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City of Seattle
Seattle Public Utilities

**Pump Station 39 Emergency Standby Generator Installation Project
SEPA Determination of Non-significance (DNS)**

Description of Proposal

The proposed action is the installation of a permanent emergency standby electrical generator at Pump Station 39 so that this station functions normally during power outages by providing continuous wastewater conservancy and improved reliability while meeting the current SPU design standard for backup power generation. Construction includes the following components:

- Excavate and grade site
- Construct three reinforced concrete retaining walls
- Construct reinforced concrete pad (19 ft long by 12 ft wide)
- Install permanent diesel-fueled emergency standby generator (approximately 10 ft long by 4 ft wide by 8 ft high; 145 horsepower, 4 cycle, in-line, 4 cylinder)
- Install chain link fence.
- Install automatic transfer switches
- Install (bury) electrical conduits and install cabinets
- Landscape and screen generator housing

Once installed, the generator would start automatically upon a power outage (estimated to be 10 hours per year). The generator will also run automatically one day per week for 30 minutes (during business hours) for purposes of maintaining the generator in standby condition. The generator would require periodic maintenance and refueling during its 15 year lifespan.

Location of Proposal

The project site is located in the West Seattle neighborhood of the City of Seattle, on a 7,200 sq ft parcel (PIN 7936000381) owned by Seattle Public Utilities at 5080 Beach Drive Southwest, Seattle, WA (zip code 98136). The existing PS 39 is located underground within the Beach Drive Southwest street right-of-way. The project location is in the northeast quarter of Section 22, Township 24N, Range 3E and within the Green/Duwamish and Central Puget Sound Water Resource Inventory Area (WRIA 9).

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Proponent

Seattle Public Utilities
Seattle Municipal Tower Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

Lead Agency

Seattle Public Utilities, the lead agency for this proposal, has determined that it does 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). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This Determination of Non-significance (DNS) is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen (14) days from the date below.

A copy of the environmental checklist is available at:

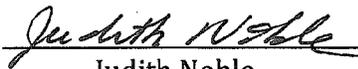
- Seattle Public Utilities, Director's Office Main Reception Area, Seattle Municipal Tower, Suite 4900, 700 Fifth Avenue, Seattle, Washington
- Seattle Central Library, General Reference Section

Public and Agency Comments

Comments must be submitted by September 26, 2011 and must be sent to:

Judith Noble, SEPA Responsible Official
Seattle Public Utilities
Seattle Municipal Tower, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018
206-684-8078

Signature:


Judith Noble

Issue Date: September 12, 2011

Appeals

Appeals of this DNS must be filed by 5:00 p.m. on October 3, 2011. The appeal must be in writing, accompanied by a \$50.00 filing fee in a check made payable to the City of Seattle, and sent to:

City of Seattle Hearing Examiner
700 5th Avenue Suite 4000
P.O. Box 94729
Seattle, WA 98124-4729

You should be prepared to make specific factual objections. Contact the Hearing Examiner at 206-684-0521 to ask about or to make arrangements to read the procedures for SEPA appeals.

**SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST**

A. BACKGROUND

A1. Name of proposed project:

Wastewater Pump Station No. 39 Emergency Standby Generator Installation Project

A2. Name of applicant:

Seattle Public Utilities (SPU)

A3. Address and phone number of applicant and contact person:

Luis Ramirez, Project Manager
Seattle Public Utilities
Utility Systems Management Branch
Seattle Municipal Tower, Suite 4900
PO Box 34018
Seattle, WA 98104-4018
206-684-3660

A4. Date checklist prepared:

August 29, 2011

A5. Agency requesting checklist:

Seattle Public Utilities (SPU)

A6. Proposed timing or schedule (including phasing, if applicable):

This project is scheduled to be constructed between April 1 and December 31, 2011.
Construction is expected to last approximately 26 days.

A7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

This project is being designed and contracted (for construction) concurrently with eight other wastewater pump station generation projects (Pump Stations 7, 25, 43, 49, 59, 62, 63, and 71). While designed and contracted in the aggregate to take advantages of the cost efficiencies of doing so, and all are currently scheduled to be constructed sometime during 2011, each of these nine wastewater pump station generation installation projects is independent of all the other projects. Each is located in different parts of the City of Seattle and each has unique environmental impacts. Thus, SPU intends to conduct separate environmental review under SEPA, for each of the other eight pump station projects, concurrently with the environmental review for this proposed project [Pump Station (PS) 39]. There are currently no plans for future

additions or expansions of this PS (PS 39) or any of the others beyond that related to the proposed project.

- A8. List any environmental information you know about that has been prepared, or would be prepared, directly related to this proposal.**

No additional environmental information has been prepared, or would be prepared, that is directly related to this project.

- A9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

There are no known applications pending for governmental approvals or other proposals directly affecting the properties covered by this proposal.

- A10. List any government approvals or permits that would be needed for your proposal, if known.**

- City of Seattle, Department of Planning and Development, Building Permits
- City of Seattle, Department of Planning and Development, Environmentally Critical Areas compliance
- City of Seattle, Department of Planning and Development, Shoreline Master Program compliance (project has been determined to be exempt from shoreline substantial development permit requirements)
- City of Seattle, Department of Transportation, Street Use/Utility Permits.

- A11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

In March 2008, the U.S. Environmental Protection Agency required that SPU evaluate the electrical generation backup capacity in its sewage collection system. In SPU's resulting *Pump Station Backup Generator Evaluation Report (2009)*, SPU evaluated all of its wastewater pump stations to determine if specific pump stations should have a permanent on-site generator or an emergency plug connection for a temporary mobile generator. The evaluation determined that nine of the City's 68 existing wastewater pump stations require the addition of a permanent electrical generator to reduce the risk of overflows during power outages.

The specific project being reviewed by this environmental checklist is the installation of a permanent electrical generator at PS 39. As described above, PS 39 is among nine pump stations that were identified as having this need. The proposed project would install a permanent, above-ground electrical generator at PS 39 so that this station functions normally during power outages by providing continuous wastewater conservancy and improved reliability while meeting the current SPU design standard for backup generation. SPU's design standard for backup generation at wastewater pump stations is as follows: "Backup power at new or redesigned wastewater pump

stations, or when generators are installed, shall provide a minimum of four hours of storage time where possible. No station shall have less than one hour of storage. New, redesigned, or existing wastewater pump stations shall have an emergency plug on-site unless a generator installation is justified. All new stations with design flows over 1 million gallons per day (MGD) would have a permanent on-site generator.”

For the PS 39 project, construction includes the following components:

- Excavate and grade site
- Construct three reinforced concrete retaining walls
- Construct reinforced concrete pad (19 ft long by 12 ft wide)
- Install permanent diesel-fueled emergency standby generator (approximately 10 ft long by 4 ft wide by 8 ft high; 145 horsepower, 4 cycle, in-line, 4 cylinder)
- Install chain link fence.
- Install automatic transfer switches
- Install (bury) electrical conduits and install cabinets
- Landscape and screen generator housing

A vicinity map is included as Attachment A. A project plan is included in Attachment B. Photos of the project site are included as Attachment C.

Once installed, the generator would start automatically upon a power outage (estimated to be 10 hours per year). The generator will also run automatically one day per week for 30 minutes for purposes of maintaining the generator in standby condition. The generator would require periodic maintenance and refueling during its 15 year lifespan.

- A12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

The project site is located in the West Seattle neighborhood of the City of Seattle, on a 7,200 sq ft parcel (PIN 7936000381) owned by Seattle Public Utilities at 5080 Beach Drive Southwest, Seattle, WA (zip code 98136). The existing PS 39 is located underground within the Beach Drive Southwest street right-of-way. The project location is in the northeast quarter of Section 22, Township 24N, Range 3E and within the Green/Duwamish and Central Puget Sound Water Resource Inventory Area (WRIA 9). A vicinity map is included as Attachment A.

B. ENVIRONMENTAL ELEMENTS

B1. Earth

a. General description of the site: [Check the applicable boxes]

- Flat Rolling Hilly Steep Slopes Mountainous
 Other: (identify)

b. What is the steepest slope on the site (approximate percent slope)?

The project site is located at the base of a slope (less than 40 percent slope).

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Soils on the project site are sandy silt. The project location is within a liquefaction zone, an Environmentally Critical Area, as mapped by the City of Seattle Department of Planning and Development.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:

There are no surface features (such as head scarps, hummocky terrain, seepage along steep slope surfaces, bulging at the bases of slopes and/or evidence of permeable strata over relatively impermeable strata) that indicate past or possible future slide activity.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of fill.

There would be grading and excavation of existing soils to construct the concrete pad on which the electrical generator would be installed. The quantity of earth to be moved is less than 20 cubic yards (cy). Fill material would be limited to the concrete pad subgrade aggregate, which would be provided by a state-licensed purveyor of aggregate and soil materials. The proposed quantity of this material is approximately 20 cy. Approximately 10 cy of topsoil, compost, and/or mulch would be imported to support the restoration and landscaping of the project site. This material would be provided by a State-licensed purveyor of compost products. Shallow trenching would be conducted to install the required electrical and communication conduit and wiring. Trenches would be excavated in previously disturbed areas.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe:

No significant erosion is anticipated during or as a result of the proposed work. A temporary erosion and sedimentation control plan would be prepared and implemented. The project site would be landscaped to prevent future erosion.

- g. About what percent of the site would be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

The proposed project would construct an impervious concrete pad and three associated retaining walls that, collectively, cover an area 19 ft long by 12 ft wide (about 3 percent of the 7,200 sq ft parcel).

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Best Management Practices (BMPs) would be used to protect the project area from water runoff, construction disturbance, and erosion as needed during construction.

The following BMP's would be implemented to reduce or control erosion:

- Preserve existing vegetation when possible
- Stabilize construction site
- Minimize soil disturbance
- Deploy silt fences, blankets, mulches, and other materials as needed for temporary erosion control
- Limit access to the project site during non-work times, as needed.

B2. Air

- a. What types of emissions to the air would result from the proposal [e.g., dust, automobile, odors, industrial wood smoke, greenhouse gases (GHG)] during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

Mobile and stationary equipment would be used to construct the proposed project and would generate emissions due to the combustion of gasoline and diesel fuels and grading/excavation activity. Emissions during construction would include normal amounts of dust from grading activities and exhaust (carbon monoxide, sulfur, particulates) from construction equipment and are expected to be minimal, localized, and temporary.

The completed project would generate electricity by combusting diesel fuel and would produce air emissions associated with that emergency and maintenance operation combustion activity (such as oxides of nitrogen, carbon monoxide, particulate matter and smoke, uncombusted hydrocarbons, hydrogen sulfide, carbon dioxide, and water vapor). The completed project would also generate vehicle trips to support routine, on-going maintenance and refueling. The generator would be maintained by running the generator for 30 minutes every 7 days at 100 percent load during weekday business hours only (between 9:00 AM and 5:00 PM). The generator requires such periodic "exercising" to avoid fuel degradation, prevent carbon accumulation, lubricate generator parts, and eliminate moisture within the generator.

For purposes of estimating emissions from maintenance and operation of the generator, the generator is estimated to use 5.5 gallons of diesel fuel every hour, and that the generator would be exercised for 26 hours annually, operate under emergency (power outage) conditions for 10 hours annually, and that the lifespan of this generator is 15 years. Every year there would be an estimated total of five vehicle trips for fueling and repair (four fueling stops and one repair). Fueling would be conducted by a contractor on a route that includes many other stops in the area for other clients

This project would also generate greenhouse gas (GHG) emissions in three ways: concrete usage (embodied), construction activity, and operation and maintenance activity. The total GHG emissions for the project are estimated to be 69.4 metric tons of carbon dioxide emission (MTCO₂e). The GHG emission calculations are shown in Attachment D. One metric ton is equal to 2,205 pounds.

The project would require construction of three retaining walls (288 sq ft, estimated) and a concrete slab (228 sq ft) under the generator. The total square footage (516 sq ft) is estimated to embody 25.8 MTCO₂e.

This project would generate GHG emissions during the estimated 26 workday construction period through the operation of diesel- and gasoline-powered equipment and to transport materials, equipment, and workers to and from the site. Because project construction methods were not completely known at the time this checklist was prepared, the estimates provided here are based on daily vehicle operation times for the entire estimated project duration and assuming work occurs over 26 workdays; actual times may be less. Construction activities would generate an estimated 6.9 MTCO₂e.

The project would also generate GHG emissions during 15 years of operation and maintenance. Annual maintenance includes maintenance operation of the generator and the inspection and refueling of the generator. Over 15 years, operation and maintenance activities would generate an estimated 36.7 MTCO₂e.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

There are no known off-site sources of emissions or odor that would affect this proposal.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

The Puget Sound Clean Air Agency (PSCAA) is responsible for enforcing federal, state, and local air pollution standards and governing air pollutant emissions from new sources in King, Snohomish, Pierce, and Kitsap Counties. As required by the PSCAA regulations, emissions would be controlled by using reasonably available control technologies (PSCAA 2008) and City of Seattle standard operating

procedures (SOPs) and best management practices (BMPs) for construction.

During construction, impacts to air quality would be reduced and controlled through implementation of standard federal, state, and local emission control criteria and City of Seattle construction practices. These would include requiring contractors to use best available control technologies, proper vehicle maintenance, and minimizing vehicle and equipment idling. The installed generator would be equipped with a turbocharger and charge air cooler to reduce or control air emissions during operation and maintenance of the generator.

B3. Water

a. Surface:

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river or water body it flows into.**

The project location is within 150 ft of Puget Sound.

- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe, and attach available plans.**

The project location is within 150 ft of Puget Sound. No work would occur below the ordinary high water mark of Puget Sound.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.**

No fill or dredged material would be placed in or removed from surface water or wetlands as part of this project.

- (4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

This project would not require surface water withdrawals or diversions.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

No portion of the project lies within the 100-year floodplain.

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

The project would not produce or discharge waste materials to surface waters.

b. Ground:

- (1) Will ground water be withdrawn, or would water be discharged to ground water? If so, give general description, purpose, and approximate quantities if known.

No groundwater would be withdrawn, discharged, or surcharged as a result of this project.

- (2) Describe waste material that would be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals...; agricultural, etc.). Describe the general size of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material would be discharged to ground water for this project.

c. Water Runoff (including storm water):

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where would this water flow? Would this water flow into other waters? If so, describe.

Due to the small area of impervious surface being created, the proposed project would not create a need to manage additional stormwater runoff beyond previously existing conditions. Stormwater runoff may need to be managed during construction to prevent sediment from entering Puget Sound. Temporary erosion control measures, such as silt fences or straw wattles, would be deployed as needed and as per a temporary erosion and sedimentation control plan to minimize the erosion potential of stormwater runoff during construction. Once construction is complete, temporary erosion control measures would be removed and stormwater flows would follow their pre-construction pathways.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.

There would be no waste materials from this project that could enter ground or surface waters.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

No surface, ground, or runoff water impacts are anticipated. BMPs would be used to control erosion and sediment transport from the project site during construction.

B4. Plants

a. Types of vegetation found on the site: [check the applicable boxes]

- | | | | | |
|--|---|--|--------------------------------|---------------------------------|
| <input checked="" type="checkbox"/> Deciduous trees: | <input checked="" type="checkbox"/> Alder | <input checked="" type="checkbox"/> Big-leaf Maple | <input type="checkbox"/> Aspen | <input type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Evergreen trees: | <input checked="" type="checkbox"/> Fir | <input checked="" type="checkbox"/> Cedar | <input type="checkbox"/> Pine | <input type="checkbox"/> Other: |
| <input checked="" type="checkbox"/> Shrubs | | | | |

- Grass
- Pasture
- Crop or grain
- Wet soil plants: Cattail Buttercup Bulrush Skunk cabbage
- Other: (identify)
- Water plants: water lily eelgrass milfoil Other: (identify)
- Other types of vegetation: (identify)

b. What kind and amount of vegetation would be removed or altered?

Vegetation in the project area is dominated by cultivated non-native plants such as yucca (*Yucca* sp.), tam juniper (*Juniperus sabina* 'Tamariscifolia'), cotoneaster (*Cotoneaster* sp.), English ivy (*Hedera helix*), and azalea and rhododendron (*Rhododendron* hybrids). Several of these commonly seen species of ornamental shrubs may be removed. Native trees such as red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), western redcedar (*Thuja plicata*), and Douglas-fir (*Pseudotsuga menziesii*) occur elsewhere on the project parcel, but would not be impacted by this project.

c. List threatened or endangered species known to be on or near the site.

No federally-listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within the municipal limits of the City of Seattle. This was confirmed by data retrieved from the Washington Natural Heritage Program database (August 2009). A rare plant botanist surveyed the project location on May 13, 2010 and detected no threatened or endangered plants.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The project would limit plant removal and pruning to that required for project construction and would install landscaping consisting of native and non-native ornamental shrubs and groundcovers to screen the new generator and replace removed plants.

B5. Animals

a. Birds and animals that have been observed on or near the site or are known to be on or near the site: [check the applicable boxes]

- | | | | | |
|-----------------|---|--|---|---|
| Birds: | <input checked="" type="checkbox"/> Hawk | <input checked="" type="checkbox"/> Heron | <input checked="" type="checkbox"/> Eagle | <input checked="" type="checkbox"/> Songbirds |
| | <input type="checkbox"/> Other (identify): Ducks | | | |
| Mammals: | <input type="checkbox"/> Deer | <input type="checkbox"/> Bear | <input type="checkbox"/> Elk | <input checked="" type="checkbox"/> Beaver |
| | <input type="checkbox"/> Other:(identify) | | | |
| Fish: | <input type="checkbox"/> Bass | <input checked="" type="checkbox"/> Salmon | <input checked="" type="checkbox"/> Trout | <input checked="" type="checkbox"/> Herring |
| | <input checked="" type="checkbox"/> Shellfish <input checked="" type="checkbox"/> Other (identify): Many other species of marine life are located in Puget Sound. | | | |

b. List any threatened or endangered species known to be on or near the site:

The project site is within 150 ft of Puget Sound. ESA-listed species for Puget Sound (PS) are Chinook salmon (*Oncorhynchus tshawytscha*, Threatened PS), steelhead (*O. mykiss*, Threatened PS), bull trout (*Salvelinus confluentus*, Threatened PS), bocaccio (*Sebastes paucispinis*, Endangered PS), canary rockfish (*Sebastes pinniger*, Threatened, PS), yelloweye rockfish (*Sebastes ruberrimus*), and Orca whale (*Orcinus orca*, Endangered PS). Because the project is not proposing any “in water” work, the project is expected to have no effect on any fish or marine mammal species.

The Washington Department of Fish and Wildlife Habitat and Species map (March 2008) for the project area indicates Puget Sound includes “Priority Anadromous Fish Presence” and “Priority Resident Fish Presence.” These fish are described above. The site is known to be (but not mapped as being) within the habitat of bald eagle (*Haliaeetus leucocephalus*), a priority species in Washington. There are no known nests within the vicinity of the project.

c. Is the site part of a migration route? If so, explain.

Seattle is within the migratory route of many bird species. The project site is adjacent to Puget Sound, an important migration route for many animal species.

d. Proposed measures to preserve or enhance wildlife, if any:

This project would use SOPs and BMPs and standard operating procedures, and conservation measures to generally protect fish and wildlife. For example, all equipment to be used for construction activity would be cleaned and inspected before it arrives at the project site to avoid and minimize the potential for fuel or lubricant leaks. As possible, construction equipment would use vegetable-based oils and lubricants. The completed project would be landscaped to screen views to the installed generator and to improve the wildlife habitat and aesthetics of the project location.

B6 Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) would be used to meet the completed project's energy needs? Describe whether it would be used for heating, manufacturing, etc.

The completed project would include emergency and maintenance operation of the generator and vehicle trips for re-fueling and repair of the generator. Fueling and repair trucks would combust diesel fuel. The generator would combust diesel fuel to generate electricity. The generator to be installed uses approximately 5.5 gallons of fuel for every hour of operation at full load. Fueling and repair of the generators is estimated to require 5 vehicle trips per year. The completed project is expected to use 3,045 gallons of diesel fuel as part of the generator's operation and

maintenance over its 15 year lifespan. See Attachment D and Section B.2.a for more details.

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The proposed project does not involve building structures or planting vegetation that would block access to the sun for adjacent properties.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

There are no conservation features or proposed measures to reduce or control energy impacts.

B7. Environmental Health

- 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? If so, describe:**

Materials likely to be present during construction, operation, and maintenance would include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, and other chemical products. A spill of one of these chemicals could potentially occur during construction, operation, and/or maintenance as a result of either equipment failure or worker error.

- (1) **Describe special emergency services that might be required.**

Possible fire or medic services could be required during project construction, as well as possibly during operation and maintenance of the completed project.

- (2) **Proposed measures to reduce or control environmental health hazards, if any:**

SOPs and BMPs would be used to reduce the potential for adverse health hazards. Equipment would be inspected for leaking hoses, mechanical joints, and hydraulic pistons. Temporary control measures for both erosion and hazardous material spills would be installed to minimize access pathways to Puget Sound in the event of a spill or leak. Hazardous material spill response materials would be available onsite for the duration of the construction work.

b. Noise

- (1) **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Noises that exist in the area would not affect the project.

- (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.**

Noise levels in the vicinity of construction would temporarily increase during construction activities. Short-term noise from construction equipment would be limited to the allowable maximum levels of City of Seattle's Noise Control Ordinance (SMC Chapter 25.08).

Within the allowable maximum levels, SMC 25.08 permits noise from construction equipment between the hours of 7 am and 10 pm weekdays, and 9 am and 10 pm weekends and legal holidays. While the standard quitting time for noisy construction under SMC 25.08 is 10 pm, recent changes establish an earlier quitting time (7 pm) for noisy construction work in the lowrise, midrise, highrise, and neighborhood commercial zones. For this project, construction typically would take place between 7 am to 6 pm on weekdays, except for emergencies that may occur before or after those times.

Operation and maintenance of the completed project would generate noise. After construction, the diesel-fueled generator would be maintained by running the generator for 30 minutes every 7 days at 100 percent load during weekday business hours only (between 9:00 AM and 5:00 PM). The generator requires such periodic "exercising" to avoid fuel degradation, prevent carbon accumulation, lubricate generator parts, and eliminate moisture within the generator. Otherwise, the generators would start automatically if there is an actual power outage. For purposes of describing these noise levels, the project estimates that the generator would be exercised for 26 hours annually, operate under power outage conditions for 10 hours annually, and that the lifespan of this generator is 15 years. When operating at 100 percent load, the installed generator with housing creates sound pressure levels of 68-70 decibels [(dB(A)] at 23 feet. For comparison, a passing bus or truck at 10 ft generates sound pressure levels in the vicinity of 90 dB(A).

- (3) **Proposed measures to reduce or control noise impacts, if any:**

Construction equipment would be muffled in accordance with the applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) would be enforced while the project is being constructed and during operations, except for emergencies. The installed generator would be equipped with a sound-attenuating housing and an exhaust muffler.

B8. Land and Shoreline Use

- a. **What is the current use of the site and adjacent properties?**

The project is located on a City-owned parcel adjacent to a major arterial (Beach Drive Southwest), in a single family residential neighborhood.

- b. Has the site been used for agriculture? If so, describe.**

The site has not been used for agricultural purposes.

- c. Describe any structures on the site.**

There is an existing underground wastewater pump station on-site.

- d. Will any structures be demolished? If so, what?**

No structures would be demolished.

- e. What is the current zoning classification of the site?**

The site is currently zoned Residential Single-Family 7200.

- f. What is the current comprehensive plan designation of the site?**

The current comprehensive plan designation of the site is single-family residential.

- g. If applicable, what is the current shoreline master program designation of the site?**

This project parcel is within 150 ft of Puget Sound. The shoreline area is designated "Urban Residential" under the current City of Seattle shoreline master program. The project has been determined to be exempt from Shoreline Master Program permit provisions by the City of Seattle Department of Planning and Development.

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

The project is located at the base of a slope (less than 40 percent slope) and Potential Slide Area, an Environmentally Critical Area as mapped by the City of Seattle's Department of Planning and Development. A Steep Slope and non-shoreline Wildlife Habitat Area (also Environmentally Critical Areas) are mapped on the eastern third of the parcel. In addition, the west edge of the parcel is within a Liquefaction Area, an Environmentally Critical Area, as mapped by the City of Seattle's Department of Planning and Development. Designated Fish and Wildlife Habitat Conservation Areas receive protections under Seattle's Environmentally Critical Areas Ordinance (Seattle Municipal Code 25.09). Fish and Wildlife Habitat Conservation Areas include Shoreline Habitat Areas, but there is no such designated habitat on this parcel. The Shoreline Master Program (Seattle Municipal Code 23.60) contains additional regulations for shoreline areas (see Section B.8.g, above).

- i. Approximately how many people would reside or work in the completed project?**

No people would reside or work in the completed project.

- j. Approximately how many people would the completed project displace?**

No people would be displaced by the project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

There are no mitigation measures proposed because there are no adverse impacts related to displacement.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The proposed project is consistent with current land uses and plans. The completed project would be landscaped to screen views of the installed generator and to improve the wildlife habitat and aesthetics of the project location.

B9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The proposed project would not construct any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The proposed project would not remove any housing units.

c. Proposed measures to reduce or control housing impacts, if any:

No measures are proposed because the proposed project does not have any housing impacts.

B10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

The proposed project would construct three retaining walls and a concrete pad that, collectively, cover an area 19 ft long by 12 ft wide. The installed generator would occupy most of that pad and rise to an elevation of approximately 8 ft above the pad. The generator itself is contained within a painted metal housing.

b. What views in the immediate vicinity would be altered or obstructed?

No views in the immediate vicinity would be altered or obstructed. The project location is generally screened from views because the project location is at the base of a vegetated slope; houses are located above or west of the proposed project. However, the completed project will be visible to pedestrians and motorists using Beach Avenue Southwest due to the 8 ft height of the installed generator and fence.

c. Proposed measures to reduce or control aesthetic impacts, if any:

To mitigate aesthetic impacts, the project would install a chain-link fence on the west side of the generator. The other sides of the generator will be obscured from view by the proposed retaining walls. The chain-link fence would have green vinyl slats to visually obscure the generator and assist in blending the facility with the surrounding environment. In addition, the project would install native and non-native plants around the completed generator above and on the retaining walls to assist in screening views of these features.

B11. Light and Glare

a. What type of light or glare would the proposal produce? What time of day would it mainly occur?

The completed project would not produce any light or glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

There would be no light or glare from the finished project.

c. What existing off-site sources of light or glare may affect your proposal?

There are no existing off-site sources of light and glare that would affect the proposal.

d. Proposed measures to reduce or control light and glare impacts, if any:

No mitigation is being proposed because there would be no adverse impacts related to light and glare.

B12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

The proposed project is located along a major arterial and in a residential neighborhood. Public sidewalks on both sides of Beach Drive Southwest are used for pedestrian travel and uses and limited biking. There are no other recreational opportunities in the immediate vicinity.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Construction of the proposed project may require temporary closure(s) of the sidewalk adjacent to the parcel on the east side of Beach Drive Southwest, but the project would not permanently displace any existing recreational uses.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

No measures are proposed to reduce or control impacts on recreation.

B13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are no places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site. The project location was checked against the following registers on October 5, 2010.

- City of Seattle Landmarks

http://www.cityofseattle.net/neighborhoods/preservation/landmarks_listing.htm

- Washington Heritage Register and National Register of Historic Places
<http://www.dahp.wa.gov/pages/HistoricSites/WashingtonHeritageRegister.htm> and the WISAARD search engine (<http://www.dahp.wa.gov/pages/wisaardIntro.htm>) to determine if National Register or Washington Heritage properties are located in or adjacent to the project area.

None of these registers recorded any places or objects listed on, or proposed for, national, state, or local preservation registers on or next to the project site.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

The project location was checked using the King County Historic Preservation archaeological and ethnographic database on December 3, 2010. No landmarks or evidence of historic, archaeological, scientific, or cultural importance is known from or near the project location.

Much of the site consists of previously disturbed land associated with an existing parking area, underground pump station, an improved street right-of-way, and other recently disturbed upland. The project's location on artificial fill and the likelihood that the project's limited ground disturbance will be within the extent of previous disturbance combine to reduce or eliminate the project's chance of encountering undisturbed archaeological materials.

- c. Proposed measures to reduce or control impacts, if any:

Should evidence of cultural artifacts or human remains, either historic or prehistoric, be encountered during excavation, work in that immediate area would be suspended and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

B14. Transportation

- a. **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

The project site is located adjacent to Beach Drive Southwest in a single-family residential neighborhood in Seattle. Access to the project location is by Beach Drive Southwest, the local arterial.

- b. **Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The project site is currently served by public transit. Metro Routes 37 and 53 run on Beach Drive Southwest. Bus stops for each of these routes are near (but not at) the project location.

- c. **How many parking spaces would be unavailable during project construction? How many spaces would the completed project have? How many would the project eliminate?**

Approximately 4 on-street parking spaces would be unavailable during project construction as a result of the project's need to stage construction vehicles and equipment. No parking spaces would be permanently eliminated.

- d. **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

The proposed project would not require any new roads, streets, or improvements.

- e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed project would not use or occur in the immediate vicinity of water, rail, or air transportation.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Project construction would generate an estimated 4 to 5 round-trips per day due to workers and materials being transported to and from the site during the 26 day construction period. The completed project would generate an estimated 5 vehicle round-trips per year, related to the periodic and on-going maintenance and refueling of the generator.

- g. **Proposed measures to reduce or control transportation impacts, if any:**

There are no proposed measures to reduce or control transportation impacts because the proposed project would have only non-significant temporary impacts.

B15. Public Services

- a. **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

The proposed project is not expected to create an increased need for public services.

- b. **Proposed measures to reduce or control direct impacts on public services, if any.**

No mitigation is being proposed because there would be no significant adverse impacts on public services.

B16. Utilities

- a. **Check utilities available at the site, if any: [check the applicable boxes]**

None
 Electricity Natural gas Water Refuse service
 Telephone Sanitary sewer Septic system
 Other (identify): fiber/cable

- b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

None

While the existing pump station uses the existing electrical grid, the proposed generator would provide continuous electrical supply during grid outages. The generator would energize only the existing pump station.

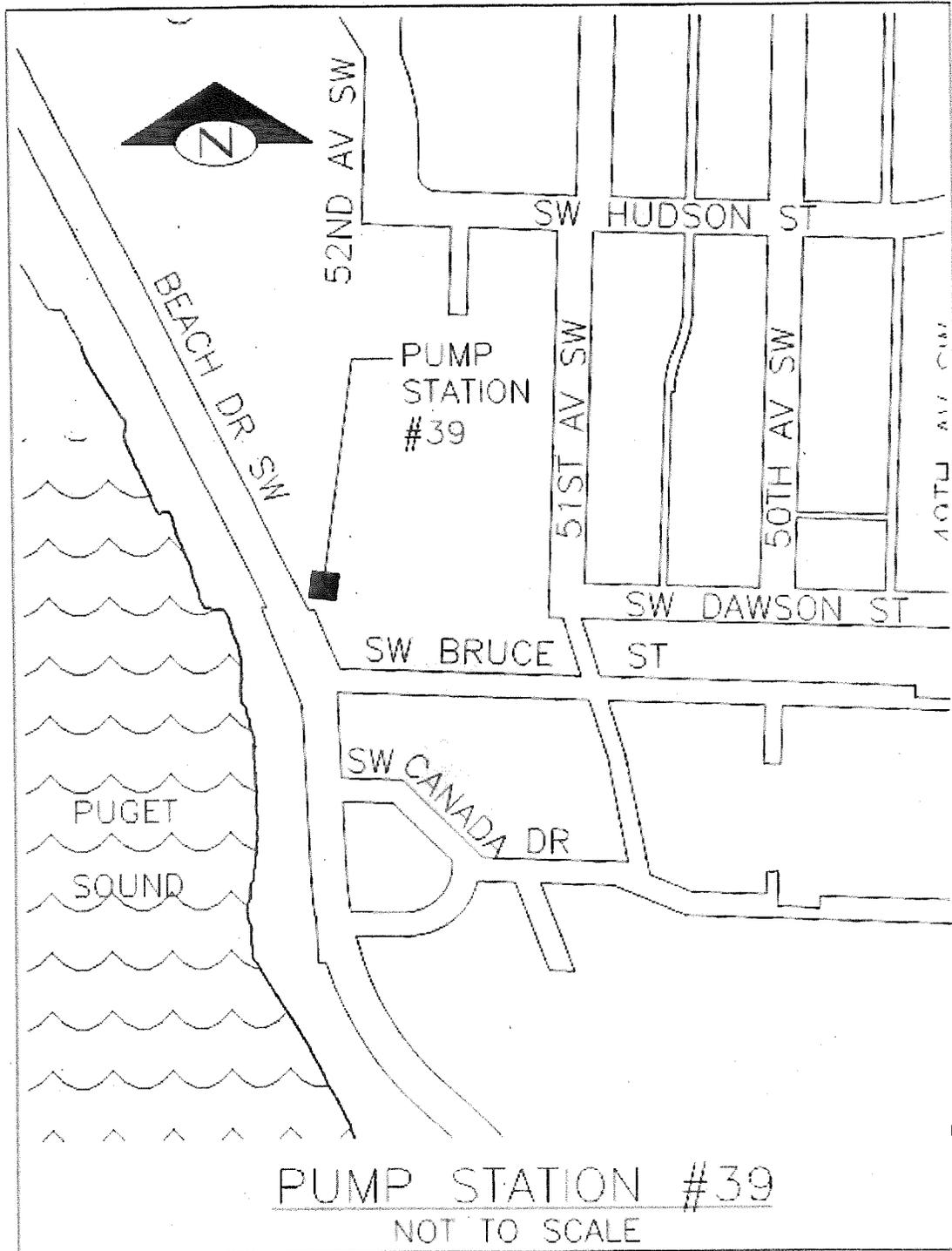
C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

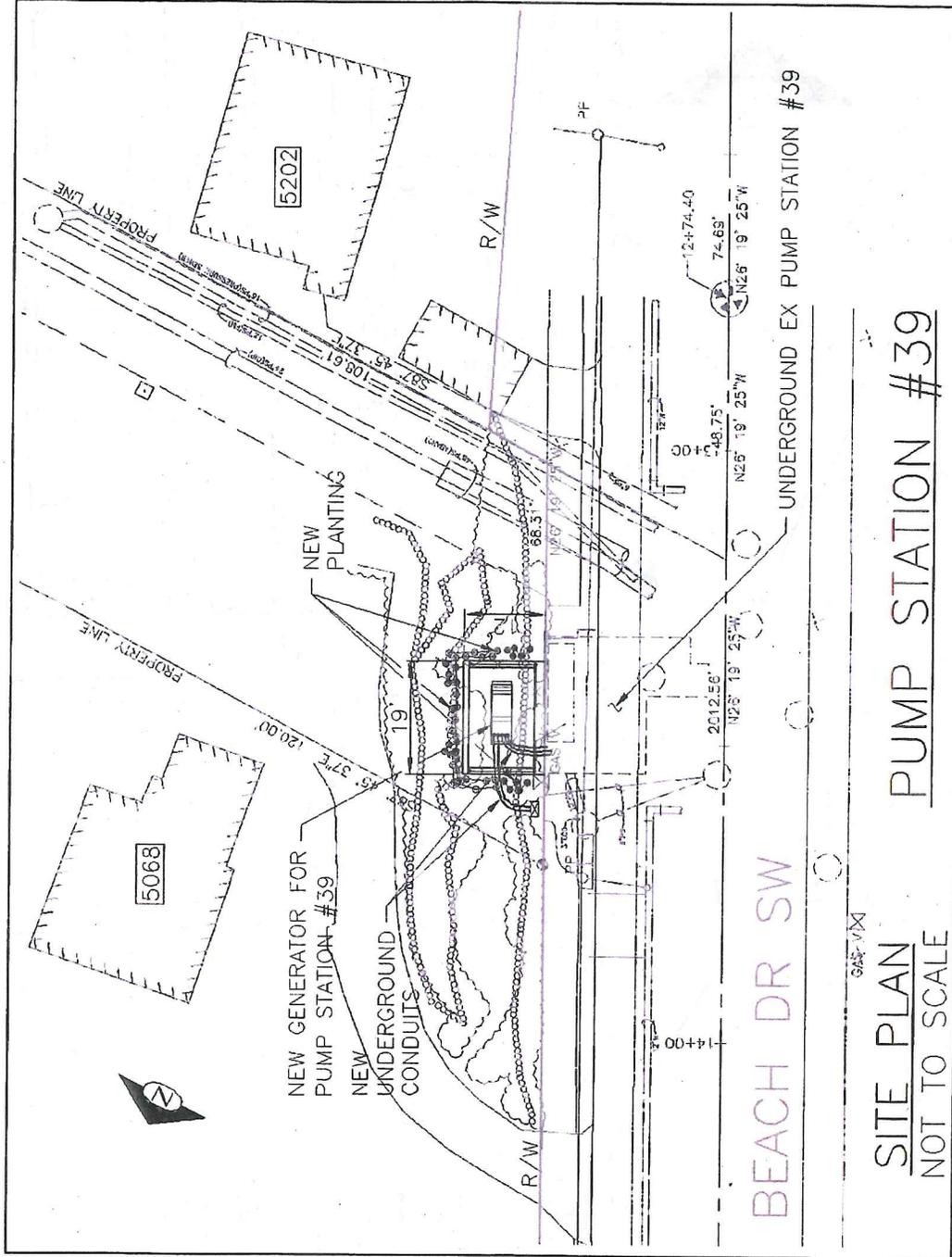
Signature: Luis Ramirez
Luis Ramirez
Project Manager

Date: 8-29-11

Attachment A: Vicinity Map



Attachment B: Project Plan



Attachment C: Project Photographs



Photograph 1. Looking east from Beach Drive Southwest toward proposed location of emergency standby generator. The existing underground pump station is located under the structures apparent in this photograph.



Photograph 2. Looking southeast from Beach Drive Southwest to proposed location of emergency standby generator. Existing underground pump station is under the sidewalk and street visible in this photograph.

Attachment D: Greenhouse Gas Emissions Worksheet

Section I: Buildings

Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet	Emissions Per Unit or Per Thousand Square Feet (MTCO ₂ e)			Lifespan Emissions (MTCO ₂ e)
			Embodied	Energy	Transportation	
Single-Family Home	0		98	672	792	0
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other Than Mall)		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant		0.0	39	162	47	0

Section II: Pavement [includes both slab (228 sq ft) and walls (288 sq ft)]

Concrete Pad (50 MTCO ₂ e per 1000 square feet of pavement/wall)*		516 sq ft				25.8
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*King County SEPA GHG emissions Worksheet Bulletin 26, Version 1.7, December 26, 2007.

Section III: Construction

See below						6.9
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Section IV: Operation and Maintenance

See below.						36.7
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TOTAL

TOTAL.....						69.4
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III. Construction Details

Equipment	Diesel (gallons)	Assumption
Excavator (1)	500	5 days x 5 hours/day x 20 gallons/hour (345 hp engine)
Dump Truck (1)	20	5 days x 2 round trips/day x 10 miles round trip ÷ 5 mpg
Concrete truck (1)	2	1 trip x 1 truck x 10 miles round trip ÷ 5 mpg
Subtotal	522	

GHC Emissions: 6.3 metric tons CO₂e (at 26.55 lbs CO₂e/gallon of diesel)

Equipment	Gasoline (gallons)	Assumption
Pickup trucks or crew vans (2)	52	26 workdays x 2 trucks x 2 round trips/day x 10 miles round trip ÷ 20 mpg
Subtotal	52	

GHC Emissions: 0.6 metric tons CO₂e (at 24.3 lbs CO₂e/gallon of gasoline)

Construction Summary

Activity	CO ₂ e (metric tons)
Diesel	6.3
Gasoline	0.6
Subtotal	6.9

IV. Operation and Maintenance Details

Equipment	Diesel (gallons)	Assumption
Emergency Operation	825	10 hours/year x 15 years x 5.5 gallon/hour
Maintenance Operation	2,145	0.5 hours/week x 52 weeks x 15 years x 5.5 gallons/hour
Fueling truck/repair truck	75	1 vehicle x 1-20-mile round-trip x 5 trips/year x 15 years ÷ 20 mpg
Subtotal	3,045	

GHC Emissions: 36.7 metric tons CO₂e (at 26.55 lbs CO₂e/gallon of diesel)

