

**Response to Comment for
Proposed Modification to Permit No. AK-002324-8
Alyeska Pipeline Service Company
Valdez Marine Terminal
January 20, 2005**

Background:

EPA Region 10 reissued NPDES Permit No. AK-002324-8 (the “permit”) to Alyeska Pipeline Service Company, Valdez Marine Terminal (Alyeska) on June 15, 2004. The permit was for wastewater discharge from Alyeska’s Ballast Water Treatment Facility (BWTF). On July 19, 2004, Alyeska filed a Petition for Review and supporting materials seeking Environmental Appeal Board (EAB) review of the reissued permit. On July 23, 2004, the Region received notification from the EAB that Alyeska had filed the Petition for Review.

Alyeska sought review of the provisions of the permit that require Alyeska to use a specific laboratory method, EPA Method 624, to quantify concentrations of BETX (benzene, ethylbenzene, toluene, and xylene) in the wastewater discharge. The previous permit, issued in 1997, allowed Alyeska to use Method 602 to quantify BETX. Specifically, Alyeska contests the requirement to use Method 624 to measure BETX in the following locations of the permit: Note 1 to Table 1 in Section I.A.2 and Notes 2 and 3 to Table 2 in Section I.A.3.

On August 11, 2004, the Region sent a letter to Alyeska identifying those permit conditions that have been stayed as a result of Alyeska’s petition for review. The remainder of the June 15, 2004 permit’s conditions are uncontested and severable from the contested conditions, and became fully effective and enforceable on September 13, 2004. In the letter the Region stated its intention to withdraw the contested provisions and issue for public comment a draft permit modification which would allow Alyeska to use any method listed in 40 C.F.R Part 136 in monitoring for BETX under this permit. On October 27, 2004, the Region issued for public comment a modification to the permit to address the monitoring provisions contested by Alyeska. The public comment period closed on November 26, 2004. The following is a response to the comments received during the public comment period.

Comments Received/Responses:

EPA received comments from three parties: Alyeska submitted comments by letter to Michael Lidgard, EPA, from Rod Hanson, Valdez Marine Terminal Manager, dated November 18, 2004. The National Marine Fisheries Service (NMFS) submitted comments to Michael Lidgard via electronic mail dated November 30, 2004. The Prince William Sound Regional Citizens’ Advisory Council (RCAC) submitted comment to Michael Lidgard and Luke Boles, Alaska Department of Environmental Conservation (ADEC), via a letter dated November 23, 2004.

Alyeska Comments. Alyeska’s submittal was supportive of the proposed modification to allow

the use of EPA Method 602 or any other EPA approved method listed under 40 C.F.R. Part 136 for BETX analysis. Alyeska's letter supports EPA's basis for the modification as stated in EPA's fact sheet supporting the modification. Alyeska reiterates that either method approved under Part 136 is sufficiently sensitive to determine compliance with applicable discharge limits. Alyeska refers to and incorporates the explanation contained in Alyeska's petition to EPA as support for the comments submitted.

Response. No new information was provided in the comment letter from Alyeska. Comments provided by Alyeska were addressed by the Region in the fact sheet issued along with the modification. No additional response is necessary.

NMFS Comments. The NMFS sent an electronic mail to EPA stating that comments were provided on the original draft permit in June 2003. "We have attached that letter for your reference to this e-mail. We have no new additional comments or recommendations."

Response. The NMFS comments submitted in June 2003 were addressed and considered when issuing the final permit and when issuing the proposed modification. Since no new information was submitted which has not already been addressed and considered by the Region, no additional response is necessary.

RCAC Comment. RCAC summarized its involvement with the permit process, including its preparation of a June 24, 2004 document highlighting its concerns with the final permit and a request to the state for an informal review. RCAC points out that it was pleased to see inclusion of Method 624 in the final permit. Other concerns were raised by RCAC in its request for informal review which ultimately was denied by the state.

Response. EPA recognizes the history of RCAC involvement in this permit issuance as outlined in the comment letter.

RCAC Comment. RCAC states that methods 602 and 610 are "grossly antiquated, relying on 1980's technologies that increase analytic ambiguities due to matrix interference (particularly with petroleum hydrocarbon-contaminated wastes). This can result in limited precision with higher-than-desired detection limits." RCAC states that the GC/MS method supersedes the older technique, and it is not subject to the same matrix interference and associated detection limit problems. For these reasons RCAC recommends using Method 624 for BETX analyses.

Response. The NPDES permit includes a daily maximum BETX limit of 1.0 mg/l and a monthly average limit of 0.3 mg/l. The primary objective of the monitoring requirements of Table 2 are to determine compliance of the discharge with the effluent limits. The permit requires weekly measurements with a grab-type sample. Two methods are approved under 40 C.F.R. Part 136 to quantify BETX: EPA Method 602 and 624. Both methods are gas chromatographic methods that employ purge and trap for sample introduction. EPA Method 602 uses a photoionization detector (PID) to detect and quantify target analytes. EPA Method 624 uses a mass spectrometer detector (MSD) for analyte detection. The following are the published method detection limits for each method as presented in the fact sheet supporting the proposed modification:

	Method 602	Method 624
Benzene	0.2 µg/l	4.4µg/l
Ethylbenzene	0.2 µg/l	7.2 µg/l
Toluene	0.2 µg/l	6.0 µg/l
Xylene	—	—

As stated in the fact sheet with the proposed modification, newer MSD instruments used in Method 624 can measure lower concentrations than specified in the published method. Nevertheless, either method is sufficiently sensitive and achieve detection limits well below the effluent limits so that compliance with permit limits can be determined with either method. EPA agrees with the statement in Alyeska’s petition that Method 602 is particularly sensitive to aromatic hydrocarbons and is well suited to monitor BETX under this permit. Again, either method approved under Part 136 would meet the objective to determine compliance with the permit limitations. No data has been provided by any interested party which demonstrates that Method 602, which has been in use by Alyeska for a number of years, is not adequate to meet the stated objective to determine compliance with the permit limits.

RCAC Comment. RCAC states that ADEC has recently accepted the GC/MS Method 624 in its definition for assessing Total Aqueous Hydrocarbons.

Response. The State of Alaska’s Water Quality Standards expressly allow the use of Method 602 or Method 624 to quantify BETX (see 18 AAC 70.020(b), Note 7). EPA has consulted with ADEC on the proposed permit modification and ADEC has provided a final CWA Section 401 certification that the modification to the NPDES permit which allows use of either method will meet state water quality standards.

RCAC Comment. RCAC states that the target analytes for the Method 624 should be BETX but with the GC/MS method additional hazardous air pollutants could also be included.

Response. Additional target analytes such as hazardous air pollutants were not considered as a condition of the permit modification. The NPDES permit authorizes and regulates discharges of pollutants to water of the U.S. and not the regulation of air emissions.

RCAC Comment. RCAC states that they are pleased to see that the current NPDES permit includes Method 625 and is uncertain as to why there was no objection to the use of Method 625 by Alyeska.

Response. RCAC should contact Alyeska regarding their decision not to appeal the use of Method 625 but it is likely due to the regularity of BETX sampling necessary for permit compliance and operational needs, which for practical purposes needs to be conducted on-site, versus the less frequent (monthly) requirement to monitor for polynuclear aromatic hydrocarbons which can be sent off-site for analysis.

RCAC Comment. RCAC comments on the fact that the final permit requires analysis for the 16 EPA Priority Pollutant PAH analytes and not the alkyl-substituted PAH that RCAC states are

more indicative of petroleum hydrocarbon contamination.

Response. The Region acknowledges this comment which was considered at the time of final permit issuance and addressed in the response to comments received on the draft permit. This comment was also presented by RCAC to ADEC in a request for review after permit issuance that was ultimately denied by ADEC. Addition PAH monitoring has not been proposed as part of this permit modification. This permit modification addresses only the required method for testing of BETX under the NPDES permit. This document only addresses comments pertaining to permit conditions proposed for modification.

RCAC Comment. RCAC asserts that Alyeska “did have ample warning of this potential change,” to include Method 624 in the final permit. RCAC references teleconferences where proposed changes were discussed.

Response. The Region acknowledges this comment but the decision by EPA to allow either method approved under 40 C.F.R. Part 136 is based on the fact that either method meets the primary objective of determining compliance of the discharge with the effluent limits of the permit.

RCAC Comment. RCAC states that from their inquiries with sales representatives, the state-of-the-art instrumentation required for Method 624 can be obtained for \$80,000, and annual operating costs may approach \$50,000. RCAC submits that this is not an unreasonable price.

Response. The Region acknowledges RCAC’s cost information provided in the comment letter. In the fact sheet supporting the proposed modification, the Region disagreed with the cost estimate provided by Alyeska; however, the Region recognized that additional costs including annual operating costs, would be incurred. The fact sheet also states that given the lack of a monitoring benefit of specifying one method over the other for BETX compliance purposes, the additional costs are relevant to the decision to modify the permit.

RCAC Comment. RCAC agrees that it is not practical to ship samples outside of Valdez for Method 624 analyses and recommends that steps be taken to procure the appropriate instrumentation on-site.

Response. The Region concurs that it is not practical to ship samples out of Valdez on a routine basis for this analysis.