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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:

Alyeska Pipeline Service Company,
Valdez Marine Terminal

NPDES Permit No. AK-002324-8

Case No.:

DECLARATION OF DAVID J.
CONNOR IN SUPPORT OF
ALYESKA PIPELINE SERVICE
COMPANY'S PETITION FOR
REVIEW

I, David J. Connor, declare as follows:

1. I am the Water Quality Subject Matter Expert for Alyeska Pipeline Service Company ("Alyeska"), and have held my position since April 2010. From 1997 through 2010, I held various positions with Alyeska, all of which were related in some way to the Ballast Water Treatment Facility ("BWTF") at the Valdez Marine Terminal ("VMT"). In this capacity, I am responsible for management of the NPDES Permit requirements for Alyeska. I have personal knowledge of the facts stated herein, unless otherwise indicated.

2. Alyeska has been the operator of the Trans Alaska Pipeline System since the pipeline and related Valdez Marine Terminal ("VMT") facilities became active in 1977. The first NPDES wastewater discharge permit for the VMT and its ballast water treatment facility ("BWTF") was issued in 1974. Subsequent permits have been in place providing continuous coverage for wastewater discharges for 37 years.

3. Since it began operation, the VMT has included a BWTF to treat oily seawater ballast. Vessels arrive at the VMT with a load of seawater used as ballast to stabilize the vessels

1 during their transit. Before the advent of double hull tankers, the seawater ballast was stored in
2 the vessels' oil cargo tanks, and so needed to be treated to remove oil constituents prior to
3 discharge. The BWTF also treats a variety of wastewater streams from the VMT and the
4 associated tankers and spill prevention and response vessels. All influents to the BWTF are
5 identified and characterized in the EPA-approved Best Management Practices Plan.

6 4. With the advent of double hull tankers, fewer vessels arrive at the VMT with
7 ballast water that has been stored in tanks also used to transport oil, thus reducing the volume of
8 ballast water requiring treatment prior to discharge. The current influent sources to the BWTF
9 are composed primarily of uncontaminated stormwater and other process waters that are low in
10 pollutants.

11 5. Between 2007 and 2012, Alyeska renovated and substantially upgraded the
12 BWTF to accommodate changes in the oil tanker fleet and reduced oil production on the North
13 Slope of Alaska. BWTF flow rates and pollutant loadings have significantly declined. Both the
14 pollutant loadings and the effluent flows, including the ballast water, have been reduced by a
15 factor of four or more on average. The reduced flows are currently in the range of 1.5 - 2.0
16 million gallons per day ("MGD") from Outfall 001 (the BWTF). Monthly average flows up to
17 5.54 MGD and maximum daily flow rates as high as 10 MGD may occur as a result of
18 precipitation events. By comparison, the average Outfall 001 flow rate in 2004 was 9 MGD and
19 the maximum daily flow was 20.3 MGD. Ballast water has historically been the source of the
20 majority of hydrocarbon pollutants in the BWTF influent.

21 6. The changes made during 2007-2012 resulted in a more advanced treatment
22 process to address long-term average wastewater flow rates. Pollutant discharges have been
23 reduced proportionately to flow because the updated treatment system is designed to equal or
24 exceed the performance achieved by the previous treatment system. The upgraded design of the
25 BWTF also includes a new, highly effective air stripping treatment process to remove volatile
26 hydrocarbons such as benzene before the wastewater is treated in the Biological Treatment Tank
27 ("BTT") and discharged. The air stripping process reduces the pollutant load on the BTT which
28 will improve the overall system effluent quality. Extensive pilot testing of the upgraded system

1 by Alyeska before and during the upgrade, and operational experience since the upgraded system
2 was commissioned in late 2011, have documented that the current effluent quality equals or
3 exceeds the historic effluent quality for all regulated pollutants.

4 7. On October 30, 2012, the Environmental Protection Agency, Region 10, reissued
5 NPDES Permit AK-002324-8 (the “NPDES Permit”), which authorizes the discharge of
6 wastewater from the VMT. A true and correct copy of the NPDES Permit is attached hereto as
7 Exhibit 1. On March 8, 2012, Alyeska submitted comments to EPA regarding the draft of the
8 NPDES Permit that was circulated for public comment.

9 8. Table 2 of the NPDES Permit, contained in condition I.B.1, requires quarterly
10 monitoring of BWT effluent for acute whole effluent toxicity (“WET”).

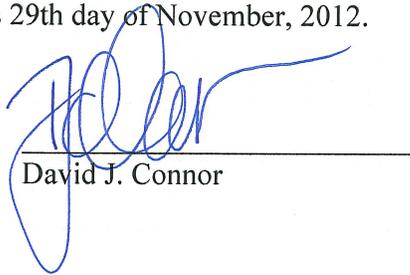
11 9. The BWTF operates with a high degree of regulatory compliance. During the
12 time Alyeska has operated the BWTF, it has performed and submitted over one hundred
13 comprehensive reports characterizing the effluent chemistry, the receiving water, the sediments,
14 indigenous animal populations, and toxicity, including acute WET testing. The regulatory
15 community has comprehensively reviewed the impacts of the BWTF effluent on Port Valdez,
16 finding no long-term environmental impacts. The historic record of acute WET testing
17 conducted on effluent from the BWTF evaluated by EPA in developing the NPDES Permit
18 contains not a single failure of an acute WET test. The NPDES Permit also reflects the fact that
19 flow rates and pollutant loadings have significantly declined, as outlined above.

- 20
- 21 10. Attached hereto are true and correct copies of the following documents:
- 22 Exhibit 1 NPDES Permit AK-002324-8 issued October 30, 2012
- 23 Exhibit 2 - Alyeska Pipeline Service Company Studies Related To The Ballast Water
24 Treatment Facility, Valdez, Alaska;
- 25 Exhibit 3 - EPA, *Technical Support Document for Water Quality-based Toxic Control* (1991)
26 (excerpt);
- 27 Exhibit 4 - EPA, Response to Comments, NPDES Permit AK-002324-8 (October 30, 2012)
28 (excerpt);

- 1 Exhibit 5 - ADEC, Response to Comments For Section 401 Certification (October 29, 2012);
2 Exhibit 6 - ADEC, 401 Certification for NPDES Permit AK-002324-8 (October 29, 2012);
3 Exhibit 7 - EPA, *Clarification Regarding Toxicity Reduction and Identification Evaluations*
4 *in the National Pollution Discharge Elimination System Program* (2001);
5 Exhibit 8 - EPA, *Toxicity Reduction Evaluation Guidance for Municipal Wastewater*
6 *Treatment Plants* (1999) (excerpt);
7 Exhibit 9 - EPA, *Regions 9 & 10 Guidance For Implementing Whole Effluent Toxicity*
8 *Testing Programs*, Interim Final (May 31, 1996) (excerpt).
9

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11 I declare under penalty of perjury under the laws of the United States that the foregoing is true
12 and correct.

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14 Executed at Anchorage, Alaska this 29th day of November, 2012.

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18 David J. Connor
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