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March 31, 2015

To: Mike Stranik

From: John Rork

**Subject: Docket UG-920781 (WNG)**

**Docket UE-911476 (PSP&L)**

**Docket UE-070724 (PSE)**

**Docket UE-072060 (PSE)**

**Docket UE-081016 (PSE)**

**Environmental Report for the quarter ending March 31, 2015**

**Pursuant to the WUTC Order entered on 10/8/08, PSE now operates both its electric and gas deferred environmental accounting programs with a blanket authorization that does not require additional deferred accounting petitions, provided the requisite criteria are met. This Order was issued under the following Docket Numbers: UE-070724, UE-072060, and UE- 081016. In short, the electric deferred system now operates much like the PSE gas deferred accounting order.**

**All future estimated costs provided in this document are forward looking and do not include prior costs already incurred. Additionally, estimates are based in part on claims made against PSE. As such, these figures are subject to change, based upon new information, further analysis, litigation risk, or regulatory/legal decisions.**

**FORMER WNG SITES**

**A. Tacoma Gas Company Site (Upland Source Control)**

PSE continues to work with the Washington Department of Ecology (WDOE) on developing the Remedial Investigation/Feasibility Study (RI/FS) documents.

Balance of actual costs 3/31/15 $776,532

Future Estimated Cost: $609,000

Total Project Estimate: $1,385,532

1. **Thea Foss Waterway**

On November 16th, 2007 the Commencement Bay Natural Resource Trustees delivered the revised Natural Resource Damage (NRD) Settlement Proposal Report to the PRPs. Since then, PSE has continued to participate as part of the steering committee that was formed to represent the greater PRP group. The PRP group submitted a settlement offer to the Trustees in the second quarter of 2010 and is actively engaged in negotiations with the Trustees. As part of that settlement, the PRP group will fund a mitigation project. Review of available projects has identified King County levy setback project with construction is anticipated to begin in late 2015.

As required by the EPA approved Operation and Monitoring Plan (OMMP), in April and May 2014 (Year 10 OMMP) the Utilities completed site inspections and sediment sampling near the head of the waterway. The analytical data was reviewed and analyzed. The data continued to show that the Utilities’ remedy is functioning as intended and that the recontamination source remains storm water. Based on 10 years of sampling, the project team is beginning to negotiate a work program and sampling schedule for future monitoring with EPA. PSE received proceeds from the Settlement with WSDOT for their contribution to the contamination of the Thea Foss. The Future Estimated Cost includes the estimated cost associated with the NRDA.

Balance of actual costs 3/31/15 $4,066,899

Future Estimated Cost: $ 1,919,000

Total Project Estimate: $5,985,899

Reimbursement from 3rd parties $3,488,999

1. **Everett, Washington**

The interim remedy implemented was a containment wall with groundwater monitoring at both ends. PSE continues regular monitoring of the results of the remediation already performed. Annual groundwater sampling performed continues to show the remedy is containing contaminated groundwater. PSE received proceeds from an agreement entered into with a PRP.

Balance of actual costs 3/31/15 $1,460,173

Future Estimated Cost: $ 3,300,000

Total Project Estimate: $4,760,173

Reimbursement from 3rd parties $801,551

1. **Chehalis, Washington**

Construction of the remedy was completed in October 2010. PSE submitted a report documenting the construction activities to WDOE is performing long-term groundwater monitoring to verify that the remedy was successful.

Balance of actual costs 3/31/15 $3,946,842

Future Estimated Cost: $239,000

Total Project Estimate: $4,185,842

**E. Gas Works Park Site**

On November 1, 2012, the *Settlement, Release and Cost Allocation Agreement* between the City of Seattle and PSE for the remediation of the combined Gas Works Park uplands as well as the Lake Union sediments became effective. As part of this agreement, PSE has taken the lead for completing the investigation as well as remediation of the combined uplands and sediment sites. Costs associated with the RI/FS as well as construction and long-term maintenance of the remedy will be shared between PSE and the City.

Work is being performed under an Agreed Order. WDOE approved modification of the Agreed Order on March 15, 2013 to expand the Site boundaries to include Gas Works Park, Seattle Harbor Patrol and the near shore sediments surrounding the Park and Harbor Patrol. This modification ensures that the impacts from uplands to the lake and near shore sediments are addressed.

Field investigation activities in the uplands Gas Work Park and Harbor Patrol properties were completed in 2013. The results of this work were incorporated into a remedial investigation report for the Gas Works Park Site. PSE is responding to WDOE’s comments on the draft RI report which were received in November 2014,

An interim remedy of stripping the surface soils of Kite Hill and replacing it with clean soil was completed in November, 2014 and it’s anticipated that the park will reopen by late May 2015. The goal is for all portions of the park accessible by the public to have a clean soil barrier in place.

Balance of actual costs 3/31/15 $19,760,550

Future Cost Estimate: $22,239,000

Total Project Estimate: $41,999,550

**F. Quendall Terminals**

EPA listed Quendall Terminals as an NPL (i.e., Superfund) Site on April 19, 2006. On December 23, 2010, PSE received a 104e Information Request from the EPA. EPA requested information regarding PSE’s past ownership and operation of the Manufactured Gas Plant (MGP) that was operated on the site now known as Gas Works Park. PSE reportedly sold tar from Gas Works to the Quendall facility but did not transport the byproduct or dispose of it as a waste at the Quendall facility.

On March 6, 2014 PSE received a Notice of Potential Liability and Supplemental Request for Information from the EPA indicating that they believe PSE may be responsible under CERCLA for costs associated with the cleanup of the site and requesting additional information pursuant to CERCLA Section 104(e). PSE provided additional information to EPA on June 17, 2014 and PSE continues to research its status as a potentially liable party at the site.

On October 17, 2014, using the Public Disclosure Act, PSE obtained new documents prepared by EPA regarding alternative remedial options and the projected costs of each of ten (10) remedial alternatives. The draft document indicates EPA will select one of the ten remedial alternatives as its preferred alternative for cleanup of the site.

Balance of actual costs 3/31/15 $0

Future Cost Estimate: $ 1,300,000

Total Project Estimate: $1,300,000

**G. Tacoma Tar Pits**

PSE continues to operate and monitor the groundwater pump and treat system. Maintenance of site facilities and monitoring of ground water quality continues.

EPA completed its last Superfund mandated five year review in 2009. The five year review concluded that the remedy is still protective. The next five year review is underway and the results are scheduled to be published by the end of 2014. It is anticipated that the latest review will conclude that the remedy, as implemented, remains protective and no significant changes will be required.

In April 2011, PSE met with EPA to generally discuss project status. At the meeting EPA requested that PSE prepare a work plan to assess whether contaminated groundwater was migrating along sewer pipe bedding towards the Puyallup River. After approval of the work plan, in May 2013, two additional wells were installed along the alignment of the city sewer and are being sampled on a quarterly basis. Monitoring completed through June 2014 indicates contamination is not moving through sewer pipe bedding towards the Puyallup River.

Balance of actual costs 3/31/15 $38,723,404

Future Cost Estimate: $2,500,000

Total Project Cost Estimate: $41,223,404

**H. Swarr Station**

Lead and petroleum-contaminated soil was removed in 2003. However, arsenic-contaminated groundwater remains beneath the site. PSE ceased monitoring groundwater conditions because the footprint of the arsenic plume does not appear to have changed since monitoring began and remains beneath the facility and does not extend off PSE property.

Balance of actual costs 3/31/15 $279,321

Future Cost Estimate: $140,000

Total Project Estimate: $419,321

**I. Bay Station (Elliott Ave)**

In the early 1900’s, PSE’s predecessors owned and operated an MGP in Seattle along the waterfront now known as Elliott Ave. PSE was contacted by the property owners regarding contamination in the subsurface at this location that appears to be associated with the former MGP.

On June 23, 2010 PSE purchased the property and is using the site as a material storage yard in support of PSE operations while PSE remediates the site. A preliminary site investigation was performed in August, 2010. The analytical results of soil samples confirmed the presence of contamination consistent with MGP releases. A report was prepared documenting the results of this investigation.

In August 2013 , PSE received a letter from WDOE stating that they had performed a Site Hazard Ranking Assessment and the that they have ranked the site with a number 1 on a scale of 1 to 5 with the ranking of 1 having the highest potential risk. PSE is currently considering options to address the site.

Balance of actual costs 3/31/15 $231,370

Future Cost Estimate: $2,050,000

Total Project Estimate: $2,281,370

**J. Olympia (Columbia Street MGP)**

From 1908 to approximately 1924, an MGP was located at this property in Olympia. In late 2006, PSE received a letter from a firm representing the owners at that time stating that contamination found in soil and groundwater was attributable to PSE’s predecessors’ ownership and operation on this site. In response to the owners' request, PSE conducted an initial investigation of environmental conditions beneath the property in 2008. Subsequent on- and off-property investigations were conducted between 2009 and 2011 under WDOE’s Voluntary Cleanup Program. These studies identified the presence of MGP-related contamination beneath the Property and extending onto adjacent properties. The full lateral extent of off-property impacts has not yet been identified.

PSE designed and implemented a remedial action for the Property and the action was completed in October 2012. Efforts are under way to obtain a Property-specific No Further Action letter from WDOE. Institutional controls and ongoing groundwater monitoring will be required because some inaccessible contamination remains. Contamination that extends off the property will be addressed as a separate phase of the project.

Balance of actual costs 3/31/15 $1,239,483

Future Cost Estimate: $523,000

Total Project Estimate: $1,762,483

Reimbursement from 3rd parties $160,310

**K. Verbeek Autowrecking**

Remediation of the Verbeek property was completed in accordance with an approved Interim Remedial Action Plan (IRAP) in 2010 and WDOE issued a property specific No Further Action letter. A small amount of GWP contaminated fill remains in place on an adjacent property that could not be removed due to a building having been constructed over the top of the fill.

Balance of actual costs 3/31/15 $2,050,123

Future Cost Estimate: $200,000

Total Project Estimate: $2,250,123

Reimbursement from 3rd parties $1,114,593

**L. Downtowner Property**

On April 7, 2014, PSE received a MTCA notice letter from a law firm representing a property owner alleging contamination discovered at a property in downtown Seattle in connection with a MGP that was operated between roughly 1875 and 1907 by PSE’s predecessors. PSE is currently researching the merit of this claim and has responded to counsel for the property owner regarding certain of the allegations. PSE is onsite monitoring the remedial excavation at the site.

Balance of actual costs 3/31/15 $42,368

Future Cost Estimate Cost: $300,000

Total Project Estimate: $342,368

**FORMER PUGET POWER SITES**

**A. White River/Buckley Phase II Burn Pile and Wood Debris**

PSE has satisfied the requirement to monitor and maintain the site rehabilitation activities performed in 2006. However, groundwater continues to be monitored to evaluate the effectiveness of the cleanup. While arsenic concentrations in groundwater do not appear to be substantially declining, the lateral extent of the plume does not appear to be currently expanding or approaching the White River.

Balance of actual costs 3/31/15 $2,140,681

Future Cost Estimate Cost: $200,000

Total Project Estimate: $2,340,681

**B. Lower Duwamish Waterway**

On December 21, 2005, PSE received a demand letter regarding the Malarkey Asphalt plant at Terminal 117 on the Duwamish waterway. Used transformer oil, containing PCBs, was burned by the operators as a boiler fuel. PSE has denied involvement at the site, and to date, no evidence linking PSE to the site has been discovered. Litigation involving other parties has been resolved without PSE’s involvement.

On January 29th 2009, PSE received a 104e Information Request from the EPA as part of the Lower Duwamish Waterway Superfund Site. EPA requested information regarding PSE’s past ownership and operation of the Georgetown Steam Plant and nearby facilities. PSE has completed its responses to these requests and submitted them to EPA at the end of July, 2009.

On November 8th, 2012 PSE received a General Notice letter from EPA indicating that they believe PSE may be responsible under CERCLA for costs associated with the cleanup of the Lower Duwamish Waterway.

On August 1, 2014, PSE received notice from a neutral allocator inviting PSE to join an alternative dispute resolution (ADR) process to allocate liability for environmental remedial action at the site. PSE agreed on August 25, 2014 to participate in the ADR process.

Balance of actual costs 3/31/15 $88,344

Future Cost Estimate: $200,000

Total Project Estimate: $288,344

**C. Lower Baker Power Plant**

In 1965 a landslide destroyed PSE's Lower Baker powerhouse facility. It is believed that a number of oil-containing devices remain buried beneath the slide. A petroleum-like sheen was discovered in water discharging from a metal pipe extending from the concrete wall of the former powerhouse that remains in place. PSE evaluated the sheen and installed a water treatment system to eliminate the sheen. The specific source(s) and extent of contamination in the landslide area has not been identified.

Balance of actual costs 3/31/15 $402,104

Future Cost Estimate: $350,000

Total Project Estimate: $752,104

**D. Snoqualmie Hydro Generation (Power Plant)**

PSE began construction activities associated with the Snoqualmie Falls redevelopment project in the fall of 2009. Upgrades to electrical generating facilities at both power plants required the excavation of a significant quantity of soil and rock. During this process, contaminated soil was removed from the Plant 1 construction footprint between 2010 and 2013. Residual contaminated soil remains at some locations outside of the Plant 1 construction footprint, in areas where access would have been difficult. The cleanup completion report was been finalized and no further actions are planned.

Balance of actual costs 3/31/15 $2,254,508

Future Cost Estimate: $50,000

Total Project Estimate: $2,304,508

**E. Bellingham South State Street MGP *(formerly known as Boulevard Park)***

As early as the late 1800’s, PSE’s predecessors owned and operated a MGP on Bellingham Bay. PSE sold the property to Cascade Natural Gas which dismantled the MGP and later sold it to the City of Bellingham who developed the site as part of Boulevard Park. PSE was notified by the City of Bellingham of potential liability for contamination at the site. PSE has entered into a cost-sharing agreement with the City of Bellingham to complete a RI/FS for the former MGP site under an Agreed Order with the City and WDOE. The Agreed Order was issued on April 30, 2010 by WDOE.

PSE and the City of Bellingham prepared an upland and sediment investigation under the Agreed Order. The draft remedial investigation (RI) and associated report were completed under the leadership of the City. WDOE has provided comments on the draft RI report. Due to the volume of comments provided by WDOE, PSE and the City are determining how best to address them prior to continuing work on the Feasibility Study (FS).

Balance of actual costs 3/31/15 $ 2,105,022

Future Cost Estimate: $ 2,925,000

Total Project Estimate: $5,030,022

**F. Electron Flume**

A wooden flume is used to convey water from the diversion dam to the Electron Powerhouse. The flume is approximately 10 miles long and is located on the southwest slope of the Puyallup River valley. PSE historically replaced portions of the flume during routine maintenance and repair activities. The removed wood was typically placed on the ground surface at the location of the repair. This produced piles of wood debris that remained along the flume alignment. Based on historical information, some of this wood was treated with chemical preservatives.

In response to WDOE inquiries, PSE sent a letter in late 2006 committing to begin a project to remove the large debris immediately adjacent to the flume. Characterization has shown this debris to be a mix of both treated and untreated wood of similar properties to the debris piles formerly located at the Buckley Headworks and qualifies for the arsenical-treated wood exclusion. At the direction of WDOE, all large piles of treated wood debris that could be address safely have been removed and sent off-site for proper disposal.

Balance of actual costs 3/31/15 $659,655

Future Cost Estimate: $250,000

Total Project Estimate: $909,655

**G. Talbot Hill Substation and Switchyard**

During the investigation and remediation of a minor mineral oil release discovered in June 2009, contamination related to historic spills from electrical equipment was encountered at the site. Subsurface explorations identified contamination exceeding state cleanup levels beneath a portion of the site, including structural foundations supporting towers and electrical equipment. PSE completed an interim cleanup action that removed accessible contaminated soil from the site. Some contaminated soil remains beneath facility structures.

Balance of actual costs 3/31/15 $224,880

Future Cost Estimate: $75,000

Total Project Estimate: $299,880

**H.** **Puyallup Garage**

Contaminated soil remains beneath the former garage building. PSE expects to perform remediation at this site in the future.

Balance of actual costs 3/31/15 $14,834

Future Cost Estimate: $ 550,000

Total Project Estimate: $564,834

**I. Crystal Mountain Generator Station**

PSE has now settled all civil penalty claims of the United States and natural resource damage claims of the Natural Resource Trustees, as well as the civil penalty with WDOE.

Final site restoration will be required after removing the trench and treatment system. Following the final restoration, groundwater monitoring will likely be necessary for a number of years to verify the success of the remediation.

Balance of actual costs 3/31/15 $14,583,473

Future Cost Estimate: $500,000

Total Project Estimate: $15,083,473

Reimbursement from 3rd parties $11,938,563

1. **Sammamish Substation**

On June 16, 2011, a failure of a large transformer at PSE’s Sammamish Substation occurred causing a fire and release of Non PCB mineral oil. PSE has completed remediation of the majority of contaminated soil. However, there still remains some limited contamination adjacent to energized control cables that will need to be addressed sometime in the future when it becomes accessible. On May 28, 2014, PSE received a letter from WDOE informing PSE that the site would now be listed as a known and confirmed contaminated site.

Balance of actual costs 3/31/15 $400,496

Future Cost Estimate: $50,000

Total Cost Estimate: $ 450,496

**K. City of Olympia vs. PSE (Plum Street Substation) (Change)**

On March 7, 2012, the City of Olympia filed a lawsuit against PSE asserting that a predecessor of PSE owned and operated an MGP at an adjacent site and that PSE also is responsible as the current owner of the adjacent Plum Street Substation.   During construction of the new City Hall, the City alleged that it had encountered contamination from past MGP operations. PSE is currently researching the merit of these allegations. PSE has reached a settlement with one of the defendants named in the lawsuit.

Balance of actual costs 3/31/15 $197,428

Future Cost Estimate: $175,000

Total Project Estimate: $372,428

**L. Underground Storage Tanks Status**

Please see the attached spreadsheet. This provides a summary of our ongoing efforts associated with the investigation, remediation, and/or removal of underground storage tanks (UST).

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