



RECEIVED LOWER MAKEFIELD TWF 2018 DEC -6 PH 12: 13

November 29, 2018

## NOTICE OF VIOLATION

Mr. Kurt Ferguson, Manager Lower Makefield Township 1100 Edgewood Road Yardley, PA 19067

Re:

Clean Water Program/Sewage Lower Makefield Township Sanitary Sewer Collection System Lower Makefield Township

**Bucks County** 

Dear Mr. Ferguson:

The Department of Environmental Protection (DEP) has received reliable documentary evidence indicating that sanitary sewer overflow (SSO) events have occurred recently in Lower Makefield Township. The location of all the SSOs reported is a sewer manhole at the corner of Esther Lane and Irving Road. The dates when SSOs reportedly occurred were February 11, March 2, April 16, May 28, September 25, and November 27, 2018.

The overflow of sewage from a municipal sewer is an unpermitted discharge of sewage to Waters of the Commonwealth and is a violation of Section 201 of the Clean Streams Law, the Act of June 22, 1937, P.L. 1987, as amended, 35 P.S. §§ 691.1-691.1001 (Clean Streams Law). Such violations also constitute unlawful conduct under Section 611 of the Clean Streams Law, 35 P.S. § 691.611, and are subject to the enforcement provisions of Section 605 of the Clean Streams Law, 35 P.S. § 691.605 which includes the assessment of civil penalties.

In addition, Lower Makefield Township failed to notify DEP of these discharges. Failure to provide proper notification to DEP is a violation of 25 Pa. Code § 91.33(a) and constitutes unlawful conduct under Section 611 of the Clean Streams Law, 35 P.S. § 691.611, and is subject to the enforcement provisions of Section 605 of the Clean Streams Law, 35 P.S. § 691.605 which includes the assessment of civil penalties.

This past summer, Lower Makefield Township and DEP exchanged several communications concerning sewer maintenance and inflow and infiltration abatement, in connection with the Township's Act 537 Sewage Facilities Plan Special Study. (The Special Study was approved by DEP on November 5, 2018.) One of the topics covered in those discussions was the Township's diversion pump located at Derbyshire Road, which is used to manage wet weather flow in the portion of the sanitary sewer system that flows through the neighborhood where the SSOs occurred. We are disappointed that the Township did not mention to DEP, when these matters were being discussed, that SSOs had recently occurred. The presence and purpose of the Derbyshire diversion pump is clearly connected to the surcharging and discharge that has occurred at Esther Lane. Moreover, the Township has a duty to report SSOs when they occur, and DEP has no record that the Township did so.

DEP requests that you provide a written response within 15 days of the date of this letter that describes the circumstances of the discharges described above, including the actions taken by Lower Makefield Township to mitigate the impact of the discharges, and the steps that are being taken by the Authority to prevent a re-occurrence.

DEP also requests that you prepare a revised Corrective Action Plan, to supersede the Corrective Action Plan dated September 19, 2018, that was included with the Special Study. The revised Corrective Action Plan should re-prioritize the sub-areas of the collection system for corrective action, making the "Falls Township Contract Area" (also known as "Study Area E") a higher priority for investigation and corrective action. Considering what the Department has learned about the incidence of SSOs, we believe this sub-area deserves to be given the highest priority for investigation and corrective action.

This Notice of Violation is neither an order nor any other final action of DEP. It neither imposes nor waives any enforcement action available to DEP under any of its statutes. If DEP determines that an enforcement action is appropriate, you will be notified of the action.

If you have any questions about this matter, please contact me at 484.250.5822.

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Sincerely,

David Burke

Watershed Manager

Clean Water

cc. Mr. Roth

Mr. Bauer

Ms. Boettlin

Re 30 (GJE18CLW)333-3

## Ebert Engineering, Inc.

## Water and Wastewater Engineering

December 14, 2018

Mr. David Burke Pennsylvania Department of Environmental Protection 2 East Main Street Norristown, PA 19401

Subject:

Notice of Violation (11/29/18)

Re:

Response to NOV

EE, Inc. No.: 068-001 "NOV"

Dear Mr. Burke,

Lower Makefield Township received a Notice of Violation dated November 29, 2018 on December 6, 2018 from the PA DEP concerning sanitary sewer overflow (SSO) events located at the corner of the Esther Lane and Irving Roads. This area is also known as the Derbyshire Road area. The dates when the SSO reportedly occurred were February 11, March 2, April 16, May 28, September 25 and November 27, 2018. This letter is Lower Makefield Township's written response to the PA DEP's letter and includes the requested actions taken by Lower Makefield Township to mitigate the impact of the discharges and that are being taken by the Township to prevent a re-occurrence.

The first item that needs to be addressed is that Lower Makefield Township did properly and timely report the SSO that occurred on November 27, 2018. We have attached a copy of the report (including a copy of the fax transmittal) of the SSO that was faxed to the PA DEP on November 26, 2018 notifying the PA DEP of the occurrence. The SSO was also timely called into the PA DEP. This information was previously provided to the PA DEP via email on December 11, 2018. We have also provided the report of another SSO that occurred on December 4, 2018 in the Covington and Sheffield Roads area. This clearly documents that Lower Makefield Township properly and timely reports any known SSOs to the PA DEP.

It appears that the primary cause of the overflow was a root mass that was restricting the flow of wastewater through the sanitary sewer main. The root mass was a result of Lower Makefield Township's previous maintenance work on this sanitary sewer main that was performed on November 14, 2018. Lower Makefield Township's operations staff had noticed that the flows through this section of the sanitary sewer system were being restricted even in normal flow conditions and as a result had Root-A-Drain perform a video inspection to determine the cause of the restriction the video inspection showed that the cause was roots and the sanitary sewer main was cleaned and the roots removed. This is documented on the attached invoice from Root-A-Drain. After the SSO, the contractor at the request of Lower Makefield Township and in direct response to the SSO returned to the sites and performed a second video inspection. The contractor then cut additional roots out and also removed a large root mass that had developed from the previous cleaning.

In order to prevent this from occurring in the future as well as to be able to perform additional preventative measures in the future will be installing a cellular autodialer at the Derbyshire Diversion Pump Station. There will also be an additional float installed in the manhole to notify NOV Response - Derbyshire 11/29/18 December 14, 2018 Page 2 of 3

the operators whenever a surcharge condition occurs. There will also be two additional floats installed. The second float will be when the water level reaches the level that will start the operation of the by-pass pump and the third float will be a high water alarm at the elevation slightly below where a SSO could occur. This will enable them to better monitor the flows and operation of the by-pass pump. This work has been authorized by Lower Makefield Township and will be installed as soon as they can coordinate the work with their alarm company and electrical contractor. This work is anticipated to be completed in two weeks.

Since the date of the NOV letter, Lower Makefield Township also experienced a dry weather SSO. Lower Makefield Township would also like to respond to the cause and resolution of this SSO at this time as well. The SSO that occurred during normal flow conditions in the Covington Road area on December 4, 2018 was also a result of a clog. The inspection revealed that a child's toy had entered the sanitary sewer system and combined with normal wastewater debris to form a clog. This clog was removed and the surcharge immediately was resolved and the wastewater flowed through the sanitary sewer system at it did previously. This documents Lower Makefield Township not only promptly and timely reports any SSOs but also immediately follows up and resolves the issues.

Lower Makefield Township will be instituting an updated Standard Operating Practice (SOP) concerning SSOs moving forward to provide a better notification and record keeping. The past practice was in accordance with the PA DEP requirements where the operator would immediately notify the PA DEP by calling the emergency number and then following up with a fax of the written copy of the report to the PA DEP. The operators would also perform an investigation as well as cleaning up and liming the area of the SSO. The operators however did not maintain a permanent record of the SSO reports in their files.

The new SOP for reporting and documenting SSOs in Lower Makefield Township will be as follows:

- 1. The Operator will immediately phone in the SSO to the PA DEP emergency line.
- 2. The Operator will also notify the Public Works Director of the SSO.
- 3. The Operator will perform an investigation to determine the cause of the SSO and contact the appropriate contractors to minimize or eliminate the SSO if possible.
- 4. The Operator will complete the required PA DEP SSO Report form and fax it to the PA DEP within twenty four hours.
- 5. The Operator will continue to monitor the SSO location until the SSO no longer exists.
- 6. The Operator will remove any debris from the SSO as well as spreading lime on the areas where the wastewater flowed.
- The Operator will provide a copy of the SSO report to the Public Works Director and Engineer as well as providing a copy to the Township Secretary to file in the Township's records.

- 8. The Public Works director will interview the operator on the cause of the SSO and determine what if any preventative measures can be taken to prevent a reoccurrence.
- 9. The Public Works director will discuss incident with both the Engineer and Township Manager and make a recommendation on any preventative measures that can be taken.
- 10. The Township will maintain a file of all SSO reports in its filing system by year and maintain those records along with documentation of corrective actions that took places as a result of the SSO.
- 11. The Engineer will report all SSOs as well as the any preventive measures implemented in both the Chapter 94 Report as well in the CAP Update to the PA DEP.
- 12. The Engineer will analyze the frequency of the SSO as well as effectiveness of any preventative measures in the CAP Update and make recommendations if any changes are required to the CAP to address the SSOs.

The above SOP will be provided in a written form to all operators of the Lower Makefield Township public sanitary sewer system. A copy will be maintained along with all contact information in the sewer department offices for quick reference by the operators.

Lower Makefield Township will be in contact with the PA DEP to discuss updating their CAP to prioritize this area. The impact of the root cleaning needs to be evaluated to determine if this area should become a higher priority or if this can be addressed as a maintenance issue with potentially lining the area that contains the roots that led to the SSO. This needs to be evaluated so that Lower Makefield Township is addressing the areas with the highest I/I removal potential. Lower Makefield Township does agree that the removal of SSOs is the highest priority of the CAP.

If the PA DEP needs any additional information or has any questions concerning this matter, we are willing to meet with the PA DEP to discuss either this NOV or the potential changes to the CAP.

Very truly yours,

Frederick E. Ebert, P.E.

President

Enclosures

CC: Kurt Ferguson (w/encl.)

Greg Hucklebridge (w/encl.) Barbara Kirk, Esq. (w/encl.)

Kelley Watson (w/encl.)