From: Trotta, Jacqueline
To: "Howard Hoover"
Cc: Monty Ledbetter

Subject: RE: City of Bryant Pump Station Overflow Date: Friday, August 07, 2015 3:43:00 PM

Mr. Hoover,

I received the report. We will contact you if we need anything further.

Thanks,

Jacqueline Trotta
Enforcement Analyst
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118
501-682-0632

From: Howard Hoover [mailto:hhoover@cityofbryant.com]

Sent: Friday, August 07, 2015 3:33 PM

To: Trotta, Jacqueline

Cc: Monty Ledbetter; Scott Chandler; Bryce Rimmer **Subject:** City of Bryant Pump Station Overflow

Ms. Trotta,

I am Monty Ledbetter's Administrative Operations Coordinator. I am sending you a report on our clean up activities at the Pump Station 10 overflow site. Should you have any further questions or concerns please contact Monty at mledbetter@cityofbryant.com.

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Howard Hoover Administrative Operations Coordinator

City of Bryant Wastewater Department Pump Station 10 Overflow on August 5, 2015

WHAT HAPPENED

The City of Bryant Wastewater Department responded to an overflow at one of its pump stations on August 5, 2015. The overflow was the result of a storm-related power failure. At approximately 4 pm the Pumps and Controls Operator received a power failure alarm from Pump Station 10 located in the Shobe Road – Raymar Road area.

Shortly thereafter the power was restored according to the SCADA system (supervisory control and data acquisition) that monitors the status of the pumps and sends alerts when problems arise. However, only one phase of the power kicked on. That was enough indicate to the SCADA system that power was restored and indicate that the pump was running, but not enough to operate it properly. The pump requires three phase power to operate correctly.

Because the pump was on but without enough power to operate correctly no other alarms were sent to the Pumps and Controls Operator. Over the next 5 hours, the pump station filled and overflowed. A nearby resident called 911 to report the overflow. The 911 dispatch called the Bryant Water and Wastewater emergency number at approximately 9 pm. The On-call employee arrived at the pump station by 9:15 pm. He manually restarted the pumps, alleviating the overflow conditions.

REMEDIATION

On August 6, 2015, wastewater crews went to the pump station to clean up the overflow site. The area affected by the spill was roughly 20 feet by 20 feet. Crews spread 10 bags of lime to the area. Debris was raked up and hauled to the wastewater plant dumpster for removal to an approved landfill.

ADEQ notified the Public Works Director that more remediation of the site would be necessary. On August 7, 2015 crews returned to the site. Remediation included

- removal and replacement of approximately of soil in the affected area
- application of additional lime and sprayed enzymes,
- grass seeding with straw to help with erosion, keep the soil moist and encourage germination
- Stormwater barrier to prevent any uphill wash from eroding the new soil and stop any erosion into the drainage channel.

CORRECTIVE MEASURES

The City of Bryant is about to begin construction of upgrades to Pump Station 5 and Pump Station 25, and a new 16 inch force main between the two stations. This \$2.3 million project will alleviate over 90% of the current flow through Pump Station 10 where the overflow occurred. This project includes two new natural gas generator systems that will restore power immediately to pumps and the SCADA system to keep the pump station operating continuously until normal power is restored.

This event has prompted the department to review how the SCADA system works and seek a way to receive alerts for power deficiencies that might prevent proper pump operation. High level alarm floats in the station wells will be check and replaces as needed and in the future it will be mandatory that personnel respond in person to any alarm to verify proper operation.

CLEANUP ACTIVITIES

August 7, 2015



Overflow site before final cleanup



Clearing brush to accommodate cleanup



Removal of felled trees left by West Tree Service



Removal of soil and debris



Removal of contaminated debris and soil



Applying Lime



Seeding



Applying Straw



Fresh seeded with straw cover



Overflow site after cleanup



Drainage Channel



Drainage Channel



Drainage channel with fish



Storm water protection