

**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action at:

**BNSF Railway Black Tank Property  
Spokane County, WA**

AMENDMENT NO. 1 TO  
AGREED ORDER

No. 9188

TO: **BNSF Railway Company  
Marathon Oil Company**

**The signatories to this Agreed Order are collectively referred to herein as the Potentially Liable Persons (“PLPs”).**

**I. AMENDMENT**

Agreed Order (Order) No. 9188 dated August 23, 2012, is hereby amended to incorporate the information and requirements contained in this Amendment. This Amendment is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050 (1) and except as indicated below does not replace or change any of the exiting requirements of the Order, which shall remain in effect.

**V. FINDINGS OF FACT**

Section V (Findings of Fact) is amended by adding the following:

I. On August 23, 2012, Agreed Order 9188 was executed between Ecology and PLPs that required PLPs to complete a Remedial Investigation and Feasibility Study (RI/FS) at the Site. The PLPs submitted the final draft of the RI/FS report to Ecology in March 2017. The report was made available for public review and comment and was determined to be final after Ecology’s response to public comments. Ecology sent a letter to the PLPs dated May 19, 2017 informing them of the RI/FS final status.

J. The March 2017 RI/FS identified contamination at the Site in shallow soil (<15 feet), intermediate soil (between 15 feet and approximately 150 feet below ground surface [bgs]), deep smear zone soil (between approximately 150 and 180 feet bgs), and in Site groundwater.

## **VI. ECOLOGY DETERMINATIONS**

Section VI (Ecology Determinations) is amended by adding the following:

F. Under WAC 173-340-430, an interim action is a remedial action: 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 the remedial investigation/feasibility study or design of the cleanup action.

G. Ecology has determined that additional work in the form of an interim action is necessary in order to begin implementation of a cleanup action for shallow contaminated soil so as to improve environmental conditions at the Site. Such a circumstance is consistent with WAC 173-340-430.

H. The work required by this amendment is consistent with the final cleanup action Ecology expects to propose for the Site and will not foreclose reasonable alternatives for that action. The parties expect to negotiate a consent decree that will provide for implementing that final cleanup action. If the work required by this amendment is still in progress at the time a prospective future decree is entered, Ecology intends to incorporate that work into the scope of that decree.

## **VII. WORK TO BE PERFORMED**

Section VII (Work to be Performed) is amended by adding the following actions:

F. The PLPs shall furnish all personnel, materials, and services necessary for, or incidental to, the planning, initiation, completion, and reporting upon the Scope of Work and Schedule, attached as Exhibit B-A1. Exhibit B-A1 is incorporated by reference and is an integral and enforceable part of the Order. The work to be performed is to conduct an interim action. The PLPs shall commence work and thereafter complete all tasks in Exhibit B-A1 in the time frames and frame work indicated unless the Department grants an extension in accordance with Section

VIII.K, or unless provided otherwise in the Order. Each element of Exhibit B-A1 shall be implemented and completed in accordance with the Model Toxics Control Action (Chapter 70.105.D RCW) and its implementing regulation (Chapter 173-340 WAC) as amended, and all applicable federal, state, and local laws and regulations.

### **VIII. TERMS AND CONDITIONS OF ORDER**

Section VIII (Terms and Conditions of Order) is amended by replacing the applicable language or adding to the language of the identified sub-sections as follows:

**A. Public Notice** (replace in whole)

RCW 70.105D.030(2)(a) requires that, at a minimum, this Order and its Amendment(s) be subject to concurrent public notice. Ecology shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order or its Amendment(s) should public comment disclose facts or considerations which indicate to Ecology that this Order or its Amendment(s) is inadequate or improper in any respect.

**D. Designated Project Coordinators** (replace in whole)

The project coordinator for Ecology is:

Jeremy Schmidt, P.E.  
4601 N Monroe  
Spokane, WA 99205  
Phone: 509-329-3484  
E-mail: jesc461@ecy.wa.gov

The project coordinators for the PLPs are:

For BNSF:  
Shane DeGross  
BNSF Railway Company  
605 Puyallup Avenue  
Tacoma, WA 98134  
Phone: 253-591-2567  
E-mail: Shane.DeGross@BNSF.com

For Marathon:  
Renée Bellavance  
Senior Environmental Advisor, Corporate Responsibility  
Husky Oil Operations Limited  
707 8<sup>th</sup> Ave. S.W., Calgary, AB  
Box 6525, Stn. D, T2P 3G7

Phone: 403-298-6278 Cell: 587-226-6561  
E-mail: Renee.Bellavance@huskyenergy.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 Site. To the maximum extent possible, communications between Ecology and the PLPs, 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.

Effective date of this Amendment: July 12, 2018

**BNSF RAILWAY COMPANY**

**MARATHON OIL COMPANY**

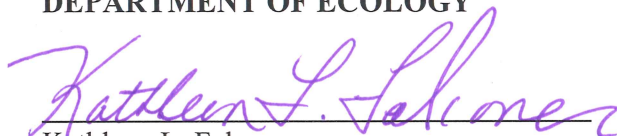
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John Lovenburg  
Vice President, Environmental  
BNSF Railway Company  
Fort Worth, TX  
Telephone: 817-352-1459

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Dan Kalisek  
HES Director  
Marathon Oil Company  
Houston, TX  
Telephone: 713-629-6600

**STATE OF WASHINGTON,  
DEPARTMENT OF ECOLOGY**

  
Kathleen L. Falconer  
Section Manager  
Toxics Cleanup Program  
Eastern Regional Office  
Spokane, WA  
Telephone: 509-329-3568

Phone: 403-298-6278 Cell: 587-226-6561  
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# **EXHIBIT B-A1**

## **SCOPE OF WORK (SOW) AND SCHEDULE**

### **SCOPE OF WORK**

#### **PURPOSE**

The work under Amendment No. 1 to Agreed Order 9188 (AO) involves conducting an Interim Action for Shallow Soil Contamination at the BNSF Railway Black Tank Property Site (Site).

The PLPs shall coordinate with Ecology throughout the development of the deliverables associated with this work and during implementation of the Interim Action. The PLPs shall keep Ecology informed of any changes to Work Plan or other project plans, and of any issues or problems as they develop.

The SOW is divided into five major tasks as follows:

- Task 1. Interim Action Work Plan
- Task 2. Permits and Substantive Conditions of Permit-Exempt Laws
- Task 3. Interim Action
- Task 4. Interim Action Completion Report

#### **TASK 1. INTERIM ACTION WORK PLAN**

The PLPs shall prepare an Interim Action Work Plan (IAWP) for the cleanup of contaminated surface soil at the Site. An Agency Review Draft IAWP will be prepared and submitted for Ecology review and approval. The IAWP will be prepared with detail commensurate with the work to be performed. The Agency Review Draft IAWP shall include, as appropriate:

- Description of the interim action including its purpose, general requirements, and relationship to the (final) cleanup action;
- Summary of relevant RI/FS information, including at a minimum existing site conditions, alternative interim actions considered, and contaminants of concern and cleanup levels applicable to the interim action;
- Applicable engineering design report and construction information, as specified in WAC 173-340-400, including a proposed schedule and personnel roles and responsibilities;
- Compliance Monitoring Plan;

## Exhibit B-A1 Scope of Work and Schedule

- Health and Safety Plan;
- SAP/QAPP
- Permits required.

The PLPs shall prepare two (2) copies of the Agency Review Draft IAWP and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review. The PLPs shall incorporate Ecology's comments after which Ecology will approve the IAWP (if appropriate) and the document will be considered Final. The PLPs shall prepare three (3) copies of the Final Interim Action Work Plan and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats. Once approved by Ecology, the PLPs will implement the interim action according with the approved schedule.

### **TASK 2. PERMITS AND SUBSTANTIVE CONDITIONS OF PERMIT-EXEMPT LAWS**

The PLPs must obtain any necessary permits prior to construction of the interim action, or identify substantive requirements of laws for which MTCA creates a permit exemption.

### **TASK 3. INTERIM ACTION FOR SHALLOW SOIL CONTAMINATION**

A remedial action implemented prior to completion of the Draft Cleanup Action Plan is considered an interim action and will be implemented in accordance with WAC 173-340-430 and the AO. Interim actions:

- are 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;
- correct a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed; or
- are needed to provide for completion of the remedial investigation/feasibility study or design of the cleanup action.

It has been determined that this interim action for shallow soil contamination at the Site can and will be designed in a manner that will not foreclose reasonable alternatives for any final cleanup action that may be required for any other portion of the Site.

As detailed below, the PLPs will implement this interim action according to the schedule contained in this Exhibit. The schedule allows time for a contractor bid period, contractor selection, and contract administration; necessary steps preceding the start of construction. The scope of the interim action includes:

- Excavation of up to 15 feet of contaminated soil exceeding the surface soil cleanup levels (CULs) set forth on Table ES-1 of the Ecology-accepted Remedial



## Exhibit B-A1 Scope of Work and Schedule

Investigation/Feasibility Study (RI/FS) completed by ERM-West, Inc., dated March 2017 at each of the five surface soil contamination areas identified in the RI/FS, and

- Transport of contaminated soil for off-Site disposal at a landfill permitted to accept the waste.

Excavation may extend deeper if high-concentration source material (as determined through field screening, e.g., sheen testing) is encountered and can be removed without resorting to shoring or other substantive measures. The five surface soil contamination areas are shown in Figure ES-4 of the RI/FS (attached). The lateral extent of excavation in any of the five surface soil contamination areas shall be increased if confirmation sampling indicates that additional excavation is necessary to achieve the surface soil cleanup levels set forth on Table ES-1 of the RI/FS (attached); provided, however, that no excavation will be required that may undermine the integrity of the existing rail line. All excavations shall be backfilled to their original grade, and appropriately compacted, with clean fill soil. Backfill material and compaction shall comply with specifications provided by the Washington State Department of Transportation. Excavated soil exceeding CULs shall be transported to a landfill permitted to accept the waste for disposal. Compliance sampling shall occur in the excavation walls prior to backfill to ensure the lateral extent of contamination is removed. Performance sampling shall occur in the excavation bottom to document the level of contamination left in place. In addition to the removal of contaminated soil in the five surface soil contamination areas, known underground piping and infrastructure remaining within the site boundaries on Figure ES-4 shall be removed and disposed at an off-Site landfill. CULs shall be achieved in the upper 15 feet of contaminated soil upon completion of the excavation.

### **TASK 4. INTERIM ACTION COMPLETION REPORT**

Upon successful completion of the work, an Agency Review Draft Interim Action Completion Report (IACR) will be prepared as a separate deliverable. The IACR shall include, but not be limited to: a summary of the work that was completed, any deviations from the work plan, chemical analytical data documenting that backfill materials were not contaminated, performance and confirmation analytical data from samples taken within the excavation, and disposal documentation for all materials taken off site. The PLPs shall prepare two (2) copies of the Agency Review Draft IACR and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology for review and approval. After incorporating Ecology's comments on the Agency Review Draft IACR and after Ecology approval, the PLPs shall prepare three (3) copies of the Final IACR and submit them, including one electronic copy each in Word (.doc) and Adobe (.pdf) formats, to Ecology.

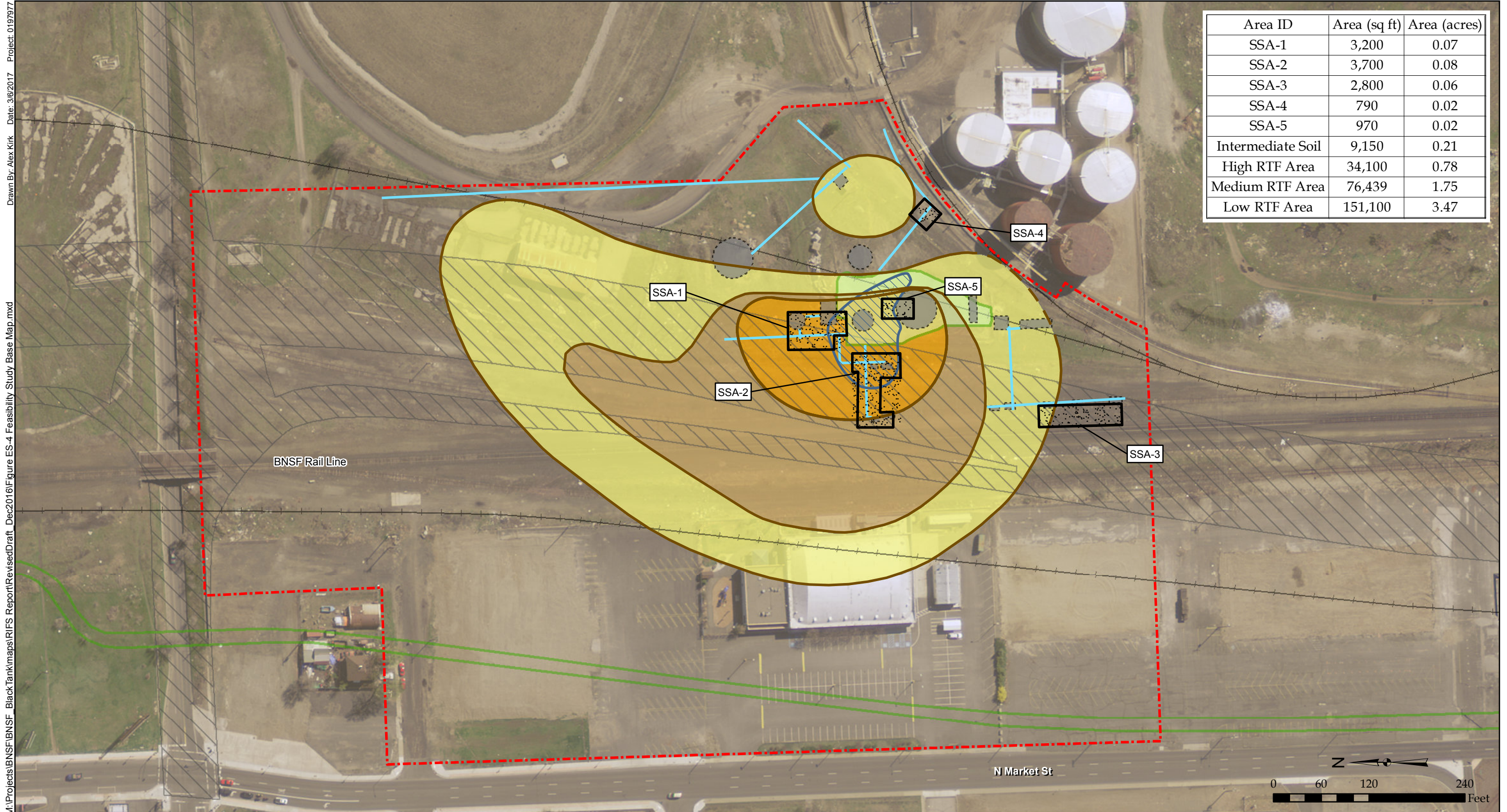
## SCHEDULE OF DELIVERABLES AND ACTIONS

The schedule for deliverables and actions described in Amendment No. 1 to the Agreed Order and the Scope of Work is presented below. If the date for submission of any item or notification required by this Schedule of Deliverables occurs on a weekend, state or federal holiday, the date for submission of that item or notification is extended to the next business day following the weekend or holiday. Where a deliverable due date is triggered by Ecology notification, comments or approval, the starting date for the period shown is the date the PLPs received such notification, comments or approval by certified mail, return receipt requested, unless otherwise noted below. Where triggered by Ecology receipt of a deliverable, the starting date for the period shown is the date Ecology receives the deliverable by certified mail, return receipt requested, or the date of Ecology signature on a hand-delivery form. Ecology expects to review and comment on each document within 14 calendar days following receipt.

<b>Task</b>	<b>Deliverables/Actions</b>	<b>Completion Times</b>
1	Agency Review Draft IAWP	30 calendar days following the effective date of Amendment No. 1 to Agreed Order 9188
	Revised (Final) Draft IAWP	14 calendar days following receipt of Ecology comments on Agency Review Draft IAWP
3	Initiation of Interim Action Field Work	14 calendar days following Ecology approval of Final IAWP
	Deadline for completing Interim Action Field Work	30 Calendar days following initiation of Interim Action Field Work or November 15, 2018, whichever is earlier
4	Agency Review Draft IACR	60 days following completion of interim action field work
	Revised (Final) Draft IACR	30 calendar days following receipt of Ecology comments on Agency Review Draft IACR



M:\Projects\BNSF\BNSF\_BlackTankmaps\RIFS\_Report\RevisedDraft\_Dec2016\Figure ES-4 Feasibility Study Base Map.mxd  
 Drawn By: Alex Kirk Date: 3/6/2017 Project: 0197977



**Legend**

- Existing Piping (Petroleum and Chemical Solution)
- TPH-D/HO in Intermediate Soil Exceeding the Preliminary CUL
- DOT Proposed Pedestrian Pathway - 2014
- High RTF Area
- Medium RTF Area
- Low RTF Area
- DOT Proposed Railroad Realignment Option - 2014
- Approximate Lateral Limits of Surface Soil Cleanup Areas
- Former Black Tank Excavation
- Historical Aboveground Storage Tank, Sump or Pump House
- Proposed BNSF Black Tank Site Boundary
- DOT Proposed Highway Alignment Option - 2014

**Notes:**  
 CUL = Cleanup Level  
 LNAPL = Light Non-Aqueous Phase Liquid  
 RTF: Restoration Timeframe  
 TPH-D/HO = Combined Diesel and Heavy Oil-Range Petroleum Hydrocarbons  
 Preliminary CUL = 13,600 milligrams per kilogram  
 Aerial Photo: USGS, April 2012.

**Figure ES-4**  
**Cleanup Action Areas**  
**BNSF Black Tank**  
**Spokane, Washington**

Environmental Resources Management  
 www.erm.com



*Preliminary Cleanup Levels  
BNSF Black Tank Site  
Spokane, Washington*

Contaminant of Concern	Surface Soil (< 15 feet bgs) (mg/kg)	Subsurface Soil (> 15 feet bgs) (mg/kg)	Groundwater (µg/L)
TPH-D/HO	2,000	13,600	500
Benzo(a)Pyrene	0.1	n/a	0.1
Benzo(a)Pyrene TEQ	0.1	n/a	0.1
Naphthalene	5	n/a	n/a
Total Naphthalenes	5	n/a	n/a
LNAPL (Mobile)	Removal using normally accepted engineering practices.		

**Abbreviations:**

bgs = below ground surface

LNAPL = light non-aqueous phase liquid

mg/kg = milligrams per kilogram

n/a = not applicable

TEQ = Toxic Equivalency Quotient

TPH-D/HO = Total Petroleum Hydrocarbons as Diesel/Heavy Oil per method NWTPH-Dx

µg/L = micrograms per liter