



# KITSAP COUNTY DEPARTMENT OF PUBLIC WORKS

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

August 7, 2015

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

Regarding: Sewage spill at Bucklin Hill Bridge project

Dear Lazaro,

Thursday, July 30, 2015 at 2:58pm the Central Kitsap Treatment Plant staff was notified that there was a spill occurring at the Bucklin Hill Bridge construction site. Once on site County staff was able to assess that the spill was caused by the contractor, Granite Construction, damaging a 14" forcemain. County staff were mobilized and sent to the pump stations to mitigate the volume of flow into the damaged forcemain. The County's Operation/Maintenance Supervisor arrived at the construction site at 3:12pm and determined flow would need to be held at the pump stations for an extended period of time. Tanker trucks were mobilized and sent to the contributing pump stations to shut down pumps and monitor wet well levels so repairs could be performed.

The County's Operations/Maintenance Supervisor implemented spill protocol and at 3:25pm called 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. Stuart Whitford, Water Quality Manger with Kitsap Public Health District came out and was escorted by County staff to evaluate the spill and impact. No samples were taken at that time.

In order to keep up with the flow at the pump stations, 3 County owned tanker trucks and 2 commercial tanker trucks from Arness Septic Haulers were dispatched to Pump Stations 2 and 3. It was 3:56pm when 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 pipe break 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.

By 4:50pm, the flow at the break had diminished enough for the contractor to begin removing sewage from the excavation ditch in order to access the forcemain and assess the damage. It was determined that the tooth from the excavator bucket had punctured a 3" diameter hole in the top of the 14" force main.



The flow from the break stopped at 5:20pm, which put the duration of spill at 2 hours and 35 minutes. A calculation based on a 14" diameter pipe, with a 3" orifice, operating at 60 psi produced a flow rate of 244 gallons/minute discharge. Over the 155 minutes, the total volume was 37,820 gallons rounded up to 40,000 gallons discharged into the Clear Creek Estuary that flows into Dyes Inlet in Silverdale, WA.

At 5:44pm the County crew was able to access the forcemain and began to repair the pipe. The repair consisted of installing a full circle band around the pipe and was completed by 5:52pm. The County then used an educator truck to inspect the pipe at another location to confirm no further damage had been done and the integrity of the forcemain was intact. The pump stations were back online at 6:15pm and the forcemain repair 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 7:23pm. For the 40,000 gallons of raw sewage spilled, the Kitsap County Health District issued a no contact advisory for Dyes Inlet and Port of Washington Narrows effective through August 6, 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 explained the excavator operator punctured the forcemain with a tooth on the bucket while demolishing a stormwater structure and misjudging the actual separation between utilities. The County requested the contractor evaluate the correct construction methods to be employed prior to any future work in the vicinity of the forcemain 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,

A handwritten signature in blue ink that reads "Patrick Kongsle".

Patrick Kongsle  
Operations Supervisor  
Kitsap County Public Works-Sewer Utility Division

CC: Stella Vakarcs, Kitsap County Senior Program Manager