



KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS

614 DIVISION STREET (MS-26), PORT ORCHARD, WA 98366-4699 | KITSAP1: 360.337.5777 | KITSAPGOV.COM

August 11, 2015

Lazaro Eleuterio
Department of Ecology Permit Manager
Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008-5452

Regarding: Sewage spill at Bucklin Hill Bridge project on August 4, 2015

Dear Lazaro,

Tuesday, August 4, 2015 from 8-10am Kitsap County Sewer Utility staff assisted Granite Construction in commissioning their temporary bypass for the Bucklin Hill Bridge Project. The County's responsibility during this process was to hold the flows at the contributing pump stations while Granite Construction activated the two temporary line stops previously installed for the bypass. Once the line stops were activated then the bypass piping was brought up to operating pressure and inspected for leaks. Granite detected no leaks and gave the County the go ahead to put all the pump stations back in normal operation at around 10am.

At 10:40am the Central Kitsap Treatment Plant staff was notified that there was a spill occurring at the Bucklin Hill Bridge construction site. The County immediately responded and once on site staff was informed that the line stops were not holding the flow. The problem began when the contractor drilled a ventilation hole in the pipe in order to drain the sewage from the section of forcemain to be removed. The contractor determined the line stops had failed when the sewage flow did not diminish and continued to flow from the ventilation hole. The contractor was able to contain some of the sewage but then it reached a level where some abandoned utility conduits allowed the sewage to escape the containment area and flow to the low spot at the Clear Creek Estuary. The estuary was the same location as the July 30, 2015 spill.

The County's Operation/Maintenance Supervisor arrived at the construction site at 11:00am and determined flow would need to be held at the pump stations for an extended period of time. County staff was sent to the contributing pump stations to prepare to shut down pumps and monitor wet well levels so the problem could be corrected. The County implemented spill protocol and at 11:13am notified the Department of Health-Shellfish, Kitsap Public Health District, and the Department of Ecology (DOE) hotline. The County also directly notified their DOE NPDES permit manager, Lazaro Eleuterio.

The County dispatched 3 County owned tanker trucks and 2 commercial tanker trucks from Arness Septic Haulers to Pump Stations 2 and 3 and at 12:27am the tanker trucks began pumping and hauling sewage out of the pump stations. The sewage was then trucked to another station downstream from the damaged forcemain and discharged back into the collection system. Flow from upstream of the construction site was stopped from draining back



into the forcemain by plugging the manhole in which the 14" forcemain discharged. This also allowed for the upstream pump stations to remain in service.

The flow from the ventilation hole was stopped at 1:00pm, which put the duration of spill at 2 hours and 20 minutes. The volume of the spill was calculated based on the number and size of the utility conduits that conveyed the spill and the duration of the discharge at 140 minutes. The total volume was determined to be 16,000 gallons discharged into the Clear Creek Estuary that flows into Dyes Inlet in Silverdale, WA.

The correction to the problem was for the contractor to install 2 permanent gate valves to replace the 2 line stops while Kitsap County staff continued to monitor and tanker flows at the contributing pump stations. The contractor was also able to pull the 2 line stops while the flow was diverted and determined the east end line stopped did not seal completely due to the rubber plug rolling back on itself.

The pump stations were back online at 6:30pm and the forcemain was inspected for leaks and pressure tested once the pipe was filled and back up to operating pressure. The system was put back to normal operation by 7:00pm. For the 16,000 gallons of raw sewage spilled, the Kitsap County Health District extended the no contact advisory for Dyes Inlet and Port of Washington Narrows through August 11, 2015.

A debriefing of the incident was held on Tuesday, Aug. 4 at 3pm with Kitsap County staff and management, Granite Construction, and the construction management firm, Exeltech Consulting. The contractor indicated that it had never experienced a line stop failing and would need to contact the manufacturer to further investigate. County requested the contractor review all contingency plans to be employed with the Sewer Utility prior to any future work involving the forcemain or the sewer bypass for the remainder of the project. It was also requested of the contractor to notify Public Works on upcoming work near and around the forcemain so a County Sewer Utility employee can be on site.

The Bucklin Hill Bridge Project is located at 2694 NW Bucklin Hill Road, Silverdale, WA.

If you have any questions or concerns regarding the spill, please contact me at 360-337-5768.

Thank You,



Patrick Kongsli
Operations/Maintenance Supervisor
Kitsap County Public Works-Sewer Utility Division

CC: Stella Vakarcs, Kitsap County Senior Program Manager