies available were compared with the Crucial skimming system. Tank and field tests have shown that the Crucial skimmers are effective, and able to consistently collect more oil than water even if run in less than optimal conditions. The Crucial skimming system was found to meet the best available technology requirements in 18 AAC 75.445(k)(1), since when used as part of the response system, the response system as a whole is appropriate and reliable for the intended use and the magnitude of the applicable response planning standard.

This technology, oleophilic disc skimmers manufactured by Crucial, Inc., when used with a buster booming system, was submitted to the department on July 23, 2015 for development of recovery rates and efficiencies that are above the standard 20% outlined in 18 AAC 75.445(g)(5) for planning purposes. The department granted this request on September 4, 2015, and clarified it on October 21, 2015. This approval states that "to take advantage of these skimmers at the approved oil recovery capacities, APSC must amend the VMT ODPCP, including the technical manual, to include all components of the skimming system, describe how the skimming systems will be used, and demonstrate that the oil recovery capacities can be supported."

The tactic VMT-OW-1 and information provided on the Crucial skimmers (including the buster booming system) in the VMT Plan provide sufficient information on the components of the equipment, adequately describe how the systems will be used to respond to a spill in open water, and demonstrate how the recovery capacities can be supported. In addition to the open water application of this system with the buster system, the Crucial skimmers are also approved for use in

calm water containment boom to recover uninterrupted oil discharges from a single point source at the VMT. Information on this application is also included in VMT-OW-1. Personnel required, vessels needed, and applicable time for getting this equipment deployed in both formations are included in the tactic VMT-OW-1. Oil surveillance technology (FLIR or X-Band technology), used to ensure the skimmers are effectively placed in the oil, is included in the VMT Plan to confirm oil recovery capacity conventions can be supported. The skimming rates and efficiencies from the department's September 4, 2015 Valdez Marine Terminal Crucial Model C-Disc Skimmer Efficiency Decision and associated decision document were incorporated into the VMT Plan during this renewal. Debris management tools to assist with Crucial skimmer and buster booming system operations have been outlined and identified in VMT-OW-1 and VMT-WM-4.

The Crucial skimmer's oil recover capabilities are calculated at 629 bbls/hr which is greater than the currently approved technology, the TransRec. The TransRec has recovery abilities at 494 bbls/hr. The approximate swath width of the boom used in the TransRec Task Force (PWS-OW-6) is listed at 400 feet with a speed of advance of 1 knot. The swath width of the Crucial Task Force (PWS-OW-1) is estimated at 428 feet with a speed of advance of 3.5 knots. These recovery capabilities and the enhanced usability of the Crucial skimmers and buster booming system with the oil surveillance technology support the addition of this equipment to the VMT Plan to meet the response planning standard.

Issue #2 Response Training

Statement of Issue:
Does the VMT plan include a detailed description of the training programs for discharge response personnel?

Regulatory Authority
18 AAC 75.425(e)(3)(I) requires the VMT plan to provide a detailed description of the training programs for discharge response personnel.

In addition, 18 AAC 75.445(j) requires plan holders demonstrate that:

(1) designated oil spill response personnel are trained and kept current in the specifics of plan implementation, including deployment of containment boom, operation of skimmers and lightering equipment, and organization and mobilization of personnel and resources;

(2) personnel are trained and kept current in methods of preventing oil discharges as required by 18 AAC 75.020; and

(3) proof of that training is maintained for five years and is made available to the department upon request.

Finding
The department finds the plan adequately describes the response training program, with the addition of Condition of Approval No. 1, which requires APSC to add the Open Water Crucial Skimmer Suite to the Open Water Task Force Leader training for Open Water Task Force Leaders that will be on the Open Water barge with the Crucial Skimmer system before publication.

During the initial public review period, PWSRCAC requested that the department require the previously approved response training information be restored to the plan. The department found that the first version submitted by APSC for review did not include a detailed description of the training program for discharge response personnel as required by 18 AAC 75.425(e)(3)(I). APSC, through the RFAI process, submitted an updated training program that was reformatted to a table format. In the final public comment period, PWSRCAC questioned changes made to the training section during the process of reformatting this section.

The department has reviewed the changes to the field responder training descriptions and finds that the plan adequately describes the response training program. The module, and associated description and objective list for each course is sufficient to meet the detailed description of the training program required by 18 AAC 75.425(e)(3)(I). The following is in response to specific public comments on the changes or removal of some field response personnel training descriptions and specific training requirements:

- The SRVOSCP Course that was removed from several positions is a land operation course and therefore was not a relevant training for positions like Open Water Task Force Leader and other on-water response positions it was removed from.
- The Basic Marine Safety course that is necessary for on-water response personnel was not relevant to land-based positions like the Source Control Responder and therefore was removed from those positions.
- HAZWOPER was removed from some training programs for specific personnel because it is not required for non-field personnel like the Safety and Security Officers. Nonetheless, the department expects that all OSHA and other safety requirements are met for all responders so they are able to immediately carry out their roles in the response.
- Changes were also made for the ICS training that is required for each position but the department has reviewed this change and is comfortable with the Task Force Leaders getting the ICS/041 Task Form Leader/Group Supervisor training and not the ICS 202 Field Command training, because the training is specific for Task Force leaders.
- The job role numbers were deleted because they are not used in APSC's current training management program (AMS-011-01). The job role numbers were not defined in the plan, other than being associated with the job role. The job role remain in the plan. The job role titles are detailed enough and in conjunction with Appendix B of Volume 3 to describe the job roles of responders.

As laid out in Volume 1 Section 3.9 the Response Training is sufficient to meet 18 AAC 75.425(e)(3)(I) and 18 AAC 75.445(j). The department will continue to provide oversight to evaluate the adequacy of the response training program through attendance in training, evaluation of exercises, and training program audits. In order to effectively assess the training program, APSC continues to comply with the Condition of Approval No. 2 from the January 14, 2015 VMT plan renewal that requires APSC to provide the training schedule for all response training, including online, in-class and in-the-field training, and APSC ensures the department is notified of any changes to the schedule as soon as practicable to enable the department to attend training.

Issue #3 Condition of Approval No. 6: Requirement to Review and Revise Oil Spill Response Scenarios

Statement of Issue:
Ensure APSC sufficiently reviewed and updated Scenario 4 as required by Condition of Approval no. 6 in the January 14, 2015 VMT plan approval letter by including seasonal variation found at the facility and in Port Valdez.

Regulatory Authority
18 AAC 75.425(e)(1)(F) requires APSC to provide a response scenario that entails " a hypothetical spill incident and response that demonstrates a plan holder's ability to respond to a discharge of each applicable response planning standard volume within the required time frames using the resources described in the contingency plan . . . if required by the department, the plan holder must provide additional response strategies to account for variations in receiving environments and seasonal conditions."

Finding
During the evaluation of Scenario 4, APSC lead table-top discussions that included USCG, BLM, EPA, ADEC and PWSRCAC for the review and update of this scenario. APSC included assessments of the typical seasonal conditions in Scenario 4 as part of this review process which resulted in an increased wind speed. The amendment demonstrates appropriate response actions are taken for the conditions. The effects of seasonal variation on the response actions taken in the scenarios will continue to be evaluated in the review of Scenarios 5. Amendments to Scenarios 5 are still required as part of the Condition of Approval no. 6 as stated in the January 14, 2015 VMT plan approval letter. The department issued a letter on April 24, 2017, extending the date of the required submittal of Condition of Approval no. 6 for Scenario 5, until May 25, 2019 or in combination with the 2019 VMT plan renewal if the application is submitted prior to May 25, 2019. APSC has scheduled a meeting to start the review of Scenario 5 that will include representatives of the USCG, BLM, EPA, ADEC, and PWSRCAC.

Issue #4 Update of Scenario 4

Statement of Issue:
Ensure that APSC is in compliance with regulatory requirements with the update of Scenario 4.

Regulatory Authority
Under 18 AAC 75.430(a), APSC "must demonstrate the general procedures to clean up a discharge of any size"

18 AAC 75.425(e)(1)(F) requires APSC to provide a response scenario that entails "a hypothetical spill incident and response that demonstrates a plan holder's ability to respond to a discharge of each applicable response planning standard volume within the required time frames using the resources described in the contingency plan . . . if required by the department, the plan holder must provide additional response strategies to account for variations in receiving environments and seasonal conditions."

Finding
In addition to the changes meeting the requirements of Condition of Approval no. 6 of the 2015 VMT plan renewal as stated in Issue 3 above, Scenario 4 underwent major changes starting with a change in spill volume from 89,595 barrels to 59,000 barrels. This change incorporated the effects of the removal of the West Tank Farm from service at the VMT and the USCG worked with APSC to determine the updated spill volume to meet requirements of the "worst case" discharge under 33 CFR 154.1029. The updated calculations are included in Volume 1 Appendix C.1 of the VMT plan. Scenario 4 meets planning requirements per 18 AAC 425 and 18 AAC 445, but Scenario 5 is the scenario that meets the department's Response Planning Standard amount requirements 18 AAC 75.430 and 18 AAC 75.432.

The department finds there is no reduction in response capability with changes made to Scenario 4. All of the tactics used in the previous version of Scenario 4 are still in the plan. All the response equipment and personnel deployed in the previous version of Scenario 4 remain available because the equipment and personnel are still deployed in the updated Scenario 4 or are committed to be available in other scenarios in the plan. The updates to Scenario 4 do not diminish APSC's ability to respond to a spill of the magnitude less than or equal to the VMT response planning standard. Source control actions in Scenario 4 were reviewed and found to be appropriate for the scenario. Comments received on source control were found to be beyond the scope of this amendment and the updates made to Scenario 4.

Table top discussions to evaluate the updates to Scenario 4 included representatives from USCG, BLM, EPA, ADEC, and PWSRCAC, and developments from these meetings were incorporated into the scenario. The department finds that the specified response details of Scenario 4 is sufficient pursuant to what is regulatory required.

Issue #5 Update of the Sensitive Area Protection prioritization in Scenario 4

Statement of Issue:
Ensure protection strategies for sensitive areas that may be effected by a discharge from the VMT are in place.

Regulatory Authority
18 AAC 75.425(e)(3)(J) requires "identification of environmentally sensitive areas and areas of public concern that may suffer an impact from a spill of the applicable response planning standard volume; if identification of those areas and site-specific strategies for protection of those areas are in an applicable subarea contingency plan, the plan holder may incorporate that information by reference; whether prepared separately or incorporated by reference, the identification of and planned protection measures for those areas must be based on mapped predictions of discharge movement, spreading, and probable points of contact, based on expected local, seasonal, meteorologic, and oceanographic or topographic conditions"

18 AAC 75.425(e)(3)(J)(iii) requires "identification of which areas will be given priority attention if a discharge occurs."

18 AAC 75.425(e)(1)(F)(v) states that, if requested by the department for a vessel, a response action plan must include "a description of the site specific strategies for the protection" of those sensitive areas identified under 18 AAC 75.425(e)(3)(J).

Pursuant to 18 AAC 75.445(d)(4), the department evaluates the plan's response strategies to determine whether they demonstrate that there is sufficient response equipment, personnel, and other resources maintained and available for the specific purpose of preventing oil from entering designated sensitive areas or areas of public concern that would likely be impacted if a discharge occurs.

Finding

There are many environmentally sensitive areas and areas of public concern in Port Valdez that may need to be protected during a potential oil discharge response from the VMT. Some areas have site-specific Geographic Response Strategies and others have been identified by type with protection strategy in the PWS Subarea Plan, VMT plan or Port Valdez Sensitive Areas Tactical Guide. Volume 3 of the VMT plan has tactics in Section 9 that describe general plans for protecting the salmon hatcheries and sensitive areas, and include citations for other sources of information which may be referenced for identifying and prioritizing sensitive areas. This section also has information on the tactics which can be used to protect sensitive areas, including the vessels and equipment required. During this amendment sensitive areas were prioritized based on the trajectory and specific information from Scenario 4. The department finds that the three Sensitive Area Protection Task Forces and associated equipment and fishing vessels are sufficient for sensitive area protection in Scenario 4 for this amendment.

APSC has to make assumptions and decisions to the best of their ability to identify sensitive areas that made the most sense for each scenario. The selection and prioritization of sensitive areas for protection is specific to a given spill and specific response needs. The process for identifying and prioritizing sensitive areas, and the assignment of response resources for their protection following a release, is practiced annually during discharge exercises. As listed in multiple locations in the VMT plan, including the Scenarios (Volume 2) and Volume 3, the most important part of sensitive area protection is that sites are identified, prioritized, and protected based on consultation with Resource Trustees and the anticipated trajectory of the spill. In an actual incident the Resource Trustees will supply information to the Unified Command to ensure sensitive areas are prioritized appropriately and protected in a timely manner.

Several comments were received about the prioritization of the Solomon Gulch Hatchery and the Valdez Duck Flats. The department finds that the protection timing of the Solomon Gulch Hatchery and the Valdez Duck Flats as presented in Scenario 4 are reasonable based on the prioritization and initial equipment available for Sensitive Area Protection. The equipment available and vessels on contract for Sensitive Area Protection committed in the plan remains the same as the previous version. The vessels deployed by hour in the sensitive area response actions has changed due to the changes in the oil movement in Scenario 4. The number of vessels used to deploy the sensitive areas is consistent with the number of vessel needed to deploy each sensitive area protection tactic. The tactics used to deploy Solomon Gulch Hatchery and the Valdez Duck Flats are vessel intensive. With no changes made to these tactics, the updated scenario shows the appropriate number of vessels at necessary hours in the response. The vessel numbers APSC commits in other areas of the plan ensure that if Solomon Gulch Hatchery and/or the Valdez Duck

Flats was prioritized for immediate deployment the vessels necessary would be available. Both versions of Scenario 4 have three Sensitive Area Task forces; Sensitive Area Task Forces 1 and 2 begin deployment by hour 3 in both the previous and updated versions. Sensitive Area Task Force 3 starts at hour 12 compared to hour 48 in the previous version, allowing more sensitive area protection tactics to be completed in the updated scenario.

The 72-hour trajectory for the scenario shows oil moving west. The protection of sensitive areas east of the spill are protected later in the updated version of Scenario 4 than they were previously but are still completed prior to a trajectory showing oil moving toward them. Deployment of the Solomon Gulch Hatchery will begin by hour 12 and Valdez Duck Flats deployments will begin by hour 36. The deployments of the Solomon Gulch Hatchery and the Valdez Duck Flats are followed through to completion in the Response Actions tables and the Mobilization Chart. These timeframes are a way of organizing the scenario, but response actions will occur as soon as possible within these time frames. In a real incident, the Unified Command will work to ensure that response activities occur continuously as long as the conditions allow for safe operations including night operations.

The Valdez Fisheries Development Association states that APSC's plan should demonstrate the "best possible outcome for containment of the spill and the protection of stakeholder assets" as stated in their March 31, 2017 letter. Other commenters including the PWSRCAC, City of Valdez, and Cordova District Fishermen United also expressed concern that there is a loss in protection of the Solomon Gulch Hatchery and Valdez Duck Flats in this amendment. To ensure the best outcome for all sensitive areas and resources the department has to ensure that all response resources that are available are prioritized and used to ensure the best outcome for the state of Alaska as a whole. The Solomon Gulch Hatchery and Valdez Duck Flats remain high priorities for protection in the Port of Valdez. Tactics specific to the Valdez Duck Flats and the Solomon Gulch Hatchery remain in the plan, and the response timeframes and capability to deploy these tactics have not changed in this amendment. Equipment remains staged to deploy these specific sensitive areas. The Solomon Gulch Hatchery and Valdez Duck Flats remain the only sensitive areas in the port with equipment specifically designated to deploy them. Volume 3 Section 9.6 still commits APSC to installing permanent boom whenever fish fry are in the fish pens.

PWSRCAC was concerned about the overall reduction in response resources for sensitive area protection in the Scenario 4 updates. The department has reviewed the updates to the scenario and finds overall appropriate resources are deployed for sensitive area protection. The updates to Scenario 4 are sufficient for this review, but the department will continue to exercise sensitive area protection and evaluate equipment needs and prioritization strategies.

Issue #6 Update of the Solomon Gulch Hatchery and Valdez Duck Flats Sensitive Area Protection Mobilization Decision Matrix

Statement of Issue:
Ensure that the Matrix will be a useful tool in assisting initial decisions regarding sensitive area protection specific to the Duck Flat and Solomon Gulch Hatchery.

Regulatory Authority
18 AAC 75.425(e)(3)(J)(iii) requires "identification of which areas will be given priority attention if a discharge occurs."

Finding
The Sensitive Area Prioritization Matrix in the plan is used as a way to make sure that some of the sensitive areas that may be affected in a spill, the Valdez Duck Flats and Solomon Gulch Hatchery, are identified to be "given priority attention" as required under 18 AAC 425(e)(3)(J)(iii). The intent of the Matrix is to incorporate the most relevant factors in an actual incident, and to assist in the initial decision-making process of whether to deploy the Valdez Duck Flats and Solomon Gulch Hatchery and to confirm this decision is made in a timely manner. However, as explained in Section 9.0.2.1 of Volume 3, exigent conditions must be taken into consideration so that responders are able to ensure that the spill containment recovery and sensitive protection can occur concurrently, based on incident specific objectives and prioritization.

The VMT plan identifies multiple sensitive areas in Port Valdez that should be given priority attention, and the Matrix is an additional step to ensure the Valdez Duck Flats and the Solomon Gulch Hatchery are evaluated for deployment in a timely manner.

Comments were received from PWSRCAC expressing concern for changes to the Matrix with the removal of wave height, visibility, and current direction. The previous Matrix was more complex and required the initial on-scene incident commander to evaluate conditions that were challenging to capture correctly and quickly. It was identified that the Matrix was not assisting in the prioritization of all sensitive areas in Port Valdez and was being used ineffectively in making initial decisions. With the previous Matrix, in exercises, resources were mandated to deployment of the Valdez Duck Flats and Solomon Gulch Hatchery when the resources would have been more appropriately deployed to other sensitive areas in Port Valdez. The updated Matrix has been modified to include the most influential initial inputs for decision-making early in a response before a Unified Command, Operations Section, and Environmental Unit can be stood up.

The department finds the updated Matrix does not change the commitment to evaluate and deploy the Valdez Duck Flats and Solomon Gulch Hatchery within the same timeframes. The department will continue to assess this updated tool in exercises to ensure its usefulness in appropriately prioritizing response actions.

Issue #7 Decant Plans and Retention Time

Statement of Issue:
Ensure retention times listed in the plan follow the vessel specific Load and Decant plans.

Regulatory Authority
18 AAC 75.425(e)(1)(F) requires the VMT plan to have the following:

(ix) procedures for transfer and storage of recovered oil and oily water, including methods for estimating the amount of recovered oil;

(x) procedures and locations for temporary storage and ultimate disposal of oil contaminated materials, oily wastes, and sanitary and solid wastes, including procedures for obtaining any required permits or authorizations for temporary storage or ultimate disposal.

Finding
As a waste management option the VMT plan has the equipment to decant water from recovered oil storage barges through a permit process as outlined in Section 11.3.2.1. The minimum suggested retention time was changed as part of this amendment, and during the RFAI process APSC explained that this retention time is per the barge specific Load and Decant plans. The department finds it appropriate to use the barge specific Load and Decant plan retention times as a starting place for decanting plans that would be produced specific to an incident. Prior to any decanting an incident specific decanting plan would be produced and approved through the permitting process.

Comments were received from PWSRCAC identifying concerns and confusion about the load and decant plans. These Load and Decant plans are produced specifically for each barge and are available for the barges that are currently listed in the plan. This amendment is specific to the barges currently in the system. These Load and Decant plans are the same plans for the SERVS response barges that were reviewed as part of the 2017 PWS Tanker plan renewal.

Issue #8 Condition of Approval No. 5: Nonmechanical Response Monitoring and the Use of Dispersants

Statement of Issue:
Does the VMT plan have a strategy to assess potential consequences and monitor environmental effects when non-mechanical response options are used? Is it sufficient to meet Condition of Approval no. 5 from the VMT renewal approval letter dated January 14 2015?

Regulatory Authority
18 AAC 75.425(e)(3)(G)(i) requires the VMT plan to include "a description of the specific mechanisms in place to assess the environmental consequences of the nonmechanical response option and to provide continuous monitoring of its environmental effects."

18 AAC 75.445(h) requires a plan to include "a full assessment of potential environmental consequences, provisions for continuous monitoring and real-time assessment of environmental effects" to demonstrate efficiency and effectiveness of nonmechanical response techniques.

Finding
Section 3.7 of Volume 1 of the VMT Plan as well as tactics VMT-NM-1, VMT-NM-2, and VMT-NM-3, and sections 8.0, 8.1, 8.2 and 8.3 of Volume 3, identify the methods to monitor effectiveness, assessment, and the continuous monitoring of environmental effects during the use of nonmechanical response. The department finds the monitoring information in the VMT Plan for nonmechanical methods, including dispersant application and in-situ burning, is adequate and meets the regulatory requirements.

To monitor the effectiveness of nonmechanical methods, the VMT Plan identifies the use of fluorometers, grab sampling, and the application of Special Monitoring of Applied Response

Technologies (SMART) protocols. Additionally, the VMT Plan references the permit approval process outlined in the Alaska Regional Response Teams' Unified Plan[1] and Prince William Sound Subarea Plan[2], which include a process for the analysis of environmental trade-offs to assess the potential environmental consequences with a checklist, a detailed planning process, and information on potential environmental trade-offs. The long term monitoring of environmental effects will be accomplished by the National Resource Damage Assessment (NRDA) process.[1]

The PWSRCAC Prince William Sound Dispersant Monitoring Protocol: Implementation and Enhancement of SMART was received and reviewed by the ARRT's Science and Technology Committee which includes representatives from the department. However, the department still determines that the processes outlined above in the Unified Plan[1] and Prince William Sound Subarea Plan[2], which are referenced in the VMT plan, satisfy department contingency plan regulatory requirements. Decisions will be made by the Unified Command specific to a response on a case-by-case basis in Prince William Sound Undesignated Areas, which include the waters of Port Valdez, prior to use of non-mechanical response options. Permitting processes will be followed.

Comments were received from PWSRCAC requesting that dispersant use be prohibited in Port Valdez. The possible use of dispersants in Port Valdez was not included as part of this amendment review process.

The PWSRCAC also questioned if the VMT Plan amendment was meeting the intention of Condition of Approval no. 5 from the 2015 VMT plan approval letter. The VMT plan references protocols and mechanisms to assess environmental consequents and monitoring of environmental effects, by referencing the Unified Plan processes as explained above. The VMT plan correctly references Annex F in its entirety, since information in all the appendices are appropriate, as nonmechanical options include more than dispersants. The department agrees with PWSRCAC that the Special Monitoring of Applied Response Technologies (SMART) protocols are designed to evaluate the effectiveness of dispersants and finds that the VMT plan correctly references the scope of SMART and with reference to the federal processes and plans as outlined above meets the Condition of Approval no. 5 and applicable regulations.

The Director's decision document from the informal review of the renewal approval letter dated December 22, 2014, which reviewed the Condition of Approval no. 5 recommend that APSC review how the PWS tanker plan has met the regulations and requires the citing of the ARRT process, the Unified plan and the process that the Unified Command would use to make determinations about the environmental impacts of dispersant use during an event. The changes made during this amendment follow guidance from this PWS tanker plan and cite the ARRT process and associated plans. The department finds that referencing the process and protocols that are in the Unified Plan to monitor and make decisions for dispersants meet the department's regulations at this time.

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[1] ARRT. 2010. Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan, Volume I). http://dec.alaska.gov/spar/PPR/plans/uc.htm

[2] Alaska Regional Response Team (ARRT). 2014. Prince William Sound Subarea Plan. Contained in the Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan, Volume II). http://dec.alaska.gov/spar/ppr/plans/scp_pws.htm

Decision

The department does not make its decision to approve or disapprove a plan based solely on plan holder verification of every element in the plan. Rather, the department's decision is based upon the reasonableness of assertions and evidence that certain essential resources and practices are securely in place. The department and plan holder complete many follow-up field tasks to verify contingency plan commitments. Field tasks include but are not limited to: planned and unannounced inspections; planned and unannounced oil spill response drills; regular evaluation of field equipment and equipment deployment exercises; and verification of equipment maintenance and training records. The department may require any of the above to occur and may evaluate similar activities initiated by the plan holder.

Based on the above information and applicable statutes and regulations, it is the decision of the department to approve with conditions the Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan.

Graham Wood
Program Manager

Alaska Department of Environmental Conservation

Certificate of Approval

Oil Discharge Prevention and Contingency Plan

Certificate Number: **14CER-016.4**

Plan Number: **14-CP-4057**

Plan Title: **Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan**

Covered Facilities: **Valdez Marine Terminal**

Facility Address/Location: **Valdez Marine Terminal**
300 Dayville Road
Valdez, AK 99686

Telephone: **(907) 834-7300**

Fax: **(907) 834-6914**

Region of Operation (18 AAC 75.495): **Prince William Sound**

Effective Date of Approval: **October 23, 2017**

Expiration Date: **November 21, 2019**

This approval is subject to the terms and conditions of the applicable Alaska Department of Environmental Conservation contingency plan approval letter dated 10/23/2017 and continuing compliance with the requirements of AS 46.04 and 18 AAC 75.

10/23/2017

Graham Wood, Approving Authority **Date**
Prevention, Preparedness & Response Program Manager

EXHIBIT B

PWSRCAC Comments, April 13, 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution

Regional Citizens' Advisory Council / "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers."

In Anchorage: 3709 Spenard Road / Suite 100 / Anchorage, Alaska 99503 / (907) 277-7222 / FAX (907) 277-4523
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April 13, 2017

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Re: PWSRCAC's Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1, ADEC Plan 14-CP-4057

Dear Ms. Carey, Ms. Reed, Mr. Carr, Mr. Lehman, CDR Lally, and Mr. Gilliam:

Enclosed are the Prince William Sound Regional Citizens' Advisory Council's (PWSRCAC's) comments on the proposed February 28, 2017 major amendment to the Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan [ADEC Plan 14-CP-4057] (VMT C-Plan) for your review and consideration.

PWSRCAC (or "Council") is an independent, non-profit corporation whose mission is to promote environmentally safe operation of the Valdez Marine Terminal and associated tankers. The Oil Pollution Act of 1990 (OPA90) and the Council's contract with Alyeska Pipeline Service Company (APSC) guide our work. PWSRCAC's 18 member organizations consist of communities in the region affected by the 1989 *Exxon Valdez* oil spill, as well as commercial fishing, aquaculture, Native, recreation, tourism, and environmental groups.

These comments are being provided to the following agencies together with Alyeska Pipeline Service Company (APSC) as the planholder:

(1) Alaska Department of Environmental Conservation (ADEC),
(2) United States Bureau of Land Management (BLM),
(3) United States Coast Guard (USCG),
(4) United States Environmental Protection Agency (EPA),
(5) United States Department of Transportation (DOT).

PWSRCAC directs these comments to all federal and state agencies responsible for oil spill prevention and response oversight at the Valdez Marine Terminal and requests each agency carefully review PWSRCAC's recommendations contained in these comments when formulating individual agency responses, requirements, or approvals of this amendment.

PWSRCAC participates in the public review of the VMT C-Plan as a function of our OPA 90-mandated role as a citizens' oversight group and our contract with APSC. PWSRCAC has over 25 years of experience and expertise with the Valdez Marine Terminal spill prevention and response activities. The Council's work is supported by technical experts that have provided advice, recommendations, and have produced reports regarding the concerns raised in our comments.

Our detailed comments are attached. Most of PWSRCAC's comments and recommendations are not new. The Council has raised these concerns and recommendations on various occasions to APSC and regulating agencies via letters, reports, through participation in the VMT C-Plan Coordination Workgroup, and through meetings and oral conversations.

We look forward to working with the federal and state agencies and the planholder in any efforts to improve and maintain a quality plan. Please feel free to contact me at (907) 834-5070, or Linda Swiss at (907) 277-7222 at if you have any questions or need further information.

Sincerely,

Donna Schantz
Executive Director

Attachment: PWSRCAC's Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1

Cc: Graham Wood, ADEC
Scott Hicks, APSC
Tom Stokes, APSC
PWSRCAC Board of Directors

Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1

Submitted to the
Alaska Department of Environmental Conservation
United States Bureau of Land Management
United States Coast Guard
United States Environmental Protection Agency
United States Department of Transportation

Submitted by:

Prince William Sound Regional Citizens' Advisory Council (PWSRCAC)

April 13, 2017

Table of Contents

1. Regulatory Basis for Comments

The following comments are based on state and federal laws and regulations pertaining to Alyeska Pipeline Service Company's (APSC) Oil Discharge Prevention and Contingency Plan for the Valdez Marine Terminal (VMT), including:

1. Title 46 of the Alaska Statutes;
2. Title 18, Chapter 75 of Alaska Regulations;
3. 49 CFR Part 194, U.S. DOT's Regulations for Response Plans for Onshore Oil Pipelines;
4. 33 CFR Part 154, Subpart O, USCG Regulations for Facility Response Plans;
5. 40 CFR Part 112, EPA Regulations for Facility Response Plans;
6. Oil Pollution Act of 1990; and,
7. TAPS Grant and Lease.[1]

2. Volume 1, Part 3, Section 3.7, Non-Mechanical Response Information

The Alaska Department of Environmental Conservation's (ADEC's) January 14, 2015 Valdez Marine Terminal Contingency Plan (VMT C-Plan) revised approval included Condition of Approval No. 5 (COA 5), "Requirement to Include Nonmechanical Response Monitoring of Environmental Effects of the Nonmechanical Options." That condition states:

> *APSC is required to develop protocols to assess potential environmental consequences, provisions for monitoring and real-time assessment of environmental effects of the nonmechanical response options proposed for inclusion into the VMT plan. APSC must demonstrate resources to conduct the required assessment and monitoring are available in-house or secured by contract. Further discussion on this issue can be found in Issue No. 24 in the attached findings document. This amendment must be submitted to the department by December 31, 2016. The amendment implementing this condition will undergo public review under 18 AAC 75.445. The department encourages review through the VMT Coordination Group prior to submission of an amendment to the plan.*

ADEC's November 21, 2014 VMT C-Plan Findings Document (Issue No. 24: Nonmechanical Response Monitoring) concluded improvements to APSC's nonmechanical response monitoring program were necessary:

> *The department finds the plan includes provisions for monitoring efficiency and effectiveness of dispersant or in situ burning* ***but does not include specific mechanisms to assess the environmental consequences or provisions for continuous monitoring of its environmental effects****. To address this, the department is requiring APSC develop protocols for environmental monitoring as stated in Condition of Approval 5. [Emphasis added].*

[1] Renewal of the Agreement and Grant of Right-of-Way for the Trans-Alaska Pipeline and Related Facilities between The United States of America and Amerada Hess Pipeline Corporation, BP Pipelines (Alaska) Inc., ExxonMobil Pipeline Company, Phillips Transportation Alaska, Inc., Unocal Pipeline Company, and Williams Alaska Pipeline Company, LLC, 2003.

> *The plan proposes use of nonmechanical response options, dispersants and in situ burning, as one of many tools to respond to an oil spill.* ***The plan does not however include a description of the specific mechanisms in place to assess the environmental consequences of nonmechanical response options and provide continuous monitoring with real-time assessment of environmental effects.*** *The plan does reference the Special Monitoring of Applied Response Technologies (SMART) protocol which provides procedures for monitoring the effectiveness of the nonmechanical response options on the oil. The response to R2RFAI 35 references the company that is contracted to monitor effectiveness of both dispersants and in-situ burning.* ***Department contact with the contractor via telephone on August 28, 2014, confirmed the contractor does not provide monitoring of environmental consequences of nonmechanical response options or continuous monitoring of their environmental effects. The plan also does not include an assessment of potential environmental consequences and provisions for continuous monitoring with real-time assessment of environmental effects.*** *[Emphasis added].*
>
> ***The department is requiring APSC to develop protocols to assess the potential environmental consequences of the nonmechanical response options presented in the plan and to provide for continuous monitoring of their real-time environmental effects****. APSC must submit an amendment to the VMT plan that describes those protocols, how they will be implemented during a response, and demonstrate that the resources can be secured either through in-house capabilities of via contract, see Condition of Approval 5. [Emphasis added].*

APSC's proposed amendment includes changes to the dispersant use section (Volume 1, Part 1, Section 1.7) and non-mechanical response section (Volume 1, Part 3, Section 3.7) of the plan. The proposed amendment references "Annex F of the Unified Plan" which should be appropriately referenced as Annex F, Appendix I: Alaska Regional Response Team Dispersant Use Plan for Alaska as part of the *Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges and Releases* ("Unified Plan"). Annex F, Appendix I guides dispersant use authorization in Alaska's marine waters including Prince William Sound. The amendment also references NOAA's Special Monitoring of Applied Response Technologies (SMART) protocols and visual observations to monitor the effectiveness of non-mechanical response options.

PWSRCAC finds the proposed changes to these sections do not fully address the requirements of COA 5 for the following reasons:

- The reference and link to Annex F of the Unified Plan have been added to the VMT C-Plan. However, PWSRCAC does not find Annex F provides all the information required by ADEC in COA 5. Specifically, Annex F does not include "specific mechanisms to assess the environmental consequences or provisions for continuous monitoring of its environmental effects" and "protocols for environmental monitoring." Annex F, Appendix I provides for limited pre-application environmental assessment and briefly notes the need for continuous monitoring after dispersants are applied, but fails to adequately address the need for protocols to assess environmental effects before, during, or after dispersant use.

- NOAA's Special Monitoring of Applied Response Technologies (SMART) protocols are designed to evaluate dispersant effectiveness and do not address the information requested in COA 5. SMART does not include specific instruction on what steps should be taken to assess environmental consequences or environmental effects.

- The VMT C-Plan references NOAA's Natural Resource Damage Assessment (NRDA) method, but this method does not satisfy the requirements of COA 5. NRDA is a long term assessment and monitoring approach, not a real-time assessment of environmental consequences or environmental effects.
- This amendment does not provide monitoring and real-time assessment of environmental effects of the nonmechanical response options proposed in the VMT plan.
- This amendment does not demonstrate that APSC has the personnel, equipment, or expertise to carry out the required nonmechanical assessment and monitoring work, or clearly explain which contractor would perform this work and provide sufficient information to show that the contractor has this expertise and capability. This issue was raised during the last C-Plan renewal as ADEC was unable to verify in an August 28, 2014 telephone call that APSC's contractor had the expertise or equipment to complete this work.

PWSRCAC is also concerned that APSC's proposed changes to the VMT C-Plan to meet COA 5 were not discussed in the VMT Coordination Workgroup prior to submission of this amendment. One of the primary purposes of the VMT Coordination Workgroup is to provide an open forum for communication and discussion of topics. The proposed amendment to meet COA 5 was not discussed with the workgroup, thus reducing the effectiveness of the workgroup process and resulting in an amendment not supported by PWSRCAC.

PWSRCAC recommends the VMT C-Plan be amended to meet the requirements of Condition of Approval No. 5 by addressing the inadequacies described above.

PWSRCAC developed a set of protocols for Prince William Sound entitled *Prince William Sound Dispersants Monitoring Protocol: Implementation and Enhancement of SMART (Special Monitoring of Applied Response Technologies)* dated July 2016. This set of environmental monitoring protocols for Prince William Sound was developed for use in the immediate aftermath of non-mechanical response technology application. Developed in consultation with regulatory stakeholders and independent oil spill response experts, these protocols provide improved monitoring guidelines, including a biological monitoring component, to fit within the response framework of the Dispersant Use Plan for Alaska and the federal SMART protocols.

PWSRCAC presented these draft protocols to the VMT C-Plan Coordination Workgroup in August 2016 for consideration in helping APSC meet the requirements of COA 5. The final document was transmitted to APSC, USCG, EPA, and the Alaska Regional Response Team on December 5, 2016. PWSRCAC requested APSC consider incorporating the protocols into the VMT C-Plan to meet the requirements of COA 5.

These protocols were specifically written for PWS responders to use during an actual event. The intent is to have a PWS-specific protocol that fits seamlessly into the PWS responder's work process, while providing responders with the ability to deal with environmental and biological monitoring before and after dispersant application.

The core purpose of the PWSRCAC's report is to outline "a dispersants monitoring protocol that builds on the SMART protocol" and "specifies additional pre- and post-spill monitoring activities to complement field testing during a dispersant application." The content of PWSRCAC's report directly addresses the non-mechanical response monitoring inadequacies identified in ADEC's November 2014 C-Plan Final Findings Document and requirements of COA 5. Inclusion of the *Prince William Sound Dispersants Monitoring Protocol: Implementation and Enhancement of SMART (Special Monitoring of Applied Response*

Technologies) would specifically address the first requirements of COA 5 which are "to develop protocols to assess potential environmental effects of the nonmechanical response" and to "demonstrate resources to conduct the required assessment and monitoring."

PWSRCAC requests the VMT C-Plan be amended to incorporate the *Prince William Sound Dispersants Monitoring Protocol: Implementation and Enhancement of SMART (Special Monitoring of Applied Response Technologies)* by reference or provide an equivalent site-specific plan.

3. Volume 1, Part 1, Section 1.7, Dispersant Use

It remains PWSRCAC's position that dispersants should not be included in the VMT C-Plan as a non-mechanical response option because dispersants can adversely impact the health of marine resources that stakeholders depend on for their food, culture, and livelihoods. PWSRCAC's position on dispersants is:

> *After years of observing dispersant trials, dispersant effectiveness monitoring, advising and sponsoring independent research regarding chemical dispersant use, it is the position of the Prince William Sound Regional Citizens' Advisory Council (the Council) that dispersants should not be used on Alaska North Slope crude oil spills in the waters of our region. Until such time as chemical dispersant effectiveness is demonstrated in our region and shown to minimize adverse effects on the environment, the Council does not support dispersant use as an oil spill response option. Mechanical recovery and containment of crude oil spilled at sea should remain the primary methodology employed in our region.*[2]

Among PWSRCAC's concerns is the scarcity of reliable, peer-reviewed, scientific data about the efficacy, toxicity, and persistence of dispersants and dispersed oil in Prince William Sound/Gulf of Alaska conditions. Conclusive demonstrations of chemical dispersant efficacy in the cold waters of Prince William Sound have not been completed. It is PWSRCAC's opinion that dispersant use in Port Valdez is generally not appropriate for the following reasons:

- Low salinity (freshwater lensing also significantly lowers the salinity of the surface waters where any potential dispersants may be applied thus interfering with their effectiveness);
- Lack of mixing (residence time for water in the Port basin is very long and it takes a great deal of time for the water in the Port to turnover or exchange and strong seasonal freshwater lensing effect in the Port interferes with the successful mixing of any potential dispersants use for much of the year);
- Proximity to humans that live, work, and recreate in Port Valdez; and,
- A host of environmentally sensitive sites and species, and economically important resources (e.g., commercial fisheries) that would be disproportionately harmed by exposure to sub-surface dispersed oil.

Additionally, PWSRCAC questions dispersant use based upon recent photo enhanced toxicity concerns and other outstanding questions regarding long-term effects. Photo enhanced toxicity occurs when a chemical becomes more toxic if exposed to the ultraviolet light present in natural sunlight.

[2] PWSRCAC, Dispersants Use Position Statement, May 3, 2006.

PWSRCAC recommends dispersant use application be prohibited in Port Valdez until such time that scientific information can be provided that clearly demonstrates that chemical dispersants can be used safely and effectively, and are proven to present a net environmental benefit to the marine resources that stakeholders depend on for their food, culture, and livelihoods, relative to other oil spill response options including mechanical recovery.

While PWSRCAC assumes that APSC's proposed revisions to Volume 1, Part 1, Section 1, Dispersant Use are intended to meet the first part of COA 5 (requiring protocols for environmental monitoring and assessment), as explained above, it is PWSRCAC's opinion that the proposed changes do not meet the requirements of COA 5. This proposed revision provides no method or protocol to assess potential or real-time environmental effects of non-mechanical response.

Annex F in the Unified Plan, referenced by APSC, currently guides dispersant use authorization in Alaska's marine waters, including Prince William Sound and the marine waters adjacent to the VMT where a spill from the VMT could spread. Annex F eliminates pre-approval zones for all state waters including Port Valdez. While this does not eliminate the ability to obtain dispersant use permission for use in Port Valdez, it requires substantial consultation and scientific inquiry prior to dispersant use approval.

Even though PWSRCAC strongly opposes dispersant use in Port Valdez, PWSRCAC recognizes that there is a process in place to facilitate the use of dispersants in our region. It is critical that substantial consultation, scientific inquiry and comprehensive monitoring protocols are in place to guide dispersant use.

4. Volume 1, Part 3, Section 3.9, Response Training

APSC's proposed amendment to Volume 1, Part 3, Section 3.9, Response Training proposes to delete all the Field Responder Training course descriptions and goals for each training module that is not supported by PWSRCAC.

The following historical background is included to provide an understanding that oil spill response training has been an important issue in the VMT C-Plan in the past.

- On June 18, 2004, ADEC issued an Out of Compliance Notification to APSC for response training in the VMT C-Plan. A review by ADEC in February 2004 found that APSC's training program was different from what was contained in the plan. The Out of Compliance Notification required an amendment to the plan that provided an accurate detailed description of training programs in place for discharge response personnel.
- APSC's January 31, 2007 Government Letter 11094 explained that APSC developed a comprehensive training program through a multi-stakeholder process. APSC wrote: "The Oil Spill Response Training Management Program manual is submitted as a supporting document for your review and reference. This amendment and program were completed after a protracted period and working the process through a workgroup including APSC personnel, the Alaska Department of Environmental Conservation (ADEC) and the Prince William Sound (PWS) Regional Citizens' Advisory Council (RCAC). An APSC project team was ultimately formed and worked the project through the compliance schedule outline in Part 2, Section 2.7.5.3; regulators and stakeholders were regularly informed of project status. Throughout the project, the input and ideas of all parties were carefully evaluated, considered, and incorporated as appropriate. **APSC believes that the resulting**

products are an improvement of its oil spill response training, documentation, and management processes." [Emphasis added.]

- APSC's Oil Spill Response Training Management Program, AMS-011-01 (210 pages) was incorporated into the VMT C-Plan in 2007 to meet the commitment in the Compliance Schedule and Waivers Section 2.7 of the VMT C-Plan.
- In 2014, despite PWSRCAC's opposition, ADEC approved a revision to the VMT Response Training Program that removed reference to the detailed APSC's Oil Spill Response Training Management Program, AMS-011-01. ADEC had previously required this level of detail in 2007 and reversed its position in 2014, allowing APSC to delete most of response training program details.[3]
- Course descriptions were retained in the response training section in the 2014 VMT C-Plan. APSC now proposes to delete this last remnant of its response training program that was once promoted to be an "**improvement of its oil spill response training, documentation, and management processes."**
- An important improvement to the plan resulting from multi-stakeholder efforts has been reversed in a few short years, and PWSRCAC does not understand this reversal of position.
- If this proposed amendment is approved, the majority of the response training program information will be eliminated from the plan quality.
- Based on past work on improvements to response training information in the plan, PWSRCAC does not support removal of the information as proposed.

PWSRCAC does not support the proposed amendment as it:

- Does not include any justification for deleting 21 pages of the Field Responder Training course descriptions and goals for each training module from the existing, approved VMT C-Plan.
- Continues to erode the quality of the response training program, which is inconsistent with the regulatory standard of "a detailed description of the training programs for discharge response personnel" (18 AAC 75.425(e)(3)(I)).

PWSRCAC is also concerned that the proposed response training amendment was not presented to the VMT C-Plan Coordination Workgroup for discussion prior to submission. The proposed amendment was not discussed with the workgroup, again reducing the effectiveness of the workgroup and resulting in an amendment not supported by PWSRCAC.

PWSRCAC maintains its position that the level of detail required by ADEC in 2007 to meet the VMT C-Plan Condition of Approval to improve the VMT Response Training Program should be met today, and the standard 10 years later should not be lowered. The plan should be continuously improved, not degraded.

PWSRCAC recommends that the existing Response Training Program be retained without revision.

[3] ADEC VMT Plan Findings Document, Issue No. 17: Response Training, November 21, 2014.

5. Volume 3, Section 9.0.2.1, SGH and DF SA Protection Mobilization Decision Matrix

APSC's proposed amendment to Volume 3, Section 9.0.2.1 deletes the existing, approved Solomon Gulch Hatchery (SGH) and Valdez Duck Flats (DF) Sensitive Area Protection Mobilization Decision Matrix (the Matrix) and replaces it with a completely new table that will result in less protection. PWSRCAC does not support this proposed change.

APSC proposes changes to the Matrix that will make it so difficult to ever trigger the protection threshold (even in a very large spill), that there will be few situations where SGH and DF protection would actually be triggered. PWSRCAC is concerned that by modifying the Matrix developed in 1997 by a multi-stakeholder working group (including state and federal trustee agencies) a weakening of a long-standing protection strategy will be reduced without justification.

PWSRCAC recommends that the protection tactics for the SGH and DF be initiated immediately regardless of the initial weather and sea conditions. Those conditions can rapidly change, and it takes a substantial amount of time to deploy those tactics. The environmental and economic value of these two local resources are too high to risk hydrocarbon contamination. Sensitive area protection tactics should be performed simultaneously while other personnel and equipment are working on source control and other prudent response efforts. APSC should have sufficient personnel and resources to clean up the spilled oil and simultaneously protect sensitive areas in Port Valdez.

PWSRCAC provides the following historical background for an understanding that this is an important issue to commercial fishermen, subsistence users, local residents, and the ecosystem.

- The Matrix was created many years ago based on years of actual experience and oil spills. PWSRCAC does not recommend unraveling the progress made previously.
- An important lesson learned from the May 1994 *Eastern Lion* spill was that a spill of 10 gallons or more should automatically (combined with other factors in the 1997 matrix) trigger mobilization of SGH and DH protection. APSC's threshold for mobilizing SGH and DH protection was too high in 1994, and these sensitive areas were not adequately or timely protected. Oil from this spill reached the net pens in 18 hours.
- A June 6, 1994, PWSRCAC letter to APSC summarized the lessons learned from the May 1994 *Eastern Lion* spill. PWSRCAC recommended a lower threshold for mobilizing SGH and DH protection, and explained the adverse consequences of delayed protection. PWSRCAC wrote:

  The Hatchery Plan states on page 506-2 "Protection of fish hatcheries exposed to the threat of a spill in Prince William Sound is one of the highest priorities in the near shore response strategy. Oil got into the net pens at Solomon Gulch Hatchery, as the main boom around the hatchery was not placed until after oil had reached the net pens. If this had been a bigger spill or it had occurred under different tide or wind conditions, this could have been disastrous."
- PWSRCAC also recommended automatic hatchery booming for any release of oil in Port Valdez based on lessons learned in the October 20-21, 1992 oil spill drill in Port Valdez. Hatchery personnel were concerned that if oil impregnated the shoreline and the brood lagoon, the oil may leech out the soil over time and damage the fisheries resource.
- PWSRCAC recommended automatic Duck Flats protection because this area is recognized as one of the most environmentally sensitive areas in Port Valdez.

- Actual spill and drill experience and lessons learned were examined by a multi-stakeholder workgroup including state and federal trustee agencies. This information was used to develop the currently approved SGH and DF Sensitive Area Protection Mobilization Decision Matrix as a condition of plan approval in 1997.
- The existing Matrix was approved by state and federal agencies, and has been in place and an effective tool for almost 20 years.
- The existing Matrix provides criteria and assessment points for use by the Initial Incident Commander at the start of a spill, and for Incident Command to continue to use throughout the early part of a spill response, to ensure SGH and DF sensitive area protection remains in the forefront of response decision making for spills in Port Valdez.
- The existing Matrix takes into account the importance of protecting the SGH and DF sensitive areas, in a number of situations, even if the oil spill trajectory is currently moving away from these sites. It takes substantial time (approximately 10-12 hours) to deploy protection at these sensitive areas, and there may not be time to deploy protection when weather, tide and current conditions rapidly change the direction of the spilled oil.
- The existing Matrix provides a conservative approach to protecting the SGH and DF sensitive areas, by requiring protection deployment for large spills, uncontained oil, and when currents, winds, waves, and visibility all adversely impact response effectiveness.

PWSRCAC does not support APSC's proposed amendment for the following reasons:

- APSC's proposed changes to the Matrix were presented to the VMT C-Plan Coordination Workgroup, and no consensus was reached between workgroup members APSC, federal and state agencies, and PWSRCAC. PWSRCAC did not agree with the proposed changes.
- APSC's proposed changes do not provide justification for deleting an effective tool and replacing it with an untested tool.
- ASPC's proposed changes do not take into account the lessons learned during prior spills (e.g., *Eastern Lion*), oil spill drills and exercises in Port Valdez, and exercises that show how long it takes to actually mobilize and deploy SGH and DF protection.
- APSC's proposed changes to the scoring process and threshold for determining when to protect the SGH and DF would delay or impede protection of these sensitive areas, even in large oil spill events.
- Overall, APSC proposes a less conservative protection plan, assuming the oil spill trajectory will not rapidly change and that there will be time to deploy protection if it does.
- Currently, SGH and DF protection is deployed simultaneous to oil recovery operations if the Matrix score equals or exceeds 25. Therefore, APSC must have the capability to both recover spilled oil and protect SGH and DF. Since APSC is required to have this capability, PWSRCAC does not understand why equipment would not be deployed. No one benefits from this risky strategy.
- APSC proposes to amend the trigger point for protection to a lower score of 12, but has eliminated a number of categories where points can be assigned, and has reduced the value of each category substantially. The end result shows it would be much more difficult to reach a score of 12 to trigger the requirement to protect the SGH and DF sites.

- The existing Matrix assigns high point values to large, uncontained spills, and assigns high point values to more challenging response conditions (where the oil is moving towards the site or the weather is unfavorable for effective response).
    - For example, using the existing Matrix, a score of 25 would be computed for an uncontained spill (10 points) of 35 barrels or more (10 points), low visibility (2 points), and high winds (3 points).
    - By comparison, using APSC's proposed Matrix, the same uncontained spill of 35 barrels would only be assigned 5 points, 0 for reduced visibility (this category was removed by APSC), and only 2 points for high winds. Therefore, the score would result in no SGH or DF protection deployment at all.
    - In sum, APSC has revised the Matrix so that a lower score is computed at a threshold that would not trigger protection for the same physical circumstances that would have triggered protection under the existing Matrix.

A detailed comparison of APSC's proposed Matrix change is provided below:

- All points for wave height were deleted. Yet, it is well understood that increasing wave height reduces oil recovery response effectiveness.
- All points for visibility impacts were deleted. Yet, it is well understood that reduced visibility adversely impacts oil recovery response effectiveness.
- All points for wind direction coming from the east or north were deleted. The revised Matrix assumes there will be sufficient time to protect the SGH and DF as long as oil is moving away from those sites. Yet, it can take up to 12 hours to deploy these sites, and experience shows Port Valdez weather can change rapidly and leave responders with insufficient time to deploy protection equipment.
- All points for current direction were deleted. Yet, it is well understood that current direction will influence the path of spilled oil. PWSRCAC understands that it can be difficult for an onshore responder to estimate the current direction from the shore, however, a worst-case current direction (to the east) should be used as the default until improved data is available.
- The revised Matrix proposes to only trigger SGH and DF protection when a point total of 12 is reached, compared to 25 points in the existing Matrix (a 48% reduction). The number of categories where points can be assigned has been decreased, as well as the maximum point total for each impact category.
- The proposed changes reduce the amount of points assigned to spill magnitude. The existing Matrix assigns 10 points to unknown spill volumes, spills of 10-35 barrels, and spills with a high rate of release. The proposed revision only assigns 2 points to a spill of 10-35 barrels, and assigns 0 points to spills of unknown spill volumes or high rates of release. To obtain 4 points in the new Matrix, the spill must be at least 10,000 barrels.
- To further illustrate PWSRCAC's concerns, the example below shows how an oil spill in Port Valdez (59,000 barrels, a Scenario 4 sized spill) would not trigger protection under the proposed Matrix.
    - Spill Magnitude: 59,000-barrel spill (4 points)
    - Source Control: Secured (0 points)
    - Uncontained (4 points)
    - Tide Cycle Ebb (0 points)
    - Wind Velocity 30 knots (2 points)
    - Wind Direction from east (0 points)
    - Wave Height 2 ft. (0 points)

The point total for this scenario would only be 10 points meaning no action would be taken to protect SGH or the DF (because the score is less than 12) even when 59,000 barrels of oil were floating on the water in Port Valdez.

- By comparison, the existing Matrix would immediately instruct responders to protect the SGH and DF sites:
  - Spill Magnitude: 59,000-barrel spill (10 points)
  - Source Control: Secured (0 points)
  - Uncontained (10 points)
  - Tide Cycle Ebb (0 points)
  - Wind Velocity 30 knots (3 points)
  - Wind Direction from east (1 point)
  - Wave Height 2 ft. (2 points)

  The point total for this scenario would be 26 points meaning action would be taken to protect SGH or the DF.

It is important to note that the proposed Matrix revision is so flawed that there are circumstances where a large spill from the VMT to Port Valdez close to SGH and DF would not trigger any protection. For example, using the proposed Matrix and the VMT Response Planning Standard (RPS) spill size of 155,000 barrels to water (VMT Scenario 5 Spill Volume) would result in the following points assigned:

- Spill Magnitude: 155,000 -barrel spill (4 points)
- Source Control: Secured (0 points)
- Uncontained (4 points)
- Tide Cycle Ebb (0 points)
- Wind Velocity 30 knots (2 points)
- Wind Direction from east (0 points)
- Wave Height 2’ (0 points)

The point total for this scenario would only be 10 points meaning take no action would be taken to protect SGH or the DF (because the score is less than 12) even when 155,000 barrels of oil were floating on the water in Port Valdez.

By comparison, the existing Matrix would immediately instruct responders to protect the SGH and DF sites in response to a large 155,000-barrel spill:

- Spill Magnitude: 155,000-barrel spill (10 points)
- Source Control: Secured (0 points)
- Uncontained (10 points)
- Tide Cycle Ebb (0 points)
- Wind Velocity 30 knots (3 points)
- Wind Direction from east (1 point)
- Wave Height 2’ (2 points)

The point total for this scenario would tally to 26 points meaning, APSC would take action to protect SGH or the DF.

PWSRCAC recommends the existing SGH and DF Protection Matrix be retained without revision.

6. Volume 2, Section 4, Scenario 4 59,000-barrel spill to Open Water

APSC's proposed amendment to Volume 2, Section 4 includes a major amendment to Scenario 4. APSC's proposed changes were presented and discussed with the VMT C-Plan Coordination Workgroup. PWSRCAC provided both oral and written comment on the proposed amendment to APSC through the workgroup process. No consensus was reached between APSC, federal and state agencies and PWSRCAC (the workgroup members).

PWSRCAC has five main concerns with the proposed amendment:

1. The scenario is a large 59,000-barrel (2.5 million gallon) crude oil spill into Port Valdez, but would not require any protection of the SGH or DF based on changes to Volume 3, Section 9.0.2.1, SGH and DF Sensitive Area Protection Mobilization Decision Matrix. As explained above, deploying personnel and equipment using the proposed matrix revision would not occur. PWSRCAC does not support changes to a 20-year-old matrix that results in less protection to environmentally and economically sensitive resources. Under the proposed changes, oil would need to be heading directly to the SGH and DF before protection resources would be assigned, and by that time it may be too late to deploy protection (which could take 10-12 hours or more) before those areas are oiled.

2. The proposed amendment raises serious concerns with the Valdez Fisheries Development Association Inc. and may adversely impact commercial fishermen in our region. In a December 11, 2016 letter to ADEC, the Valdez Fisheries Development Association Inc. (VFDA), Solomon Gulch Hatchery opposed changes to Scenario 4 that would delay SGH protection because there is insufficient time to deploy protection if weather conditions change, and because the economic impact of oil reaching the hatchery (only 3 nautical miles away) would be devastating. VFDA requested "the previous commitment for swift protection of the hatchery" be retained. PWSRCAC fully agrees with VFDA's comments. A copy of VFDA's December 11, 2016 letter to ADEC is attached.

3. The proposed response plan is not consistent with the actions APSC would take, or has taken, in prior oil spill response exercises for this size spill and spill location. APSC has a large amount of open water oil spill response equipment available for deployment in Port Valdez. Scenario 4 proposes to use a small portion of that available equipment, minimizing the amount, type and pace of equipment brought to the spill location.

4. Existing Scenario 4, Table 4.3.4 (Response Planning Standard Calculation and Assumption for On Water Recovery Capacity) has been deleted, without replacement.

5. The Scenario lacks a detailed waste management plan and detailed waste management calculations to show the different waste volumes and that ASPC has the resources to handle all waste streams.

PWSRCAC recommends that Scenario 4 be revised as follows:

(1) Include deployment of SGH and DF protection early in the spill. For <u>any</u> large spill from the VMT, such as that described in Scenario 4, the protection tactics of the SGH and DF should be initiated immediately regardless of the initial weather and sea conditions because in reality those can change rapidly, it takes a substantial amount of time to deploy those tactics, and the environmental and economic value of those two local resources are too high

to risk contamination. Those tactics should be performed simultaneously while other personnel and equipment is working on source control and other prudent response efforts;

(2) A rapid response fleet be developed to provide sensitive area protection in the Port Valdez vicinity;

(3) The scenario optimize use of existing on water recovery assets consistent with the approach APSC would actually take during the spill;

(4) Table 4.3.4 be revised to match the changes in the scenario and be retained; and

(5) **A detailed waste management plan be included so the type and volume of each waste stream is clear, and that the scenario clearly explains the personnel, equipment, and logistical resources and experts assigned to handling each waste stream.**

VALDEZ FISHERIES DEVELOPMENT ASSOCIATION, INC.
SOLOMON GULCH HATCHERY

P.O. Box 125 Valdez, AK. 99686 1815 Mineral Creek Loop Road Valdez, AK
(907)-835-4874 Fax (907)-835-4831 vfdamike@valdezfisheries.com

Mr. Ron Doyel
Prince William Sound Unit Manager
Alaska Dept. of Environmental Conservation
PO Box 990, MS 729
Valdez, AK 99686

December 11, 2016

RE: VMT Contingency Plan Scenario 4 Revisions

Dear Members of the Valdez Marine Terminal Contingency Plan Coordination Group,

The Valdez Fisheries Development Association Inc., (VFDA) would like to comment on Scenario 4 of the Valdez Marine Terminal (VMT) Contingency Plan, which we understand is currently being discussed and revised by your group. It has been brought to our attention that the planning for this scenario does not include the deployment of sensitive area protection tactic VMT-SA-6, the tactic that would be used to protect the Solomon Gulch Hatchery in the event of a spill. We believe this is an error and could pose catastrophic effects for hatchery operations and salmon fry survival based on the size of proposed spill scenario. VMT-SA-6 should be initiated with all expediency whenever a spill occurs in the waters of Port Valdez because the economic value of the hatchery and the role it plays in the economy of the Prince William Sound region is too large to chance oil reaching it. In the currently approved version of Scenario 4, VMT-SA-6 is to be initiated immediately after the spill is discovered. This commitment, precaution, and urgency are important to us, and we want to see this level of dedication maintained as the plan is revised and submitted for regulatory approval. Some observations and reasons for requiring this level of protection are as follows;

The scenario depicts quite a large spill - 59,000 barrels - to water from the piping on Berth 5 of the terminal. The weather and sea state in Port Valdez can change dramatically in short periods of time. In particular, winter winds and sea state in the port can become very hazardous. Therefore, the conditions that exist during the beginning of a spill can easily change and affect which oil spill response tactics would be appropriate to protect sensitive areas in Port Valdez. As Scenario 4 is currently proposed, the initial weather and sea conditions during the March spill would include northeast winds of 1 knot, temperature of 28°F, visibility of less than 1 NM, seas of 2-3 feet, and an ebb tide of 0.5 knots.

These should be considered as a best case scenario and weather and sea conditions could reasonably result in oil spilled from the terminal moving southwest away from the hatchery. However, in a matter of hours a change in weather and the tide may potentially lead to oil moving

toward the hatchery. And given the hatchery's proximity to the VMT spill site being less than three nautical miles, the reaction time to a shift in conditions would be very short. Therefore, we believe, regardless of the initial weather conditions, VMT-SA-6 should be initiated as soon as possible after the discovery of a spill from the terminal (or anywhere else in Port Valdez) as a precautionary measure to guard against the unpredictable nature of the local weather and protect the significant economic value produced by the Solomon Gulch Hatchery.

In 2013, the McDowell Group prepared a report titled, "Economic Impact of the Valdez Fisheries Development Association." Its analysis showed that during the five year study period (2008-2012) VFDA generated an average of $80 million in economic output and provided for 842 direct and indirect jobs to the region. From 2000 through 2012, the salmon raised and released from the Solomon Gulch Hatchery led to a total of $113 million in ex-vessel value for fisherman in Prince William Sound. And, between 2008 and 2012, VFDA salmon created the basis of 241 commercial fishing jobs each year. From 2000 through 2012, processors grossed an estimated $524 million and employed 270 seasonal workers each year processing the hatchery's salmon. VFDA salmon caught in local sport fisheries resulted in $6.6 million in annual economic output from 2008 through 2012 and led to 85 jobs and $2.6 million in labor income each year during this same period. The economic value of the Solomon Gulch Hatchery is substantial and its dependence by the community of Valdez and others is significant. Every reasonable effort must be made to protect this local resource in the event of an oil spill in Port Valdez.

Finally, hatchery operations for fry outmigration begin in mid - March and salmon fry enter ocean rearing pens later that month. At full capacity, VFDA will have up to 250 million pink and coho salmon in net pens just a short distance from the VMT with plans for further expansion to 270 million. Saltwater rearing for fish growth continues adjacent to the hatchery throughout mid-June. And, shortly thereafter hatchery cost recovery operations and common property harvests begin in the hatchery Special Harvest Area on returning adult salmon. Based on past experience with the Eastern Lion spill, much smaller by comparison and under similar conditions, oil will reach the hatchery. Because of actual historical events, the potential for the loss of penned juvenile salmon without full hatchery protection may occur. In addition, the effects of a protracted shore line clean up around the hatchery may also impact returning adult salmon and disrupt harvest operations and local fisheries.

For these reasons, VFDA hopes you will retain the previous commitment for swift protection of the hatchery as you work through your revision of Scenario 4 in the VMT Contingency Plan. The security of the Solomon Gulch hatchery is simply too important.

Sincerely

Mike Wells
Executive Director

EXHIBIT C

PWSRCAC Comments, August 23, 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution

Regional Citizens' Advisory Council / "Citizens promoting environmentally safe operation of the Alyeska terminal and associated tankers."

In Anchorage: 3709 Spenard Road / Suite 100 / Anchorage, Alaska 99503 / (907) 277-7222 / FAX (907) 277-4523
In Valdez: P.O. Box 3089 / 130 South Meals / Suite 202 / Valdez, Alaska 99686 / (907) 834-5000 / FAX (907) 835-5926

August 23, 2017

Anna Carey
Alaska Department of Environmental Conservation
SPAR/PPRP
PO Box 1709
Valdez, AK 99686

Re: PWSRCAC's Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1 (RFAI Round 2), ADEC Plan 14-CP-4057

Dear Ms. Carey:

Enclosed are the Prince William Sound Regional Citizens' Advisory Council's (PWSRCAC) Comments on Round 2 of Alyeska Pipeline Service Company (APSC), Valdez Marine Terminal (VMT) Oil Discharge Prevention and Contingency Plan (VMT C-Plan), ADEC Plan 14-CP-4057, for your review and consideration. These comments address VMT C-Plan Amendment 2017-1 submitted to the Alaska Department of Environmental Conservation (ADEC) on February 28, 2017, and follow PWSRCAC's initial comments dated April 13, 2017, that are incorporated herein by reference. Comments are limited to issues raised by ADEC in RFAI Rounds 1 and 2.

Regarding the review process, PWSRCAC found it challenging due to the lack of information made available to the public between RFAI Round 1 and Round 2. To our knowledge, no information was shared publically until responses to RFAI Round 2 were received by ADEC. At that time, only pages with changes made in Round 2 were made available for public comment. Thus, there are numerous issues for which PWSRCAC has been unable to review the changes made by APSC based on Round 1, apparently until the plan is finalized. Additionally, table numbers were changed and reviewers had to make assumptions about replacement tables. PWSRCAC understands that ADEC has the discretion to work with planholders during the RFAI process, but the public needs adequate information on how the RFAIs were addressed in order to fully understand the proposed changes.

PWSRCAC has identified the following issues we are most concerned with:

1. **Response training**: APSC proposed removing response training information in the initial amendment. In the RFAI phase, ADEC requested training information remain in the plan. Based on the attention and importance placed on this issue during past plan reviews, PWSRCAC strongly supports ADEC's requirement that detailed training information remain in the plan.

2. **Protection of Solomon Gulch Hatchery and Valdez Duck Flats**: PWSRCAC is particularly concerned that changes proposed by APSC to the decision-making matrix for Solomon Gulch Hatchery and Valdez Duck Flats could delay protection of these valuable sensitive areas. The matrix was already agreed upon through past collaborative efforts, as referenced in the enclosed "Final Findings and Response to Comments" from ADEC on the 2000 Valdez Marine Terminal Plan. The importance of these resources has not diminished in the 20 years since the matrix was first developed, nor has the inherent need for a robust tool for response decision making in the immediate hours after a spill.

3. **Condition of Approval No. 5: Requirement to Include Nonmechanical Response Monitoring of Environmental Effects of the Nonmechanical Options from the 2014 approval**: In reading the wording contained in ADEC's approval letters (dated November 21, 2014; December 5, 2014; and January 14, 2015) and November 21, 2014 Findings Document, it is PWSRCAC's opinion that APSC's response does not fully address the requirements of Condition of Approval No. 5, specifically the requirement that APSC develop protocols to assess potential environmental consequences of nonmechanical response options.

PWSRCAC would like to point out that past work group efforts have addressed some of the issues described above, specifically response training and protection of Solomon Gulch Hatchery and Duck Flats. It appears that some of the proposed changes reverse the progress made on these issues developed through a collaborative process. PWSRCAC stresses recognition of the improvements made by APSC, ADEC, BLM and stakeholders on the VMT C-Plan, and emphasizes the importance of maintaining key information identified during past plan reviews.

PWSRCAC appreciates all of the effort that has gone into improving this plan since 1989, and wants to see the continuous improvement process be maintained in the spirit of achieving the highest level of protection in Valdez and Prince William Sound.

Please feel free to contact me if you have any questions or need further information.

Sincerely,

Donna Schantz

Donna Schantz
Executive Director

Attachment: PWSRCAC's Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1 RFAI Round 2

Cc: Scott Hicks, Alyeska
Ron Doyel, ADEC
CDR Michael Franklin, USCG
Erika Reed, BLM
Chris Hoidel, PHMSA
Matt Carr, EPA

Comments on Alyeska Pipeline Service Company, Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, Amendment 2017-1

RFAI Round 2

Submitted by:

Prince William Sound Regional Citizens' Advisory Council (PWSRCAC)

August 23, 2017

1. Introduction

The Prince William Sound Regional Citizens' Advisory Council (PWSRCAC or Council) submits the following comments to the Alaska Department of Environmental Conservation (ADEC) on Alyeska Pipeline Service Company's (APSC) Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan (VMT C-Plan). These comments are based on APSC's responses to RFAI Rounds 1 and 2 on proposed Amendment 2017-1.

2. Volume 1, Part 3, Section 3.7, Non-Mechanical Response Information

In RFAI #3, ADEC asked APSC to "…provide the department with an explanation of how trained personnel and equipment necessary for carrying out the monitoring of environmental effects and assessment of environmental consequences that is outlined in the proposed changes for the plan will be obtained if needed for non-mechanical use." PWSRCAC seeks clarification of how APSC's response (1) responds to ADEC's RFAI #3, and (2) meets the requirements of Condition of Approval No. 5 in ADEC's approval letters (dated November 14, 2014; December 5, 2014; and January 14, 2015) and Issue No. 24 Nonmechanical Response Monitoring in ADEC's VMT Plan Findings Document dated November 21, 2014. It does not appear that APSC's response adequately addresses RFAI#3, nor does it adequately address ADEC's Condition of Approval No. 5 (COA #5). APSC response states it "would use contracted services to provide trained personnel and the equipment necessary for carrying out the monitoring of environmental effects…" Nowhere does APSC provide protocols to assess potential environmental consequences or specific mechanisms to assess the environmental consequences for continuous monitoring of environmental effects as required in COA #5. PWSRCAC incorporates by reference its April 13, 2017 Comments on VMT Amendment 2017-1 on this issue.

PWSRCAC requests clarification of APSC's response to ADEC's RFAI #3 and that information in response to COA #5 be included in the VMT C-Plan.

3. Volume 1, Part 3, Section 3.9, Response Training

APSC initially proposed to delete all the Field Responder Training course descriptions and goals for each training module that were in Volume 1, Part 3, Section 3.9, Response Training. PWSRCAC reiterates comments submitted on April 13, 2017 that this information be retained without revision, pointing out that addition of response training information was in response to ADEC's June 18, 2004 Out of Compliance Notification and the result of a previous collaborative effort by the plan holder, ADEC, and PWSRCAC.

PWSRCAC appreciates that ADEC requested in RFAI #4 (Round 1) that "Information with detailed descriptions of the training programs for discharge personnel needs to be in the plan to meet the requirements of regulations," referencing 18 AAC 75.425(e)(3)(l). After asserting in RFAI #4 (Round 1) that this was not needed from their perspective, Alyeska replied in RFAI #4 (Round 2) that Table 3.9-4 was "reformatted, and updated course descriptions have been added to Volume 1, Section 3.9."

PWSRCAC has reviewed the reformatted information and found multiple changes made to the content as presented in the currently approved VMT C-Plan, which are outlined below. While the reformatting of information is not inherently problematic, we recommend that the same level of detail should be retained.

General Comments
The "Job Role" column has been deleted. According to page 3.9-2 of the 2014 approved VMT C-Plan, the training program overview states that "[c]entral to the program is the concept of job role." Essentially, job roles describe the task(s) to be performed by that specific position and the training needed to be able to perform those tasks. Removal of the job role makes linking training to specific positions less effective. The rationale for removing the Job Role link, and how one is to determine the specific training needed without this link, should be explained. PWSRCAC recommends retaining the job role link.

The SRVOSCP Course (001: Once/002: Annual) requirements have been removed for all positions except the On-Land Task Force Leader (TFL) and On-Land Responder positions. In the previously approved VMT C-Plan, this course was required for the following positions:

- Open Water TFL
- Open Water Responder
- Open Water Self-Prop Skimmer TFL
- Open Water Self-Prop Skimmer Responder
- Sensitive Area Protection TFL (named Strike Team Leader)
- Onshore TFL
- Onshore Responder

There are several positions in Table 3.9-4 in the 2014 approved VMT C-Plan that contain the phrase "Training per full time work role." While not very specific, this link to courses is lost in the revised table for several positions and for several courses. This loss is captured in the individual position comments section below.

As revised, no HAZWOPER training is required for the Firefighting TFL, Safety Officer and Security Officer. Previously, these positions required "training per full time work role."

Table 3.9-5: Course objectives in Table 3.9-5 are less detailed than in the approved 2014 VMT C-plan. Many objectives list other courses without providing any further detail. Others lack terminology that would enable assessment of proper performance. For example, the first objective for HAZ/015 and 016 HAZWOPER Level 4 states "Know how to implement the local emergency response plan." Proper instructional objectives should be described in terms that are observable so that proper performance can be assessed. It is impossible to observe if a person "knows" a task. The objective should instead call for a student to "implement task X from the emergency response plan. Course objectives also lack references to describe proper performance. For example, operating any equipment should always be in accordance with manufacturers specifications or operations manuals.

Individual Position Comments:
Source Control TFL

- TFL/Group Supervisor (ICS/041) is an added requirement.
- "Training per full time work role requirements" means the following items are no longer required:
  - Spill Response Field Command (ICS/202)
  - Initial Response and 201 Briefings (ICS/203)
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

Source Control Responder

- Name changed from "Responder" to "Team Member."
- "Training per full time work role requirements" means the following items are no longer required:
  - Task Force Leader/Group Supervisor (ICS/401)
  - Spill Response Field Command (ICS/202)
  - Initial Response and 201 Briefings (ICS/203)
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

Firefighting TFL

- "Training per full time work role requirements" means the following items are no longer required:
  - Hazwoper
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

Safety Officer

- "Training per full time work role requirements" means the following items are no longer required:
  - Hazwoper
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

Security Officer

- "Training per full time work role requirements" means the following items are no longer required:
  - Hazwoper
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

Oil Recovery STL and Responder

Positions have been removed. New positions added include:

- Nearshore Oil Recovery Strike Team Leader
- Nearshore Oil Recovery Responder

Open Water TFL

- Added Open water TransRec Skimmer Suite course to training requirements.
- Open Water Crucial Skimmer Suite is not required but should be added to this position.

On Land TFL

- "Training per full time work role requirements" means the following items are no longer required:
  - Spill Response Field Command (ICS/202)
  - Initial Response and 201 Briefings (ICS/203)
  - Basic Marine Safety (SAF/203)

On Land Responder

- "Training per full time work role requirements" means the following items are no longer required:

- Task Force Leader/Group Supervisor (ICS/401)
- Spill Response Field Command (ICS/202)
- Initial Response and 201 Briefings (ICS/203)
- Basic Marine Safety (SAF/203)

On Site Safety Specialist

- "Training per full time work role requirements" means the following items are no longer required:
  - Spill Response Field Command (ICS/202)
  - Initial Response and 201 Briefings (ICS/203)
  - Basic Marine Safety (SAF/203)
  - SRVOSCP

PWSRCAC recommends:

1. That the course content be updated (again) to reflect the level of detail that is in the currently approved VMT C-Plan, with the exception of only those changes related to the addition of Crucial skimmers; and

2. That previous training requirements for the positions described above be reinstated.

4. Volume 2, Section 4, Scenario 4 59,000-barrel spill to Open Water

PWSRCAC raised concerns in its April 13, 2017 comments regarding changes to sensitive area protection made in Scenario 4 as a result of a reduced spill size (89,595 barrels reduced to 59,000 barrels). As a result of the reduced spill volume and changes to the decision-making matrix designed specifically for these sites, APSC reduced the resources allocated to sensitive area protection generally, and removed deployment of Solomon Gulch Hatchery (SGH) and the Valdez Duck Flats (DF) protection strategies. Following ADEC's RFAI #7 Round 1, APSC added booming of both sites back to the scenario: SGH between hours 24-36 and DF between Hours 48-60. Given the level of resources available to APSC (including for response to a much larger spill of 155,000 barrels of oil spilled to water) and the critical importance of these sensitive sites, the immediate and rapid deployment of protective strategies for SGH and DF should be reinstated in Scenario 4.

PWSRCAC views the proposed change to increase the current 11 hour timeframe to 24-36 hours for SGH and 48-60 hours for the DF, and reduce the resources allocated to sensitive area protection in general, is a serious diminishment and weakening of the existing requirements for environmental protection strategies and capabilities. It is our understanding that the recommendation to reinstate the immediate and rapid deployment of protective oil spill boom for the DF and SGH is consistent with ADEC's prior decision from the 2000 VMT C-Plan approval.[1]

[1] ADEC's Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan – Final Findings Document and Response to Comments April 11, 2000 (Basis for Decision, Issue #2: Protecting Environmentally Sensitive Areas)

We understand the oil spill trajectory for Scenario 4 has changed, but due to the length of time it takes to boom the SGH and DF, we believe it is prudent to retain the existing timeframe of immediately deploying protection strategies for the SGH and DF for any significant spill at the Valdez Marine Terminal. Because APSC has the resources available, the immediate and rapid protection of SGH and DF should not delay or preclude APSC from simultaneously deploying protection strategies for other environmentally sensitive areas in Port Valdez. If needed, vessels from the SERVS fishing vessel program could be used to support these response activities.

PWSRCAC recommends that the immediate and rapid deployment of protective strategies for SGH and DF should be reinstated in Scenario 4.

5. Volume 2, Table 4-13 (Part 4 of 6)

In RFAI #63, ADEC asked APSC to explain the reduction in numbers for VMT-WM-2. The tactic itself does not specify personnel numbers. APSC responded that the reduced personnel numbers are the result of the use of the barge performing as an oil storage barge. PWSRCAC requests that personnel numbers and their respective roles be added to the tactic for clarity, which could include identifying variations as appropriate.

PWSRCAC requests that personnel numbers and roles be added to VMT-WM-2 to enhance clarity in the scenario.

6. Volume 3, Section 9.0.2.1, SGH and DF SA Protection Mobilization Decision Matrix

APSC's amendment to Volume 3, Section 9.0.2.1 proposes deleting the existing, approved *Solomon Gulch Hatchery (SGH) and Valdez Duck Flats (DF) Sensitive Area Protection Mobilization Decision Matrix* (the Matrix) and replacing it with a completely new table that will result in less protection. PWSRCAC does not support replacing the Matrix with a new one. PWSRCAC's April 13, 2017 comments traced the history of the current Matrix, developed following a 1994 oil spill during which the Solomon Gulch Hatchery (SGH) and Duck Flats (DF) were not adequately protected.

As indicated in the attached pages from ADEC's Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan - Final Findings Document and Response to Comments April 11, 2000, ADEC acknowledged that a delay in mobilizing free oil task forces could result in lost opportunities to control or contain the spread of oil from a spill at the VMT. PWSRCAC shares these concerns, and stresses the economic and environmental importance of both the SGH and the DF requires protection of these resources should begin as soon as possible if a spill occurs at the VMT. Additionally, ADEC's Basis for Decision from the 2000 VMT C-Plan approval states that:

> The Duck Flats and the Solomon Gulch Hatchery are prioritized for protection in the plan through the use of the Sensitive Area Protection Mobilization Decision Matrix. This matrix was added to the current plan as a result of the 1997 plan review and approval process. The matrix provides criteria and assessment points for use by the initial incident commander within the first one or two hours of a spill. Based upon

information received about the spill, immediate and rapid deployment of protective oil spill boom is expected for the Duck Flats and the Solomon Gulch Hatchery.

The importance of immediate and rapid deployment of protection strategies for SGH and DF was recognized after oil from the 1994 *Eastern Lion* spill reached the net pens in 18 hours. The lesson learned was that a spill of 10 gallons or more should automatically (combined with other factors in the 1997 matrix) trigger mobilization of SGH and DH protection.

In RFAI #23 Round 1, ADEC instructed APSC to "Evaluate if the total that would indicate an immediate action has been fully evaluated. Ensure that stakeholder input has been considered." APSC responded, "The IRIC uses the Matrix prior to full implementation of the IMT. Stakeholder input is considered as part of the Unified Command and ICS process." PWSRCAC had raised concerns about the changes to the matrix inputs, the lowering of the score required to initiate protection of the SGH and DF, and omission of the input that went into the development of the original matrix, including from state and federal trustee agencies. We understood ADEC's RFAI #23 to refer to these issues, and find that APSC's response does not address either of these points. APSC does not state that they have evaluated the total of the Matrix that would indicate an immediate action, nor did APSC provide any further justification for the changes made. It also is not clear how stakeholder input will be incorporated real-time via the Unified Command and ICS when the purpose of the Matrix is to make a highly expedited decision in the first few hours of a response, and the Matrix essentially already incorporates input from those who helped to develop it in the first place.

For the reasons stated above, PWSRCAC requests that the current Matrix be reinstated without changes.

PWSRCAC recommends retaining the existing SGH and DF Protection Matrix without revision.

7. Volume 3, Section 11.3.2.1 Decant Plans and Retention Time

In RFAI #32, ADEC asked the plan holders to ensure that the retention time of one hour for large barges and 30 minutes for mini-barges is consistent with other guidance documents. No changes were made, but the plan holders' response refers to barge-specific Load and Decant Plans which ADEC already has. These documents are not included as part of the review, and it is not clear whether this refers to Load and Decant Plans for the *current* barges or plans for the new, proposed barges. Please clarify and provide the referenced documentation.

PWSRCAC requests the referenced Load and Decant Plans be provided. If new plans have not been developed for the new barges, these should be developed and shared as they are key to planning assumptions related to on-water storage.

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Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Industry Preparedness and Pipeline Program

Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan

Final Findings Document

And

Response to Comments

April 11, 2000

ISSUE #2: PROTECTING ENVIRONMENTALLY SENSITIVE AREAS

STATEMENT OF ISSUE

Does the plan provide for sufficient oil discharge response equipment, personnel, and other resources to protect environmentally sensitive areas or areas of public concern before oil reaches them?

FINDINGS

The Department finds that the plan could be improved to ensure that sufficient resources are available to protect environmentally sensitive areas and areas of public concern in Port Valdez. The Department accepts Alyeska's proposal to amend Part 2, Section 2.7.5 of the plan to include language stating that methods will be developed in 2000 and 2001 aimed at decreasing the time it takes to deploy equipment to protect the waters around the terminal and the Duck Flats and Solomon Gulch Hatchery. Because specific methodologies are still under consideration, the final proposed action(s) will be subject to public review and comment (see Condition No. 6), and must be submitted to the Department no later than January 1, 2001.

Additional commitments in Alyeska's training program for the contract-fishing vessel fleet, originating in the Prince William Sound Tanker plan review, have been added to the VMT C-plan which assure that trained crews are available to deploy protective tactics at the identified sensitive areas in Port Valdez. (Please also refer to Issue #4, "Oil Spill Response Training.") Any changes to the Prince William Sound Tanker C-plans, as a result of it's Conditional Approval (Approval #6, "Fishing Vessel Response," or #7, "Fishing Vessel Training Requirements") shall also be incorporated into this plan as appropriate.

REGULATORY AUTHORITY

The regulations under 18 AAC 75.425(e)(1)(F)(v) require: "for a stationary facility or operation...procedures and methods to exclude oil from environmentally sensitive areas and areas of public concern identified under (3)(J) of this subsection, including for a land-based facility, protection of ground water and public water supplies;"

The regulation under 18 AAC 75.445(d) states "(d) Response strategies. The response strategies must take into account the type of product discharged and must demonstrate that...

(4) sufficient oil discharge response equipment, personnel, and other resources are maintained and available for the specific purpose of preventing discharged oil from entering an environmentally sensitive area or an area of public concern that would likely be impacted if a discharge occurs, and that this equipment and personnel will be deployed and maintained on a time schedule that will

protect those areas before oil reaches them according to the predicted oil trajectories for an oil discharge of the volumes established under 18 AAC 75.430 - 18 AAC 75.442; areas identified in the plan must include areas added by the Department as a condition of plan approval."

RESPONSE TO COMMENTS

RCAC requested specific information about resources that would be used to simultaneously protect the two environmentally sensitive areas and the leading edge of a large oil spill, but accepts the proposed work group to address these issues, and expressed appreciation for inclusion in the working group.

RCAC also requested that the methodologies developed in this process be available for public review, which ADEC will require. (See Condition No. 6).

Mr. Lakosh expressed concern about Alyeska's ability to respond to a nearshore sensitive area under low wind conditions, due to the potential for hazardous vapors. Please see Issue #3 for a complete discussion about vapor hazards and oil spill response actions.

BASIS FOR DECISION

The plan holder must be capable of protecting sensitive areas in Port Valdez while simultaneously containing and controlling the further spread of oil in a catastrophic incident. The current plan does not clearly demonstrate this capability and requires further analysis. At the Department's request, Alyeska conducted a demonstration exercise on September 24th, 1999 where exclusion booming was deployed at three environmentally sensitive areas near the Terminal. Although many aspects of this demonstration were successful, the Department is concerned that there may not be enough resources available to protect the Valdez Duck Flats and the Solomon Gulch Hatchery in the early hours of an incident when many competing response actions must occur.

The Duck Flats and the Solomon Gulch Hatchery are prioritized for protection in the plan through the use of the Sensitive Area Protection Mobilization Decision Matrix. This matrix was added to the current plan as a result of the 1997 plan review and approval process. The matrix provides criteria and assessment points for use by the initial incident commander within the first one or two hours of a spill. Based upon information received about the spill, immediate and rapid deployment of protective oil spill boom is expected for the Duck Flats and the Solomon Gulch Hatchery. Currently, personnel from SERVS are responsible to conduct this deployment. During the RPS Scenario Drill held on September 1st and 2nd, the protection of the Solomon Gulch Hatchery and the Duck Flats were given priority according to the criteria of the matrix. However, actions to contain and control free oil were delayed because some of the same limited resources that were needed to protect the Solomon Gulch Hatchery were also needed to protect the Duck Flats. The Response Planning Scenario currently in the plan shows resources being used for deployment at the first and the same resources going to the Duck Flats three hours later.

The Department is concerned that during a real incident, the delay in the mobilization of the free oil task forces could potentially result in loss of opportunities to timely control or contain the further spread of oil. Although the protection of the Duck Flats and the Solomon Gulch Hatchery remain a priority, the Department would like to further explore with the plan holder the most strategic use of resources. The Department would like to ensure that: (1) sensitive areas closest to the Terminal are protected and (2) the leading edge of the spill is controlled as early as possible to prevent additional sensitive areas threats. Alyeska has agreed to improve methodologies (including possible pre-deployment of equipment) to be able to more quickly protect these sensitive areas.

Fishing vessel fleet training has been adequately addressed by the text added in Alyeska's January 23, 2000 submittal of additional information, Part 3, SID 2, Section 5.9.3. Please also refer to Issue #4, Oil Spill Response Training.

ISSUE #3: RESPONSE STRATEGIES

STATEMENT OF ISSUE

Has the plan holder provided a description of the actions to be taken to contain and control the spilled oil?

Are the strategies sufficient to meet the applicable response planning standard?

FINDINGS

The Department finds that the plan holder has provided adequate description of the actions to be taken to contain and control spilled oil. The strategies presented are sufficient to meet the applicable response planning standard.

The Department supports Alyeska's initiative to develop a tactical guide for on land containment and control strategies, as set out in Alyeska's revised text of Part 2, Section 2.7.5 in their January 23, 2000 submittal. This guide will be the product of a joint Alyeska, RCAC, JPO and ADEC work group that will commence the initial scoping and participate in the guide development. Although Alyeska states that only Part 1 of the guide will be a SID to the contingency plan, the Department requires that Part 2 also be a SID as it contains supplemental information required under 18 AAC 75.425(e)(3). Submission of Part 2 and a schedule for the tactical guide completion will be a condition of plan approval. Please refer to Condition No. 5.

REGULATORY AUTHORITY

The regulations under 18 AAC 75.425(e)(1)(F) Response Strategies require:

EXHIBIT D

City of Valdez Comments, August 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution

Anna Carey
Alaska Department of Environmental Conservation
SPAR/PPRP
PO Box 1709
Valdez, AK 99686
Anna.carey@alaska.gov

RE: Alyeska Pipeline Service Company Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, ADEC Plan 14-CP-4057
Amendment 2017-1

Dear Anna:

The City of Valdez would like to provide the following comments for your consideration on Alyeska Pipeline Service Company's Amendment 2017-1 to the Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan.

It is our understanding that protection and booming of the Solomon Gulch Hatchery and Duck Flats will be delayed significantly compared to the current contingency plan. Currently, those two areas are protected by booming them by hour 11. The proposed changes delay that protection as follows:

- **Solomon Gulch Hatchery** will be boomed between hours 24-36 (previously by hour 11)
- **Duck Flats** will be boomed between hours 48-60 (previously by hour 11)

It is our understanding that it takes 6 to 10 hours to deploy the Duck Flats once it has been decided protection is necessary. Regarding Solomon Gulch Hatchery, depending on when in March a spill occurs (per the spill scenario), boom may or *may not* be deployed around the pens at the hatchery. Pens are boomed after a specific date in March, and it appears that the scenario depends on the pens already being boomed.

The City of Valdez recommends that protection of the Duck Flats and Solomon Gulch Hatchery begin as soon as possible after a spill at the Valdez Marine Terminal. Weather and sea conditions can change rapidly, and the environmental and economic value of these resources are far too important to delay protection.

Thank you for your consideration.

Ruth E Knight

Mayor Ruth Knight
City of Valdez

EXHIBIT E

CDFU Comments, August 22, 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution

Cordova District Fishermen United
PO Box 939 | 509 First Street | Cordova, AK 99574
phone. (907) 424 3447 | fax. (907) 424 3430
web. www.cdfu.org

August 22, 2017

Ms. Ann Carey
Alaska Department of Environmental Conservation
SPAR/PPRP
P.O. Box 1709
Valdez, AK 99686

Re: Alyeska Pipeline Service Company Valdez Marine Terminal Oil Discharge Prevention and Contingency Plan, ADEC Plan 14-CP-4057; Amendment 2017-1

To Whom It May Concern:

Thank you for the opportunity to submit comments to the planning and reviewing processes regarding the Alyeska Pipeline Service Company Valdez Marine Terminal Oil Discharge Prevention & Contingency Plan. Cordova District Fishermen United (CDFU) is a non-profit membership organization representing 900+ commercial fishing families who participate in commercial fisheries in Alaska's Area E, which includes Prince William Sound, the Copper River region and the northern-central Gulf. It is our mission to preserve, promote and perpetuate the commercial fishing industry in Area E and to further promote safety at sea, legislation, conservation, management and general welfare for the mutual benefit of all our members.

The commercial fishermen of Area E have a strong and historic relationship with both the Alyeska SERVS Program and the RCAC that we foster with great care, proactive communications and representation. CDFU would like to formally state our strong support for strong spill response and planning. Our members represent several hundred of the responders contracted through SERVS. Our organization lived through the 1989 Exxon Valdez spill and we aim to be a part of both prevention and solutions in the future. The preparation and oversight that the Valdez Terminal contingency plan provides is critical to the future welfare and sustainability of our fisheries and we appreciate your full consideration in this regard.

It is our understanding that protection and booming of the Solomon Gulch Hatchery and Duck Flats will be delayed significantly compared to the current contingency plan. The proposed changes delay that protection by indicating that the hatchery will be boomed between the hours of 12-24 (previously by hour 11). CDFU recommends that protection of the Duck Flats and Solomon Gulch Hatchery begin as soon as possible after a spill at

Cordova District Fishermen United
PO Box 939 | 509 First Street | Cordova, AK 99574
phone. (907) 424 3447 | fax. (907) 424 3430
web. www.cdfu.org

the Valdez Marine Terminal. The health of the hatchery is instrumental to the health of salmon fisheries in Prince William Sound. Weather and sea conditions can change rapidly, and the environmental and economic value of these resources are far too important to delay protection.

In re: APSC's response to ADEC, we support the following conclusions:

- The plan holder has inserted the deployment of hatchery protection measures at hour 12-24. The plan must contain a clear and definitive directive for immediate deployment. The currently proposed window for deployment is vague and too broad.
- Deploying until dark should not delay hatchery deployment. For example, if a spill occurs just before dark in the winter months, the risk of operations in the dark does not outweigh the risk of delaying deployment until morning. Please note that depending on weather and time of year, such a delay (delaying until daylight hours) could mean a 12+ hour delay.
- The plan holder must state clearly in the document when a complete hatchery deployment would occur.

Furthermore, CDFU supports the Valdez Fisheries Development Association's insistence that the decision to deploy hatchery protection be a clear immediate directive to the plan holder. Technology, logistics, and methodology for deployment at the hatcheries must also be modernized and vetted. The best option in the event of a spill at the terminal is to deploy as soon as possible with the best available technology.

We appreciate your consideration. Please don't hesitate to reach out to CDFU with questions or for additional information.

Sincerely,

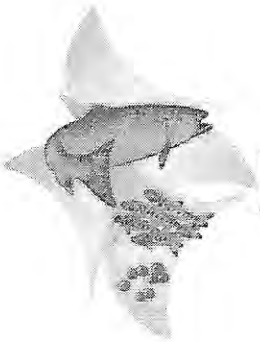
Jerry McCune
President of the Board, CDFU

Rachel Kallander
Executive Director, CDFU

EXHIBIT F

Letter from PWSAC to PWSRCAC, November 15, 2017

PWSRCAC *et al.*
Joint Request for Adjudicatory Hearing and
Joint Request for Alternative Dispute Resolution



Prince William Sound
Aquaculture Corporation

Prince William Sound Regional Citizens Advisory Council
PO Box 3089
130 S Meals Ste 202
Valdez, AK 99686

November 15, 2017

Dear Jennifer:

The Prince William Sound Aquaculture Corporation (PWSAC) is concerned that it will be adversely affected by the ADEC's October 23, 2017, approval of Alyeska's VMT Contingency Plan (ADEC Plan # 14-CP-4057; Amendment 2017-1) pertaining to the Solomon Gulch Hatchery and Valdez Duck Flats Sensitive Area Protection Mobilization Decision Matrix. PWSAC has in the past received silver salmon eggs from the Solomon Gulch Hatchery for incubation at its Wally Noerenberg Hatchery at Esther Island. Any reduction in the amount of protection of the Solomon Gulch Hatchery could have a direct adverse effect on PWSAC in the future with regards to egg transfers. Any change in protection standards could also trickle down to reduced protection standards at other sensitive areas, particularly at the PWSAC hatcheries located throughout Prince William Sound. PWSAC requests that PWSRCAC represent PWSAC's interests in an Adjudicatory Hearing regarding ADEC's October 23, 2017, approval of Alyeska's VMT Contingency Plan.

Sincerely

Timothy F. Joyce

Tim Joyce
Interim General Manager

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