Fact Sheet

NPDES Permit Number: AKG-33-0000
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The U.S. Environmental Protection Agency (EPA) Plans To Issue A General Wastewater Discharge Permit To:

Facilities Related to Oil and Gas Extraction,

a notice for
REVOCATION OF ADMINISTRATIVELY
EXTENDED COVERAGE,

and

notice of
STATE CERTIFICATION

EPA Proposes NPDES Permit Issuance.

EPA proposes to reissue a National Pollutant Discharge Elimination System (NPDES) General Permit to facilities related to oil and gas extraction located in the area described in Appendix B. The draft general permit sets conditions on the discharge - or release - of pollutants from various types of operations into waters of the United States.

This Fact Sheet includes:

- a tentative determination of the EPA to issue the general permit,
- information on public comment, public hearing, and appeal procedures,
- a description of the industry, and
- a description of draft permit conditions.

Revocation of Coverage

When this GP is reissued, facilities eligible for coverage under the new GP that were administratively extended will be automatically covered by the new GP. Coverage for any other facility that received an administrative extension by timely filing an NOI prior

to the 2004 GP's expiration date will remain administratively extended until a permit is issued to cover those discharges. Facilities no longer covered by this GP will need to obtain other permit coverage.

The individual permit for Alyeska Pipeline Services, AK-005056-3, was administratively extended. The administrative extension for discharges covered by this general permit will be revoked 45 days after the effective date of this new GP.

The State of Alaska certification.

EPA has requested that the Alaska Department of Environmental Conservation (ADEC) certify the NPDES permit under Clean Water Act (CWA) § 401. A copy of the draft Certification is included as Appendix D.

Consistency Determination

As of July 1, 2011, there is no longer a CZMA program in Alaska. Because a federally approved coastal management program must be administered by a state, no other entity may develop or implement a federally approved coastal management program for the state. Federal agencies shall no longer provide the State of Alaska with CZMA Consistency Determinations. Because the CZMA Federal consistency provisions no longer apply in Alaska, consistency determinations from Federal agencies and consistency certifications from applicants for Federal authorizations or funding that are currently pending ACMP response are no longer required to receive a response from the ACMP and may proceed in accordance with other applicable law and procedures.

EPA invites comments on the draft permit.

EPA will consider all substantive comments before issuing a final permit. Those wishing to comment on the draft permit may do so in writing by the end of the public comment period.

Persons wishing to comment on State Certification should submit written comments by the public notice expiration date to the Alaska Department of Environmental Conservation, 555 Cordova Street, Anchorage, Alaska 99501. Questions may be addressed to Marc Bentley at (907)269-6287 or marc.bentley@alaska.gov.

After the public comment period ends, EPA will review and address all submitted comments and will take them into account in making a decision on the effluent limitations and conditions in the Draft permit. EPA's Director for the Office of Water and Watersheds in Region 10 will then make a final decision regarding final issuance of the Draft permit. The Draft permit will become effective 30 days after it is issued, unless it is stayed by the court in response to an appeal. Pursuant to CWA § 509(b)(1), any interested person may appeal the permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the GP.

Documents are available for review.

The draft NPDES permit and fact sheet can be reviewed at EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday. This material is also available for inspection and copying at the following places in Alaska:

USEPA Alaska Operations Office
Federal Building, Room 537
222 West 7th Avenue
Anchorage, Alaska 99513-7588
Telephone: (800) 781-0983 (in Alaska)

USEPA Alaska Operations Office
709 W. 9th Street, Room 223A
Juneau, Alaska 99802
Telephone: (907) 586-7619

ADEC
Water Division
555 Cordova Street
Anchorage, AK 99501
Telephone: (907) 269-7504

The Administrative Record for this draft GP primarily consists of the draft GP, Fact Sheet and the documents referenced in this Fact Sheet. These are available upon request by contacting Cindi Godsey at (907) 271-6561 or godsey.cindi@epa.gov, or at the above Anchorage address.

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LIST OF ACRONYMS

AAC	Alaska Administrative Code
ACMP	Alaska Coastal Management Program
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
APA	Administrative Procedures Act
AWQS	Alaska Water Quality Standard
BAT	Best Available Technology, economically achievable
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology, currently available
CFR	Code of Federal Regulations
CWA	Clean Water Act
DCOM	Division of Coastal and Ocean Management
DMR	Discharge Monitoring Report
DNR	Department of Natural Resources
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FR	Federal Register
GP	General Permit
GPD	gallons per day
MGD	million gallons per day
mg/L	milligrams per liter
ml/L	milliliters per liter
MSGP	Multi-sector General Permit (Storm water)
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSB	North Slope Borough
NSPS	New Source Performance Standards
NTU	Nephelometric Turbidity Units
ODCE	Ocean Discharge Criteria Evaluation
SS	Settleable Solids
SWPPP	Storm Water Pollution Prevention Plan
TSS	Total Suspended Solids
ug/L	micrograms per liter
U.S.C.	United States Code
USEPA	Environmental Protection Agency
USFWS	United States Fish & Wildlife Service

I. GENERAL PERMITS

A. Permit Coverage

1. CWA § 301(a) provides that the discharge of pollutants is unlawful except in accordance with an NPDES permit. Although such permits are usually issued to individual dischargers, EPA's regulations also authorize the issuance of general permits to categories of dischargers [40 CFR 122.28] located within the same geographic area if the regulated sources are:

   a) Involve the same or substantially similar types of operations;

   b) Discharge the same types of wastes;

   c) Require the same effluent limitations or operating conditions;

   d) Require the same or similar monitoring requirements; and

   e) In the opinion of the Director, are more appropriately controlled under a general permit than under individual permits.

2. Like individual permits, a violation of a condition contained in a general permit constitutes a violation of the Act and subjects the owner or operator of the permitted facility to the penalties specified in CWA § 309 as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note).

3. A Notice of Intent (NOI) to be covered under this General Permit (GP) is required [40 CFR 122.28(b)(2)(i)] to be submitted to EPA and ADEC. An NOI information sheet containing the information required to be covered is included in Appendix A of the GP.

   A discharge is authorized when the permittee receives written notification from EPA to discharge at a specific site or within a designated area. The EPA written notification will include the required ADEC authorization although in rare circumstances these may be sent separately.

4. This permit will expire five (5) years from the date of effective date. 40 CFR 122.28(b)(1) allows a GP to be administered according to the individual permit regulations found in 40 CFR 124 so the GP will continue in force and effect until a new GP is issued. Only those facilities authorized to discharge under the expiring GP that submit an NOI 90 days prior to the expiration of this GP are covered by the administratively extended permit. See 40 CFR 124.6.

5. EPA is proposing that facilities covered by the 2004 GP that submitted timely NOIs be automatically authorized by this GP provided that the discharges from each facility are still covered by the GP. In this manner, permit coverage would be granted when the GP goes into effect. All permittees covered by the GP will receive a copy of the draft permit and fact sheet as well as the final permit when it is published in the Federal Register (FR).

   After the final FR notice, new NOIs may be submitted. In this manner, permit coverage could be granted when the GP goes into effect.

B. Individual Permits

1. Owners or operators covered by a GP may be excepted from coverage by applying to the Director of the NPDES program for an individual permit. This request must be made by submitting an NPDES permit application, together with supporting documentation within 90 days of publication by EPA of the final GP in the Federal Register, or 180 days prior to the commencement of operation of a new discharger.

2. The Director may require any person authorized by a GP to apply for and obtain an individual permit, or any interested person may petition the Director to take this action. The Director may consider the issuance of an individual permit when:

   a) The single discharge or the cumulative number of discharges is/are a significant contributor of pollution;

   b) The discharger is not in compliance with the terms and conditions of the GP;

   c) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

   d) Effluent limitations guidelines are subsequently promulgated for the point sources covered by the GP;

   e) A Water Quality Management Plan containing requirements applicable to such point sources is approved; or

   f) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the GP (e.g., no longer meeting the conditions in Part I.A.1. of this Fact Sheet), or either a temporary or permanent reduction or elimination of the authorized discharge is necessary.

II. GENERAL PERMITTING BACKGROUND

There are many varied reasons why permitting authorities choose to use general permits to cover point source discharges. Permitting authorities approved to issue general permits have used general permits to reduce their permit issuance backlogs. General permits can be written to cover large classes or categories of similar discharges. In addition, general permits can be used to cover dischargers that have been previously unpermitted due to resource constraints. By covering numerous discharges under one general permit, the permitting authority can avoid much of the time and burden that issuing individual permits to each discharge would involve. Permit application costs and paperwork burdens for discharges covered by a general permit are also reduced. Dischargers covered by a general permit usually are not required to conduct the sampling and analysis associated with individual permit applications.

The nature of a GP is to outline the conditions that any discharge that is eligible for coverage is required to meet no matter how many discharges apply and no matter where they are located in the coverage area. The expansion of the coverage area for

this GP into the TAPs corridor and into the potential corridors for future pipeline projects makes this GP coverage area less straightforward than it has been in the past because EPA does not expect there to be activity in all of the corridors (i.e., some projects may move forward, others may fall by the wayside). As with many projects, the discharge of wastewater is but a small component of an overall project that will have many opportunities for public input.

III. GENERAL PERMIT: FACILITIES RELATED TO OIL & GAS EXTRACTION

A. History

A GP for discharges related to oil and gas extraction facilities on the North Slope was first effective April 10, 1997. The GP covered discharges for sanitary and domestic wastewaters, gravel pit dewatering and construction dewatering. A Fact Sheet dated August 1, 1996, outlines the technical basis for the conditions included in the GP.

The GP was later modified and the modification was effective March 16, 1998. The modification included provisions to extend the area of coverage for sanitary and/or domestic wastewater discharges and discharges from melting ice roads constructed of gravel pit water into marine waters offshore of the North Slope Borough of Alaska. The modified GP also included a new outfall designation for the discharge of hydrostatic test water. A Fact Sheet dated November 10, 1997, outlines the technical basis of the modifications to the GP.

The current GP was effective on January 2, 2004. The permit coverage included the categories in the previous permit plus storm water coverage for industrial activities and mobile spill units. A Fact Sheet dated May 21, 2003 outlines the technical basis of the 2004 GP.

B. 2004 GP Coverage

During the 5 year life of the 2004 GP, 75 facilities applied for permit coverage. Currently, through inactivation or consolidation, 64 facilities had permit coverage, some for more than one type of discharge. Most facilities discharge to unnamed tundra wetlands. Nine facilities are permitted for discharge of sanitary wastewater and 16 are permitted for discharge of graywater. Three facilities are permitted for discharge of a combination of sanitary and domestic wastewaters. Twenty-three facilities are permitted to dewater gravel pits and 2 facilities are authorized to discharge hydrostatic test water. Four facilities have coverage for construction dewatering activities and 7 have coverage for mobile spill units. A list of facilities covered by the 2004 GP is included in Appendix E.

C. Sanitary & Domestic Wastewater

On October 31, 2008, EPA approved the application submitted by the state of Alaska to administer the NPDES Program. Under the State program, the Alaska Department of Environmental Conservation (ADEC) will be phasing the assumption with different categories of discharges being phased in over a multi-year period. Domestic wastewater permits transferred in the first phase but oil and

gas permits will not transfer until the fourth phase.

To align this GP with the phasing sequence, ADEC requested that EPA reissue this GP without the domestic/graywater components. There are two other general permits, AKG-57-0000 and AKG-57-1000, for small domestic wastewater discharges into freshwater and marine waters, respectively, that would be utilized instead. This would align the treatment requirements for small discharges currently covered by this GP with similar discharges covered by the other GPs. Facilities with these types of discharges were notified of this change in May 2008 and sent Notice of Intent (NOI) information in July 2008.

D. 2004 GP Compliance

EPA produced a compliance report from the Integrated Compliance Information System (ICIS). This report identified any numeric violations of the GP conditions for the facilities in ICIS. Only one numeric violation was identified. AKG-33-0041 reported a measure of 580 #/100 ml for fecal coliform which is over the monthly average of 200 #/100 ml.

E. New additions to the GP

EPA is proposing the addition of an outfall for the discharge of storm water and/or snow melt accumulated in secondary containment facilities. Previously these were regulated under the storm water section of the GP. The list of allowable non-storm water discharges in this GP was meant to mimic the list in the EPA's Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) which does not list secondary containment. The draft GP has removed this category from Outfall 006 and added Outfall 008 to the permit where contaminated water will be stringently limited while uncontaminated water will be regulated by BMPs and can be handled with the storm water discharges. EPA is also proposing to cover discharges of hydrostatic test water from new containers and existing pipelines. New containers will be subject to the same requirements as new pipelines. Discharges from existing pipelines will be required to meet limits for petroleum hydrocarbons in addition to the new pipeline requirements. It is not the intent of EPA in this GP to cover construction storm water or industrial storm water discharges except for industrial activities within the North Slope Borough. Coverage for storm water discharges not covered by this GP may be obtained through either the ADEC's Construction General Permit (CGP) or the ADEC's Multisector General Permit (MSGP). It is also the intent of this GP to cover discharges from Mobile Spill Response Units only within and offshore of the NSB. When EPA originally covered these two types of discharges, it determined that the conditions on the Slope were unique for storm water discharges due to the limited seasonal nature of the discharges and for mobile spill response due to the configuration of the facilities utilizing this discharge and the logistical challenge to transport potentially large quantities of water to be treated.

F. Current Action

EPA published a draft GP in July 2009 and has decided that a new public notice is necessary at this time. Changes were made to this permit that should address

comments made on the previous draft so it is expected that new comments will be submitted during the public notice period.

IV. COVERED FACILITIES AND NATURE OF DISCHARGES

A. Types of Facilities Covered and Area of Coverage

The general permit, as proposed, authorizes the discharge of specific wastewaters from facilities related to oil and gas extraction to waters of the United States.

In order to be authorized by the GP, the operator of such facilities must apply to both EPA and ADEC through the NOI process and receive a letter of authorization from EPA. This authorization will include ADEC's authorization as required by the CWA § 401 Certification (Appendix D). In rare instances, a facility may receive separate notification from each entity.

The 2004 GP area of coverage included the North Slope Borough (NSB) of Alaska (shown in Appendix B) and seaward for ice structure discharges, construction dewatering, hydrostatic test water and mobile spill response water. The proposed area of coverage under the reissued GP is the area described above and the area shown in the maps in Appendix B. These areas encompass a 14 mile (7 miles on either side) corridor along the Trans-Alaska Pipeline System (TAPS) as well as the route of the Haines-to-Fairbanks pipeline. In addition, the area includes those corridors of potential activity which generally branch off the TAPS line to follow the Glenn and Parks Highways to Anchorage and then to Beluga. General maps showing the corridors are shown in Appendix B. More detailed maps can be found on the EPA website with the draft permit and fact sheet. This permit does not authorize the placement of operations in areas of restricted activity such as National Parks or Wildlife Refuges, although if such placement were authorized by the appropriate agencies, the wastewater discharges requirements contained in this draft GP would apply.

The extension down the TAPS is proposed so that the discharges covered by an individual permit held by Alyeska Pipeline Services Company that is currently expired can be updated within this GP. Along with existing work that may be done, any new construction needing the types of permit coverage offered by this GP could submit NOIs to receive authorization to discharge.

The addition of new pipeline corridors is in anticipation of new work that may occur during the 5-year life of this reissued permit.

B. Types of Discharges Authorized

1. Gravel Pit Dewatering

The first discharge covered by this general permit is dewatering of active gravel pits to waters of the United States (a creek or adjacent tundra wetlands). Winter snow accumulations from precipitation and drifting, meltwater from snow and overburden storage, and local drainage from breakup runoff create bodies of water at the lower elevations of each gravel

pit. Infrequent gravel source requirements may allow several seasons of water to accumulate in the gravel pits. Initial pumping of accumulated waters is begun within the deeper sections of the gravel pits. These undisturbed waters contain little suspended sediment, as a pit serves as an effective settling basin. Removal of this accumulated water is required to allow gravel removal and transportation equipment to operate efficiently and safely.

In addition to dewatering of active gravel pits, this GP covers the melting of ice roads and pads constructed from gravel pit water and the use of gravel pit water for road watering. The ice roads and pads will eventually melt and discharge to the adjacent tundra wetlands or to surface waters. Ice roads and pads are used instead of gravel to limit the impact of an operation on the surrounding tundra area. Road watering is done during the summer for dust suppression. The draft permit will require compliance with a Best Management Practices (BMPs) Plan for dewatering and to maintain the quality of the ice roads and pads in use so that there will be no additional pollutants of concern as structures melt during breakup. The BMP Plan will also address potential runoff from the road watering process.

2. *Construction Dewatering*

At facilities related to oil and gas extraction, there are times when it is necessary to dewater construction areas where water has pooled. This is common when burying a pipeline and ditches have to be dewatered for proper placement of the line. This GP proposes to cover discharges to waters of the United States associated with dewatering construction areas where water is mainly attributed to ground water inflow into the ditches with the inflow of storm water being minimal.

3. Hydrostatic Testing Water

Water is used to pressure test pipes and tanks to verify mechanical strength and integrity. This water is discharged when the hydrostatic testing is completed. Waters from hydrostatic testing can contain small quantities of residual materials that are left in the pipe prior to testing such as dust and welding slag. Discharges from existing pipelines may contain hydrocarbons which would have to be removed to meet the water quality standards. Common treatment and control measures used for hydrostatic testing waters include one or more of the following methods: velocity reduction on splash pads; erosion control; rubble mound infiltration into dry stream channels; settling ponds; pumping to upland areas; and/or pumping to ice and snow. The location and volume of discharges depend upon the circumstances of a particular project.

4. Storm Water Discharges associated with Industrial Activity

The most likely source of storm water runoff comes during spring break-up from the rapid melting of snow and ice that accumulates during winter. Due to the low relief and frozen tundra surface, meltwater initially flows over the frozen tundra. As the tundra surface gradually thaws, meltwater percolates

downward but is impeded by permafrost.

A storm water discharge permit is not required for discharges of storm water runoff from oil and gas exploration, production, processing or treatment operations or transmission facilities that is composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or do not come into contact with any overburden, raw material, intermediate products, finished products, byproduct or waste products located on the site of such operations [33 USC 1342(l)(2)]. In short, if a facility experiences a release of a reportable quantity or exceedance of a water quality standard then it must obtain a permit for storm water discharge.

a. As in the current GP, this GP proposes to cover those storm water discharges within the North Slope Borough that have come in contact with any of those materials or products from industrial activities that may occur in, but are not limited to, the following sites and areas:

    1) Industrialized resource extraction areas including drill sites;
    2) Access roads, docks and airstrips used or traveled by carriers of raw materials, intermediate products, or finished products;
    3) Sites used for storage of manufactured products, waste material or byproducts used or created by the facility;
    4) Material handling and storage sites, refuse sites, and sites used for the application or disposal of process wastewaters;
    5) Production reserve pits which have been closed under 18 AAC 60 and converted to storm water storage areas;
    6) Sites used for residual treatment, storage or disposal of production or remediation wastes:
        a) Shipping and receiving areas;
        b) Manufacturing buildings, including electric power generation plants, storage areas (including tank farms) for raw materials and intermediate and finished products;
    7) Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. Significant materials include but are not limited to raw materials, fuels, solvents, detergents, plastic pellets, finished materials, fertilizers, pesticides and waste products such as sludge.

b. Non-storm water discharges authorized to be discharged with storm water, under the permit include:

    1) Fire fighting flows and fire hydrant flushing discharges, including periodic fire suppression test discharges;
    2) Potable water sources including waterline flushings and drinking

fountain water;

3) Irrigation drainage – Not a common practice but may be used on occasion for re-vegetation projects;

4) Routine external building and power line wash down that does not use detergent or other compounds;

5) Uncontaminated springs or groundwater;

6) Uncontaminated foundation or footing drains; and

7) Electrical insulator steaming.

5. *Mobile Spill Response Units*

Small leaks from winter operations of motorized vehicles and equipment used for oil and gas exploration and development may result in droplets of motor oil, diesel, gasoline or transmission fluid on snow. These leaks are frequently remediated by removing droplets from the snow surface with a shovel and placing the snow-oil mixture in a container. The snow is melted and treated in a 55 gallon water-scrubbing unit that selectively absorbs hydrocarbons and repels water. The contaminated absorbent material is disposed of with similar oil-soaked material: typically in an incinerator. If the water's only source of contamination has been a small amount of oil products and there is not a sheen then the water from the unit could be discharged to frozen tundra wetlands.

Discharges from this type of operation are limited geographically to the extent of previous coverage, the North Slope Borough and seaward.

6. *Secondary Containment*

The draft GP is proposing the addition of an outfall authorizing the discharge of storm water (rainfall & snowmelt) accumulated in areas of secondary containment (i.e., diked or bermed areas) surrounding tanks, tank farms, or tanker truck loading racks.

In addition to NPDES permitting, the CWA also requires owners and operators of oil above ground storage tanks (ASTs) with an aggregate storage capacity of 1,320 gallons (including all containers 55 gallons or larger and associated piping) or greater to prepare a Spill Prevention, Control and Countermeasure (SPCC) Plan, and to comply with the requirements of 40 CFR § 112. SPCC also requires facilities with a storage capacity greater than or equal to 42,000 gallons, and which transfer oil to or from a vessel (or over water), to prepare a Facility Response Plan (FRP) as described in 40 CFR § 112.20. An FRP is also required for any oil storage facility with a capacity of 1,000,000 gallons or greater.

Under the existing SPCC Program, secondary containments are visually inspected daily for contamination. For this GP, the term "uncontaminated" will be defined as having had no spills within the last 12 months with no evidence of sheen, no odor, and no discoloration. If a discharge is determined to be

uncontaminated, it may be discharged as part of the storm water management at the facility. The BMP Plan or the facility SWPPP shall contain BMPs for including this discharge with storm water discharges. If a discharge is deemed to be contaminated, the limitations and monitoring requirements of the GP will apply.

V. RECEIVING WATER

The receiving waters are waters of United States and the state of Alaska, most of which are classified in the Alaska Water Quality Standards (AWQS) [18 AAC 70] as Classes (1)(A), (B), (C), and (D) for use in drinking, culinary and food processing, agriculture, aquaculture, and industrial water supply; contact and secondary recreation; and growth and propagation of fish, shellfish, other aquatic life, and wildlife. These classifications also apply to tundra and other wetlands.

Some of the receiving waters are marine waters that are classified in 18 AAC 70 as Classes (2)(A), (B), (C), and (D) for use in aquaculture, seafood processing, and industrial water supply; contact and secondary recreation; growth and propagation of fish, shellfish, other aquatic life, and wildlife; and harvesting for consumption of raw mollusks or other raw aquatic life.

VI. OCEAN DISCHARGE CRITERIA EVALUATION (ODCE)

In previous permitting actions, EPA relied on the ODCE that had been completed for the Arctic General NPDES Permit to determine whether the discharges would cause unreasonable degradation. For this permitting action, EPA is relying on 40 CFR 125.122(b) which states “Discharges in compliance with section 301(g), 301(h), or 316(a) variance requirements or State water quality standards shall be presumed not to cause unreasonable degradation of the marine environment, for any specific pollutants or conditions specified in the variance or the standard.” Since this GP ensures that applicable water quality standards are being met, pursuant to 40 CFR 125.122(b), EPA presumes that there will not be unreasonable degradation of the marine environment.

VII. SPECIFIC PERMIT REQUIREMENTS

In establishing permit limits, EPA first determines which technology-based limits must be incorporated into the permit. EPA then evaluates the effluent quality expected to result from these controls, to see if it could result in any exceedences of the water quality standards in the receiving water. If exceedences could occur, EPA must include water quality-based limits in the permit. The draft permit limits will reflect whichever requirements (technology-based or water quality-based) are more stringent. Appendix C provides the basis for the development of effluent limits.

A. Gravel Pit Dewatering

1. *Technology-Based Limitations*

Effluent limitations required in this GP for the control of pollutants are published in 40 CFR § 436 Subpart C—Construction Sand and Gravel Subcategory. These limitations apply to the dewatering of gravel pits.

Subpart C establishes effluent limitation guidelines based on Best Practicable Control Technology currently available (BPT). BPT effluent limitations are listed in 40 CFR § 436.32 (a)(2), which states that "mine dewatering discharges shall not exceed the following limitations: pH range of 6 to 9, maximum for one day; pH range of 6 to 9, average of daily values for 30 consecutive days."

EPA did not include a technology-based limitation for sediment in the national effluent guidelines for this category of discharge but the treatment technology for these discharges would be the same as the gold placer mining category, one of simple settling. The only parameter specifically limited in these guidelines [40 CFR § 440, Subpart M] is settleable solids. The limit is 0.2 ml/L. Since the technology is the same, EPA is proposing to use this guideline as the Best Professional Judgment (BPJ) technology-based limitation for sediment.

2. *Water Quality-Based Evaluation*

Oil and Grease. Applicable state standards for oil and grease are limited to "shall not cause a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines." The mine sites should have no direct contact with oil production activities. Furthermore, equipment is not to be operated in a manner that will allow contact of hydraulic fluids, lubricants, or fuel with the accumulated meltwater. EPA has determined that the state criteria can be met by a requirement of no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.

pH. For fresh waters, the most protective limitations on pH are for aquaculture and contact recreation. This level is 6.5 to 8.5 standard units. For marine waters, the most protective limitations are for aquaculture and the growth and propagation of fish, shellfish, other aquatic life and wildlife. This level is 6.5 to 8.5 standard units.

Sediment. There is a reasonable potential for violations to occur should pumping of the gravel pit be conducted improperly. A sediment limitation based on the AWQS would call for “no measurable increase in concentrations of settleable solids above natural conditions, as measured by the volumetric Imhoff cone.” This level is less restrictive than the technology-based limitation so EPA is proposing a settleable solids limit for the discharge of 0.2 ml/L.

The effluent limitations and monitoring requirements are summarized in Table 1:

Table 1
Effluent Limitations and Monitoring Requirements

Parameter	Minimum	Maximum	Units	Sampling Location	Sample Type	Sampling Frequency
Flow	---	3.0	Million gallons per day (MGD)	Effluent	Estimate	Daily
Settleable Solids	---	0.2	Milliliters per liter (ml/L)	Effluent	Grab	Weekly

(SS)						
pH	6.5	8.5	Standard Units	Effluent	Grab	Weekly
Oily Sheen	No discharge of floating solids, visible foam, or oily wastes which may cause a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines.			Surface of mine water and receiving water	Visual	Daily

3. *Best Management Practices Plan*

The use of gravel pit discharge water for ice road and pad construction is being proposed for two reasons. The first reason is the possible impacts on a larger area because the waters usually used for these activities may not be in close proximity to a facility. The second reason was brought to light by the Alaska Department of Fish and Game during the initial permit issuance in 1996. Their concern is that drawing down waters in naturally occurring lakes or ponds, the usual source of water, may cause harm to fish overwintering in these water bodies. The ice roads may be built over marine waters as well as frozen tundra; therefore, the discharges may be to fresh or to marine waters.

The use of gravel pit water for the construction of ice roads and pads causes a unique discharge of this water in the spring during breakup. The discharge cannot be representatively sampled as it occurs to the tundra wetlands or to surface waters over a large area so the numeric limitations are required to be met upon withdrawal from the pit. The GP requires that BMPs be developed for the gravel pit dewatering process and these BMPs be utilized when gravel pit water will be used for ice structures and/or road watering. The BMP Plan, required in Permit Part II.G., will also address the operation and maintenance of these activities to ensure that water quality is not harmed.

B. **Construction Dewatering**

1. *Technology-Based Limitations*

EPA has not developed effluent guidelines for this category of dischargers but the treatment technology for these discharges would be the same as the gold placer mining category, one of simple settling.

Sediment. The only parameter specifically limited in these guidelines [40 CFR § 440, Subpart M] is settleable solids. The limit is 0.2 ml/L. Since the technology is the same, EPA is proposing to use this guideline as the BPJ technology-based limitation for sediment.

2. *Water Quality-Based limitations*

Sediment. There is a reasonable potential for violations to occur should pumping be conducted improperly. A sediment limitation based on the AWQS would call for “no measurable increase in concentrations of settleable solids above natural conditions, as measured by the volumetric Imhoff cone.” This is less restrictive than the technology-based limitation so EPA is proposing a settleable solids limit for the discharge of 0.2 ml/L.

Turbidity. Due to the nature of the discharge, dewatering a construction area, a turbidity limitation is being proposed in the general permit for this category of discharge. According to the AWQS, the most protective turbidity criteria applies to fresh water sources classified for use as drinking water and contact recreation uses. These criteria [18 AAC 70.020(b)] state that turbidity "(m)ay not exceed 5 Nephelometric turbidity units (NTU) above natural conditions when the natural turbidity is 50 NTU or less; and more than 10% increase in turbidity when the natural condition is more that 50 NTU, not to exceed a maximum increase of 25 NTU."

The effluent limitation requirements are summarized in Table 2:

Table 2
EFFLUENT LIMITATIONS

Parameter		**Maximum**	**Units**
Total Flow		---	Gallons per day (GPD)
Settleable Solids (SS)		0.2	ml/L
Turbidity	Freshwater	May not exceed 5 NTUs above natural conditions when the turbidity is 50 NTUs or less, and may not have more than 10% increase in turbidity when the natural turbidity is more than 50 NTU, not to exceed a maximum increase of 25 NTU	Nephelometric Turbidity Units (NTU)
	Marine	25	NTU

3. *Best Management Practices Plan*

A BMP Plan is required to comply with Permit Part II.G. The Plan shall address the methods used when dewatering construction areas to meet the effluent limitations in Permit Part II.B.1. and to prevent erosion if discharging to the tundra.

C. Hydrostatic Test Water Discharges

1. *Technology-Based Limitations*

There are no EPA effluent guidelines for discharges from hydrostatic testing. Therefore, the limitations in this GP are based on Best Professional Judgment (BPJ) which has been established for this type of discharge in the permit for Alyeska Pipeline Service, AK-005056-3. For this discharge, EPA is required to establish limitations that can be achieved through the use of Best Conventional Pollutant Control Technology (BCT).

Sediment. The constituents of the discharge generated by hydrostatic testing are primarily small quantities of inorganic residual materials left in the pipe prior to testing, such as dust and welding slag. It has been

determined that appropriate technology for these discharges are physical treatment methods, such as filtration, overland treatment, and/or settling ponds that can control settleable solids and turbidity. This technology is therefore established as BCT and BAT for hydrostatic testing discharges. The effluent limit for sediment is 0.2 ml/L.

2. *Water Quality-Based Limitations*

Sediment. There is a reasonable potential for violations to occur should pumping of the gravel pit be conducted improperly. A sediment limitation based on the AWQS would call for "no measurable increase in concentrations of settleable solids above natural conditions, as measured by the volumetric Imhoff cone."

Turbidity. Due to the nature of the discharge, a turbidity limitation is being proposed in the general permit for this category of discharge. According to the AWQS, the most protective turbidity criteria apply to fresh water sources classified for use as drinking water and contact recreation uses. These criteria [18 AAC 70.020(b)] state that turbidity "(m)ay not exceed 5 nephelometric turbidity units (NTU) above natural conditions when the turbidity the natural turbidity is 50 NTU or less; and more than a 10% increase in turbidity when the natural conditions is more than 50 NTU, not to exceed a maximum increase of 25 NTU. The most protective marine criteria is for aquaculture, contact and secondary contact recreation, and states, "(m)ay not exceed 25 nephelometric turbidity units (NTU)."

pH. For fresh waters, the most protective limitations on pH are for aquaculture and contact recreation. This level is 6.5 to 8.5 standard units. For marine waters, the most protective limitations are for aquaculture and the growth and propagation of fish, shellfish, other aquatic life, and wildlife. This level is 6.5 to 8.5 standard units.

Oil and Grease. Applicable state standards for oil and grease are limited to "shall not cause a film, sheen, or discoloration on the surface or floor of the water body or adjoining shorelines." EPA has determined that the state criteria can be met by a requirement of no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of receiving water.

Petroleum Hydrocarbons. AWQS contain numeric criteria protective of aquatic life for total aromatic and total aqueous hydrocarbons, 10 µg/L and 15 µg/L, respectively. This draft permit adopts the numeric criteria as an effluent limitation for discharges from testing of existing pipelines.

3. *Best Management Practices Plan*

A BMP Plan is required to comply with Permit Part II.G. The Plan shall address the methods used when discharging hydrostatic test water to meet the effluent limitations in Permit Part II.C.1. and to prevent erosion if

discharging to the tundra.

D. Storm Water Discharges from Industrial Facilities

According to CWA § 402(l)(2), EPA shall not require discharge permit for storm water runoff from oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, by-product or waste products located on the site of such operations.

This outfall is designated for those discharges that do not meet the above requirements and therefore require permit coverage.

1. *Technology-Based Limitations*

   EPA has developed Effluent Limitation Guidelines for the Oil and Gas Extraction Point Source Category, Subpart D—Coastal Category [40 CFR Part 435] that contain provisions that apply to storm water associated with industrial activity. The limitations applicable to oil and gas extraction activities are described below.

   BPT, BAT, BCT, and NSPS requirements [40 CFR §§ 435.12, .13, .14, and .15] for discharge of deck drainage (which includes rainfall runoff) require no discharge of free oil, as determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

   In evaluating options for controlling pollutants, EPA noted that it does not believe it is necessary to establish specific numeric effluent limitations, or a specific design or performance standard for storm water discharges associated with industrial activity from oil and gas facilities to meet the BAT/BCT standards.

2. *Water Quality-Based Limitations*

   Based on results of EPA's review of data in developing the Multi-Sector General Permit (MSGP) for oil and gas, water transportation, and air transportation industry sectors, no numeric effluent limitations are proposed.

3. *Storm Water Pollution Prevention Plans (SWPPP)*

   Standard application requirements for storm water discharges associated with industrial activity, as specified at 40 CFR § 122.26(c), are proposed to be included in the GP. In particular, applications must contain a narrative description of materials management practices and existing structural and non-structural control measures to reduce pollutants in storm water runoff. This GP proposes that these descriptions be included in the applicant's BMP Plan.

This GP proposes that the narrative of the SWPPP include descriptions of the following items:

a) Measures to cleanup reportable quantity releases (Contaminated storm water is storm water associated with a discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6 or any storm water that contributes to a violation of a water quality standard [40 CFR 122.26(c)(1)(iii)]);
b) Vehicle and equipment storage, cleaning, and maintenance areas;
c) Snow handling procedures and erosion controls; and
d) Any provisions necessary to meet the BMP requirements of Permit Part II.G.

The SWPPP shall be consistent with the general guidance contained in the publication entitled *Developing Your Stormwater Pollution Prevention Plan - A Guide for Industrial Operators. February 2009, EPA 833-B-09*-002, or any subsequent revision to the guidance document. The 2008 MultiSector General Permit (MSGP) reflects EPA's current interpretation of the storm water regulations (40 CFR 122.26) so the provisions of the MSGP should be used as a guide in updating the SWPPP required by this GP.

Facilities that have already completed SWPPPs may incorporate those plans by reference. SWPPPs will become part of the overall BMP Plan under this Permit and, as such, are subject to the same requirements for revision and review.

4. *Monitoring Requirements*

Requirements for reporting results of storm water monitoring are specified at 40 CFR § 122.44(i)(4). The GP includes the following provisions:

a) Bi-annual inspection of the facility site. One inspection should be conducted prior to breakup to assess whether there are any areas which may contribute to storm water discharges associated with an industrial activity and could be addressed with BMPs to minimize contact with the industrial activity. The second inspection should be conducted after the breakup period is over to assess whether there are any areas which contributed to storm water discharge associated with an industrial activity that were unanticipated and unaddressed by the SWPPP. The SWPPP should be modified to include the necessary practices to minimize contact with industrial activities in the future.

   A new requirement of the general permit is reporting the completion of the bi-annual inspections

b) Maintenance of inspections reports and compliance certification for a period of 3 years.
c) Certification signed in accordance with established signatory authority (40 CFR § 122.22); and for inactive sites where annual inspections are

impracticable, or otherwise unwarranted, a certification once every 3 years that the facility is in compliance with the Permit or alternative requirements.

5. *Requirements included from § 401 Certification (Appendix D)*

a) Applicants for new projects must submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) for the project, developed by a qualified person, to ADEC for review at the time of submittal of the NOI. The SWPPP for a new project shall be accompanied by the state-required plan review fee (see 18 AAC 72.955 Table D). The SWPPP shall be developed in accordance with the following EPA guidance, *Developing Your Stormwater Pollution Prevention Plan- A Guide for Industrial Operators. February 2009, EPA 833-B-09*-002.

b) Existing projects with a SWPPP must review their SWPPP for conformance with the EPA guidance, *Developing Your Stormwater Pollution Prevention Plan- A Guide for Industrial Operators. February 2009, EPA 833-B-09*-002. If modification of the existing SWPPP is necessary to comply with guidance, the modified SWPPP will be submitted to ADEC for review with the NOI.

E. Treated Water Effluent from Mobile Spill Response Units

Spill response units are used for small spills of fuel for field exploration activities. The units are composed of a container which provides gravity separation of aqueous and non-aqueous petroleum liquids.

1. *Technology-Based Limitations*

There are no EPA effluent guidelines for discharges from this type of petroleum/water separator. Therefore, the limitations in this GP are based on BPJ evaluating the unit's performance.

<u>Oil and Grease</u>. The constituents of the discharge generated by water scrubbing units are primarily small quantities of petroleum hydrocarbons left in the water after treatment. It has been determined that appropriate technology for these discharges is physical treatment methods, such as adsorption and/or absorption. This technology is, therefore, established as BAT for response unit discharges. The effluent limit for oil and grease is no visible sheen.

2. *Water Quality-Based Limitations*

<u>Oil and Grease</u>. There is a reasonable potential for violations to occur should the discharge be conducted improperly. Applicable state standards for oil and grease are limited to "shall not cause a film, sheen, or discoloration on the surfaces or floor of the water body or adjoining shorelines." EPA has determined that the state criteria can be met by a requirement of no discharge of floating solids, visible foam, or oily wastes which produce a sheen on the surface of the receiving water.

3. *Best Management Practices Plan*

A BMP Plan is required to comply with Permit Part II.G. The Plan shall address the methods used when discharging treated mobile spill water to meet the effluent limitations in Permit Part II.E.1. and address prevention of erosion and thermokarsting when discharging to the tundra.

4. *Annual Report*

The annual report shall include:

a. Days of discharge over the period of discharge (e.g. 4 days from November 1 through January 31)

b. Any non-compliance events (e.g. sheen observed on November 13)

c. Measures took to return to compliance with the general permit requirements (e.g. stopped discharging, changed sorbent material, etc.)

5. *Requirements included from § 401 Certification (Appendix D)*

Spills of reportable quantities must be reported to ADEC and remediated per 18 AAC 75.300. Go to http://www.dec.state.ak.us/spar/spillreport.htm for contact information and reporting requirements.

F. Secondary Containment

Secondary containment is an area around stored fuel required to prevent spills from the storage unit from reaching the environment. These areas sometimes accumulate rain and snow melt that, without discharge, could hinder the effectiveness of their preventative nature.

1. *Technology-Based Limitations*

There are no EPA effluent guidelines for discharges from this type of facility when it is not associated with a larger facility such as petroleum bulk stations and terminals. Therefore, the limitations in this GP are based on Best Professional Judgment (BPJ). For this type of discharge, EPA is required to establish limitations that can be achieved through the use of BAT.

In establishing technology-based BPJ effluent limits for the draft GP, EPA reviewed the Oil and Gas Extraction Point Source Category (40 CFR § 435), and the Petroleum Refining Point Source Category (40 CFR § 419) for potentially applicable ELGs. Specifically, 40 CFR § 419.12(c) contains effluent limits for ballast water discharges from petroleum refineries. EPA has concluded that ELGs for treated ballast water are most applicable to bulk oil storage facilities, and is establishing these limitations as technology-based BPJ limits for the draft GP. Table 3 presents the pollutant parameters limited under 40 CFR § 419.12(c), along with the daily maximum and monthly average effluent limitations.

Table 3 Technology-Based Effluent Limitations Adopted as BPJ		
Parameter	Daily Maximum (mg/L)	Monthly Average (mg/L)
BOD	48	26
TSS	33	21
Oil and Grease	15	8
COD	470	240
pH	6.0 – 9.0 s.u. at all times	

Technology-based effluent limitations, including limits based upon BPJ, are the primary mechanism of control and enforcement of water pollution under the CWA. Accordingly, every individual member of a discharge class or category is required to operate its water pollution control technologies according to industry-wide standards. This means that technology-based effluent limits based upon a BPJ determination are applied at end-of-pipe, and mixing zones are not allowed [40 CFR § 125.3(a)].

2. *Water Quality-Based Limitations*

pH: The most stringent marine water quality criteria for pH are for the protection of aquaculture water supply, and for the growth and propagation of fish and wildlife. In this case, pH must be no less than 6.5 and no greater than 8.5 standard units, and may not vary more than 0.5 standard units outside of the naturally occurring range. These limits are more stringent than the technology – based effluent limit (6.0 – 9.0) identified in 40 CFR § 419.12(c), and have been adopted in the draft permit accordingly.

Petroleum Hydrocarbons: AWQS contain a narrative criteria for petroleum hydrocarbons stating that discharges “may not cause a film, sheen, or discoloration on the surface or the floor of the waterbody or adjoining shoreline”. This applies for the contact recreation designated use for marine waters [18 AAC 70.020(b)(17)(B)(i)]. However, Alaska also has numeric criteria protective of aquatic life for total aromatic and total aqueous hydrocarbons, 10 µg/L and 15 µg/L, respectively. This draft permit adopts the numeric criteria as an effluent limitation, and also includes monitoring requirements for these parameters.

Residues: Similar to petroleum hydrocarbons, the AWQS [18 AAC 70.020(b)(20)] require that discharges “may not, alone or in combination with other substances, cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines”. Therefore, EPA has included a narrative limitation prohibiting the discharge of such residues in the draft permit. Visual monitoring for residues is required on a daily basis during discharge.

3. *Best Management Practices Plan*

A BMP Plan is required to comply with Permit Part II.G. The Plan shall address the methods used to determine whether treatment is necessary based on history and sheen and how a discharging secondary containment water will meet the effluent limitations in Permit Part II.F.1. The BMP Plan shall also address prevention of erosion and thermokarsting when discharging to the tundra.

4. Requirements included from CWA § 401 Certification (Appendix D)

a) ADEC requires an effluent maximum limitation for total aqueous hydrocarbons (TAqH) in the water column of 15 ug/l. Total aromatic hydrocarbons in the water column may not exceed 10 ug/l.

b) ADEC requires effluent monitoring for total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH). Sample frequency and locations shall be as proscribed in Table 9 of the NPDES permit.

VII. OTHER PERMIT CONDITIONS

A. **Endangered Species Act (ESA)**

The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. EPA sent letters to USFWS and to NMFS on October 22, 2008, requesting a species list for the coverage area of the GP. EPA received a letter from NMFS on October 30, 2008. There are two listed species within the area of coverage: the Bowhead Whale and the Steller Sea Lion. There has been no critical habitat designated for these species. Previously, Steller's eider and the Spectacled eider were identified by USFWS and the polar bear has been recently listed. There is critical habitat for the Spectacled eider off the southwest shore of the NSB. Because the discharges from the permitted facilities have to meet water quality standards, a discharge from a facility operating in compliance with its permit limitations should not adversely affect listed species. It is also expected that facilities operating within the NSB have a Polar Bear plan in place to deal with human/bear encounters. If necessary, EPA will enter into consultation with USFWS and NMFS to ensure that the GP will not result in unacceptable impacts to any of the species identified on these lists.

B. **Essential Fish Habitat (EFH)**

The 1996 amendments to the Magnuson-Stevens Fishery Management and Conservation Act set forth a number of new mandates for NMFS, regional fishery management councils and other federal agencies to identify and protect important marine and anadromous fish habitat. The action agency needs to make a determination whether Federal actions may adversely impact EFH.

EPA has determined that the issuance of this GP is not likely to affect EFH species and habitat in the vicinity of the discharges. This is because most of the discharges occur to tundra wetlands. The discharges that do occur to open waters

are required to meet water quality standards and have to follow BMPs to prevent habitat degradation.

EPA has submitted this fact sheet and the draft permit to NMFS for review during the public notice period. Additional information will be provided upon request. Any recommendations will be considered for incorporation in the GP prior to the final reissuance.

C. State Certification

CWA § 401 requires EPA to seek certification from the State that a permit is adequate to meet State water quality standards before issuing a final permit. The regulations allow for the State to stipulate more stringent conditions in the permit, if the certification cites the CWA or State law references upon which that condition is based. In addition, the regulations require a certification to include statements of the extent to which each condition of the permit can be made less stringent without violating the requirements of State law.

The draft permit contains the requirements included in the draft CWA § 401 Certification and has been sent to the State to begin the final certification process. If the state authorizes different or additional conditions as part of the certification, the permit may be changed to reflect these conditions. Appendix D contains a copy of the draft CWA § 401 Certification.

D. Permit Expiration

This permit will expire five years from the effective date.

APPENDIX A -- REFERENCES

1. http://www.dec.state.ak.us/water/wwdp/wetlands/index.htm. Alaska Department of Environmental Conservation, Division of Water. Wetlands Program. Accessed December 28, 2010.

2. National Pollutant Discharge Elimination System (NPDES) permit AK-005056-3 with corresponding fact sheet. Effective July 30, 1993. Expired July 30, 1998.

3. Prentki, R. T., M. C. Miller, R. J. Barsdate, V. Alexander, J. Kelley, and P. Coyne. 1980. Chapter 4 Chemistry. *In: Limnology of Tundra Ponds, Barrow Alaska*. J. E. Hobbie ed. US/IBP Synthesis Series 13 Stroudsburg, PA: Dowden, Hutchinson, and Ross, pp. 76-178.

4. Scott, K. H. 1978. Effects of permafrost on stream channel behavior in Arctic Alaska. U.S. Geological Survey. Professional Paper 1068. 19 pp.

5. United States Department of Interior, Bureau of Land Management and Minerals Management Service (DOI). 1998. Northeast National Petroleum Reserve-Alaska Final Integrated Activity Plan and Environmental Impact Statement (EIS). August 1998. 2 Volumes. Available at http://www.blm.gov/ak/st/en/prog/planning/npra_general/ne_npra/ne_npr-a_1998_iap.html

6. United State Environmental Protection Agency. (USEPA). February 2009. Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators. EPA 833-B-09-002.

7. USEPA. 1993. Guidance Manual for Developing Best Management Practices (BMP). October 1993.

8. USEPA. 2006. Final Ocean Discharge Criteria Evaluation of the Arctic NPDES General Permit for Oil and Gas Exploration. Prepared with the assistance of Tetra Tech, Inc. January 2006.

9. USEPA. 1996. Fact Sheet for Proposed Issuance of General NPDES Permit No. AKG-31-0000 for Facilities Related to Oil and Gas Extraction. USEPA, Region 10. August 1, 1996. 18 p.

10. USEPA. 1997. Fact Sheet for Proposed Modification of General NPDES Permit No. AKG-31-0000 for Facilities Related to Oil and Gas Extraction. USEPA, Region 10. November 10, 1997. 12 p.

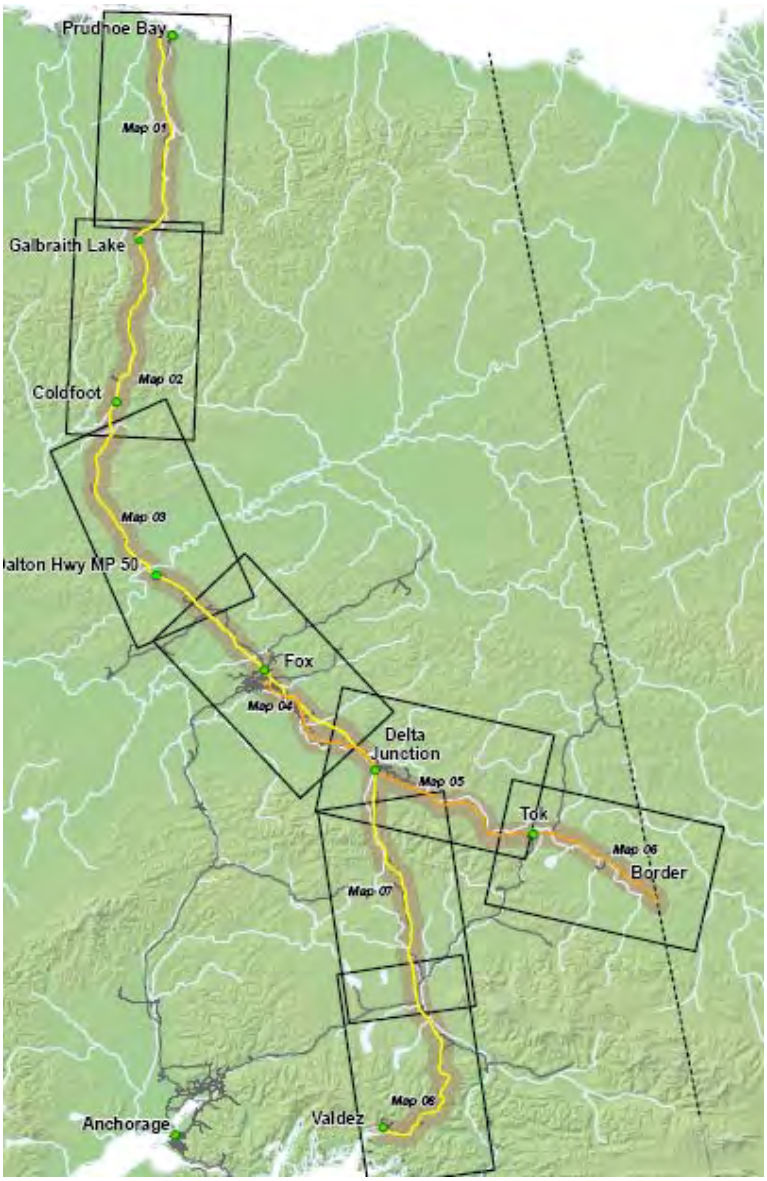
11. USEPA. 2004. Fact Sheet for Proposed Reissuance of General NPDES Permit No. AKG-31-0000 for Facilities Related to Oil and Gas Extraction. USEPA, Region 10. May 21, 2003. 37 p. (permit renumbered as AKG-33-0000 when final permit was issued).

12. 40 CFR 419 – Petroleum Refining Point Source Category

13. 40 CFR 435 – Oil and Gas Extraction Point Source Category

14. 40 CFR 112 – Oil Pollution Prevention

APPENDIX B -- AREA OF COVERAGE



Larger scale maps are available on our website with the draft permit and fact sheet.

APPENDIX C -- TECHNICAL INFORMATION

CWA §§ 301(b), 304, 308, 401, and 402 provide the basis for the effluent limitations and other conditions contained in this draft GP. EPA evaluates discharges with respect to these sections of the CWA and the relevant NPDES regulations in determining which conditions to include in the Permit.

In general, EPA first determines which technology-based limits apply to the discharges in accordance with the national effluent guidelines and standards. EPA then determines which water quality-based limits apply to the discharges. The Permit limits will reflect whichever limits (technology-based or water quality based) are more stringent.

1. Technology-Based Effluent Limitations

The CWA requires particular categories of industrial discharges to meet effluent limitations established by EPA. The CWA initially focused on the control of "traditional" pollutants (conventional pollutants and some metals) through the use of Best Practicable Control Technology Currently Available (BPT). Permits issued after March 31, 1989, must include any conditions necessary to ensure that the BPT level of control is achieved. BPT limitations are based on effluent guidelines developed by EPA for specific industries. Where EPA has not yet developed guidelines for a particular industry, permit conditions must be established using Best Professional Judgment (BPJ) procedures (40 CFR § 122.43, 122.44, and 125.3).

CWA § 301(b)(2) also requires further technology-based controls on effluents. After March 31, 1989, all permits are required by CWA § 301(b)(2) and 301(b)(3) to contain effluent limitations for all categories and classes of point sources which: (1) control toxic pollutants and nonconventional pollutants through the use of Best Available Technology Economically Achievable (BAT), and (2) represent Best Conventional Pollutant Control Technology (BCT). BCT effluent limitations apply to conventional pollutants (pH, BOD, oil and grease, suspended solids, and fecal coliform). BAT applies to toxic and nonconventional pollutants. Toxic pollutants are those listed in 40 CFR § 401.15. Nonconventional pollutants include all pollutants not included in the toxic and conventional pollutant categories. In no case may BCT or BAT be less stringent than BPT. Like BPT requirements, BAT and BCT permit conditions must be established using BPJ procedures in the absence of effluent limitation guidelines for a particular industry.

a) Gravel Pit Dewatering

Part 436—Mineral Mining and Processing Point Source Category, Subpart C—Construction Sand and Gravel Subcategory are used to limit gravel pit dewatering discharges [40 CFR § 436.32(a)(2)]. Regulations at 40 CFR § 436.32 include limitations applying to the dewatering of gravel pits. Subpart C establishes effluent limitation guidelines based on BPT listed in 40 CFR § 436.32 (a)(2), which states that "mine dewatering discharges shall not exceed the following limitations: pH range of 6 to 9, maximum for one day; pH range of 6 to 9, average of daily values for 30 consecutive days."

EPA did not include a technology-based limitation for sediment in the national effluent guidelines for this category of discharge, but the treatment technology for

these discharges would be the same as the gold placer mining category, one of simple settling. The only parameter specifically limited in these guidelines (40 CFR § 440, Subpart M) is settleable solids. The limit is 0.2 ml/L. Since the technology is the same, EPA is proposing to use this guideline as the technology-based limitation for sediment.

b) Construction Site Dewatering

EPA has not developed effluent guidelines for this category of discharges, but the treatment technology for these discharges would be the same as the gold placer mining category, one of simple settling. The only parameter specifically limited in these guidelines (40 CFR § 440, Subpart M) is settleable solids. The limit is 0.2 ml/L. Since the technology is the same, EPA is proposing to use this guideline as the technology-based limitation for sediment.

c) Hydrostatic Test Water

There are no EPA effluent guidelines for discharges from hydrostatic testing. Therefore, the limitations in this GP are based on Best Professional Judgment (BPJ) which has been established for this type of discharge in the permit for Alyeska Pipeline Service, AK-005056-3. For this discharge, EPA is required to establish limitations that can be achieved through the use of Best Conventional Pollutant Control Technology (BCT).

The constituents of the discharge generated by hydrostatic testing are primarily small quantities of inorganic residual materials left in the pipe prior to testing, such as dust and welding slag. It has been determined that the appropriate technology for these discharges is physical treatment methods, such as filtration, overland treatment, and/or settling ponds that can control settleable solids and turbidity. This technology is therefore established as BCT and BAT for hydrostatic testing discharges. The effluent limit for sediment is 0.2 ml/L.

d) Storm Water

EPA has stated that does not believe it is necessary to establish specific numeric effluent limitations or a specific design or performance standards for storm water discharges associated with industrial activity from oil and gas [60 FR 50915]. However, a discharge of free oil, as determined by the presence of a film or sheen upon the surface of the receiving water, is not permitted.

Regulations at 40 CFR §§ 435.42 through 435.45 include limitations for the deck drainage waste source in the Coastal Subcategory. Deck drainage in this subpart [coastal] means “any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities subject to this subpart” [40 CFR § 435.41(e)]. Under this definition, storm water would be included in the definition of deck drainage. The effluent limitations for deck drainage with the application of BPT, BAT, and BCT are all the same: no discharge of free oil, as determined by the presence of a film or sheen upon or discoloration of the surface of the receiving water.

e) Treated Effluent from Mobile Spill Response Units

There are no effluent limitations guidelines for treated spill response effluent. The waste source included in the regulations (40 CFR 435 Subpart C) that appears to be most similar is deck drainage (described above), since the definition of deck drainage includes runoff from drip pans. For this, the effluent limitation is the same: no discharge of free oil, as determined by the presence of a film or sheen upon or discoloration of the surface of the receiving water.

f) Secondary Containment

There are no EPA effluent guidelines for discharges from this type of petroleum/water separator. In establishing technology-based BPJ effluent limits for the draft GP, EPA reviewed the Oil and Gas Extraction Point Source Category (40 CFR § 435), and the Petroleum Refining Point Source Category (40 CFR § 419) for potentially applicable ELGs. Specifically, 40 CFR § 419.12(c) contains effluent limits for ballast water discharges from petroleum refineries. EPA has concluded that ELGs for treated ballast water are most applicable to bulk oil storage facilities, and is establishing these limitations as technology-based BPJ limits for discharges of contaminated water under the draft GP.

2. Water Quality-Based Limitations

CWA § 301(b)(1) requires the establishment of limitations in permits necessary to meet water quality standards by July 1, 1977. All discharges to state waters must comply with state and local coastal management plans as well as with state water quality standards, including the state's antidegradation policy. Discharges to state waters must also comply with limitations imposed by the state as part of its coastal management program consistency determinations and of its certification of NPDES permits under CWA § 401.

The NPDES regulations at 40 CFR § 122.44(d)(1) require that permits include limits on all pollutants or parameters which “are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Alaska State Water Quality Standards (18 AAC Part 70) classify fresh waters as Classes (I)(A)(i-iv), (I)(B)(i-ii), and (I)(C) for use in drinking, culinary and food processing, agriculture, aquaculture, industrial water supply, water recreation, and the growth and propagation offish, shellfish, aquatic life, and wildlife. With few exceptions, and none on the North Slope of the Brooks Range, rivers and lakes are designated for all beneficial uses and the most stringent of the water quality standards for these uses must be met.

Alaska State Water Quality Standards (18 AAC Part 70) classify marine and estuarine receiving waters as Classes (II)(A)(i-iii), (I)(B)(i-ii), (II)(C) and (II)(D) for use in aquaculture, seafood processing, water recreation, the growth and propagation of fish, shellfish, aquatic life and wildlife, and the harvesting for consumption of raw mollusks and other raw aquatic life. Marine and estuarine waters are designated for all beneficial uses and the most stringent of the water quality standards for these uses must be met.

3. Monitoring

Under CWA § 308 and 40 CFR § 122.44(i), EPA must also include monitoring requirements in the permit to determine compliance with effluent limitations. EPA has included several monitoring requirements in this GP.

The basis for monitoring is found in 40 CFR § 122.44(i). Flow monitoring is included based on 40 CFR § 122.44(i)(1)(ii). The location, frequency, and type of sampling are required based on 40 CFR § 122.48 as is a requirement for reporting which is specified in the Permit as an annual submission of the Discharge Monitoring Report (DMR). 40 CFR § 122.44(i)(2) allows flexibility in determining the frequency of reporting.

4. Best Management Practices (BMP) Plan

It is national policy that, whenever feasible, pollution should be prevented or reduced at the source, that pollution which cannot be prevented should be recycled in an environmentally safe manner, and that disposal or release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner (Pollution Prevention Act of 1990, 42 U.S.C. 13101 et seq.).

Pursuant to CWA § 402(a)(1) , development and implementation of BMP Plans may be included as a condition in NPDES permits. CWA § 402(a)(1) authorizes EPA to include miscellaneous requirements in permits on a case-by-case basis, which are deemed necessary to carry out the provisions of the Act. BMPs, in addition to numerical effluent limitations, are required to control or abate the discharge of pollutants in accordance with 40 CFR § 122.44(k). The BMP Plan requirement has also been incorporated into this GP in accordance with Region 10's BMP Plan Policy (EPA Region 10, 1993).

The draft GP requires the development and implementation of a BMP Plan which prevents or minimizes the generation of pollutants, their release, and/or potential release from the facility to the waters of the United States. The requirements of the general plan are outlined in the draft permit and the permit also stipulates that the plan address the integrity of the ice structures as well as prevention of physical degradation to tundra wetlands. The quality of the water discharged from a mine site and used for ice road or pad construction must be maintained throughout the life of the road or pad to ensure that the discharge of the melting pad or road to tundra wetlands or to surface waters will meet water quality standards. If gravel pit water is to be used for road watering the Plan should also address this activity.

In addition to developing and implementing the BMP Plan, the operator is also required to certify that the BMP Plan is complete, on-site, and available upon request. Certification is required no later than 7 days prior to the commencement of discharge. The BMP Plan must be amended whenever there is a change in the facility or in the operation of the facility which materially increases the potential for an increase discharge of pollutants.

APPENDIX D – DRAFT CWA §401 CERTIFICATION

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CERTIFICATE OF REASONABLE ASSURANCE

A Certificate of Reasonable Assurance, as required by Section 401 of the Clean Water Act, has been requested by the United States Environmental Protection Agency (EPA) for National Pollutant Discharge Elimination System (NPDES) general permit AKG-33-0000, for specific wastewater and pollutant discharges from facilities related to oil and gas extraction to waters of the State of Alaska. The area of coverage is the North Slope Borough and the area shown in the maps attached to this certification. This area encompasses a 14 mile wide corridor along the Trans-Alaska Pipeline, as well as the Haines-to-Fairbanks pipeline for the following discharges:

Discharge Name	Discharge Number
Gravel Pit Dewatering	003
Construction Dewatering	004
Hydrostatic Test Water	005
Storm Water	006
Mobile Spill Response	007
Secondary Containment	008

Public Notice of the application for this certification has been made in accordance with 18 Alaska Administrative Code (AAC) 15.140.

Water Quality Certification is required for the activity, because the activity will be authorized by an EPA permit identified as NPDES No. AKG-33-0000 and discharges into State waters will result from the activity authorized under the permit.

The Department of Environmental Conservation (DEC or the department) reviewed the NPDES permit and certifies that there is reasonable assurance that the activities and the resulting discharges are in compliance with the requirements of Section 401 of the Clean Water Act, which includes the Alaska Water Quality Standards (WQS), 18 AAC 70, as amended through June 26, 2003, provided that the terms and conditions of this certification are adhered to.

Through this certification, in accordance with 18 AAC 15.120, the final NPDES permit will constitute the permit required under AS 46.03.100. DEC is specifying the following permit stipulations under authority of AS 46.03.110(d):

1. An applicant is required to obtain written authorization from DEC prior to discharge.

   Rationale: In accordance with AS 46.03.110 (d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The DEC written authorization requirement will

provide the department, through the review and approval of the Notice of Intent (NOI), oversight of the proposed activity and allow review of treatment processes and best management practice plans for those facilities that apply for coverage under the general permit. Review of the NOI will provide assurance to the public that any discharges are being treated or controlled to comply with the State of Alaska Water Quality Standards 18 AAC 70 and the Alaska Wastewater Disposal Regulations 18 AAC 72.

Hydrostatic Test Water, Existing Pipelines, Discharge 005

2. DEC may attach other site specific stipulations and requirements as necessary to individual State authorizations to operate under this General Permit. Total aqueous hydrocarbons (TAqH) in the water column may not exceed 15 µg/L. Total aromatic hydrocarbons (TAH) in the water column may not exceed 10 µg/L.

Rationale: In accordance with Water Quality Standards 18 AAC 70.020(b)(5) & (17), Total aqueous hydrocarbons (TAqH) in the water column may not exceed 15 µg/L (see note 7). Total aromatic hydrocarbons (TAH) in the water column may not exceed 10 µg/L.

(Note 7) Samples to determine concentrations of total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH) must be collected in marine and fresh water below the surface and away from any observable sheen; concentrations of TAqH must be determined and summed using a combination of: (A) EPA Method 602 (plus xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH; and (B) EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed EPA Method 610.

3. DEC requires effluent monitoring for TAqH and TAH. Sample frequency and locations shall be as prescribed in Table 8 of the NPDES permit AKG-33-0000.

Rationale: In accordance with AS 46.03.110(d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The terms and conditions shall be directed to avoiding pollution and to otherwise carry out the policies of this chapter. Also, in accordance with 18 AAC 70.910 the department may issue a compliance schedule as a condition of a permit, certification, or approval.

Stormwater Associated with industrial activities, Discharge 006

4. Applicants for new projects must submit a copy of the Storm Water Pollution Prevention Plan (SWPPP) for the project, developed by a qualified person, to DEC for review at the time of submittal of the Notice of Intent (NOI). The SWPPP for a new facility shall be accompanied by the state-required plan review fee (see 18 AAC 72.955 Table D). The SWPP shall be developed in accordance with the following EPA guidance, *Developing Your*

Stormwater Pollution Prevention Plan - A Guide for Industrial Operators. February 2009, EPA 833-B-09-002.

> *Rationale: In accordance with AS 46.03.110(d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The terms and conditions shall be directed to avoiding pollution and to otherwise carry out the policies of this chapter. In accordance with 18 AAC 72.600 DEC has the authority to require plan approval for nondomestic wastewater treatment works. Nondomestic wastewater includes stormwater runoff (18 AAC 72.990(41)(E)).*

5. Existing projects with a SWPPP must review their SWPP for conformance with the EPA guidance, *Developing Your Stormwater Pollution Prevention Plan – A guide for Industrial Operators. February 2009, EPA 833-B-09-002.* If modification of the existing SWPPP is necessary to comply with the guidance, the modified SWPPP will be submitted to DEC with the NOI for review.

> *Rationale: In accordance with AS 46.03.110(d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The terms and conditions shall be directed to avoiding pollution and to otherwise carry out the policies of this chapter. In accordance with 18 AAC 72.600, DEC has the authority to require plan approval for nondomestic wastewater treatment works. Nondomestic wastewater includes stormwater runoff (18 AAC 72.990(41)(E)).*

Mobile Spill Response Units, Discharge 007

6. Spills of reportable quantities must be reported to DEC and remediated per 18 AAC 75.300. Go to http://www.dec.state.ak.us/spar/spillreport.htm for contact information and reporting requirements.

> *Rationale: In accordance with AS 46.03.110(d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. The terms and conditions shall be directed to avoiding pollution and to otherwise carry out the policies of this chapter. Permitting the discharge of treated snow or water mixed with hydrocarbon does not excuse the discharger from the obligation of reporting the spill to DEC as set out in 18 AAC 75.300.*

Secondary Containment, Discharge 008

7. DEC may attach other site specific stipulations and requirements as necessary to individual State authorizations to operate under this General Permit. TAqH in the water column may not exceed 15 µg/L. TAH in the water column may not exceed 10 µg/L.

> *Rationale: In accordance with Water Quality Standards 18 AAC 70.020(b)(5) & (17), Total aqueous hydrocarbons (TAqH) in the water column may not exceed 15 µg/L (see note 7). Total aromatic hydrocarbons (TAH) in the water column may not exceed 10 µg/L.*

(Note 7) Samples to determine concentrations of total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH) must be collected in marine and fresh water below the surface and away from any observable sheen; concentrations of TAqH must be determined and summed using a combination of: (A) EPA Method 602 (plus xylenes) or EPA Method 624 to quantify monoaromatic hydrocarbons and to measure TAH; and (B) EPA Method 610 or EPA Method 625 to quantify polynuclear aromatic hydrocarbons listed EPA Method 610.

8. DEC requires effluent monitoring for TAqH and TAH. Sample frequency and locations shall be prescribed in Part II.F.1 of the NPDES permit AK-33-0000 (See Table 9: Effluent Limits and Monitoring Requirements).

Rationale: In accordance with AS 46.03.110(d), the department may specify in a permit the terms and conditions under which waste material may be disposed of. This requirement will be used to provide assurance to the department of compliance with the State of Alaska Water Quality for TAqH and TAH, 18 AAC 70.020(b)(5) & (17).

Antidegradation

The department's approach to implementing the antidegradation policy found in 18 AAC 70.015 is based on the requirements in 18 AAC 70 and the department's July 14, 2010, Policy and Procedure guidance *Interim Antidegradation Implementation Methods*. Using these requirements and policies, the department determines whether a water body or portion of a water body is classified as Tier 1, Tier 2, or Tier 3. This determination is made on a pollutant-by-pollutant basis. DEC has determined that the general area for the above discharge is tundra and tundra wetlands and qualifies for Tier 2 status. This decision is based on the antidegradation guidance cited above, information submitted by the applicant, and DEC knowledge of the area of discharge.

The Antidegradation Policy of the Alaska WQS (18 AAC 70.015) states that existing water and the level of water quality necessary to protect existing uses must be maintained and protected. There are no exceptions to state-wide standards in the permit, therefore state water quality criteria must be met at the point of discharge. The department may allow reduction of water quality below that of natural conditions only after finding that five specific criteria are met. These criteria and the department's findings are as follows:

- *18 AAC 70.015(a)(2)(A) allowing lower water quality is necessary to accommodate important economic or social development in the area where the water is located.*

Treatment methods for these types of discharges include reinjection and additional treatment, as well as those required by the permit via best management practices (BMPs). Alternative methods of tertiary advanced treatment are discussed in the section below that addresses 18 AAC

70.015(a)(2)(D).

This activity occurs in the North Slope Borough and more specifically Barrow, Alaska and other smaller villages. Oil and oil related industry is the primary source of employment in the North Slope area (Alaska Department of Commerce, Community and Economic Development - Alaska Community Database at: http://www.commerce.state.ak.us/dca/commdb/CF_CIS.htm). Activities regulated in the permit are a necessary part of the infrastructure that supports the oil industry and are designed to provide maintenance support of oil related activities.

According to the State of Alaska, Division of Employment Security, the oil industry is the main source of revenue for and in the state, including the North Slope Borough. Oil and Gas producers account for approximately 22% of all job growth in Alaska from 2000 to 2007, while oil related services account for approximately 48% for the same time period. The oil industry is also the source of 80% of the state's general fund and is considered the mainstay of the state's economy providing jobs in the catering, security, construction, engineering, and support services in addition to directly related jobs in oil production, processing, and transport. It also accounts for the highest salaries paid in the state.

DEC finds that authorization of these discharges requires the lowering of water quality and that this lowering of water quality is necessary to accommodate important economic development, and that this requirement is met.

- *18 AAC 70.015(a)(2)(B) Except as allowed under this subsection, reducing water quality will not violate the applicable criteria of 18 AAC 70.020.*

The permit requires facilities of this nature to establish BMPs to minimize potential discharge of pollutants to waters of the U.S. The permit limits and conditions are established after comparing technology-based and water-quality based effluent limits and applying the more restrictive of these limits to the permit.

The permit requires visual monitoring of the waste discharge where appropriate, and has requirements to monitor and limit potential pollutants. The department has determined facilities operating under the terms and conditions of the permit and the department policies will be adequate to maintain water quality and protect existing uses.

DEC concludes that this criterion will be met at the point of discharge and final permit limits will not violate the applicable criteria of 18 AAC 70.020. The Department finds that this requirement is met.

- *18 AAC 70.015(a)(2)(C) the resulting water quality will be adequate to fully protect existing uses of the water.*

Waters covered under this general permit are protected for the following uses, per 18 AAC 70.020(a)(1)(A)-(C) and 18 AAC 70.020: Water supply for drinking, culinary, and food processing, aquaculture, and industrial; contact and secondary recreation; and the growth and propagation of fish, shellfish, other aquatic life and wildlife. DEC requires facilities of this nature to establish BMPs to minimize potential discharge of pollutants to waters of the U.S. The permit limits and conditions are established after comparing technology-based and water-quality based effluent limits and applying the more restrictive of these limits to the permit. The permit requires visual monitoring of the waste discharge where appropriate, and has requirements to monitor and limit potential pollutants. Based on department policy, the above information, and a review of the expected volumes of discharge, the types and amounts of regulated pollutants including their fate, transport, and available dilution, the DEC finds that existing uses will be fully protected.

The Department finds that this requirement is met.

- *18 AAC 70.015(a)(2)(D) the methods of pollution prevention, control, and treatment found by the department to be most effective and reasonable will be applied to all wastes and other substances to be discharged.*

Advanced alternative methods employing tertiary treatments, such as activated charcoal filtration, walnut shell filtration, dissolved air floatation, induced gas coalescence, as well as underground injection wells and disposal off site, were investigated as alternative means of waste disposal of discharges from the above outfalls. While some existing sites do employ off site removal and underground injection wells to some degree, the remote locations preclude the use of these methods of disposal. The broad employment of tertiary treatment methods was deemed too impractical or too expensive for the small volume discharges that will typically occur under this permit. The methods of prevention, control, and treatment DEC finds to be most effective and reasonable are the practices, requirements, and limits set out in the NPDES permit. The permit requires the permittee to follow prescribed BMPs via developing a BMP Plan and implementation schedule to achieve the following objectives:

- The number and quantity of pollutants and the potential toxicity of effluent generated, discharged, or potentially discharged at the facility shall be minimized by the permittee to the extent feasible by managing each pollutant source in the most appropriate manner.

- Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the Plan, the permittee shall ensure proper operation and maintenance of the treatment facility.

The department has determined that a discharge from a facility operating under the terms and conditions of the permit has no reasonable potential to exceed WQS.

DEC finds that the methods of pollution prevention, control, and treatment

included in the permit are the most effective and reasonable and that this requirement is met.

- *18 AAC 70.15(a)(2)(E) all wastes and other substances discharged will be treated and controlled to achieve (i) for new and existing point sources, the highest statutory and regulatory requirements; and (ii) for nonpoint sources, all cost-effective and reasonable best management practices.*

The highest statutory and regulatory requirements are defined in the 2003 version of the Alaska WQS at 18 AAC 70.990(30) as

(A) any federal technology-based effluent limitation identified in 40 C.F.R. 125.3 and 40 C.F.R. 122.29, as amended through August 18, 1997, adopted by reference;
(B) minimum treatment standards in 18 AAC 72.040; and
(C) any treatment requirement imposed under another state law that is more stringent than a requirement of this chapter.

Federal technology-based effluent limitation guidelines (ELGs) have been developed by EPA for particular categories of industrial dischargers and have been applied in this permit. In the absence of ELGs for a particular category of industrial discharger, Best Professional Judgment (BPJ) has been used to establish permit limitations through the use of best available technology designed to address similar operations in other types of facilities, as well as prescribed practices, limits, BMPs, and BPJ in the NPDES permit.

18 AAC 70.990(30)(B) (2003) appears to be in error, as 18 AAC 72.040 describes discharge to sewers and not minimum treatment. The correct reference appears to be 18 AAC 72.050, Minimum treatment. This section refers to domestic wastewater and not the wastewater types addressed in this permit, and therefore does not apply to this analysis.

Other regulations beyond 18 AAC 70 that apply to this permitting action include 18 AAC 15 and 18 AAC 72. Neither the regulations in 18 ACC 15 and 18 AAC 72 nor another state law that DEC is aware of impose more stringent treatment requirements than those found in 18 AAC 70.

DEC finds that the treatment of the discharges conforms to the highest statutory and regulatory requirements and that the requirement is met.

Date	Sharon Morgan Program Manager

APPENDIX E

Facilities covered by the 2004 General Permit

Company Name	Facility Name	Permit Number	Types of Discharge	Receiving Water
Alaska Clean Seas		33-0065	006	Coleen Lake
Alaska Interstate Construction, LLC	AIC Mobile Camp	33-0042	003	unnamed tundra wetlands
Anadarko Petroleum Corp	Mine Site F	33-0096	003	unnamed tundra wetlands
Anadarko Petroleum Corp	Duck Island Mine Site	33-0104	003	unnamed tundra wetlands
Anadarko Petroleum Corp	Mobile Spill Response	33-0105	007	unnamed tundra wetlands
BP Exploration (Alaska), Inc.	Duck Island Mine Site	33-0009	003	wetlands, marine, fresh
BP Exploration (Alaska), Inc.	Mine Site E	33-0028	003	wetlands, marine, fresh
BP Exploration (Alaska), Inc.	PUT 23 Gravel Mine	33-0032	003	Putuligayak River, any
BP Exploration (Alaska), Inc.	Greater Prudhoe Bay	33-0061	006	wetlands, marine, fresh
BP Exploration (Alaska), Inc.	Badami Development Unit	33-0062	006	waters in the vicinity
BP Exploration (Alaska), Inc.	Endicott	33-0063	006	marine
BP Exploration (Alaska), Inc.	Milne Point Unit	33-0064	006	waters in the vicinity
BP Exploration (Alaska), Inc.	North Star	33-0086	006	marine
BP Exploration (Alaska), Inc.	Greater Prudhoe Bay Power	33-0093	004	unnamed tundra wetlands
Caribou Construction	Orphan Sites Camp	33-0055	002	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	Kuparuk Mine Site F	33-0005	003	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	Kuparuk Mine Site C	33-0014	003	Ugnu River
ConocoPhillips Alaska, Inc.	Kuparuk Mine Site E	33-0058	003	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	Kuparuk River Unit	33-0067	007	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	ASRC Mine Site	33-0071	003	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	Drill Site 1J	33-0076	005	unnamed tundra wetlands
ConocoPhillips Alaska, Inc.	Colville River Unit	33-0082	004, 006, 007	unnamed tundra wetlands
Crowley Alaska (CATCO)	Sag River Camp	33-0017	002	unnamed tundra wetlands
Crowley Alaska (CATCO)	Canning River Camp	33-0060	002	unnamed tundra wetlands
Crowley Alaska (CATCO)	Kuparuk River Camp	33-0090	002	unnamed tundra wetlands
Cruz Construction, Inc.	Cruz #1	33-0080	002	unnamed tundra wetlands
Cruz Construction, Inc.	Galena Camp	33-0095	001	unnamed tundra wetlands
Delta Leasing	Atigun Camp	33-0107	002	unnamed tundra wetlands
Doyon Drilling, Inc.	DDI Rig 141 Mobile Camp	33-0007	002	unnamed tundra wetlands
Doyon Drilling, Inc.	DDI Rig 141 Mobile Camp	33-0073	002	unnamed tundra wetlands
Eni Petroleum	Rock Flour/Maggiore	33-0088	003	unnamed tundra wetlands
ExxonMobil Production Co.	Shaviovik Pit	33-0108	003	unnamed tundra wetlands
ExxonMobil Production Co.	C-1 Pit	33-0109	003	unnamed tundra wetlands
ExxonMobil Production Co.	Duck Island Mine Site	33-0110	003	unnamed tundra wetlands

Discharge Key
001 Domestic wastewater
002 Gray water
003 Gravel Pit Water
004 Construction Dewater
005 Hydrostatic Test Water
006 Storm water
007 Mobile Spill

APPENDIX E

Facilities covered by the 2004 General Permit

Company Name	Facility Name	Permit Number	Types of Discharge	Receiving Water
ExxonMobil Production Co.	Vern Lake/MS C	33-0111	003	unnamed tundra wetlands
ExxonMobil Production Co.	Badami Resevoir	33-0112	003	unnamed tundra wetlands
FEX L.P.	Mobile Spill Unit	33-0085	007	unnamed tundra wetlands
FEX L.P.	Pad DS-2P	33-0091	003	unnamed tundra wetlands
FEX L.P.	Arctic Wolf Camp	33-0092	001, 002	unnamed tundra wetlands
Halliburton Energy Services, Inc.	Deadhorse Facility	33-0019	001	unnamed tundra wetlands
Kerr-McGee Oil & Gas Corp	Two Bits - Mine Site C	33-0075	003	unnamed tundra wetlands
Kuukpik Arctic Catering	Inigok Pad	33-0056	001	unnamed tundra wetlands
Kuukpik Arctic Catering	Stallion 29 Camp	33-0102	002	unnamed tundra wetlands
Kuukpik Arctic Services	Stallion 29 Camp	33-0069	002	unnamed tundra wetlands
Nabors Drilling, Inc.	Alaska Camp	33-0044	001	unnamed tundra wetlands
Nabors Drilling, Inc.	Talkeetna Camp	33-0045	001	unnamed tundra wetlands
Nabors Drilling, Inc.	Alyeska Camp	33-0097	001	unnamed tundra wetlands
Nabors Drilling, Inc.	Augustine Camp	33-0098	001	unnamed tundra wetlands
NANA Oilfield Services, Inc.	NOSI STP	33-0047	001	unnamed tundra wetlands
NANA Pacific, LCC	Arctic Caribou Inn	33-0089	004	unnamed tundra wetlands
North Slope Borough	Nuiqsut Natural Gas Pipeline	33-0094	003	unnamed tundra wetlands
Peak Oilfield Services	Ice Road Camp	33-0072	002	unnamed tundra wetlands
PGS Onshore	PGS-158	33-0027	002	unnamed tundra wetlands
PGS Onshore, Inc.	PGS-157 Sleigh Camp	33-0026	002	unnamed tundra wetlands
Pioneer Resources	Oooguruk	33-0083	001, 003-007	tundra wetlands/marine
Renaissance Umiat LLC	Arctic Wolf Camp	33-0103	001, 002	unnamed tundra wetlands
Savant Alaska LLC	Kupcake Prospect - Duck Island	33-0100	003	Beaufort Sea
Savant Alaska LLC	Kupcake Prospect - Sag C	33-0101	003	Beaufort Sea
Savant Alaska LLC	Shell Shaviovik Pit	33-0113	003	unnamed tundra wetlands
Savant Alaska LLC	Badami Gravel Pit	33-0114	003	unnamed tundra wetlands
Taiga Ventures	Cape Simpson Camp	33-0081	002	unnamed tundra wetlands
Total E&P USA, Inc.	Total NPR-A Exporation	33-0066	007	unnamed tundra wetlands
Ukpeagvik Inupiat Corp.	Cape Simpson Ind. Port	33-0084	002	unnamed tundra wetlands
Union Oil Company of CA	Chevron White Hills/Franklin Bluff	33-0115	005,006,007	unnamed tundra wetland
Union Oil Company of CA	UOCC Foothills Area	33-0116	005,006,007	unnamed tundra wetland
Veritas DGC	Geophysical Camp	33-0041	002	unnamed tundra wetlands
Veritas DGC	Geophysical Camp	33-0099	001,002, 007	unnamed tundra wetlands

Discharge Key
001 Domestic wastewater
002 Gray water
003 Gravel Pit Water
004 Construction Dewater
005 Hydrostatic Test Water
006 Storm water
007 Mobile Spill