



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Southwest Region Office
PO Box 47775, Olympia, WA 98504-7775 • 360-407-6300

July 6, 2022

Jeff Langhelm, P.E.
City of Gig Harbor
3510 Grandview Street
Gig Harbor, WA 98335

Re: City of Gig Harbor S4.F Notification (WAR045009)
Water Line Flushing Discharge to Gig Harbor Bay

Dear Jeff Langhelm:

I am responding to the City of Gig Harbor's S4.F notification dated May 24, 2022, regarding a discharge of turbid water to Gig Harbor Bay on March 9, 2020 from the City's stormwater system associated with water line flushing activity. The City submitted this notification to the Department of Ecology (Ecology) under the Phase II Municipal Stormwater National Pollutant Discharge Elimination System (NPDES) Permit (Phase II Permit). The notification is based on a likely violation of the turbidity standard at a marine MS4 outfall located near Murphy's Landing.

The City says this turbid discharge was reported to Ecology per General condition G3 of the Phase II Permit; however, the City did not also report this incident as an S4.F notice to Ecology within 30 days. During a permit compliance review meeting on April 25, 2022, Ecology and the City of Gig Harbor discussed whether an S4.F notice was needed for this March 9, 2020 turbid discharge. The City provided Ecology with an S4.F notice and a General condition G20 noncompliance notice for their late S4.F notice on May 24, 2022.

Ecology has determined that an adaptive management response under condition S4.F.3 is not necessary at this time because:

- Permit Special condition S5.C.5.c.ii provides for the conditionally allowable discharge of potable water, such as from water line flushing, provided such discharges are volumetrically and velocity controlled to prevent re-suspension of sediments in the stormwater system. These planned discharges must be dechlorinated to a total residual chlorine concentration of 0.1 ppm or less, and pH adjusted, if necessary.

- The City clarified that right after the discharge event the City's engineering technician, Brienn Ellis, had a conversation with the crew about Best Management Practices (BMPs, erosion control, and how to ensure turbid discharges do not occur during water flushing operations.
- Ms. Ellis said she believes this incident was an outlier event, and that the crew "was unknowingly causing erosion in a swale downstream." She said the crew has since "implemented additional diffusion at the end of their discharge hose..."
- Ms. Ellis said crews "dechlorinate to a total residual chlorine of 0.1 ppm or less and follow Ecology's BMP guidance." Based on my conversation with Ms. Ellis, it is my understanding that City of Gig Harbor crews follow S441 ***BMPs for Potable Water Line Flushing, Water Tank Maintenance, and Hydrant Testing*** of the 2019 Stormwater Management Manual for Western Washington (SWMMWW). S441 includes required operational BMPs for water quality protection during potable water line flushing activity.
- Ms. Ellis clarified that all staff who perform water flushing have their Waterworks Operator Certificate from the Department of Health, and that this training "discusses flushing operations including discharge diffusion and downstream erosion."
- Ms. Ellis provided further information about the City's general practices for water flushing operations in her June 15, 2022 email to me.
- Ms. Ellis said, "...the City is dedicated to notifying Ecology of future water quality violations that enter a receiving water and will submit S4.F notifications as needed."

All staff who perform water line flushing must be trained to implement the operational BMPs included in S441 of the 2019 SWMMWW. The City must maintain records of staff training for at least five years, as required by your Phase II Permit.

Special condition S5.C.7 of the Phase II Permit does not address written procedures for water line flushing operations. That said, Carol Stuckey (WA DOH) informed me that DOH "strongly recommend[s] a written SOP [Standard Operating Procedure] for all drinking water system operational procedures, including flushing." I have enclosed Ms. Stuckey's email to me for your review.

This determination is specific to the City of Gig Harbor's Phase II Permit requirements. This determination does not affect any obligation the City of Gig Harbor may have under other federal, state, or local laws, regulations, or permits.

If you have questions, please contact me at avin461@ecy.wa.gov or (360)-628-4734.

Jeff Langhelm

July 6, 2022

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Sincerely,

A handwritten signature in cursive script that reads "Angela Vincent". The signature is written in black ink and includes a long horizontal flourish at the end.

Angela Vincent

Municipal Stormwater Permit Specialist

Southwest Regional Office

Water Quality Program

cc: Brienn Ellis, City of Gig Harbor
Sheila Marcoe, Unit Supervisor, Ecology, SWRO-WQ
Andrew Kolosseus, Section Manager, Ecology, SWRO-WQ
Abbey Stockwell, Permit Writer, Ecology, HQ-WQ
Carol Stuckey, Washington State Department of Health
Permit File

Enclosure (1)

CERTIFIED MAIL: 9489 0090 0027 6102 3092 83