# RESPONSE TO COMMENTS

## OIL AND GAS EXPLORATION FACILITIES ON THE OUTER CONTINENTAL SHELF AND CONTIGUOUS STATE WATERS (NPDES Permit No. AKG280000)

U.S. Environmental Protection Agency
Region 10

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# I. INTRODUCTION

On April 5, 2004, the Environmental Protection Agency, Region 10 (EPA) proposed to reissue the National Pollutant Discharge Elimination System (NPDES) permit number AKG280000 for Oil and Gas Exploration Facilities on the Outer Continental Shelf and Contiguous State Waters. The comment period on the proposed reissuance began on April 5, 2004, and was scheduled to end on May 19, 2004. EPA reopened the comment period on June 24, 2005 for 30 days to take comment on expanding the area of coverage to include the Hope and Norton Basins. EPA received comments during both the comment periods from the following: Trustees for Alaska, North Slope Borough, Alaska Oil & Gas Association (AOGA), Inupiat Community of the Arctic Slope (ICAS), Minerals Management Service (MMS), and Native Village of Kivalina. This document provides a summary of the substantive comments received and the responses to those comments.

This document does not address minor comments, e.g., those indicating spelling errors. Additionally, EPA has changed the flow reporting requirement for discharges 005 through 013 to total volume reported in gallons for each month discharged, since these are intermittent batch-type discharges. Requiring the facility to report only the flow rate does not allow EPA to determine the maximum discharge quantities of these waste streams for analysis of discharge effects (e.g., Ocean Discharge Criteria Evaluation). Reporting the flow rate also gives the public an inaccurate perception of the quantity of discharges from oil and gas activities.

Many commentors provided comments on the fact sheet that accompanied the draft permit. The fact sheet was not revised based on the comments since it is a final document that provides the basis for the draft permit. However, this document provides responses to comments regarding the fact sheet to explain changes made to the draft permit.

Many commentors provided references to other documents but did not include those documents with their comments. Per 40 CFR § 124.13, "[a]ny supporting materials which are submitted shall be included in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statues and regulations, EPA documents of general applicability, or other generally available reference material." Accordingly, some documents that commentors referenced, but did not submit, are not part of the administrative record for this permit and are not considered in responding to the comments.

## II. ACTIONS AND NEW INFORMATION AFTER THE PUBLIC COMMENT PERIOD

### A. State of Alaska Clean Water Act 401 Certification

On February 27, 2006, the state of Alaska issued a 401 certification that the permit complies with Alaska water quality standards. Stipulations of the certification have been incorporated into the final permit. The 401 certification included the following stipulations:

- Remove total aromatic hydrocarbons (TAH) and total aqueous hydrocarbons (TAqH) limits for discharge 001, but require monitoring once per well in lieu of annual monitoring with the sample collected at the same time as the monthly SPP toxicity test. EPA has included this stipulation in Table 1 of the final permit.
- Include TAH and TAqH monitoring for discharges 002 and 014. For discharge 002, a representative sample of deck drainage will be monitored for TAH and TAqH once during platform drilling operations. EPA has included this stipulation in Tables 3 and 16 of the final permit.
- A 100 meter mixing zone that extends to the seabed is authorized for discharge 001 for antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium and zinc.
- Include metals partitioning monitoring requirements for drilling fluids in discharge 001 of silver, thallium and chromium. EPA has included this stipulation in Table 1 of the final permit.
- Discharges of drilling fluids and cuttings below ice or in open water must apply to ADEC for a Zone of Deposit (ZOD) and conduct Environmental Monitoring Requirements in section II.B.5 of the permit. EPA has included this stipulation in paragraphs II.B.4.a (3) and II.B.4.c (2) of the final permit.
- Discharges of drilling fluids and cuttings on ice must address on-ice disposal methods in the BMP Plan and specifically address on-ice spacing and depth of accumulated drilling fluids and cuttings piles. EPA has included this stipulation in paragraphs II.B.4.a (10) and II.B.4.d (5) of the final permit.
- ADEC approves the use of the $LC_{50}$ 96-hour suspended particulate phase (SPP) toxicity test as an endpoint for toxicity testing in discharge 001.
- Permit applicant that have economically feasible access via ice roads or other transportation to convey sanitary and/or domestic wastewater to an existing permitted wastewater disposal facility will not authorize a mixing zone for disposal of these wastes to state waters. Applicants that cannot meet the limits without a mixing zone and do not have feasible access to a

permitted disposal facility will be authorized a 100 meter radius mixing zone. EPA has included this stipulation in paragraphs I.D.1 and II.D.2 of the final permit.

- In state waters, ADEC categorizes domestic or gray water as sanitary waste. Therefore, the applicant must meet the same limits for discharge 004 (domestic waste) as required for discharge 003 (sanitary waste). EPA has included this stipulation in section II.D of the final permit.
- Discharges of sanitary waste (including domestic waste) are limited to a flow volume of 10,000 gallons per day. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- Discharges 003 and 004 are limited to a maximum 5-day biochemical oxygen demand ($BOD_5$) limitation of 30 mg/L for a monthly average, 45 mg/L for a seven day average, and 60 mg/L for a maximum daily value. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- Discharges 003 and 004 are limited to a maximum total suspended solids (TSS) limitation of 30 mg/L for a monthly average, 45 mg/L for a seven day average, and 60 mg/L for a maximum daily value. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- $BOD_5$ and TSS may be collected as either a grab or a composite sample to allow the option of obtaining a more representative sample if conditions permit. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- The number of fecal coliform bacteria (FC) in the secondary treated effluent discharged from each facility is not to exceed a monthly average of 14 FC/100 mL and a daily maximum of 43 FC/100 mL, except when less stringent effluent limitations are allowed through dilution within a state-authorized mixing zone. When a 100 meter mixing zone is authorized by ADEC, the FC is not to exceed a monthly average of 100 FC/100 mL and a daily maximum of 200 FC/100 mL. Reporting of 30-day average for FC is the geometric mean. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- Discharges 003 and 004 must have a pH within the range of 6.0 to 9.0 standard units in if a mixing zone is authorized. If a mixing zone is not authorized, the pH must be within the range of 6.5 to 8.5 standard units and within 0.2 standard units of the receiving water. EPA has included this stipulation in Tables 4a and 4b of the final permit.
- Dissolved oxygen (DO) concentrations in discharges 003 and 004 must be with the range of 2.0 mg/L to 17 mg/L if a mixing zone is authorized. If a mixing zone is not authorized, the DO concentration must be within the range of 6 mg/L to 17 mg/L. EPA has included this stipulation in Tables 4a and 4b.

- Total residual chlorine in discharges 003 and 004 must not exceed 1.0 mg/L for a maximum daily value and 0.5 mg/L for a 30-day average if a mixing zone is authorized. If a mixing zone is not authorized, the maximum daily value must not exceed 0.0075 mg/L. The detection limit for total chlorine shall be 0.1 mg/L. Monitoring is not required if chlorine is not added to the wastewater. EPA has included this stipulation in Tables 4a and 4b.
- Discharges 003 and 004 must not contain any floating solids, debris, sludge, deposits, foam, scum and other residues alone or in combination with other substances in quantities that would make the water unfit or unsafe for any marine water use. EPA has included this stipulation in Tables 4a and 4b.
- A 100 meter mixing zone is authorized for discharge 013 to meet the residue water quality standard.

## B. Tribal Consultation

On April 19, 2002, EPA sent a letter to the following Alaska Native Tribes and Corporations on the North Slope informing them of this governmental action and to provide them the opportunity to consult with EPA:

Inupiat Community of the Arctic Slope
Wainwright Traditional Council
Naqsragmint Tribal Council
Native Village of Point Lay
Native Village of Atqasuk
Native Village of Nuiqsut
Native Village of Barrow
Native Village of Kaktovik
Native Village of Point Hope
Anaktuvuk Village Council
Arctic Village Council
Ukpeagvik Inupiat
Native village of Venetie

No requests for consultation were received by EPA.

Since a considerable time passed between the first letter and the drafting of the permit, EPA sent a second letter on April 1, 2004, providing these Tribes the opportunity to initiate consultation with EPA regarding this permit. During the public comment period (April 5 through May 15, 2004), EPA received comments from the Inupiat Community of the Arctic Slope [ICAS, 2004]. In that letter, they recommended that EPA defer to the tribal government and the North Slope Borough in identifying those areas and in protecting those areas from discharges by prohibiting all discharges in the areas identified. The Tribe requested a local government/tribal government consultation to identify those areas so operators are aware of them prior to submitting NOIs. EPA attempted several times to set a meeting with the ICAS regarding this issue. However, EPA was unsuccessful in setting a meeting to discuss this issue. Additionally, ICAS requested to consult on applications (i.e., notices of intent – NOIs) for this permit. EPA will fulfill its trust responsibility and will consult with ICAS on applications for this permit (see response to comment B.2, below).

Due to the expansion of the Area of Coverage (see response to comment A.2, below) EPA sent a third letter on July 11, 2005, providing the following Tribes the opportunity to initiate consultation with EPA regarding this permit:

Naqsragmuit Tribal Council
Arctic Village
Inupiat Community of the Arctic Slope
Atqasuk Village
Native Village of Barrow
Native Village of Brevig
Chinik Eskimo Community
Native Village of Deering
Native Village of Elim
Native Village of Gambell
Native Village of Kaktovik
Native Village of Kivalina
Village of Kotlik
Native Village of Kotzebue
Native Village of Koyuk
Native Village of Nuiqsut
Native Village of Point Hope
Native Village of Point Lay
Native Village of Saint Michael
Native Village of Savoonga
Native Village of Selawik
Native Village of Shaktoolik
Native Village of Shishmaref
Stebbins Community Association
Native Village of Teller
Native Village of Unalakleet
Venetie Village Council
Native Village of Venetie
Village of Wainwright
Native Village of Wales

Raymond Tritt, President of the Arctic Village, responded by telephone on July 7, 2005, and expressed that he was opposed to any development of oil and gas in Alaska.

Thomas Olemaun, President of the Native Village of Barrow, responded by letter on July 26, 2005, appointing Thomas Brower III as Representative for Native Village of Barrow Administration Consultant and the Tribal Council. EPA attempted several times to set a meeting with the Native Village of Barrow regarding this issue. However, EPA was unsuccessful in setting a meeting to discuss any issues this Tribe has with the general permit.

During the reopened public comment period (June 24 through July 25, 2005), EPA received comments from Millie Hawley, Coordinator of Environmental Program for the Native Village of Kivalina. In that letter, several issues were raised that the Tribe requested EPA consider in making decisions that affect the people who live in Kivalina, Alaska, but did not request consultation. However, in an email dated January 30, 2006, the Tribal Administrator for the Native Village of Kivalina requested consultation with EPA. EPA met with the Tribal Council for Native Village of Kivalina in Anchorage, Alaska, on February 9, 2006. The Tribe raised two main concerns regarding on-ice disposal: affects to melted ice used as drinking water and fate and transport of drilling fluids and cuttings.

## C. Endangered Species Act Consultation

EPA has concluded that its federal action (i.e., re-issuance of a general permit) may affect, but is not likely to adversely affect threatened and endangered species in the Area of Coverage and is not likely to adversely modify critical habitat for the spectacled and Steller's eiders.

On June 30, 2004, EPA sent a letter and biological evaluation (BE) to the National Marine Fisheries Service (NOAA Fisheries) and U.S. Fish and Wildlife Service (USFWS) requesting concurrence on EPA's federal action pursuant to 50 CFR 402.14(c) of the Endangered Species Act (ESA). On July 20, 2004, EPA received a concurrence letter from USFWS.

Due to comments received from MMS during the pubic comment period (MMS, 2004), EPA expanded the area of coverage for the permit and had to submit a new BE to NOAA Fisheries and USFWS for this action. EPA sent a letter with the new BE to NOAA Fisheries and USFWS on October 18, 2005, requesting concurrence on EPA's federal action pursuant to 50 CFR 402.14(c) of the ESA. EPA sent an updated version of the BE to NOAA Fisheries and USFWS on January 27, 2006. On, May 12, 2005 EPA received a draft concurrence letter from NOAA Fisheries.

The fact sheet erroneously stated that the National Marine Fisheries Services had determined that the proposed action would not likely affect any Essential Fish

Habitat species. EPA concluded that the reissuance of this permit is not likely to adversely modify the critical habitat

## III. RESPONSE TO COMMENTS RECEIVED ON DRAFT PERMITS

The comments are responded to in the order listed in the Table of Contents. The comments may not be in the particular order in which they were presented and may be summarized or paraphrased. Additionally, similar comments from different commentors have been incorporated into one comment. Each comment will be followed by the EPA's response.

### A. Section I.B (Area of Coverage)

1. **Comment:** One commentor stated that the description of the Area of Coverage needs to be changed to include state of Alaska waters.

   **Response:** Under the current (1995) permit, Alaska State waters are included in the Area of Coverage. It was EPA's intent for the draft permit to cover the whole area previously covered, including state waters. EPA agrees that the language in the draft permit was unclear and has revised the description of the Area of Coverage to clarify the inclusion of Alaska State waters.

2. **Comment:** One commentor stated that the northern portion of the Hope Basin and other Outer Continental Shelf (OCS) areas along the northeast boundary that are within the MMS current 5-year oil and gas leasing program appear outside the general permit defined area. Neither the figure nor the narrative of the area of coverage indicates that the Arctic NPDES general permit will cover these areas. The commentor requested that the figure and permit text be expanded to include these areas.

   **Response:** EPA agrees with the commentor. Federal regulations at 40 CFR 122.28(c)(1) states that "the general permit area should generally be no less extensive than the [Federal] lease sale area defined by the Department of the Interior. EPA has updated the Area of Coverage and Figure 1 in the final permit to reflect the MMS lease sale areas under their current 5-year leasing program, including the Hope Basin and Norton Sound.

3. **Comment:** Several commentors stated that the area covered by the proposed permit is over-inclusive and should be restricted to areas that are currently leased or are likely to be leased in the foreseeable future. The proposed area covers over 50 million acres of federal and state waters that

do not correspond to areas where oil and gas exploration are actively occurring or likely to occur.

**Response:** The permit will authorize discharges from exploratory operations in all areas offered for lease by MMS and Alaska Department of Natural Resources (ADNR) including past and future lease sales within the Beaufort Sea, Chuckchi Sea, Hope Basin, and Northern Norton Basin. This method of defining the Area of Coverage will insure that all areas potentially leased during the term of this general permit will be covered. The conditions of the general permit are appropriate to that entire area. While the MMS planning basins (i.e., Beaufort Sea, Chukchi Sea, Hope Basin and Northern Norton Basin Planning Areas) and contiguous State waters are generally larger than the areas offered for lease by MMS and ADNR, discharges under this general permit would occur in only those areas ultimately leased.

4. **Comment:** One commentor stated that the fact sheet incorrectly stated that the inner boundary baseline in Alaska has not been clearly established. The boundary between the federal OCS waters and the State's coastal waters has been explicitly delineated as a fixed boundary by decree of the Supreme Court with case cited.

**Response:** EPA agrees with the comment. The inner boundary baseline establishes the boundary between inland waters and territorial seas. It is also the boundary between the "offshore" and "coastal" subcategories in the effluent guidelines for Oil and Gas Extraction Point Sources at 40 C.F.R. Part 435. The United States Supreme Court established the inner boundary baseline, within the general permit's coverage area, in United States v. Alaska, 521 U.S. 1, 117 S.Ct. 1888 (1997) ("Alaska I"). The Court decided that the seaward extent of Alaska's inland waters, or inner boundary baseline, was the low water line along Alaska's coast supplemented by closing lines drawn across bays and mouths of rivers. Alaska I at 8.

The inner boundary baseline also serves as the basis for determining the boundary between territorial seas (also called state coastal waters), where State water quality standards apply, and outer continental shelf waters (also called contiguous zone), where State water quality standards do not apply. That boundary is three miles seaward from the inner boundary baseline, and was fixed by the United States Supreme court in United States v. Alaska, 530 U.S. 1021, 120 S.Ct. 2767 (2000) ("Alaska II").

5. **Comment:** One commentor stated that it appears the new provisions governing mobile operations are in response to the problems ICAS commented on with respect to the McCovey project. In that project, the permit was transferred among operators, and was used in a different geographical location than the original permit. While the comment appreciated the fact that EPA is apparently attempting to make "lawful" the previously unlawful transfer, they do not believe that using the prior "problem" transfer as a basis for formulation of new policy is warranted, or represents "good government." The commentor urges EPA to set stricter transfer requirements that provide more public notice, not less.

   **Response:** EPA included the paragraph in I.E.2 as a result of the ICAS petition to clarify what ownership or location changes of permitted facilities remain covered under the general permit (e.g., transfers), and which require a new NOI to be covered. EPA has no basis to establish stricter transfer requirements in this general permit than those in the federal regulations at 40 CFR § 122.61 and § 124.10. EPA has allowed mobile operations in other general permits for years (e.g. AKG520000 – Seafood General Permit and AKG310000 – North Slope General Permit). EPA is including the provision for mobile operations in this permit because exploratory facilities are mobile operations and EPA believes that the permitting process would be streamlined if the permittee could apply for coverage for their whole operation. This also alleviates administration burdens on the Agency and allows the public to comment on the impacts of the whole operation rather than each portion of the operation.

6. **Comment:** One commentor requested that the permit exclude the Hope Basin from the general permit (AKG280000). They stated that "discharging and drilling [in this area] would greatly distress the Native Village of Kivalina further more as [they] are fighting for their livelihood every day from both industrial and natural environmental pressures. Currently, the small barrier reef that the Native Village of Kivalina sits on is rapidly eroding each year, diminishing living space for its 400 some odd residents." Additionally, the Red Dog Mine Port is 17 miles away from the Native Village of Kivalina and has already affected the Tribe's subsistence from their mining practices. The commentor is especially concerned about the Arctic Char.

   **Response:** Federal regulations at 40 CFR 122.28(c)(1) state that for offshore oil and gas facilities:

   > "The [EPA] Regional Administrator shall, except as provided below, issue general permits covering discharges from offshore oil

> and gas exploration and production facilities within the Region's jurisdiction. Where the offshore area includes areas, such as areas of biological concern, for which separate permit conditions are required, the [EPA] Regional Administrator may issue separate general permits, individual permits, or both. The reason for separate general permits or individual permits shall be set forth in the appropriate fact sheets or statements of basis…. For Federally leased lands, the general permit area should generally be no less extensive than the lease sale area defined by the Department of the Interior."

Since the Minerals Management Service, Department of the Interior has proposed federal leases covering lands in the Hope Basin (see Comment #2), EPA must issue a general permit for those areas unless there is a reason for separate general or individual permits for that area. In proposing to expand the area of coverage from the Beaufort and Chukchi Seas, EPA considered whether different permit conditions would be necessary for the expanded area (Norton and Hope Basins). EPA revised the Ocean Discharge Criteria Evaluation, as required under Section 403 of the Clean Water Act, to evaluate the impact of the discharges from oil and gas exploration in the expanded area of coverage (Norton and Hope Basins). EPA is aware of no basis for requiring different permit conditions for the expanded area, so EPA included that area within the scope of the new general permit. The comment states that drilling in the Hope Basin would distress the Native Village of Kivalina," but EPA is unaware of any particular impacts from activities in the Hope Basin, either on the Native Village of Kivalina or on the local ecosystem, that would justify different permit conditions in that area.

B. **Section I.D (Authorization to Discharge)**

1. **Comment:** One commentor stated that under certain situations a company may not know of a need to move a facility 30 days prior to moving. Therefore, the 30 day requirement should be changed to 7 days.

   **Response:** The intent of the 30 days was for EPA to evaluate the new discharge to ensure that the mixing zones of two discharges do not overlap. However, EPA has decided that it would be acceptable to have the discharger provide notice 7 days prior to moving if they certify that the new location will not be within 200 meters of either the facility's previous discharge or any other discharge. This distance ensures that the mixing zones will not overlap because the maximum authorized mixing zone for this permit is 100 meters.

2. **Comment:** The Inupiat Community of the Arctic Slope (ICAS) stated that copies of all Notices of Intent (NOIs) need to be provided to the ICAS tribal government in a timely manner. In response to comments on the general permit AKG700000, EPA concluded that the administration of the general permit would include consultation and that EPA would forward NOIs to the appropriate agency or tribal contact at least 30 days prior to making a decision whether to authorize the proposed discharge.

   **Response:** When a tribal government requests consultation on EPA actions, in this case the authorization of a discharge, then the Agency will fulfill their trust responsibilities by providing the tribal government with a copy of the NOI prior to making a decision whether to authorize the proposed discharge. EPA believes that 30 days is a reasonable request by ICAS. In order to accommodate this request, EPA has changed the requirement for applicants to submit an NOI from 30 days to 45 days (see paragraph I.D.2).

C. **Section I.E (Transfers)**

1. **Comment:** One commentor stated that they opposed the option for mobile operations to remain covered after a move without submitting a new NOI. The concern was that it could easily be used to evade public scrutiny of discharges. An applicant could propose one site, get the authorization, and then give 30 days notice before moving to a very controversial location, which could easily happen given the extremely large geographical area covered by the permit.

   **Response:** EPA believes that the public should be allowed to comment on applications for this general permit because of the lack of specific knowledge regarding areas of biological concern in Arctic Alaska waters. Therefore, EPA will post on its website NOIs for coverage under this permit and allow the public 30 days to comment on the application. When the applicant submits the NOI for mobile operations, the public will be afforded the opportunity to comment on the area operations and identify controversial locations prior to EPA granting authorization. The authorization letter sent to the permittee would include any specific stipulations from the permit that apply to that operation (e.g., areas of prohibition, mixing zone size).

   Mobile operations will be limited to a lease block, not to the entire area covered by the general permit. A separate NOI would be needed for each

lease block. EPA has included specific language in paragraph I.D.5 of the permit to indicate this.

2. **Comment:** One commentor stated that because of the long term planning process for wells in the Beaufort/Chukchi Seas, it is possible that the type of drilling platform could change late in the planning process. Having to file a NOI at the end of the planning process, just because the drilling platform has changed, could potentially result in additional time before all the required permits are in hand for the project. Furthermore, a change from one facility to another would not impact the characteristics of the discharge. The commentor requested that paragraph I.E.2 be removed from the permit.

**Response:** Permit coverage can only be transferred, without a new NOI, from one owner or operator to a new owner or operator of the same facility. A change from one facility to another would require a new NOI, even if the discharge characteristics are the same. Paragraph I.E.2 is included in this permit to clarify this point but does not place any additional burden on the permittees covered by this permit from other permittees in the nation.

D. **Section I.F (Termination Notification)**

1. **Comment:** Once commentor requested that the words "prior to ceasing operations" in paragraph I.F.1 be changed to "30 days after ceasing operations" to ensure coverage is provided in the event operations must continue for a period of time longer than anticipated.

**Response:** EPA agrees that this is a reasonable request and has changed the permit language in I.F.1 to 'Within 30 days of ceasing operations...' to mean that within 30 days after ceasing operations the permittee shall request termination of permit coverage if it is no longer needed. EPA would like to emphasize that until the permit coverage is terminated, the permittee will be required to submit DMRs, even if they do not discharge.

2. **Comment:** One commentor requested that the words "within 7 days of ceasing drilling operations" in paragraph I.F.2 be changed to 'within 30 days..." This requirement is onerous, provides no environmental benefit, and conflicts with the requirement found in II.B.9.

**Response:** EPA agrees that the requirement may be onerous and conflicts with other requirements in the permit. Therefore, EPA will change the timing to be within 30 days as requested by the commentor.

E. **Section I.H (Requirements for an Individual Permit)**

**Comment:** One commentor stated that this section I.H of the permit allows the Director of Water Programs or Regional Administrator to require an applicant to file for an individual NPDES permit instead of filing an NOI to use this general permit. These provisions provide no clear standard by which the Director or Regional Administrator would decide that an individual permit application is appropriate.

**Response:** The requirements for this section are directly from the federal regulations at 40 CFR 122.28(b)(3). EPA would only decide not to include a facility under the general permit and require an individual permit for one of the four reasons stated in the permit. As stated in 40 CFR 122.28(b)(3)(ii), the notice from EPA requiring an individual permit must include a brief statement of the reasons for this decision. An example provided in 40 CFR 122.28(c)(1) is where the offshore area includes areas, such as areas of biological concern, for which separate permit conditions are required.

**Section II.A (Requirements for All Discharges)**

1. **Comment:** The Minerals Management Service (MMS) stated that they do not have any specific safety requirement related to use of the products listed in paragraph II.A.5 nor are they aware of any OSHA or U.S. Coast Guard requirements. MMS requested that if this provision is directed at cleaning deck areas using these products in minor amounts, that the permit be clarified accordingly.

   **Response:** This paragraph is stating that should the use of the products listed in paragraph II.A.5 be necessary to meet the safety requirements of OSHA or MMS, then the permittee should discharge them in minimal amounts, not that OSHA or MMS has any specific safety requirements related to the use of these products. The permit language has been clarified accordingly.

2. **Comment:** One commentor stated that it is not practical to have two separator systems for washdown and rainwater as required in paragraph II.A.6 of the draft permit.

   **Response:** EPA believes that the effluent limitations for deck drainage are sufficient to regulate this discharge without specifically requiring two separate systems. Therefore, EPA has removed the requirement in paragraph II.A.6 of the draft general permit.

3. **Comment:** One commentor stated that the condition in paragraph II.A.11 does not really apply to winter operations in the Beaufort/Chuckchi Seas (November through April) because there is no daylight in the Arctic during this time period.

**Response:** EPA agrees with this comment and has stricken "during daylight" from this paragraph (paragraph II.A.10 in the final permit).

G. **Section II.B (Requirements for Drilling Fluids and Drilling Cuttings)**

1. **Comment:** Several commentors stated that annual monitoring was insufficient to document mass loading to the aquatic environment.

**Response:** EPA disagrees with the commentor. The loading is based upon the concentration and volume. Per the effluent guidelines at 40 CFR Part 435, Subpart A, EPA is requiring the permittee to monitor pollutant parameters in their stock drilling fluids annually. The monitored parameters are unlikely to change over time since the permittees recycle and reuse these fluids. Certain components of the discharge that have the potential for variability are required to be monitored more frequently. Permittees must also monitor monthly discharge volumes. This will allow a computation of the total annual mass loading to the environment.

2. **Comment:** Several commentors stated that the Mud Plan must still be required.

**Response:** As stated in the Fact Sheet, the proposed permit retained the requirement for a mud (drilling fluid) plan (see Section IV.C of the permit).

3. **Comment:** One commentor stated that they strongly support retaining the prohibition of the discharge of drilling fluids and cuttings discharges in the Steffansson Sound Boulder Patch. However, the language of the 1995 general permit should be retained rather than using the language in the draft permit because the proposed language of the draft permit will exclude some critical geographical areas and will place unique biological communities at risk of smothering.

**Response:** Some of the requirements from the 1995 permit were inadvertently omitted in the draft permit. However, EPA has corrected this in the final permit. The language in the final permit is essentially the same as that in the 1995 general permit.

4. **Comment:** One commentor stated that Dunton et. al. (1982) cited in the Fact Sheet (p. 17) is not sufficient to define the Boulder Patch for the proposed permit because that study did not include all productive communities that are part of this Boulder Patch and additional cobble and boulder habitats that support productive biological communities have subsequently been found. The commentor believes that the discharges should be prohibited in all documented Boulder Patch communities in the Beaufort Sea, including the entire Steffansson Sound Boulder Patch and others in Stockton Bay, Flaxman Island, Konganevik Point, Camden Bay, and other sites.

   Additionally, the commentor stated that there is great concern about contaminants in the Arctic food chain by Alaska Native residents of the area. Subsistence harvesting of bowhead whales, seals, fish, and birds often occurs in areas near exploratory drilling sites, so there may be long-term ramifications of drilling waste discharges near these areas. Drilling waste discharge area restrictions are warranted at important bowhead whale feeding areas, anadromous fish migratory habitats in the nearshore estuary, concentration areas used by other marine mammals, birds and other wildlife, and in subsistence use areas.

   **Response:** EPA agrees that discharges should be prohibited in all environmental sensitive areas, including those areas that could harm the subsistence of Alaska Native residents. However, the commentor did not provide sufficient information to identify additional areas of prohibition in the general permit. However, ADEC has identified Thetis Island and the Colville River Delta as environmentally sensitive areas and EPA has prohibited discharges in these areas in the final permit.

5. **Comment:** One commentor stated that the area restriction for shallow waters has been narrowed substantially in the draft permit from the 1995 permit. While the draft permit prohibits discharges "in water depths less than 5 meters (as measured from mean lower low water)," the 1995 permit prohibited a more extensive area in prohibiting "discharge of muds and cuttings between the shore (mainland and barrier islands) and the 5 meter isobath." The commentor believes this prohibition must be retained to comply with the Clean Water Act's anti-backsliding and anti-degradation requirements.

   **Response:** It was EPA's intent to retain this requirement. EPA agrees that the language in II.B.3.b is incorrect and has corrected it to reflect the requirement from the 1995 permit.

6. **Comment:** Several commentors stated that five exploratory wells at one location is too concentrated and should require an individual permit because the discharges will be greater and the facilities are no longer similarly situated since the occurrence of multiple wells is likely to be the exception and not the rule. More than one well at a location should be considered on a case-by-case basis.

   **Response:** Allowance to drill up to 5 wells was a requirement in the current (1995) permit. It is not unlikely for a facility to have more than one well. For this reason, EPA evaluated the discharge of drilling fluids and cuttings in the Ocean Discharge Criteria Evaluation and determined that up to five wells at one location would not be too concentrated. There is the potential for more than five wells to result in adverse affects to the environment and the final permit only allows discharges from additional wells on a case-by-case basis.

7. **Comment:** One commentor stated that the Mineral Oil Pills section of the current permit should be included in this permit.

   **Response:** As stated in the Fact Sheet, the proposed permit retained the requirement for Mineral Oil Pills (see Section II.B.8 of the permit).

8. **Comment:** Several commentors stated that zero discharge should be required for all new facilities. One commentor stated that various facilities in Cook Inlet have implemented zero discharge and the reissued Cook Inlet general permit will be proposing zero discharge for new facilities. Commentors also stated that production facilities in the Beaufort Sea (Endicott and Northstar) have zero discharge of drilling fluids, drill cuttings and many other discharges, and onshore facilities on the North Slope are also implementing zero discharge.

   **Response:** The instances of zero discharge commentors refer to are production facilities, not exploration facilities which this permit is covering. While it is true that the Cook Inlet general permit is proposing not to authorize discharges from new production facilities (i.e. new sources), it will still allow the discharge of drilling fluids (e.g., muds) and cuttings from new exploration facilities. New production facilities in Cook Inlet that wish to discharge would need to acquire an individual permit.

   Zero discharge of this waste stream is required by the effluent guidelines (40 CFR 435, Subpart C) for onshore facilities (e.g., North Slope facilities

– AKG320000), but this permit applies only to offshore facilities. The effluent guidelines for offshore facilities (40 CFR 435, Subpart A) allows for these discharges in Alaska.

EPA agrees with commentors that permittees should seek to eliminate waste to the environment and should implement the least harmful disposal method. This means that if zero discharge of this waste stream is a feasible option for a discharge, then they should ideally implement that option rather than discharge it to waters of the U.S., even though it is not required by the effluent guidelines. It should be noted that under the proposed general permit, there are 14 different waste streams and an applicant must indicate which waste streams they are applying to discharge rather than just applying for coverage under this general permit and being authorized to discharge all waste streams whether or not they needed to, as was done in the past.

9. **Comment:** One commentor urges EPA to reevaluate zero discharge for Alaska and update the Effluent Limitations Guidelines.

**Response:** Reevaluation of Effluent Limitations Guidelines is beyond the scope of this permit action. Each year, EPA Headquarters solicits public input under the 304(m) planning process as to which industrial sectors need effluent limitations guidelines established or revisited. Commentors may use this process to urge EPA to update Effluent Limitations Guidelines for this industry. Until such time as the guidelines for this industry are revoked or revised, the current guidelines will continue to be the basis for this general permit.

10. **Comment:** One commentor stated that the draft permit has weakened the prohibitions on discharges within 1000 meters of river mouths or deltas. In the current permit, the prohibition was included as an Area restriction, including during open water periods. Discharges should be prohibited all year in the critical habitats of river mouths and deltas. Dilution and monitoring are insufficient to adequately protect these sensitive areas. This constitutes backsliding from the 1995 permit.

**Response:** It was EPA's intent to retain this requirement. EPA agrees that the language in II.B.4.a is incorrect and has corrected it to reflect the requirement from the 1995 permit.

11. **Comment:** One commentor stated that the paragraph II.B.3.a prohibits discharges in waters less than 5 meters, yet the Fact Sheet, section 5d, states that previous permits allowed discharges in water depths of 2-5

meters. Failure of existing models to realistically characterize dispersion at these depths is not a reasonable justification for prohibiting discharge. Clearly there is no potential for drilling fluids to accumulate to depths 10 to 20 times greater than water depths. EPA has no defensible scientific justification to prohibit discharge of drilling fluids and drill cuttings in waters less than 5 meters in depth and, therefore, should modify II.B.3.a to read "in water depths less than 2 meters.

**Response:** This requirement was retained from the previous permit. To remove this requirement would require an anti-degradation analysis which would be similar to the type of analysis used in the ODCE for this permit. Shallow waters within the 5 meter isobath are considered sensitive environmental areas, especially since many subsistence species are taken or spend a portion of the life shoreward of the 5 meter isobath and some threatened and endangered species also spend a portion of their life in this area.

EPA has extensively studied the nearshore zone of the Alaskan Beaufort Sea in several Ocean Discharge Criteria Evaluations for this general permit. These evaluations have clearly shown that these nearshore areas provide important feeding and migratory habitat for a large number of species including fish, waterfowl, and mammals. Further, these areas provide essential feeding and preferred habitat for species of major importance for subsistence and commercial fisheries.

As discussed in the Ocean Discharge Criteria Evaluation for this permit, scientific studies and computer modeling of drilling fluid discharges does not indicate adequate dilution and dispersion of the drilling fluid in shallow waters. EPA believes that there is enough evidence to indicate that discharges in water depths from 2 to 5 meters has the potential to adversely impact the marine environment. The commentor did not provide any information to the contrary nor did they provide any information to show EPA's analysis in the ODCE was incorrect. Land disposal or transport and discharge at another location with a greater depth are viable options for this industry. Therefore, EPA is retaining this prohibition in the general permit.

12. **Comment:** One commentor stated that the prohibition in paragraph II.B.3.b should be removed since there was no justification given in the Fact Sheet.

**Response:** This requirement was retained from the previous permit. EPA did state in the Fact Sheet that the proposed permit was retaining the area

restrictions of the current general permit and that these area restrictions are necessary to ensure no unreasonable degradation of the environment in accordance with 40 CFR 125.123(c). EPA has extensively studied the nearshore zone of the Alaskan Beaufort Sea in several Ocean Discharge Criteria Evaluations (Tetra Tech, 1994, 2004; Jones & Stokes, l983, l984). These evaluations have clearly shown that these nearshore areas provide important feeding and migratory habitat for a large number of species including fish, waterfowl, and mammals. Further, these areas provide essential feeding and preferred habitat for species of major importance for subsistence and commercial fisheries. EPA is retaining this prohibition in the general permit.

13. **Comment:** One commentor requested the removal of the sediment toxicity testing requirement from Table 1 of the general permit. Effluent limits and the mud plan are developed to ensure protection of Beaufort Sea ambient water and sediment.

**Response:** The sediment toxicity requirements in Table 1 are from the Effluent Limitations Guidelines for this industry (40 CFR 435 Subpart A) and therefore must be retained in the permit. To remove this requirement would entail reevaluation of the Effluent Limitations Guidelines. Reevaluation of Effluent Limitations Guidelines is beyond the purview of this permit action. Each year, EPA Headquarters solicits public input under the 304(m) planning process as to which industrial sectors need effluent limitations guidelines established or revisited. The commentor should use this process to urge EPA to update the Effluent Limitations Guidelines for this industry. Until such time as the guidelines for this industry are revoked or revised, the current guidelines will continue to be the basis for determining technology-based limits in this general permit.

14. **Comment:** One commentor stated that EPA should either provide additional information on the type of information is needed in paragraph II.B.5.d(5) or remove this requirement because it is too vague.

**Response:** This was a requirement of the previous permit. This paragraph is only stating the objectives of the monitoring. This statement is letting the permittee know that EPA will use the information from the Environmental Monitoring to assess the current permit conditions and determine if they are adequate to protect the environment. The other paragraphs in this section adequately define the information that must be monitored.

15. **Comment:** One commentor stated that it is unreasonable to require annual Environmental Monitoring Reports to be due 15 days after the end of the calendar year. Setting the same due date as the annual inventory of chemicals/biocides, March 1, would be a reasonable alternative.

**Response:** EPA agrees that March 1 would be an adequate due date for the Environmental Monitoring Reports and has changed the permit to reflect this date.

16. **Comment:** One commentor stated that the requirement in paragraph II.B.5.i should provide a standard by which the appropriateness of a change to the environmental monitoring program would be justified. To do otherwise would leave the provision subject to arbitrary and untimely implementation. The commentor recommended deleting this provision.

**Response:** This was a requirement of the previous permit. EPA does have the authority to require changes to a monitoring plan if the program is inadequate. EPA cannot foresee all possible scenarios that would result in modification to the environmental monitoring; thus, EPA is unable to establish a "standard" by which this would occur. All modifications would be justified and would not be arbitrary. EPA will try to ensure that it makes all requests for modifications within a timely manner. EPA does feel that it is reasonable to include the permittee in the consultation for the modification prior to making a decision to modify the environmental monitoring. Therefore, the permit has been changed to include the permittee in this paragraph.

17. **Comment:** One commentor requested removal of the requirement in paragraph II.B.6.d to submit information on "hole diameter" because the hole diameter does not impact the characteristics of discharges.

**Response:** In order for EPA to determine the environmental impacts of additional wells, an environmental assessment from the estimated additional amount of drilling fluids and cuttings discharged must be conducted. EPA needs the hole diameter in order to estimate the additional amount of drilling fluids and cuttings. An alternative would be for the permittee to include the estimated additional amount of drilling fluids and cuttings to be discharged from each additional hole. The permit has been changed to include this alternative.

18. **Comment:** One commentor stated that paragraph II.B.9 contains duplicative requirements and requested that the duplicative requirements are removed from the permit. The commentor also requested removal of

the requirement in II.B.9.a for the 'hole diameter' as the hole diameter does not impact the characteristics of discharges.

**Response:** EPA agrees that duplicative requirements should be removed from the permit. EPA has reviewed the requirements in paragraph II.B.9 and has either removed duplicative requirements or clarified the requirements. Additionally, EPA agrees that the requirement to provide the hole diameter can be removed from this section of the permit since the permittee is required to provide discharge volumes.

19. **Comment:** One commentor stated that the 'no discharge' effluent limitation for diesel oil in Table 1 does not contain requirements as to the analysis that is required to be performed on the daily grab samples as with other pollutant parameters. The commentor finds this requirement confusing and would like clarification on the reasoning and required sampling and analytical procedures for this pollutant parameter.

**Response:** The requirement for 'no discharge' of diesel oil in Table 1 is from the effluent limitations guidelines for this industry (40 CFR 435). EPA agrees that this requirement is confusing and has incorporated the requirements from the current permit in II.A.1.b into footnotes 18 and 19 and changed the monitoring frequency to 'once per well.' The permittee will be required to submit any diesel oil analysis with their end-of-well report.

20. **Comment:** One commentor recommended that the suspended particulate phase sampling refer to the requirements of II.B.8.b Mineral Oil Pill.

**Response:** EPA agrees with this comment and has incorporated footnote 17 in Table 1 of the permit.

21. **Comment:** One commentor stated that the Fact Sheet (Section II.D.5.a paragraph 4) identifies five passes for environmental monitoring if drilling muds and drill cuttings are to be discharged; however, the draft permit identifies seven passes. The commentor requested EPA reconcile this disparity and correctly identify the passes where environmental monitoring is to occur.

**Response:** In addition to the five passes to Kasegaluk Lagoon discussed in the Fact Sheet, Naokok and Pingaorarok passes should also have been discussed. Information was provided to EPA by DOI and others during the 1994 comment period and the current (1995) permit was updated to

include these passes. This permit is retaining those passes as prohibited areas.

22. **Comment:** One commentor stated that the Fact Sheet (Section II.D.5.e) indicates '...within 10000 meters of an area of biological concern...' while the permit (Sections II.B.3 and 4) indicate '...within 1000 meters...' The commentor requested EPA reconcile this disparity.

**Response:** The permit is correct. The Fact Sheet should have stated '...within 1000 meters of an area of biological concern...'

23. **Comment:** One commentor stated that the justification for placing effluent limitations on total aqueous hydrocarbons (TAqH) and total aromatic hydrocarbons (TAH) is based on an interpretation of Alaska water quality standards which apply to State waters, but the limitations are limited to State waters. The commentor recommended deleting these limits.

**Response:** The commentor is correct that the TAH and TAqH limits are based on Alaska water quality standards. Under the Coastal Zone Management Act (CZMA), the State can require that its water quality standards are applied to federal waters in order to protect waters of the State. In the State's Clean Water Act (CWA) Section 401 certification of this permit, they allowed the removal of the TAH and total TAqH limits from Table 1, but require monthly in lieu of annual monitoring with the sample collected at the same time as the monthly suspended particulate phase (SPP) toxicity test. EPA has incorporated the State's certification requirements into the permit.

24. **Comment:** Several commentors stated that it appears that the mercury effluent limit does not comply with Alaska's water quality standards. One commentor stated the Alaska Water Quality Criteria Manual for Toxic and Other Deleterious Organic and Inorganic Substances contains a saltwater aquatic life standard for mercury of 0.94 µg/L as a 4-day average (dissolved). The permit limit is 1 mg/kg. The same is true for cadmium – the Criteria Manual level is 8.8 µg/L and the permit limit is 3 mg/kg. The permit must contain limits that comply with Alaska's water quality standards.

**Response:** The effluent limits the commentor is referring to (1 mg/kg mercury and 3 mg/kg cadmium) are concentrations in the stock barite (solid media). The Alaska water quality standards (which include criteria) apply to the acceptable concentrations for the water body (water media).

The concentration in the water media from the solid media depends upon how the pollutant partitions (i.e. dissolves) in the water body. The state of Alaska has authorized a 100 meter mixing zone in their CWA 401 certification for these parameters to meet these limits in state waters. In other words, Alaska water quality standards (criteria) would apply at the edge of the 100 meter mixing zone and EPA has modeling showing that the discharges would meet water quality standards at the edge of the mixing zone.

25. **Comment:** One commentor stated that EPA needs to adhere to the (former) Division of Governmental Coordination ("DGC") recommendation that results of disposal studies for above-ice disposal of drilling muds and cuttings from exploratory and stratigraphic test wells and sites be provided in order to establish depth-related above-ice disposal limitations. [DGC Advisory #1]

**Response:** The DGC Advisory #1 in the November 29, 1994, Consistency Determination for the current permit stated the following:

***Advisory 1. Area and Seasonal Restrictions (Page 20, Section f of the draft permit)***

*It is unclear what depth-related requirements apply to muds and cuttings disposal during stable ice conditions. An explicit statement of depth-related requirements should be made, if such limitations apply.*

*Historically, the State of Alaska has, in selected instances, authorized above-ice disposal of drilling muds and cuttings from exploratory and statigraphic test wells at sites seaward of the 2 meter isobath but in water depths less than 5 meters. It is recommended that the results of these disposal studies be considered in establishing depth-related, above-ice disposal limitations.*

The DGC advisory was requesting that EPA consider pre-existing disposal studies in establishing depth-related above-ice disposal limitations and does not state anywhere that disposal studies are to be provided to DGC by EPA.

26. **Comment:** One commentor stated that EPA needs to incorporate the findings of the Department of Interior (DOI) panel investigating whether mercury being discharged from offshore oil and gas rigs is contaminating wildlife through the drilling muds. The commentor is concerned about the series of newspaper articles in Alabama, linking high concentrations of

mercury in the Gulf of Mexico fish and families of commercial fishermen. The bioaccumulative effect from mercury around rigs is of particular concern to those who depend upon the resources of the Beaufort Sea for their survival.

**Response:** The facility that the commentor is referring to is an old production facility in the Gulf of Mexico near an environmentally sensitive area (coral reefs). This facility did not have the new limits on mercury imposed by the EPA effluent limitations guidelines (ELGs). The facility had mercury levels in the muds that exceeded the ELGs and water quality criteria; however, it was inorganic mercury that is not bioavailable to aquatic species. The Department of Interior panel found that mercury is not a problem if the new ELGs are imposed on facilities. EPA has imposed the new ELG limits in this permit.

H. **Section II.C (Requirements for Deck Drainage)**

**Comment:** One commentor stated that the draft requirement to monitor deck drainage from oil and water separators once per discharge event for static sheen, total aromatic hydrocarbons (TAH) and Total Aqueous Hydrocarbons (TAqH) is inconsistent with storm water requirements for discharges similar to deck drainage. The requirement for TAH and TAqH does not provide added benefit to the Static Sheen Test in determining the effectiveness of the oil-water separators.

**Response:** As stated in the Fact Sheet, TAH and TAqH monitoring is required to ensure compliance with Alaska water quality standards. It is not meant to provide added benefit to the Static Sheet Test in determining the effectiveness of the oil-water separators. The state of Alaska included the requirement for this monitoring in their Clean Water Act (CWA) Section 401 certification of this permit; therefore, this requirement must remain in the permit.

I. **Section II.D (Requirements for Sanitary and Domestic Wastes)**

1. **Comment:** Several commentors stated that the different effluent limits for discharges beyond Alaska waters are not supported. Sanitary wastes contain human waste, chlorine residue, suspended solids, and create an oxygen demand for the aquatic environment. One commentor stated that these discharges will have impacts on aquatic life whether it is in Alaska waters or beyond Alaska waters, so the more stringent limits should apply to all discharges. Another commentor stated that lessening of the standards beyond Alaska waters may be detrimental to Tribal health since they depend substantially upon subsistence resources “beyond” Alaska waters.

**Response:** Under the current permit, secondary treatment standards have been applied to discharges in Alaska waters and in federal waters (pollutant parameters include $BOD_5$ and TSS). Since these are technology-based limits, the Clean Water Act (CWA) Section 402(o) does not allow backsliding of technology-based effluent limits from previous permits unless at least one of five criteria is met. Since none of the five criteria apply to this permit, EPA must retain the effluent limits for $BOD_5$ and TSS for discharges beyond Alaska waters (i.e., in federal waters) in the permit. Additionally, EPA believes that it is appropriate to limit pH at the secondary treatment standards (6.0 to 9.0 standard units) and total residual chlorine at Alaska water quality standards with a 100 meter mixing zone as allowed by 40 CFR 125.121(c). EPA believes dissolved oxygen is effectively controlled through the $BOD_5$ limits and does not warrant further limitations. Table 5 has been updated to reflect these changes.

2. **Comment:** One commentor requested that the frequency for monitoring fecal coliform bacteria be reduced or an exemption given to the holding time or test method because it is very difficult, and in some cases impossible, to get a fecal coliform bacteria test conducted within 6 hours due to the remote locations of the area covered by the permit.

   **Response:** The state of Alaska has an approved Quality Assurance Project Plan for Wastewater Treatment Facilities (see http://info.dec.state.ak.us/decpermit/wq/generic%20qapp.pdf) that allows a 24 hour holding time for fecal coliform bacteria (see Table 1). Therefore, EPA agrees that a 24 hour holding time for fecal coliform bacteria would be acceptable for this permit as well. The permit requirement would not preclude this.

3. **Comment:** One commentor stated that the chlorine limits in the permit are different than Alaska State water quality standards and should be reviewed.

   **Response:** EPA has reviewed the chlorine limits in the permit and has updated them to be consistent with Alaska water quality standards.

4. **Comment:** One commentor stated that monthly monitoring for fecal coliform is an unnecessary requirement where chlorine use is required.

   **Response:** EPA and ADEC disagree with this comment. It is possible for a permittee to violate fecal coliform limits while meeting chlorine limits.

Therefore, monitoring of fecal coliform bacteria is retained in the final permit.

**Section II.M (Requirements for Mud, Cuttings, and Cement at the Seafloor)**

**Comment:** Several commentors stated that the discharge of mud, cuttings and cement at the seafloor violates Alaska's water quality standards because the water quality standard for residue in marine waters is zero [18 AAC 70.020(b)(20)]. The commentor requested that EPA remove the discharge requirements because they violated Alaska water quality standards. The relevant narrative criterion states that:

*"[Deposits or other residues] [m]ay not, alone or in combination with other substances or wastes, make the water unfit or unsafe for the use,...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."*

**Response:** The state of Alaska has authorized a 100 meter mixing zone (zone of deposit) for this discharge, which creates a local exception to the general prohibition on residues. The permittee is not authorized to discharge beyond the zone of deposit.

K. **Section IV.A (Quality Assurance Plan Requirements)**

1. **Comment:** One commentor stated that it is unreasonable that a company should develop a QAP before it knows if it is eligible to operate under the permit and requests the language in paragraph IV.A.1 be changed to read 'Within 90 days following written notification that EPA has authorized the discharge...'

   **Response:** EPA agrees with the commentor. It was not EPA's intent to require a company to develop a QAP prior to permit coverage. EPA has incorporated the commentors requested change into the permit.

2. **Comment:** Several commentors requested the removal of the requirement to address internal and ambient monitoring in the QAP since these activities are not required by the permit.

   **Response:** EPA agrees with this comment and has changed this requirement to require the QAP to address only those types of monitoring activities which are required in the permit.

3. **Comment:** One commentor requested that paragraph IV.A.2.c be removed since sediment monitoring is not required by the permit.

   **Response:** EPA agrees with this comment and has removed this paragraph from the permit.

L. **Section IV.B (Best Management Practices Plan Requirements)**

1. **Comment:** One commentor requested that this section be removed from the general permit and instead offered as guidance along with the issuance of the general permit.

   **Response:** Best management practices (BMPs) are intended to complement and augment effluent limitations. BMPs are inherently pollution prevention practices and have traditionally focused on good housekeeping measures and good management techniques. The intent is to avoid contact between pollutants and water media as a result of leaks, spills, and improper waste disposal. Where BMPs or pollution prevention practices can be both environmentally beneficial as well as technically and economically feasible, EPA believes their implementation is prudent.

   EPA believes that significant opportunities exist for operators to protect the environment through implementation of BMP plan requirements. Environmental protection is inherent in the implementation of BMPs – through operational changes, reduced risk of spills, employee training, preventative maintenance, and so forth.

   EPA has the authority to include this requirement in permits. Pursuant to Section 304(e) and 402(a) of the Clean Water Act (CWA), best management practices (BMP) plans may be included as conditions in NPDES permits. Section 304(e) of the CWA authorizes the Administrator to publish regulations supplemental to effluent limitations for a class or category of point sources for toxic or hazardous pollutants under Section 307(a) or Section 311 of the CWA. Since no BMPs have been promulgated for the offshore oil and gas category under the authority of CWA 304(e), the primary authority for a BMP plan is Section 402(a).

   Section 402 of the Clean Water Act and federal regulations 40 CFR 122.44(k)(2) and (3) authorize EPA to require best management practices, or BMPs, in NPDES permits. BMPs are measures for controlling the generation of pollutants and their release to waterways. These measures are important tools for waste minimization and pollution prevention.

The statutory and regulatory basis cited above has been the basis for BMP plan requirements that have been included in many individual and general NPDES permits previously issued by Region 10. EPA also has regional and national guidance (USEPA, 1993 and 2000) regarding BMPs.

EPA believes that it is important to require facilities to prevent or mitigate water pollution (i.e., permit requirement) rather than make it an option (i.e., guidance). History has shown that more often than not, facilities will not take the necessary steps to prevent or mitigate water pollution when it is given as an option. It is EPA Region 10 policy to require BMP plans in an NPDES permit as an enforceable condition of the permit. A violation of the BMP plan is, therefore, a violation of the permit. There is no compelling reason why permittees under this permit should not be subject to an enforceable BMP plan as are other NPDES permittees in Region 10. This requirement will be retained in the permit.

2. **Comment:** One commentor stated that the Best Management Practices Plan Section IV.B.4 contains prescriptive requirements which have not undergone necessary public review and are not appropriate for an NPDES permit.

   **Response:** The public was afforded review of these requirements under the public comment period for this permit. EPA believes that these components of a BMP plan are necessary for an effective BMP plan.

3. **Comment:** One commentor requested deleting paragraph IV.B.4.e(5) stating that there may not be a crude oil processing system on all vessel types and as long as rainwater is meeting discharge limitations, it should be acceptable to discharge.

   **Response:** While EPA agrees that there may not be a crude oil processing system on all vessel types, the permittee should minimize all oil leaks and prevent leaks from being discharged. Therefore, EPA has combined requirements in paragraphs IV.B.4.e(4) and (5) and removed the requirement to segregate and direct leakage to the crude oil processing system.

4. **Comment:** One commentor stated that as long as the mud/cuttings are passing the toxicity test, the permittee should be allowed to use standard pipe dope. The commentor requested that paragraph IV.B.4.e(7) be reworded to ‘The permittee should consider substituting standard drill pipe threading compound with ‘toxic metals free’ pipe dope.’

**Response:** EPA agrees with this comment and has changed this requirement [now paragraph IV.B.4.e(6)] to be implemented when possible.

5. **Comment:** One commentor stated that as long as the mud/cuttings are passing the toxicity test, the permittee should be allowed to use the approved mud systems that are included in the Drilling Fluid Plan. The commentor requested that paragraph IV.B.4.e(10) be removed from the permit.

**Response:** While EPA agrees with the commentor, the permittee should reduce the use and discharge of toxic products where possible. EPA has changed this requirement [now paragraph IV.B.4.e(9)] to be implemented when possible.

6. **Comment:** One commentor stated that it is not practical to have two separator systems for washdown and rainwater and separating contaminated rainwater from non-contaminated rainwater would require an additional two collection systems. The commentor requested that paragraphs IV.B.4.e(11), (12), (13) and (14) either be removed from the permit or reworded to address this issue.

**Response:** EPA agrees with the commentor and has removed these requirements from the permit.

M. **Section VI.G (Inspection and Entry)**

**Comment:** The MMS requests that the inspection authority for permitted operations occurring on the OCS be recognized within this section in accordance with the May 31, 1984 Memorandum of Understanding between the EPA and Department of the Interior.

**Response:** As stated in a letter dated December 4, 2003, from Anita Frankel, Manager of the Alaska Oil & Gas Sector, EPA Region 10 to John Goll, Regional Director, MMS Alaska Region, EPA believes that the May 31, 1984, MOU is no longer in effect. Should MMS and EPA enter into a new agreement, the current language of the permit would allow MMS employees to conduct inspections for EPA.

N. **Section VII (Definitions)**

1. **Comment:** One commentor stated that the elimination of a definition of "End of Well" makes compliance with reporting deadlines more difficult.

The commentor recommended the following definition: "After the vessel has been removed from the location and a sea floor bottom survey has been completed."

**Response:** EPA did not eliminate a definition of "End of Well" because there was no definition in the current permit. However, EPA agrees with the commentors definition and has included it in the permit, except that "vessel" has been replaced with "exploratory facility" to include all types of exploratory facilities that may be covered under this general permit.

2. **Comment:** One commentor requested additional clarification on M9IM/M10 facility classifications. Issues of concern include how often the agency expects the operator to evaluate population levels and associated facility classification. The commentor indicated that it may be beneficial to refine the definitions by stating how the facility classification should be determined (i.e., a one-time only determination based on permanent staffing levels or by average persons onboard daily during a given month) and further clarify whether this is intended to be overnight residents or to include day guests as well.

**Response:** These facility classifications and the definitions have been removed from the permit since the sanitary discharge requirements have been made the same for all facilities, with the exception of total residual chlorine monitoring which is not required for facilities serving fewer than 10 people (e.g., M9IM) in federal waters. The population level for 'facilities serving fewer than 10 people' is associated with permanent staff within a given month (those that reside at the facility for the majority of the month) and does not include guests that stay for a short duration (e.g., less than a few days).

O. **General Comments**

1. **Comment:** One commentor was concerned about the negative effects of discharges of toxic substances to Arctic coastal and marine ecosystems of national significance.

**Response:** EPA has evaluated the effects of the discharges to Arctic coastal and marine ecosystems in the Ocean Discharge Criteria Evaluation (USEPA, 2004) as required under 40 CFR § 125 Subpart M. This evaluation requires EPA to determine whether a discharge will cause unreasonable degradation of the marine environment. EPA has made that evaluation and has concluded that the discharges authorized by this permit would not result in unreasonable degradation to the environment.

2. **Comment:** Several commentors requested that EPA provide information regarding discharges that occurred under the current permit to provide the extent and geographic scope of exploratory drilling covered by the current permit. They requested that this information include violation and enforcement actions.

**Response:** There are currently five facilities that are authorized under this general permit: BP Exploration (Alaska) Inc., Liberty #1 (AKG284201); Fairweather E&P Services Inc., Arco Warthog No. 1 Well (AKG284202); Doyon Drilling Inc., Kalubik #2 (AKG284203); Conoco-Phillips, Pike Exploration #1 (AKG284204); and En Cana Oil & Gas (USA) Inc., McCovey Exploration Well (AKG284205). The only facilities that have discharged under the current permit are BP Liberty #1 (AKG284201), Fairweather Arco Warthog No. 1 (AKG284202) and En Cana McCovey (AKG284205).

According to EPA's records:

- **BP (AKG284201)** only discharged in February of 1997. They reported that they discharged 11,399 bbls muds and cuttings (discharge 001), 4,029 gpd sanitary and domestic wastes (discharges 003 and 004), and 260 bbls (110 cement and 150 rinsate) excess cement slurry (discharge 012). There were no violations of effluent limitations.

- **Fairweather (AKG284202)** discharged in November and December of 1997. In November 1997, they reported that they discharged at 70° 02' 40" N latitude 144° 55' 35" W longitude 7212 bbls drilling fluids and 1197 bbls drilling cuttings (discharge 001), 0.000517 mgd sanitary waste (discharge 003), 0.00518 mgd domestic waste (discharge 004), 0.0126 mgd desalination unit waste (discharge 005), 0.0000062 mgd boiler blowdown (discharge 007), 0.20238 mgd non-contact cooling water (discharge 009), 0.00027 mgd uncontaminated bilge water (discharge 011), and 0.0002 mgd excess cement slurry (discharge 012). There were no violations of effluent limitations.

  In December 1997, they reported that they discharged at 70° 02' 40" N latitude 144° 55' 35" W longitude 1197 bbls drilling fluids and no drilling cuttings (discharge 001), 0.000565 mgd sanitary waste (discharge 003), 0.005793 mgd domestic waste (discharge

004), 0.007275 mgd desalination unit waste (discharge 005), 0.000007 mgd boiler blowdown waste (discharge 007), 0.209435 mgd non-contact cooling water (discharge 009), and 0.000043 mgd excess cement slurry (discharge 012). There were no violations of effluent limitations.

- **En Cana (AKG284205)** discharged in October, November and December of 2002, and February, March, July and August of 2003. In October 2002, they reported that they discharged 1,633 gpd sanitary waste (discharge 003), 1,663 gpd domestic waste (discharge 004), 31,518 gpd desalination unit waste (discharge 005), and 47 gpd boiler blowdown (discharge 007). Samples taken on October 22 and October 29 violated the effluent limitations for BOD and TSS in the sanitary waste stream. No enforcement actions were taken because the facility identified and corrected the problem and instituted new protocols to prevent further violations.

  In November 2003, they reported that they discharged 213 gpd deck drainage (discharge 002), 2,419 gpd sanitary waste (discharge 003), 2,419 gpd domestic waste (discharge 004), 36,730 gpd desalination unit waste (discharge 005), 586 gpd boiler blowdown (discharge 007), 360 gpd fire control system test water (discharge 008), 40 gpd uncontaminated ballast water (discharge 010), and 0.0940 mgd mud, cuttings, cement at seafloor (discharge 013). Samples taken on November 4, 12 and 18, violated the effluent limitations for BOD and TSS in the sanitary waste stream. No enforcement actions were taken because the facility was working with the manufacturer of the sanitary treatment unit and modifications were made to the unit to increase treatment capabilities.

  In December 2003, they reported that they discharged 6,607 bbls drilling mud and 1,650 bbls cuttings (discharge 001), 75,061 gpd deck drainage (discharge 002), 2,500 gpd sanitary waste (discharge 003), 2,500 gpd domestic waste (discharge 004), 0.0080320 mgd desalination unit waste (discharge 005), 0.00004 mgd boiler blowdown (discharge 007), and 0.009129 mgd excess cement slurry (discharge 012). Samples taken on December 31, violated effluent limitations for BOD and TSS in the sanitary waste stream. No enforcement actions were taken.

  In February 2003, they reported that they discharged 1,086 bbls drilling mud and no cuttings (discharge 001), 78,193 gpd deck

drainage (discharge 002), 75,150 gpd sanitary waste (discharge 003), 75,150 gpd domestic waste (discharge 004), 0.006315 mgd desalination unit waste (discharge 005), 0.000027 mgd boiler blowdown (discharge 007), 0.00185714 mgd uncontaminated ballast water (discharge 010), and 0.0063 mgd excess cement slurry (discharge 012). Samples taken on February 3, 11, 18, and 26 violated effluent limitations for BOD and TSS in the sanitary waste stream. No enforcement actions were taken.

In March 2003, they reported that they discharged 75,000 gpd deck drainage (discharge 002), 75,000 gpd sanitary waste (discharge 003), 75,000 gpd domestic waste (discharge 004), 0.0056 mgd desalination unit waste (discharge 005), 0.000038 mgd boiler blowdown (discharge 007), 0.000043 mgd fire control system test water (discharge 008), and 0.113 mgd uncontaminated ballast water (discharge 010). Samples taken on March 11 and 19 violated TSS effluent limitations in the sanitary waste stream. No enforcement actions were taken.

In July 2003, they reported that they discharged 12 gpd deck drainage (discharge 002), 975 gpd sanitary waste (discharge 003), 975 gpd domestic waste (discharge 004), 0.14 mgd desalination unit waste (discharge 005), 0.00037 mgd fire control system test water (discharge 008), and 0.000195 mgd bilge water (discharge 011). There were no violations of effluent limitations.

In August 2003, they reported that they discharged 868 gpd sanitary waste (discharge 003), 868 gpd domestic waste (discharge 004), 0.000174 mgd desalination unit waste (discharge 005), and 2.254 mgd uncontaminated ballast water (discharge 010). There were no violations of effluent limitations.

3. **Comment:** Several commentors stated that they do not understand why EPA has not undertaken any environmental review of the Permit pursuant to the National Environmental Policy Act (NEPA). Once comment cited that 33 U.S.C. § 1371(c) exempts the issuance of permits from NEPA review, unless they are 'new sources.' 'New source' is defined as 'any source the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under this section which will be applicable to such source...' [33 U.S.C. § 1316(a)(2)] EPA seems to have taken a very constrained reading of the exemption because the permit does allow for new discharges, dischargers, and facilities which would require NEPA review.

**Response:** The National Environmental Policy Act (NEPA) only applies to 'new sources.' New discharges are not necessarily new sources. The definition of 'new source' as it applies to the Offshore Guidelines was discussed at length in EPA's 1985 proposal, 50 FR 34617-34619, Aug. 26, 1985. As discussed in that proposal, provisions in the NPDES regulations define new source (40 CFR 122.2) and establish criteria for a new souce determination (40 CFR 122.29(b)). In 1985, EPA proposed special definitions which are consistent with 40 CFR 122.29 and which provide that 40 CFR 122.2 and 122.29(b) shall apply "except as otherwise provided in an applicable new source performance standard." (See 49 FR 38046, Sept. 26, 1984.)

The Offshore Guidelines apply to all mobile and fixed drilling (exploratory and development) and production operations. In 1985, EPA addressed the question of which of these facilities are new source and which are existing sources under these guidelines.

As discussed in 1985, Section 306(a)(2) of the Clean Water Act (CWA) defines "new source" to mean "any new source, construction of which is commenced after publication of the proposed NSPS if such standards are promulgated consistent with Section 306." The CWA defines "source" to mean any "facility...from which there is or may be a discharge of pollutants" and "construction" to mean "any placement, assembly, or installation of facilities or equipment...at the premises where such equipment will be used."

The regulations implementing this provision state, in part:

> "New Source means any building structure, facility, or installation from which there is or may be a 'discharge of pollutants,' the construction of which is commenced:
> (a) After promulgation of standards of performance under section 306 of the Act which are applicable to such source, or
> (b) After proposal of standards of performance in accordance with section 306 of the Act which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal" 40 CFR § 122.2.
>
> "(4) Construction of a new source as defined under § 122.2 has commenced if the owner or operator has:
> (i) Begun, or caused to begin as part of a continuous on-site construction program;

> (A) Any placement assembly, or installation of facilities or equipment; or
> (B) Significant site preparation work including clearing, excavation or removal of existing buildings, structures or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
> (ii) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility engineering and design studies do not constitute a contractual obligation under the paragraph." 40 CFR § 122.29(b)(4) (emphasis added)

In 1985, EPA proposed to define, for purposes of the Offshore Guidelines, "significant site preparation work" as "the process of clearing and preparing an area of the ocean floor for the purposes of constructing or placing a development or production facility on or over the site." (emphasis added). Thus, development and production wells would be new sources under the Offshore Guidelines. Further, with regard to 40 CFR 122.29(b)(4)(ii), EPA stated that although it was not "proposing a special definition of this provision believing it should appropriately be a decision for the permit writer," EPA suggested that the definition of new source include development or production sites even if the discharger entered into a contract for purchase of facilities or equipment prior to publication, if no specific site was specified in the contract. Conversely, EPA suggested that the definition of new source exclude development or production sites if the discharger entered into a contract prior to publication and a specific site was specified in the contract.

As a consequence of the proposed definition of "significant site preparation work," if "clearing or preparation of an area for development or production has occurred at a site prior to the publication of the [New Source Performance Standards] NSPS, then subsequent development and production activities at the site would not be considered a new source" (50 FR 34618). Also, exploration activities at a site would not be considered significant site preparation work, and therefore exploratory wells would not be new sources (50 FR 34618). The purposes of these distinctions were to "grandfather" as an existing source, any source if "significant site preparation work...evidencing an intent to establish full scale operations at a site, had been performed prior to NSPS becoming effective" (50 FR 34618). At the same time, if only exploratory drilling had occurred prior

to NSPS becoming effective, then subsequent drilling and production wells would be considered to be new sources.

EPA also proposed a special definition for "site" in the phrase significant site preparation work used in 40 CFR 122.2 and 40 CFR 122.29(b). "Site" is defined in 40 CFR 122.2 as "the land or water area where any 'facility or activity' is physically located or conducted, including adjacent land used in connection with the facility or activity." EPA proposed that the term "water area" mean the "specific geographical location where the exploration, development, or production activity is conducted, including the water column and ocean floor beneath such activities. Thus, if a new platform is built at or moved from a different location, it will be considered a new source when placed at the new site where its oil and gas activities take place. Even if the platform is placed adjacent to an existing platform, the new platform will still be considered a 'new source,' occupying a new 'water area' and therefore a new site" (50 FR 34618)

As a consequence of these distinctions, exploratory facilities would always be existing sources. Production and development facilities where significant site preparation has occurred prior to the effective date of the Offshore Guidelines would also be existing sources. These same production and development facilities, however, would become "new sources" under the proposed regulatory definition if they moved to a new water area to commence production or development activities. The proposed definition, however, presents a problem because even though these facilities would be "new sources" subject to NSPS, they could not be covered by an NPDES permit in the period immediately following the issuance of these regulations. This is because no existing general or individual permits could have included NSPS until NSPS were promulgated. To resolve this problem the final rule temporarily excluded from the definition of "new source" those facilities that as of the effective date of the Offshore Guidelines are subject to an existing general permit pending EPA's issuance of a new source NPDES general permit. EPA believes this approach is reasonable because when Congress enacted Section 305 of the CWA it did not specifically address mobile activities of the sort common in this industry, as distinguished from activities at stationary facilities on land that had not yet been constructed prior to the effective date of applicable NSPS. Moreover, EPA believes that Congress did not intend that the promulgation of NSPS would result in stopping all oil and gas activities which would have been authorized under existing NPDES permits as soon as the NSPS are promulgated. Now that NSPS are promulgated, EPA intends to apply them to appropriate facilities (i.e.,

those where there is significant site preparation work for development or production after promulgation of NSPS) within the Offshore Subcategory.

Based on the above discussion, EPA concludes that NEPA review is not required for exploratory facilities, which are authorized by this permit, because they are "existing facilities" not "new sources" under federal regulations. However, the Minerals Management Service does and Environmental Impact Statement under NEPA for all lease sales, which means that NEPA review is done for exploratory facilities by another agency (i.e., MMS) prior to authorization of this permit.

4. **Comment:** One commentor stated that exploratory drilling structures that could be used in the area covered by the proposed general permit include bottom-founded structures such as the Steel Drilling Caisson (SDC) and associated steel mat, which mates to the SDC. These types of structures may remain on location long after completion of exploratory drilling operations with some minor discharges (sanitary and domestic wastes). Demobilization and related ballast water discharges could also occur some time after completion of the exploration activity. The commentor requested that either the permit or the supporting preamble clarify whether or not the general permit will enable applicants to cover discharges of this nature.

**Response:** The permit will enable applicants to cover the discharges described by the commentor. This permit has changed to have the applicant apply for each of those discharges (001 through 014) that they will be discharging. As a permittee ceases operations, they are required to send in a termination notification under the permit. If a permittee ceases part of their operations, e.g. drilling operations, and had the situation presented by the commentor, then the permittee would send in a termination notification for drilling associated discharges, e.g. drilling fluids and cuttings, but retain coverage for other discharges, e.g. sanitary and domestic waste. The reason EPA is doing this is to better track which discharges and the quantity of pollutants permittees are discharging.

5. **Comment:** One commentor requested that EPA perform an anti-degradation analysis under 18 AAC 70.015 because the draft permit proposes to remove environmental standards and monitoring requirements, reduce the area of prohibited discharges in waters inside the 5 meter isobath and for the Steffansson Sound Boulder Patch, and to diminish seasonal restrictions on discharges for sensitive areas within 1000 meters of river mouths or deltas.

**Response:** As stated above, the language in the permit for areas of prohibited discharges is essentially the same as that in the 1995 general permit. Some of the requirements were inadvertently omitted in the draft permit. However, EPA has corrected this in the final permit. EPA has not removed any environmental standards or monitoring requirements.

6. **Comment:** One commentor stated that this permit must undergo a review for consistency with the Alaska Coastal Management Program.

**Response:** This permit has undergone a review for consistency with the Alaska Coastal Management Program. On May 3, 2004, EPA sent an evaluation of the proposed action to the Alaska Department of Natural Resources requesting their concurrence. The state of Alaska Department of Environmental Conservation certified under Section 401 of the Clean Water Act that the requirements of this permit comply with the Alaska Coastal Management Program.

7. **Comment:** Several commentors stated that there should be no lowering of discharge standards.

**Response:** This comment is difficult to respond to without specifically referencing the condition in the permit in which the commentors are referring. The only permit condition which was less stringent in the draft permit from the current permit was the sanitary discharge requirements in Federal waters, which has been changed in the final permit to be at least as stringent as the current permit.

8. **Comment:** One commentor stated that they are concerned that the shallow hazards surveys [from environmental monitoring requirements] are inadequate in areas of proposed discharges.

**Response:** EPA has not received any environmental monitoring plans under this general permit. EPA cannot respond to the adequacy or inadequacy of any shallow hazard surveys because we have not seen any.