



## **Second Periodic Review**

Washington Water Power  
Central Steam Plant

South Lincoln Street and West First Avenue  
Spokane, Washington 99201

FS ID#: 726  
Cleanup Site ID#: 682

Prepared by:  
Washington State Department of Ecology  
Eastern Region Office  
Toxics Cleanup Program

July 2014

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## 1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to assure human health and the environment are being protected at the Washington Water Power Central Steam Plant facility (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC). This is the second periodic review conducted for this Site. The first periodic review was completed in January 2009. This periodic review will evaluate the period from January 2009 through January 2014.

Cleanup activities at this Site were completed under an amended Consent Decree filed in Washington State Superior Court for Spokane County on November 8, 1994 and amended on December 2, 1996. The cleanup actions resulted in residual concentrations of total petroleum hydrocarbons (TPH) and chlorinated polycyclic aromatic hydrocarbons (cPAHs) exceeding MTCA Method A cleanup levels for soil and groundwater established under WAC 173-340-720 and WAC 173-340-740, respectively. As a result of residual contamination in soil and groundwater, institutional controls were required as part of the remedy for the Site. WAC 173-340-420(2) requires Ecology conduct a periodic review of a site every five years under the following conditions:

1. Whenever Ecology conducts a cleanup action.
2. Whenever Ecology approves a cleanup action under an order, agreed order or consent decree.
3. Or, as resources permit, whenever Ecology issues a no further action opinion
4. And one of the following conditions exists:
  - (a) Institutional controls or financial assurance are required as part of the cleanup.
  - (b) Where the cleanup level is based on a practical quantitation limit.
  - (c) Where, in Ecology's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions.
- (b) New scientific information for individual hazardous substances of mixtures present at the Site.
- (c) New applicable state and federal laws for hazardous substances present at the Site.
- (d) Current and projected Site use.

- (e) Availability and practicability of higher preference technologies.
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

Ecology shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

## **2.0 SUMMARY OF SITE CONDITIONS**

### **2.1 Site History**

The former Washington Water Power (WWP) Central Steam Plant facility is located in the City of Spokane in Spokane County, Washington. The Site includes the majority of the City block bounded to the north by West First Avenue, to the West by South Lincoln Street, to the south by West Second Avenue, and to the east by South Post Street.

The Site is located in a commercial area which is currently occupied by retail stores, restaurants, hotels, and commercial parking lots. Steam Plant Square, Diamond Parking Lot, Davenport Parking Garage, and the Rodeway Inn cover the majority of the petroleum hydrocarbon impacted soils. A vicinity map is available as Appendix 6.1 and a Site plan is available as Appendix 6.2.

The Central Steam Plant was built in 1915 and was designed to burn coal to produce steam and electric power. In the mid-1960s, all plant boilers were converted to use petroleum products. Seven concrete underground storage tanks (USTs) were constructed at the Site between 1966 and 1975 to store Bunker C fuel oil. The tanks were labeled Tank A, B, C, D, F, G and H, and ranged from 75,000-gallons to 140,000-gallons. In May 1982, workers noticed petroleum was seeping through cracks in the steam plant basement wall. Monitoring in one of the USTs detected a drop in the product level of 1.5 inches in 20 days. An investigation was completed in 1984, and Ecology determined no further action was required.

### **2.2 Site Investigations**

In 1991, following the closure of the steam plant, WWP conducted additional investigations to determine if any additional releases had occurred. Thirty-nine soil borings were advanced, 13 of which were completed as groundwater monitoring wells. Data from those borings confirmed the presence of petroleum hydrocarbons containing cPAHs in soil and TPH in groundwater.

Following entrance into a Consent Decree (CD) with Ecology in 1994, WWP conducted a remedial investigation/feasibility study (RI/FS). Ecology developed a Site cleanup action plan (CAP) which was then incorporated into the amended CD in 1996. The goals of the CAP were:

1. Remove the potential for migration of contaminants of concern (COC) from Site soil containing TPH and/or cPAH concentrations above MTCA Method A cleanup levels.
2. Prevent human contact with or ingestion of Site soil containing TPH and/or cPAH concentrations above MTCA Method A cleanup levels.
3. Prevent human contact with or ingestion of Site groundwater containing TPH concentrations above MTCA Method A cleanup levels.

4. Prevent off-site migration of groundwater containing TPH concentrations above MTCA Method A cleanup levels.
5. Recover free-phase hydrocarbon product to the maximum extent practicable and in a manner that minimizes the spread of hazardous substances.
6. Protect beneficial uses of groundwater.

## 2.3 Cleanup Levels and Points of Compliance

### 2.3.1 Cleanup Levels

The CD identified MTCA Method A cleanup levels as applicable to the Site. WAC 173-340-704 states MTCA Method A may be used to establish cleanup levels at sites that have few hazardous substances, are undergoing a routine cleanup action, and where numerical standards are available for all indicator hazardous substances in the media for which the Method A cleanup level is being used.

The cleanup actions conducted at the Site were determined to be ‘routine’, few hazardous substances were found at the Site, and numerical standards were available in the MTCA Method A table for each hazardous substance. MTCA Method A cleanup levels effective at the time of the CD and CAP are still applicable at the Site. Those cleanup levels are available below:

- Soil – Method A established soil cleanup levels of 200 milligrams per kilogram (mg/kg) for TPH-diesel (TPH-D), 100 mg/kg for TPH-gasoline (TPH-G), and 1 mg/kg for total cPAHs.
- Groundwater – Method A cleanup levels were determined to be appropriate for Site groundwater. The Method A cleanup level of 1,000 micrograms per liter (ug/L) was used for TPH.
- Free Product – Free product is being removed as practicable to help achieve groundwater cleanup levels.

### 2.3.2 Points of Compliance

The CD defines the Site as the area affected by petroleum hydrocarbons in soil above MTCA Method A cleanup levels. The point of compliance established for soil is throughout the Site, regardless of depth, to protect groundwater.

The groundwater point of compliance was established as throughout the Site from the uppermost level of the saturated zone to the lowest depth that could possibly be affected by the Site. Because hazardous substances are contained on the Site, the groundwater point of compliance is established as close as practicable to the edge of the contained hazardous substances, not to exceed the northern boundary of the Steam Plant property south of Railroad Avenue.

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## 2.4 Summary of Cleanup Actions

The final Site CAP in the amended 1996 CD prescribed the activities listed below. Implementation of these activities was completed in 1996 and 1997.

1. Tank Closure and Shallow Soil Excavation – Tanks A through D were closed in accordance with WAC 173-360-385 through 398. Shallow soil near the Steam Plant Tanks was excavated and disposed off-site. The resulting tank excavations were left open and used as part of the Steam Plant Square redevelopment.
2. Subsurface Barrier Wall – A subsurface barrier wall was constructed north of the Site's boundary, north of the Rodeway Inn in First Avenue, to prevent off-site migration of hazardous substances in groundwater. Groundwater extraction wells were located upgradient to achieve hydraulic control of Site groundwater behind the subsurface barrier wall.
3. Hydraulic Control – Four groundwater extraction wells were installed to achieve hydraulic control of Site groundwater behind the subsurface barrier wall, helping to prevent potential off-site migration of soil contaminants via groundwater. Extracted water is discharged into the combined sewer overflow system (CSO).
4. Free Product Recovery – Free petroleum product was recovered from the four groundwater extraction wells and from two oil recovery wells located within the area of TPH-affected soil. Free product is continually collected from MW-1, MW-3, MW-4, MW-13, MW-26, MW-29 and OR2 using sorbent materials.
5. Soil Bioventing – Bioventing wells, both injection and extraction, were installed through the Site to promote in situ soil treatment to the maximum extent practicable. Off-gas treatment is not necessary, as approved by the Spokane Regional Clean Air Agency (SRCAA) (formerly Spokane County Air Pollution Control Authority), due to the low volatility of the Bunker C contaminants.
6. Stormwater Management and Paving – Paving, pavement repair/sealing, and stormwater management measures were implemented to minimize potential mobilization of soil contaminants due to infiltrating precipitation and subsequent groundwater flow. Stormwater is collected from Diamond Parking, Steam Plant Square Redevelopment, the WWP substation and other adjacent areas and piped to WWP tanks F, G, and H for detention. After the conclusion of the storm event, pumps in the tanks discharge the water to the CSO.

#### **2.4.1 Restrictive Covenant**

Following cleanup activities, a restrictive covenant (Covenant) was recorded for the Site in 1997. The Covenant notifies prospective purchasers of the location of contained petroleum contamination and places the following restrictions on the property:

1. The residual contamination that is the subject of this Covenant consists of petroleum hydrocarbons and polynuclear aromatic hydrocarbons and is located in the area shown in Exhibit "A". Remediation or removal of these contaminants must be addressed before the owner or successor owner alters or modifies the property in any manner that causes the residual contamination to be exposed or accessible.
2. The owner or successor owner/s must ensure that all the requirements in the final CAP for containing the contaminants left on the property are met, including long term monitoring and maintenance.
3. Any activity that would threaten the viability of the containment as set forth in the final CAP is prohibited.
4. Groundwater withdrawn for any purposes, including domestic, agricultural, commercial, or industrial, is prohibited.
5. The owner of the property must give written notice to Ecology, or its successor agency, of the owner's intent to convey any interest in the property.
6. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for continued compliance with this Covenant.
7. The owner must notify Ecology, or its successor agency, prior to any use of the property that is inconsistent with the terms of this Covenant and must obtain Ecology's, or its successor agency's approval prior to any use of the property that is inconsistent with the terms of this Covenant.
8. The owner shall allow authorized representatives of Ecology, or its successor agency, the right to enter the property at a reasonable time for the purpose of evaluating the Cleanup Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records related to the Cleanup Action.
9. The owner of the Site and the owner's assigns and successors in interest reserve the right under WAC 173-340-440(7) to record an instrument which provides that this Covenant shall no longer limit use of the property or be of any further force or effect. However such an instrument may be recorded only with the consent of Ecology, or its successor agency may consent to the recording of such an instrument only after appropriate public notice and comment.

A copy of the Covenant is available as Appendix 6.3.



## **2.4.2 Operations and Maintenance**

Four mechanical systems operate continuously at the Site. They include hydraulic control, free product recovery, bioventing, and stormwater management. Routine system maintenance is conducted quarterly. Mechanical problems are fixed as quickly as possible. Maintenance activities are reported as they occur, and operating parameters of the four systems are reported quarterly.

## **2.4.3 Protection Monitoring**

Protection monitoring confirms that human health and the environment are adequately protected during construction and operation of the cleanup action. Protection monitoring at this Site consists of air monitoring of the biovent discharge.

### **2.4.3.1 Air Monitoring**

Air monitoring is protection monitoring conducted to ensure the bioventing discharge to the atmosphere is in compliance with SRCAA guidance and does not pose a threat to human health or the environment.

## **2.4.4 Performance Monitoring**

Performance monitoring is conducted to demonstrate when the cleanup action has attained cleanup standards. In accordance with the final compliance monitoring plan, performance monitoring includes groundwater, stormwater, hydraulic control, and bioventing monitoring.

### **2.4.4.1 Groundwater Monitoring**

Groundwater performance monitoring is conducted to ensure no off-site migration of hazardous materials. Groundwater monitoring was scheduled for 12 quarters in the original CAP, and was to be evaluated at that time. In 2001, Ecology accepted a revised monitoring plan that reduced the monitoring frequency to semiannual. Currently, groundwater monitoring continues on a semiannual schedule due to the significant presence of free product remaining at the Site. Groundwater monitoring consists of sampling 13 wells across the Site. This review will evaluate performance groundwater monitoring through quarter 62, the most recent sampling event for which groundwater monitoring data summaries have been provided to Ecology.

### **2.4.4.2 Stormwater Monitoring**

Stormwater performance monitoring is conducted on an annual basis. Samples are collected from the detention basin in the CSO to ensure stormwater discharged to the system is in compliance with the City of Spokane discharge criteria.

### **2.4.4.3 Hydraulic Control Monitoring**

Hydraulic control monitoring is performed to ensure performance of the hydraulic control system. Four piezometers were installed along the barrier wall to monitor water levels upgradient of the wall. Hydraulic control monitoring is conducted in conjunction with groundwater elevation monitoring.

#### 2.4.4.4 Extracted Groundwater Monitoring

Extracted groundwater is monitored annually for fats, oil and grease in accordance with criteria established by the City of Spokane for discharge to the CSO.

#### 2.4.4.5 Free-Phase Product Monitoring

Monitoring of free-phase petroleum product recovery volumes is performed quarterly to evaluate the performance of the product recovery system. According to the CAP, product recovery is considered impractical if less than 1 gallon of product is recovered from a well during the course of two consecutive quarters.

#### 2.4.4.6 Biovent Monitoring

Bioventing performance monitoring is conducted to optimize the efficiency of the bioventing system. Bioventing performance monitoring consists of subsurface temperature and pressure monitoring, bioventing extraction well monitoring, injected and introduced air monitoring, and soil sampling to evaluate TPH concentrations after bioventing system operation has been terminated.

## **3.0 PERIODIC REVIEW**

### **3.1 Effectiveness of completed cleanup actions**

During the Site visit conducted on January 22, 2014, there were no indications the integrity of the remedial action has been compromised. There were no indications of undocumented Site excavation or disturbance activities, and no visual indications of possible disturbance of the asphalt surface. During the Site visit conducted in 2008, a monitoring well located in the public roadway at the eastern side of the intersection of South Lincoln Street and West First Avenue was missing the monument lid and well casing cap. This well (PZ-4) was abandoned in 2010, and no longer poses a threat as a conduit for potential groundwater contamination. A photo log is available as Appendix 6.4.

#### **3.1.1 Direct Contact**

Cleanup actions at the Site were intended to eliminate human exposure to contaminated soils and groundwater at the Site. The exposure pathways to contaminated soils and free product (ingestion, direct contact) have been removed by the presence of asphalt surface and buildings on the Site, as well as the tank removal and shallow excavation conducted during the initial cleanup. The potential exposure pathway to contaminated groundwater has been removed by the ground water barrier wall, the hydraulic control system, and the Covenant which prohibits use of groundwater from the Site.

#### **3.1.2 Institutional Controls**

The Covenant for the Site was recorded and is in place. This Covenant prohibits groundwater use from any well in the property, prohibits activities that will result in the release of contaminants contained as part of the cleanup without Ecology's approval, and prohibits other uses. This Covenant will maintain the integrity of the Site surface and the ground water barrier system installed during the cleanup.

#### **3.1.3 Monitoring Results**

##### **3.1.3.1 Groundwater Monitoring**

Groundwater monitoring has been conducted at the Site for 16 years from 1997 through 2013. Groundwater monitoring has not detected gasoline- or diesel-range TPH above 1996 MTCA Method A cleanup levels since the 29th quarter of sampling in February 2005. Bunker-C range petroleum hydrocarbons (Bunker C) continue to be detected at relatively low concentrations in select Site groundwater monitoring wells.

The most recent groundwater data summary submitted to Ecology was from 2012. Only one of thirteen monitoring wells contained Bunker C at concentrations above the 1996 MTCA Method A TPH cleanup level of 1.0 mg/L. In the opinion of the analytical laboratory, the reported concentration of Bunker C in MW-028 did not match the Bunker C standard and was not

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positively identified due to the presence of organics and additional hydrocarbons. Furthermore, monitoring well MW-028 is generally upgradient and outside the area impacted by the Site release. No other concentrations of petroleum-range hydrocarbons were reported above the performance standard in groundwater samples collected during 2012. Based on this data, the institutional and engineered controls being used at the Site continue to effectively prevent the downgradient spread of contaminated groundwater. Groundwater monitoring data from 57<sup>th</sup> and 59<sup>th</sup> quarter are available as Appendix 6.5.

#### 3.1.3.2 Stormwater Performance Monitoring

The annual sample of extracted groundwater was collected on November 15, 2012 and analyzed for fats, oil and grease (FOG) by EPA Method 1664. FOG was not detected in the storm water sample collected during QM-60.

#### 3.1.3.3 Free Product Recovery

Free-product continues to be recovered in significant quantities. Approximately 159 gallons of free product were recovered by belt skimmer from five extraction wells at the Site in 2012. For comparison, 315 gallons were recovered in 2007, 348 gallons were recovered in 2003 and 349 gallons were recovered in 1999.

A total of 1,192 gallons of oil were estimated to have been removed from wells EW1, OR1, OR2, and OR3 by vacuum extraction during 2012.

#### 3.1.3.4 Bioventing

Concentrations of carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) are monitored in bioventing extraction wells to evaluate the performance of the bioventing system. During the 2012 monitoring event, the average oxygen level in bioventing extraction wells for QM-60 was 19.41 percent, which is slightly above the performance standard of 10-15 percent by volume. The average carbon dioxide level in the extraction wells was 0.12 percent, which is below the design concentration of 0.20 percent by volume.

#### 3.1.3.5 Air Monitoring

Air protection monitoring is performed to ensure bioventing system discharge to the atmosphere is in compliance with SCAPCA requirements. Air protection monitoring for QM-60 was performed on November 1, 2012, Air monitoring indicated that total airflow discharge to the atmosphere was 134 cubic feet per minute (cfm), which is below the permitted level of 200 cfm. VOCs were not detected using a PID during QM-60.

Summary:

Soils with TPH concentrations higher than MTCA Method A cleanup levels are still present at the Site. Free product is still present at the Site and continues to be recovered in significant quantities. However, the structures and asphalt surface prevent human exposure to this contamination by ingestion and direct contact with soils. The Covenant will ensure that contaminated groundwater from the Site will not spread or be extracted for use and the integrity of the protective surfaces will be protected through maintaining the current use of the Site. The hydraulic barrier wall, and active hydraulic control being used at the property, will ensure contaminated groundwater from the Site will not spread and cause additional downgradient impacts.

### **3.2 New scientific information for individual hazardous substances for mixtures present at the Site**

There is no new scientific information for the petroleum contaminants related to the Site.

### **3.3 New applicable state and federal laws for hazardous substances present at the Site**

This cleanup is governed by Chapter 173-340 WAC (1996 ed.). This regulation was amended in 2001. Although TPH cleanup levels changed as a result of this modification, Site cleanup levels determined in the CAP will not change. WAC 173-340-702(12) (c) [2001 ed.] provides:

“A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.”

Cleanup levels changed for gasoline, diesel, and volatile organic compounds as a result of modifications to MTCA in 2001; however, contamination remains at the Site above MTCA Method A cleanup levels and the cleanup action is still protective of human health and the environment.

### **3.4 Current and projected Site use**

The Site is currently used for commercial and industrial purposes. There have been no changes in current or projected future Site or resource uses.

### **3.5 Availability and practicability of higher preference technologies**

The remedy implemented included containment of hazardous substances and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

### **3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels**

The analytical methods used at the time of the remedial action were capable of detection below MTCA Method A cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

## **4.0 CONCLUSIONS**

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soil and groundwater cleanup levels have not been met at the Site; however, the cleanup action for the Property is determined to comply with cleanup standards under WAC 173-340-740(6) (f), since the long-term integrity of the containment system is ensured and the requirements for containment technologies have been met.
- The Covenant for the property is in place and will be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, Ecology has determined the requirements of the Covenant have been satisfactorily completed. No additional actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure the integrity of the cap is maintained.

### **4.1 NEXT REVIEW**

The next review for the Site will be scheduled five years from the date of this periodic review. In the event additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

## 5.0 REFERENCES

Ecology. *Consent Decree*. 1994.

Ecology. *Amended Consent Decree*. 1996.

Ecology. *Restrictive Covenant*. 1997.

Ecology. *Periodic Review*. 2008.

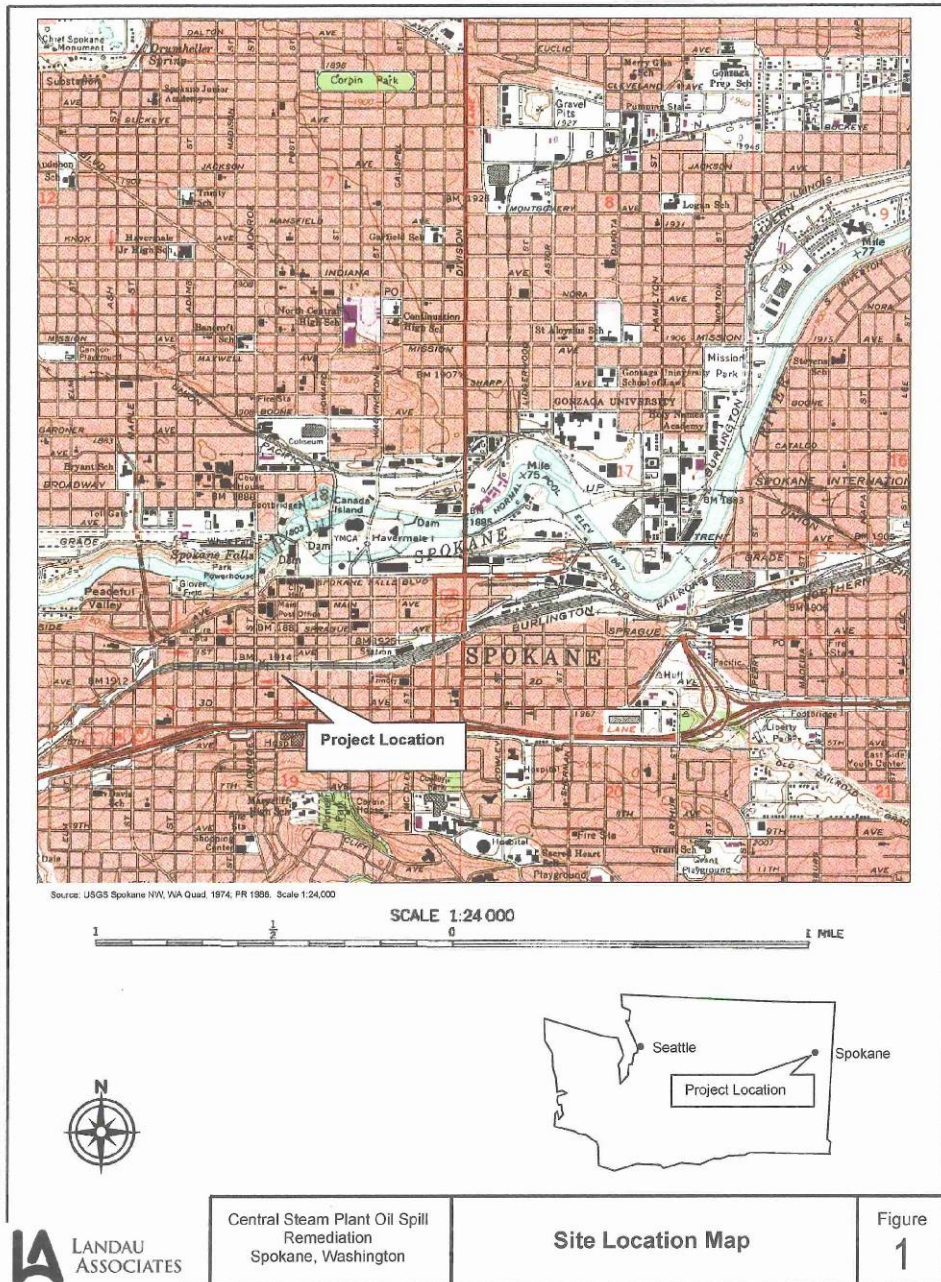
Landau Associates. *Quarterly Compliance Monitoring QM-60 and 2012 Annual Summary*.  
February 27, 2013.

Ecology. *Site Visit*. January 22, 2014.

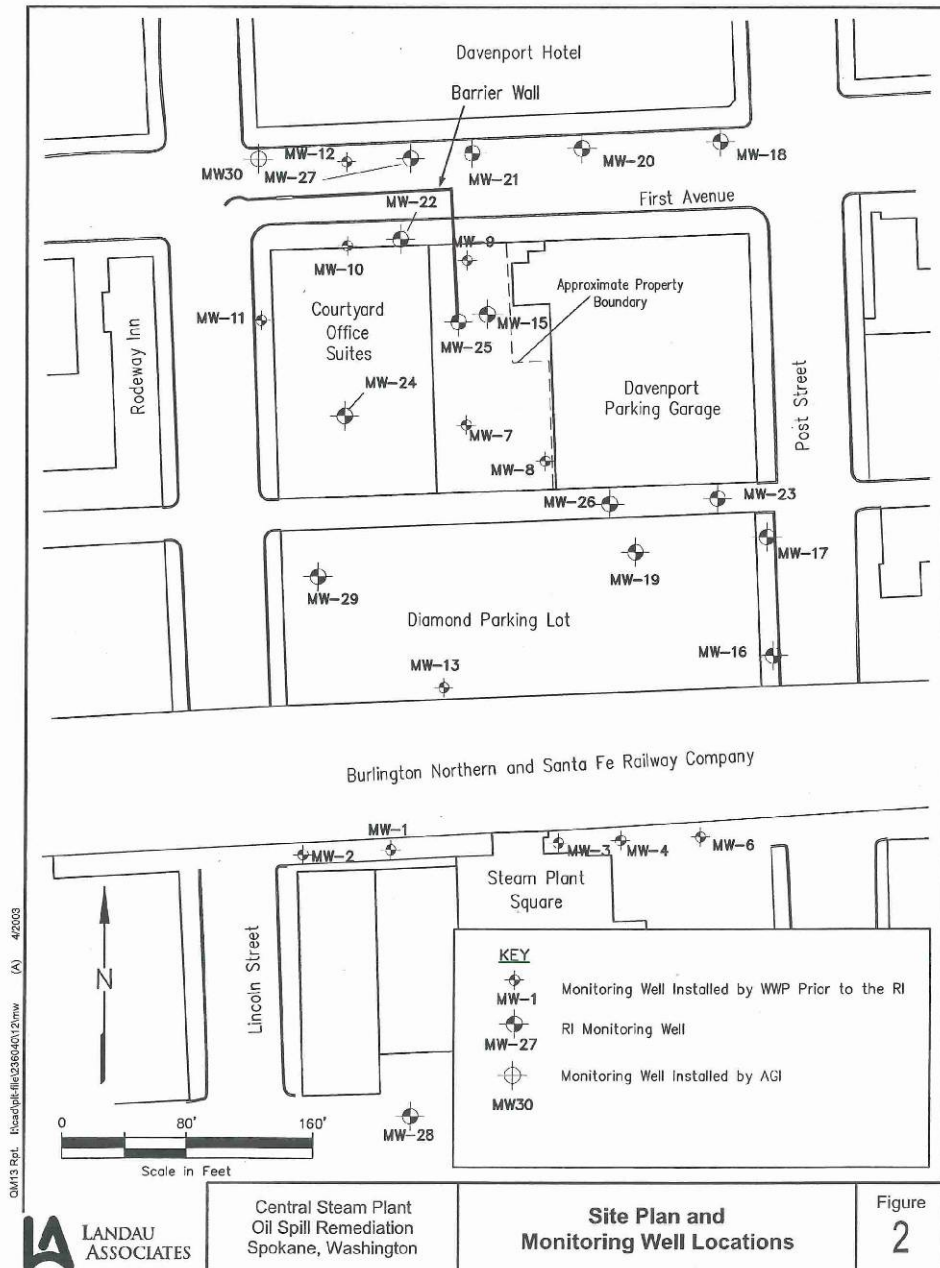


## **6.0 APPENDICIES**

## 6.1 Vicinity Map



## 6.2 Site Plan



### 6.3 Restrictive Covenant



Filed for Record at Request of:

Jerry K. Boyd  
Paine, Hamblen, Coffin, Brooke & Miller LLP  
717 W. Sprague, #1200  
Spokane, WA. 99204

**Indexing Data**

**Document title:** RESTRICTIVE COVENANT CONCERNING THE  
WASHINGTON WATER POWER CENTRAL STEAM PLANT  
OIL SPILL

**Reference numbers of related documents:** None

**Grantor:**

1. Washington Irrigation and Development Company, a  
Washington corporation,

**Grantee:**

1. The Washington Water Power Company, a Washington  
corporation

**Legal Description:**

1. Lots 1, 2, 3, and the South 77.5 feet of the West Half  
of Lot 4, Block 16, RAILROAD ADDITION
2. Additional legal description is on page 2 of document

**Assessor's Property Tax Parcel Account Number(s):**

35192.0901; 35192.0902; 35192.0903

For and in consideration of TEN DOLLARS (\$10.00) in hand  
received, and for other good and valuable consideration,  
Washington Irrigation and Development Company, a Washington

R.E. Excise Tax Exempt

Date: 12/30/1997

Spokane County Treasurer

By: [Signature]



corporation with offices located in Spokane, Washington, hereby grants and issues a Restrictive Covenant for the benefit of The Washington Water Power Company with respect to certain property, hereinafter referred to as "Property."

The Property that is the subject of this Restrictive Covenant has been the subject of a remedial action pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D. The remedial action undertaken to clean up the Property (hereafter referred to as the "Cleanup Action") is described in the Final Cleanup Action Plan which is an attachment to the Amended Consent Decree filed in Spokane Superior Court, No. 94-2-05788-4. These documents, including any attachments, are on file at the State of Washington Department of Ecology ("Ecology") at the Eastern Regional Office in Spokane, Washington.

This restrictive covenant is required by Ecology as defined in WAC 173-340-440 because the Cleanup Action resulted in residual concentrations of petroleum hydrocarbons and polynuclear aromatic hydrocarbons which exceed the Model Toxics Control Act Method A Cleanup levels for soil established under WAC 173-340-740 and petroleum hydrocarbons which exceed the Model Toxics Control Act Method A Cleanup levels for ground water established under WAC 173-340-720.

The undersigned, Washington Irrigation and Development Company ("WIDCo"), is the fee owner of real property in the County of Spokane, State of Washington. The legal description of the Property is as follows:

Lots 1, 2, 3, and the South 77.5 feet of the West Half of Lot 4, Block 16, RAILROAD ADDITION, according to plat recorded in Volume "p" of plats, Page 82, in the City of Spokane, Spokane County, State of Washington.

WIDCo makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owner of any portion of or interest in the Site.

1. The residual contamination that is the subject of this restrictive covenant consists of petroleum hydrocarbons and polynuclear aromatic hydrocarbons and is located in the area shown in Exhibit "A". Remediation or removal of these contaminants must be addressed before the owner or successor owner alters or modifies the property in any manner that causes the residual contamination to be exposed or accessible.



2. The owner or successor owner/s must ensure that all the requirements in the Final Cleanup Action Plan for containing the contaminants left on the property are met, including long term monitoring and maintenance.
3. Any activity that would threaten the viability of the containment as set forth in the Final Cleanup Action Plan is prohibited.
4. Groundwater withdrawn for any purposes, including domestic, agricultural, commercial, or industrial, is prohibited.
5. The owner of the property must give written notice to Ecology, or its successor agency, of the owner's intent to convey any interest in the property.
6. No conveyance of title, easement, lease, or other interest in the property shall be consummated by the property owner without adequate and complete provision for continued compliance with this Restrictive Covenant.
7. The owner must notify Ecology, or its successor agency, prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant and must obtain Ecology's, or its successor agency's, approval prior to any use of the property that is inconsistent with the terms of this Restrictive Covenant.
8. The owner shall allow authorized representatives of Ecology, or its successor agency, the right to enter the property at a reasonable time for the purpose of evaluating the Cleanup Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Cleanup Action.
9. The owner of the Site and the owner's assigns and successors in interest reserve the right under WAC 173-340-440(7) to record an instrument which provides that this Restrictive Covenant shall no longer limit use of the property or be of any further force or effect. However such an instrument may be recorded only with the consent of Ecology, or its successor agency. Ecology, or its successor agency, may consent to the





recording of such an instrument only after appropriate public notice and comment.

Executed as of the 29th day of December 1997.

PROPERTY OWNER: WASHINGTON IRRIGATION AND DEVELOPMENT COMPANY

Ronald R. Peterson  
President

Attachments:  
Exhibit A-Area of Containment

STATE OF WASHINGTON )  
COUNTY OF SPOKANE ) ss.

On this 29th day of December 1997, before me, a Notary Public in and for the State of Washington, personally appeared Ronald R. Peterson, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed this instrument, on oath state that he was authorized to execute the instrument, and acknowledged it as the President of Washington Irrigation and Development Company to be the free and voluntary act and deed of said corporation for the uses and purposes mentioned in the instrument.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.



Patricia J. Whalen  
Print Name PATRICIA J. WHALEN  
NOTARY PUBLIC in and for the State  
of Washington, residing at RITZVILLE  
My appointment expires 7-31-98

4174187  
Page: 6 of 6  
12/30/1997 03:27P  
Spokane Co, WA  
PAINE, HUBBEN, COFFIN ET GOV \$12.00

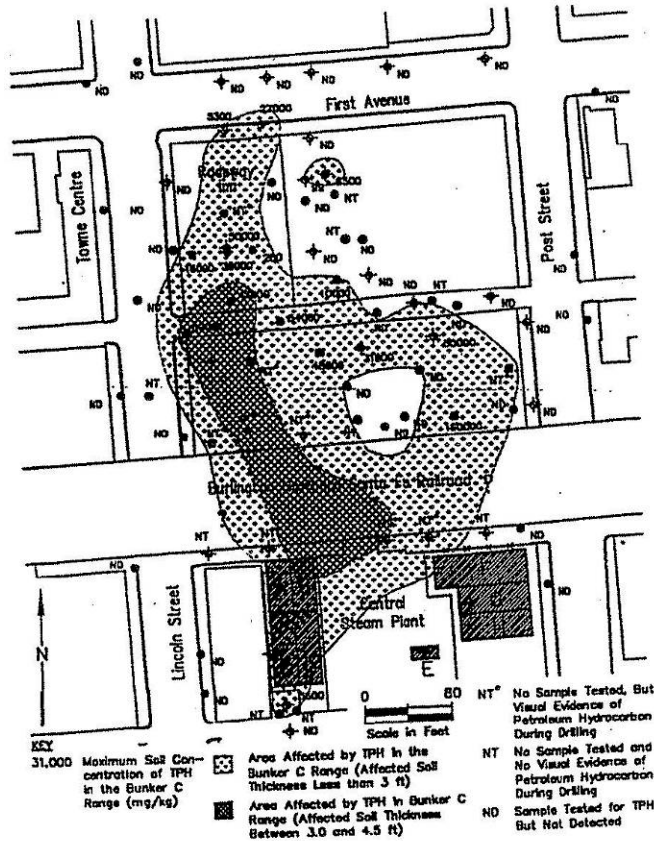


Exhibit A to the Restrictive Covenant



## 6.4 Photo log

**Photo 1: First Street in Vicinity of Barrier Wall - from the east**



**Photo 2: Extraction Well Vault in Parking Lot - from the northwest**



**Photo 3: Lower Parking Lot Across from Davenport Hotel - from the south**



**Photo 4: Western Site Sidewalk – from the north**





## 6.5 Quarter 57 and 59 Groundwater Monitoring Data

Table 5  
2012 Groundwater Sampling Results  
WWP Central Steam Plant Oil Spill Remediation  
Spokane, Washington

Sample Location	NWTPH-D (extended) with silica gel cleanup					
	QM-57			QM-59		
	Diesel	Bunker C	Oil	Diesel	Bunker C	Oil
	mg/L			mg/L		
MW-006	ND	ND	ND	ND	ND(b)	ND
MW-007	ND	ND	ND	ND	ND	ND
MW-012	ND	ND	ND	ND	ND	ND
MW-016	ND	ND	ND	--	--	--
MW-017	ND	ND	ND	--	--	--
MW-018	ND	0.24	ND	--	--	--
MW-020	ND	ND	ND	ND	ND(b)	ND
MW-021	ND	ND	ND	ND	ND	ND
MW-023	ND	ND	ND	ND	ND(b)	ND
MW-025	ND	ND	ND	ND	ND	ND
MW-027	ND	ND	ND	ND	ND	ND
Dup(a)	ND	ND	ND	ND	ND	ND
MW-028	0.15	0.76	0.25	ND	1.4*	0.45*
MW-030	ND	0.51	0.24	ND	ND(b)	ND
Performance Standard	1.0	1.0	1.0	1.0	1.0	1.0
Laboratory Reporting Limit	0.1	0.20	0.20	0.1	0.20	0.20

Notes:

-- = not sampled.

mg/L = milligrams per liter.

ND = not detected.

(a) Field duplicate sample of MW-027.

(b) = Concentration reported above the laboratory reporting limit but qualified by Landau Associates as not detected due to the presence of Bunker C contamination in the associated laboratory method blank.

\*In the opinion of the laboratory analyst, the detected hydrocarbons did not match the chromatograph pattern for any of the requested petroleum standards (diesel, Bunker C, motor oil) and were not positively identified.