



LEHIGH COUNTY AUTHORITY

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Monday, November 03, 2014

Certified No. 7010 3090 0001 6413 7772

Michael Brunamonti, P.E.
Environmental Program Manager
Commonwealth of Pennsylvania
Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18711-0790

Dear Mr. Brunamonti:

Please accept this letter and attachments as Lehigh County Authority's submission to the conditions of NPDES Permit 0026000.

On October 29, 2014 the Programmable Logic Controller that activates the cleaning mechanism for No.2 Bar Screen malfunctioned resulting in blinding of the screen and subsequent discharge from Outfall 003.

If you should have any questions or concerns, please feel free to contact me at (610) 437-7641.

Sincerely,

Robert J. Kerchusky Jr.
Wastewater Services Manager

RJK

Attachments: Bypass Report from Gretchen Schleppey

xc: Sheena Ripple, PADEP Water Quality Specialist, Bethlehem Office
Pat Mandes, Compliance Director
Steven Stahlberg, Chief Operator
Compliance Office, City of Allentown

Sanitary Sewer Overflow (SSO) Report to PADEP

<p>1. Date, Name, Phone # of person completing this report</p>	<p>Date : 11/3/14 Name : Steven R. Stahlberg Phone # : 610-437-7641</p> <p style="text-align: right;">Signature : <i>Steven R. Stahlberg</i> Chief Plant Operator</p>
<p>2. Your organization name and address ?</p>	<p>Lehigh County Authority / Allentown Division Wastewater Treatment Plant 112 Union St. Allentown, PA 18102-4912</p>
<p>3. Date found and <u>specific</u> location of SSO ?</p>	<p>October 29, 2014 at 23:15pm, the 003 Outfall located at the Allentown Wastewater Treatment Plant headworks.</p>
<p>4. How was SSO discovered? By who ?</p>	<p>The Panalarm from the Plant SCADA System sounded indicating "Influent Bypass". The Shift Supervisor, Gary Saunders, acknowledged the alarm, investigated, and observed the start of the bypass at the 003 Outfall.</p>
<p>5. Start and end time of SSO (actual or estimate?)</p>	<p>As per the downloaded spreadsheet, start time was 23:15pm and end time was 23:50pm</p>
<p>6. Date, time and name of person who notified PADEP of SSO ?</p>	<p>Date : October 30, 2014 Time : 01:00am Name : Gary Saunders, Operations Shift Supervisor</p>
<p>7. Description and actual or estimated volume of SSO</p>	<p>Total Metered Flow at the 003 Outfall = 7,243 Gallons</p>
<p>8. Where, <u>precisely</u>, did SSO go ? (land, roadway, basement, swale, storm sewer, creek, etc)</p>	<p>Plant Outfall 003 leads to the Little Lehigh Creek, which shortly thereafter flows to the Lehigh River.</p>
<p>9. What caused SSO ? How was it stopped ?</p>	<p>The Programmable Logic Controller (PLC) that activates the cleaning mechanism for #2 Barscreen malfunctioned resulting in blinding of the screen and subsequent discharge from Outfall 003.</p>
<p>10. Describe extent of contamination and how it was cleaned up</p>	<p>7,243 gallons were in the small inlet area to the Little Lehigh Creek. The debris and any remaining water was vacuumed up with a vac truck from our Sewer Line Maintenance Department.</p>
<p>11. What actions will be taken to prevent a re-occurrence ? When ?</p>	<p>1). The "High Channel Level" alarm is now hooked into the PLC for an early warning notification, as well as it will cause the cleaning mechanism to not only "Run", but keep running until the alarm condition no longer exists. 2). If the cleaning mechanism hasn't run in 10 minutes time, it will make 1 pass. The old setting was 16 minutes as recommended by the manufacturer. 3). The inlet/outlet wetwell levels at the screen are being routed from the Climber Screen Panel to the PLC, which then can not only be tracked, but an alarm setpoint can be installed for too high of a level differential between the inlet and outlet of the screen. 4). Ultrasonic Level sensors installed in "Shark Cages", which we already have on the outlet side of the screens will be installed on the inlet side of the screens for more reliable monitoring of the level which is where the plant bypasses would occur.</p>
<p>12. Other comments ?</p>	<p>No further comments.</p>

**LEHIGH COUNTY AUTHORITY / ALLENTOWN DIVISION
BYPASS REPORT**

To: Robert Kerchusky, Manager of Operations
 From: Gretchen, Laboratories Manager
 Date: Tuesday, November 04, 2014
 Subject: Plant bypassing on October 29th, 2014

In order to comply with NPDES Permit # PA0026000, section A.2.D, with respect to plant bypassing on October 29th, 2014, a description of the non-compliant discharge follows.

POINT SOURCE: 003

REASON: On October 29, 2014 the Programmable Logic Controller that activates the cleaning mechanism for No.2 Bar Screen malfunctioned resulting in blinding of the screen and subsequent discharge from Outfall 003.

DURATION: 23:15 10/29/14 START
 23:50 10/29/14 STOP
 0.58 HOURS

Total Duration	0.58 HOURS
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FLOW:

23:20	10/29/14	444	gallons
23:50	10/29/14	6,799	gallons
Total		7,234	gallons

Total Flow	7,234 gallons (0.0072 MG)
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SAMPLE TIME: 23:50 10/29/14

BOD5	766 mg/L	46.3 lbs.
Total Suspended Solids	1396 mg/L	84.3 lbs.
Ammonia Nitrogen	20.0 mg/L	1.2 lbs.
pH	6.80	

Sample Time	# BOD5	# TSS	#NH3
23:50 10/29/14	46.3 lbs.	84.3 lbs.	1.2 lbs.
Total	46.3 lbs.	84.3 lbs.	1.2 lbs.

Total Bypass Loading for 10/29/2014 Event (pounds)		
# BOD5	# TSS	# NH3
46.3	84.3	1.2