

**Phase II MS4 General Permit
Program Plan Update**

**City of Petersburg
Local TMDL Action Plan**



OCTOBER 2015



TIMMONS GROUP
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IN ACCORDANCE WITH GUIDANCE MEMO No. XXX ISSUED BY THE COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY WATER DIVISION

The following demonstrates the City of Petersburg's compliance with their assigned WLA for the Appomattox River TMDL.

- 1.) Name of TMDL Final Report: **Total Maximum Daily Load Development for the Appomattox River Basin**
- 2.) Pollutant causing the impairment: *E. coli*
- 3.) WLAs assigned to the MS4 as individual WLAs: **Appomattox River (2): 1.31E+11 cfu/yr**
Appomattox River (3)-tidal: 1.76E+12 cfu/yr
- 4.) Significant sources of POC from facilities of concern owned or operated by the MS4 operator that are not covered under a separate VPDES permit (A significant source of pollutant from a facility of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL):

The City of Petersburg has not identified any significant sources of POC from facilities of concern owned or operated by the City of Petersburg that are not covered under a separate VPDES permit.

- 5.) Existing or new management practices, control techniques, and system design and engineering methods, that have or will be implemented as part of the MS4 Program Plan that are applicable to reducing the pollutant identified in the WLA:

The City plans to continue to enforce the ordinances discussed below in order to ensure that the WLA continues to be achieved. The City also plans to conduct employee training on an annual basis that includes education on sources of bacteria and best management practices to reduce the amount of bacteria making it into the City's waters.

- 6.) Legal authorities such as ordinances, state and other permits, orders, specific contract language, and interjurisdictional agreements applicable to reducing the POCs identified in the TMDL:



The following is a list of current ordinances and legal authorities from the Petersburg, Virginia Code of Ordinances that are applicable to reducing the major sources of pollutant identified in the WLA:

- Chapter 18 – Animals, prohibits animals from running loose in the City, including livestock, fowl, and dogs;
- Chapter 50 – Environment, includes the erosion and sediment control ordinance;
- Chapter 58 – Floods, includes provisions for floodplain management;
- Chapter 78 – Parks and Recreation, includes provisions to protect managed turf and prohibits pollution of springs or lakes in any City park;
- Chapter 94 – Solid waste, addresses littering and mandates removal of garbage/rubbish;
- Chapter 114 – Utilities, mandates connection to public sewer if in proximity to such, and mandates standard practices of design/construction of new sewer; and
- Chapter 122 – Waterways, includes performance standards for development and redevelopment, including septic pump-out requirements, and prohibits illicit discharges to the storm sewer system.

7.) Enhancements to public education, outreach, and employee training programs to also promote methods to eliminate and reduce discharges of the POC for which the WLA has been assigned:

The City plans to conduct employee training on an annual basis and education to the public that includes education on sources of bacteria and best management practices to eliminate and reduce discharges of the POC (bacteria). Refer to the Public Education & Outreach Plan and the Municipal Employee Training Plan and Schedule.

8.) A schedule of interim milestones and implementation of the items in 5, 6, and 7:

According to the City's calculations, the WLA for the City for the Appomattox River Bacteria TMDL has already been achieved. The following loading rates were calculated utilizing the City's land cover data and the most recent loading rates for *E. coli*:

- Appomattox River (2): 6.49E+09 cfu/yr
- Appomattox River (3)-tidal: 1.12E+10 cfu/yr

9.) Methods to assess TMDL Action Plans for their effectiveness in reducing the pollutants identified in the WLAs:



The City will assess TMDL Action Plans for their effectiveness in reducing the pollutants identified in the WLAs by calculating the loading rate for the City's MS4 regulated area. A loading rate below the WLA will be the metric used to determine the effectiveness of the TMDL Action Plans. The City will also track the number of employees present at annual training sessions to determine the number of employees being trained on elimination and reduction of the discharge of the POC (bacteria).

- 10.) Measureable goals and the metrics that the City of Petersburg and Department of Environmental Quality will use to track goals (and the milestones required by the permit) (Evaluation metrics other than monitoring may be used to determine compliance with the TMDL):

The City will continue to monitor the loading rate for *E. coli* for the regulated MS4 area. The City will assure that the loading remains in compliance with the WLAs assigned. Should the loading for *E. coli* exceed the WLAs, the City will develop and implement a program to eliminate and reduce the discharges of the POC (bacteria).