



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

August 30, 2017

Mr. William H. (Bill) Collins
Tidewater Terminal Company, Inc.
6305 NW Old Lower River Road
Vancouver, WA 98660

Re: Comments on Draft Compliance Monitoring Plan:

- **Site Name:** Tidewater Fuel Line Leak
- **Site Address:** 2900 Sacajawea Park Road, Pasco WA, 99301
- **Cleanup Site ID:** 2331
- **Facility/Site ID:** 39378684

Dear Mr. Collins:

Thank you for submitting the draft compliance monitoring plan (CMP) and the supporting sampling and analysis plan (SAP), the quality assurance plan (QAPP) and the health and safety plan (HSP) for review by the Department of Ecology (Ecology). Based on the Department's review of the draft plan we have the following comments on the documents:

Compliance Monitoring Plan, Ecology Comments

1. **Subsection 1.1, Statement of Work, first paragraph, 3rd row:** Please include a description of the planned passive bioremediation and describe how, when, and where the bioventing will take place. Please identify wells that are part of the passive venting effort in the CMP.
2. **Subsection 1.2, Site Description, 3rd paragraph, last line:** Please include a description when and where the Tidewater spill occurred that triggered the cleanup effort at the Tidewater Site.
3. **Subsection 1.3, Compliance Monitoring Requirements, 3rd paragraph, second line:** Please describe the institutional controls selected as part of the Remedial Alternative No.

4. **Subsection 1.3, Compliance Monitoring Requirements, 3rd paragraph, fourth line:** Since there is a Health and Safety Plan, protection monitoring will be required.
5. **Subsection 1.3, Compliance Monitoring Requirements, 3rd paragraph, last line:** A provision for when monitored natural attenuation (MNA) must be replaced by a more aggressive remedy is missing. What criteria will trigger a re-evaluation of the chosen site remediation option, MNA?
6. **Subsection 3.3, Monitoring Frequency, 2nd paragraph, second from last line:** Do not remove GW monitoring wells gradually from the monitoring program, all selected wells will be part of the monitoring program until criteria have been achieved (four consecutive quarters with COC CULs are less than the cleanup targets according to the CMP).
7. **Section 4.0, Reporting, 3rd paragraph, 2nd bullet:** Please include all data consecutively for the GW monitoring events under the CMP in all report deliverables.
8. **Section 4.0, Reporting, 3rd paragraph, 4th bullet:** The report deliverables should include the well purging logs with temperature, conductivity, turbidity, pH, oxidation reduction potential (ORP), and dissolved O₂ data.

Sampling and Analysis Plan, Ecology Comments

1. **Subsection 1.5, Sampling Schedule, 3rd paragraph, second from last line:** Do not remove GW monitoring wells gradually from the monitoring program, all selected wells will be part of the monitoring program until criteria have been achieved (four consecutive quarters with COC CULs are less than the cleanup targets according to the CMP).
2. **Subsection 2.3, Field Quality Assurance/Quality Control, 1st paragraph, fifth line:** Since we are sampling only seven wells it may be easier to state we will collect one QA sample for each sampling round.
3. **Sub-subsection 2.3.4, Field Replicates, last line:** Sample blanks should include trip blanks for BTEX and Gx analyses, one for each cooler used.
4. **Subsection 3.1, Static Water Level Measurement and LNAPL Screening, 2nd paragraph, fifth line:** Well headspace should be checked with a PID directly after the well cover is removed.
5. **Subsection 3.2, Low-Flow Purging and Sampling, 2nd paragraph, third line:** Purge rates will need to be within the limitations of the flow-through cell.
6. **Subsection 3.4, Sample Collection, 2nd paragraph, fourth bullet:** Please consider including analyses for nitrate and methane as indicator constituents for biological breakdown of petroleum hydrocarbons.

7. **Subsection 3.4, Sample Collection, 2nd paragraph, fourth bullet:** Consider using a multi-meter to measure methane and CO₂.
8. **Subsection 3.4, Sample Collection, 3rd paragraph, second from last line:** Additional care will be used to ensure the sample bottles are not overfilled resulting in preservative loss.
9. **Subsection 3.4, Sample Collection, 3rd paragraph, last line:** Please describe planned analytical methods for the geochemical indicator parameters in more detail, particularly ferrous iron analysis. Will ferrous iron be analyzed both in the field and in the lab? Please include a reference to the method selected for ferrous iron analysis.

Quality Assurance Project Plan, Ecology Comments

1. **Table B-1:** In Table B-1 please include all information from sources outside the SAP, QAPP and HSP. The CMP, SAP, QAPP, and HSP should be stand-alone documents. References to other sources outside these four documents should to confirm and support information in these four documents only.
2. **Table B-5:** Please define the abbreviations SPCC and CCC shown in the table.
3. **Acronyms:** Is the MRL the same as PQL (practical quantification limit)?
4. **Subsection 1.4, Project Organization:** Please include an organization chart in the QAPP as a stand-alone figure.
5. **Subsection 1.4, Project Organization, fourth paragraph, Field Team, last line:** Ecology needs to be made aware of and approve any significant deviations.
6. **Subsection 7.1, Field QC Procedures, third line:** One batch of QC samples will be collected each sampling round. This should be changed throughout document and in other documents.

Health and Safety Plan, Ecology Comments

1. **Site Map:** Please include the complete route to the hospital from the site in the HSP.

Tidewater Terminal Company, Inc.

August 30, 2017

Page 4

If you have any questions about this request or how to complete your work plan, please contact Ecology's cleanup project manager, Christer Loftenius, at (509) 329-3543 or clof461@ecy.wa.gov Thank you for your cooperation, and we look forward to working with you.

Sincerely,

Christer Loftenius, L.G. L.H.G.
Site Manager
Toxics Cleanup Program, Eastern Region

Enclosure (1) Compliance Monitoring Plan, Sampling and Analysis Plan, Quality Assurance Project Plan and Health and Safety Plan with Ecology annotated comments

cc: Robert Martin – CH2M
Ecology Site File