

## Newburgh Wastewater Treatment Facilities 2008 SSO Incident Report

Location Of SSO	Date SSO Began	Time SSO Began	Date SSO Ended	Time SSO Ended	Overflowed To (Location):	SSO Volume (mg)	SSO Volume (Est/Act)	WWTP Flow During SSO (mgd)	Aquatic life Killed (Yes or No)	Reason For SSO	Precipitation (Inches)	Details Of SSO (As Described by the Incident Report)	Actions Taken (As Described by the Incident Report)	Additional Information / Additional Action Required / Current Status of Projects (As of March 9, 2009 Review)
MH 23-120 located at 2422 Briarcliff Drive	02/05/08	10:30 PM	02-05-08	11:45 PM	Ground and into private lake	0.004	Est	7.5	No	Precipitation	3.75	Blue Lake pump station became hydraulically over loaded due to rain. As a result, sewage backed-up and created the overflow.	A diesel pump was used to assist the lift station pumps via an emergency force main connection. Two (2) vacuum tank trucks were used to assist the lift station. Sewage was transported around the lift station and placed back into the collection system. A "Potential E.coli Contamination" warning sign was placed at the overflow location near the lake. The E.coli sign will stay in place until lab tests indicate that levels have dropped to a safe limit. The Blue Lake lift station force main will be upgraded to handle the high flow generated during storm events. The final design has been completed and we are in the easement acquisition phase of the project. After completion of a title search for the easement parcels, the attorney discovered that several parcels were sold and the properties had been platted without easements. We are currently working on resolving these issues and revising the easement documents. We expect to be under construction later this year.	The contract for the Blue Lake Force Main Project was awarded on May 14, 2008, and the notice to proceed with construction was issued on May 28, 2008. The new Blue Lake force main was completed and placed in service on February 23, 2009.
MH 11-197 located at 8477 Sycamore Drive	02/06/08	12:05 AM	02-06-08	12:45 AM	Ground	0.001	Est	10.7	No	Precipitation	3.75	Sanitary sewer was surcharged due to rain.	Newburgh's engineers have flow modeled this area using our SWMM model, and modeling indicates that this sanitary sewer should be replaced with a larger diameter sewer to prevent surcharging and overflows during rain events. The project will be referred to the Utility Committee for inclusion in Master Plan Project list.	The project has been added to the Exhibit K Master Plan Project List. The Town Council has awarded the design contract. The project is currently in the design phase.
Master Lift Station force main vacuum/air release valve located at station no. 163 + 00 on Vann Rd.	03/16/08	12:00 PM	03-16-08	3:00 PM	Ground to unnamed ditch	0.003	Est	3.8	No	Equipment Failure		A Master Lift Station force main vacuum / air release valve experienced a mechanical failure which led to the release.	A vacuum truck was called to the site; the vacuum/air release (VAR) pit was vacuumed out, and the defective vacuum/air release was isolated by closing the isolation valve. The VAR pit was vacuumed out, and the waste was transported to the wastewater treatment plant for treatment. The valve will be repaired and placed back in service ASAP. The vacuum/air release valve is experiencing extreme hammering as it cycles, which led to internal parts failure within the valve. Our engineers are investigating the cause and cure for the problem. We suspect that the VAR valve may need to be restricted to prevent the hammer effect. When the engineers make a recommendation for correcting the problem, the correction will be expedited.	In March 2008, our engineers recommended replacing 3 of the 6-inch vacuum/air relief valves on the Master Lift Station force main with 3-inch vacuum valves. They also recommended restricting 3 of the other 6-inch valves on the force main to 3-inch exhaust/inlets. This work was completed shortly after the recommendation. In September 2008, it was discovered that the 3 valves that were restricted to 3-inch exhaust/inlets were still receiving damage due to hammering. The engineer upon learning of this recommended a modified installation which allowed replacement of the three 6-inch valves with three 3-inch valves. To date, all six 6-inch of the problem valves have been replaced with 3-inch valves, and the new valves have been operating with no internal parts damage. We will continue to inspect the valves on this force main for damage on a 1-month schedule.

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MH 23-10	03/18/08	7:00 AM	03-18-08	7:45 AM	Ground and into private lake	0.002	Est	13	No	Precipitation	6.5	Blue Lake pump station became hydraulically over loaded due to rain. As a result, sewage backed-up and created the overflow.	A diesel pump was used to assist the lift station pumps via an emergency force main connection. A vacuum truck was used to assist the lift station. Sewage was transported around the lift station and placed back into the collection system. A "Potential E.coli Contamination" warning sign was placed at the overflow location near the lake. The E.coli sign will stay in place until lab tests indicate that levels have dropped to a safe limit. The Blue Lake lift station force main will be up-graded to handle the high flow generated during storm events. The final design has been completed and we are in the easement acquisition phase of the project. After completion of a title search for the easement parcels, the attorney discovered that several parcels were sold and the properties had been platted without easements. We are currently working on resolving these issues and revising the easement documents. We expect to be under construction later this year.	The contract for the Blue Lake Force Main Project was awarded on May 14, 2008, and the notice to proceed with construction was issued on May 28, 2008. The new Blue Lake force main was completed and placed in service on February 23, 2009.
MH 23-10	03/18/08	8:15 PM	03-18-08	9:37 PM	Ground and into private lake	0.002	Est	15.6	No	Precipitation	6.5	Blue Lake pump station became hydraulically over loaded due to rain. As a result, sewage backed-up and created the overflow.	A diesel pump was used to assist the lift station pumps via an emergency force main connection. Two (2) vacuum trucks were used to assist the lift station. Sewage was transported around the lift station and placed back into the collection system. A "Potential E.coli Contamination" warning sign was already in place at the overflow location due to previous overflow earlier the same day. The E.coli sign will stay in place until lab tests indicate that levels have dropped to a safe limit. The Blue Lake lift station force main will be up-graded to handle the high flow generated during storm events. The final design has been completed and we are in the easement acquisition phase of the project. After completion of a title search for the easement parcels, the attorney discovered that several parcels were sold and the properties had been platted without easements. We are currently working on resolving these issues and revising the easement documents. We expect to be under construction later this year.	The contract for the Blue Lake Force Main Project was awarded on May 14, 2008, and the notice to proceed with construction was issued on May 28, 2008. The new Blue Lake force main was completed and placed in service on February 23, 2009.
MH 09-140 at Old Dam Property Along Hwy 662	03/18/08	9:00 PM	03-19-08	7:30 AM	Ground and into Ohio River	0.189	Est	15.6	No	Precipitation	6.7	Lift Station No. 1 became hydraulically overloaded due to a massive rain event, creating the overflow	Lift Station No. 1's pumps were supplemented with an 8-inch diesel pump connected to an emergency force main connection and 2 vacuum pumper tankers. The tankers transported the waste to WWTP treatment. Two projects are planned to correct the capacity problem: Upgrade the capacity of the lift station, scheduled for bid letting in late March 2008 and Upgrade force main capacity by installing a twin force main, expected bid letting will be in late 2008.	The Lift Station No. 1 & Lift Station No. 2 (Onsite Projects): The final design plans are completed and bids will be received on January 28, 2009. Lift Station No. 1 & Lift Station No. 2 (Force Main Projects): The route has been established, the preliminary design has been completed, and easement information has been forwarded to our attorney to begin the easement acquisition process.

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ITT Force Main Vacuum/Air Relief Valve Located at Stahl Rd & Venetian Way	04/07/08	10:23 AM	04-07-08	1:00 PM	Over the ground toward a private lake	0.003	Est	3.8	No	Equipment Failure		The ITT Pump Station force main experienced a vacuum/air release failure which caused the overflow (the float inside the valve broke). The defective valve was repaired immediately.	A vacuum/tank truck was called in, and the valve pit and the area around the pit was vacuum cleaned. Liquid vacuumed up was placed back into a sanitary sewer. E.coli warning signs were placed at the lake. The E.coli signs will remain until the lake is tested and the E.coli levels are in a safe range. The valves are currently inspected once every two months. The procedure will be reviewed for potential update.	The vacuum air release valves for this force main will continue to be inspected on a 2-month schedule.
MH 23-10	04/11/08	12:45 AM	04-11-08	1:46 AM	Ground and into private lake	0.003	Est	14.8	No	Precipitation	2.36	Blue Lake pump station became hydraulically over loaded due to rain. As a result, sewage backed-up and created the overflow.	A diesel pump was used to assist the lift station pumps via an emergency force main connection. A vacuum truck was used to assist the lift station. Sewage was transported around the lift station and placed back into the collection system. A "Potential E.coli Contamination" warning sign was placed at the overflow location near the lake. The E.coli sign will stay in place until lab tests indicate that levels have dropped to a safe limit. The Blue Lake lift station force main will be up-graded to handle the high flow generated during storm events. The final design has been completed and we are in the easement acquisition phase of the project. After completion of a title search for the easement parcels, the attorney discovered that several parcels were sold and the properties had been platted without easements. We are currently working on resolving these issues and revising the easement documents. We expect to be under construction later this year.	The contract for the Blue Lake Force Main Project was awarded on May 14, 2008, and the notice to proceed with construction was issued on May 28, 2008. The new Blue Lake force main was completed and placed in service on February 23, 2009.
MH 03-09	04/23/08	8:26 AM	04-23-08	9:45 AM	Ground and into a ditch	0.002	Est	2.7	No	Sanitary Sewer Main Clog		An 8-inch sewer main was clogged 110 feet down stream of manhole <del>03-09</del> 03-06*.	The line was immediately cleaned with a high pressure jet. Grease silt and rags were flushed from the line. The line will be placed on our preventative maintenance list for periodic cleaning. The line will also be TV inspected and any defects found in the line will be repaired ASAP.	*Point of clarification: The line clog was found in the line segment stretching from MH 03-04A to MH 03-06. This created the overflow at MH 03-09. The line was TV inspected and was placed on our preventative maintenance list for periodic cleaning. The TV inspection revealed numerous grade issues (bellies) in the line. We are currently evaluating existing grade conditions to determine if line replacement is feasible at proper gradient.
MH 23-10	06/13/08	4:30 PM	06-13-08	5:05 PM	Ground and into private lake	0.002	Est	8.4	No	Precipitation	2.54	Blue Lake pump station became hydraulically over loaded due to rain. As a result, sewage backed-up and created the overflow.	A diesel pump was used to assist the lift station pumps via an emergency force main connection. A vacuum truck was used to assist the lift station. Sewage was transported around the lift station and placed back into the collection system. A "Potential E.coli Contamination" warning sign was placed at the overflow location near the lake. The E.coli sign will stay in place until lab tests indicate that levels have dropped to a safe limit. The Blue Lake lift station force main will be up-graded to handle the high flow generated during storm events. The contract for the project was awarded on 5-14-08. Construction is to begin by 6-25-08. Project is scheduled to be completed by 11-24-08.	The contract for the Blue Lake Force Main Project was awarded on May 14, 2008, and the notice to proceed with construction was issued on May 28, 2008. The new Blue Lake force main was completed and placed in service on February 23, 2009.

