

Permit No.: WAD009250366
Issuance Date: July 20, 2018
Effective Date: August 1, 2018
Expiration Date: July 31, 2028
Modification Date: August 1, 2020



P.O. Box 47600
Olympia, Washington 98504-7600

Permit
For The Storage Of Dangerous Waste

Issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70.105 Revised Code of Washington (RCW), and the regulations promulgated thereunder in Chapter 173-303 Washington Administrative Code (WAC).

Issued to: Phillips 66 Company
Ferndale Refinery
3901 Unick Road
Ferndale, Washington 98248

Issued by: Washington State
Department of Ecology

This Permit is effective **August 1, 2018** and will remain in effect until **July 31, 2028**, unless revoked and reissued or terminated under WAC 173-303-830 or continued in accordance with WAC 173-303-806(7) or as provided at Condition 1.2.3.1 of this Permit.



James DeMay, P.E.
Industrial Section Manager
Solid Waste Management Program

August 1, 2020
Date

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Introduction

Permittee: Phillips 66 Company Ferndale Refinery

EPA/State ID Number: WAD009250366

Pursuant to:

Chapter 70.105 Revised Code of Washington (RCW), the Hazardous Waste Management Act of 1976, as amended, and regulations codified in Chapter 173-303 Washington Administrative Code (WAC); and the Solid Waste Disposal Act (SWDA), as amended.

A Permit is issued to the Phillips 66 Company Ferndale Refinery (hereinafter called the Permittee), to operate a dangerous waste long term container storage area and conduct corrective action at the Phillips 66 Ferndale Refinery, located at 3901 Unick Road, Ferndale, Washington, 98248, latitude 48 degrees, 49 minutes, and 37 seconds North and longitude 122 degrees, 41 minutes, and 33 seconds West. Pursuant to RCW 70.105D.030(1)(d), the Washington State Department of Ecology (Ecology) is designated by the Washington State Legislature to carry out all State programs authorized by the United States Environmental Protection Agency (EPA) pursuant to the federal Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et. seq., as amended. Pursuant to Section 3006 of RCRA, 42 U.S.C. Section 6926, the hazardous waste program in the State of Washington and revisions to that program were authorized as specified by EPA. Ecology has authority to issue this Permit in accordance with the authorized program and with RCW 70.105.130 and is responsible for enforcement of all conditions of this Permit.

The Permittee must comply with all terms and conditions set forth in this Permit, including all of the "Attachments Incorporated by Reference."

WAC 173-303 state regulations specified in the Permit are those state regulations in effect on the date of permit issuance.

The Permittee must also comply with requirements identified at WAC 173-303-810(8)(a)(i) through (iv) that are not included in the Permit, including but not limited to, self-implementing statutory and regulatory requirements.

This Permit is based upon the administrative record, as required by WAC 173-303-840. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts or the Permittee's misrepresentation of any relevant facts at any time are grounds for the termination, revocation and reissuance, or modification of this Permit and/or initiation of an enforcement action, including criminal proceedings.

Ecology will enforce all conditions of this Permit. Any challenge of a permit condition must be appealed to the Pollution Control Hearings Board in accordance with WAC 173-303-845.

The Agency has the authority to enforce any condition in this Permit that is based on federal regulations for which the State of Washington's dangerous waste management program is authorized.

Attachments Incorporated by Reference

The following sections from the Phillips 66 Company Ferndale Refinery, Dangerous Waste Permit Application (dated September 5, 2017) and the other documents listed below are incorporated by reference into this Permit. These incorporated documents are enforceable conditions of this Permit.

Section A of Permit Application – Part A Form

Section B of Permit Application – Facility Description

Section C of Permit Application – Waste Analyses

Section D of Permit Application – Process Information

Section F of Permit Application – Procedures to Prevent Hazards

Section G of Permit Application – Contingency Plan

Section H of Permit Application – Personnel Training

Section I of Permit Application – Closure and Financial Assurance

Agreed Order Docket No. DE 16297

Chapter 173-303 WAC (amended December 2014)

Chapter 173-340 WAC (revised 2013)

Definitions

All definitions in WAC 173-303-040 are incorporated by reference into this Permit. If any definition in WAC 173-303-040 differs from the following definitions in this Permit, the Permit's definition prevails.

Any term used in this Permit which has not been defined in the Permit or in WAC 173-303-040 shall have the same meaning as set forth in Title 40 CFR Parts 260, 264, 270, and 124. All other terms shall have their standard, technical meaning.

Some terms are specifically defined in Part 2, Corrective Action, for the purposes of that section of the Permit only.

For this Permit, except where a specific definition applies under Part 2, Corrective Action, the following definitions apply:

"Agency" means the United States Environmental Protection Agency, Region 10.

"Dangerous waste management unit" means a contiguous area of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed. In this permit, dangerous waste management unit means the long term (greater than 90 days) container storage area.

"Days" means calendar days unless otherwise defined for a condition or section of this Permit.

"Facility" means the Phillips 66 Ferndale Refinery.

Standard Conditions

1.1 Effect of Permit

- 1.1.1 The Permittee is authorized to store dangerous waste in accordance with the conditions of this permit which include applicable requirements of WAC 173-303 specified in the permit, and any self-implementing regulations in WAC 173-303, and self-implementing statutory provisions and related regulations which are automatically applicable to the Permittee's dangerous waste management activities according to the Hazardous Waste Management Act, as amended, or other laws.
- 1.1.2 Any storage, treatment, or disposal of dangerous waste that requires a permit under WAC 173-303 is prohibited at this Facility unless that activity is authorized by this permit, including any temporary authorization by Ecology under WAC 173-303-830(4)(e).
- 1.1.3 Conducting an activity at the Facility that requires a permit under WAC 173-303 and is not authorized by this permit or a temporary authorization under WAC 173-303-830(4)(e) is subject to enforcement of all applicable state and federal laws and regulations.
- 1.1.4 The Permittee is authorized to continue to manage newly regulated dangerous wastes or to continue to use newly regulated dangerous waste management units subject to all limits, conditions and procedures in WAC 173-303-830(4)(g)(i)(A) through (E). For this condition to apply, the unit must have been in existence as a dangerous waste facility with respect to the newly listed or identified waste or newly regulated waste management unit on the effective date of the final rule listing or identifying the wastes, or regulating the unit according to WAC 173-303-830(4)(g)(i)(A).
- 1.1.5 Pursuant to WAC 173-303-810(8), compliance with this permit during its term constitutes compliance for the purpose of enforcement with WAC 173-303 for waste management activities covered under this permit except as provided for in WAC 173-303-810(8)(a)(i) through (iv). Compliance with this permit does not constitute a defense to any order issued or any action brought under other state or federal laws or regulations.
- 1.1.6 The Permittee is subject to requirements in WAC 173-303 for any activity not authorized by this permit or for activities not subject to a permit under WAC 173-303, including but not limited to generator and transporter requirements at WAC 173-303-170 through -270.
- 1.1.7 Issuance of this permit does not convey any property rights of any sort or any exclusive privilege.
- 1.1.8 Issuance of this permit does not authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations.

1.2 Permit Actions

1.2.1 Permit Modification, Revocation, Re-issuance, and Termination

- 1.2.1.1 Ecology may modify, revoke and reissue, or terminate this permit if there is cause as specified in WAC 173-303-830(3) and (5).
 - 1.2.1.1.1 When a permit is modified only the conditions subject to modification are reopened. All other aspects of the existing permit remain in effect for the duration of the permit.
 - 1.2.1.1.2 If a permit is revoked and reissued the entire permit is reopened and subject to revision and the permit is reissued as a new permit. The Permittee must comply with all conditions of the existing permit until a new final permit is reissued.
 - 1.2.1.1.3 If Ecology tentatively decides to terminate the permit it will issue a notice of intent to terminate and follow procedures in WAC 173-303-840(2).
- 1.2.1.2 Permit modifications at the request of the Permittee must comply with procedures and other requirements of the three-tiered modification system specified in WAC 173-303-830(4).
- 1.2.1.3 The filing of a request by the Permittee for a permit modification, revocation and re-issuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.
- 1.2.1.4 Modifications to the Agreed Order Docket No. 16297 effective **August 1, 2020**, which is administered by Ecology shall not require a permit modification except when required by WAC 173-303-830, Appendix I (N)(5) to incorporate a substantial change requiring public comment under WAC 173-303-340-600. The Agreed Order is not appealable to the Pollution Control Hearings Board.

1.2.2 Transfer of Permit

- 1.2.2.1 In accordance with WAC 173-303-810(14)(c), this permit is not transferable to any person except after notice to Ecology.
- 1.2.2.2 This permit may be transferred to a new owner or operator only if it has been modified or revoked and reissued in accordance with WAC 173-303-830(2)(a) and (b) or WAC 173-303-830(3) to identify the new permittee and incorporate such other requirements as may be necessary.
- 1.2.2.3 Before transferring ownership or operation of the Facility, the Permittee must notify the new owner or operator in writing of the requirements of this permit and WAC 173-303 in accordance with WAC 173-303-290(2).

1.2.3 Duty to Reapply and Permit Continuation

- 1.2.3.1 If the Permittee wishes to continue an activity regulated by the permit after its expiration date, the Permittee must apply for and obtain a new permit. In addition, the Permittee must apply for and obtain a new permit if corrective action or closure required by this permit has not or will not be completed by the permit's expiration date.

Department review of any application for a permit re-issuance will consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

- 1.2.3.1.1 To continue an activity allowed by this permit after the permit's expiration date or to complete corrective action, the Permittee must submit to Ecology a new permit application at least 180 days before this permit's expiration date, unless Ecology grants a later date provided that such date will never be later than the expiration date of the effective permit.
- 1.2.3.1.2 In accordance with WAC 173-303-806(7), if the Permittee submits a timely, complete application and Ecology has not made a final permit determination as set forth in WAC 173-303-840, this permit will remain in effect beyond the permit's expiration date until Ecology makes a final permit determination (issuing or denying a new permit).
- 1.2.3.2 If the Permittee fails to comply with the terms and conditions of the expiring or expired permit, then Ecology may take action consistent with WAC 173-303-806(7). If the Permittee fails to submit a timely, complete application as required under Permit Condition 1.2.3.1 then those permit conditions necessary to protect human health and the environment will remain in effect beyond the permit's expiration date in accordance with WAC 173-303-815(2)(b)(ii), until Ecology terminates the conditions or the permit is revoked and reissued.

1.3 Duties and Requirements

1.3.1 Duty to Comply

The Permittee must comply with all conditions of this permit except to the extent, and for the duration, such noncompliance is authorized by an Emergency Permit issued under WAC 173-303-804. Other than as authorized by an Emergency Permit, any permit noncompliance constitutes a violation of WAC 173-303 and/or RCW 70.105 and is grounds for: a) enforcement action; b) termination of permit; c) revocation and re-issuance of permit; d) modification of permit; or e) denial of a permit renewal application.

1.3.2 Need to Halt or Reduce Activity Not a Defense

If any enforcement action is taken because of Permittee's noncompliance with this permit, the necessity to halt or reduce the permitted activity to maintain compliance with the conditions of this permit is not a defense for the Permittee.

1.3.3 Duty to Mitigate

The Permittee must take all steps required by Ecology to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit. That the Permittee took such mitigation is not a defense to enforcement for noncompliance with the permit.

1.3.4 Proper Operation and Maintenance

The Permittee must at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures (this includes quality assurance and quality control). This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

1.3.5 Duty to Provide Information

The Permittee must furnish to Ecology, within a reasonable time, any information which Ecology requests to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or for determining compliance with this permit. The Permittee must also furnish to Ecology, upon request, copies of records required to be kept by this permit.

1.3.6 Inspection and Entry

- 1.3.6.1 Pursuant to WAC 173-303-810(10), the Permittee must allow authorized representatives of Ecology upon the presentation of credentials to:
 - 1.3.6.1.1 Enter upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 1.3.6.1.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - 1.3.6.1.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
 - 1.3.6.1.4 Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by WAC 173-303 any substances or parameters at any location.

1.3.7 Reporting Planned Changes

- 1.3.7.1 In accordance with WAC 173-303-810(14)(a), the Permittee must give notice to Ecology as soon as possible of any planned physical alterations or additions to the dangerous waste management unit. Such physical alterations or additions must be in compliance with the permit.

The Permittee must not manage dangerous waste in the new or physically changed portions of the dangerous waste management unit until:

- 1.3.7.1.1 The Permit has been modified or the Permittee has obtained a temporary authorization for the physical change and for any change in the way waste is managed.
- 1.3.7.1.2 The Permittee has submitted to Ecology by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating the dangerous waste management unit has been constructed or modified in compliance with the permit, and either:
 - 1.3.7.1.3 Ecology has inspected the modified or newly constructed dangerous waste management unit and finds it in compliance with the permit, or
 - 1.3.7.1.4 Within fifteen days of the date of the submission of the certified letter as specified in Permit Condition 1.3.7.1.2, the Permittee has not received notice from Ecology of its intent to inspect.

1.3.8 Reporting Noncompliance with the Permit and Reporting Emergencies

- 1.3.8.1 The Permittee must meet requirements for immediate reporting and written submissions in WAC 173-303-810(14)(f) for noncompliance which may endanger health or the environment.
- 1.3.8.2 In accordance with WAC 173-303-810(14)(g), the Permittee must report instances of noncompliance not reported under WAC 173-303-810(14)(d), (e), and (f) at the time of the next monitoring report or within six months of the date of noncompliance, whichever is sooner.
- 1.3.8.3 The Permittee must give advance notice to Ecology as soon as possible of any planned changes to the dangerous waste management unit or activity that may result in noncompliance with permit requirements. Such changes require a permit modification pursuant to WAC 173-303-830 before they can be implemented.
- 1.3.8.4 In the event of spills, releases and other emergencies, the Permittee must meet requirements for reporting and written submissions in Section G of the Permit Application.

1.3.9 Reporting Relevant Facts and Incorrect Information

Pursuant to WAC 173-303-810(14)(h), if the Permittee becomes aware of failure to submit any relevant facts in the permit application, or submitted incorrect information in the permit application or in any report to Ecology, the Permittee must promptly submit the relevant and correct information.

1.3.10 Reporting Compliance Schedules

Reports of permit compliance or noncompliance or any progress reports on interim and final permit requirement contained in any compliance schedules must be submitted no later than 14 days following each scheduled compliance date.

1.3.11 Other Reporting

1.3.11.1 Monitoring Reports: Monitoring results must be reported at intervals specified elsewhere in this permit.

1.3.11.2 The following reports are required:

- a. Manifest discrepancy report as specified at WAC 173-303-370(5)(c).
- b. Unmanifested waste report as specified at WAC 173-303-390(1).
- c. Annual report as specified at WAC 173-303-390(2).
- d. Additional reports as specified at WAC 173-303-390(3).

1.3.12 Information Repository

The Permittee must establish and maintain an information repository at any time Ecology requires based on the factors set forth in WAC 173-303-281(6)(b). The information repository will be governed by the provisions in WAC 173-303-281(6)(c) through (f).

1.4 Monitoring and Records

1.4.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.4.2 As provided at WAC 1730-303-810(11)(c), the Permittee must retain records of all monitoring information for a minimum of three years from the date of the sample, measurement, report or application. The record retention period may be extended by request of Ecology at any time.

1.4.2.1 The Permittee must maintain specific monitoring records for longer than three years when that is specified in other parts of this permit.

1.4.2.2 The Permittee must maintain records from all ground water monitoring wells and associated ground water surface elevations for the active life and post closure period of the permitted dangerous waste management unit.

1.4.3 Pursuant to WAC 173-303-810(11)(d), records of monitoring information must include all of the following:

- a. The dates, exact place, and times of sampling or measurements.
- b. The individuals who performed the sampling or measurements.
- c. The dates analyses were performed.
- d. The individuals who performed the analyses.
- e. The analytical techniques or methods used.
- f. The results of such analyses.

In addition, the Permittee must meet specific monitoring and record keeping requirements when those are specified in other parts of this permit.

1.5 Signature and Certification Requirements

- 1.5.1 All applications, reports, or information submitted to Ecology must be signed in accordance with WAC 173-303-810(12) and must be certified according to WAC 173-303-810(13).
- 1.5.2 Except as otherwise specified in this Permit, all applications, reports, notifications or other submissions that are required by this Permit to be submitted to Ecology must be sent by certified mail to the following address or other address as specified by Ecology:

Industrial Section Manager
Solid Waste Management Program
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Or hand delivered to the following address or other address as specified by Ecology:

Industrial Section Manager
Solid Waste Management Program
Department of Ecology
300 Desmond Drive SE
Lacey, WA 98503

A change in this address does not require a permit modification under WAC 173-303-830.

1.6 Confidential Information

Information submitted by the Permittee to Ecology identified as confidential by the Permittee will be treated in accordance with applicable provisions of WAC 173-303-810(15), RCW 42.17, and RCW 43.21A.160.

1.7 Waste Minimization

- 1.7.1 In accordance with WAC 173-303-380(1)(q), the Permittee must place a certification in the operating record on an annual basis that:
- 1.7.1.1 A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable.
 - 1.7.1.2 Proposed methods of treatment, storage or disposal are those practicable methods currently available to the Permittee which minimize the present and future threat to human health and the environment.
- 1.7.2 The Permittee must report waste minimization efforts in their annual report as required by Permit Condition 1.3.11.2.

1.8 Performance Standards

The Permittee shall design, construct, operate and maintain the dangerous waste management unit to the maximum extent practicable given the limits of technology in a manner to ensure performance standards in WAC 173-303-283 are met.

1.9 Documents and Records to be Maintained at the Facility Site

1.9.1 The following documents must be maintained at the Facility:

- a. This permit, including all of its attachments and addendums and all amendments, revisions, and modifications to these documents.
- b. Records required by this permit (commonly called the operating record).
- c. Other permits and approvals that authorize actions which affect safety and environmental protection (including, but not limited to, Air Quality Program registrations, Toxic Substance Control Act (TSCA) authorizations, State Environmental Policy Act (SEPA) decision documents).

1. Corrective Action

2.1 Definitions

Unless otherwise specified, the definitions set forth in RCW 70.105, WAC 173-303 , RCW 70.105D, and WAC 173-340, undertaken in whole or in part to fulfill the requirements of WAC 173-303-646, shall control the meanings of the terms used in this section of the Permit. Additional or modified definitions for this Part are as follows:

“Area of Concern” (“AOC”) means any area of the corrective action facility where a release of dangerous constituents (including dangerous waste and hazardous substances) has occurred, is occurring, and is suspected to have occurred, or threatens to occur.

“Corrective Action” means any activities including investigations, studies, characterizations, and corrective measures undertaken in whole or in part to fulfill the requirements of WAC 173-303-646.

“Corrective Action Facility” means all contiguous property under control of the Permittee under the provisions of RCW 70.105 or WAC 173-303, including the definition of facility at RCW 70.105D.020(5).

“Institutional Controls” mean non-engineered measures as described in WAC 173-340-440 taken to limit or prohibit activities that may interfere with the integrity of past cleanup actions implemented under interim action or cleanup action or that may result in exposure to hazardous substances at the corrective action facility.

“Release” means any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of hazardous substances, including dangerous waste and dangerous constituents into the environment. It also includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous waste or dangerous constituents and includes the definition of release at RCW 70.105D.020(25).

“Solid Waste Management Unit” (“SWMU”) means any discernible location at the corrective action facility where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at the corrective action facility at which solid wastes, including spills, have been routinely and systematically released and include regulated units as defined by WAC 173-303.

2.2 Corrective Action Conditions

- 2.2.1 Ecology is requiring that the Permittee fulfill corrective action responsibilities for the facility, as defined by WAC 173-303-040, using the Model Toxics Control Act (MTCA), (Chapter RCW 70.105D), as amended, and its implementing regulations (Chapter 173-340 WAC) and the Dangerous Waste Regulations [Chapter 173-303 WAC – specifically, WAC 173-303-646]. See Section III.1, *infra*. The actions taken must meet or exceed all substantive corrective action requirements of the Resource Conservation and Recovery Act (RCRA), the state Hazardous Waste Management Act, and the Dangerous Waste Regulations.
- 2.2.2 The Permittee’s corrective action obligations with respect to the facility under Agreed Order Docket No. 16297 effective **August 1, 2020**, are enforceable conditions of this Permit under the authority of Chapter 70.105 RCW, and its implementing regulations, Chapter 173-303 WAC.
- 2.2.3 The Agreed Order Docket No. 16297 effective **August 1, 2020** and its attachments are incorporated by reference as fully enforceable under this Permit. Regardless of whether or not the Agreed order is vacated, the Permittee’s corrective action obligations continue to be enforceable conditions of this Permit under the authority of the Hazardous Waste Management Act (HWMA), Chapter 70.105 RCW, and its implementing regulations, Chapter 173-303 WAC.
- 2.2.4 When Ecology selects a final cleanup action (remedy) for the Phillips 66 Ferndale Refinery, this Permit will be modified as needed to include the selected remedy and incorporate by reference a consent decree or other administrative mechanism implementing the remedy.

2.3 Releases - Notification

- 2.3.1 The Permittee must continuously consider and evaluate information regarding releases, suspected releases, or potential releases of hazardous substances, including dangerous waste and dangerous constituents as defined by WAC 173-303-64610(4), at the corrective action facility.
- 2.3.2 Considering Permit Condition 2.3.1, the Permittee must notify the Director, in writing, of any newly discovered releases at the corrective action facility, no later than ninety (90) days after discovery, in accordance with 173-340-300(2)(a).
The Permittee must provide information specified in WAC 173-303-806(4)(a)(xxiii) and 806(4)(a)(xxiv)(A).
- 2.3.3 The Permittee must maintain a list of all SWMUs (both past SWMUs that have been released from corrective action requirements and current SWMUs that have ongoing corrective action requirements) at the Facility regardless of the time at which waste was placed in such units.

2.4 Releases - Corrective Action

- 2.4.1 After receiving notification of any newly discovered releases at the corrective action facility, the Director will determine whether the Permittee must fulfill corrective action responsibilities as required by WAC 173-303. Any such corrective action will be incorporated into the permit by a permit modification.

The actions taken must meet or exceed all substantive corrective action requirements of the Resource Conservation and Recovery Act (RCRA), the state Hazardous Waste Management Act, and the Dangerous Waste Regulations.

2.4.2 To ensure that corrective actions will be protective of human health and the environment, the Permittee must implement corrective actions in a manner that is consistent with the following provisions of WAC 173-340:

2.4.2.1 WAC 173-340-350 Remedial investigation and feasibility study

2.4.2.2 WAC 173-340-360 Selection of cleanup actions

2.4.2.3 WAC 173-340-400 Implementation of the cleanup actions

2.4.2.4 WAC 173-340-410 Compliance monitoring requirements

2.4.2.5 WAC 173-340-420 Periodic review

2.4.2.6 WAC 173-340-440 Institutional controls

2.4.2.7 WAC 173-340-700 through -760 Cleanup standards

2.5 Financial Assurance for Corrective Action

Financial assurance for corrective action is required by WAC 173-303-64620. The Permittee's financial assurance obligations with respect to the facility under Agreed Order Docket No. 16297 effective **August 1, 2020**, are enforceable conditions of this Permit under the authority of Chapter 70.105 RCW, and its implementing regulations, Chapter 173-303 WAC.

Ecology's Financial Assurance Officer shall determine when the Permittee's actions and submissions meet the requirements of WAC 173-303-64620.

2.6 Periodic Review

After reviewing information obtained from the periodic review, Ecology reserves the right to require the Permittee to submit, for Department review and approval, a plan to conduct additional corrective actions necessary to ensure that the Facility continues to comply with the corrective action requirements under WAC 173-303 as a result of information obtained from that periodic review.

Approved corrective action plans will be incorporated into this permit in accordance with the modification procedures under WAC 173-303-830.

2.7 Reservation of Right

In the event that the corrective actions performed under this permit fail to meet the requirements of WAC 173-303, Ecology reserves the right to require the Permittee to submit a permit modification to ensure that the Facility continues to comply with the corrective action requirements under WAC 173-303.

2. Permit-By-Rule

3.1 Wastewater Treatment Units

The Permittee is authorized to have a permit-by-rule for wastewater treatment units that treat state-only dangerous wastes generated on or off site or federally regulated hazardous waste generated on-site, or wastewater treatment units that treat dangerous wastes generated on or off site if the Permittee:

- 3.1.1 Follows the conditions of its National Pollutant Discharge Elimination System (NPDES) Permit - No. WA0002984.
- 3.1.2 Includes the waste streams as sources of wastewater in the NPDES application and provides flow estimates, the chemical characteristics of the waste streams, whether the waste streams are batch versus continuous discharges, and the types of treatments that the waste streams will receive.
- 3.1.3 Complies with the following regulations:
 - 3.1.3.1 WAC 173-303-060 Notification and identification numbers.
 - 3.1.3.2 WAC 173-303-070 Designation of dangerous waste.
 - 3.1.3.3 WAC 173-303-283 Performance standards.
 - 3.1.3.4 WAC 173-303-300 General waste analysis.
 - 3.1.3.5 WAC 173-303-310 Security.
 - 3.1.3.6 WAC 173-303-350 Contingency plan and emergency procedures.
 - 3.1.3.7 WAC 173-303-360 Emergencies.
 - 3.1.3.8 WAC 173-303-370 Manifest system.
 - 3.1.3.9 WAC 173-303-380(1)(d) Operating record, and WAC 173-303-380(1)(a) when the Permittee treats federally regulated wastewaters generated offsite in wastewater treatment units.
 - 3.1.3.10 WAC 173-303-390 Facility reporting.

3.2 Dangerous Wastewater Received From Off Site

The Permittee may treat dangerous wastewater received from off site in its wastewater treatment units provided the wastewater is generated within the same industry and the wastewaters will be effectively treated by the wastewater treatment units, and the Permittee complies with 3.1.1 through 3.1.3.

**STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action By:
Phillips 66 Ferndale Refinery

AGREED ORDER for
**Interim Action – Oily Water Sewer
(SWMU 14)**

TO: Carl P. Perkins
Refinery Manager
Phillips 66 Ferndale Refinery
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Ferndale, WA 98248

No. DE 16297

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I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology) and Phillips 66 Ferndale Refinery (Phillips 66) under this Agreed Order is to provide for remedial action at a facility where there has been a release or threatened release of hazardous substances. Ecology and Phillips 66 are entering into this Agreed Order (Order) to address soil or groundwater contamination resulting from releases from the Oily Water Sewer (OWS) at the Ferndale Refinery.

The action requires an assessment of whether or not releases of hazardous substances from the OWS have caused soil or groundwater contamination and the development and implementation of interim actions to address releases by requiring remediation of contaminated soil, where accessible, that exceed applicable MTCA cleanup standards. The action requires an assessment of whether or not groundwater was impacted by releases of hazardous substances from the OWS in both accessible and inaccessible areas and includes requirements to remediate contaminated groundwater that exceeds applicable MTCA cleanup standards. Where impacts to groundwater have occurred or inaccessible contamination will remain in place, this action also requires groundwater monitoring to ensure the contamination does not migrate. This Order is not intended to address soil or groundwater contamination that is not related to releases from the OWS. The interim action does not establish final cleanup standards.

This Order requires Phillips 66 to conduct an interim action at the Oily Water Sewer (OWS) that includes the inspection of all major trunk lines for releases or threatened releases, addressing the cause of the releases or threatened releases, and implementing interim remedial actions, if necessary, consistent with the requirements of the Model Toxics Control Act (MTCA), RCW 70.105D, and its implementing regulations at WAC 173-340, in order to ensure that there is no threat to human health due to direct contact exposure and to minimize the migration of contaminants. The interim action at the OWS also includes tracking and reporting of releases and financial assurance. Ecology believes the actions required by this Order are in the public interest.

After the full implementation of this Order, Ecology will evaluate whether it is necessary to repeat the investigation, response, and reporting process during the next permit cycle.

II. JURISDICTION

This Order is issued pursuant to the authority of the Model Toxics Control Act (MTCA), RCW 70.105D.050(1). This Order also satisfies the corrective action requirements of WAC 173-303-646 through -64630.

III. PARTIES BOUND

This Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each Party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such Party to comply with the Order. Phillips 66 agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter Phillips 66's responsibility under this Order. Phillips 66 shall provide a copy of this Order to all agents, contractors, and subcontractors retained to perform work required by this Order, and shall ensure that all work undertaken by such agents, contractors, and subcontractors complies with this Order.

IV. DEFINITIONS

Unless otherwise specified herein, the definitions set forth in RCW 70.105D and WAC 173-340 shall control the meanings of the terms used in this Order.

A. Order: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order.

B. Cleanup Action Plan (CAP): Refers to the document issued by Ecology under WAC 173-340-380, which selects final Facility-specific corrective measures and specifies cleanup standards (cleanup levels, points of compliance, and other requirements for the corrective measures).

C. Cleanup Standards: Refers to the standards promulgated under RCW 70.105D.030(2)(e) and includes (1) hazardous substance concentrations (cleanup levels) that protect human health and the environment, (2) the location at the Facility where those cleanup levels must be attained (points of compliance), and (3) additional regulatory requirements that apply to a cleanup because of the type of action and/or the location of the Facility.

D. Corrective Action: Refers to any activities including investigations, studies, characterizations, and corrective measures, including actions taken pursuant to RCW 70.105D and WAC 173-340, undertaken in whole or in part to fulfill the requirements of WAC 173-303-64620.

E. Corrective Measure: Refers to any measure or action to control, prevent, or mitigate release(s) and/or threatened release(s) of dangerous constituents (including dangerous waste and hazardous substances) reviewed and approved by Ecology for the Facility, with final corrective measures (cleanup actions as defined by WAC 173-340) set forth in a Facility-specific CAP prepared in compliance with the requirements of WAC 173-340, including WAC 173-340-360. Corrective measures may include interim actions as defined by WAC 173-340. Interim actions will not necessarily be set forth in a Facility specific CAP.

F. Dangerous Constituent or Dangerous Waste Constituent: Refers to any constituent identified in WAC 173-303-9905 or 40 C.F.R. part 264, appendix IX; any constituent that caused a waste to be listed or designated as dangerous under the provisions of WAC 173 303; and any constituent defined as a hazardous substance under RCW 70.105D.020(13).

G. Dangerous Waste: Refers to any solid waste designated in WAC 173-303-070 through -100 as dangerous or extremely hazardous or mixed waste. Dangerous wastes are considered hazardous substances under RCW 70.105D.020(13).

H. Dangerous Waste Management Facility: For purposes of corrective action, used interchangeably in this document with the term “Facility.”

I. Facility: Refers to the Phillips 66 Ferndale Refinery, Ferndale; all property contiguous to the Phillips 66 Ferndale Refinery also controlled by Phillips 66; and all property, regardless of control, affected by release(s) or threatened release(s) of hazardous substances from the Phillips 66 Ferndale Refinery, including dangerous wastes and dangerous constituents, at and from these areas. “Facility” also includes the definition found in RCW 70.105D.020(8). The terms “Facility” and “Site” are used interchangeably in this Order.

J. Feasibility Study (FS): Refers to the investigation and evaluation of potential corrective measures performed in accordance with the FS requirements of WAC 173-340-350 and which is undertaken in whole or in part to fulfill the corrective action requirements of WAC 173 303-64620.

K. Final Remedy: The remedial action that will be constructed/implemented for a deferred area at Facility closure to meet MTCA cleanup standards at the point of compliance.

L. Hazardous Substance: Means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous substance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment.

M. Oily Water Sewer (OWS): Refers to the underground piping system which conveys process wastewater, stormwater (from process areas), and fire water to the refinery's wastewater treatment system. For purposes of corrective action under this Order, refers to the major trunk lines of the OWS. The major trunk lines of the OWS are shown on the map in Exhibit A. The Oily Water Sewer is also referred to as SWMU 14.

N. Parties: Refers to Ecology and Phillips 66.

O. Potentially Liable Person (PLP): Refers to Phillips 66.

P. Permit or Permitting Requirement: Unless otherwise specified, refers to the requirements of WAC 173-303 for applying for, obtaining, maintaining, modifying, and terminating Dangerous Waste Management Facility permits.

Q. RCRA: Refers to the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992k.

R. RCRA Facility Assessment (RFA): Refers to the EPA conducted investigation of release(s) and threatened release(s) at the Dangerous Waste Management Facility and the information contained in the report RCRA Facility Assessment, EPA 1988 (RFA Report). The RFA Report is incorporated into this Order by reference as if fully set forth herein.

S. Release: Refers to any intentional or unintentional spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous waste or dangerous constituents into the environment. It also includes the abandonment or discarding of barrels, containers, and other receptacles containing dangerous waste or dangerous constituents, and includes the definition of “release” in RCW 70.105D.020(32).

T. Remedial Investigation (RI): Refers to a facility-wide investigation and characterization performed in accordance with the requirements of WAC 173-340, which includes the substantive requirements for a RCRA facility investigation, undertaken in whole or in part to fulfill the corrective action requirements of WAC 173-303-64620.

U. Solid Waste Management Unit (SWMU): Refers to any discernible location at the Dangerous Waste Management Facility where solid wastes have been placed at any time, irrespective of whether the location was intended for the management of solid or dangerous waste. Such locations include any area at the Dangerous Waste Management Facility at which solid wastes, including spills, have been routinely and systematically released, and include regulated units as defined by WAC 173-303.

V. FINDINGS OF FACT

Ecology makes the following Findings of Fact, without any express or implied admissions of such facts by Phillips 66.

A. The Facility is generally located 10 miles west of Ferndale, Washington in Whatcom County and consists of approximately 820 acres, is bounded on the north by Unick Road, on the south by Slater Road, on the west by the Strait of Georgia, and on the east by Lake Terrell Road. A diagram of the Facility is attached (Exhibit B).

B. Mobil Oil Corporation (Mobil) owned and operated the Ferndale Refinery as a Dangerous Waste Management Facility on or after November 19, 1980, the date which subjects facilities to RCRA permitting requirements, including interim status requirements pursuant to RCRA, 42 U.S.C. § 6925, and implementing regulations thereunder, and including authorized state regulations promulgated in WAC 173-303.

C. In 1980, Mobil notified EPA of its dangerous waste management activities. In the notification, Mobil identified itself as managing the following dangerous wastes: API separator sludge, slop oil emulsion solids, Dissolved Air Floatation (DAF) Float, heat exchanger bundle cleaning sludge, and leaded tank bottoms.

D. Pursuant to the 1980 notification, Mobil was issued identification number WAD009250366 by EPA.

E. In 1980, Mobil submitted Part A of the RCRA permit application to EPA. In the Part A application, Mobil identified itself as managing the following dangerous wastes at the Container Storage Area, Oily Sludge Pond, North and South Land Treatment Fields, and DAF Float/Slop Oil Emulsion Tanks: API separator sludge, slop oil emulsion solids, Dissolved Air Floatation (DAF) Float, heat exchanger bundle cleaning sludge, and leaded tank bottoms.

F. In 1988, EPA performed an RFA at the Dangerous Waste Management Facility. The purpose of an RFA is to identify those areas at the Dangerous Waste Management Facility where release(s) of hazardous substances, as defined in RCW 70.105D.020(13), may have occurred or may be occurring. In the RFA report, EPA concluded that there was a potential for releases to soil and groundwater from the Oily Water Sewer (SWMU 14).

G. On March 31, 1989, EPA and Ecology issued a Permit for the Land Treatment of Dangerous Waste to Mobil. The permit identified a number of SWMUs at the refinery.

H. BP Oil Company acquired the refinery in 1988. In 1993, Tosco Refining Company bought the refinery from BP. Phillips Petroleum Company purchased Tosco in February 2001 and assumed control of the refinery thereafter. Phillips and Conoco announced a merger in November 2001 forming ConocoPhillips, the new controlling entity of the Ferndale Refinery.

In 2012, ConocoPhillips spun off its downstream and midstream assets as a new independent energy company, Phillips 66, which currently operates the Ferndale Refinery.

I. The Phillips 66 Ferndale Refinery was included as a RCRA corrective action facility under the U.S. Environmental Protection Agency's (USEPA) RCRA Corrective Action 2020 Initiative. The refinery's OWS was identified as a SWMU subject to corrective action.

J. The OWS was constructed in 1953. It consists of underground piping, drain hubs, manholes, hatches, and other access points.

K. Based on site history and previous cleanup actions, releases or threatened releases of hazardous substances from the OWS include Total Petroleum Hydrocarbons - gasoline and diesel range (TPH-G and TPH-D); Benzene, Toluene, Ethylbenzene, and Xylene (BTEX); polycyclic aromatic hydrocarbons (PAHs), and metals.

L. Hazardous substances might continue to be released from the OWS into the environment, including: surface water drainage areas; groundwater beneath and beyond the Dangerous Waste Management Facility; air; human work areas; and floral and faunal habitats.

VI. ECOLOGY DETERMINATIONS

Ecology makes the following determinations, without any express or implied admissions of such determinations (and underlying facts) by Phillips 66.

A. Phillips 66 is a person within the meaning of RCW 70.105D.020(24).

B. Phillips 66 is the owner and operator of a Dangerous Waste Management Facility that has operated, is operating, or should have been operating under interim status or a final facility permit, subject to RCRA, 42 U.S.C. §§ 6924 and 6925, and regulations promulgated thereunder, including authorized state regulations in WAC 173-303. Phillips 66 is also an "owner or operator" as defined by RCW 70.105D.020(22) of a "facility" as defined by RCW 70.105D.020(8).

C. Certain waste and constituents found at the Facility are dangerous wastes and/or dangerous constituents as defined by WAC 173-303 and in Section IV (Definitions) of this Order.

D. These dangerous wastes and dangerous constituents are considered hazardous substances within the meaning of RCW 70.105D.020(13).

E. Based on all factors known to Ecology, a “release” or “threatened release” of “hazardous substance(s)” as defined in RCW 70.105D.020(32) and (13), respectively, has occurred at the Facility and presents a potential threat to human health and the environment.

F. Based upon credible evidence, Ecology issued a PLP status letter to Phillips 66 dated April 19, 2019, pursuant to RCW 70.105D.040, .020(26), and WAC 173-340-500. After providing for notice and opportunity for comment, reviewing any comments submitted, and concluding that credible evidence supported a finding of potential liability, Ecology issued a determination that Phillips 66 is a PLP under RCW 70.105D.040 and notified Phillips 66 of this determination by letter dated September 4, 2019.

G. Pursuant to RCW 70.105D.030(1) and .050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

H. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study, or design of a cleanup action plan. An interim action is necessary at the Site to investigate the integrity of the OWS, address the cause of any releases or threatened releases, and to provide for the remediation of any contaminated soil that exceeds applicable MTCA cleanup standards to reduce exposure pathways for waste constituents. Based on these circumstances, Ecology has determined that an interim action is warranted under WAC 173-340-430(1)(a).

VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that Phillips 66 take the following investigation, remedial, and reporting actions and that these actions be conducted in accordance with WAC 173-340 unless otherwise specifically provided for herein.

A. Investigation and Response Plan – Prepare a plan to investigate the OWS and develop a plan to respond to any releases or threatened releases from the OWS that are discovered during the investigation. The Investigation and Response Plan shall be submitted within six (6) months of the effective date of this Order. Phillips 66 shall implement the Investigation and Response Plan upon Ecology's approval of the plan. The Investigation and Response Plan shall include:

1. A proposed schedule and map showing the segments of the OWS that will be inspected each year.

2. The procedures that will be followed to inspect the internal integrity of all major trunk lines of the OWS (as depicted on the map in Exhibit A) over a 10-year cycle.

3. The method(s) that will be used to assess the internal integrity of the major trunk lines of the OWS. The integrity assessment must include hydrostatic testing, camera, use of tracers, a combination of these methods, or an equivalent method approved by Ecology capable of assessing the integrity of the system and identifying areas where releases may have occurred or are ongoing. The method(s) used to assess sewer integrity shall be appropriate for the type of pipe and shall follow standard industry protocols and good engineering practices.

4. Where the integrity testing identifies potential leaks in the OWS, procedures for determining whether a release to the environment has occurred.

5. Implementation of measures to correct the cause of the release or threatened release.

6. Procedures for reporting any releases of hazardous substances from the OWS that are discovered in accordance with WAC 173-340-300(2), including providing written notification to Ecology within 90 days of discovery, the location and circumstances of the release, and any remedial actions planned, completed, or underway, to the extent known. Phillips 66 may refer to the work plan required in Section VII.B. in the report.

7. Procedures for determining the nature and extent of soil contamination related to releases from the OWS in accordance with WAC 173-340-350(6) and (7) and Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*, 2016, Publication No. 10-09-057 and the proposed schedule for implementing these procedures. Ecology may later approve changes to the schedule for individual releases.

8. Methods for assessing whether or not groundwater has been impacted including, but not limited to, the shallow uppermost aquifer. Groundwater quality shall be compared with the groundwater cleanup standards in WAC 173-340-720.

9. Procedures for implementation of a groundwater monitoring program when an impact to groundwater from an OWS release has been identified.

10. Procedures for determining the nature and extent of groundwater contamination from an OWS release in accordance with WAC 173-340-350(7) and Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*, 2016, Publication No. 10-09-057 and the proposed schedule for implementing these procedures. Ecology may later approve changes to the schedule for individual releases.

11. Provisions for submittal of a work plan to Ecology within 60 days of completing the site characterization and before initiating one of the presumptive interim actions referenced in Section VII.B. or within 120 days of completing the site characterization and before initiating an interim action, as provided in Section VII.B.

12. Measures to assess and prevent the risk of migration of soil and groundwater contamination in inaccessible areas.

13. Procedures for documenting inspection dates, findings, the location of a release, the cause of a release or threatened release, corrective actions or interim measures taken or planned, and areas where soil or groundwater contamination is left in place.

B. Implementing Interim Actions – Should data obtained under the Investigation and Response Plan show that a release or releases of hazardous substances above applicable MTCA cleanup standards from the OWS has occurred, Phillips 66 shall implement an Interim Action to address the release or releases to the extent areas are accessible.

Exhibit C identifies model remedies developed by Ecology for sites with petroleum contaminated soils. Exhibit D identifies model remedies developed by Ecology for sites with petroleum impacts to groundwater. The model remedies identified in Exhibits C and D may be implemented as presumptive interim actions under this Order.

Phillips 66 must submit a work plan within 60 days of completing the site characterization and before initiating one of the presumptive interim actions in Exhibits C or D. The work plan for a presumptive interim action must include the results of the site characterization, procedures for remediation of contaminated soil and contaminated groundwater, the presumptive interim action Phillips 66 intends to implement, and the schedule for implementing the presumptive interim action. If Phillips 66 follows one of the presumptive interim actions in Exhibits C or D, Ecology pre-approval of the interim action and the work plan for this action is not necessary, subject to the reservation in Section VII.E.

If Phillips 66 chooses not to follow one of the presumptive interim actions in Exhibits C or D, Phillips 66 must submit a work plan to Ecology for review and approval within 120 days of completing the site characterization and before initiating an interim action. The work plan must provide the information required by WAC 173-340-430(7), including details regarding the interim action that will be implemented for the release including site overview (preliminary conceptual site model, site description, and site characterization), sampling and analysis plan, evaluation of cleanup standards, description of interim action, proposed schedule for implementing the interim action, compliance monitoring, and description of the reporting and documentation required during the interim action.

C. Annual Progress Report – Phillips 66 shall submit an annual progress report to Ecology by April 1st of each year following implementation of the Investigation and Response Plan. The report shall include:

1. Any deviations from the Investigation and Response Plan.

2. The findings of the sewer assessment including an assessment of the general condition of the OWS system components, the location and description of any problems identified and their cause, and a description of actions taken or planned to repair or maintain system components based on the results of the testing.

3. Information on the nature and extent of releases identified including the characteristics of the release, sampling results, how soil and groundwater quality was evaluated, and information on the extent of soil and groundwater impacts.

4. Description of the corrective actions or interim measures taken or planned to remediate soil or groundwater, including the volume and disposition of contaminated soil removed, and measures taken to monitor or remediate groundwater.

5. Areas that were determined to be inaccessible and where contaminated soil or groundwater was left in place.

6. A discussion of the geology/hydrogeology in the area of any releases and how these characteristics may influence the migration of contaminants.

7. Measures to assess and prevent the risk of migration of contamination until a final remedy is implemented, including the elements of a groundwater monitoring program (number and location of wells, parameters monitored, frequency of monitoring).

8. A review of areas that were previously determined to be inaccessible to determine if they have become accessible in the last year, together with proposed timing and approach for remediation of the area(s). Phillips 66 shall submit a work plan for Ecology review and approval prior to initiating remedial action for a previously inaccessible area.

D. 10-Year Review – No later than 180 days prior to the date 10 calendar years from the effective date of this Order, Phillips 66 shall submit a report that provides information on soil and groundwater contamination related to releases from the OWS in areas that have been determined to be inaccessible. Phillips 66 must also provide substantive responses to each of the following EPA criteria in the reports to justify a remedy deferral for these areas.

1. There are safety and/or physical limitations that cannot be overcome by engineering or scheduling considerations.

2. The deferred operating area is not an operating hazardous waste unit/area.
3. Human exposures are under control and migration of contaminated groundwater is under control and will remain under control.
4. There is no ongoing release contributing to the contamination, the contamination is not being allowed to migrate outside of the operating footprint, and there is no off-site contamination from the release.
5. The extent of contamination has been delineated, a remedial action for the deferred area has been identified, and financial assurance is in place. Phillips 66 shall provide estimated costs for construction/implementation, operation, and maintenance of the identified remedial actions for the deferred areas in the 10-year report. Phillips 66 shall provide financial assurance for these areas following Ecology's approval of the estimated costs in accordance with VIII.O. (Financial Assurance) of this Order.
6. Necessary institutional controls are in place to prevent unacceptable exposures to the contamination and ensure protection of human health and the environment. Under this Order, institutional controls are measures undertaken to limit or prohibit activities that may: interfere with the integrity of an interim action; may result in exposure to hazardous substances; or may contribute to migration of contaminated groundwater. These controls include administrative controls such as training or safety precautions, fencing, maintenance of ground cover or other barriers, and dust control.
7. A deferral is only for a specified period of time and does not extend beyond the active life of the critical process or integral component that is the basis for the deferral. Ecology has determined that the specified period of time for a deferral is 10 years, at which time the deferral will be re-evaluated and extended as appropriate.

E. Final Remedy and Additional Actions – Following submission of the 10-year review report, Ecology and Phillips 66 will confer regarding whether it is necessary or otherwise appropriate to develop and implement a final cleanup action (corrective action) for all or part of the Facility, including any soil and groundwater contamination remaining in deferred areas of the Facility.

Such actions may include developing a remedial investigation report, feasibility study report, and cleanup action plan for all or part of the Facility. Such actions may also include determining whether any interim actions implemented can constitute cleanup actions for all or part of the Facility if they are subsequently shown to comply with WAC 173-340-350 through 173-340-390.

This Order may be formally amended by agreement of both Parties as set forth in Section VIII.J. to provide a scope of work and schedule for such actions as are agreed to by the Parties, or the Parties may, but are not required to, agree to enter into a separate order or orders for such work.

Notwithstanding any other provision of this Order, Ecology retains its authority under law to require additional or different remedial actions at the Facility, including both interim actions and cleanup actions, should it determine such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves its authority to require the submission of additional information after reviewing notifications of releases, interim action plans, annual progress reports, 10-year review reports, or any other available information. Phillips 66 reserves its rights and defenses under law.

F. Phillips 66 shall submit deliverables on the schedule provided herein and set forth in this Order and in Exhibit E. All plans or other deliverables submitted by Phillips 66 for Ecology's review and approval under this Order shall, upon Ecology's approval, become integral and enforceable parts of this Order.

H. If Ecology determines that Phillips 66 has failed to make sufficient progress or failed to implement the remedial action, in whole or in part, Ecology may, after written notice to Phillips 66, perform any or all portions of the remedial actions required under this Order or at Ecology's discretion allow Phillips 66 an opportunity to correct. In an emergency, Ecology is not required to provide notice to Phillips 66, or an opportunity for dispute resolution. Phillips 66 shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.A. (Remedial Action Costs). Ecology reserves the right to enforce requirements of this Order under Section X. (Enforcement).

VIII. TERMS AND CONDITIONS

A. Remedial Action Costs

Phillips 66 shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Facility under RCW 70.105D, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173 340 550(2). Ecology has accumulated \$10,604.51 in remedial action costs related to this Facility as of June 30, 2020. Phillips 66 shall pay this amount within thirty (30) days of the effective date of this Order. For all costs incurred subsequent to June 30, 2020, Phillips 66 shall pay the required amount within thirty (30) days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an identification of involved staff, and the amount of time spent by involved staff members on the project. A general statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

B. Designated Project Coordinators

The project coordinators for Ecology are:

Greg Gould, Industrial Section
PO Box 47600
Olympia, WA 98504-7600
360-407-6934
greg.gould@ecy.wa.gov

The project coordinator for Phillips 66 is:

Amie Blystone
Phillips 66 Ferndale Refinery
P.O. Box 8
3901 Unick Road
Ferndale, WA 98248
360-384-8377
amie.blystone@phillips66.com

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Facility. To the maximum extent possible, communications between Ecology and Phillips 66, and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

C. Performance

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist or hydrogeologist licensed by the state of Washington or under the direct supervision of an engineer registered by the state of Washington, except as otherwise provided for by RCW 18.43 and 18.220.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered by the state of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered by the state of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic, or engineering work shall be under the seal of an appropriately licensed professional as required by RCW 18.43 and 18.220.

D. Access

Ecology or any Ecology authorized representative shall have access to enter and freely move about all property at the Facility that Phillips 66 either owns, controls, or has access rights to at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing Phillips 66's progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by Phillips 66. Phillips 66 shall make all reasonable efforts to secure access rights for those properties within the Facility not owned or controlled by Phillips 66 where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice consistent with WAC 173-340-800(1) before entering any Facility property owned or controlled by Phillips 66 unless an emergency prevents such notice.

All persons who access the Facility pursuant to this section shall comply with any applicable health and safety plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Facility property access.

E. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, Phillips 66 shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VII. (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements – Exhibit F), and/or any subsequent procedures specified by Ecology for data submittal. Electronic data shall be submitted to Ecology's EIM system within 60 days after receiving validated data.

If requested by Ecology, Phillips 66 shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Phillips 66 pursuant to implementation of this Order. Phillips 66 shall notify Ecology seven (7) days in advance of any sample collection related to this Order.

Ecology shall, upon request, allow Phillips 66 and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VIII.D. (Access), Ecology shall notify Phillips 66 prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under WAC 173-50 for the specific analyses to be conducted, unless otherwise approved by Ecology.

F. Public Participation

Ecology shall maintain the responsibility for public participation at the Facility. However, Phillips 66 shall cooperate with Ecology, and shall:

1. When requested by Ecology, participate in public presentations on the progress of the interim action at the Facility. Participation may be through attendance at public meetings to assisting in answering questions, or as a presenter.

2. When requested by Ecology, arrange for information repositories to be located at the following locations:

- a. Ferndale Public Library
2125 Main Street
Ferndale, WA 98248
- b. Bellingham Public Library
Central Library
210 Central Avenue
Bellingham, WA 98225
- c. Ecology's Headquarters Office
Industrial Section
303 Desmond Drive SE
Lacey, WA 98503

At a minimum, copies of all public notices, fact sheets, and documents relating to public comment periods shall be promptly placed in these repositories.

G. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of all work performed pursuant to this Order, Phillips 66 shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order and shall insert a similar record retention requirement into all contracts with project contractors and subcontractors. Upon request of Ecology, Phillips 66 shall make all records available to Ecology and allow access for review within a reasonable time.

Nothing in this Order is intended to waive any right Phillips 66 may have under applicable law to limit disclosure of documents protected by the attorney work-product privilege and/or the attorney-client privilege. If Phillips 66 withholds any requested records based on an assertion of privilege, Phillips 66 shall provide Ecology with a privilege log specifying the records withheld and the applicable privilege. No Facility-related data collected pursuant to this Order shall be considered privileged.

H. Resolution of Disputes

1. In the event that Phillips 66 elects to invoke dispute resolution Phillips 66 must utilize the procedure set forth below.

a. Upon the triggering event (e.g., receipt of Ecology's project coordinator's written decision or an itemized billing statement), Phillips 66 has fourteen (14) calendar days within which to notify Ecology's project coordinator in writing of its dispute ("Informal Dispute Notice").

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute informally. The parties shall informally confer for up to fourteen (14) calendar days from receipt of the Informal Dispute Notice. If the project coordinators cannot resolve the dispute within those 14 calendar days, then within seven (7) calendar days Ecology's project coordinator shall issue a written decision ("Informal Dispute Decision") stating: the nature of the dispute; Phillips 66's position with regards to the dispute; Ecology's position with regard to the dispute; and the extent of resolution reached by informal discussion.

c. Phillips 66 may then request management review of the dispute.

This request (“Formal Dispute Notice”) must be submitted in writing to the Industrial Section Manager within seven (7) calendar days of receipt of Ecology’s Informal Dispute Decision. The Formal Dispute Notice shall include a written statement of dispute setting forth: the nature of the dispute; the disputing Party’s position with respect to the dispute; and the information relied upon to support its position.

d. The Industrial Section Manager shall conduct a review of the dispute and shall issue a written decision regarding the dispute (“Decision on Dispute”) within thirty (30) calendar days of receipt of the Formal Dispute Notice. The Decision on Dispute shall be Ecology’s final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

4. In case of a dispute, failure to either proceed with the work required by this Order or timely invoke dispute resolution may result in Ecology’s determination that insufficient progress is being made in preparation of a deliverable, and may result in Ecology undertaking the work under Section VII.G. (Work to be Performed) or initiating enforcement under Section X. (Enforcement).

I. Extension of Schedule

1. Phillips 66’s request for an extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the deadline for which the extension is requested, and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify:

- a. The deadline that is sought to be extended;
- b. The length of the extension sought;
- c. The reason(s) for the extension; and

d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on Phillips 66 to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

a. Circumstances beyond the reasonable control and despite the due diligence of Phillips 66 including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by Phillips 66;

b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or

c. Endangerment as described in Section VIII.K. (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of Phillips 66.

3. Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give Phillips 66 written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII.J. (Amendment of Order) when a schedule extension is granted.

4. At Phillips 66's request, an extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:

a. Delays in the issuance of a necessary permit which was applied for in a timely manner;

b. Other circumstances deemed exceptional or extraordinary by Ecology; or

c. Endangerment as described in Section VIII.K. (Endangerment).

J. Amendment of Order

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII.L. (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and Phillips 66. Ecology will provide its written consent to a formal amendment only after public notice and opportunity to comment on the formal amendment.

When requesting a change to the Order, Phillips 66 shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request is received. If Ecology determined that the change is substantial, then the Order must be formally amended. Reasons for the disapproval of a proposed amendment to this Order shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section VIII.H. (Resolution of Disputes).

K. Endangerment

In the event Ecology determines that any activity being performed under this Order is creating or has the potential to create a danger to human health or the environment on or surrounding the Facility, Ecology may direct Phillips 66 to cease such activities for such period of time as it deems necessary to abate the danger. Phillips 66 shall immediately comply with such direction.

In the event Phillips 66 determines that any activity being performed under this Order is creating or has the potential to create a danger to human health or the environment, Phillips 66 may cease such activities. Phillips 66 shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities.

Upon Ecology's direction, Phillips 66 shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Phillips 66's cessation of activities, it may direct Phillips 66 to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this section, Phillips 66's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.I. (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

L. Reservation of Rights

This Order is not a settlement under RCW 70.105D. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any of Ecology's rights or authority. Ecology will not, however, bring an action against Phillips 66 to recover remedial action costs paid to and received by Ecology under this Order. In addition, subject to the authorities reserved in Section VII.E, Ecology will not take additional enforcement actions against Phillips 66 regarding remedial actions required by this Order, provided Phillips 66 complies with this Order.

Ecology reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the release or threatened release of hazardous substances at the Facility.

By entering into this Order, Phillips 66 does not admit to any liability for the Facility. Although Phillips 66 is committing to conducting the work required by this Order under the terms of this Order, Phillips 66 expressly reserves all rights available under law, including but not limited to the right to seek cost recovery or contribution against third parties, and the right to assert any defenses to liability in the event of enforcement.

M. Transfer of Interest in Property

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Facility shall be consummated by Phillips 66 without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to Phillips 66's transfer of any interest in all or any portion of the Facility, and during the effective period of this Order, Phillips 66 shall provide a copy of this Order to the prospective purchaser(s), lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, Phillips 66 shall notify Ecology of said transfer. Upon transfer of any interest, Phillips 66 shall notify all transferees of the restrictions on the activities and uses of the property under this Order and incorporate any such use restrictions into the transfer documents.

N. Compliance with Applicable Laws

1. All actions carried out by Phillips 66 pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in RCW 70.105D.090. The permits or specific federal, state, or local requirements that the agency has determined are applicable and that are known at the time of entry of this Order include Ecology's modification of Phillips 66's Dangerous Waste Management Permit and Ecology's approval of Phillips 66's OWS Investigation and Response Plan, per this Order. If the OWS assessment were to identify a release or potential release of hazardous substances that would require soil or groundwater remediation or associated infrastructure repairs, then the following agency permits may apply: Land Disturbance Permit from Whatcom County, Critical Areas Review from Whatcom County, NPDES Construction Stormwater General Permit from Ecology, Clean Water Act (CWA) Section 401 Water Quality Certification from Ecology, Hydraulic Project Approval (HPA) from the Washington State Department of Fish and Wildlife, CWA Section 404 Nationwide and/or Individual Wetland Permit from the U.S. Army Corps of Engineers. Phillips 66 has a continuing obligation to identify additional applicable federal, state, and local requirements which apply to actions carried out pursuant to this Order, and to comply with those requirements.

As additional federal, state, and local requirements are identified by Ecology or Phillips 66, Ecology will document in writing if they are applicable to actions carried out pursuant to this Order, and Phillips 66 must implement those requirements.

2. Pursuant to RCW 70.105D.090(1), Phillips 66 is exempt from the procedural requirements of RCW 70.94, 70.95, 77.55, 90.48, and 90.58 and of any laws requiring or authorizing local government permits or approvals. However, Phillips 66 shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this section.

Phillips 66 has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event either Ecology or Phillips 66 determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify the other party of its determination. Ecology shall determine whether Ecology or Phillips 66 shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Phillips 66 shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by Phillips 66 and on how Phillips 66 must meet those requirements.

Ecology shall inform Phillips 66 in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Phillips 66 shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

3. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency that is necessary for the state to administer any federal law, the exemption shall not apply and Phillips 66 shall comply

with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

O. Financial Assurance

1. Financial assurance for corrective action is required by WAC 173-303-64620. Ecology's Financial Assurance Officer shall determine when Phillips 66's actions and submissions meet the requirements of WAC 173-303-64620.

2. The Ecology Financial Assurance Officer's contact information is:

Financial Assurance Officer
Washington State Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
Phone: (360) 407-6754
Fax: (360) 407-6715

3. Phillips 66 shall maintain sufficient and adequate financial assurance mechanisms to cover all costs associated with the remedial actions identified for deferred areas at the Site as provided in Section VII.D. (10-Year Review).

a. Phillips 66 shall submit to Ecology for review and approval an estimate of the costs under this Order for the construction/implementation, operation, and maintenance of the final remedy for the deferred areas at the Site, including institutional controls, compliance monitoring, and corrective measures in the 10-year Review Report. Within sixty (60) days after Ecology approves the aforementioned cost estimate, Phillips 66 shall provide proof of financial assurance sufficient to cover all such costs in a form acceptable to Ecology.

b. Phillips 66 shall adjust the financial assurance coverage and provide Ecology's project coordinator with documentation of the updated financial assurance for:

i. Inflation, annually, within thirty (30) days of the anniversary date of the entry of this Order; or if applicable, the modified anniversary date established in accordance with this section, or if applicable, ninety (90) days after the close of Phillips 66's fiscal year if the financial test or corporate guarantee is used.

ii. Changes in cost estimates, within thirty (30) days of issuance of Ecology's approval of a modification or revision to the Investigation and Response Plan that result in increases to the cost or expected duration of remedial actions. Any adjustments for inflation since the most recent preceding anniversary date shall be made concurrent with adjustments for changes in cost estimates. The issuance of Ecology's approval of a revised or modified Investigation and Response Plan will revise the anniversary date established under this section to become the date of issuance of such revised or modified Investigation and Response Plan.

P. Indemnification

Phillips 66 agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action (1) for death or injuries to persons, or (2) for loss or damage to property to the extent arising from or on account of acts or omissions of Phillips 66, its officers, employees, agents, or contractors in entering into and implementing this Order. However, Phillips 66 shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

IX. SATISFACTION AND TERMINATION OF ORDER

Upon completing implementation of the approved Investigation and Response Plan, any Interim Actions required under Section VII.B., and any deferred interim remedial action for previously inaccessible areas, Phillips 66 may submit a request in writing to Ecology for a determination that this Order has been fully satisfied. The provisions of this Order shall be deemed satisfied, and the Order will terminate, upon Phillips 66's receipt of written notification from Ecology that Phillips 66 has completed the remedial actions required by this Order, as amended by any modifications, and that Phillips 66 has complied with all other provisions of this Order.

X. ENFORCEMENT

Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

A. The Attorney General may bring an action to enforce this Order in a state or federal court.

B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Facility.

C. A liable party who refuses, without sufficient cause, to comply with any term of this Order will be liable for:

1. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply; and

2. Civil penalties of up to twenty-five thousand dollars (\$25,000) per day for each day it refuses to comply.

D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under RCW 70.105D.060.

Effective Date of This Order: August 1, 2020

PHILLIPS 66 FERNDAL REFINERY



Carl P. Perkins
Refinery Manager

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY



James DeMay, P.E.
Industrial Section Manager
Solid Waste Management Program

EXHIBIT A

Map of Oily Water Sewer Major Trunk Lines

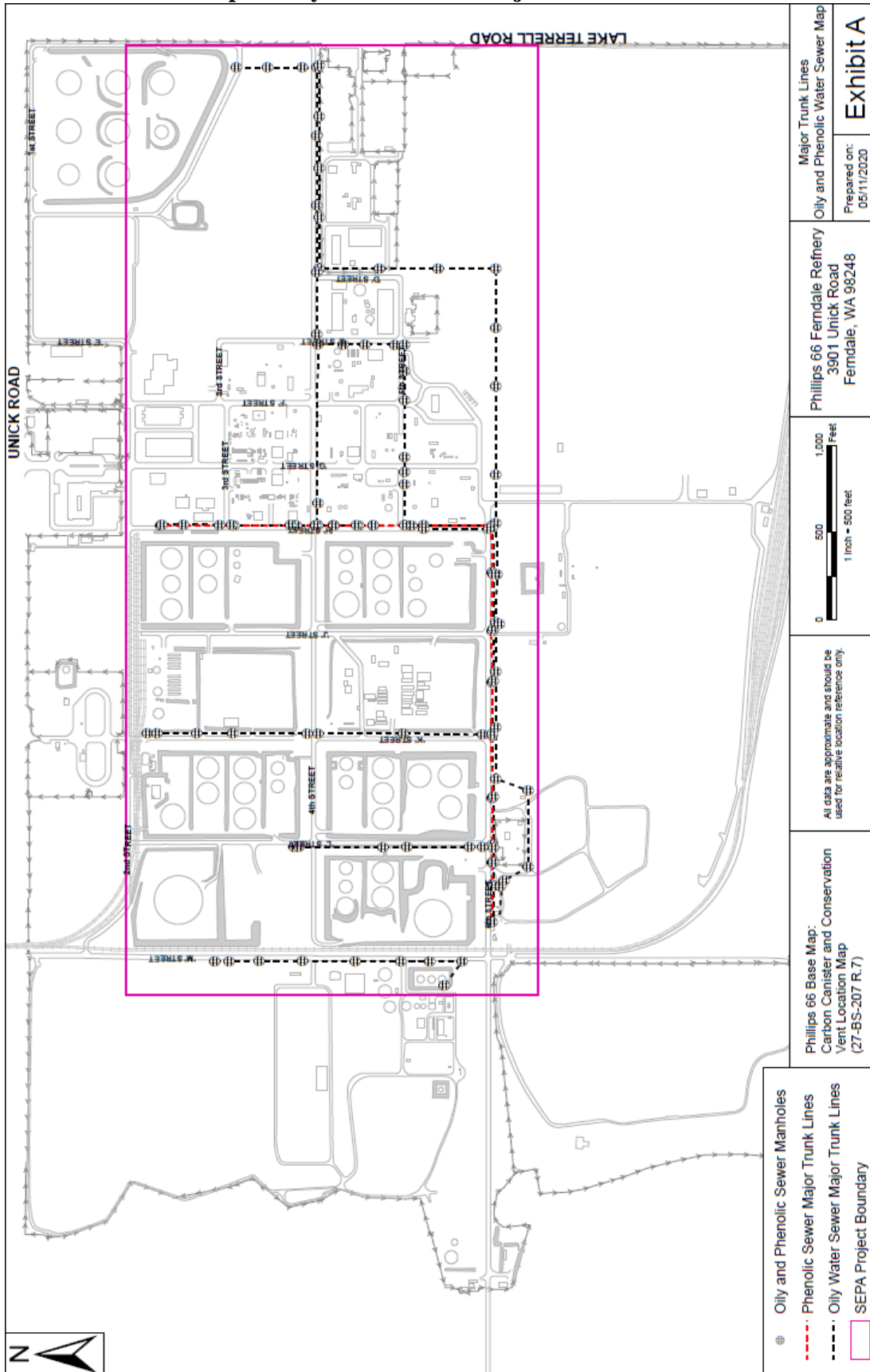


EXHIBIT B Facility Diagram



EXHIBIT C

Presumptive Interim Actions for Petroleum Contaminated Soils

Soil cleanup levels must address direct contact, the soil to groundwater pathway, terrestrial ecological receptors, and vapor intrusion. The following presumptive interim actions apply to releases where source removal, including free product, and contaminated soil will be removed to the greatest degree practicable.

The following presumptive interim actions do not apply to releases with contaminated soil below the water table or releases with petroleum contamination detected above the practical quantitation limits in groundwater (see Table 7.3 in Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*). For these situations, refer to Exhibit D – Presumptive Interim Actions for Petroleum Impacted Groundwater.

Presumptive Interim Action 1. – This presumptive interim action is for situations where complete removal of the contaminated soil will take place and there was only one contaminant in the petroleum release. In these situations, Method A industrial soil cleanup levels may be used. Following excavation of the contaminated soil, confirmation testing must be performed to document that Method A cleanup levels have been met in the remaining soil.

Presumptive Interim Action 2. – This presumptive interim action is for situations where complete removal of the contaminated soil will take place and there was more than one contaminant in the petroleum release. In these situations, Method C industrial soil cleanup levels may be used. Following excavation of the contaminated soil, confirmation testing must be performed to document that Method C cleanup levels have been met in the remaining soil.

Presumptive Interim Action 3. – This presumptive interim action is for situations where complete removal of the contaminated soil is not possible due to the presence of one or more structural impediments (e.g., buildings, utility lines, or roadways) or due to safety concerns related to working in close proximity to utility lines/product piping systems or geotechnical conditions. In these situations, contaminated soil must be removed to the greatest degree practicable. Following excavation of the contaminated soil, confirmation testing must be performed to document that Method A or Method C industrial soil cleanup levels (for one contaminant in the release or for more than one contaminant in the release) have been met in the remaining soil.

Any existing structures must remain in place and be adequately maintained so they continue to serve as a barrier to water migration through the contaminated soil, unless written approval from Ecology is granted to implement modifications.

When determining cleanup standards, use the provisions in:

- WAC 173-340-720 (groundwater cleanup standards);
- WAC 173-340-745 (soil cleanup standards for industrial properties); and
- The applicable provisions in Chapters 8 and 9 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*.

EXHIBIT D

Presumptive Interim Actions for Petroleum Impacts to Groundwater

The primary remedy for each of the presumptive interim actions identified below consists of source removal, including free product and contaminated soil to the maximum extent practicable. This remedy can be combined with any of the following remedial actions:

- Soil vapor extraction;
- Groundwater removal and treatment;
- Air sparging;
- Chemical/biological treatment; or
- Natural attenuation

Soil cleanup levels must address direct contact, the soil to groundwater pathway, terrestrial ecological receptors, and vapor intrusion.

Presumptive Interim Action 1. – This presumptive interim action is for situations where following remediation, the site of the release meets Method A soil cleanup levels for industrial properties and Method A cleanup levels for groundwater. Sufficient confirmation sampling and post-remedial monitoring is required to document compliance with these cleanup levels.

Presumptive Interim Action 2. – This presumptive interim action is for situations where following remediation, the site of the release meets Method A soil cleanup levels for industrial properties. Groundwater monitoring confirms that there are no off-property exceedances but sampling data at the release site indicates that the Method A cleanup levels for groundwater are not met. Sufficient confirmation sampling is required to document compliance with the soil cleanup levels. Post-remedial monitoring is required to document that the plume is stable or receding.

Presumptive Interim Action 3. – This presumptive interim action is for situations where following remediation, the site of the release meets Method C soil cleanup levels for industrial properties and Method A cleanup levels for groundwater. Sufficient confirmation sampling and post-remedial monitoring is required to document compliance with these cleanup levels.

Presumptive Interim Action 4. – This presumptive interim action is for situations where following remediation, the site of the release meets Method C soil cleanup levels for industrial properties. Groundwater monitoring confirms that there are no off-property exceedances but sampling data at the release site indicates that the Method A cleanup levels for groundwater are not met. Sufficient confirmation sampling is required to document compliance with the soil cleanup levels. Post-remedial monitoring is required to document that the plume is stable or receding.

Presumptive Interim Action 5. – This presumptive interim action is for situations where the remedial action is not sufficient to fully comply with the Method A or Method C soil cleanup levels due to the presence of one or more structural impediments (e.g., buildings, utility lines, or roadways) or due to safety concerns related to working in close proximity to utility lines/product piping systems or geotechnical conditions. Sufficient monitoring data must be collected to confirm that the Method A groundwater cleanup levels have been met.

Any existing structures must remain in place and be adequately maintained so they continue to serve as a barrier to water migration through the contaminated soil, unless written approval from Ecology is granted to implement modifications.

Presumptive Interim Action 6. – This presumptive interim action is for situations where the remedial action is not sufficient to fully comply with the Method A or Method C soil cleanup levels due to the presence of one or more structural impediments (e.g., buildings, utility lines, or roadways) or due to safety concerns related to working in close proximity to utility lines/product piping systems or geotechnical conditions. Groundwater monitoring confirms that there are no off-property exceedances but sampling data at the release site indicates that the Method A cleanup levels for groundwater are not met. Sufficient confirmation sampling is required to document compliance with the soil cleanup levels. Post-remedial monitoring is required to document that the plume is stable or receding.

Any existing structures must remain in place and be adequately maintained so they continue to serve as a barrier to water migration through the contaminated soil, unless written approval from Ecology is granted to implement modifications.

When determining cleanup standards, use the provisions in:

- WAC 173-340-745 (soil cleanup standards for industrial properties); and
- The applicable provisions in Chapters 8 and 9 of Ecology's *Guidance for Remediation of Petroleum Contaminated Sites*.

EXHIBIT E
Schedule of Deliverables

Due dates for select deliverables in Sections VII. and VIII. of the Agreed Order

<i>Item #</i>	<i>Deliverable</i>	<i>Due Date</i>
VII.A.	Investigation and Response Plan	Within six (6) months of effective date of Agreed Order
VII.B.	Work Plan	Within 60 days of completing site characterization and before initiating a presumptive interim action or within 120 days of completing site characterization and before initiating another interim action
VII.C.	Annual Progress Report	By April 1 st of each year following implementation of Investigation and Response Plan
VII.D.	10-Year Report	Within 180 days prior to date ten (10) calendar years from the effective date of Agreed Order
VIII.E.	Electronic data submittal to Ecology's EIM system	Within sixty (60) days of receiving validated data
VIII.O.	Proof of financial assurance coverage	Within sixty (60) days after Ecology's final approval of Phillips 66's cost estimate

EXHIBIT F
Ecology Toxics Cleanup Program Policy 840 – Data Submittal Requirements



Toxics Cleanup

Policy 840: Data Submittal

Established: August 1, 2005

Revised: April 12, 2016

Contact: Policy & Technical Support Unit, Headquarters

Purpose: This Policy provides guidance on the submission of environmental monitoring data generated or collected during the investigation or cleanup of contaminated sites under the Model Toxics Control Act.

References: WAC 173-340-840(5)
Chapter 173-204 WAC
Environmental Information Management System Database
Sediment Cleanup User's Manual II

Attachments: A - Model Grant and Permit Condition

Disclaimer: This Policy is intended solely for the guidance of Ecology staff. It is not intended, and cannot be relied on, to create rights, substantive or procedural, enforceable by any party in litigation with the state of Washington. Ecology may act at variance with this Policy depending on site-specific circumstances, or modify or withdraw this Policy at any time.

Approved by:



James J. Pendowski, Program Manager
Toxics Cleanup Program

Accommodation Requests: To request ADA accommodation, including materials in a format for the visually impaired, call Ecology's Toxics Cleanup Program at 360-407-7170. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

Purpose and Applicability

The investigation and cleanup of contaminated sites generate a large volume of environmental monitoring data that need to be properly managed to facilitate regulatory decisions. The data also need to be accessible by Ecology staff, site owners, consultants, and the general public.

This Policy describes the requirements for submitting environmental monitoring data generated or collected during the investigation and cleanup of contaminated sites under Chapter 70.105D RCW, Model Toxics Control Act (MTCA).

This Policy applies to Ecology staff and any person who investigates or cleans up contaminated sites and submits related environmental sampling data to Ecology, including potentially liable persons, Voluntary Cleanup Program (VCP) customers, prospective purchasers, government agencies, and Ecology contractors.

- 1. Unless otherwise specified by Ecology, all environmental monitoring data generated during contaminated site investigations and cleanups are required to be submitted to Ecology in both written format and electronically through EIM.**
-

Environmental monitoring data include biological, chemical, physical, and radiological data generated during site investigations and cleanups under the Model Toxics Control Act Cleanup Regulation (Chapter 173-340 WAC) and the Sediment Management Standards (Chapter 173-204 WAC).

The Environmental Information Management System (EIM) is a searchable database that contains data collected by Ecology (or by environmental contractors on behalf of Ecology), and by Ecology grant recipients, local governments, the regulated community, and volunteers.

Under this Policy, data are considered to be “environmental monitoring data” if generated or collected during:

- a. Site investigations and cleanups conducted under an order, agreed order or consent decree, permit, grant, loan, contract, interagency agreement, memorandum of understanding; or
- b. An independent remedial action.

Under this Policy, data are not considered to be environmental monitoring data if generated or collected for the following studies. This means that entering data into EIM, while encouraged, is optional for:

- a. Non site-specific studies;
- b. Site hazard assessments that result in no further action; and
- c. All initial site investigations.

2. Orders, agreed orders, consent decrees, or permits must include a condition that site-specific environmental sampling data be submitted in compliance with this Policy.

For those reports prepared and submitted for review under an order, agreed order, consent decree, or permit, the environmental sampling data must be entered into EIM at the time of report submittal. If reports for such work do not include documentation that data was submitted in compliance with this Policy, the reports shall be deemed incomplete and a notice will be provided to the submitter.

Generally, Ecology should not review such reports until that documentation is provided. The assistant attorney general assigned to the site should be consulted for an appropriate response when Ecology's review is delayed due to failure of data entry into EIM.

3. Site-specific environmental sampling data must be entered into EIM before Ecology will review independent remedial action reports under the Voluntary Cleanup Program.

For independent remedial action reports prepared and submitted under Ecology's Voluntary Cleanup Program (VCP), environmental sampling data must be entered into EIM at the time any report is submitted requesting an opinion on the sufficiency of the action under the VCP.

However, Ecology may establish an alternate deadline for entering data into EIM if this Policy creates undue hardship on the VCP customer and Ecology does not need the data in EIM to begin the review.¹ But in no case will Ecology issue a No Further Action (NFA) opinion letter under the VCP—either for the whole site or a property located within the site—until the data has been entered into EIM.

If sampling data has not been entered into EIM, Ecology may still review the report for the limited purpose of determining whether it contains sufficient information to provide an opinion. If the report is incomplete, Ecology may also respond to the VCP customer's request for an opinion by issuing an administrative letter rejecting the report and requesting additional information.

¹ For example, when a site has multiple groundwater sampling events over time, it may be more efficient to enter the data into EIM at one time after monitoring is completed, rather than for each monitoring event. Another example would be where a VCP consultant is using EIM for the first time and needs additional time to learn how to use the system.

4. Grants, contracts, interagency agreements or memoranda of understanding issued after the effective date of this Policy must include a condition that site- specific data be submitted in compliance with this Policy.

Reports on such work will not be accepted as complete until the data have been submitted in compliance with this Policy. If a payment or transfer of funds is involved in the transaction, the relevant payment or transfer shall be withheld until this requirement has been met. Attachment A contains example language to include in these documents.

5. Data generated during upland investigations and cleanups must be submitted electronically using Ecology's EIM.

The Environmental Information Management System is Ecology's main database for environmental monitoring data. Proper submission of data through this system meets the requirement of submitting such data in an electronic format.

Additional information about EIM, including instructions for data submittal, can be found on Ecology's EIM website at <http://www.ecy.wa.gov/eim/>. The Toxic Cleanup Program's (TCP) EIM Coordinator can also provide technical assistance to site managers and consultants who use EIM.

6. Data generated during sediment investigations and cleanups must be submitted electronically using Ecology's EIM.

Effective March 1, 2008, EIM is Ecology's data management system for sediment-related data. Proper submission of data through EIM meets the requirement of submitting such data in an electronic format. Electronic data must be submitted to Ecology simultaneously with the accompanying report.

For additional information on sediment sampling and analysis plan requirements, see Ecology's *Sediment Cleanup User's Manual (SCUM II)* Publication No. 12-09-057, available at:

<https://fortress.wa.gov/ecy/publications/summarypages/1209057.html>

The Sediment Data Coordinator in TCP's Aquatic Land Cleanup Unit (ALCU) can also provide technical assistance with EIM.

7. Data submitted electronically using EIM must be checked by the Toxics Cleanup Program's EIM Coordinator before the data will be officially loaded into EIM.

Normally, TCP's EIM Coordinator will receive a notice that data have been submitted through EIM. Upon receipt of the notice, the EIM Coordinator should notify the Cleanup Project Manager. The EIM Coordinator then reviews the submittal for quality control and officially loads the data into the system.

Attachment A

Model Grant and Permit Condition

The following condition is to be inserted in grants, loans, contracts, interagency agreements, and memoranda of understandings where site-specific environmental monitoring data is expected to be generated:

All sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with WAC 173-340-840(5) and Ecology Toxics Cleanup Program Policy 840: Data Submittal Requirements.

Electronic submittal of data is not required for site hazard assessments that result in no further action and initial site investigations. (FOR GRANTS, AND LOANS

ADD: Failure to properly submit sampling data will result in Ecology withholding payment and could jeopardize future funding.