CWA 401 Water Quality Certification Request

version 2.15

Digitally signed by: dec.alaska.gov Date: 2025.07.09 13:18:14 -08:00 Reason: Submission Data Location: State of Alaska

(Submission #: HQD-Z3C4-17GS9, version 1)

Details

Site: Deering Airport and Access Road Improvements

Submission ID HQD-Z3C4-17GS9

Form Input

Form Instructions

Form Instructions

Instructions for filling out the 401 Prefiling Meeting Request Form are located on the Alaska DEC website at the link below. 401 Prefiling Meeting Request Form Instructions

Agents: For Delegation of Authority to act on behalf of the applicant in processing the application, use the following form, have signed, and upload with application.

Delegation of Authority - 401 Application

Contact Information (1 of 3)

Required Contacts

The following **Contact Roles are** *REQUIRED*. Please select the appropriate role(s) for each contact and complete the contact details. Multiple role(s) may be assigned to each unique individual.

- Applicant (Responsible Party)
- Billing Contact

Contact Role(s) Applicant

Contact

Prefix Mrs.		
First Name	Last Name	
Kerri	Martin	
Title		
Northern Region E	Environmental Manag	ger
Organization Na Alaska Departme	me nt of Transportation a	& Public Facilities
Phone Type	Number	Extension
Business	907-451-5289	
Email		
kerri.martin@alas	ka.gov	
Mailing Address		
2301 Peger Rd		
Fairbanks, AK 99	709	
[NO COUNTRY SPEC	IFIED]	

Contact Information (2 of 3)

Required Contacts

The following Contact Roles are REQUIRED. Please select the appropriate role(s) for each contact and complete the contact details. Multiple role(s) may be assigned to each unique individual.

- Applicant (Responsible Party)
- Billing Contact

Contact Role(s) **Application Preparer**

Contact

Prefix Mr.		
First Name William	Last Name Sexton	
Title Environmental Impa	act Analyst III	
Organization Nan State of Alaska De		ation and Public Facilities
Phone Type	Number	Extension
Business	907-451-2290	
Email william.sexton@ala	ska.gov	
Mailing Address		
2301 Peger Rd		
Fairbanks, AK 997	09	
United States		

Contact Information (3 of 3)

The following **Contact Roles are** *REQUIRED*. Please select the appropriate role(s) for each contact and complete the contact details. Multiple role(s) may be assigned to each unique individual.

- Applicant (Responsible Party)
- Billing Contact

Contact Role(s) Billing Contact

Contact

ondot		
Prefix Mrs.		
First Name	Last Name	
Elizabeth	Miller-Chapman	
Title		
Administrative Ass	sistant II	
Organization Nar	ne	
Alaska Departmer	nt of Transportation	n & Public Facilities
Phone Type	Number	Extension
Business	907-451-5400	
Email		
elizabeth.miller1@	alaska.gov	
Mailing Address		
2301 Peger Road		
Fairbanks, AK 997	/09	
United States		

Project / Facility Site Info

Identify the applicable federal license or permit

A copy of the federal permit or license application is required to be submitted with the request for the water quality certification. (18 AAC 15.130, 18 AAC 15.180)

Federal Agency

Army Corps of Engineers (USACE)

Project Name or Title

Deering Airport and Access Road Improvements

Primary Receiving Waterbody Name

Smith Creek and Inmachuk River

Estimated Project Dates (+/- 30 days)

Project Estimated Start Date	Project Estimated End/Completion Date
10/01/2025	10/31/2028

Approximate date(s) when any Discharge(s) may commence (+/- 30 days)

Description Discharge Estimated Start Date		Discharge Estimated Start Date	Discharge Estimated End Date	
	NONE PROVIDED	NONE PROVIDED	NONE PROVIDED	

Project Description (Nature of Activity, include all features)

Resurface the existing runway, rehabilitate runway embankments, replace the airport lighting, improve airport drainage, and construct a new access road to the airport with a bridge over Smith Creek. The new bridge will have earthen abutments and approaches on either side of Smith Creek. The new road will provide all season access to the Deering Airport. Fill material (sand and gravel) will be excavated from up to eight material sites in the Inmachuk River. The new access road to the Deering Airport requires fill placement into approximately 8.1 acres of jurisdictional wetlands. To stabilize thawing permafrost around the runway new fill material will be placed on existing runway embankments and into adjacent wetlands. Airport fill will total approximately 10.4 acres in wetlands. The rip rap protecting the bridge embankments will impact 0.2 acres of Waters of the United States (WOUS). A total of 18.8 acres of WOUS will be filled. Temporary work space equals 4.8 acres, and will buffer the evacuation and access road.

Project Purpose (Describe the reason(s) for discharge)

The Native Village of Deering was issued permit POA-2014-00121-M2 on April 13, 2018, for an evacuation road to the Deering Airport. The project was never built. The Alaska Department of Transportation and Public Facilities has identified safety and operational repairs necessary for the Deering Airport. The project purpose is to provide the community of Deering with safe and efficient airport access and address Deering Airport deficiencies that would bring the airport to current standards and meet criteria identified in the Alaska Statewide Transportation Plan, the Alaska Aviation System Plan, and current Federal Aviation Administration design standards. The new road will provide all season access to the Deering Airport.

Is any portion of the work already complete?

No

Description of current activity site conditions

No portion of the proposed work has been completed. The Deering Airport is as shown on project figures and the existing airport access road is in it's original alignment.

Relevant Site Data, Photographs that Represent Current Site Conditions, or other Relevant Documentation

NONE PROVIDED Comment NONE PROVIDED

Is this a linear project? (i.e., utility line, road, etc.) No

Project Address

[NO STREET ADDRESS SPECIFIED]

Deering, AK 99736

Visit the link below to help with conversion between DMS and Latitude/Longitude DSM - Lat/Long converter

Project Location

66.069299,-162.766261

Visit the following link if you need to convert the lat/long to get the **PLSS information** <u>Converter for Section, Township, and Range</u>

PLSS Location (Public Land Survey System)

State Tax Parcel ID	Borough/Municipality	Meridian	Section	Township	Range
NONE PROVIDED	Northwest Arctic Borough	Kateel River	24,25,36	8N	20W
NONE PROVIDED	Northwest Arctic Borough	Kateel River	19,30	8N	19W
NONE PROVIDED	Northwest Arctic Borough	Kateel River	2,10,11,16,20	7N	20W

Directions to Site

Deering is located on the north side of the Seward Peninsula where the Inmachuk River flows into Kotzebue Sound. Deering is located approximately 55 miles south of Kotzebue. Deering is accessed by commercial aircraft from Kotzebue or by boat. Deering is off the road system and transportation is limited to air, boat, or by snow machine during winter. From Deering, travel south to the airport using the current Inmachuk River Road.

Federal Agency Contact (1 of 1)

Have you been working with anyone in the Federal Agency? Yes

Federal Contact Role USACE

Federal Agency Contact

First Name Andrew	Last Name Kastning			
Title NONE PROVIDED				
Organization Name US Army Corps of Engineers				
Phone Type	Number	Extension		
Business	907-753-2554			
Email andrew.c.kastr	ning@usace.army	v.mil		

Dredge Material to be Discharged

Is dredging involved?

Tier Analysis

A tier analysis is comprised of a layered approach to determine the need for testing the dredge material to aid in generating physical, chemical, toxicity and bioaccumulation information, but not more information than is necessary to make factual **testing** in the second seco

•

Tier I - Site Evaluation and History. The initial tier (Tier I) uses readily available, existing information (including all previous testing). For certain dredge materials with readily apparent potential for environmental impact (or lack thereof), information collected in Tier I may be sufficient for making factual determinations.

- Tier II Chemical Testing is concerned solely with sediment and water chemistry.
- Tier III Biological Testing (bioassay and/or bioaccumulation testing) is concerned with well-defined, nationally accepter toxicity and bioaccumulation testing procedures.
- Tier IV Special Studies allows for case-specific laboratory and field testing, and is intended to for use in unusual circumstances.

For more information regarding a Tier analysis, see below references

- EPA Inland Testing Manual
- USACE Seattle District Civil Works DMMP User Manual

Fill Material to be Discharged

Will Fill Material be Discharged? Yes

For fill material, identify the material source

Inmachuk River Gravel Bars

Types of material being discharged and the amount of each type (cubic yards)

Type Cubic Yards	
Borrow	169.305
Riprap	1.500

Surface area in (acres or linear feet) of wetlands or other waters filled

Surface Area	Units
18.8	Acres

Discharge Location Information (1 of 2)

Identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters

Discharge Location ID (001, 002, 003, - increment by one)

001

NOTE: if you have a receiving water that is Wetlands, just enter the generic term "Wetlands". Do not enter "Wetlands of Tanana River", for example.

Please select 'Other' if your waterbody is not in the list below. You can start typing the name of the waterbody to filter the list.

Receiving Waterbody / Wetlands Name Smith Creek

Discharge Location 66.076334,-162.748539

Discharge Location Information (2 of 2)

Identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters

Discharge Location ID (001, 002, 003, - increment by one) 002

NOTE: if you have a receiving water that is Wetlands, just enter the generic term "Wetlands". Do not enter "Wetlands of Tanana River", for example.

Please select 'Other' if your waterbody is not in the list below. You can start typing the name of the waterbody to filter the list.

Receiving Waterbody / Wetlands Name

AND ADJACENT WETLANDS

Discharge Location 66.069299,-162.766261

Other Pollutant Sources

Determine if your project is **within 1,500 feet** of a known Alaska DEC Contaminated Site. See the *Alaska DEC Contaminated Web Map* below. This will help you to identify if any potential pollutants/parameters of concern may be present on your project site., see DEC's website:

- <u>Contaminated Sites Web Map</u>
- <u>Contaminated Sites Database Search website</u>

Is the project within 1,500 feet of a known contaminated site? Yes

Contaminated Sites

Hazard ID#	Contaminated Site Name	Contaminant Type	Latitude	Longitude	In soil or groundwater?	CS Staff Contact
1141	Deering Old Bulk Fuel Tank Farm	Extractable Petroleum Hydrocarbons	66.074005	- 162.722618	Soil	No Longer Assigned, dec.icunit@alaska.gov

Describe the identified contaminated site(s) or groundwater plume within 1,500 feet

Contaminated site #1141 is located adjacent to the existing Deering Airport access road. The clean up of this site is complete. The old road will be traveled, but no excavation will take place in this area.

Parameters of Concern that may be present in discharge

Parameter(s) of Concern

Identify the parameters of concern that may be present in your discharge from the dredge and/or fill material.

Note, TURBIDITY and SEDIMENT are routine parameters associated with dredge and/or fill activities.

Consider if other parameters may be present from past activities in the area such as contamianted site data, impaired waters or other relevant water quality data, or other parameters of concern identified during the application process.

Parameter(s)

Turbidity Sediment

If known, describe respective concentrations, persistence, and potential impacts to the receiving water and data on parameters that may alter the effects of the discharge to the receiving water

The Project utilizes existing airport embankment and material sites to minimize discharges to WOUS. Only clean fill will be placed in wetlands for the construction of the road and airport. Clean riprap will be used in Smith Creek to protect bridge abutments. Road material will be contained on site. BMPs for embankment stabilization include contouring and seeding with native species to reduce erosion and potential sediment runoff into adjacent wetlands. At material source locations, adequate setbacks from the active river channel will be maintained to avoid impacts to fish and sediment transport to the active channel. Material stockpiles will be moved out of the active floodplain before river breakup in spring.

Impaired Waters

An *impaired waterbody* are those listed as a **Category 4 [304(b)] or Category 5 [303(d)]** in the current EPA approved *Alaska* s Integrated Water Quality Monitoring and Assessment Report. For the most recently Approved Integrated Water Quality Monitoring And Assessment Report (Integrated Report), see DEC's website:

Integrated Water Quality Monitoring And Assessment Report https://dec.alaska.gov/water/water-quality/integrated-report

Does a discharge of any parameter identified above occur to an impaired waterbody? No

If determined necessary and requested by the Department, submit sufficient and credible baseline water quality information for the receiving water which meets the requirements of 18 AAC 70.016(a)(6)(A-C).

Avoidance & Minimization BMPs and Mitigation Measures

Describe how impacts are being avoided and minimized on the project site. Include best management practices (BMPs) for sediment and erosion controls that will be implemented to minimize environmental impacts, and any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge.

Include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge

The project uses the existing airport, access roads, and material sites to avoid and minimize discharges to wetlands and streams. The construction equipment will be offloaded at a barge landing during the summer. Equipment will be stored in designated upland areas. The access road alignment overlies ground that is subject to thaw settlement. Road design includes placing geotextile underlayment and insulation board to protect thaw-susceptible soils. The road will be constructed to an average height of 6 feet to provide additional thermal protection for the underlying permafrost, and to provide a drivable surface above the 100-year flood event. The fill material placed into wetlands will be clean fill for the road and airport improvements. Clean rip rap will be placed in Smith Creek at the bridge crossing. The proposed material sources for the project, located in the Inmachuk River channel, will be mined on gravel bars during low water conditions in the winter. The material source boundaries will include river gravel bars and islands. After the project is complete, excavated areas used for material extraction will likely pond due to a high-water table, or be connected to the river through flooding by design.

Avoidance Measures

Material Sites

The DOT&PF plans to use material from eight sites located on gravel bars within the Inmachuk River. Material extraction from gravel bars will ensure no net loss of WOUS, as each material site will be excavated below the OHWM, and eventually re-aggrade from the river s natural flooding. The mining of material from gravel bars will reduce the need for terrestrial material sites. Terrestrial alternatives will require additional disturbance in wetlands for material sites and access.

Each material site will be permitted for use through the Alaska Department of Natural Resources (DNR) Division of Mining Land & Water. DOT&PF will submit a Mining and Reclamation Guideline document to DNR for each of the material sites. In addition, sites on NANA Regional Corporation land will be permitted through NANA. The construction contractor will create a Project Mining and Reclamation Plan for each site to be submitted to DOT&PF, DNR, and NANA for approval. It will include appropriate BMPs to minimize impacts to WOUS at each location. Gravel sources will be mined to maximize mineral material extraction from the smallest footprint.

At each material source location, adequate setbacks from the active river channel will be maintained to avoid impacts to fish and sediment transport to the active channel. If the river braid is crossed for pit access, excavation will occur during winter months when the ground is frozen and the river waters are at a low-flow level. Material stockpiles will be moved out of the active floodplain before river breakup in the spring.

Access Road

The access road alignment overlies ground that is subject to thaw settlement. Road design includes placing geotextile underlayment and the use of insulation board to protect thaw susceptible soils. The road will be constructed to an average depth of 6 feet to help provide additional thermal protection for the underlying permafrost, and to provide a drivable surface above the 100-year flood event. The road will have an average driving surface of 24 feet and a toe-to-toe width of a minimum of 75 feet. The figures show the toe-to-toe fill.

Excavation along the route will be avoided to minimize thermal degradation of the frozen soils. Dust control measures will be implemented as needed to reduce suspension of fugitive dust during construction and as part of ongoing road maintenance.

Equipment Storage

The design incorporates existing roads, minimizing impacts to WOUS, to include wetlands and streams. The construction equipment will be offloaded at the barge landing during the summer. Equipment will be stored in designated upland areas.

Temporary Work Areas

The access road as well as the bridge approaches have been shown with a temporary 25-foot-wide work area on either side. This buffer has been included in the drawings. This has been included to allow for construction deviations with equipment beyond the toe-to-toe layout of the road and bridge embankments. The buffer areas will be reserved, if needed when construction is complete. This acreage has been calculated as temporary work area totaling 4.8 acres.

Access Road Drainage Construction Minimization Measures

Appropriately sized culverts will be placed along the access road to maintain hydrologic connectivity of the adjacent wetlands. The figures show several proposed locations. No additional fill is required for the culvert placements. The fill is calculated as part of the roadway. Swales and other concave landscape features that collect water will have hydrologic connectivity maintained using culverts. A two-lane bridge will cross Smith Creek and has been designed to accommodate high water, navigation, and winter snow machine traffic. Abutments will be placed on either side of the creek within the floodplain.

Rip rap layout was designed to protect the embankments at all water stages.

Erosion Sediment Control Plans and Stormwater Pollution Prevention Plans (SWPPPs) will be developed and implemented to prevent introduction of sediments and consequent turbidity into WOUS during construction. BMPs will be used project-wide to maintain in-stream water quality and stream bank stability.

Minimization Measures

The proposed material sources for the project, located in the Inmachuk River channel, will be mined on gravel bars during low water conditions in the winter. The material source boundaries will include river gravel bars and islands mapped as riverine channel (no field verification). After the project is completed, excavated areas used for material extraction will likely pond due to a high-water table, and/or connected to the river through flooding. The material sources, after reclamation is complete, will remain as WOUS as functioning gravel or channel within the Inmachuk River floodplain.

The in-river mining at the proposed material sources will potentially provide functional lift to the Inmachuk River by potentially creating overwintering fish habitat. On the North Slope s Sagavanirktok River, the Alaska Department of Fish and Game (ADF&G) noted the potential for creation of overwintering habitat for fish through gravel extraction and started recommending gravel extraction in-river (Morris 2000). McLean (1993) noted that mining in-river will provide net benefits for fish while avoiding many of the costs and impacts of terrestrial mining. Mining in-river on the Sagavanirktok River will provide overwintering fish habitat, �� for a considerable period of time (McLean 1993).

Mitigation Measures

DOT&PF has selected an alternative for the airport that has been demonstrated to be practicable for the community of Deering. DOT&PF, working in an area that was mapped as 93 percent wetlands has avoided wetland impacts by not developing terrestrial material sources. Material for the project will use existing gravel bars within the Inmachuk River channel. The proposed sites will provide sufficient material for the project while completely avoiding terrestrial wetland material site impacts through extraction and haulage.

Barge traffic will move construction equipment to the site. No conservation units are impacted by the proposed action. Winter access roads to material sites avoids fill in streams.

The preferred airport location uses existing fill pads to meet safety requirements, while obtaining material within the Inmachuk River gravel bars, which reduces the permanent impacts of this project.

The reason for this project is public safety; for both the runway and access road, there are no external economic drivers. Due to the avoidance and minimization efforts DOT&PF has undertaken with community input during the planning and design of this project, minimal cumulative impacts, the in-river material site location and potential functional lift, the vast wetland landscape within the watershed, NAB subsistence zoning, and by following the 404(b)(1) Guidelines sequencing, and adhering to current Alaska regulatory guidance, no compensatory mitigation will be offered to offset the 18.8 acres or less of permanent losses to wetlands and waters in this location. The temporary impacts of 4.8 acres will be reclaimed following construction.

Social / Economic Importance

Social or Economic Importance

(18 AAC 70.016(c)(5): Provide information that demonstrates the accommodation of important social or economic development. The applicant shall complete either a social OR economic importance analysis (or both) for each affected community in the area where the receiving water for the proposed discharge is located.

Social Importance Analysis

Community services provided Public health or safety improvements Infrastructure improvements

Economic Importance Analysis

Access to a transportation network Commercial activities

Describe Social and/or Economic Importance of the project

The Deering Airport and existing access road are subject to seasonal flooding and the airport does not meet current FAA design standards. Airport rehabilitation and new access road construction would ensure safe and reliable year-round air transportation for Deering. The Deering Airport has two gravel surface runways designated as Runway 3-21 and 12-30. Snow removal operations have graded off most of the runway surfacing, resulting in rutting and ponding. The airfield s surface course and lighting system have exceeded their useful lifespan and need replacement. Deering is off the road system, with the only year-round accessibility by air transportation, with barge service limited to summer months. Deering relies heavily on year-round air transportation for major commerce, supplies, fuel, access, and medical evacuation.

Description of Social or Economic Importance, if needed

NONE PROVIDED Comment NONE PROVIDED

List of Other Permits or Certificates

*Would include but is not restricted to zoning, building, and flood plain permits.

Include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received.

Agency	Type of Approval*	Identification Number	Date Applied	Date Approved	Date Denied
USACE	CWA 404 Permit	POA-2021-00211-M1	06/26/2025	NONE PROVIDED	NONE PROVIDED
ADF&G	Title 16 Fish Habitat Permit	FH22-III-0175-A2	08/10/2022	03/11/2025	NONE PROVIDED

Agency	Type of Approval*	Identification Number	Date Applied	Date Approved	Date Denied
ADF&G	Title 16 Fish Habitat Permit	FH22-III-0176	08/10/2022	09/20/2022	NONE PROVIDED
ADF&G	Title 16 Fish Habitat Permit	FH22-III-0177-A1	08/10/2022	03/11/2025	NONE PROVIDED
ADF&G	Title 16 Fish Habitat Permit	FH22-III-0198-A1	08/10/2022	03/11/2025	NONE PROVIDED
SHPO	Section 106 Findings Concurrence	3130-1R FAA 2020- 0203	03/15/2021	04/02/2021	NONE PROVIDED
USFWS	ESA Section 7 Concurrence	N/A	12/10/2020	12/11/2020	NONE PROVIDED
NOAA- NMFS	ESA Section 7 Concurrence	AKRO-2020-03390	12/10/2020	02/22/2021	NONE PROVIDED
NOAA- NMFS	MSA EFH Concurrence	N/A	01/26/2021	01/29/2021	NONE PROVIDED

Other Agency or Local Contacts (1 of 2)

Contact Role OTHER_REG_CNTCT

Other Agency and or Local Contacts

First Name
CalvinLast Name
Moto Jr.Title
Tribal PresidentOrganization Name
Native Village of Deering

Phone Type Number Extension

Business 907-363-2138

Email

tribeadmin@ipnatchiaq.org

Other Agency or Local Contacts (2 of 2)

Contact Role OTHER_REG_CNTCT

Other Agency and or Local Contacts

First Name
JeffLast Name
NelsonJeffNelsonTitle
Director of LandsImage: CompositionOrganizationName
NANA Regional CorporationPhone TypeNumberExtensionBusiness907-265-4100Email
jeffrey.nelson@nana.comImage: Composition

Attachments

Copy of Federal Application (USACE, EPA, or FERC, etc.)

POA-2021-00192 - Inmachuk River - Mod Request.pdf - 07/09/2025 11:01 AM

POA-2021-000192.20211208.Trans2.pdf - 07/09/2025 11:01 AM

RE_PermitNumberCorrection.pdf - 07/09/2025 11:01 AM Comment

Includes signed final Section 404 Permit, request for modification to USACE, and clarification of POA number change.

Figures and/or Drawings/Plan Sets. To include a map or diagram of the proposed activity site, including the proposed activity boundaries in relation to local streets, roads, and highways.

POA-2021-00211-M1_Figs_1-11.pdf - 07/09/2025 11:01 AM Comment

NONE PROVIDED

Document Attachments

<u>FH22-III-0175-A2; ADOTPF; Inmachuk R; gravel extraction.pdf - 07/09/2025 11:01 AM</u> **Comment** Updated F&G Title 16 Permit to include additional material sites.

Delegation of Authority for Submission of Application

NONE PROVIDED Comment NONE PROVIDED

As per 18 AAC 15.030 signing of applications, all permit or approval applications must be signed as follows:

1) in the case of corporations, by a principal executive officer of at least the level of vice president or his duly authorized

representative, if the representative is responsible for the overall management of the project or operation;

2) in the case of a partnership, by a general partner;

3) in the case of a sole proprietorship, by the proprietor; and

4) in the case of a municipal, state, federal or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

As per 18 AAC 15.030 signing of applications, all permit or approval applications must be signed as follows:

1) in the case of corporations, by a principal executive officer of at least the level of vice president or his duly authorized representative, if the representative is responsible for the overall management of the project or operation;

2) in the case of a partnership, by a general partner;

3) in the case of a sole proprietorship, by the proprietor; and

4) in the case of a municipal, state, federal or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee. The project proponent hereby certifies that all information contained herein is true, accurate, and complete to the best of my knowledge and belief. The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Signed william.sexton@alaska.gov william.sexton@alaska.gov on 07/09/2025 at 11:06 AM