

**Response to Comments on the Draft NPDES Permit No. AK-003142-9
U.S. Coast Guard, Kodiak Support Center, Bulk Fuel Terminal**

U.S. EPA Region 10, September 2007

Background

On July 31, 2007, EPA issued a public notice advertising the availability of a three draft NPDES permits for the following bulk fuel terminal facilities in Alaska: 1) U.S. Coast Guard, Kodiak Support Center (Permit No. AK-003142-9); 2) Wrangell Oil Inc. (Permit No. AK-002945-9); and, 3) Petro Star Inc. (Permit No. AK-002944-1). These draft permits provide Clean Water Act authorization for the discharge of treated stormwater collected in secondary containment areas surrounding petroleum storage tanks located at each facility. The draft permits contain a mixture of technology and water quality-based effluent limits; along with administrative and monitoring requirements, as well as other standard conditions, prohibitions and management practices. A one month public comment period ended August 30, 2007, during which time comments were received only from the U.S. Coast Guard. This document summarizes EPA's responses to the comments received, and identifies any changes to the final permit that may have resulted from these comments. Changes made to the Coast Guard permit as a result of their comments are also reflected in the Wrangell Oil and Petro Star final permits. This document serves as an amended Fact Sheet which has not been modified from its original public notice version.

Comment 1: Due to the infrequent and intermittent nature of discharge events, the Coast Guard requests that Discharge Monitoring Reports (DMRs) be submitted quarterly rather than monthly.

EPA Response: EPA agrees with this comment, and the change has been reflected in the final permit.

Comment 2: Because bulk fuel terminals already have Clean Water Act authorization to discharge under the Stormwater Multi-Sector General Permit (MSGP) for Industrial Activities, the Coast Guard believes that the permit is redundant and perhaps unnecessary.

EPA Response: As described in Section II.B. of the Fact Sheet, EPA believes that bulk oil storage terminals are more appropriately covered under individual NPDES permits which provide for a greater degree of environmental protection as compared to the MSGP. The current individual permit is not redundant with the MSGP because it replaces this general permit coverage which will be terminated upon the effective date of the individual permit.

Comment 3A: The Coast Guard believes that the technology-based, Best Professional Judgment (BPJ) effluent limits in the draft permit that are based on ballast water discharges from petroleum refineries are not appropriate for bulk fuel tank farms. Petroleum contaminated ballast water is typically treated using advanced technologies such as dissolved air floatation rather than oil-water separation which is the industry standard for bulk fuel tank farms. While ballast water and discharges from bulk storage facilities share some common attributes, there are some notable differences as described below (1-5) for each pollutant.

EPA Response: EPA disagrees that the technology-based effluent limits found in 40 CFR 419.12(c) (ballast water discharges from petroleum refineries) are not appropriate for bulk fuel tank farms. As described in Section II.B of the Fact Sheet, many coastal tank farm facilities treat and discharge ship ballast or bilge water in addition to accumulated stormwater from diked areas. They are similar in that they both handle petroleum contact water containing low concentrations of hydrocarbons.

Comment 3A(1) Oil & Grease: The Coast Guard states that oil/water separators can not be expected to achieve oil & grease effluent limits below 100 mg/l, and they cite the American Petroleum Institute (API) Publication 421 (February 1990), *Monographs on Refinery Environmental Control-Management of Water Discharges, Design and Operation of Oil-Water Separators*, as reference. If an oil & grease limit below 100 mg/l is retained in the final permit, the Coast Guard requests a 24 month compliance schedule to modify or replace their existing system.

EPA Response: EPA understands Coast Guard concerns regarding the performance of old and/or outdated oil/water separators. As mentioned in the comment, API Publication 421 (which is based only on gravity type separators using data collected prior to 1985) makes note of this problem, and points out that oil/water separators are less efficient in treating low concentrations of influent such as those expected in stormwater. However, it is EPA's experience that most modern oil/water separators are specifically designed to treat oil & grease to effluent concentrations at or below 15 mg/l which is widely used and accepted as a technology standard for EPA and state permitting authorities industry-wide. As noted in the Fact Sheet, the Petro Star Inc. permit is a reissuance of a permit that was first issued in July 1978. This administratively extended permit contains an oil & grease effluent limitation of 15 mg/l, as do many other permits for bulk fuel tank farms across the county that discharge stormwater. To raise the effluent limit to 100 mg/l for oil and grease would represent a decreasing standard for environmental protection and a backsliding measure. Consequently, the 15 mg/l oil & grease limit is retained in the final permit. However, considering the infrequent and intermittent nature of discharges associated with these facilities, combined with the monthly monitoring frequency, the average monthly limit of 8 mg/l has been eliminated in the final permit. While EPA can not provide compliance schedules for pollutants with technology-based effluent limits because all of the statutory deadlines have long passed, EPA is setting a March 1, 2008 effective date for the final permit. This will allow the facility five months in which to prepare for the conditions of the new permit.

Comment 3A(2) BOD: The Coast Guard requests that the final permit include monitoring only for biological oxygen demand (BOD) rather than the effluent limitations included in the draft permit. This considers the fact that secondary containment water may often pond and sit exposed for a period of time in which algae can grow and birds will use it for habitat. These factors will elevate the BOD of the effluent but is not associated with any pollutant attributable to the operations of the bulk fuel storage facility.

EPA Response: EPA agrees with this comment. The final permit will include monitoring for BOD, and the need for effluent limitations will be assessed during the next permit issuance.

Comment 3A(3) COD: The Coast Guard points out that elevated chloride levels can interfere with a chemical oxygen demand (COD) test, and request that if chloride levels exceed 1,000 mg/l, a substitute test be allowed.

EPA Response: EPA agrees with this comment and in fact neglected to include footnote #1 from 40 CFR 419.12(c) which was used as the technology-based BPJ effluent limitation. This recognizes that the COD test is not appropriate where chloride ion concentrations exceed 1,000 mg/l, and suggests that the permitting authority may substitute a total organic carbon (TOC) test for COD under such circumstances. Because chloride concentrations in the discharge are not known, but are not expected to exceed 1,000 mg/l for any of the three facilities, the COD effluent limit has been removed from the final permit and replaced with quarterly (semiannual for the smaller Wrangell Oil facility) monitoring for COD and chloride. These data will be evaluated during the next permit issuance to determine whether a COD or a TOC effluent limit is more appropriate.

Comment 3A(4) pH: The Coast Guard requests that the low end of the pH effluent limit in the draft permit (6.5 standard units) be replaced by 6.0, or perhaps lower, as carbon dioxide from the atmosphere can produce a mild solution of carbonic acid.

EPA Response: EPA disagrees with this comment. As described in Section IV.C of the Fact Sheet, pH is a water quality-based effluent limit included to protect aquaculture water supply, and for the growth and propagation of fish and wildlife designated use. In this situation, state authorized mixing zones are not appropriate. In addition, EPA does not believe that carbon dioxide from the atmosphere would have such a measurable effect on the pH of the effluent.

Comment 3A(5) TSS: The Coast Guard disagrees with the inclusion of a total suspended solids (TSS) limitation, and notes that the earthen dikes used as secondary containment are the only potential sources of sediment or solids that could contribute TSS to the effluent.

EPA Response: EPA disagrees with this comment. Suspended solids/sediment is a fundamental conventional pollutant that needs to be controlled regardless of the source. Earthen materials that are subject to erosion are a major contributor of this pollutant.

Comment 3B: The Coast Guard requests that best management practices (BMPs) be used in-lieu of numerical effluent limits in the permit.

EPA Response: EPA does not agree with this comment. While development of a BMP Plan is a permit requirement, BMPs alone can not assure compliance with the Clean Water Act. The NPDES permit is a principle mechanism used to implement technology and water quality-based effluent limits to assure compliance with the Act.

Comment 3C: The Coast Guard requests deletion of average monthly effluent limits while maintaining the maximum daily limit. This is in consideration of the infrequent nature of discharge events.

EPA Response: While EPA agrees with this comment as it pertains to oil & grease (see response to Comment 3A(1) above), it is necessary for the Agency to be consistent with the effluent limitation guideline upon which BPJ was based to the maximum extent practical. Accordingly, EPA does not agree with this comment and average monthly limits will be retained in the final permit (except for oil & grease). However, the facility may choose to sample their effluent at a higher frequency than the monthly events that are required by the permit in order to attain a more statistically valid average monthly value.

Comment 3D: The Coast Guard requests that continuous flow monitoring not be included as a permit condition considering the intermittent, batch nature of the discharge. The facility requests that discharge flows be estimated.

EPA Response: EPA does not agree with this comment. Measuring flow is a fundamental aspect of the NPDES program regardless of whether discharges are continuous or batch in nature. For a facilities of this size, it is necessary to continuously measure their flow during discharge events.

Comment 4: The Coast Guard requests modifying the permit language in paragraphs 6 and 7 of Part I.B to remove references to the method limit (ML).

EPA Response: Within the context of this NPDES permit, ML stands for minimum level, not method limit. The ML means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific procedure, and is similar to a quantification or reporting limit. On the other hand, the method detection limit (MDL) is concentration of a substance (analyte) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero. The standard permit language in paragraphs 6 and 7 is not subject to change.

Comment 5: With respect to Part II.A of the permit, the Coast Guard requests that the document *Uniform Federal Policy for Quality Assurance Plans* be acceptable instead of the *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) as described in the permit.

EPA Response: EPA agrees with this comment. Both documents are very similar, and the *Uniform Federal Policy for Quality Assurance Plans* document was developed specifically to be consistent with EPA requirements and the QA/R-5 document. While there are some minor differences, by developing a Quality Assurance Plan (QAP) consistent with one is being substantially consistent with the other. However, EPA would recommend that the Coast Guard review both documents to see what differences there are.

Comment 6: The Coast Guard notes that many of the BMPs identified in Part II.B of the permit are very similar to those contained within the facility's Stormwater Pollution Prevention Plan (SWPPP), and do not need to be addressed separately in a BMP Plan.

EPA Response: EPA recognizes this fact and agrees with this statement. In fact, the document described in Part II.B of the permit could just as easily been titled a SWPPP rather than a BMP

Plan. However, while EPA recognizes that the Coast Guard has an overarching SWPPP to cover their entire facility, EPA requires that a separate cover be prepared for this document that is specific for the bulk fuel tank farm and the NPDES permit. Plan components identified in Part II.B, but not addressed in the facilities current SWPPP should be added to the BMP Plan.

Comment 7: The Coast Guard remarked that the reference to Outfall 001 in Part III.A of the permit was not clear.

EPA Response: This was a typographical error in the draft permit. The text should have read *each outfall* (that is either Outfall IA-3, NP-18 or NP-6), not *Outfall 001*. the correction has been made to the final permit.

Comment 8: With regard to Part II.F, Retention of Records, the facility questions either EPA or ADEC extending the period of record retention beyond the standard five years at their request.

EPA Response: This standard permit language is derived directly from the NPDES regulations and is not subject to change.

Comment 9: With regard to Part V.E.2 of the permit, the Coast Guard requests that other individuals not duly authorized by a ranking official be allowed to sign official permit related correspondence to allow for a more productive exchange of information.

EPA Response: This standard permit language is derived directly from the NPDES regulations and is not subject to change. EPA suggests that any individual at the Coast Guard who may wish to sign such reports, be duly authorized, in writing, by the Commanding Officer as described in the permit.

Comment 10: With regard to Part V.G, Inspection and Entry, the Coast Guard notes that ISC Kodiak is a secure facility with specific entry requirements.

EPA Response: EPA and ADEC recognize the secure nature of the ISC Kodiak facility and will make all necessary security arrangements prior to entry.