



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

28 SEP 1993

REPLY TO
ATTENTION OF:

CECW-OR

MEMORANDUM THRU COMMANDER, NORTH PACIFIC DIVISION

FOR COMMANDER, ALASKA DISTRICT

SUBJECT: Requests for Section 404(q) Elevation, Port Valdez
83 Permit Modification

1. On 14 July 1993, the Acting Assistant Secretary of the Army (Civil Works) responded to the requests by the Department of Commerce (DOC), the Department of the Interior (DOI) and the Environmental Protection Agency (EPA) for higher level review of a permit modification proposed by the U.S. Army Corps of Engineers Alaska District. The project proposed by the city of Valdez involves the construction of a pipeline and barge loading facility to allow the shipment of refined petroleum products (marine diesel and Jet-A) from the Valdez Container Terminal, a bulk cargo facility in Port Valdez, Alaska.
2. The requests from DOC, DOI and EPA were made pursuant to Part IV of the 1992 Section 404(q) Memoranda of Agreement between the Department of the Army and the DOC, the DOI, and EPA. The main issues presented by DOC, DOI and EPA for consideration were based on their conclusion that substantial and unacceptable adverse impacts to an aquatic resource of national importance would occur. More specifically, the primary issues raised by all three agencies, and on which the Washington level review focused, are summarized as follows:
 - a. The Valdez Duck Flats (Duck Flats) is an aquatic resource of national importance.
 - b. Modification of the Port Valdez 83 permit will cause substantial and unacceptable adverse impacts to the Duck Flats from spills of refined petroleum products. Related to this is the collective opinion that the Alaska District has not adequately assessed the risk of such spills, as well as the associated adverse impacts to the aquatic environment, nor the effectiveness of the proposed mitigation measures designed to prevent and respond to spills.
 - c. It has not been clearly demonstrated that the proposed project is the least environmentally damaging practicable alternative which meets the project purpose.

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3. The Acting Assistant Secretary of the Army (Civil Works) letters concurred with the DOC, DOI and EPA position that the Valdez Duck Flats is an aquatic resource of national importance. The Acting Assistant Secretary of the Army (Civil Works) further advised that additional guidance should be provided to the District in accordance with Part IV, paragraph 3(g)(2) of the Memoranda of Agreement with each agency. This guidance is provided in detail in the enclosed Memorandum for Record. However, to summarize, the District must, prior to reaching a final decision:

a. Reassess fully the risk of spills of petroleum products and the impacts of such spills on the Valdez Duck Flats based on input from an independent study involving, at a minimum, subject matter experts from EPA, DOI, DOC, and Dr. John Ingram of the Corps Waterways Experiment Station (601) 634-3048).

b. Investigate further the alternatives at the site west of Solomon Gulch and the Alyeska Marine Terminal.

c. Obtain an approved U.S. Coast Guard facility response plan and/or Alaska Department of Environmental Conservation Oil Spill Contingency Plan.

4. If you have any questions or comments, please call Ms. Cheryl Smith at (202) 272-1780.

Encl


STANLEY G. GENEGA
Major General, USA
Director of Civil Works

MEMORANDUM FOR RECORD**SUBJECT:** Section 404(q) Elevation, Port Valdez 83 Permit Modification

1. **PURPOSE:** This Memorandum provides case specific guidance pertaining to the proposed decision by the U.S. Army Corps of Engineers Alaska District to modify an existing permit, pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. This guidance consolidates and is in response to Corps Headquarters (HQUSACE) analysis of the Alaska District decision document and the decision by the Office of the Assistant Secretary of the Army for Civil Works (OASA(CW)) concerning the requests for elevation from the Department of Commerce (DOC), the Department of the Interior (DOI) and the Environmental Protection Agency (EPA).

2. **BACKGROUND:** The proposed Port Valdez 83 permit modification involves the construction of a pipeline and barge loading facility to allow the shipment of refined petroleum products (marine diesel and Jet-A) from the Valdez Container Terminal (VCT), a bulk cargo facility in Port Valdez, Alaska. The history of authorization of the VCT is as follows:

a. The permit to construct a dock and approach for the purpose of shipping and marshalling containerized cargo was originally issued to the city of Valdez on 24 January 1980. The permit contained special condition "f", which stated that "there shall be no storing or dispensing of petroleum products at the marshalling yard fill with the exception of containerized units for shipment."

b. The city of Valdez applied for, and on 8 January 1993 received, a modification to the original permit (known as modification "M") which allows the expanded use of the VCT as a multi-use marine terminal, including refueling and repair of vessels, moorage of passenger cruise ships, tankers carrying unrefined petroleum, ammunition carriers, military vessels, Ship Escort/Rescue Vessel System Response vessels and handling uncontainerized cargo, such as but not limited to pipe, logs, wood chips, and other bulk cargo. Special condition "f" was modified to allow the distribution of petroleum products by tanker truck with a capacity of no more than 15,000 gallons and with plans of operations approved by the U.S. Coast Guard (USCG). This condition also limited the purpose for the distribution of petroleum products to fueling vessels or as secondary cargo. Special condition "h" was added to require the Captain of the Port be contacted prior to fuel transfers to vessels not otherwise regulated by the USCG (i.e., vessels with a petroleum capacity of less than 250 barrels (10,500 gal)). Special condition "i" was also added

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and requires that trained personnel and sufficient boom be present on the facility so as to be deployed within 30 minutes if necessary to contain a spill.

c. The city of Valdez's current request is on behalf of the Petro Star Valdez Refinery Joint Venture (Petro Star). It involves further modification of the permit (modification "N") to allow for the petroleum dispensing pipeline and barge loading facility. The proposal incorporates design features and other measures, the intent of which are to mitigate the potential for spills of petroleum products. Design measures include segmenting the pipeline into three sections with lined catchment boxes at each joint, controlling the flow by remote switch at three locations, leak detection devices beneath the pipeline for its entire length and double-walling the pipeline where it is exposed along the approach trestle which connects the dock with the shoreline. Other measures include the pre-deployment of containment boom both around the vessel and between the dock and shoreline, self-imposed operating restrictions governing loading operations during inclement weather and sea conditions and evacuation of the line when not in use.

3. **ELEVATION REQUESTS:** The DOC, DOI and EPA requests for elevation all cite the criteria in Part IV of the Memoranda of Agreement (MOA). The primary issues raised by all three agencies, and on which analysis focused, are summarized as follows:

a. The Valdez Duck Flats is an aquatic resource of national importance (ARNI).

b. Modification of the Port Valdez 83 permit will cause substantial and unacceptable adverse impacts to the Valdez Duck Flats from spills of refined petroleum products. Related to this is the agencies' collective opinion that neither the risk of such spills, as well as the associated adverse impacts to the aquatic environment, nor the effectiveness of the proposed mitigation measures designed to prevent and respond to spills have been adequately assessed.

c. It has not been clearly demonstrated that the proposed project is the least environmentally damaging practicable alternative which meets the project purpose.

4. **HEADQUARTERS REVIEW:** Part IV of the MOA establishes procedures for elevation of specific permit cases. To satisfy the explicit requirements for elevation, the permit case must pass two tests: 1) the proposed project would involve aquatic resources of national importance (ARNIs); and 2) the project should result in unacceptable impacts to the ARNIs.

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HQUSACE and OASA(CW) agree that the Valdez Duck Flats qualify as an ARNI. With respect to the proposed permit modification, it is also agreed that unacceptable impacts to the Valdez Duck Flats may occur as a result of spills of refined petroleum products at the VCT; however, additional information is required to make a final determination. Therefore, the permit decision document was reviewed at the Headquarters level. Although this review focussed on the issues raised by DOC, DOI and EPA, it was not limited to those issues. As a result, and in accordance with Part IV(3)(g)(2), case specific guidance has been developed as discussed below.

5. DETERMINATION OF THE VALDEZ DUCK FLATS AS AN ARNI: The Valdez Duck Flats is one of the most productive ecosystems within Port Valdez, if not the most important, and the salt marshes contained within this ecosystem are rare in Alaska. There are other salt marshes in Port Valdez; however, the Valdez Duck Flats have characteristics which make it unique from the other areas.

The Valdez Duck Flats is an embayment composed of approximately 460 acres of estuarine marsh and 1000 acres of mudflats. It is a complex community of distinct wetland types subject to regular and irregular tidal action. The area exhibits a unique and complex mosaic of vegetated communities, inter- and sub-tidal mud flats, submerged aquatic moss beds, scrub-shrub wetlands, forested islands with rocky shores, freshwater streams, sub-tidal ponds and salt marsh. The estuarine marsh is dependent on daily tidal flooding, freshwater input from adjacent streams and the mixing action and circulation of the marine waters. Further, the salt marsh provides natural filtration processes for water purification by acting as a sediment accretion site that reduces nutrient and sediment loads and increases oxygen content of waters that pass through. Salt marshes such as those in the Valdez Duck Flats are relatively rare in Alaska.

Due to the diversity of habitat type, abundant detrital production, a rich plankton and invertebrate population, the Valdez Duck Flats provide a significant source of food and forage that, in combination with nesting, molting and staging habitat, attracts and supports large numbers, and species, of birds. The area also provides feeding habitat and a haul out area for Harbor Seals and Stellar Sea Lions utilizing Port Valdez waters. The Valdez Duck Flats also provide significant habitat for a range of freshwater, marine and anadromous fish species, including serving as valuable nursery habitat for both the wild and hatchery populations of the salmon fry in eastern Port Valdez. The National Marine Fisheries Service estimates that the commercial salmonid populations supported by the Valdez Duck Flats area are valued at approximately \$2.3 million annually. The

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Valdez Duck Flats area and its adjacent estuary also support significant marine and freshwater fish populations which in turn support additional commercial and recreational fishing activities.

6. **IMPACT ASSESSMENT:** It is noted that the construction of the proposed pipeline and barge loading facility will not impact the Valdez Duck Flats; however, the operation of the project has the potential to effect the Valdez Duck Flats through spills of petroleum products. Therefore, the assessment at issue is the assessment of secondary and cumulative impacts. The National Environmental Policy Act and its implementing regulations require that the Corps evaluation consider not only the direct, but also the indirect and cumulative impacts of a proposed project. The requests from DOC, DOI and EPA served to highlight the potential significance of indirect and cumulative impacts associated with the proposed work.

The Alaska District's position concerning this potential effect is that a spill can be prevented from occurring; or should a spill occur, it can be adequately contained. Furthermore, the Alaska District asserts that through design (mitigative) measures and implementation of an approved Facility Response Plan (FRP) from the USCG and Oil Spill Contingency Plan (OSCP) from the Alaska Department of Environmental Conservation (ADEC), the potential for a small spill reaching the Valdez Duck Flats is minimized to an acceptable level and the potential for a major spill with substantial impacts is almost non-existent. This position is based on a risk assessment which considered the current use of the VCT, the types and estimated frequency of spills, the probability that a spill into Port Valdez will reach the Valdez Duck Flats and the acceptability of clean-up measures.

It is generally agreed that some type of spill(s) of petroleum hydrocarbons at the VCT will occur regardless of the precautions taken and the technology employed. Contamination could occur as a result of a large catastrophic spill, or from chronic, low level spills over a period of time. For various but similar reasons, neither DOC, DOI nor EPA concurred with the Alaska District's assessment of either the risk of substantial and unacceptable impacts to the Valdez Duck Flats nor the adequacy of preventative and clean-up (i.e., mitigation) measures. The Alaska District's assessment was somewhat limited due to the numerous and diverse factors which influence a spill and its dispersion, the unavailability of information regarding acceptable thresholds of contaminants and the dearth of information relevant to the existing baseline condition at the VCT and the Valdez Duck Flats. The probability that spills which will substantially impact the Valdez Duck Flats will, in fact, reach the Valdez Duck Flats and the acceptability of those spill impacts, should they occur, does remain at issue.

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As stated above, Part IV of the MOA provides that the permit case should pass a test which concludes that the project would result in unacceptable impacts to ARNIs. The Headquarters review, which included the record generated regarding the modification request, the information and discussions which took place as a result of the elevation requests and a cursory review of USCG regulations, indicated that the risk of a petroleum spill at the VCT occurring and unacceptably impacting the Duck Flats had not been comprehensively assessed by either party involved in the elevation. Therefore, for purposes of the MOA provision, the Oil Pollution Act of 1990 and the USCG's implementing regulations found at 33 CFR Part 154 were considered as a base level indication of potential impacts.

At a minimum, the USCG regulations provide that a fixed marine transportation-related (MTR) facility which handles, stores, or transports oil in bulk, and which is capable of transferring oil to or from a vessel with a capacity of 250 barrels or more, could reasonably be expected to cause substantial harm to the environment by discharging oil into or on the navigable waters or adjoining shoreline. Further, in accordance with these regulations, the USCG Captain of the Port, Valdez, has classified the VCT at a higher level of risk; i.e., as a significant and substantial harm MTR facility. This is based on a determination that the facility can reasonably be expected to cause significant and substantial harm to the environment by discharging oil into or on the navigable waters proximate to the Valdez Duck Flats, which is considered to be an area of environmental sensitivity. In conclusion, the proposed modification of the Port Valdez 83 permit has the potential to result in unacceptable adverse impacts to the Valdez Duck Flats and additional information with respect to the risks of such a spill and the associated impacts is required in order for the Alaska District to make a fully informed decision.

The Headquarters analysis indicated that a definitive assessment of the extent of petroleum products spill impacts on Valdez Duck Flats and associated resources is problematic. Review of the assessments performed by the Alaska District, DOC, DOI and EPA identified a minimum range of factors which should be considered for the risk and impact assessment. It was determined that a reassessment, which addresses this range of factors, is warranted. Furthermore, in order to address the outstanding issue of an "adequate"; i.e., comprehensive risk and impact assessment, the reassessment should be commissioned by the Alaska District as an independent study. To accomplish this, the Alaska District shall prepare and coordinate a plan of study with the Corps Waterways Experiment Station (WES). WES will facilitate the study and report the findings to the Alaska District. The data and results of the study shall be incorporated into the Environmental Assessment and decision document as appropriate.

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At a minimum, the plan of study shall address the following:

a. Goals and objectives.

b. Study Participants. The participants shall include subject matter (i.e., marine oil spill) experts from the Waterways Experiment Station, DOC, DOI, and EPA. Other participants, such as the USCG, shall also be included as determined appropriate by the Alaska District.

c. Scope of analysis. As noted previously, varying levels of information, with respect to both quantity and quality, are available for assessing the risk and impacts of a spill of petroleum products on the Valdez Duck Flats. As part of the reassessment, it is likely to be necessary to collect primary data on factors which are considered relevant to the decision on the permit modification. The Alaska District should provide the information which was available for their assessment and identify information needs with respect to factors critical to the decision making process and which are consistent with Corps Regulatory Program requirements. The range of factors to be addressed, at some level, include:

(1) Types of spills - Including spills which do and do not impact waters of the United States, small spills (isolated and chronic) and catastrophic spills, and contained and uncontained spills.

(2) Probability of the occurrence of a spill - Including consideration of human abilities and error, earthquakes and other seismic disturbances, equipment limitations and failure, method and frequency of product transfer, fire and weather conditions (see also item 7 below).

(3) Area of Impact - Including consideration of the location of the spill, type and characteristic of the spilled product, spill containment measures and their effectiveness, opportunity for evaporation and dilution, tide, wind direction, weather conditions, circulation patterns, geomorphic features and pollution response capabilities and logistics.

(4) Types of Impacts - Including establishing the existing base conditions at VCT (including an evaluation of the existing activities and procedures at the VCT) and within the potential area of impact (potentially including primary data collection) and consideration of change in these conditions due to product characteristics (i.e., persistence, toxicity, distillation, specific gravity), anticipated resource loss and time of year.

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Prior to initiation of the study, the Alaska District shall also, in conjunction with WES, prepare and submit a cost estimate for accomplishment of the study to HQUSACE, attention CECW-OR.

7. MITIGATION MEASURES. As noted above, primary considerations with respect to avoiding a spill into any water of the United States pertain to the stable platform and impermeable surface which the VCT provides. To further avoid the potential for a spill Petro Star has proposed, and the Alaska District intends to require, a number of design features and mitigation measures. Through the comments provided in the elevation requests, and the discussions which resulted, the objections related to the spill prevention and clean-up technology ultimately pertain to the likelihood that spills will occur at the terminus during transfer, the alleged relative ineffectiveness of booms for the containment of refined petroleum products (as compared to crude/unrefined oil) and the lack of sufficient opportunity for evaporation and dilution due to the proximity to the Valdez Duck Flats.

Even considering the most likely location for a spill at the terminus of the proposed pipeline, the proximity of the VCT to the Valdez Duck Flats limits the opportunity for evaporation and dilution should a spill move in that direction. Although the booms proposed for use are state-of-the-art and will be pre-deployed, the information currently available provides a low level of confidence with respect to their effectiveness in conditions anticipated for Port Valdez. Further investigation into this matter is warranted and should involve a consensus of subject matter experts, with the results incorporated into the risk and impact assessment discussed in item 6 above.

8. OTHER REGULATORY REQUIREMENTS: Corps regulations provide that another agency's determination to proceed is entitled to substantial consideration in the Corps public interest review. In addition, the processing of an application shall normally proceed concurrently with, and will normally not be delayed by, pending action by another Federal, State and/or local authorization. In order to operate their proposed facility, Petro Star is required to obtain approval of an OSCP from the ADEC and a FRP from the USCG. At the time of the Headquarters elevation review, it was understood that Petro Star had not submitted a proposed FRP to the USCG; nor had they received an approval of their OSCP from the ADEC.

Due to the sensitivity and proximity of the Valdez Duck Flats and the significant and substantial harm which can be caused by an oil spill, the assessment of environmental impacts and the public interest review for the proposed permit modification should rely heavily on the nature of the requirements of the approved OSCP and FRP, the effectiveness of their implementation and ADEC's/USCG's ability to

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enforce their program requirements. HQUSACE review of the USCG's 12 February 1993 letter to the Alaska District and discussion with the USCG on 8 July 1993, indicate possible outstanding concerns with respect to the adequacy of spill prevention and clean-up measures. In their 12 February letter, the USCG indicated that "adequate preventative measures could be taken which would minimize the impacts of a spill on the Valdez Duck Flats.... However, there are certain times of the year when a sea breeze does occur in Port Valdez which would require the implementation of alternative pollution prevention measures by Petro Star." It is uncertain what the USCG considers these alternative measures to be. In addition, during the 8 July conversation with HQUSACE, the USCG indicated that the effectiveness of the booms proposed for use is debatable. Therefore, should the proposed modification ultimately prove to be the least environmentally damaging practicable alternative, it appears that case specific circumstances may exist which warrant the Alaska District delaying their final decision until approval of the FRP and/or OSCP has been obtained by Petro Star.

Subsequent to the Headquarters elevation review, the Alaska District clarified that Petro Star had received approval of their OSCP prior to the proposed decision on the modification and that the USCG will not accept an application for an FRP until the proposed permit modification is approved. This represents at least partial, if not full, fulfillment of the guidance provided above. However, it is recommended that the Alaska District coordinate further with the USCG concerning the requirements and limitations of the FRP. This coordination would be conducted with a view toward ensuring that the USCG and the Alaska District believe proposed protective measures in case of a spill are adequate.

9. LESS ENVIRONMENTALLY DAMAGING ALTERNATIVES: The alternatives analysis for the proposed modification considered a total of eight sites, seven of which were rejected or determined to be unacceptable or not practicable. The elevation requests and Headquarters review indicated that there appear to be less environmentally damaging alternatives which are potentially available to Petro Star. The alternatives considered to fall into this category included Tesoro Dock, Valdez City Dock, a new facility located west of Solomon Gulch, a new facility located east of Solomon Gulch (West Solomon Gulch) and the existing Alyeska Marine Terminal (AMT). Discussions with the Alaska District, DOC, DOI and EPA resulted in a narrowing of this list of alternatives to two: 1) the AMT and 2) West Solomon Gulch. The Headquarters analysis also concluded that the potential practicability and reasonableness of these alternatives, as well as whether or not they are indeed less environmentally damaging, has not been conclusively addressed.

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Department of the Army regulations provide for the consideration of alternatives under the National Environmental Policy Act (i.e., reasonable alternatives) and the Section 404(b)(1) Guidelines (i.e., practicable alternatives). The outstanding issue of alternatives which are less environmentally damaging is related not only to practicability, but to the reasonability of alternatives which appear to be available to Petro Star. The crux of the Alaska District's determination that the AMT is not a practicable alternative revolves around the availability of this alternative within the foreseeable future. A letter from the Alyeska Pipeline Service Company (APSC) to the Alaska District indicates that the process for considering a proposal for use of the facility would involve extensive review, analyses and approvals which could not be accomplished in the short term. Although Petro Star had been in contact with APSC, they had not submitted any proposals for consideration. With respect to the rejection of the West Solomon Gulch alternative, this alternative was rejected due to a number of issues, which were similar to the issues related to the alternative located east of Solomon Gulch. These issues included the potential for accidental product spillage, the potential for seismic disturbance and the proximity of the Solomon Gulch Hatchery. In addition, the West Solomon Gulch alternative is located within or adjacent to an existing designated commercial fishery and hatchery use area. Key to this is the likelihood of Petro Star being able to acquire the required permit from the Alaska Department of Natural Resources. In a letter to OASA(CW), dated 12 July 1993, the Office of the Governor of Alaska notes that "It is very unlikely that this location could be approved under the City of Valdez Coastal Management Program should it be proposed for consideration."

Practicable alternatives are those which are available and capable of being done after taking into consideration cost, existing technology and logistics in light of overall project purposes. Reasonable alternatives are considered to include those which are feasible, with such feasibility focussing on the accomplishment of the underlying purpose and need (of the applicant or the public) that would be satisfied by permit issuance. Further guidance with respect to reasonable alternatives is found in the Council on Environmental Quality (CEQ) Regulations, 40 CFR 1502.14, which provide that the Corps rigorously explore and objectively evaluate all reasonable alternatives. The CEQ regulations recognize that certain inconsistencies may exist between or among the Corps preferred alternative, the applicant's proposed action and any approved state or local policy, plan or law.

In considering reasonable alternatives the differences in perspective of national and local needs must be evaluated. This evaluation should identify and consider:

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- a. All national and local interests and agency missions;
- b. How State and local interests have been accommodated;
- c. Any conflicts, the possibilities of resolving the conflicts and how the alternative would be reconciled with unresolved conflicts;
- d. The seriousness of the impact of the alternative on land use plans and policies, and whether, or how much, the proposal will impair the effectiveness of land use control mechanisms for the area; and
- e. Comments from officials of the affected area.

To resolve this issue the Alaska District must further investigate the practicability and reasonability of the AMT and West Solomon Gulch alternatives. Specifically with respect to the AMT alternative, the Alaska District shall request that Petro Star formally request, in writing, use of the AMT and provide a copy of such request and its response to the Alaska District. With respect to the West Solomon Gulch alternative, a full investigation shall be conducted. Further, the investigation of both alternatives shall be consistent with the evaluation of the VCT alternative; i.e., compared and contrasted with respect to impacts to resources and project planning constraints which are relevant to the proposed work and the environmental setting of Port Valdez. The results of this investigation of detailed plans shall be incorporated into the Environmental Assessment and decision document.

10. **Other Issues.** Several other issues were raised by DOC, DOI and EPA. The following discussion of these issues is provided for informational purposes:

a. Part III Elevation Request. The DOC request for elevation cites the criteria in Part III of the MOA. The issue, as presented in a 1 April 1993 letter from the National Marine Fisheries Service, Alaska Region to the Alaska District, pertains to the Alaska District's decision to evaluate separately the requests related to modifications M and N. The current elevation request from DOC states that if the Alaska District is not required to examine and select the alternative which minimizes the risk to the Valdez Duck Flats, policy issue discussions, as indicated above, are requested. It is assumed that the OASA(CW)'s decision on the Part IV elevation request is responsive to DOC's recommendation and it is not necessary for the Corps to pursue Part III policy issue discussions at this time. Should DOC wish to pursue this issue, written notification which describes the issue in sufficient detail, and which provides recommendations for resolving the issue, should be submitted to the Alaska District.

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b. Alternatives Analysis. The EPA questioned procedural elements of the Alaska District's alternatives analysis with respect to the scope of analysis and the consideration of mitigation.

(1) Scope of Analysis. EPA questioned the Alaska District's purpose and need statement, pointing out that the purpose and need for the project from the perspective of the city of Valdez (technically the applicant) is different from the purpose and need of Petro Star (on whose behalf the application has been submitted). We believe that the Alaska District has appropriately considered and integrated the needs of both parties into the scope of analysis.

(2) Mitigation Measures. EPA expressed concern that the Alaska District inappropriately considered proposed mitigation during its evaluation and selection of the least environmentally damaging alternative. We find that the Alaska District's consideration of design features to be consistent with the provisions of the alternatives analysis found at 33 CFR 325, Appendix B, Section 9(c). In addition, we believe the consideration of the spill containment measures to be appropriate as the provisions of the USCG regulations would be applicable regardless of location.

c. Single and Complete Project. The support documentation enclosed in the requests from DOI and DOC questioned the Alaska District's decision to evaluate separately Petro Star's refinery, tank farm, interconnecting pipelines, and the proposed project. In other words, these agencies believe the Alaska District should have prepared an Environmental Impact Statement to evaluate these projects and the related issues comprehensively. We find no cause to question the Alaska District's decision or to conduct a detailed investigation of this issue at this time. We believe this is also an issue which is more appropriately raised under Part III of the MOAs.

11. **SUMMARY:** The Valdez Duck Flats is an ARNI and the potential exists for unacceptable impacts to this resource as a result of impacts from spills of petroleum products. However, the risk and the impacts of such spills have not been clearly demonstrated. The city of Valdez, Petro Star and the public interest will be best served by a more comprehensive assessment of the risk and impacts of spills on Valdez Duck Flats. In addition, the investigation of alternatives located at the AMT and West Solomon's Gulch, both of which appear to be less environmentally damaging, has not been conclusive; therefore, further investigation is warranted. Finally, due to the dependence on the other regulatory programs, any decision with respect to a barge loading facility at the VCT should consider the requirements and limitations of those programs.

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
WASHINGTON, DC 20310-0108



02 AUG 1993

REPLY TO
ATTENTION OF

MEMORANDUM FOR THE DIRECTOR OF CIVIL WORKS

SUBJECT: Request for Section 404(q) Elevation, Port Valdez 83
Permit Modification

This is in response to your July 13, 1993, memorandum concerning the requests by the Department of the Interior (DOI), the Department of Commerce (DOC) and the Environmental Protection Agency (EPA) for higher level review of a permit modification proposed by the Army Corps of Engineer Alaska District. The project, which is proposed by the city of Valdez, involves the construction of a pipeline and barge loading facility to allow the shipment of refined petroleum products (marine diesel and Jet-A) from the Valdez Container Terminal (VCT), a bulk cargo facility in Port Valdez, Alaska. The requests from DOI, DOC and EPA were made pursuant to Part IV of the 1992 Section 404(q) Memoranda of Agreement (MOA) between the Department of the Army and the DOI, the DOC, and EPA.

We have evaluated the information provided in the DOI, DOC and EPA elevation requests, information obtained during a joint meeting with EPA, U. S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration and Corps staff, as well as from meetings with the city of Valdez and Petro Star, and the information in your July 13, 1993, memorandum. As a result, we concur with your recommendation that the District Engineer proceed in accordance with case specific guidance. Our concurrence is based on the following:

- a. That the Valdez Duck Flats is an aquatic resource of national importance (ARNI).
- b. That a spill of petroleum products in the vicinity of the VCT may result in unavoidable and unacceptable impacts to the Valdez Duck Flats. Furthermore, we believe that the risks of a spill and the associated impacts of such a spill have not been clearly demonstrated.
- c. The alternative sites located west of Solomon's Gulch and at the Alyeska Marine Terminal appear to be less environmentally damaging alternatives and that the investigation of the practicability of these alternatives has not been conclusive.

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d. That, due to the dependence on the applicant's ability to respond to spills effectively, any decision with respect to a barge loading facility at the Valdez Marine Terminal must consider the operator's demonstrated ability to respond to spills.

In light of the above, we have determined that, pursuant to the MOA, Part IV, paragraph 3(g)(2), guidance concerning several issues must be given to the District in order to facilitate further evaluation before a final permit decision is made. Therefore, at a minimum the Alaska District Engineer must:

a. Reassess fully the risk of spills of petroleum products and the impacts of such spills on the Valdez Duck Flats based on input from an independent study involving, at a minimum, subject matter experts from the Corps Waterways Experiment Station, EPA, DOI and DOC. This includes an evaluation of the existing activities and procedures of the VCT. This independent study must address the full range of factors raised during our review, including:

(1) Types of spills - Including small spills (isolated and chronic) and catastrophic spills, and contained and uncontained spills.

(2) Probability of the occurrence of a spill - Including consideration of human abilities and error, earthquakes and other seismic disturbances, equipment limitations and failure, method and frequency of product transfer, fire and weather conditions.

(3) Area of Impact - Including consideration of the location of the spill, type and characteristic of the spilled product, spill containment measures and their effectiveness, opportunity for evaporation and dilution, tide, wind direction, weather conditions, circulation patterns, geomorphic features and pollution response capabilities and logistics.

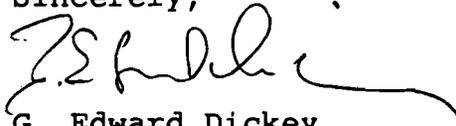
(4) Types of Impacts - Including establishing the existing base conditions at VCT and within the potential area of impact and consideration of change in conditions due to product characteristics (i.e., persistence, toxicity, distillation, specific gravity), anticipated resource loss and time of year.

b. Investigate further the practicability of the alternatives at the site west of Solomon Gulch and the Alyeska Marine Terminal. At a minimum, Petro Star must formally request, in writing, use of the Alyeska Terminal.

c. Obtain an approved U.S. Coast Guard facility response plan and/or Alaska Department of Environmental Conservation Oil Spill Contingency Plan.

Please advise the District by memorandum of our conclusions in this case. Should you have any questions or comments concerning our determination in this case, do not hesitate to contact me or Mr. Michael Davis, my Assistant for Regulatory Affairs, at telephone (703) 695-1376.

Sincerely,

A handwritten signature in dark ink, appearing to read "G. Edward Dickey". The signature is written in a cursive style with a long horizontal flourish extending to the right.

G. Edward Dickey
Acting Assistant Secretary of the Army
(Civil Works)