

August 29, 2019

TO: Recipients of the Portage Bay Gate Retrofit and Pump Station 20 SEPA DNS/Checklist

FROM: Betty Meyer, SEPA Responsible Official

SUBJECT: Addendum to the Portage Bay Gate Retrofit and Pump Station 20 SEPA Environmental Checklist and Determination of Non-Significance

PURPOSE OF THIS ADDENDUM

In April of 2019, Seattle Public Utilities (SPU) prepared a State Environmental Policy Act (SEPA) Environmental Checklist that analyzed environmental impacts of the proposed Portage Bay Gate Retrofit and Pump Station 20 Improvements Project. As lead agency for SEPA, SPU issued a Determination of Non-Significance (DNS) for the project on May 2, 2019.

As described in the SEPA Environmental Checklist, the proposed project would better manage combined sewer flows during wet weather events to help reduce occurrences of combined sewer overflows into Portage Bay. The project would achieve improved flow control by replacing an existing flow control component (a HydroBrake) with an adjustable slide gate; increasing peak pumping capacity with larger pump impellers and motors; providing improved access, wiring, and instrumentation in the dry and wet wells; and adding new supervisory control and data acquisition (SCADA) infrastructure for automated gate operation, flow control, and storage monitoring.

During construction, a temporary sewer bypass will need to be installed, re-directing basin flows to Pump Station 67 near the Lake Washington shoreline. In order to best facilitate this bypass, temporary pumping equipment needs to be installed on-site. This pumping equipment will need to be transported to the site via a barge which constitutes a different delivery method than described in the SEPA Checklist. Thus, SPU has prepared this SEPA Addendum to document these changes in the project and to assess how these changes affect analyses in the SEPA Environmental Checklist.

As lead agency, SPU has reviewed the findings and concluded the project changes do not substantially alter the analyses of impacts contained in the SEPA Environmental Checklist and will not result in any significant environmental impacts. This Addendum has been prepared in accordance with the authority provided in Seattle Municipal Code (SMC) 25.05.600 and in accordance with the procedures described in SMC 25.05.625.

UPDATED PROJECT INFORMATION

The combination of a relatively long distance from the shoreline area to the paved roadway, along with existing overhead utility lines, will likely prevent delivery of the temporary bypass pump system from the street. Instead, the contractor will likely need to transport the pumping equipment by water, using temporary barge support for the project. SPU anticipates the contractor will propose the use of a small barge to transport three skid mounted 5,000-pound pieces of temporary pumping equipment to the site for use during construction. Barge support work would consist of short periods (1 – 3 days) of delivery

and pickup of this pumping equipment. While present, the barge will be positioned in the right-of-way for East Shelby Street (identified as Shoreline Street End 72 by the City of Seattle). The maximum timeframe for periodic barge presence is no more than seven months.

All other work would be as evaluated in the Portage Bay Gate Retrofit and Pump Station 20 Improvements Project SEPA Checklist. No additional technical reports have been prepared that directly relate to this proposal.

CHANGES TO ENVIRONMENTAL ELEMENTS

Environmental Checklist Section B2: Air

The SEPA Environmental Checklist estimated the project’s total greenhouse gas (GHG) emissions to be 55.1 metric tons of carbon dioxide emission (MTCO_{2e}). The GHG emissions calculations were included in the Checklist’s Attachment D and are summarized here in Table 1.

Table 1. 2019 Environmental Checklist Summary of GHG Emissions

Activity/Emission Type	GHG Emissions (pounds of CO _{2e}) ¹	GHG Emissions (metric tons of CO _{2e}) ¹
Buildings	not applicable	not applicable
Paving	93,695.5	42.5
Construction Activities (Diesel)	15,134	6.86
Construction Activities (Gasoline)	12,636	5.73
Long-term Maintenance (Diesel)	0	0
Long-term Maintenance (Gasoline)	0	0
Total GHG Emissions	121,466	55.1

¹Note: 1 metric ton = 2,204.6 pounds of CO_{2e}. 1,000 pounds = 0.45 metric tons of CO_{2e}

SPU estimates transporting the three temporary pumps to the project site via barge will require approximately 40 gallons of diesel fuel, resulting in generation of an additional 0.47 MTCO_{2e} of GHG emissions. However, eliminating the four round trips for a flat-bed truck to transport the pumps will result in a net reduction of 48 gallons of diesel fuel, or 0.58 MTCO_{2e} of GHG emissions. As a result, the project’s revised total GHG emissions are estimated to be 55.0 MTCO_{2e}, as summarized in Table 2.

Table 2. Revised Summary of GHG Emissions

Activity/Emission Type	GHG Emissions (pounds of CO _{2e})	GHS Emissions (metric tons of CO _{2e})
Buildings	not applicable	not applicable
Paving	93,695.5	42.5
Construction Activities (Diesel)	14,921	6.77
Construction Activities (Gasoline)	12,636	5.73
Long-term Maintenance (Diesel)	0	0
Long-term Maintenance (Gasoline)	0	0
Total GHG Emissions	121,253	55.0

Environmental Checklist Section B3: Water

The SEPA Environmental Checklist referenced a spill prevention, control, and countermeasures plan to address when pollutants entered surface waters. The current proposal using the barge to transport temporary pumps may increase the chances of diesel fuel leakage while the barge is in operation. However, the spill prevention, control, and countermeasures plan would also describe what to do in the event a barge fuel leakage was to take place.

Environmental Checklist Section B5: Animals

The SEPA Environmental Checklist mentions several salmonid species present in proximity to the project area, both within Portage Bay and the Lake Washington Ship Canal. These species may be impacted by transporting pumping equipment to and from the site via barge. Impacts may include barge motor noise, shading, and/or lighting. These impacts will be temporary in nature, as the barge will be present 24-72 hours at a time, making two round trips to the site. The barge size will also be limited to maximum dimensions of 20 feet by 20 feet, limiting shading to the minimum necessary to transport pumping equipment. Overall, potential impacts to fish species associated with barge use are expected to be insignificant.

Environmental Checklist Section B12: Recreation

The SEPA Environmental Checklist referenced project impacts to walkers, runners, and bicyclists on affected streets and sidewalks. Utilizing the barge during construction will create an additional temporary impact for kayakers and walkers at the shoreline street end area. Barge deliveries will be conducted in accordance with applicable permit requirements, namely the SDOT Construction Street Use Permit, which will incorporate a right-of-way impact plan to show temporary pump staging areas, barge access, and anchor points on land. However, aquatic recreation will be impacted minimally, with the barge largely absent from the shoreline, save for delivery and pick-up of the pumps on separate days, over a period not to exceed seven months.

Environmental Checklist Section B14: Transportation

The SEPA Environmental Checklist estimated that project construction would generate 320 vehicle round trips due to workers and materials being transported to and from the site over 130 working days. Proposed transportation of temporary pumping equipment by barge instead of flat-bed truck will result in an estimated reduction of four vehicle round trips. Transporting the pumping equipment via water versus land will also alleviate the logistical challenge of transporting this equipment over the existing retaining wall and stairway that separates the roadway barrier from the pump station infrastructure adjacent to the shoreline.

The barge will navigate in the southeast direction into Portage Bay from Lake Union, followed by moving west to enter the E Shelby Street right-of-way street end for delivery of the pumping equipment. The barge will exit the site by migrating east, then turning toward the northwest to reach Lake Union. As a result, boat traffic will increase through Lake Union and the Ship Canal Bridge, and may also increase through the Ballard Locks, as well. However, these impacts are not considered significant, as the amount of barge trips will be limited to two round trips total for the life of the project.

