DEPARTMENT OF ECOLOGY
State of Washington

Response to Comments

Remedial Investigation/Feasibility Study

South State Street Manufactured Gas Plant Site
Bellingham, WA

Facility Site ID: 2865
Cleanup Site ID: 4606

January 2019

Publication and Contact Information

This document is available on the Department of Ecology's South State Street Manufactured Gas Plant website at:
https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=4606

For more information contact:

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Bellingham, WA 98225
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- Headquarters, Olympia 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Olympia 360-407-6300
- Central Regional Office, Union Gap 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

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Washington State Department of Ecology

Northwest Regional Office

Toxics Cleanup Program

Bellevue, Washington

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Public Outreach

From October 8 to November 6, 2018, the Department of Ecology (Ecology) solicited public comments on a Draft Remedial Investigation/Feasibility Study (RI/FS) for the South State Street Manufactured Gas Plant (MGP) cleanup site (Site) on the Bellingham waterfront.

Our public involvement activities related to this 30-day comment period included:

- **Fact Sheet:**
  - US mail distribution of a Fact Sheet providing information about the Draft RI/FS, public comment period, and public meeting to approximately 2,200 people including neighboring businesses and other interested parties.
  - Email distribution of a Fact Sheet to approximately 230 people, including interested individuals, local/county/state/federal agencies, and interested community groups.
- **Legal Notice:**
  - Publication of one paid legal ad in *The Bellingham Herald*, dated October 5, 2018.
- **Site Register:**
  - Publication of three notices in Ecology's Toxics Cleanup Site Register:
    - September 27, 2018
    - October 11, 2018
    - October 25, 2018
    - Visit Ecology's Site Register website[1] to download PDFs.
- **Website**:
  - Announcement of the public comment period, public meeting, and posting of the Fact Sheet and associated documents for review on Ecology's South State Street MGP website[2]
- **Document Repositories:**
  - Provided copies of the document for public review through three information repositories:
    - Ecology's Northwest Regional Office in Bellevue
    - Ecology's Bellingham Field Office in Bellingham
    - Bellingham Public Library in Bellingham
- **Public Meeting:**
  - Hosted an informational public meeting at Bellingham City Hall on October 30, 2018 from 6 – 8 p.m.

[1] https://fortress.wa.gov/ecy/publications/UIPages/PublicationList.aspx?IndexTypeName=Program&NameValue=Toxics+Cleanup&DocumentTypeName=Newsletter

[2] https://fortress.wa.gov/ecy/gsp/Sitepage.aspx?csid=4606

Comment Summary

Ecology received five comments during the 30-day comment period:

- 3 individuals.
- 1 agency.
- 1 organization.

Table 1: List of Commenters

	First Name	Last Name	Agency/Organization/Business	Submitted By
1	Monte	Hokanson		Individual
2	Bruce	Peters		Individual
3	Judith	Akins		Individual
4	Timothy	Goodman	Department of Natural Resources	Agency
5	Eleanor	Hines	RE Sources for Sustainable Communities	Organization

Next Steps

In 2019 Ecology expects to issue a draft cleanup action plan (CAP) for the South State Street Manufactured Gas Plant site for public review. We will develop the CAP based on the information in the RI/FS. The CAP will be part of a legal agreement that requires the City of Bellingham, Puget Sound Energy, and possible others, to design and implement the cleanup action.

We expect to complete design activities by the end of 2020 and begin implementing the cleanup action in 2021.

Comments and Responses

Ecology has reviewed and considered all comments received on the Draft RI/FS. Based on Ecology's evaluation of the comments, changes were made to the documents:

Remedial Investigation

- *Section 5.1.1 Shallow Soil:* Fix spelling typo.

Feasibility Study

- *Section 3.4.4 Natural Recovery Processes:* Delete the confusing second sentence in paragraph two.

The comments are presented below, along with Ecology's responses. Appendix A, page 11, contains the comments in their original format.

Comment from: Monte Hokanson

Surface water flooding is the most common cause of flooding and one of the greatest short-term climate change risks facing the NorthWest.

Consider diverting contaminated surface and ground water seepage from the Manufactured Gas Plant clean-up site away from Boulevard Park green areas. The lawn located below the clean-up site and adjacent to the pavilion music stage is already wet most of the year and prone to becoming boggy and muddy with use. One possible solution is to design a swale below the contaminated site to contain and divert stormwater before it enters the public green areas at times of high rainfall.

Response:

Surface water flooding caused by high tides, storm events, climate change and sea level rise were considered for all of the cleanup action alternatives evaluated in the Draft RI/FS. Surface water flooding will be further evaluated in the future during design of the cleanup action ultimately selected for the site.

The lawn (green area) around the music pavilion is within the cleanup site. All of the cleanup alternatives evaluated in the Draft RI/FS include placing a minimum of 2 feet of clean soil and vegetation across this entire area. The soil cover and vegetation will prevent exposure to contaminants, prevent erosion, and reduce flooding potential.

All the cleanup alternatives also include a minimum of 2 feet of soil and vegetation across the area of the site next to State Street.

Regarding contaminated groundwater, the remedial investigation found impacts to groundwater adjacent to the railroad tracks at the north end of the site. The preferred cleanup alternative calls for treating groundwater in this area.

Additionally, stormwater management will be engineered and constructed to address stormwater conveyance, treatment and keeping potentially contaminated surface water from entering Bellingham Bay.

Comment from: Bruce Peters

Will the pedestrian overpass over the railroad tracks be rebuilt as part of this project?

Response:

No. The City of Bellingham will address the pedestrian overpass as a separate project. We understand that the City intends to remove, but not rebuild the overpass. The City may be constructing stairs on the slope that stop east of the railway. The City does not currently have plans for a new pedestrian overpass over the railway tracks.

Comment from: Judith Akins

I am a resident of Bellingham and regularly use this trail both for walking and biking. I find that keeping the blackberries on the upland site and fencing this area off is appalling, to say the least. I have picked blackberries here and I don't think they are safe no matter what your indicators are. I feel that they should be removed and either capped, putting large boulders there would protect the public along with a fence. I am finding this site for information very hard to navigate. I was looking for the graphs for the alternatives 1-5 but could not find them. My comment had to do with these graphs but I believe your preferred alternative is #2. I would prefer alternative #3 before #2. I believe the upland cap, the enhanced BIO remediation, monitoring natural attenuation, and institutional control inspections are a necessity. I prefer #3 because soil vapor extraction and in situ solidification are considered. I understand that alternative #5 is too expensive for the level of cleanup and Alternative #1 gives us no protection for the cost. However, for the cost versus cleanup, I do think #3 gives us greater security over #2. I would encourage you to enhance alternative 2 and consider some of the enhancements between 3,4,5 to upgrade alternative #2. Thank you for your reaching out to the public and your very informative public meetings.

Response:

While scientific analysis does not indicate a need to remove existing blackberry plants on the steep slope between the upper and lower park to protect human health and the environment, the City may voluntarily remove and replace them in conjunction with cleanup activities.

We assume the referenced graph is Figure 5-1, Disproportionate Cost Analysis Scoring Comparison (see below). This figure is located in the FS portion of the Draft RI/FS report at: https://fortress.wa.gov/ecy/gsp/DocViewer.ashx?did=77684. The FS also contains Tables 3-1 through 5-2 which present the various remediation technology screening, evaluation and ranking processes.

Figure 5-1 graphically depicts a comparison of the costs and environmental benefits of Cleanup Action Alternatives 1 - 5. All of these alternatives protect human health and the environment, and the purpose of the cost/benefit analysis is to identify the alternative that is permanent to the maximum extent practicable. The alternatives evaluated in the FS that cost more than Alternative 2 do not achieve a proportionate increase in benefit for the increase in cost. Therefore, Alternative 2 is revealed as the alternative that has the highest benefit per unit cost, is permanent to the maximum extent practicable and the preferred alternative.

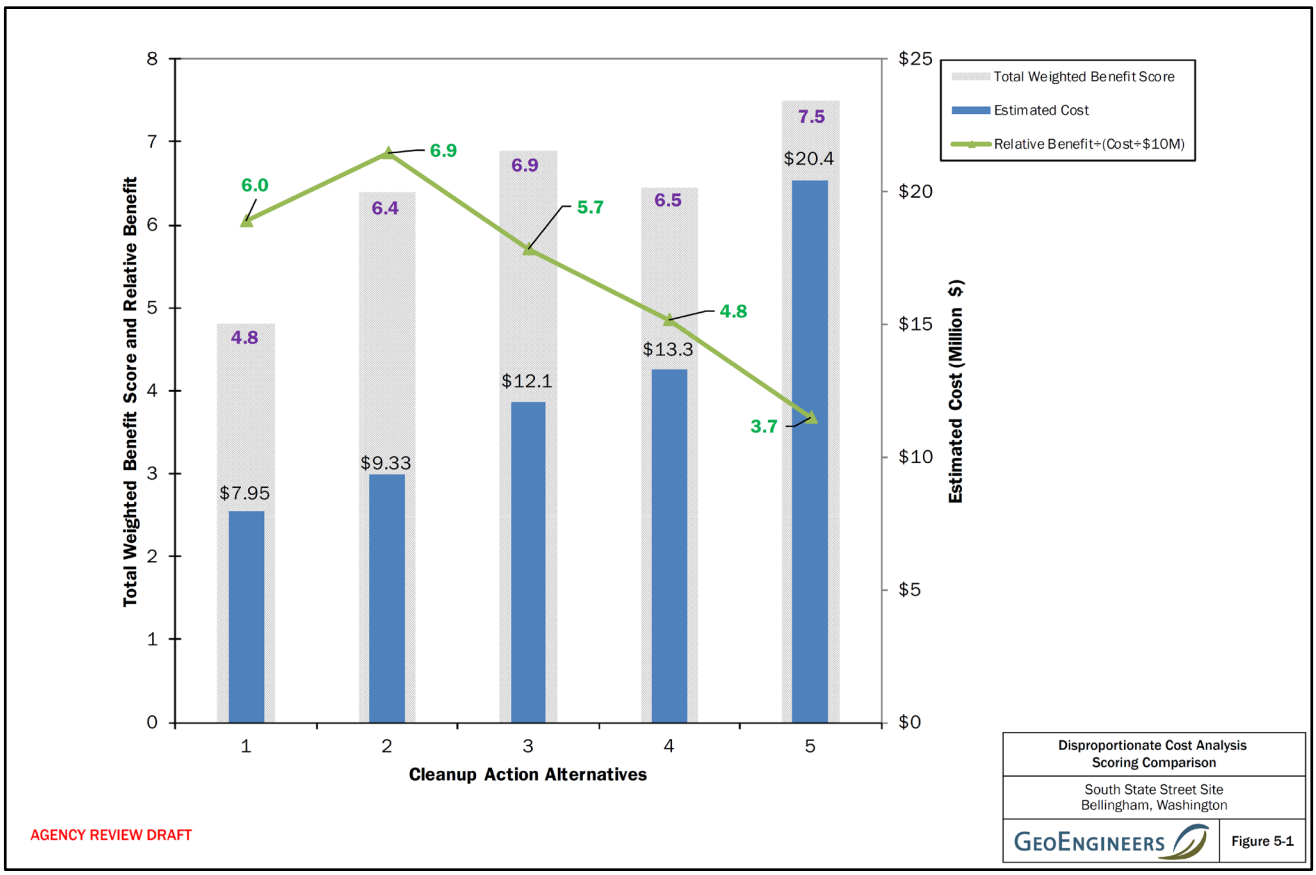

Figure 5.1: Disproportionate Cost Analysis Scoring Comparison from South State Street MGP Feasibility Study Report

Comment from: Department of Natural Resources (Timothy Goodman)

The Washington State Department of Natural Resources (DNR) is pleased to provide the following comments on the SSS MGP RI/FS September 26, 2018 Public Review Draft Feasibility Study.

DNR requests that the Feasibility Study be expanded to include specific information about property access and the nature of the institutional restrictions associated with each type of remedy. DNR has the responsibility to provide access to a large portion of the site for implementation of the remedial action. The terms of that access are key to the implementibility and, thus, feasibility of each remedy. In addition, other cleanup sites have established that the DNR authorization may function as the primary environmental covenant.

A large portion of the South State Street Manufactured Gas Plant cleanup site is located on State Owned Aquatic Land (SOAL) managed by DNR. Aquatic land laws that prescribe the DNR mission are not exempt under MTCA. Remedial activities that involve SOAL will require one or more authorizations from DNR, which could cover construction activities at a minimum and, if needed, long-term management actions such as caps. The terms of the authorization will be specific to each type of remedy. For example, a sediment cap (natural or engineered) may require institutional controls that restrict the public from benefitting from all or a subset of possible uses of their land. As land manager, DNR will determine if and under what conditions it is appropriate to use SOAL to store and remediate contamination.

Section 3.4.4 of the Feasibility Study on the natural recovery process notes that it is both "not intended to isolate" and "increases isolation." Please clarify whether the performance requirements of each type of remedial action (caps, sand layers, naturally forming caps...etc.) requires institutional use restrictions to prevent disturbance of sediment. Does the engineered/natural/enhanced layer or cap need to isolate deeper layers of contamination? Clarify what types of human uses are and are not compatible with each type of remedy. Indicate the duration of the proposed restrictions (e.g. in perpetuity, until recovery occurs...etc.). Please be clear as to what sediment depth restrictions apply (e.g. all depths, benthic layer, depth of contamination...etc.). These details will factor into the types and terms of the authorization granted by DNR and the cost and feasibility of access.

Response:

Thank you for your comments. DNR is an important partner in the comprehensive cleanup work underway in Bellingham Bay.

Ecology is working with DNR on other sites to develop institutional control mechanisms for state-owned aquatic land that will ensure the long term integrity of cleanup actions. We look forward to continuing these efforts, which will inform the SSSMGP site cleanup.

In addition, the City, Puget Sound Energy and Ecology will consult with DNR during development of the Cleanup Action Plan, remedial design and permitting and Consent Decree to evaluate remedy-specific authorizations required by DNR.

We will delete the confusing second sentence in paragraph two of Section 3.4.4.

We will add language to the remedy descriptions to clarify the degree to which each type of remedy will rely on institutional controls (e.g. use restrictions) to maintain the integrity of the remedy and meet the cleanup goals of the each remedy type. DNR will be consulted on the feasibility of the required institutional controls.

Comment from: RE Sources for Sustainable Communities (Eleanor Hines)

RE: South State Street Manufactured Gas Plant Cleanup Site ID #2865 Remedial Investigation/Feasibility Study

Dear Mr. Guenther,

Thank you for taking the time to consider our comment on the South State Street Manufactured Gas Plant Cleanup Remedial Investigation/Feasibility Study. RE Sources for Sustainable Communities is a local organization in northwest Washington, founded in 1982. RE Sources works to build sustainable communities and protect the health of northwest Washington's people and ecosystems through the application of science, education, advocacy, and action. Our North Sound Baykeeper program is dedicated to protecting and enhancing the marine and nearshore habitats of northern Puget Sound and the Georgia Strait. Our chief focus is on preventing pollution from entering the North Sound and Strait, while helping our local citizenry better understand the complex connections between prosperity, society, environmental health, and individual wellbeing. Our North Sound Baykeeper is the 43rd member of the Waterkeeper Alliance, with over 300 organizations in 34 countries around the world that promote fishable, swimmable, drinkable water. RE Sources has over

20,000 members in Whatcom, Skagit, and San Juan counties, and we submit these comments on their behalf.

Upland Unit:

The remedial investigation showed that the steep slope connecting the upper and lower parts of the Site have high contamination levels. The proposed cleanup plan is to leave this area as is, covered predominantly in invasive blackberries, which then assumes that this area does not pose a health risk.

Global climate change models predict that the Pacific Northwest will be experiencing heavier rain events on a more regular basis. We are concerned that this may lead to landslides and/or migration of contaminants to the lower site of the Upland Unit and/or marine sediment and are requesting that you find a better, more permanent solution for this steep slope area. We recommend that you explore bioremediation techniques or other enhanced natural recovery processes in addition to in-situ soil solidification treatment. We also ask that you consider building armor at the base of the slope that will contain the contaminated soil to help hold back any potentially migrating soil.

The Upland Unit also calls for an average of a 2 foot cap, which may help the portion of Boulevard Park covered by this cleanup to better adapt to sea level rise, but what about the rest of the park that won't be covered with a 2 foot cap? Additionally, what about the existing plants, such as trees, that are presently at the park? Will they remain, and if so, how will contaminant exposure risk be mitigated?

Marine Unit:

The pocket beach in Marine Unit, on the border with the Upland Unit, is extremely popular for kids, adults, and dogs to recreate and we are concerned that the proposed 2 foot cap is not protective enough. A 2 foot cap could easily be dug through by an overzealous child or dog. Also wIth the uncertainty of sea level rise and potential changes to climate and currents we cannot assume that this beach will always be net depositional. Therefore, we feel this specific area may warrant the more costly procedure of removing and transporting some of the contaminated sediment offsite. This would not only remove some contamination but it would also allow for a larger cap to be put in place.

Offshore recreational mooring is also a concern in the marine unit here as it is similarly for Cornwall Avenue and RG Haley. It is common for sailboats to anchor in this area, particularly during the summer months. We are concerned that offshore anchoring could compromise capping. Proper measures to ensure this does not become an issue should be put in place, possibly including education and outreach to recreational boaters and/or signage on where it is or is not okay to anchor.

Critical Habitat:

Regardless if sediment removal occurs, we would also like assurances that the sediment that is brought in for the cap meets the diverse needs of the beach. The Marine Unit area is a documented forage fish spawning ground[1] and supports a large eelgrass bed. Forage fish and eelgrass both play a critical role in the survival of our dwindling salmon species and orca whales. The imported sediment needs to meet very specific requirements so that both native flora and fauna can thrive. In addition, the sediment needs to be safe for children, adults, and pets to play in.

General Comments:

We found that both the Remedial Investigation (RI) and Feasibility study (FS) were well written and easy to follow. There were 2 places in the RI, however, where a correction or clarification are needed:

1) *5.1.1: Shallow Soil. In the second paragraph there is a type, 'dep' should be "deep".*
2) *5.1.1: Shallow Soil. In the third paragraph it states, "There were no exceedances of screening levels for VOCs, TPH, or cyanide…" However, Figure 19 Soil 0-2 ft bgs shows that VOC's were not analyzed. Table 7 Analytical Results - Soil also reports that VOC's were not analyzed. There is a distinct difference between a contaminant not being analyzed versus it not exceeding screening levels.*

We found staff expertise provided on the October 30th tour and public meeting to be very informative and helpful and would only add that having these public opportunities occur at the beginning of the comment period, rather than at the end, would allow people more time to reflect and research before submitting comments. While we appreciate the public meeting slideshow being posted online and efforts to try to livestream, we still encourage Ecology to livestream and record the public meetings in the future for those who cannot attend but are still interested in seeing the public presentation.

While we understand that all 5 remedial alternatives meet the minimum standards established by the Model Toxics Control Act and that Alternative 2 has been selected as the preferred alternative based on a Disproportionate Cost Analysis, we strongly encourage Alternative 2 be considered as a starting point and not an ending point for cleanup actions. We feel that more protective measures could be put in place particularly on the steep slope and the pocket beach. We appreciate your consideration of our recommendations when constructing the next phase of this cleanup process.

Sincerely,

Kirsten McDade, Pollution Prevention Specialist Eleanor Hines, North Sound Baykeeper, Lead Scientist RE Sources for Sustainable Communities

[1] *https://wdfw.wa.gov/conservation/research/projects/marine_beach_spawning/*

Response:

Upland Unit:

Accessible areas of the steep slope, where elevated concentrations of contaminants are present, will be covered with a soil cap and replanted with vegetation.

Any issues with slope stability will be identified and addressed as necessary during design. Institutional controls will be undertaken to provide monitoring and maintenance of the steep slope. In addition, the railroad tracks provide an existing barrier to overland flow of soil to Bellingham Bay.

With regard to the 2-foot vegetated soil cap, the boundary of the cap will be graded in a manner that will not interfere with park use. A variety of options will be evaluated to address existing vegetation during engineering design of the cleanup action. Potential options will include replanting, grading to maintain established vegetation and using barriers around the perimeter of trees.

Marine Unit:

Although the terminology for the proposed cleanup action for the pocket beach is referred to as a minimum two foot cap, the cap would include at least 2 feet of cap material, armoring to protect the cap, and a suitable surface material - WDFW may require a specific type of material as part of project permitting. The exact composition, thickness and footprint of the various types of caps will be determined during design and permitting activities.

The entire cleanup action, including the area of the pocket beach, will be monitored and maintained in perpetuity. Should future changes in the natural environment affect the integrity of the cleanup action, the cleanup action will be modified in accordance with environmental covenants or other institutional control mechanisms to be developed following completion of construction.

We understand that the off shore areas of the site are used for recreational mooring and will take this into consideration during engineering design and development of institutional controls.

Critical Habitat:

Consultation with WDFW during design and permitting will guide cap design in terms of habitat. Cleanup, habitat and land use will be integrated to the greatest degree possible.

General Comments:

The typo in Section 5.1.1 will be corrected – “dep” will be changed to “deep.”

All soil samples were field screened for the presence of volatile organic compounds (VOCs) using a portable photoionization detector (PID). The results of this screening were used to determine if VOCs were present at a concentration requiring follow-up laboratory analysis. A

field screening threshold of 20 parts per million (ppm) was used to determine if the soil sample would be analyzed for VOCs at the laboratory. Field screening with PID was conducted at every sample location in the upper and lower park, and only detected the presence of VOCs in four soil samples collected from the upper two feet of soil. The VOC concentrations were less than 5 ppm at each of those four locations, and those responses were assumed to be interference from moisture. Since these field screening results were below the 20 ppm filed screening threshold, the samples were not analyzed for VOCs at the laboratory and it was concluded that VOCs are not present in soil at concentrations that present a threat to human health or the environment.

We typically try to hold public meetings near the beginning of the public comment period, but sometimes presenter schedules and room availability don't enable this to happen.

We understand your preference for adding to Alternative 2, however it meets the regulatory requirements of the MTCA WAC 173-340 and SMS WAC 173-204.

Appendices

Appendix A. Public Comments in Original Format

Monte Hokanson

Surface water flooding is the most common cause of flooding and one of the greatest short-term climate change risks facing the NorthWest.

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RESOURCES FOR SUSTAINABLE COMMUNITIES
PROTECT. ACTIVATE. INNOVATE. THRIVE.

2309 Meridian Street
Bellingham, WA 98225
(360) 733-8307 • re-sources.org

To: John Guenther
Project Manager
Department of Ecology

913 Squalicum Way, Unit 101

Bellingham, WA 98225

Submitted via online comment form

November 6, 2018

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Sincerely,

Kirsten McDade, Pollution
Prevention Specialist Eleanor Hines,
North Sound Baykeeper, Lead
Scientist RE Sources for Sustainable
Communities