



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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***STATE ENVIRONMENTAL POLICY ACT***  
**ADDENDUM TO DETERMINATION OF NONSIGNIFICANCE (DNS)**

**PURSUANT TO WAC 197-11-600 AND WAC 197-11-625**

Date of Issuance of the Addendum – September 11, 2017

Date of Original Issuance of SEPA Determination – February 24, 2017

Lead agency: Department of Ecology, Toxic Cleanup Program

Agency Contact: Ching-Pi Wang, Site Manager  
[Cwan461@ecy.wa.gov](mailto:Cwan461@ecy.wa.gov)

Description of proposal/purpose of Addendum:

Seattle Parks and Recreation (SPR) will be conducting a maintenance project at Gas Works Park. Maintenance work or renovations will be completed at the Play Area, Comfort Station, and East Entry areas. Renovations will focus on replacing equipment and improving existing conditions to meet updated safety standards and Americans with Disabilities Act (ADA) requirements.

Puget Sound Energy (PSE) and the City of Seattle are proposing to complete an interim action to treat dissolved arsenic beneath the Play Area. The initial interim action to install the groundwater treatment system infrastructure was completed on June 16, 2017. The next step is to implement an interim action to operate the groundwater treatment system. Treatment system operation and monitoring are summarized in the Agency Review Draft Play Area Groundwater Treatment Interim Action Work Plan (GeoEngineers, 2017).

This SEPA Addendum and letter dated 7-26-2017 from Puget Sound Energy attached hereto includes additional information to supplement the SEPA Environmental Checklist for Play Area Injection Infrastructure and Monitoring Well Installation, and the SEPA Determination of Nonsignificance (DNS) issued by Ecology on February 24, 2017.

Location of proposal: Gas Works Park, 1801 N Northlake Way, Seattle, WA



DETERMINATION OF NONSIGNIFICANCE

Page 2 of 2

September 11, 2017

Applicant/Proponent:

Puget Sound Energy (PSE) and City of Seattle  
10885 NE 4<sup>th</sup> Street  
Bellevue, WA 98004

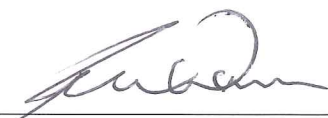
Ecology has determined that this proposal will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). We have reviewed the attached Environmental Checklist, Draft amendment to agreed order and Draft interim work plan. These documents are available at:  
<https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=2876>

The comment period for this DNS corresponds with the comment period on the draft plans for an interim cleanup action at Gasworks Park in Seattle. The comment period is from September 11, 2017 – October 10, 2017.

Responsible official:

Bob Warren  
Section Manager  
Department of Ecology  
3190 160<sup>th</sup> Avenue SE  
Bellevue, WA 98008  
425-649-7054

Signature



Date

8-30-17



July 26, 2017

Ching-Pi Wang, Site Manager  
Washington State Department of Ecology  
Northwest Regional Office  
3190 - 160<sup>th</sup> Avenue SE  
Bellevue, Washington 98008-5452

Subject: SEPA Addendum 1 for  
Play Area Groundwater Treatment Operation and Monitoring  
Gas Works Park Site  
Seattle, Washington

Dear Ching-Pi:

Seattle Parks and Recreation (SPR) will be conducting a maintenance project at Gas Works Park. Maintenance work or renovations will be completed at the Play Area, Comfort Station, and East Entry areas. Renovations will focus on replacing equipment and improving existing conditions to meet updated safety standards and Americans with Disabilities Act (ADA) requirements.

Puget Sound Energy (PSE) and the City of Seattle are proposing to complete an interim action to treat dissolved arsenic beneath the Play Area. The initial interim action to install the groundwater treatment system infrastructure was completed on June 16, 2017. The next step is to implement an interim action to operate the groundwater treatment system. Treatment system operation and monitoring are summarized in the *Agency Review Draft Play Area Groundwater Treatment Interim Action Work Plan* (GeoEngineers, 2017). This SEPA Addendum 1 letter includes additional information to supplement the SEPA Environmental Checklist for Play Area Injection Infrastructure and Monitoring Well Installation, and the SEPA Determination of Nonsignificance (DNS) issued by Ecology on February 24, 2017.

### Existing Documents

The following documents are relevant to the Play Area Interim Action and are incorporated into this SEPA Addendum by reference:

- [SEPA Environmental Checklist for Play Area Injection Infrastructure and Monitoring Well Installation](#), February 16, 2017.
- [SEPA Determination of Nonsignificance](#) (DNS) issued by Ecology on February 24, 2017.

Puget Sound Energy, Inc.  
PSE12  
10885 N.E. 4<sup>th</sup> Street  
Bellevue, WA 98004

- Agency Review Draft Play Area Groundwater Treatment Interim Action Work Plan (IAWP), (GeoEngineers, 2017).
- Technical Memorandum, Supplemental Play Area Investigation and Treatment Infrastructure Construction, August 18, 2017.

## SEPA Checklist Addendum

New project information is summarized below by SEPA Checklist section.

### A.1. Name of proposed project:

The project name is modified to "Play Area Injection Infrastructure and Monitoring Well Installation; and Groundwater Treatment System Operation, Maintenance and Monitoring".

**A.4. Date addendum prepared:** July 26, 2017

### A.6. Proposed timing or schedule:

The following general schedule is proposed for system operation and monitoring. The operation and monitoring schedule may change depending on the timing of Play Area renovations and other project factors. Additional rounds of amendment injection, short-term groundwater monitoring and performance groundwater monitoring may be performed in 2018 as necessary.

#### **Fall 2017:**

- Baseline groundwater monitoring
- First round of amendment injection and short-term groundwater monitoring
- Performance groundwater monitoring

#### **2018:**

- Confirmational groundwater monitoring
- Reporting

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

Further activity connected with this proposal includes operation, maintenance and monitoring of the in-situ groundwater treatment system. These activities are presented in the IAWP for treatment and summarized under Section A.11 below.

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

- Agency Review Draft Play Area Groundwater Treatment Interim Action Work Plan (IAWP), (GeoEngineers, 2017).

**A.1.1. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site.**

The proposed approach for the Interim Action involves the use of hydrated ferrous sulfate, an injectable treatment reagent solution, to react in-situ within zones of elevated dissolved arsenic beneath the Play Area, resulting in groundwater conditions that promote the precipitation and adsorption of dissolved arsenic. Field personnel will set up a temporary mixing and delivery system on site. The mixing and delivery system will include mixing tank(s), a transfer pump, manifold, distribution hoses, and fittings to connect to multiple injection wells simultaneously. The temporary work area will be smaller than the 200-foot by 120-foot fenced area currently in place for renovation activities.

The Interim Action groundwater monitoring approach consists of characterizing groundwater by collecting samples from some or all of the 17 monitoring wells within the Play Area groundwater monitoring network. Groundwater monitoring will entail temporary access restriction to a 10 to 20-foot diameter area surrounding each well.

**B.3.b.1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

During groundwater monitoring, a limited amount of groundwater will be withdrawn from each well sampled. Several hundred gallons of water are estimated to be removed during each monitoring event. Water withdrawn during groundwater monitoring will be containerized and disposed of offsite.

The reagent, consisting of up to a 5% solution of hydrated ferrous sulfate dissolved in water, will be discharged to groundwater. It is expected that no more than 1,000 gallons of reagent will be injected at each of the 35 injection wells during each round of treatment. The reagent concentration and volume will be adjusted based on groundwater characterization performed as part of this project.

**B.7.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?**

There are no known environmental health hazards that could occur following completion of the project.

Water generated during groundwater monitoring will be containerized, temporarily stored on site, and disposed of offsite at a permitted facility.

The selected reagent, Ferrous Sulfate Heptahydrate (CAS 7782-63-0) is considered toxic by the oral route; is a skin and eye irritant; is not flammable; nor considered a hazardous waste. The reagent will be stored and handled consistent with the Safety Data Sheet and Site-Specific Health and Safety Plan. Accidental spills will be cleaned and the reagent will not be allowed to enter storm drains.

**B.7.a.3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.**

Toxic or hazardous chemicals used and stored during reagent injection will be limited to the reagent (Ferrous Sulfate Heptahydrate [CAS 7782-63-0]) described under B.7.a, and fuels (diesel and gasoline) to power pumps and blowers used during reagent injection.

**B.7.a.5) Measures to reduce or control environmental health hazards.**

The site-specific Health and Safety Plan will include environmental health hazards of Ferrous Sulfate Heptahydrate (CAS 7782-63-0), and methods to protect workers and the environment from exposure and spills of the reagent. Contaminated groundwater generated during groundwater monitoring will be temporarily stored in containers on site in a secure location.

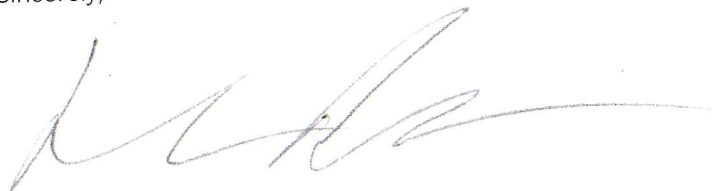
**B.7.b.2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Reagent injection will result in a short-term increase in noise levels associated with generators, pumps, and blowers used during active injection. Work activities are limited per the City of Seattle Noise Ordinance which, in general, permits construction activities between the hours of 7:00 a.m. and 10:00 p.m. weekdays, and between 9:00 a.m. and 10:00 p.m. weekends and holidays.

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We appreciate your cooperation and support of our efforts to operate the treatment system to allow in situ treatment of arsenic. We respectfully request your prompt review and approval.

Sincerely,



John Rork  
Manager - Environmental Programs & Services  
Puget Sound Energy

cc via e-mail: Peter D. Rude, Ph.D, Seattle Public Utilities  
David Graves, AICP, Seattle Parks and Recreation  
Dan Baker, GeoEngineers  
Sandy Smith, GeoEngineers  
Chris Bailey, GeoEngineers