Memorandum of Understanding
Between the Port of Seattle
And
the Puget Sound Clean Air Agency
Regarding Air Quality at Terminal 5

This Memorandum of Understanding ("MOU") is made by and among the Port of Seattle, a Washington municipal corporation ("Port"), acting through its agent the Northwest Seaport Alliance ("NWSA") and the Puget Sound Clean Air Agency ("Agency"), a municipal corporation of the laws of the State of Washington, as of the 22nd day of August, 2017.

Recitals

I. The Port, intends to rehabilitate the existing marine cargo facilities at Terminal 5 ("Project") at the west margin of the West Waterway in Elliott Bay.

II. The Port analyzed air quality implications of the Project as part of the environmental review required by the State Environmental Protection Act.

III. The Port presented emissions projections from operations once the Project is completed for Alternative 2 (preferred alternative) in its Final Environmental Impact Statement for criteria air pollutants as part of its environmental review.

IV. The Port, as part of its permit application for a Shoreline Substantial Development Permit, received from the City of Seattle ("City") "Analysis and Decision of the Director of the Seattle Department of Construction and Inspections," dated April 3, 2017 ("Decision").

V. The Agency, in consultation with Seattle Department of Construction and Inspections, found that operation of the Project will generate air pollution emissions including fine particle pollution (PM2.5), but not in exceedance of any regulatory standard.

VI. PM2.5 exposure is associated with adverse human health impacts.

VII. The City, in consultation with the Agency, agreed that in order to address the lack of adequate existing regulation to address potential operation air quality impact and pursuant to authority under SMC 25.05.675 to condition permits, required the Port to establish an Air Quality Management Program (AQMP) that will be consistent with the objectives summarized in the City of Seattle Analysis and Decision of the Director for Shoreline Substantial Development permit application Number 3019071 ("City Decision") summarized on Attachment 1.

In consideration of the terms set forth herein, the Parties agree as follows:
Agreement

1. The parties agree to implement and monitor the terms of the City Decision dealing with air quality related to the Project.

2. The Port will prepare an AQMP draft to be consistent with the objectives summarized in the City Decision.

3. The Port will provide the draft AQMP to the Agency for review and Agency approval for consistency with the objectives summarized in the City Decision.

4. Following review and joint approval of the parties of the AQMP, the Port will implement the AQMP through tenant leases at the time the City issues the Certificate of Occupancy.

5. **Term.** The term of this MOU will be for the duration that Terminal 5 (T-5) is being operated as a container cargo terminal.

6. **Enforcement.** The Agency will not be responsible for enforcement of the AQMP. If the Port is unable to comply with the terms of this MOU and is unable to address the issue through the terms of the AQMP, the Agency will advise the City.

7. **Indemnification.** Each party to this MOU shall be responsible for its own acts and/or omissions and those of its officers, employees and agents. No party to this MOU shall be responsible for the acts and/or omissions of entities or individuals not a party to this MOU.

8. **NOTICES.** All notices hereunder may be delivered or mailed. If mailed, they shall be sent to the following respective addresses:

   **The Agency contact is:**
   Kathy Strange
   Puget Sound Clean Air Agency
   1904 3rd Ave., Ste 105
   Seattle, WA 98101

   **The Port/NWSA contact is:**
   Sara Cederberg
   Sr. Manager, Air Quality and Sustainable Practices
   The Northwest Seaport Alliance
   P.O. Box 2985
   Tacoma, WA 98401-2985
   scederberg@nwseaportalliance.com
   800-657-9808

   Or to such other respective addresses as either party hereto may hereafter designate in writing.
9. **APPLICABLE LAW.** This MOU shall be governed by the laws of the state of Washington.

10. **AMENDMENTS/MODIFICATIONS.** This MOU may be amended or modified only by written agreement of the parties.

11. **ENTIRE AGREEMENT.** This MOU contains the entire agreement of the parties related to the Project, and no representations, inducements, promises or agreements, oral or otherwise, between the parties not contained in this MOU shall have any force or effect.

**IN WITNESS WHEREOF,** the undersigned have, on the date set forth above, executed this MOU on behalf of the parties.

**PUGET SOUND CLEAN AIR AGENCY**

By: __________________________
Title: __________________________
Date: ________________

**PORT OF SEATTLE**

By: __________________________
Title: __________________________
Date: ________________

**NORTHWEST SEAPORT ALLIANCE**

By: __________________________
Title: __________________________
Date: ________________
Attachment 1

1. The Port will undertake the following actions every year after the City issues a certificate of occupancy for T-5:

   A. The Port or NWSA will report cargo throughput at T-5 in twenty foot equivalent units ("TEU").

   B. The Port or NWSA will report the total number of hours of vessel hoteling at T-5.

   C. The Port or NWSA will report the total number of hours of vessel hoteling at T-5 with and without shore power.

   D. The Port or NWSA will provide a summary of the cargo handling equipment ("CHE") in use at T-5, including the percentage of CHE that meet Tier 4i (interim Tier 4) emission standards or an equivalent standard.

   E. The Port or NWSA will report total annual hours of CHE use at T-5, aggregated by engine emission tier classifications and CHE types (e.g., top pick, yard hostler).

   F. The Port or NWSA will provide a summary of fuel efficiency planning for CHE and trucks at T-5.

   The Port or NWSA will collect the information required by this section and submit a report annually ("Annual Report") by March 15 (for the preceding calendar year) to the Agency and City, and post the report on the Port’s or NWSA’s internet site.

2. Annual PM2.5 emissions from the same scope of T-5 operations for which emissions were estimated in the T-5 Final Environmental Impact Statement ("FEIS") ("Annual PM2.5 Emissions") will not exceed the amounts shown in Table 1:

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>Year of Certificate of Occupancy + The 9 Following Years</th>
<th>10th through 19th Following Years</th>
<th>20th through 25th Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual PM2.5 Emissions</td>
<td>6.0 tons/year</td>
<td>5.9 tons/year</td>
<td>4.0 tons/year</td>
</tr>
</tbody>
</table>

3. For any given year, the Port may demonstrate compliance with the emissions levels described in Table 1 using any one of four methods described in 3. A through D below, at the Port’s discretion. The Port will inform the Agency and the City by April 15 of the preceding year which method it will use.

   A. If the Annual Report lists results under paragraphs 1.A through D of this attachment that meet the maximum and minimum values in Table 2 below, the Agency, in consultation with the City, will deem Annual PM2.5 Emissions compliant with paragraph 2, Table 1.
<table>
<thead>
<tr>
<th>TABLE 2</th>
<th>Year of Cert. of Occupancy through Year +9</th>
<th>Years +10 through +19 20th through 25th Years</th>
<th>20th through 25th Years</th>
<th>Any Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum cargo throughput (M TEU)</td>
<td>0.64</td>
<td>1.3</td>
<td>1.3</td>
<td>Approved values under 4.B</td>
</tr>
<tr>
<td>Minimum percent of vessel hoteling hours with shore power</td>
<td>30%</td>
<td>50%</td>
<td>70%</td>
<td>Approved values under 4.B</td>
</tr>
<tr>
<td>Minimum percent of Cargo Handling Equipment (top picks + RTG + yard tractors) meeting Tier 4i or better</td>
<td>89.8%</td>
<td>97.6%</td>
<td>99.5%</td>
<td>Approved values under 4.B</td>
</tr>
</tbody>
</table>

B. The Agency and City may modify the maximum and minimum values in Table 2 proposed by the Port, that the Agency and the City determine will achieve the same air quality results that would have been achieved by the targets established in Table 2. If the Annual Report lists values for paragraphs 1.A through D of this attachment that meet the maximum and minimum values in the approved modified Table 2, the Agency, following consultation with the City, will deem Annual PM2.5 Emissions compliant with paragraph 2.

C. The Port may achieve compliance with its air quality goals in any year by conducting an emissions inventory for that year to be completed by June 30 of the following year. The inventory will be for the same scope of T-5 operations for which emissions were estimated in the FEIS, using the same methods used for the FEIS or using methods pre-approved by the Agency and the City. The Port will report emissions results to the Agency and the City to compare to the amounts in Table 1. The Agency, following consultation with the City, will deem Annual PM2.5 Emissions compliant with paragraph 2 if the Annual PM2.5 Emissions are less than the amounts listed in Table 1. Use of this method to measure emission does not require reference to Table 2.

D. The Agency and City may approve any alternative method and timeline not described in this attachment proposed by the Port by April 15 of each year for use in the
following year to evaluate or measure Annual PM2.5 Emissions in order to show compliance with the Annual PM 2.5 Emissions levels listed in Table 1 above.

4. If Annual PM2.5 Emissions exceed the amounts listed in Table 1 by any of the methods described in paragraphs 3.A through D of this attachment, the Port will design and implement a reasonably practicable program in consultation with the Agency to reduce Annual PM2.5 Emissions to levels at or below the amounts shown in Table 1. The Port will design and begin program implementation by September 15th of the same year the emissions were deemed non-compliant.

5. The Port will install shore power electrical equipment capable of accommodating two vessels at T-5. The parties agree that full implementation and use of installed shore power equipment, necessary to ensure adequate, safe electrical service, will require up to one year from the date of resumption of T-5 container cargo operations to achieve full operational adequacy.

6. The Port, after consulting with the Agency, will design a program to influence improvements of at-berth environmental performance for container cargo vessels at T-5. The program will seek to maximize use of shore power at T-5, or leverage equivalent alternative PM2.5 emission reduction technology while vessels are docked at T-5. The Port will implement the program at Certificate of Occupancy.
TRANSMITTAL RECORD

TO: Andrew Green
Air Quality Programs Division
Director

DATE: August 25, 2017

We are enclosing two signed copies of Memorandum of Understanding with Puget Sound Clean Air Agency for your signature. Please sign, keep one copy and mail the other to Port of Seattle, Attn: Anne Porter. P.O. Box 1209, Seattle WA 98111. Thank you.

We are mailing under separate cover.

REMARKS: If you have questions regarding this, please contact Anne Porter at 206-787-3133.

Very Truly yours,

By Anne Porter