

Alaska Oil and Gas Association



121 W. Fireweed Lane, Suite 207
Anchorage, Alaska 99503-2035
Phone: (907) 272-1481 Fax: (907) 279-8114
Email: kindred@aoga.org
Joshua M. Kindred, Regulatory & Legal Affairs Manager

February 19, 2014

Chris Foley
Alaska Department of Environmental Conservation
Division of Water, Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

Via U.S. Mail and Email to chris.foley@alaska.gov

**Re: Comments on the Draft Alaska Pollutant Discharge Elimination System (APDES)
Geotechnical General Permit for the Beaufort and Chukchi Seas**

Dear Mr. Foley;

Thank you for the opportunity to comment on the draft NPDES General Permit for Geotechnical Activities in the Beaufort and Chukchi Seas ("Draft Geotechnical Permit"). The 15 members of the Alaska Oil and Gas Association (AOGA) account for the majority of oil and gas exploration, development, production, transportation, and refining activities onshore and offshore in Alaska.

During the course of our review of the Draft Geotechnical Permit, AOGA identified several key issues that we ask the Alaska Department of Environmental Conservation (ADEC) to address in advance of the finalization of this document. Ultimately, as currently constructed, the Draft Geotechnical Permit will serve to discourage efficient and productive geotechnical work in Alaskan waters of the Arctic Ocean. As reiterated several times below, the consistent issue with the Draft Geotechnical Permit is that it appears to be directed at impacts associated with exploratory drilling, as opposed to geotechnical boring. As a result, many of the permit requirements do not correspond with the manner and volume of discharges associated with geotechnical boring. AOGA has addressed below its concerns regarding the problematic provisions in the Draft Geotechnical Permit.

I. Introduction

The regulation of geotechnical activities in the Arctic Ocean is not only a matter of great importance to AOGA members, but can have a profound impact on future development and production. Thus, it is crucial that operators receive prompt and reasonable permits to allow for geotechnical activities in the federal and state waters in the Beaufort and Chukchi Seas. These

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

permits provide necessary coverage to operators seeking to survey subsurface conditions along potential pipeline corridors and at potential production facility locations. Delays in the release of a reasoned and scientifically-based permit for geotechnical discharges in the Beaufort and Chukchi Seas will result in corresponding delay in production and development. Those delays will cause negative commercial implications for industry, and, perhaps more importantly, will result in foregone tax revenue and opportunities for Alaskans. Furthermore, the unfortunate postponements of, or decreases in, production may result in limiting the availability of future supply to the Trans-Alaska Pipeline System, which is paramount to continued viability of the pipeline.

The Draft Geotechnical Permit, if implemented as currently constructed, will unnecessarily increase the overall environmental impact of geotechnical programs in State waters. For example, the Draft Geotechnical permit will necessitate that permitted geotechnical programs include both a science vessel and a helicopter. The Draft Geotechnical Permit will also necessitate that a geotechnical operator substantially increase the amount of time it spends at a given site, which will, in turn, result in an increase of air emissions, subsea ensonification, and the volume of general vessel wastestreams discharged at a site. Without needed modifications, the net environmental impact of the Draft Geotechnical Permit *provisions* will arguably be greater than the environmental impacts of the *actual permitted discharges*.

AOGA submits that the fundamental issues with the Draft Geotechnical Permit relate to a lack of appreciation for the significant differences between exploration drilling and geotechnical boring. To elaborate, exploration discharges and geotechnical discharges differ both in volume and type. Specifically, a geotechnical boring will typically result in approximately one percent of the discharge produced during the drilling of an exploration well. Furthermore, exploration drilling is conducted to depths of approximately 10,000 feet, while geotechnical boring will not exceed 499 feet. Finally, a geotechnical boring takes between a few hours to three days at a site to complete. The substantial differences between exploration drilling and geotechnical boring should translate to significant differences in the manner in which the discharges associated with these activities are regulated. Unfortunately, the Draft Geotechnical Permit does not account for these differences and is therefore not scaled to the type of discharges projected to occur in the region during the five-year term of the permit.

Not surprisingly, the Ocean Discharge Criteria Evaluation (ODCE) that the State prepared to evaluate the impacts of the permitted discharges found that geotechnical activity will not result in “an unreasonable degradation of the marine environment.” However, the ODCE finding and its scientific underpinnings, are not reflected in several significant provisions in the Draft Geotechnical Permit. As articulated in greater detail below, AOGA asks that ADEC revise the Draft Geotechnical Permit in order that it comport with existing science and reflect the limited extent and magnitude of impacts from geotechnical activities.

II. Environmental Monitoring Program Requirements Should not be Included in the Draft Geotechnical Permit

AOGA asks that the ADEC remove the Environmental Monitoring Program (EMP) requirement from the Geotechnical General Permit. The inclusion of the EMP is not appropriate for geotechnical discharges, nor is it supported by the ODCE. The ODCE finding of “no unreasonable

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

degradation to the marine environment” is not dependent on the inclusion of the EMP in the Geotechnical GP. Traditionally, the EPA will include an EMP requirement in a NPDES permit if there is a lack of scientific data supporting no impact to the environment, or public consensus regarding the environmental impacts from the permitted activities. In those situations, an EMP may serve to confirm scientific knowledge about an activity, thereby increasing agency and public confidence in the safety of the permitted activity. However, that is not the case here, because there are no scientific or public disputes regarding the nature of geotechnical discharges. The EMP sets out to answer questions that are not germane to geotechnical activities or have already been answered by existing studies and other permit provisions. Further, as drafted, the EMP requirement will increase the environmental impacts associated with geotechnical discharges, by requiring that an operator’s geotechnical program include a science vessel and helicopter, and by requiring that an operator extend the amount of time it spends both at an individual site and in the overall coverage area. For these reasons, as further detailed below, AOGA requests that the EMP requirement be removed from the final Geotechnical Permit.

A. Geotechnical Activities will not Result in Exploration-Drilling Level Impacts

AOGA is concerned that the ADEC felt it necessary to include the EMP requirement to correspond with the Environmental Protection Agency’s (EPA) Draft Geotechnical Permit for the Beaufort and Chukchi Seas. As stated previously, the significant distinctions between exploration drilling and geotechnical boring should be represented in the respective permit requirements. The level of activity associated with geotechnical boring does not warrant the inclusion of an EMP in the Draft Geotechnical Permit; the Draft Geotechnical Permit requires monitoring that is not justified by the limited potential impacts of geotechnical discharges. For example, the Draft Geotechnical Permit EMP requires a permittee to conduct a “seafloor survey” and “map the areal extent and depth/thickness of solids deposition caused by Discharges 001.”¹ Geotechnical borings are not anticipated to result in a measurable deposition on the seafloor; this requirement was developed for exploration drilling discharges where discharge volumes are much greater and discharged at the surface creating an environment that is more conducive to dispersion. This conclusion is supported by the ODCE, which makes reference to the “limited areal extent of potential impacts” from geotechnical discharges.² The Draft Geotechnical Permit EMP also requires that a permittee “continuously monitor for turbidity in the plume from [water-based drilling fluids and cuttings].”³ Again, this requirement was designed for exploration drilling, not geotechnical boring where drilling fluids and cuttings will be discharged at the seafloor and therefore will not result in a “plume” in the water column.

B. The EMP is Not Supported by the Ten Criteria Considered in the ODCE

The EMP objectives and requirements in the Draft Geotechnical Permit are not scientifically supported. The ODCE conclusions do not warrant inclusion of an EMP in the Draft Geotechnical Permit and none of the ten Ocean Discharge Criteria (ODC) evaluated in the ODCE, either individually, or taken as a whole, justify the inclusion of the EMP requirements. Review of those

¹ APDES Geotechnical General Permit, Section 3.3.4.3.1.

² EPA ODCE, Section 6.3.3.

³ APDES Geotechnical General Permit, Section 3.3.4.2.1.

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas

February 19, 2014

individual ODC criterion bolsters the argument for the removal of the EMP requirement from the Draft Geotechnical Permit. AOGA would like to address each of those criterion, in turn.

Criterion 1 assessed the likelihood of potential chemical bioaccumulation and persistence in the environment. The ODCE concluded that “these studies demonstrate that trace metals are generally not bioavailable to marine organisms, and therefore, not accessible for bioaccumulation. Furthermore, the studies suggest that concentrations of dissolved trace metal concentrations in a mixture of barite and seawater are close to natural coastal concentrations.”⁴ “Based on these results, DEC concludes while sediment concentrations of some constituents will be elevated within the immediate vicinity of the drill sites as a result of the discharges of drilling fluids and drill cuttings, they are unlikely to be persistent in the water body”⁵ Thus, criterion 1 findings do not support the inclusion of an EMP in addition to the discharge-specific effluent limitation and monitoring requirements in the permit.

Criterion 2 evaluated the potential transport of discharges into the local environment. In doing so, the ODCE noted that “large-scale physical transport of drilling fluids and drill cuttings discharges is not anticipated according to the conditions of the receiving environment as well as the discharge location at the sea floor”⁶ and that “DEC has determined that the deposition of drilling-related materials on the seafloor associated with drilling fluids and drill cuttings discharges from short-term geotechnical investigations will have little effect on the environment.”⁷ As it relates to chemical transport, the DEC concluded that “the discharges from geotechnical investigation activities are short term and intermittent, and the majority of dissolved trace metals are expected to adsorb to fine sediment particles, and settle on the seafloor in the immediate vicinity point of discharge”⁸

Criterion 3 evaluated the vulnerability of biological communities as a result of the proposed geotechnical activities. The ODCE concluded that the “relatively small volumes and localized nature of drill cuttings and drilling fluids generated ... and the requirements in place that govern and regulate the amounts and type of discharges permitted, the limited extent of these impacts..., the transient use of the area by the species, [and] the availability of benthic and pelagic food sources [are] outside of potentially affected areas.”⁹ As a result, the ODCE found that “[p]ermitted discharges from geotechnical investigations will not cause unreasonable degradation of the marine environment as a result of impacts to threatened or endangered species or their habitats.”¹⁰ Criterion 3 evaluation does not justify inclusion of the EMP in the Draft Geotechnical Permit.

Criterion 4 evaluated the importance of the receiving water to the surrounding biological community. The ODCE concluded that “[o]verall, sensitive areas and biological communities are

⁴ ODCE, p. 89.

⁵ ODCE, p. 90.

⁶ ODCE, p. 94.

⁷ Id.

⁸ ODCE, p. 96.

⁹ ODCE, p. 101.

¹⁰ ODCE, p. 101-02.

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas

February 19, 2014

generally associated with shallow waters in the nearshore environment. The intermittent nature and limited extent of discharges from geotechnical investigation activities, combined with the areal and depth restrictions established in the permit, will prevent unreasonable degradation of these areas and communities”¹¹ In other words, the seasonal and area-restriction time window requirements are more than sufficient to limit and/or prohibit any adverse effects to the marine organisms as a result of geotechnical activities. The conclusions of the ODCE for Criterion 4 do not justify nor necessitate the inclusion of an EMP in the Draft Geotechnical Permit.

Criterion 5 evaluated the existence of special aquatic sites. The ODCE concludes that, “[b]ased on the analysis of criteria 1, 2, and 3, the Alaska Maritime National Wildlife Refuge would not be affected by authorized discharges.”¹²

Criterion 6 evaluated the likelihood of potential impacts on human health as a result of the proposed geotechnical activities. The ODCE concluded that “[b]ased on the requirements and prohibitions established in the general permit and analysis of bioaccumulation and pollutant transport, discharges will not result in human health impacts from direct and indirect exposure pathways.”¹³ Although the DEC indicates that it “will review the environmental monitoring data conducted at site-specific drill sites to inform ongoing and future permit decisions,”¹⁴ the limited duration of the activities, the limited volume of potential discharges, the seasonal- and area-restriction time window requirements for conducting activities, and the information ODCE has already provided should effectively allow the DEC to make informed permitting decisions in the future. Bioaccumulation potential and persistence of chemicals in the environment drive the likelihood of potential impacts on human health. However, the EMP is unnecessary because the ODCE, under criterion 1, concluded that potential discharges are not bioaccumulative or persistent. Furthermore, under criterion 2, the ODCE concluded that the discharges are limited in potential for transport. Moreover, the effluent limitations and monitoring requirements for the discharges are sufficient to identify what potential chemicals (included on the OSPAR potential for little to no risk to the environment - PLONOR list) may be entering the environment as a result of the activities and at concentrations below the permit limitations.

Criterion 7 evaluated the likelihood for adverse impact on existing or potential recreational and commercial fishing as a result of the proposed geotechnical activities, and concluded that “[b]ecause the discharges would meet water quality objectives, and with the findings presented for criteria 1 through 4, unreasonable degradation of recreational, commercial, or subsistence fishing resulting from the discharges will not occur if the terms of the permit are followed.”¹⁵ There is no justification for the EMP requirements backed by criterion 7 evaluation because the questions the EMP poses have already been answered by the information the ODCE has provided, as well as by the effluent limitations and monitoring requirements in the Draft Geotechnical Permit.

¹¹ ODCE, p. 105.

¹² Id.

¹³ ODCE, p. 110.

¹⁴ Id.

¹⁵ ODCE, p. 111.

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

Criterion 8 evaluated any applicable requirements associated with the State Coastal Zone Management Plan. As stated by the DEC, the State of Alaska does not have such a management plan currently in place and therefore this criterion is not relevant to the EMP (or any other) permit requirements.¹⁶

Criterion 9 evaluated additional factors relating to potential effects of discharge. The ODCE noted that the DEC “carefully considered the potential impacts related to the Geotech GP’s authorized discharges, especially the potential for effects on communities and residents that engage in subsistence activities [, and] determined that, with respect to the discharges, there will not be adverse human health or environmental effects on residents in the North Slope and near the Area of Coverage.”¹⁷ Based on that conclusion, there is no justification for the EMP requirements, and effluent limitations and monitoring requirements are sufficient to evaluate any unanticipated potential for adverse effects.

Criterion 10 evaluated the potential effect of the geotechnical activities relative to Marine Water Quality Criteria pursuant to CWA Section 304(a)(1). The ODCE noted that “[i]n accordance with the requirements of the CWA, DEC has identified no marine waters within the Area of Coverage that are water quality limited because of pollutants associated with discharges authorized under the GP.”¹⁸ Therefore, criterion 10 fails to provide any justification for inclusion of the EMP in the Draft Geotechnical Permit.

C. The EMP Includes Requirements to Collect Data that is Already Being Captured through Other Permit Requirements and Existing and Ongoing Studies

Not only does the proposed EMP lack any scientific justification, it also undertakes to collect information that is either contemplated by other permit requirements or is the subject of existing or ongoing studies in the region.

With respect to the metals analysis requirement in the EMP, Discharge 001—which would be the likely source of any metals contaminants—is already subjected to toxicity and metals testing by permit provisions other than those in the EMP. As set forth in Table 2 of the Draft Geotechnical Permit, Discharge 001 will be subjected to SPP testing and testing for other metals. These testing requirements are sufficient to characterize the toxicological parameters of Discharge 001. Furthermore, application of the EPA’s Effluent Limitation Guidelines (ELGs) will indirectly control the level of toxic pollutant metals introduced to the environment. As indicated in the ODCE, the ADEC understands that the Draft Geotechnical Permit:

also establishes the ELG limits for mercury and cadmium concentrations (1 mg/kg and 3 mg/kg, respectively) in stock barite. EPA has previously determined that the

¹⁶ See ODCE, p. 112, providing that “[t]he Alaska Coastal Management Program expired on June 30, 2011, by operation of Alaska Statutes 44.66.020 and 44.66.030. There is not currently an approved Coastal Zone Management Plan in Alaska.”

¹⁷ ODCE, p. 112.

¹⁸ ODCE, p. 116.

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

limitation indirectly controls the levels of toxic pollutant metals because barite that meets the mercury and cadmium limits is also likely to have reduced concentrations of other metals (EPA 1993). Additional permit requirements include monitoring for TAH, TAqH, and pH. The Geotech GP also establishes discharge rates on the basis of depths of discharge to ensure that unreasonable degradation will not occur.¹⁹

The purpose of the ELGs is to provide protection of the marine environment. The fact that the discharges are of an extremely transient nature and “the volumes and areal dispersion of discharges would be considerably less [than those from offshore oil and gas exploration]”²⁰ indicate that the effluent limitations and monitoring requirements as laid out in the permit in Tables 2 through 6 are more than sufficient for protection of the marine environment, in fact in some cases are overly conservative and not warranted.

Similarly, there is no rationale to support the EMP requirements for the collection at each site of data relating to “surface wind speed and direction, current speed and direction throughout the water column, water temperature, salinity, depth, and turbidity.”²¹ The collection of this basic baseline data in this type of fragmented permit-by-permit approach is not a necessary or efficient way to support future permit development. Various current and ongoing studies are developing information about the Arctic marine environment. These integrated studies are better suited to inform development of future APDES permits than an EMP requirement in the Draft Geotechnical Permit, which would collect only a fragmented data set. AOGA encourages the ADEC to adopt a more scientifically-based approach in the final permit, recognizing that both federally-funded and industry-funded programs have evaluated and will continue to evaluate the marine environment of the Beaufort and Chukchi Seas. These programs include:

- Chukchi Sea Offshore Monitoring in the Drilling Area (COMIDA) studies funded by BOEM (2009, 2010, 2012);
- Chukchi Sea Environmental Studies Program (CSESP) jointly-funded by Conoco, Shell, and Statoil (2008-present, with a nearshore study in 2014);
- Arctic Nearshore Impact Monitoring in the Development Area (ANIMIDA) studies funded by BOEM (ANIMIDA (1999-2002), cANIMIDA (2004-2007), ANIMIDA III (2013-2018));
- Arctic Ecosystem Integrated Study (2012-present) funded by Department of Interior
- Alaska Monitoring and Assessment Program funded by the EPA;
- Onshore Environmental Survey Program (2012) funded by Shell;
- Nearshore Fish Assemblage Studies (2006 - present) funded by the National Oceanic and Atmospheric Administration; and
- Arctic Coastal Ecosystem Study (2010-present) funded by the North Slope Borough.

¹⁹ ODCE, p. 92.

²⁰ ODCE, p 18.

²¹ APDES Draft Geotechnical Permit, 3.3.4.1.3.

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

There are also continuing interdisciplinary (e.g., Distributed Biological Observatory (DBO) initiative managed by NOAA) and pan-Arctic programs (e.g., Arctic Council working groups) that continue to collect, synthesize, and analyze the research and monitoring being conducted throughout the Alaskan Arctic marine region in an integrated manner. The abundance of baseline data and monitoring work should be integrated (e.g., publically-available data sharing such as that through Alaska Ocean Observing System, AOOS), rather than collected in the fragmented manner proposed in the Draft Geotechnical Permit.

D. The EMP Would Result in an Increased Environmental Impact

Compliance with the EMP requirements in the Draft Geotechnical Permit would increase the environmental impact of a geotechnical program. These requirements would necessitate that a geotechnical program include, in addition to a geotechnical vessel, a science vessel and a helicopter. These requirements will also substantially increase the duration that a geotechnical vessel (and now its supporting science vessel) will spend at any given site. This will result in increased air emissions and subsea ensonification at the site, as well as increased volumes of general vessel wastestreams that must be disposed of at the site. Additionally, the EMP requirements will substantially lengthen the amount of time that it takes to execute a geotechnical program. Given that there are little, if any, benefits of the EMP requirements, there is no justification for including these requirements in the final Geotechnical Permit and increasing the environmental footprint of a geotechnical program.

III. The ADEC Should Remove the Effluent Toxicity Characterization Requirement from the Final Permit

AOGA asks that the ADEC remove the Effluent Toxicity Characterization requirement from the final Geotechnical General Permit, and that the ADEC regulate general vessel discharges in a manner that is consistent with how those same discharges are treated in the Vessel General Permit (VGP).

As drafted, the State permit requires a permittee to perform Effluent Toxicity Characterization “anytime [an] individual discharge is greater than 10,000 gpd and chemical additives are used” (ADEC 2013, 2.7.1). This requirement applies to five different discharge types: Discharge 002 (deck drainage), Discharge 005 (desalination unit wastes), Discharge 007 (boiler blowdown), Discharge 008 (fire control system test water), Discharge 009 (non-contact cooling water), and Discharge 011 (bilge water) (ADEC 2013, 2.7.1). This testing must be performed a minimum of once per discharge (ADEC 2013, 2.7.2).

These toxicity characterization requirements apply only to the general vessel discharges covered under the Draft Geotechnical Permit, and do not apply to the discharges associated with geotechnical activities. Given that these discharges are unrelated to the type of work a vessel is performing, there is no justification for the ADEC to regulate these discharges in a manner that is inconsistent with other general permits applicable in the region, including the MARPOL, the VGP and the Offshore Seafood Processor’s General Permit. Nevertheless, in the Draft Geotechnical

APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

Permit, the ADEC has consistently increased the requirements for a geotechnical permittee beyond those that are required of other permittees in other permits.

This requirement for Effluent Toxicity Characterization is onerous and not commensurate with the level of discharge and potential impact. Even requiring one sample to be collected a year would require significant logistical support, risk, and cost to collect these samples and move them the thousands of miles to the closest laboratory within 36-hours. Additionally, all of the discharges with this onerous requirement are already allowed to be discharged by every other vessel under the vessel general permit where EPA has found these discharges not to pose a significant environmental risk nor does that permit require any similar testing. Although the VGP applies to when the vessel is acting as a mode of transportation, there are still instances where the vessel could be stationary for similar lengths of time as required to conduct geotech work and these onerous requirements are not required for vessels under the VGP. The requirements for “typical” vessel discharges should not become more stringent for oil and gas activities when they represent the exact same discharges that vessels operating throughout the US are allowed to discharge. In the VGP fact sheet, EPA estimated that 72,400 vessels (domestic and foreign) would be impacted by the VGP requirements. If the VGP requirements are adequate for 72,400 vessels of varying sizes (all greater than 79 feet) throughout the US then the geotechnical vessels discharging the exact same material on site for 1-3 days shouldn’t have these onerous requirements

Unlike a drilling rig, a geotechnical vessel does not remain at a site for an extended period of time. Specifically, as acknowledged in the ODCE, a geotechnical vessel permitted under the Geotechnical GP is presumed to remain at a site for 1-3 days versus the 30-45 days that a drilling rig may be discharging at a site. The duration of time a geotechnical vessel may spend on site is consistent with the time that vessels regulated under the VGP or the Offshore Seafood Processor’s General Permit may spend at a site. Therefore, general vessel discharges associated with a geotechnical vessel should be treated similarly to general vessel discharges associated with other vessels, not with a drilling rig.

IV. The ADEC Should Revise the Draft Geotechnical Permit to Reflect Foreseeable Activity Levels

AOGA suggests that the ADEC consider evaluating geotechnical activity levels in terms of linear feet of borehole drilled as opposed to the “per borehole” approach that it has taken with respect to this permit. In an average season, most operators will be unable to drill more than 1,500 to 2,000 linear feet of boreholes in the State waters. In order to conservatively estimate the total boreholes for any given year, the ADEC assumed that 50% of the boreholes would be drilled in its waters. AOGA recommends that this assumption be modified to accurately reflect foreseeable activity in the planning region. The ADEC has assumed that 50% of the boreholes projected in the coordinated industry response would be drilled in its waters; however, in its Fact Sheet, the ADEC acknowledge that “such a split is unlikely, and as a result, [it] is likely overstating both the level of activity and possible effects.”²² While AOGA appreciates that it is prudent for the ADEC to be

²² See Preliminary Fact Sheet, p. 21.

reasonably conservative in its activity level estimates, the 50% multiplier drastically overstates the boreholes that will be drilled during the life of this permit. Between limitations on available assets and the short working season, it is not foreseeable that 136 boreholes will be drilled in State waters during a single year during the life of this permit.

V. The ADEC Should Revise the SPP Toxicity Testing Requirement

AOGA asks that the SPP Toxicity Testing requirement be revised to provide that this testing shall be conducted only once per season and that it can be performed pre-season. As drafted the SPP Toxicity Testing requirement in the Geotechnical GP provides that a permittee will perform this testing of samples taken from the mud pit of a vessel.²³ This requirement should be revised because it is not feasible to analyze mud from the mud pit prior to discharge activities. A permittee's mud system can be adequately tested prior to arriving in the Arctic. The parameters that the mud system must maintain in order to ensure that the toxicity is greater than 30,000 ppm will be documented in a permittee's Drilling Fluids Plan (DFP).

Additionally, documentation during drilling activities will illustrate that the drilling fluid systems are mixed in accordance with the SPP toxicity sampling conducted prior to the season. If a mud system needs to be altered outside of the parameters analyzed in the DFP then additional testing prior to discharge is warranted. However, a permittee should not be required to test its mud system, mobilize to the Arctic, arrive on location, mix mud and then be required again to test its mud system. The requirement for on-site testing of a mud system would substantially increase the amount of time that it would take for an operator to conduct a geotechnical survey. A permittee would have to wait on site for several days before it received the results of the SPP toxicity testing and was permitted to proceed with discharging. Additionally, this requirement would necessitate that all geotechnical vessels used in the region would have to be equipped with a helideck and supported by a helicopter. These assets would be necessary so that a permittee could get their SPP samples off the vessel, to the lab, tested and tested so that they could commence drilling.

VI. Conclusion

The Draft Geotechnical Permit would result in significant and negative impacts to exploration and development in the State waters of the Beaufort and Chukchi Seas. As articulated above, the Draft Geotechnical Permit includes provisions that will lead to increase in the safety exposure, cost, and environmental impacts associated with the execution of a geotechnical program. The problematic provisions in the Draft Geotechnical Permit are unprecedented in other regions where geotechnical activities occur. Further, AOGA is unaware of any scientific support for a decision by the ADEC to regulate geotechnical discharges in the Arctic in a manner that is inconsistent with geotechnical permitting standards established in other regions. The ADEC should be cognizant of the detrimental precedent it is setting with the development of this permit. The ADEC's Draft Geotechnical Permit does not limit its coverage to oil and gas operators. It will also govern all geotechnical activities in the nearshore waters of the Beaufort and Chukchi Seas, which may include geotechnical surveys associated with the construction of a dock, port or other offshore infrastructure. Finally, it is reasonable to assume that the provisions of the final Geotechnical

²³ EPA 2013, Section 2.2.3, Table 2.

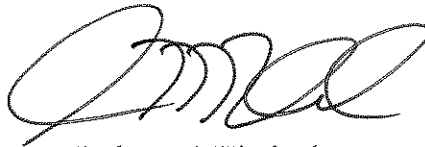
APDES Draft Preliminary General Permit for Geotechnical Facilities for Beaufort and Chukchi Seas
February 19, 2014

General Permit will serve as the blueprint for subsequent APDES permits for geotechnical discharges in the Cook Inlet.

The ADEC must revise the Draft Geotechnical Permit to ensure that its requirements are substantiated by science, within the purview of the State of Alaska to regulate under the Clean Water Act (CWA), and of a demonstrable benefit to the marine environment. AOGA requests that ADEC modify the Geotechnical General Permit in accordance with the issues presented in these comments.

Thank you again for the opportunity to comment and engage in further discourse in an attempt to address our mutual concerns. AOGA's members have a long history of partnership with state and federal agencies to help ensure that oil and gas operations do not adversely impact the environment in which we live and work, and we look forward to continuing this productive relationship into the future.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Kindred', with a stylized flourish at the end.

Joshua M. Kindred
Regulatory and Legal Affairs Manager