CWA 401 Water Quality Certification - Modification

version 2.11

(Submission #: HQC-ZKJH-J5R8C, version 1)

Details

Site: Willow Development

Submission ID HQC-ZKJH-J5R8C

Form Input

Form Instructions

Form Instructions

Instructions for filling out the 401 Water Quality Certification Request - Modification 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

Modification Reason

Permit Number
POA-2018-190

Are you modifying any of the following things for this permit?
NONE PROVIDED

Modification Description or Section Changes

- If you have a quick description that explains your modification you can add it below.
- Please check any section boxes below if you've made any additional changes in those sections as well.

If changing contact details for anyone associated with the permit or application, please add a note in the Modification Description box below.

Modification Description
ConocoPhillips Alaska, Inc. (CPAI) is submitting a modification to the Willow Development airstrip to support airstrip operational safety. The modification would increase the permitted footprint by 9.1 acres (from 45.2 acres to 54.3 acres) and would decrease fill quantity by 16,000 cubic yards (cy; from 636,000 cy to 620,000 cy) due to gravel pad optimizations. The proposed modifications will not affect the footprint of project facilities within the Teshekpuk Lake Special Area or the Colville River Special Area.

Modified Sections
Contact Information
Permit Information

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

Permit Information

Federal Permit License Number
POA-2018-190

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**

Edit the contact roles and details as needed. If the contact is no longer active, please remove all roles for the assigned person and indicate the contact is In-Active, and add a new contact with the appropriate roles versus writing over the previous one.

Contact Role(s)
Applicant

Is this contact In-Active?
No

Contact

Prefix
Mr.

First Name	Last Name
Jason	Charton

Title
Vice President, HSE

Organization Name
ConocoPhillips Alaska, Inc.

Phone Type	Number	Extension
Business	9072634682	

Email
Jason.T.Charton@conocophillips.com

Mailing Address

700 G Street

Anchorage, AK 99501

United States

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**

Edit the contact roles and details as needed. If the contact is no longer active, please remove all roles for the assigned person and indicate the contact is In-Active, and add a new contact with the appropriate roles versus writing over the previous one.

Contact Role(s)
Application Preparer

Is this contact In-Active?
No

Contact

Prefix
NONE PROVIDED

First Name	Last Name
Jennifer, M.	Collins

Title
Staff Environmental Advisor

Organization Name
ConocoPhillips Alaska, Inc.

Phone Type	Number	Extension
Mobile	9077273473	
Other	9072656509	

Email
jennifer.collins@conocophillips.com

Mailing Address

P.O. Box 100360
700 G Street
Anchorage, AK 99510
United States

Contact Information (3 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**

Edit the contact roles and details as needed. If the contact is no longer active, please remove all roles for the assigned person and indicate the contact is In-Active, and add a new contact with the appropriate roles versus writing over the previous one.

Contact Role(s)
Billing Contact

Is this contact In-Active?
No

Contact

Prefix
NONE PROVIDED

First Name	Last Name
Jan	Deering

Title
Alaska HSE & Village Outreach Aide

Organization Name
ConocoPhillips Alaska, Inc.

Phone Type	Number	Extension
Business	9072656961	

Email
Jan.Deering@conocophillips.com

Mailing Address

P.O. Box 100360

700 G Street

Anchorage, AK 99501

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)

Permit License Number (ex. USACE: POA-XXXX-XXXX; FERC: FERC-xxxx-xxxx; EPA: AK########)
USACE: POA-2018-00190-M3

Project Name or Title
Willow Development

Primary Receiving Waterbody Name
Harrison Bay

Estimated Project Dates (+/- 30 days)

Project Estimated Start Date	Project Estimated End/Completion Date
12/01/2025	05/31/2028

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

Description	Discharge Estimated Start Date	Discharge Estimated End Date
Gravel placement	12/01/2025	05/31/2028

Project Description (Nature of Activity, include all features)
CPAI is requesting a modification to the Willow Development airstrip. CPAI proposes extending the two Runway End Safety Areas (RESAs) by 900 feet on each side. This gravel placement would occur in areas where cable trenching, approach lighting, and maintenance access across the tundra was already planned. It will provide an additional measure of safety in the event of an aircraft over-running or landing short of the runway. The RESAs will include Medium Intensity Approach Light System (MALSR) lights down the center of the gravel RESAs.
Beyond the RESAs, CPAI proposes two 640-foot-long by 20-foot-wide access paths to the MALSR lights located on either end of the RESAs to further support safety. The RESA and access paths provide a consistent gravel surface to install the MALSR lights and connecting power cables to allow for frangible connections. The access paths also improve year-round access for operations and maintenance and reduce the need for trenching power and fiber cables in the tundra. The paths include MALSR lights located on small gravel surfaces and a MALSR shelter, moved from its previously permitted location perpendicular to the end of the airstrip. Relocation of the MALSR shelter improves safety by removing a hazard (a perpendicular gravel embankment) within the Runway Object Free Area (ROFA). Beyond the MALSR shelter, strobe lights will remain on tundra as previously permitted to minimize the need for additional gravel fill. Total fill area from all above-described activities is 9.1 acres.

Project Purpose (Describe the reason(s) for discharge)
Based on engineering analysis, CPAI is requesting updates to support aircraft operational safety based on aircraft manufacturer guidance, safety considerations, and engineering best practices.

Is any portion of the work already complete?
No

Description of current activity site conditions
The Project area is located on the North Slope of Alaska, with the proposed facilities on leased federal lands within the Bear Tooth Unit (BTU) in the northeastern portion of the NPR-A.

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
Willow Development Project
Nuiqsut, AK 99789

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

Project Location
70.1446316,-152.0155925

Visit the following link if you need to convert the lat/long to get the **PLSS information**

Converter for Section, Township, and Range

PLSS Location (Public Land Survey System)

State Tax Parcel ID	Borough/Municipality	Meridian	Section	Township	Range
NONE PROVIDED	North Slope Borough	Umiat	7	9N	1E
NONE PROVIDED	North Slope Borough	Umiat	12	9N	1W
NONE PROVIDED	North Slope Borough	Umiat	13	9N	1W

Directions to Site
NONE PROVIDED

Federal Agency Contact (1 of 2)

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

Federal Contact Role
USACE

Federal Agency Contact

First Name	Last Name
Steve	Moore

Title
NONE PROVIDED

Organization Name
US Army Corps of Engineers

Phone Type	Number	Extension
Business	9077535713	

Email
stephen.a.moore2@usace.army.mil

Federal Agency Contact (2 of 2)

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

Federal Contact Role
USACE

Federal Agency Contact

First Name	Last Name
Jonathan	Hegna

Title
NONE PROVIDED

Organization Name
US Army Corps of Engineers

Phone Type	Number	Extension
Business	9077532708	

Email
Jonathan.R.Hegna@usace.army.mil

Dredge Material to be Discharged

Is dredging involved?
No

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 determinations. The tier analysis is a series of tiers (I – IV) or levels of intensity (and cost) of investigation. It is necessary to proceed through the tiers only until information is sufficient to make factual determinations, no further testing is required.

- **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 accepte 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
Willow Mine Site

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

Type	Cubic Yards
Gravel	620,000.0

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

Surface Area	Units
9.1	Acres

Discharge Location Information (1 of 1)

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)
005

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
Harrison Bay

Discharge Location
70.1446316,-152.0155925

Other Pollutant Sources

Contaminated Site Information

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:

- [Contaminated Sites Web Map]

- Contaminated Sites Database Search website

Is the project within 1,500 feet of a known contaminated site?
No

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
Unknown concentrations of turbidity, sediment, and fugitive dust may occur. Sediment and turbidity are expected to be localized to the Project area and temporary in duration during construction. Fugitive dust will be localized to the Project area and occur seasonally throughout the Project. Petroleum hydrocarbon impacts are not anticipated and any that occur will be minimal.

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
CPAI will develop an Erosion and Sediment Control Plan (ESCP) to specify contractor minimum Best Management Practices (BMPs) requirements in compliance with the Alaska Pollution Discharge Elimination System (APDES) Construction General Permit (CGP, AKR100000). BMPs will be implemented to limit soil disturbances to specified project limits, protect natural features and soils, and mitigate potential for erosion, sedimentation and pollution from stormwater discharges for the duration of construction activities. Anticipated BMPs for the project include site delineation (i.e. flagging project disturbance limits), down-slope perimeter controls (i.e. vegetative buffer strips, rock berms, and silt fences), and temporary soil stabilization (i.e. surface roughening, soil tackifier products, and rolled erosion control products). If determined applicable, the contractor may also develop a project-specific Stormwater Pollution Prevention Plan (SWPPP).

Avoidance Measures
Placement of the proposed fill is in areas where cable trenching and approach lighting (including towers and junction boxes) is already permitted. The proposed update therefore concentrates gravel fill placement in partially developed areas, avoiding impacts to undisturbed tundra areas.

Minimization Measures
The size of the Runway End Safety Areas (RESAs) and Medium Intensity Approach Light System (MALSR) access roads is specifically designed to serve their intended purpose without having a broader footprint. Overall, the proposed RESAs and MALSR access roads were reduced from approximately 13 acres to the proposed 9.1 acres, a reduction of approximately 4 acres. Specific minimizations include:

-Using insulation where practicable, thereby reducing the RESA footprint and gravel fill volume. The emergency-only use of the RESAs provides increased opportunity for use of insulation relative to use in the active runway, allowing reduction in the average height, volume, and acreage of gravel fill while maintaining thermal properties to protect permafrost.

-Decreasing the surface width of the MALSR access road where practicable, thereby reducing footprint and gravel fill volume. Initial engineering designs included a recommendation for a surface width of approximately 39 feet for the length of the road accommodating the driving surface, road shoulders, and clearance for the MALSR light bar. Through work with engineering and operations, CPAI was able to reduce the surface width to 20 feet in between the MALSR light bars with 13-foot bump outs at each of the MALSR light poles to provide frangibility and access to the poles for regular maintenance.

-Removing gravel access roads to the strobe lights beyond the MALSR shelter to reduce gravel fill footprint, thereby eliminating unnecessary gravel fill. Strobe lights located beyond the Runway Object Free Area (ROFA) are not subject to the same guidelines for frangibility as the MALSR lights within the ROFA. As such, CPAI did not include gravel access to approximately 775 feet of strobe lights on each end of the airstrip (1,550 feet total).

-Removing tundra access ramps proposed in prior design, which were determined to be unnecessary with the addition of the proposed RESAs.

Mitigation Measures
CPAI has designed the RESAs and MALSR access roads to avoid the creation of standing water. Cross drainage culverts will be installed to maintain natural surface drainage to mitigate the risk of sheet flow interruption and thermokarsting. The estimated spacing of culverts is every 1,000 feet. However, during final design, CPAI (or its contractor) will optimize final culvert locations based on field observations including observation of low areas where culverts are needed. The culverts will be installed per the final design prior to breakup of the first construction season. Exact placement will be adjusted based on a field survey of local, in-field drainage patterns.

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
Infrastructure improvements
Public health or safety improvements

Economic Importance Analysis
Access to recourses
Access to a transportation network
Commercial activities
Employment, job availability, and salary impacts

Describe Social and/or Economic Importance of the project
CPAI is requesting updates to support aircraft operational safety
based on aircraft manufacturer guidance, safety considerations, and engineering best practices. The airstrip will be for private use and is necessary to the success of the Willow Development Project. The Willow Development Project has social and economic benefits to the residents of Nuiqsut and the State of Alaska.

CPAI's community investment and mitigation programs provide income and other benefits to residents of Nuiqsut. The Willow transportation system will provide access to subsistence hunting resources to the west of Nuiqsut. Taxes and royalties from oil sales, state corporate income taxes, property taxes, bed taxes, and other feeds would benefit the City of Nuiqsut, NSB, the State of Alaska, and Alaska Native Corporations.

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
North Slope Borough	Development Permit	NSB 25-420	02/04/2025	*NONE PROVIDED*	*NONE PROVIDED*
Bureau of Land Management	Sundry	W1R1C14	01/27/2025	03/07/2025	*NONE PROVIDED*
US Army Corps of Engineers	404 Permit Modification	POA-2018-00190	01/27/2025	*NONE PROVIDED*	*NONE PROVIDED*
North Slope Borough	Certificate of TLUI Clearance	NSB 25-049	02/04/2025	02/11/2025	*NONE PROVIDED*

Other Agency or Local Contacts (1 of 1)

Contact Role
OTHER_REG_CNTCT

Other Agency and or Local Contacts

First Name Chastity **Last Name** Olemaun
Title
Director
Organization Name
North Slope Borough Planning Department
Phone Type Business **Number** 9078520320 **Extension**
Email
chastity.olemaun@north-slope.org

Attachments

Copy of Federal Application (USACE, EPA, or FERC, etc.)
Willow USACE POA-2018-00190_Modification Request.pdf - 06/02/2025 04:19 PM
Comment
NONE PROVIDED

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.

Figures.pdf - 06/02/2025 04:27 PM

Comment

NONE PROVIDED

Document Attachments

NONE PROVIDED

Comment

NONE PROVIDED

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.

Agreements and Signature(s)

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 By jason.t.charton@cop.com jason.t.charton@cop.com on 07/07/2025 at 9:54 AM