STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by:

Akzo Nobel Canada Inc.; Basin Disposal, Inc.; Bayer CropScience, Inc.; Blount, Inc.; BNSF Railway Company; The Boeing Company; Crown Beverage Packaging, LLC; Daimler Trucks North America, LLC; Leonard and Glenda Dietrich; E.I. Du Pont De Nemours and Co., Inc.; Franklin County; Georgia-Pacific, LLC; Goodrich Corporation on behalf of Kalama Specialty Chemicals, Inc.; Intalco Aluminum; 3M Company; Morton International LLC; PACCAR Inc.; Pasco Sanitary Landfill, Inc.; PCC Structurals, Inc.; Pharmacia Corporation; Piute Energy & Transportation; PPG Industries; Puget Sound Naval Shipyards; Sandvik Special Metals, LLC; Simpson Timber Company; The Standard Register Company (fka UARCO); Union Oil of California, as successor-in-interest to Collier Carbon and Chemical Corporation; United States Air Force; United States Department of Agriculture, Forest Service; United States Department of the Interior, Bureau of Reclamation; and Zep Manufacturing; and Weyerhaeuser NR Company.

ENFORCEMENT ORDER

No. DE 10651

TABLE OF CONTENTS

I.	INTRODUCTION	.3
II.	JURISDICTION	.4
III.	PLP BOUND	.4
IV.	DEFINITIONS	.4

V.	FINDINGS OF FACT			
VI.	ECOLOGY DETERMINATIONS			
VII.	WORK TO BE PERFORMED15			
VIII.	TERMS AND CONDITIONS			
	A.	Public Notice		
	В.	Remedial Action Costs17		
	C.	Implementation of Remedial Action17		
	D.	Designated Project Coordinators		
	E.	Performance		
	F.	Access		
	G.	Sampling, Data Submittal, and Availability20		
	H.	Retention of Records		
	I.	Resolution of Disputes		
	J.	Extension of Schedule		
	K.	Endangerment		
	L.	Reservation of Rights		
	M.	Transfer of Interest in Property		
	N.	Compliance With Applicable Laws		
IX.	SA	TISFACTION OF ORDER		
X.	ENFORCEMENT			

EXHIBIT A	Site Diagram
EXHIBIT B	Scope of Work, Schedule, and Applicable Relevant and
	Appropriate Requirements
EXHIBIT C	Ecology Policy Number 840, Data Submittal Requirements

I. INTRODUCTION

The objective of the State of Washington, Department of Ecology (Ecology) under this Enforcement Order (Order) is to require remedial action at a facility where there has been a release or threatened release of hazardous substances. Currently at the Pasco Landfill NPL Site, a subsurface fire is burning in an area of the landfill where old municipal wastes are buried. Ecology is issuing this Order as the most appropriate administrative mechanism to address this subsurface fire in an expeditious manner before it becomes substantially worse, and to reduce the threat to human health and the environment. Ecology acknowledges the cooperation of the Potentially Liable Persons (PLPs) in dealing with the subsurface fire.

This Order is addressed to the following thirty-two (32) Potentially Liable Persons for the Pasco Landfill NPL Site: Akzo Nobel Canada Inc.; Basin Disposal, Inc.; Bayer CropScience, Inc.; Blount, Inc.; BNSF Railway Company; The Boeing Company; Crown Beverage Packaging, LLC; Daimler Trucks North America, LLC; Leonard and Glenda Dietrich; E.I. Du Pont De Nemours and Co., Inc.; Franklin County; Georgia-Pacific, LLC; Goodrich Corporation on behalf of Kalama Specialty Chemicals, Inc.; Intalco Aluminum; 3M Company; Morton International LLC; PACCAR Inc.; Pasco Sanitary Landfill, Inc.; PCC Structurals, Inc.; Pharmacia Corporation; Piute Energy & Transportation; PPG Industries; Puget Sound Naval Shipyards; Sandvik Special Metals, LLC; Simpson Timber Company; The Standard Register Company (fka UARCO); Union Oil of California, as successor-in-interest to Collier Carbon and Chemical Corporation; United States Air Force; United States Department of Agriculture, Forest Service; United States Department of the Interior, Bureau of Reclamation; and Zep Manufacturing; and Weyerhaeuser NR Company (hereinafter "PLPs").

This Order requires PLPs to perform three primary actions:

1. Develop a work plan that describes a preferred method or methods to promptly extinguish the Pasco Landfill NPL Site (Site) Balefill subsurface fire.. This work plan

shall include necessary monitoring activities to verify both the short-term and long-term success of these actions.

- 2. Implement the fire extinguishment activities described in the Ecology approved work plan and the associated performance monitoring activities.
- 3. Develop a work plan detailing an engineered and/or operational approach to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter. This work plan also shall include necessary monitoring activities to assess the efficacy of the approved combustion prevention actions.

Ecology believes the actions required by this Order are in the public interest.

II. JURISDICTION

This Enforcement Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

III. PLP BOUND

This Enforcement Order shall apply to and be binding upon PLPs. To the extent allowed by law, changes in ownership or corporate status shall not alter PLPs' responsibility under this Order. PLPs 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 Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms in this Order.

A. <u>Site</u>: Refers to the Pasco Landfill NPL Site, which is generally located approximately 1.5 miles northeast of the City of Pasco, Washington, in the southwest quarter of Section 15, and the northwest quarter of Section 22, Township 9 North, Range 30 East, Willamette Meridian, in Franklin County, Washington. The Site is defined by the extent of contamination caused by the release of hazardous substances at the Site. The Site is more particularly described in the Site Diagram, which is attached to this Order as Exhibit A, is an integral part of this Order, and is incorporated by this reference. The Site constitutes a Facility under RCW 70.105D.020(5).

B. <u>Parties</u>: Refers to the State of Washington, Department of Ecology, and the PLPs.

C. <u>Potentially Liable Persons (PLPs)</u>: Refers to all entities potentially liable for the investigation and cleanup of the Site.

D. <u>Enforcement Order or Order</u>: Refers to this 2014 Enforcement Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order. The terms "Enforcement Order" or "Order" shall include all exhibits to this Order.

E. <u>Hazardous Substance</u>: Includes 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. Pyrolysis and torrefaction are forms of combustion commonly associated with subsurface landfill fires and result in the thermal decomposition of carbonaceous materials such as municipal solid waste. The combustion of organic substances within the municipal solid waste produces gaseous, liquid-phase and solid-phase byproducts, some of which are hazardous substances.

V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by the PLPs:

A. The Site is located near the intersection of Kahlotus Road with United States Routes 12 and 395, at latitude 46 degrees, 15'07" North and longitude 119 degrees, 03'13" West. The approximate location and boundaries of the Site are depicted in Exhibit A. The Site consists of the area illustrated and extends laterally and vertically as far as the plume of contamination which exceeds applicable cleanup levels in groundwater resulting from onsite contamination.

B. In 1958, the Franklin County Planning Commission authorized John Dietrich,
d/b/a Pasco Garbage Service, to establish and operate a garbage disposal facility at this Site. The

facility operated as a burning dump until 1971, at which point it was converted to a sanitary landfill.

C. Chemical Processors, Inc. and John and Marjorie Dietrich, d/b/a Basin Disposal Co., Inc., agreed to form a third company, Resource Recovery Corporation (CR2), to operate the landfill. CR2 was incorporated in Washington on August 8, 1972. The CR2 Operational Plan, dated August 28, 1972, envisioned the development of additional disposal facilities for both drummed and liquid wastes. Drummed wastes were to be buried, and bulk liquids were to be discharged to lagoons and evaporated.

D. On or about January 3, 1973, CR2 submitted a Waste Discharge Permit Application (the Application) to Ecology, by which it sought permission to collect, transport to, and dispose of various industrial, commercial, and agricultural wastes at the disposal facility. On March 21, 1973, Ecology issued Waste Discharge Permit No. 5301 (the Permit) to CR2 to govern the operation of the disposal facility. The industrial waste lagoons and drum disposal sites were operated at the disposal facility through the end of 1974. Industrial wastes were segregated and disposed of in five zones of the IWA, designated as Zones A, B, C, D and E. *See* Exhibit A-2. Those areas, designated on Exhibit A-2 as Zone U-1 (historical) and Zone TS-2 (historical), were used as holding areas for industrial wastes.

E. On September 24, 1973, Franklin County notified CR2 that it was no longer permitted to dispose of industrial wastes originating from outside of Franklin and Benton Counties at the facility and that CR2 would need to obtain a new special use permit in order to continue operating the sanitary landfill portion of the facility. On November 5, 1973, CR2 submitted a special use permit application to Franklin County seeking permission to continue to operate the facility as a sanitary landfill and industrial waste disposal facility. Franklin County subsequently issued an interim order allowing CR2 to continue operating the sanitary landfill, but barring the disposal of industrial waste at the facility until the County made a decision on CR2's special use permit application.

F. On February 11, 1974, Franklin County granted CR2 a special use permit that allowed CR2 to continue operating the sanitary landfill and to resume operating the industrial waste disposal facilities until May 2, 1974. CR2 subsequently entered into a Performance Agreement with Franklin County and Ecology, whereby Franklin County allowed CR2 to operate the industrial waste facility through December 31, 1974.

G. At some time between May 1976 and June 1977, baled municipal waste disposal (Balefill) began in the area east of Zone A. In late spring of 1980, a fire broke out in the Balefill area. This fire reportedly took over a week to extinguish, during which time the area was churned up with heavy equipment and large volumes of water applied to the burning bales. Table 3-2 from the Phase I Remedial Investigation Report notes that "Fire broke out in the balefill east of Zone A. Water was applied for a period of approximately one week to extinguish."

H. Zone A consisted of a drum disposal area and reportedly contains approximately 35,000 drums of mixed organic and inorganic industrial wastes. Zone B consisted of a drum disposal area and contained approximately 5000 drums of chlorinated herbicide manufacturing wastes. Zone C consisted of an unlined pond that was used to evaporate water from various industrial wastes. Zone D consisted of an unlined pond that was used for the disposal of non-containerized industrial wastes. Approximately 3,000,000 gallons of wastes were disposed of in Zones C and D. Zone E consisted of a bulk waste disposal area where approximately 11,000 tons of chlor-alkali sludge and carbon electrode wastes were reportedly deposited.

I. Following expiration of the Permit, CR2 continued to operate the sanitary landfill portion of the facility, accepting local solid and industrial waste under permit from the Benton-Franklin District Health Department. In 1981, Pasco Sanitary Landfill, Inc. (PSL) was formed to operate the landfill. PSL currently owns the Pasco Sanitary Landfill property, which is depicted in Exhibit A.

J. In February 1990, the Site was listed as a National Priority List (NPL) site by the

United States Environmental Protection Agency. This listing was based on the identification of hazardous substances in Site media, including groundwater. Ecology was established as the lead agency for the cleanup investigations and remedial actions taken at the Site.

K. In 1992, a Phase I Remedial Investigation (RI) was begun by a group of PLPs. The purpose of the Phase I RI was to gain additional information on the nature and extent of contamination in the soil, soil-gas, and groundwater near potential contaminant sources at the Site. Findings of the Phase I RI confirmed the presence of site-related contamination in soil, soil-gas, and groundwater at levels exceeding then applicable MTCA cleanup levels.

L. In November 1994, Ecology issued Enforcement Order No. DE 94TC-E103 to certain PLPs, requiring them to perform a Phase II RI and Feasibility Study (FS). The purpose of the Phase II RI was to further define and characterize the source(s), nature, degree, and extent of contamination at the Site. The purpose of the FS was to develop and evaluate remedial measures to reduce risks to human health and the environment in accordance with WAC 173-340. Results of the Phase II RI Report confirmed that hazardous substances had been released to the environment, within the meaning of RCW 70.105D.020(10). The results of the Phase I and Phase II RI provided sufficient information regarding the nature and extent of contamination at the Site which allowed for the preparation of a Risk Assessment/Cleanup Levels Analysis and a FS.

M. The FS for the Site was completed in accordance with Enforcement Order DE 94TC-E103 and WAC 173-340-350. The FS report was accepted as final by Ecology in October 1999 after public notice and opportunity to comment. The FS proposed a five-year performance monitoring period during which time the preferred remedy would be monitored, evaluated, and modified (if necessary) to optimize the performance of the remedy.

N. In or around May of 1997, certain PLPs undertook Interim Remedial Measures (IRMs) at the Site to reduce potential risks to human health and the environment. The 1997 IRMs included installation and pilot-scale testing of two engineered remediation systems: a soil

vapor extraction (SVE) system and a groundwater treatment system (NoVOCsTM). The pilot SVE system was installed at Zone A to remove volatile organic compounds in soil vapors from beneath and adjacent to the waste zone. The pilot NoVOCsTM groundwater treatment system was installed near Zone A in 1997.

O. In 2000, Ecology and a group of PLPs entered into Agreed Order No. DE 00TCPER-1324, which required the implementation and completion of certain interim actions at the IWA and GPA. Also in 2000, Ecology issued Enforcement Order No. DE 00TCPER-1325 to a separate group of PLPs, which required them to implement and complete those interim actions at the IWA and GPA. The interim actions required by Agreed Order No. DE 00TCPER-1324 and Enforcement Order No. DE 00TCPER-1325 included: the installation of engineered landfill caps at Zones A, C, D, and E of the IWA; an expansion of the SVE and NoVOCs systems at Zone A; removal of the drums and installation of a temporary cover at Zone B of the IWA; and implementation of institutional controls. Ecology determined that before a final site remedy could be selected under MTCA, a five-year operational period was necessary to evaluate the performance of the interim action systems.

P. In 2000, Ecology and a group of PLPs entered into Agreed Order No. DE 00TCPER-1326, which required the implementation and completion of certain interim actions for the SLA at the Site. Also in 2000, Ecology issued Enforcement Order No. DE 00TCPER-1327 to a separate group of PLPs, which required the same interim actions to be implemented and completed at the SLA. The interim actions required by Agreed Order No. DE 00TCPER-1326 and Enforcement Order No. DE 00TCPER-1327 included: the installation of an engineered landfill cap at the MSW Landfill; completion of a landfill gas collection system and flare; and implementation of institutional controls. This work was completed and approved by Ecology pursuant to Agreed Order No. DE 00TCPER-1326.

Q. In an April 23, 2007 letter, Ecology provided its evaluation of the Interim Action Performance Monitoring activities. Ecology concluded that additional system improvements, enhancements or additional remedial actions were necessary to address significant data gaps and uncertainties in the understanding of site conditions, and assess the overall effectiveness of the interim remedial systems. Ecology determined that the SVE and NoVOCsTM treatment systems were underperforming and provided an insufficient level of treatment to meet all MTCA threshold criteria in the selection of cleanup actions.

R. In 2002, Ecology approved the Operations and Maintenance Manual, Landfill Gas Collection Control and Flare, Pasco Sanitary Landfill, Pasco, Washington, prepared by Philip Service Corporation dated July 15, 2002. In 2009, Ecology approved a Memorandum regarding Addendum to Pasco Municipal Solid Waste Landfill Operations and Maintenance Manual, prepared by Aspect Consulting dated April 17, 2009. In 2011, Ecology approved the Revised Flare Performance Report, Pasco Municipal Solid Waste Landfill, prepared by Aspect Consulting dated June 29, 2011. In January 2014 Ecology approved the updated Operations and Maintenance Manual for MSW Disposal Areas, submitted in accordance with the requirements of Agreed Order No. DE 9240. Operations and maintenance requirements for the Balefill Disposal Area are addressed in this updated manual.

S. In October and November of 2007, a group of PLPs proposed to undertake investigative tasks at the IWA as part of a continuation of the interim actions required by Agreed Order No. DE 00TCPER-1324. On February 15, 2008, that same group of PLPs submitted to Ecology a draft Work Plan for Additional Interim Actions (AIAs) for these tasks. Also in February of 2008, that group of PLPs formally requested that it be allowed to undertake additional interim actions at the IWA pursuant to Agreed Order No. DE 00TCPER-1324. On May 9, 2008, the Attorney General's Office conveyed Ecology's agreement to that group of PLPs' request to conduct AIAs under Agreed Order No. DE 00TCPER-1324. The approved AIAs included: installation of new monitoring wells at the Site; evaluation of alternative SVE system operations; assessment and verification of the NoVOCsTM system operations and facilitated mechanisms of contaminant reduction; and inspection, maintenance and modifications

(as needed) to the current SVE and NoVOCsTM systems.

T. In the fall 2008, an assessment of the NoVOCsTM system revealed that the NoVOCsTM was not performing according to design expectations. Between November 2010 and June 2011, the four NoVOCsTM wells were decommissioned.

U. In 2009, a sub-group of PLPs performing the AIAs made a request to Ecology to modify the scope and schedule for Phase I of the AIAs and be allowed to perform certain tasks under the Phase II AIAs at the Site. These tasks included: upgrades to the Zone A SVE system; supplemental soil sampling and analytical testing of Zone A subsurface soils; installation of new Zone A groundwater monitoring wells; installation of additional property boundary and downgradient plume area groundwater monitoring wells; investigation of soil conditions beneath Zone A using non-vertical borehole drilling and sampling techniques; and, maintenance of subsidence on the Zone A cap. Ecology stated in a letter dated September 18, 2009, that the SVE system upgrade was intended to address only soil/vadose zone contamination, consistent with the intent of the 2000 Orders, and was not intended to serve as a replacement for the NoVOCsTM system, nor used as a stand-alone groundwater treatment remedial system.

V. In May 2010, Ecology approved the Phase II Volume I AIA Work Plan. The Work Plan described upgrades to the interim action SVE system, and the installation of additional groundwater monitoring wells within Zone A. In May 2010, Ecology approved the Engineering Design Report for SVE System Upgrades submitted by a group of PLPs, which details the engineering design of SVE upgrades. Performance evaluation and startup testing of the upgraded SVE system were performed in 2011 and 2012. Operational conditions observed during the startup testing phase resulted in a separate assessment of elevated vapor temperatures at selected SVE wells during summer 2012. Routine operations of the upgraded SVE system Commenced in the fall 2012. In September 2013, Ecology approved the February 2013 Upgraded SVE System As-Built and Testing Reports.

W. In May 2010, Ecology approved the Work Plan for the Pasco Zone B RCRA C

cap. This work includes the excavation of contaminated soil directly adjacent to Zone B, containing the soil within the limits of the planned RCRA C cap, and the installation of the RCRA C cap. In June 2013, RCRA C cap construction was completed. This work was performed as an independent remedial action pursuant to the standards and provisions set forth in WAC 173-340-515.

X. In January 2011, Ecology approved the Phase II AIA Volume II Work Plan to conduct soil investigations beneath Zone A. The Phase II AIA Volume II Work Plan also specifies the installation of four additional intermediate-depth groundwater monitoring wells within the downgradient plume area and the performance of cap maintenance in response to localized subsidence of the Zone A cap. The intermediate-depth monitoring wells were installed in February and March 2011. Ongoing maintenance and monitoring of the Zone A cap are occuring in accordance with the Ecology-approved November 2013 Operations and Maintenance Manual for Industrial Waste Area Caps – Zones A, C/D and E.

Y. On October 31, 2012, Ecology entered into Agreed Order No. DE 9240 with 22 PLPs for the Site. Also on October 31, 2012, Ecology issued Enforcement Order No. DE 9406 to 10 PLPs. Both the Agreed Order and Enforcement Order required the PLPs to conduct a Focused Feasibility Study (FFS) per WAC 173-340-350(8) to evaluate a focused set of remedial alternatives to address soil and groundwater contamination at the Site.

Z. In early December 2013, Ecology learned a subsurface fire had started in a small section of the landfill near the interface between the Balefill Area and Zone A. The fire's lateral and vertical extent were investigated in early 2014. Limited soil cover repairs were conducted by the Landfill Group within the area where ground settlement and soil cracks were observed at the western edge of the Balefill Area. A thermocouple array was installed by the Industrial Waste Area Group III (IWAG) within the general area where the subsurface fire was believed to be occurring. Temperatures of 700 degrees F and greater have been recorded at selected depth intervals within the waste mass. Representatives of Franklin County Fire District #3 and

Franklin County Emergency Managementhave been contacted by Ecology and kept informed of the landfill fire conditions and monitoring activities.

AA. On March 24, 2014 Ecology submitted a letter to the project coordinators informing them of their obligations, pursuant to subsection VIII.N (Reservation of Rights/No Settlement) of Agreed Order No. DE 9240, to prepare a work plan that will lead to the prompt suppression or extinguishment of the fire, or prompt removal of the fire's fuel source. Ecology deemed such actions to be necessary to protect human health and the environment.

BB. On April 4, 2014 Ecology received a letter from Loren Dunn of Riddell Williams, writing on behalf of Basin Disposal, Inc. (BDI), Pasco Sanitary Landfill, Inc. (PSL), BNSF Railway Company, and Franklin County. The letter served to formally invoke dispute resolution under Section VIII.J of Agreed Order No. DE 9240 based on the interpretation that the fire response actions required by Ecology were outside the scope of work required under Section VII of the Order.

CC. On April 21, 2014, Ecology rescinded its March 24, 2014 letter requiring the PLPs to prepare a work plan that will lead to the prompt suppression or extinguishment of the fire, or prompt removal of the fire's fuel source, and subsequently issued this Enforcement Order.

VI. ECOLOGY DETERMINATIONS

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

A. Each PLP is potentially liable pursuant to RCW 70.105D.040 for the release of hazardous substances at the Site, a facility as defined in RCW 70.105D.020(5). The PLPs arranged for the disposal of hazardous substances at the "facility," and/or transported hazardous substances to the "facility," as that term is defined by RCW 70.105D.020(5), and/or are or were "owners or operators" as defined in RCW 70.105D.020(17) of a "facility" as defined in RCW 70.105D.020(5).

B. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70.105D.020(25) and (10), respectively, has occurred at the Site.

C. Based upon credible evidence, Ecology issued PLP status letters to the PLPs pursuant to RCW 70.105D.040, RCW 70.105D.020(21), 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 determinations to each of the PLPs that they were PLPs under RCW 70.105D.040.

D. 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.

E. 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 at a facility; 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. Currently at the Site, a subsurface fire is burning in an area of the landfill where municipal wastes are buried Based on these circumstances, Ecology has determined that an interim action is warranted under WAC 173-340-430.

Ecology or the PLPs may propose additional interim actions, beyond the interim action required by Section VII. of this Order, at the Site. After consulting with the PLPs, Ecology will determine if the additional interim action(s) is warranted under WAC 173-340-430. Any interim action must be approved by Ecology under Section VII.B.

VII. WORK TO BE PERFORMED

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that PLPs take the following remedial actions at the Site and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein:

A. As noted above, Ecology has determined that an interim action is required to address the subsurface fire near the Balefill Area. Ecology is requiring the Site PLPs to develop Interim Action Work Plans. The work plans shall address the extinguishment of the landfill fire, and associated actions to prevent the initiation of any future subsurface fire events. This Order requires the PLPs to:

- 1. Develop a work plan that describes a preferred method (or methods) to promptly extinguish the Balefill Area subsurface fire at the Pasco Landfill NPL Site (Site). This work plan also shall include necessary monitoring activities to verify both the short-term and long-term success of these actions.
- 2. Implement the fire extinguishment activities described in the Ecology-approved work plan and the associated performance monitoring activities.
- 3. Develop a work plan detailing an engineered and/or operational approach to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter. This work plan also shall include necessary monitoring activities to assess the efficacy of the approved combustion prevention actions.

Ecology deems that such an action(s) is necessary to protect human health and the environment. Upon Ecology's approval of an Interim Action Work Plan, the PLPs are required to conduct the interim action in accordance with the Interim Action Work Plan.

B. The PLPs shall submit Interim Action Work Plan documents to Ecology for review and approval according to the Schedule of Deliverables in Exhibit B. Upon approval by Ecology, these Interim Action Work Plan documents become an integral and enforceable part of this Order. The EO PLPs will then proceed with implementation in accordance with the schedule approved in the Work Plan and other deliverables.

C. As provided in the Schedule, attached as Exhibit B, the PLPs shall commence and thereafter complete all tasks in the time frames and framework indicated unless Ecology grants an extension in accordance with Section VIII.J (Extension of Schedule).

D. Work performed by the PLPs under this Enforcement Order shall comply with all applicable health and safety requirements associated with the actions to be performed. The work plan shall include a Health and Safety Plan describing the hazards associated with the work to be performed.

E. If Ecology determines additional interim action(s) is warranted under Section VI.E, the PLPs shall prepare and submit to Ecology an Interim Action Work Plan, including a scope of work and schedule, by the date determined by Ecology. Ecology will provide public notice and opportunity to comment on the Interim Action Work Plan in accordance with WAC 173-340-600(16). The PLPs shall not conduct the interim action until Ecology approves the Interim Action Work Plan. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of this Order, and the PLPs are required to conduct the interim action in accordance with the approved Interim Action Work Plan and schedule.

F. If, at any time after the first exchange of comments on the draft work plans, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required by this section, Ecology may complete and issue the final deliverable.

VIII. TERMS AND CONDITIONS

A. Public Notice

RCW 70.105D.030(2)(a) requires that, at a minimum, this Order 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 should public comment disclose facts or

considerations which indicate to Ecology that this Order is inadequate or improper in any respect.

B. Remedial Action Costs

The PLPs 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 Site under Chapter 70.105D RCW, including remedial actions and Order preparation, 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). The PLPs 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.

C. Implementation of Remedial Action

If Ecology determines that the PLPs have failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to the PLPs, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of the PLPs' failure to comply with its obligations under this Order, the PLPs shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.B (Remedial Action Costs), provided that the PLPs is not obligated under this section to

reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order.

Except where necessary to abate an emergency situation, the PLPs shall not perform any remedial actions at the Site outside those remedial actions required by this Order, unless Ecology concurs, in writing, with such additional remedial actions.

D. Designated Project Coordinators

The project coordinator for Ecology is:

Charles Gruenenfelder, L.G., L.Hg. Eastern Regional Office, Department of Ecology 4601 N. Monroe Street Spokane, WA 99205-1295 (509) 329-3439 E-mail: chgr461@ecy.wa.gov

The project coordinator for Zones A, C, D, and E of the IWA is:

Mike Riley, Ph.D. Anchor QEA LLC 101 N. Capital Way, Suite 107 Olympia, WA 98501 (360) 528-2442 E-mail: mriley@anchorgea.com

The project coordinator for the MSW, burn trenches, Balefill areas, and inert waste area is:

William (Chip) Goodhue, L.G. Aspect Consulting LLC 350 Madison Avenue N. Bainbridge Island, WA 98110-1810 (206) 780-9370 E-mail: cgoodhue@aspectconsulting.com

The project coordinator for Zone B of the IWA is:

Sean Gormley, EAC, CHMM AMEC 7376 SW Durham Road Portland, OR 97224 (503) 639-3400 E-mail: sean.gormley@amec.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.

E. 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 Chapters 18.220 and 18.43 RCW.

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 Chapters 18.220 and 18.43 RCW. The PLPs shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

F. Access

RCW 70.105D.030(1)(a) authorizes Ecology or any Ecology authorized representative to enter all property at the Site that a PLP either owns, controls, or has access rights to, after reasonable notice unless an emergency prevents such notice. The PLPs shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by the PLPs where remedial activities or investigations will be performed pursuant to this Order.

G. Sampling, Data Submittal, and Availability

With respect to the implementation of this Order, the PLPs 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 C), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, the PLPs shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by the PLPs pursuant to the implementation of this Order. The PLPs shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow the PLPs 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.F (Access), Ecology shall notify the PLPs 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 Chapter 173-50 WAC for the specific analyses to be conducted, unless otherwise approved by Ecology.

H. Retention of Records

During the pendency of this Order, and for ten (10) years from the date of completion of the work performed pursuant to this Order, the PLPs 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, the PLPs shall make all such records available to Ecology and allow access for review within a reasonable time.

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

I. Resolution of Disputes

The PLPs may request Ecology to resolve factual or technical disputes which may arise during the implementation of this Order. Such request shall be in writing and directed to the signatory, or his/her successor(s), of this Order. Ecology resolution of the dispute shall be binding and final. The PLPs is not relieved of any requirement of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of this Order unless otherwise provided by Ecology in writing.

J. Extension of Schedule

1. 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 when 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 the PLPs 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. The existence of good cause shall be determined by Ecology in its sole discretion. Good cause may include, but may not be limited to:

a. Circumstances beyond the reasonable control and despite the due diligence of the PLPs 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 the PLPs;

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 the PLPs.

Ecology shall act upon any written request for extension in a timely fashion.
Ecology shall give the PLPs written notification of any extensions granted pursuant to this Order.
A requested extension shall not be effective until approved by Ecology.

4. 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).

K. Endangerment

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

In the event the PLPs determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment, the PLPs may cease such activities. The PLPs 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, the PLPs shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with the PLPs' cessation of activities, it may direct the PLPs to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to this section, the PLPs' 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.J (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

Ecology reserves its rights under Chapter 70.105D RCW, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also 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 Site.

M. Transfer of Interest in Property

Before any voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by the PLPs, the PLPs shall provide 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.

Further, prior to the PLPs' transfer of any interest in all or any portion of the Site, the PLPs shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and at least thirty (30) days prior to any transfer, the PLPs shall notify Ecology of said transfer. Upon transfer of any interest, the PLPs 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 the PLPs 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 have been identified in Exhibit B.

2. Pursuant to RCW 70.105D.090(1), the PLPs are exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals. However, the PLPs shall comply with the substantive requirements of such permits or approvals. The exempt permits or approvals and the applicable substantive requirements of those permits or approvals, as they are known at the time of entry of this Order, have been identified in Exhibit B.

The PLPs have 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 the PLPs 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 the PLPs shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, the PLPs 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 the PLPs and on how the PLPs must meet those requirements. Ecology shall inform the PLPs in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The PLPs 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 the PLPs 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.

IX. SATISFACTION OF ORDER

The provisions of this Order shall be deemed satisfied upon the PLPs' receipt of written notification from Ecology that the PLPs have completed the remedial activity required by this Order, and that the PLPs have complied with all other provisions of this Enforcement 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 Site.

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.

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: 28 April 2014

STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

Michael A. Hibbler Section Manager Toxics Cleanup Program Enforcement Order No. DE 10651 Page 27 of 27

Eastern Regional Office Telephone: (509) 329-3568



NOTE:

Site encompasses both the landfill property as well as the off-site groundwater plume area.



Feet 0 1,000 2,000

Exhibit A-1 Pasco Landfill NPL Site



Exhibit **B**

Enforcement Order 10651 Pasco Landfill NPL Site Balefill Area Subsurface Fire Scope of Work, Schedule, and Applicable Relevant and Appropriate Requirements

Exhibit B presents the scope of work to be performed in association with the Balefill Area subsurface fire pursuant to Enforcement Order No. DE 10651. Work under this Enforcement Order includes two primary actions:

- Planning and implementation of fire extinguishment activities and associated monitoring to document both short-term and long-term success of these actions.
- Development of a plan detailing an engineered and/or operational approach to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter.

The work required under this Enforcement Order shall involve the development and implementation of appropriate and expeditious response actions that result in complete extinguishment of the existing Balefill Area subsurface landfill fire. The work also entails an evaluation of appropriate actions that prevent future subsurface fires in or near the Balefill Area without adversely impacting or hindering ongoing interim remedial actions at the Site.

The PLPs shall perform the following:

Task 1 – Balefill Area Fire Suppression Work Plan

Develop an interim action work plan to address the Balefill Area subsurface fire at the Pasco Landfill NPL Site (Site). The work plan shall describe a preferred method (or methods) to promptly extinguish the subsurface fire. The method of extinguishment should not exacerbate existing contaminant concerns at the Site, including, but not limited to, groundwater impacts caused by ongoing releases from landfill wastes. This work plan shall include necessary monitoring activities to verify both the short-term and long-term success of these actions. The Work Plan also will include a Health and Safety Plan addressing possible worker safety concerns including, but not limited to, heavy equipment operations, gaseous emissions from the fire area, and associated explosion/combustion hazards associated with the fire abatement work. Ecology will review and comment on the draft work plan. Other government entities (e.g. Franklin County Fire District #3; Franklin County Emergency Management) shall also be provided an opportunity to review and comment on the draft Work Plan. PLPs shall address Ecology comments and prepare a final Work Plan according to the schedule provided herein.

Deliverables: Balefill Area Interim Action Fire Suppression Work Plan (Draft and Final)

Task 2 – Extinguish and Monitor the Balefill Area Subsurface Fire

Subtask 2a: Extinguish Balefill Area Fire

The PLPs shall implement all necessary actions to safely and expeditiously extinguish the existing Balefill Area subsurface fire following the methods and approaches detailed in the Ecology-approved Balefill Area Interim Action Fire Suppression Work Plan. The PLPs shall notify Ecology of the intended start date and maintain close communications with Ecology throughout the period when active fire suppression activities are occurring. Ecology shall consult with Franklin County Fire District #3 to identify any Fire District-related concerns, and shall communicate these concerns directly to the designated project coordinator managing the fire suppression activities. Upon completion of the actions described under Subtasks 2a and 2b, the PLPs shall prepare a technical memorandum documenting the work performed and post-extinguishment monitoring results.

Deliverables: Technical Memorandum: Balefill Area Subsurface Fire Extinguishment Actions – Summary of Work Performed and Findings (Draft and Final)

Subtask 2b: Install Balefill Area Fire Monitoring Network

The PLPs shall install a monitoring network to confirm the Balefill Area subsurface fire has been fully extinguished. The monitoring network shall include thermocouples, gas probes, and/or other appropriate instrumentation to be installed, as necessary, to document the complete elimination of pyrolysis/subsurface combustion of MSW materials. The monitoring system shall remain in place following the successful completion of the fire extinguishment action (Subtask 2a). PLPs shall test the monitoring network to confirm its functionality and ability to obtain the data needed for ongoing assessment of subsurface conditions around the former fire area. Upon completion of the actions described under Subtasks 2a and 2b, the PLPs shall prepare a technical memorandum documenting the work performed and post-extinguishment monitoring results. Post-extinguishment monitoring shall continue for a period of at least 2 weeks after the extinguishment activities described in Subtask 2a are completed.

Deliverables:

Technical Memorandum: Balefill Area Subsurface Fire Extinguishment Actions – Summary of Work Performed and Findings (Draft and Final)

Task 3 – Balefill Area Combustion Prevention Work Plan

The PLPs shall develop an interim action work plan for Ecology's review and approval describing engineered improvements and/or other appropriate actions that will be taken to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter. Specifically, this may include installation of barrier technologies such as a slurry wall, sheet piling, or ventilation wells; installation of an alternative Balefill Area cover system; physical separation of Balefill Area wastes from the Zone A perimeter; and/or other appropriate engineering and/or operational measures to limit the potential for enhanced aeration of the MSW materials along the eastern and northern perimeter of Zone A. This work plan also shall include necessary monitoring activities to assess the efficacy of the approved combustion prevention actions. To the extent possible, the recommended combustion prevention actions will not adversely impact, hinder, or disrupt ongoing interim remedial actions at the Site.

Ecology will review the draft work plan. Other government entities (e.g. Franklin County Fire District #3; Franklin County Emergency Management) shall also be provided an opportunity to review and comment on the draft Work Plan. PLPs shall address Ecology comments and prepare a final Work Plan. A timeline for implementation of the work activities identified in the *Combustion Prevention Work Plan* will be determined based on remedial performance of the Zone A SVE system during the subsequent phase of interim action operations following successful extinguishment of the Balefill Area fire.

Deliverables: Balefill Area - Interim Action Combustion Prevention Work Plan (Draft and Final)

Schedule

Task 1 – Balefill Area Fire Suppression Work Plan

A *draft Pasco Landfill Balefill Area - Fire Suppression Work Plan* shall be submitted to Ecology 15 days following effective date of order. A revised final Work Plan shall be submitted to Ecology within 7 days of receiving Ecology's comments on the draft Work Plan.

Task 2 – Extinguish and Monitor the Balefill Area Subsurface Fire

Subtask 2A - Extinguish Balefill Area Fire

Field implementation of the fire suppression/extinguishment activities described in Task 1 shall commence within 7 days of receiving Ecology's approval of the Work Plan and receipt of a formal notice to proceed. A draft technical memorandum shall be submitted to Ecology within 45 days of completing the fire extinguishment work.

Subtask 2B - Install Balefill Area Fire Monitoring Network

Field implementation of the monitoring network installation and testing activities described in Task 1 shall commence immediately upon successful completion of the fire extinguishment work described in Subtask 2A. A draft technical memorandum (same as described under Subtask 2a) shall be submitted to Ecology within 45 days of completing the fire extinguishment work.

Task 3 – Balefill Area Combustion Prevention Work Plan

A Draft Pasco Landfill Balefill Area - Interim Action Combustion Prevention Work Plan shall be submitted to Ecology 30 days following Ecology's final approval of the technical memorandum (Balefill Area Subsurface Fire Extinguishment Actions – Summary of Work Performed and Findings) submitted under Task 2. A revised final Work Plan shall be submitted to Ecology within 14 days of receiving Ecology's comments on the draft Work Plan.

Identified Applicable Relevant and Appropriate Requirements

Federal Requirements

- 42 USC 300, et seq. Safe Drinking Water Act of 1974 40 CFR 141 National Primary Drinking Water Standards
 - 40 CFR 143 National Secondary Drinking Water Standards
- 33 USC 1251, as amended. Clean Water Act of 1977 40 CFR 131 Water Quality Standards
- 42 USC 6901, et seq. Resource Conservation and Recovery Act 40 CFR 257 Criteria for Classification of Solid Waste Disposal Facilities and Practices

40 CFR 261 Identification and Listing of Wastes

40 CFR 265 Closure and Post-Closure

40 CFR 265AA, 265BB, and 265CC Air Emission Standards for Process Vents, Air Emission Standards for Equipment Leaks, and Air Emission Standards for Tanks, Surface Impoundments, and Containers

42 USC 7401 Clean Air Act of 1977 40 CFR 50 National Ambient Air Quality Standards

40 CFR 58 Ambient Air Quality Monitoring

- 40 CFR 60 Standards of Performance for New Stationary Sources
- 40 CFR 61 National Emission Standards for Hazardous Air Pollutants
- 40 CFR 63 National Emission Standards for Hazardous Air Pollutants for Source Categories
- 49 USC 1801, et seq. Hazardous Materials Transportation Act 49 CFR 171 Hazardous Materials Regulation

49 CFR 172 Hazardous Materials Tables, Communications Requirements, and Emergency Response Information Requirements

- 7 USC 136 Federal Insecticide, Fungicide, and Rodenticide Act 40 CFR 150, et seq. FIFRA Rules
- 29 USC 651, et seq. Occupational Safety and Health Act 29 CFR 1910, et seq. Safety and Health Rules

State Requirements

RCW 70.94 and 43.21A Clean Air Act

WAC 173-400 General Regulations for Air Pollution Sources

WAC 173-460 Controls for New Sources for Toxic Air Pollutants

WAC 173-470 Ambient Air Quality Standards for Particulate Matter

WAC 173-490 Emission Standards and Controls for Sources Emitting Volatile Organic Compounds (VOCs)

RCW 70.95 Solid Waste Management Act WAC 173-351 Criteria for Municipal Solid Waste Landfills

WAC 173-304 Minimum Functional Standards for Solid Waste Handling

- RCW 70.105 Hazardous Waste Management Act WAC 173-303 Dangerous Waste Regulations
- RCW 70.105D Model Toxics Control Act WAC 173-340 Model Toxics Control Act Cleanup Regulation
- RCW 90.48 and 90.54 Water Pollution Control/Water Resource Act of 1971 WAC 173-201A Surface Water Quality Standards

WAC 173-154 Protection of Upper Aquifer Zones

WAC 173-200 Water Quality Standards for Ground Waters of the State of Washington

WAC 173-216 State Waste Discharge Program

WAC 246-290 Department of Health Standards for Public Water Supplies

- RCW 43.21C State Environmental Policy Act WAC 197-11 SEPA Rules
- RCW 49.17 Washington Industrial Safety and Health WAC 296-62 General Occupational Health Standards
- RCW 18.104 Water Well Construction WAC 173-160 Minimum Standards for Construction and Maintenance of Wells
 - WAC 173-162 Rules and Regulations Governing the Licensing of Well Contractors and Operators

Local Requirements

Chapter 17.56, Franklin County Code, I-3 Heavy Industrial Zone

Chapter 16.06, City of Pasco Municipal Code, Utility Service Requirements for Building Permits

EXHIBIT C ECOLOGY POLICY 840 – DATA SUBMITTAL REQUIREMENTS


Toxics Cleanup Program Policy

Policy 840

 Resource Contact:
 Policy and Technical Support Staff
 Effective
 August 1, 2005

 References.
 WAC 173-340-840(5)
 Revised
 September 9, 2005

 http://www.ecy.wa.gov/eim/
 http://www.ecy.wa.gov/programs/tcp/smu/sedqualfirst.htm
 http://www.ecy.wa.gov/programs/tcp/smu/sedqualfirst.htm

 http://www.ecy.wa.gov/biblio/0309043.html
 Replaces
 Procedure 840

Policy 840: Data Submittal Requirements

Purpose: Contaminated site investigations and cleanups generate a large volume of environmental monitoring data that need to be properly managed to facilitate regulatory decisions and access to this data by site owners, consultants, and the general public. The purpose of this policy is to describe the requirements for submitting environmental monitoring data generated/collected during the investigation and cleanup of contaminated sites under the Model Toxics Control Act (MTCA) and the Sediment Management Standards

Application: This policy applies to Ecology staff, potentially liable parties, prospective purchasers, state and local agencies, and Ecology contractors that investigate or manage the cleanup of contaminated sites.

1. Unless Otherwise Specified by Ecology, all Environmental Monitoring Data Generated during Contaminated Site Investigations and Cleanups shall be Required to be Submitted to Ecology in both a Written and Electronic Format.

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

Data generated/collected during site investigations and cleanups conducted under an order, agreed order or consent decree, permit, grant, loan, contract, interagency agreement, memorandum of understanding or during an independent remedial action, are considered environmental monitoring data under this policy.

Data generated/collected for non site-specific studies, site hazard assessments that result in no further action and initial site investigations are not considered environmental monitoring data under this policy.

2. Orders, Agreed Orders, Consent Decrees, or Permits Issued After the Effective Date of this Policy Shall Include a Condition that Site-Specific Data be Submitted in Compliance with this Policy.

Reports on such work that do not include documentation that the data have been submitted in compliance with this policy shall be deemed incomplete and a notice of such provided to the

Policy 840 Data Submittal Requirements

submitter. These reports generally should not be reviewed until that information is provided. The assistant attorney general assigned to the site should be consulted in these situations.

3. Reports on Independent Remedial Actions Submitted for Review After October 1, 2005, Under Ecology's Voluntary Cleanup Program Shall Not be Reviewed Until the Data Have Been Submitted in Compliance with this Policy.

Such reports shall be deemed incomplete, and a notice to this effect provided to the submitter

4. Grants, Contracts, Interagency Agreements or Memoranda of Understanding Issued After the Effective Date of this Policy Shall Include a Condition that Site-Specific Data be Submitted in Compliance with this Policy.

Reports on such work shall 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.

Example language to include in these documents is attached in Appendix A.

5. Data Generated During Upland Investigations and Cleanups Shall be Submitted Electronically Using Ecology's Environmental Information Management System (EIM).

EIM 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. Electronic data shall be submitted to Ecology simultaneously with the accompanying printed report.

Additional information on EIM, including instructions for data submittal, can be found on Ecology's EIM web site at <u>http://www.ecy.wa.gov/eim/</u>. ICP's EIM Coordinator also is available for technical assistance to site managers and consultants using EIM.

6. Data Submitted Electronically Using EIM Shall be Checked by the Toxics Cleanup Program's EIM Coordinator Prior to Loading the Data into EIM.

Normally, notice that data have been submitted through EIM will come to TCP's EIM Coordinator. Upon receipt of such a notice the EIM Coordinator should notify the site manager. Similarly, if the Ecology site manager receives a notice of an EIM submittal, they should notify TCP's EIM Coordinator. Upon receipt of the data, TCP's EIM Coordinator reviews the submittal for quality control and officially loads the data into the system.

7. Data Generated During Sediment Investigations and Cleanups shall be Submitted Electronically Using Ecology's Sediment Quality Information System (SEDQUAL).

SEDQUAL is Ecology's data management system for sediment-related data. Proper submission of data through this system meets the requirement of submitting such data in an electronic format. Electronic data shall be submitted to Ecology simultaneously with the accompanying printed report.

8. Sediment Sampling Data Shall be Submitted to Ecology Using the SEDQUAL Data Entry Templates.

At a minimum, the following SEDQUAL data entry templates must be completed:

- 1. Reference & Bibliography: Describes lab reports and publications that relate to the data being entered;
- 2. Survey: Sample number;
- 3. Station: Specifies geographic location of the sediment sample. Sample latitude/longitude coordinates must be entered using the North American Datum of 1983 in U.S. Survey feet (NAD 83, U.S. feet);
- 4. Sample: Describes sample characteristics such as depth; and
- 5. Sediment Chemistry: Reports chemical concentration data in dry weight units.

The following additional templates must also be completed where these measurements/observations have been made:

- 1. Bioassay: Bioassay test results;
- 2. Bioassay Control: Bioassay control test results;
- 3 Benthic Infauna: Species abundance & diversity;
- 4. Tissue: Describes the organism collected;
- 5. Bioaccumulation: Reports tissue chemical concentrations; and
- 6. Histopathology: Reports tissue pathology such as tumors or lesions.

9. Electronic Data Formats Shall be Verified to be Compatible with SEDQUAL Prior to Submittal.

Because SEDQUAL uses ASCII protocol and comma delimited text files, data format verification shall be conducted prior to submittal to Ecology. Data shall be verified by downloading the SEDQUAL database, importing the data into the database, correcting errors, and then exporting the corrected templates.

For additional information on sediment sampling and analysis plan requirements, see Ecology publication 03-09-043 "Sediment Sampling and Analysis Plan Appendix", April, 2003. A copy of this document can be obtained from Ecology's publication office or downloaded from the following web site: <u>http://www.ecy.wa.gov/biblio/0309043.html</u>

Additional information on SEDQUAL can be found at:

http://www.ecy.wa.gov/programs/tcp/smu/sedqualfirst.htm. TCP's SEDQUAL Coordinator is also available for technical assistance to site managers and consultants using SEDQUAL.

10. Sediment Sampling Data Shall Also be Submitted to Ecology in a Printed Report.

Printed reports shall present the data in both dry weight and total organic carbon normalized units in data tables that compare the results to applicable state regulatory criteria.

11. Data Submitted Electronically Using SEDQUAL Shall be Checked by the Toxics Cleanup Program's SEDQUAL Coordinator Prior to Loading the Data into SEDQUAL.

Normally, SEDQUAL data submittals will come to TCP's SEDQUAL Coordinator. Upon receipt of a submittal, the Coordinator should notify the site manager. Similarly, if the Ecology site manager receives a SEDQUAL submittal, they should notify TCP's SEDQUAL Coordinator. Upon receipt of the data, TCP's SEDQUAL Coordinator reviews the submittal for quality control and officially loads the data into the system.

Approved

James J. Pendowski, Program Manager Toxics Cleanup Program

Policy 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

APPENDIX A: MODEL GRANT AND PERMIT CONDITION

The following condition is to be inserted in permits, grants, loans, contracts, interagency agreements, memorandum 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 Ioxics 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 & CONTRACTS ADD: Failure to properly submit sampling data will result in Ecology withholding payment and could jeopardize future grant funding.)



DETERMINATION OF NONSIGNIFICANCE (DNS)

Pasco Landfill NPL Cleanup Site: Interim Action to develop and **Description of Proposal:** execute a plan to extinguish and monitor an existing landfill fire and to develop a plan to prevent future landfill fires. Pasco Sanitary Landfill (PSL) Balefill Area Pasco, Washington. **Proponent:** Washington State Department of Ecology The Pasco Sanitary Landfill site is located about 1.5 miles northeast Location of Proposal: of the city of Pasco, Washington. The landfill is on Dietrich Road north of the intersection of Kahlotus Road with U.S. Highway 12 (see Figure 1). The subsurface fire is occurring at the western edge of the Balefill Area, adjacent to the Zone A drum repository area. For the purpose of this SEPA Checklist, Zone A, the Balefill Area, and the immediately adjacent areas are considered the Project Area. The Project Area is located in the southwest quarter of Section 15, the northeast Quarter of Section 22, Township 9 North, and Range 30 East. The Project Area is made up of portions of two separate parcels: Parcel Number: 113-580-091 (owned by the Pasco Sanitary 0 Landfill) • Parcel Number: 113-580-082 (owned by the Pasco Sanitary Landfill) Washington State Department of Ecology Lead Agency: The lead agency for this proposal has determined that it does not have a probable significant adverse impact on

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of the Environmental Checklist and other information on file with the lead agency. This information is available to the public on request.

 \Box There is no comment period for this DNS.

- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.
- ☑ This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days from the date below. Comments must be submitted by May 29, 2014.

Responsible Official: Michael A. Hibbler

Position/Title: Toxics Clean-up Program, Section Manager

Address: 4601 North Monroe Spokane, WA 99205-1295

Date: April 30, 2014 Signature: Work XVWW

Pasco Sanitary Landfill NPL Site – Balefill Fire Abatement Measures April 2014

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. <u>You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown</u>. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to <u>all parts of your proposal</u>, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals:

Please complete all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). For nonproject actions.

A. BACKGROUND

1. Name of proposed project, if applicable:

Pasco Landfill NPL Cleanup Site: Interim Action to develop and execute a plan to extinguish and monitor an existing landfill fire and to develop a plan to prevent future landfill fires. Pasco Sanitary Landfill (PSL) Balefill Area

Pasco, Washington

2. Name of applicant:

Washington State Department of Ecology

3. Address and phone number of applicant and contact person:

Charles Gruenenfelder, L.G., L.Hg. Eastern Regional Office, Department of Ecology 4601 N. Monroe Street Spokane, WA 99205-1295 (509) 329-3439 E-mail: chgr461@ecy.wa.gov

4. Date checklist prepared:

April 28, 2014

5. Agency requesting checklist:

Washington State Department of Ecology, Eastern Region (Ecology)

6. Proposed timing or schedule (including phasing, if applicable):

Interim Action Work Plan development will commence upon Ecology issuance of a Threshold Determination and issuance of an Enforcement Order to perform the work. A project schedule is presented as Exhibit B of the Enforcement Order which is included as an attachment to this SEPA checklist. Field work associated with this SEPA checklist is expected to commence in May and June, 2014.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Yes, additional actions to help further reduce the potential for future underground fires in the municipal solid wastes bordering Zone A at the PSL Site are expected once the current fire has been fully extinguished.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

The proposed work will involve preparation of Interim Action Work Plans. One work plan will describe the anticipated actions to extinguish the existing fire and monitor the effectiveness of the abatement actions. Another work plan will describe possible actions to help prevent similar underground fires in the future. Since December 2013, the potentially liable persons (PLPs) have gathered various kinds of data and information to help better understand the nature, extent and characteristics of the fire, and performed targeted maintenance activities of the Balefill Area cover. Actions taken to date have been performed in accordance with Ecology-approved work plans. A large number of documents are on file at Ecology's Eastern Regional Office regarding past and ongoing work in the PSL Project Area. These documents are too numerous to list here. A list of all publically available documents regarding this Project Area may be

found by contacting Ecology's Public Disclosure Coordinator, Kari Johnson, in Ecology's Eastern Region Office at:

Email: <u>kari.johnson@ecy.wa.gov</u> Phone: 509-329-3415

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No other applications are pending for government approval of other proposals affecting this property.

10. List any government approvals or permits that will be needed for your proposal, if known.

1. Compliance with the State Environmental Policy Act.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

In early December 2013, Ecology learned a subsurface fire had started in a small section of the Pasco Landfill Site near the interface between the Balefill Area and Zone A. The fire's lateral and vertical extent were investigated in early 2014. Limited soil cover repairs were conducted within the area where ground settlement and soil cracks were observed at the western edge of the Balefill Area. A thermocouple array was installed within the general area where the subsurface fire was believed to be occurring. Temperatures of 700 degrees F and greater have been recorded at selected depth intervals within the waste mass.

Because a subsurface fire is burning within the Balefill portion of the Pasco Landfill Site, Ecology is requiring the PLPs to take the following remedial actions at the Site:

- 1. Develop an Interim Action Work Plan describing a preferred method (or methods) to promptly extinguish the Balefill Area subsurface fire at the Pasco Landfill NPL Site (Site). This work plan also shall include necessary monitoring activities to verify both the short-term and long-term success of these actions.
- 2. Implement the fire extinguishment activities and the associated performance monitoring activities described in the Ecology approved work plan.
- 3. Develop a plan detailing an engineered and/or operational approach to minimize, to the extent practicable, the potential for future subsurface combustion events within waste materials located near the Zone A perimeter.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Pasco Sanitary Landfill site is located about 1.5 miles northeast of the city of Pasco, Washington. The landfill is on Dietrich Road north of the intersection of Kahlotus Road with U.S. Highway 12 (see Figure 1). The subsurface fire is occurring at the western edge of the Balefill Area, adjacent to the Zone A drum repository area. For the purpose of this SEPA Checklist, Zone A, the Balefill Area, and the immediately adjacent areas are considered the Project Area. The Project Area is located in the southwest quarter of Section 15, the northeast Quarter of Section 22, Township 9 North, and Range 30 East. The Project Area is made up of portions of two separate parcels:

- Parcel Number: 113-580-091 (owned by the Pasco Sanitary Landfill)
- Parcel Number: 113-580-082 (owned by the Pasco Sanitary Landfill)

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site

(circle one): Flat, <u>rolling</u>, hilly, steep slopes, mountainous,

other _____

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope at the project Area is approximately 28% on the eastern edge of Zone A bordering the Balefill Area. The slope is engineered and stable.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The native surface soils at the Project Area are generally sandy loam topsoil derived from wind-blown eolian deposits. These surficial deposits are underlain by thin layered beds of fine sands and silts locally known as the Touchet Beds. The Touchet Beds are 20-30 feet thick locally. The Touchet Bed soils are underlain by silts, sands, and gravels of the Upper Pasco Gravels. Soil materials placed atop the Balefill Area and Zone A to serve as engineered cover material consist largely of local borrow source material, dominated by fine- to medium-grained sand and silty sand.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Active ground subsidence is occurring in the immediate area where the Balefill Area Subsurface fire is occurring. Differential settlement of the RCRA C cover system also has been observed at Zone A. In other portions of the Balefill disposal area, beyond the limits of the landfill fire, localized settlement appears to have occurred in selected areas. Additional abrupt subsidence could occur at any time in the area of the fire.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Routine placement of soil fill material has been occurring in the immediate vicinity where the landfill fire was first reported. Soil cracking and progressive ground settlement have been observed since December 2013. It is not known at this time if the proposed fire extinguishment activities will result in the placement of additional fill materials. If soil fill placement is required, the surficial soil materials will be size classed properly to minimize potential wind-related erosion.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Not anticipated. Some wind-related erosion of surficial soils has occurred in this area in the past

g.About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

None expected.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Depending on the actions taken to extinguish the fire, any surface soil disturbances may require additional fill placement to re-establish site grades. If soil fill placement is required, the surficial soil materials must be size classed properly to minimize potential wind-related erosion.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Dust could possibly be generated during potential actions to extinguish the Balefill Area fire. Some smoke from the ongoing fire may also be emitted during extinguishment of the fire. No additional emissions are expected upon completion of the fire abatement work and associated site grading.

SEPA Environmental checklist (WAC 197-11-960)

guidance updated March 2012

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Vehicles and equipment not in use will be shut off. Dust that is generated during construction activities will be monitored as appropriate. Dust suppression actions (e.g., water spraying or misting) will be performed, as required. The Fire Suppression Work Plan will address measures that will be taken to manage any smoke that may be generated during the active fire abatement work.

3. Water

- a. Surface Water:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

No.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.
 - No.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Not applicable.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. No. 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Water may be discharged to the ground to manage the existing landfill fire.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged.

c. Water runoff (including stormwater):

 Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

It is possible that water could be applied to help extinguish any burning material – either in place, or within a designated waste spreading and treatment area. If a waste spreading area is used for purposes of water spraying/quenching/cooling, this area will be constructed to capture and collect any applied water. Efforts will be made to minimize the amount of water used so as to minimize the potential for inadvertent carry-down or vertical migration of any waste-related hazardous substances. Water which percolates into the local soils could eventually reach the underlying groundwater system, located at a depth of 50-60 feet below ground.

2) Could waste materials enter ground or surface waters? If so, generally describe.

See response above to 3.c.1.

 d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: If it becomes necessary to apply water to burning material, the least amount of water possible will be applied.

4. Plants

a. Check or circle types of vegetation found on the site:

____deciduous tree: alder, maple, aspen, other

____evergreen tree: fir, cedar, pine, other

<u>X</u>shrubs

<u>X</u>grass

____pasture

____crop or grain

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

____water plants: water lily, eelgrass, milfoil, other

____other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

None expected.

c. List threatened or endangered species known to be on or near the site.

None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

None proposed or anticipated.

5. Animals

a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

> birds: <u>hawk</u>, heron, eagle, <u>songbirds</u>, other: <u>Canadian geese, chucker</u>, <u>owls</u> mammals: deer, bear, elk, beaver, other: <u>coyote, ground squirrel</u>, <u>rabbit/hare</u>

fish: bass, salmon, trout, herring, shellfish, other ____

b. List any threatened or endangered species known to be on or near the site.

No threatened or endangered species are known to occur on or within $\frac{1}{2}$ mile of the Project Area.

c. Is the site part of a migration route? If so, explain.

The Project Area is in the Pacific Flyway, but does not have habitat to support migratory birds.

d. Proposed measures to preserve or enhance wildlife, if any:

None

6. Energy and natural resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Following completion of this project, it is not anticipated that any energy will be required.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Yes. This work is being conducted at a contaminated site in an effort to remediate impacts to the environment from chemical wastes. The current Balefill Area subsurface fire is an unanticipated and undesirable event. Potential health and safety risks and will be evaluated within the Work Plan to be developed by the PLPs.

1) Describe special emergency services that might be required.

In the event an emergency situation arises during the proposed work that requires immediate response from medically trained professionals, personnel will be required to call 911, to alert emergency care professionals including the Fire Department, Hazardous Material Responders, and emergency medical responders.

2) Proposed measures to reduce or control environmental health hazards, if any:

To help minimize chemical exposure, appropriate personal protective equipment (PPE) will be worn during Project Area operations as required. Expected PPE use will include hard hats, work boots, appropriate gloves, protective eyewear, ear protection, and Tyvek coveralls as necessary. Air monitoring will occur to evaluate air quality within the work zone.

All Project Area workers will have current hazardous waste operation certification and medical clearance to wear an appropriately equipped respirator, if required.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Intermittent short-term noise may be generated during work within the Project Area between the hours of 7:00 AM and 7:00 PM.

3) Proposed measures to reduce or control noise impacts, if any: None proposed or required.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties?

The Pasco Landfill Site is a former landfill facility currently undergoing a state-led cleanup action in accordance with, and under the authority of, the Model Toxics Control Act (MTCA) Chapter 70.105D RCW, and the implementing regulations, Chapter 173-340 WAC. Adjacent properties are used primarily for agricultural purposes. The property immediately south of the site is used as a municipal solid waste transfer station. Areas farther south and southwest are predominantly commercial and light industrial.

b. Has the site been used for agriculture? If so, describe.

Prior to 1955, the PSL Site was characterized as unimproved grassland with both stable and active sand dunes. It is unknown whether this land was used for agricultural purposes prior to this time.

c. Describe any structures on the site.

None within the Project Area.

d. Will any structures be demolished? If so, what?

No.

e. What is the current zoning classification of the site?

Both parcels are currently zoned as Agricultural Production 20.

f. What is the current comprehensive plan designation of the site?

The PSL Site is not currently proposed to undergo redevelopment. The Franklin County Growth Management Comprehensive Plan designates the parcels as Agricultural.

g. If applicable, what is the current shoreline master program designation of the site?

Not applicable.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

None.

i. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not applicable.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The existing site is undergoing site cleanup and is not an operating facility. The proposed scope of work is compatible with the current land use plans for the PSL Site.

- 9. Housing
- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

Not applicable.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

Not applicable.

c. Proposed measures to reduce or control housing impacts, if any:

Not applicable.

SEPA Environmental checklist (WAC 197-11-960)

guidance updated March 2012

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

No structures are currently proposed.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Not applicable.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The property west of the PSL site is agricultural farmland and is known to be used seasonally for bird hunting.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None known.

c. Proposed measures to reduce or control impacts, if any:

Not applicable.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans; if any.

The PSL Site is accessed by heading west on E. Lewis/Pasco-Kahlotus Road from the Kahlotus exit on Interstate 182/State Highway 12 and then turning west onto Commercial Avenue and north onto Dietrich Road.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No. It is approximately 1.5 miles to the nearest bus stop in downtown Pasco.

guidance updated March 2012

c. How many parking spaces would the completed project have? How many would the project eliminate?

Not applicable. Area is not intended for vehicular traffic or parking.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

No.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

None.

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable.

- 15. Public services
- a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable.

16. Utilities

 a. Circle utilities currently available at the site: <u>electricity</u>, natural gas, <u>water, refuse service</u>, telephone, sanitary sewer, septic system, other b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No changes are proposed to the utilities that currently service the Project Area.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature:

Name of signee Charles Gruenenfelder

Position and Agency/Organization Site Manager, WA Department of Ecology Date Submitted: April 28, 2014



Pasco Sanitary Landfill Site

Toxics Cleanup Program

Ecology to Issue Enforcement Order

Site Location

The Pasco Sanitary Landfill site covers nearly 250 acres and is located about 1.5 miles northeast of the city of Pasco, Franklin County, Washington. The landfill is on Dietrich Road north of the intersection of Kahlotus Road with U.S. Highway 12 (see Figure 1).

Enforcement Order Requires PLPs to Expedite Work to Extinguish and Monitor Landfill Fire

The Washington State Department of Ecology proposes to issue an Enforcement Order to 32 different parties collectively known as the Potentially Liable Persons (PLPs) for the Pasco Sanitary Landfill site (see PLP list on page 3). The PLPs are responsible for cleaning up contamination at the site, and Ecology provides regulatory oversight for the work. The Enforcement Order requires the PLPs to expedite work in the Balefill area of the landfill where an underground fire continues to burn (see Fig. 3).

The PLPs have taken measures to suppress the underground fire that appears to have started in November 2013; however, the fire continues to burn. The fire does not pose an immediate threat to the community. Ecology believes putting out the fire will protect human health and the environment from potential harm. Continued burning of the underground fire poses a potential threat to hazardous materials stored underground in the Zone A area of the landfill and hampers the ongoing cleanup efforts.

The Enforcement Order requires the PLPs to complete three main tasks:

- 1. Develop a work plan describing how they will promptly put out the underground fire. The work plan shall also include monitoring activities to verify short and long-term success.
- 2. Extinguish the existing fire and install a fire monitoring network according to the work plan and ensure the fire is out.
- 3. Develop a work plan describing what will be done to minimize the potential for future underground fires.

You are invited to:

- **Review** the Enforcement Order which includes a Scope of Work, State Environmental Policy Act Checklist (SEPA), and Determination of Non-Significance (DNS). The Scope of Work details the work to be completed to address the underground fire.
- Send comments to Chuck Gruenenfelder at Ecology for consideration April 30 through May 29, 2014. The box at the right provides details about where to review documents and submit comments.

Fact Sheet April 2014

Comments Accepted

April 30 through May 29, 2014

ADA accommodations or

documents in an alternate format, call Carol Bergin 509/329-3546 (voice), 711 (relay service), or 877/833-6341(TTY).

Para asistencia en Español

Gregory Bohn 509/454-4174

Locations to Review Documents

Ecology's Spokane Office Call Kari Johnson for an appointment 509/329-3415 kajo461@ecy.wa.gov

Mid Columbia Library 1320 West Hopkins Street Pasco, WA 99301-5097

Ecology's Toxics Cleanup Website: https://fortress.wa.gov/ecy/gsp/Site page.aspx?csid=1910

Submit Comments/Technical Questions to

Chuck Gruenenfelder WA Department of Ecology 4601 N. Monroe St. Spokane WA 99205-1295 509/329-3439 or chuck.gruenenfelder@ecy.wa.gov

Submit Public Involvement/ Mailing List Questions to

Carol Bergin See Ecology's address above 509/329-3546 cabe461@ecy.wa.gov

Facility Site ID No. 575 Cleanup Site ID No. 1910

Landfill Waste Areas

The landfill is divided into four main areas that received various types of wastes (see Fig. 3).

- **1.** New Waste Area: Received general garbage until it was closed in 2001.
- 2. Municipal Waste Area: Received household and commercial garbage until it was closed in 1993.
- **3. Balefill/Inert Waste Area**: Received municipal waste and construction debris until it was closed in 1989. The existing landfill fire is occurring in this area of the landfill (see Fig. 3).
- **4.** Industrial Waste Area: Divided into five zones that were all closed in 1974.

Zone A contains an estimated 35,000 55gallon drums. The drums contain solvent and paint sludges, cleaners, and other industrial waste.

Zone B formerly stored nearly 5,000 drums of herbicide-manufacturing waste. The drums were removed in 2002.

Zones C and D contain approximately three million gallons of plywood resin waste, wood treatment and preservative waste, lime sludge, cutting oils, paint and paint solvent waste, and other bulk liquid waste. These two zones were combined in 2002.

Zone E contains approximately 11,000 tons of sludge from a chlor-alkali process.

Contaminated Groundwater Plume

Contaminated groundwater lies underneath the landfill and forms what is called a plume. The groundwater plume extends nearly 2 miles past the southern boundary of the landfill and past "A" Street. A groundwater protection area was created along the plume boundaries that limits well water use and requires annual surveying of the affected residents.

Actions Taken to Reduce Contamination

Many studies, extensive monitoring, and interim cleanup activities have been conducted at the site from 1983 to the present. Treatment systems are in place to address soil and groundwater contaminants that remain at the site. Contaminants in soil and groundwater include volatile and semi-volatile organic compounds, metals, herbicides, pesticides, and other potentially hazardous substances. These contaminants are associated with wastes disposed of at the landfill.

State Environmental Policy Act (SEPA)

The State Environmental Policy Act, known as SEPA, requires government agencies to consider potential environmental impacts of a project before beginning the cleanup. A Determination of Non-Significance indicates the proposed actions will not have a probable significant adverse impact on the environment.

> • After review of the environmental checklist and other site-specific information, Ecology determined the actions to address the underground fire at the landfill site will not have a probable significant adverse impact on the environment.

• The cleanup actions will benefit the environment and reduce possible exposure pathways for humans and wildlife.

• Therefore, Ecology has issued a Determination of Non-Significance (DNS) for the cleanup action.

More Information

For details about the landfill site, groundwater plume, actions taken, and general history, please see Ecology's website for the Pasco Sanitary Landfill at https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1 910

What Happens Next?

Ecology will respond to all comments about the Enforcement Order that are received by **May 29**, **2014**. If a substantial number of comments are received, Ecology will prepare a Responsiveness Summary which responds to the questions and comments submitted. The summary is sent to everyone who commented. It is also available in the repositories listed in the box on page one. Ecology may modify the Enforcement Order based on public input, if appropriate.

Ecology is also working with the PLPs on a Focused Feasibility Study. The study identifies and evaluates cleanup options for the site. This

Pasco Sanitary Landfill Site

April 2014

document lays the groundwork for the future draft Cleanup Action Plan which will include Ecology's decision regarding which cleanup options will be used at the site. Ecology anticipates the Focused Feasibility Study will be available for public comment in the fall of 2014.



Figure 1 Site Location

List of Potentially Liable Persons (PLPs)				
Akzo Nobel Canada Inc.	PCC Structurals, Inc.			
Basin Disposal, Inc.	Pharmacia Corporation			
Bayer CropScience, Inc.	Piute Energy & Transportation			
Blount International, Inc.	PPG Industries			
BNSF Railway Company	Puget Sound Naval Shipyards			
The Boeing Company	Sandvik Special Metals, LLC			
Crown Beverage Packaging, LLC	Simpson Timber Company			
Daimler Trucks North America. LLC	The Standard Register Company			
Leonard and Glenda Dietrich	Union Oil of California, successor-in-interest to			
E.I. Du Pont De Nemours and Co., Inc.	Collier Carbon and Chemical Corporation			
Franklin County	United States Air Force			
Georgia-Pacific, LLC	United States Department of Agriculture, Forest			
Goodrich Corporation on behalf of Kalama	Service			
Specialty Chemicals, Inc.	United States Department of the Interior, Bureau of			
Intalco Aluminum	Reclamation			
3M Company	Weyerhaeuser NR Company			
Morton International, LLC	Zep Manufacturing			
PACCAR Inc.				
Pasco Sanitary Landfill, Inc.				

Figure 2	Potentially	v Liable	Persons	(PLPs)
	· · · · · · · · · · · · · · · · · · ·			(· -· ·/



Figure 3 Landfill Waste Areas



Programa de Limpieza de Sustancias Tóxicas Ecología propone emitir una Orden Ejecutoria

Locación del Sitio

El sitio del Relleno Sanitario de Pasco cubre aproximadamente 250 acres y está ubicado 1.5 miles noreste de la cuidad de Pasco, Condado de Franklin, Washington. El relleno sanitario es en Dietrich Road al norte de la intersección de Kahlotus Road y la carretera federal 12 (vea la Figura 1).

Orden Ejecutoria requiere las PLPs trabajar lo más pronto posible para extinguir y monitorear el fuego subterráneo presente en el relleno sanitario

El Departamento de Ecología del Estado de Washington propone emitir una Orden Ejecutoria a 32 entidades diferentes, conocidos colectivamente como las Entidades Posiblemente Responsables (PLPs, por sus siglas en inglés), para la contaminación del Relleno Sanitario de Pasco (vea la lista de PLPs en la página 3). Las PLPs son responsables para limpiar la contaminación presente en el sitio, y Ecología dará la administración regulatoria del trabajo. La Orden Ejecutoria requiere que las PLPs hagan trabajos lo más rápido posible en al área Balefill del relleno sanitario donde existe un fuego subterráneo (vea la Figura 3).

Las PLPs han tomado medidas para extinguir el fuego subterráneo que parece haber comenzado en noviembre de 2013; sin embargo, el fuego sigue quemando. El fuego no es una amenaza inmediata para la comunidad. Ecología cree que al extinguir el fuego protegerá la salud humana y el medio ambiente de cualquier daño potencial. Si sigue quemando, el fuego subterránea tiene un peligro potencial de llegar a los materiales peligrosos que se guardan debajo del área Zona A del relleno sanitario y, también, está retrasando los esfuerzos de limpieza.

La Orden Ejecutoria requiere que las PLPs completan tres objetos principales:

- 1. Desarrollar un plan de trabajo que describirá exactamente cómo van a extinguir el fuego subterráneo lo más pronto posible. El plan de trabajo también necesita incluir las actividades de monitoreo que verificarán los sucesos de corto y largo plazos.
- 2. Extinguir el fuego existente y instalar un sistema de monitoreo de fuegos según lo que fue descrito en el plan de trabajo y asegurar que el fuego es extinguido.
- 3. Desarrollar un plan de trabajo que describirá exactamente que se harán para minimizar la posibilidad en el futuro de otros fuegos subterráneos.

Se invita usted a:

- **Examinar** la Orden Ejecutoria que incluye un Alcance de Trabajo, un chequeo de la Ley Estatal de la Política Ambiental (SEPA), y una Determinación de Impacto Insignificante (DNS). El Alcance de Trabajo detalle el trabajo que se necesita completar pertinente al fuego subterráneo.
- Entregar sus comentarios a Chuck Gruenenfelder (Ecología) para consideración durante el **30 de abril** hasta al **29 de mayo, 2014.** La cuadra al lado derecho provee los detalles donde se puede examinar los documentos y entregar sus comentarios.

Hoja Informativa abril de 2014

Se aceptarán comentarios

30 de abril hasta el 29 de mayo, 2014

Para recibir acomodaciones ADA o

los documentos en un formato alternativo, debe llamar al Carol Bergin 509/329-3546 (voz), 711 (servicio de retransmisión), o 877/833-6341(TTY).

Para asistencia en español:

Gregorio Bohn 509/454-4174

Locaciones para examinar los documentos:

Oficina de Ecología en Spokane Llame al Kari Johnson (509/329-3415) para hacer una cita o por correo electrónico al kajo461@ecy.wa.gov

Biblioteca Mid Columbia 1320 West Hopkins Street Pasco, WA 99301-5097

Sitio Web de Ecología del Programa de Limpieza de Sustancias Tóxicas: <u>https://fortress.wa.gov/ecy/gsp/Sitepa</u> <u>ge.aspx?csid=1910</u>

Entregar sus comentarios o preguntas técnicas al:

Chuck Gruenenfelder WA Department of Ecology 4601 N. Monroe St. Spokane WA 99205-1295 509/329-3439 o chuck.gruenenfelder@ecy.wa.gov

Entregar las preguntas de Involucramiento Público a:

Carol Bergin (usando la misma dirección de arriba) o 509/329-3546 o <u>cabe461@ecy.wa.gov</u>

Número de Identificación de Sitio: 575 Número de Identificación del Sitio para Limpieza: 1910

Áreas del Relleno Sanitario

El relleno sanitario está dividido en cuatro áreas principales que recibieron varios tipos de desechos (vea la Figura 3).

- **1.** Área de Desechos Nuevos: Recibió desechos generales hasta que fue cerrado en 2001.
- 2. Área de Desechos Municipales: Recibió basura doméstica y comercial hasta que fue cerrada en 1993.
- 3. Área Balefill (Desechos Simples): Recibió desechos municipales y escombros de construcción hasta que fue cerrado en 1989. El fuego subterráneo existe debajo de esta área del relleno sanitario (vea la Figura 3).
- **4.** Área de Desechos Industriales: Hay cinco zonas que fueron cerradas en 1974.

Zona A contiene aproximadamente 35,000 barriles de 55 gallones. Los barriles contienen fangos residuales de los procesos de pintura y solvente, limpiadoras, y otros desechos industriales.
Zona B contenía casi 5,000 barriles de desechos residuales de la fabricación de herbicidas. Los barriles fueron removidos en 2002.

Zonas C y D contienen aproximadamente tres millones de galones de desechos resinosos de la fabricación de plywood, desechos del tratamiento y preservación de madera, fangos alcalinos, aceites para cortar metal, desechos de pintar y pinturas, y otros desechos líquidos en cantidades mayores. Estas dos zonas fueron combinadas en 2002.

Zona E contiene aproximadamente 11,000 toneladas de fangos residuales de un proceso clor-alcalino.

Penacho Contaminado de Agua Subterránea

Agua subterránea contaminada existe debajo del relleno sanitario y está formando lo que se refiere como un penacho. El penacho de agua subterránea contaminada extiende casi 2 millas fuera de la frontera sureña del relleno sanitario y fuera de la Calle "A". Un área de protección para aguas subterráneas fue creada según las fronteras del penacho que limite el uso del agua sacada de pozos. También, se requiere encuestas anuales de los residentes afectados.

Acciones Tomadas para Reducir la Contaminación

Muchos estudios, monitoreo extensivo, y actividades preliminares de limpieza han sido completados en el sitio desde 1983. Al presente existen sistemas de tratamiento para limpiar los contaminantes en los suelos y aguas subterráneas que todavía quedan en el sitio. Los contaminantes incluyen compuestos orgánicos volátiles y semi-volátiles, metales, herbicidas, pesticidas, y otras sustancias potencialmente peligrosas. Estos contaminantes están asociados con los desechos que fueron depositados en el relleno sanitario.

Ley Estatal de la Política Ambiental (SEPA)

La Ley Estatal de la Política Ambiental, conocida como SEPA, requiere que las agencias gubernamentales consideran los impactos ambientales potenciales de un proyecto antes de comenzar una limpieza. Una determinación de impacto insignificante indica que las acciones propuestas probablemente no van a tener un significante impacto adverso para el medio ambiente.

- Después de examinar el chequeo SEPA y otra información específica al sitio, Ecología ha determinado que las acciones planeadas para el fuego subterráneo debajo del sitio del relleno sanitario probablemente no van a tener un impacto adverso para el medio ambiente.
- Las acciones de limpieza beneficiarán al medio ambiente y reducirán las vías de exposición para los seres humanos y la fauna silvestre.
- Entonces, Ecología ha emitido una Determinación de Impacto Insignificante (DNS) para la acción de limpieza.

Más Información

Para obtener detalles sobre el relleno sanitario, al penacho de agua subterránea contaminada, acciones tomadas, y la historia general del sitio, favor de visitar el sitio Web de Ecología referente al Relleno Sanitario de Pasco: https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=1910

¿Qué Pasará Ahora?

Ecología responderá a todos los comentarios sobre la Orden Ejecutoria que son recibidos antes el **29 de mayo**, **2014**. Si se recibe una cantidad substancial de comentarios, Ecología preparará un Resumen de Respuestas que responderá a las preguntas y comentarios recibidos. El resumen será enviado a cada persona que hizo comentario. También estará disponible en las locaciones listadas en la cuadra en la página 1. Ecología podría modificar la Orden Ejecutoria basado en los comentarios del público, si es apropiado.

Ecología está trabajando también con las PLPs para completar un Estudio de Factibilidad. El estudio identificará y evaluará las opciones para limpiar el sitio. El documento es la base para la futura borrador del Plan de

Sitio del Relleno Sanitario de Pasco

abril de 2014

Acción de Limpieza que incluirá la decisión de Ecología de cual opción será utilizada en el sitio. Ecología piensa que el Estudio de Factibilidad será disponible para comentario público en el otoño de 2014.



Figura 1 Locación del Sitio

Lista de Entidades Posiblemente Responsables (PLPs)				
Akzo Nobel Canada Inc.	PCC Structurals, Inc.			
Basin Disposal, Inc.	Pharmacia Corporation			
Bayer CropScience, Inc.	Piute Energy & Transportation			
Blount International, Inc.	PPG Industries			
BNSF Railway Company	Puget Sound Naval Shipyards			
The Boeing Company	Sandvik Special Metals, LLC			
Crown Beverage Packaging, LLC	Simpson Timber Company			
Daimler Trucks North America. LLC	The Standard Register Company			
Leonard and Glenda Dietrich	Union Oil of California, successor-in-interest to			
E.I. Du Pont De Nemours and Co., Inc.	Collier Carbon and Chemical Corporation			
Franklin County	United States Air Force			
Georgia-Pacific, LLC	United States Department of Agriculture, Forest			
Goodrich Corporation on behalf of Kalama	Service			
Specialty Chemicals, Inc.	United States Department of the Interior, Bureau of			
Intalco Aluminum	Reclamation			
3M Company	Weyerhaeuser NR Company			
Morton International, LLC	Zep Manufacturing			
PACCAR Inc.				
Pasco Sanitary Landfill, Inc.				

Figura 2 Entid	ades Posiblem	ente Respons	ables (PLPs)
----------------	---------------	--------------	--------------



Figure 3 Áreas del Relleno Sanitario