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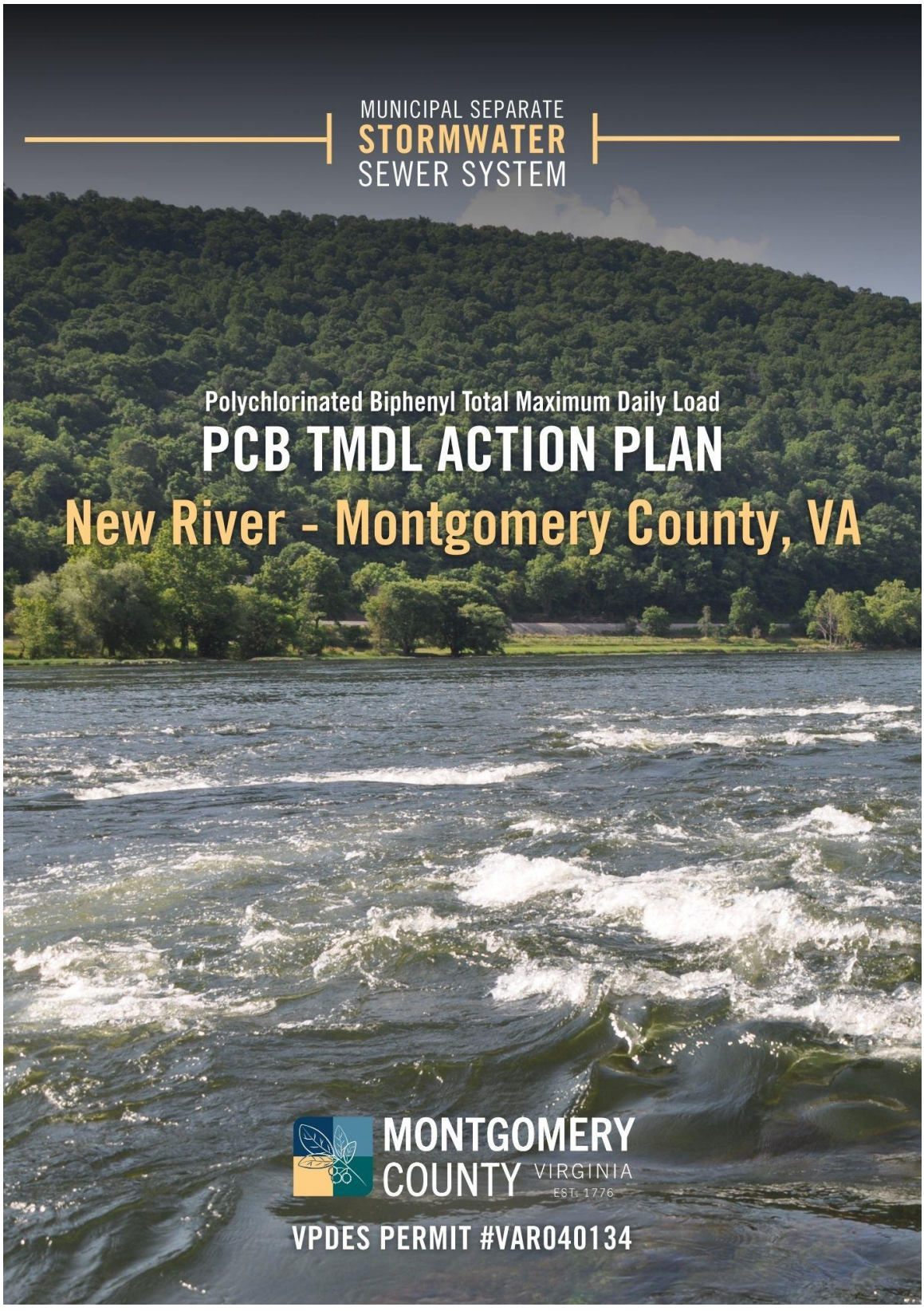
MUNICIPAL SEPARATE
STORMWATER
SEWER SYSTEM
Polychlorinated Biphenyl Total Maximum Daily Load
PCB TMDL ACTION PLAN
New River - Montgomery County, VA
MONTGOMERY
COUNTY VIRGINIA
EST. 1776
VPDES PERMIT #VAR040134

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MS4 TMDL Action Plan Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

County Administrator Date

VAR040134 Montgomery County

Glossary Of Terms:

For the purposes of this guidance document, the following definitions shall apply:

Polychlorinated Biphenyl (PCB) - An organic chlorine compound with the formula C12H10−xClx. 209 unique chemical compounds, known as congeners, exist and are included in this category of chemical compounds.

Best Management Practices ("BMPs") – Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices, including both structural and nonstructural practices to prevent or reduce the pollution of surface waters and groundwater systems.

Load Allocation ("LA") - The portion of a receiving water's loading capacity attributed to (1) the existing nonpoint sources of pollution and (2) natural background sources.

Pollutant(s) of Concern ("POC") – The pollutant(s) impairing a water body for which one or more TMDL(s) has been developed.

TMDL Implementation Plan – A document guided by an approved TMDL(s) that at a minimum provides details of the corrective actions to address the load allocation of one or more TMDLs. The plan includes measurable goals needed to achieve pollutant(s) source load reductions; outlines a schedule to attain water quality standards along with costs, benefits, and environmental impacts to reduce pollutant(s) and remediate impaired waterbodies.

Total Maximum Daily Load ("TMDL") – The sum of the individual wasteload allocations (WLAs) for point sources, load allocations (LAs) for nonpoint sources, natural background loading and a margin of safety.

Total PCB (tPCB) – The total of all 209 chemical variations in the PCB group.

Wasteload Allocation ("WLA") - The portion of a receiving waters' pollutant loading capacity that is allocated to existing or future point sources of pollution, such as an MS4.

For terms not defined above, please refer to the 9VAC25-890-1, 9VAC25-875-20, or 9VAC25-31-10 of the Virginia Administrative Code.

Executive Summary

Montgomery County was assigned Waste Load Allocations (WLA) for Polychlorinated Biphenyls (PCB) in the New River basin in a 2018 TMDL Study.[1] As part of a census defined area, Montgomery County is required to maintain Municipal Separate Storm Sewer System (MS4) permit coverage to discharge stormwater from its storm drain system and is defined as an MS4 operator under General Permit VAR04. In compliance with Section II, Part B, of General Permit VAR04, Montgomery County shall address PCB waste load allowances in accordance with Section II.B and this Local TMDL Action Plan. This document serves as a County-specific Total Maximum Daily Load (TMDL) Action Plan to identify the best management practices and other interim milestone activities to be implemented to address the PCB WLA assigned to the County's regulated MS4 area.

The New River PCB TMDL emphasizes source identification, pollution prevention, and the proper handling and disposal of PCB-containing materials, rather than reliance on structural stormwater treatment practices. Where appropriate, non-numeric best management practices (BMPs) shall be implemented, focusing on PCB reduction at identified source areas rather than end-of-pipe controls, to ensure compliance with the Waste Load Allocation (WLA) provisions of the TMDL.

The Montgomery County PCB Action Plan addresses the special conditions Part 7 of the MS4 General Permit through the following actions:

- Coordinate with the County's Utilities Department to gather information on potential PCB sources through the WWTP Industrial Waste Surveys for industrial sanitary sewer connections.
- Enhanced required staff good housekeeping/ Illicit Discharge and Elimination (IDDE) training frequencies and inclusion of Pollutant of Concern.
- Additional public education and outreach efforts focused on the pollutant of concern beyond the minimum required in Part I.E.1 of the MS4 permit.
- Coordinate the Montgomery Regional Solid Waste Authority to receive any updates to their Household Hazardous Waste collection and outreach efforts.
- Update inventory of County owned properties in the New River Watershed and MS4 area and investigate for significant sources of the pollutant of concern. As part of this inventory the County will:
    - Identify the location of the source
    - Determine whether or not the potential source is from current site activities or activities previously conducted at the Site that have been terminated; and

[1] PCB Total Maximum Daily Load Development for Reed Creek, the Upper New River, Peak Creek, Walker Creek, Stony Creek, and the Lower New River. Prepared by Virginia Tech Biological Systems Engineering for the Virginia Department of Environmental Quality, July 2018

- Describe any measures being implemented or planned to be implemented to prevent exposure to stormwater and the discharge of PCB's from the site. (Due to the potential cost to the County meeting the required reductions, the County reserves the right to make future adjustments to this plan. If it is possible to achieve Pollutant of Concern (POC) reduction at a reasonable cost, the County will include those practices and projects in this plan after potential pollutant sources have been identified.)

This TMDL was approved by the Environmental Protection Agency on March 12, 2019.

The special conditions of Montgomery County's 2023-2028 MS4 General Permit require the development of an Action Plan in response to TMDLs in which an individual or aggregate waste load has been allocated to the permittee.

The 2018 New River PCB TMDL assigns WLAs to identified point sources within the watershed. As an MS4, the portion of the County's storm drain system which drains to the Upper New River watershed is assigned a WLA. Montgomery County's WLA for the New River watershed's Wasteload Allocation for PCB is 60.1 mg/yr, a 95.0 % reduction from the existing baseline of 1,201.4 mg/yr.

Background:

PCBs were produced for commercial uses from about 1929 to 1977. The 1976 Toxic Substances Control Act banned certain uses and restricted PCB concentrations to low levels. The largest use of PCBs was for heat transfer fluids in electrical transformers and capacitors. PCBs were also used as plasticizers, wax and pesticide extenders, and lubricants. Many products used to contain PCBs at high levels, such as carbonless copy paper and caulk used to seal cracks in homes and buildings. PCBs are still found in old products produced before commercial production of PCBs ended, such as in electrical transformers. They can also be found in new products, either as a contaminant or intentionally added below regulated levels. There is still inadvertent production of PCBs during manufacturing of chemicals including dyes and pigments.[2]

Since PCBs do not naturally occur in the environment, PCBs detected in air, water and soil are a result of activities relating to the manufacture, use, and disposal of products containing PCBs. Although PCBs are no longer made in the United States, people can still be exposed to them. Many older transformers and capacitors may still contain PCBs, and this equipment can be used for 30 years or more. Old fluorescent lighting fixtures and old electrical devices and appliances, such as television sets and refrigerators, may contain PCBs if they were made before PCB use was stopped. When these electric devices get hot during operation, small amounts of PCBs may get into the air and raise the level of PCBs in indoor air. Because devices that contain PCBs can leak with age, they could also be a source for skin exposure. In the past, PCBs within products have entered the environment from

[2] Washington State Department of Ecology. *Polychlorinated Biphenyls (PCBs).* Available at: https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/pcbs

accidental spills and leaks during the transportation process, , or from leaks or burning during fires. Today, PCBs still enter the environment from a variety of sources including hazardous waste sites, improper industrial or commercial waste disposal, and uncontained leaks from old electrical transformers. [3]

One of the major ways people are exposed to PCBs is through our diet, such as eating fish that contain PCBs. PCBs have been shown to have toxic effects to the immune, reproductive, nervous, and endocrine system in humans and other organisms. PCBs also cause cancer in animals, and are considered likely to cause cancer in humans. PCBs have a relatively low vapor pressure that reduces their potential to evaporate, increasing their longevity.. They are also nonpolar and therefore are only slightly soluble. This low solubility makes PCBs bind strongly to soils and sediment and not easily diluted. PCBs enter surface waters carried by contaminated soil particles via surface water runoff. Eliminating the potential for sediment transport at PCB sites reduces the potential for PCB contributions to surface water.

Without remediation, PCBs can remain in the environment for an extended time due to their stability. PCBs can also bioaccumulate in fish.[3] Concerns over bioaccumulation of PCBs in fish led to the development of PCB total maximum daily loads (TMDLs) for PCB impaired water bodies. Because PCB sources are diffuse, public education and source awareness are key strategies for reduction.

Local TMDL Special Conditions

The VAR04 General Permit (9VAC25-890-40) lists in Part II.B.4. specific criteria to be addressed when a permittee is assigned a WLA as listed below:

a) The TMDL project name
b) The EPA approval date of the TMDL. (a) and (b) are listed above;
c) The wasteload allocated to the permitted (individual or in aggregate), and the corresponding percent reduction, if applicable;

Table 1: Wasteload Allocations for PCBs (Polychlorinated Biphenyls)

Watershed	MS4 permittees assigned WLA	Existing load (mg/yr)	Percent reduction required	Mg/yr reduction required	TMDL WLA (mg/yr)
New River (Upper)	Montgomery County (VAR040134)	1,201.4	95.0	1,141.3	60.1

[3] Agency for Toxic Substances and Disease Registry (ATSDR). 2000 (updated). *Public Health Statement for Polychlorinated Biphenyls (PCBs).* U.S. Department of Health and Human Services, Public Health Service

d) Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 and that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;
    a. The County has not previously identified any sources of pollutant of concern (PCB) discharging to the permittee's MS4 that are not covered under a separate VPDES permit. However, consistent with the TMDL's emphasis on source identification, the County will continue to evaluate potential sources within its MS4 area..
e) The BMPs designed to reduce the pollutants of concern in accordance with Parts II B7;
f) Any calculations required in accordance with VAR04 General permit Part II B5, B6 or B7;
    a. The New River PCB TMDL identified PCBs as originating from a combination of legacy and ongoing sources, including contaminated materials, sediments, and atmospheric deposition, and notes that there is significant uncertainty associated with PCB loading and transport. Consistent with the TMDL implementation approach and MS4 permit requirements, the County will implement non-numeric BMPs and pollutant minimization measures to reduce PCB inputs to the MS4. Because PCB BMP efficiencies and stormwater loading estimates are highly uncertain, no pollutant load reduction calculations are required.
g) For action plans developed in accordance with Part II B5 and B6, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and
    a. This is Part II B7, so no outreach strategy is required.
h) A schedule of anticipated actions planned for implementation during this permit term.
    a. Sections e and h are addressed below in "BMPs and schedules to address PCB load reduction."

Additionally, per Part II B7.a of the MS4 permit, for each PCB TMDL Action Plan, the permittee shall include an inventory of potentially significant sources of PCBs owned or operated by the permittee that drains to the MS4 that includes the following information:

1) Location of the potential source
2) Whether or not the potential source is from current site activities or activities previously conducted at the site that have been terminated (i.e. legacy activities); and
3) A description of any measures being implemented or to be implemented to prevent exposure to stormwater and the discharge of PCBs from the site.

Montgomery County does not currently know of any potentially significant sources of PCBs owned or operated by the permittee that drain to the MS4 withing the Upper New River Watershed. Per the requirements of Part II B7 of the MS4 permit, if at any time during the term of this permit Montgomery County discovers a previously unidentified significant source of PCBs within the permittee's MS4 regulated service area, the permittee shall notify DEQ in writing within 30 days of discovery. Additionally, Montgomery County has not elected to conduct PCB monitoring or product testing, and therefore Part II.B.7.c is not applicable.

Additionally, per Sections B.II.2.a(1) and (2) of the permit, and evaluation of the results achieved by the previous action plan and any adaptive management strategies incorporated into the updated action plan based on plan evaluation, are included in the section "BMPs and schedules to address PCB load reduction" as well.

BMPs and schedules to address PCB load reduction

The MS4 Program Plan will be updated to include education methods aimed at informing Montgomery County residents and businesses about PCB sources and elimination strategies, and will be implemented accordingly.

- Montgomery Regional Solid Waste Authority (MRSWA) will be contacted for any updates to their Household Hazardous Waste collection and outreach efforts.

- Update staff Good Housekeeping and IDDE training program to incorporate information on the PCB TMDL, with PCBs to be included beginning in the 2027 training cycle.
- Train County staff on identification and evaluation of materials that contain PCB's.
- Properties will be identified within the Montgomery County MS4, owned by the County, and within the New River watershed, will be investigated for significant sources of the Pollutant of Concern.
    - Coordinate with the County Utilities Department to gather information on potential PCB sources through the WWTP Industrial Waste Surveys for industrial sanitary sewer connections. When the WWTP conducts their next survey, results will be evaluated for potential sources of PCBs in the New River Watershed.

Regulatory Framework

This Action Plan is supported by the following authorities:

- Clean Water Act (33 U.S.C. §1251 et seq.)
- Virginia Code § 62.1-44.15
- Virginia Code § 62.1-44.19:11
- 9VAC25-890-40 (MS4 General Permit Regulation)

• Montgomery County stormwater management program and applicable County Code provisions

These authorities require MS4 localities to implement TMDL action plans and measurable goals.

Action Steps

1. Develop PCB educational materials
2. Update stormwater website with PCB resources
3. Conduct social media and newsletter outreach
4. Partner with schools for watershed education
5. Provide annual staff training for recognizing sources or materials used containing PCB's
6. Host public workshops and presentations
7. Conduct outreach to development community
8. Coordinate with waste disposal programs
9. Participate in community events
10. Perform annual evaluation and updates

11. Comply with DEQ notification of PCB discovery and annual reporting requirements

Implementation Timeline

Year 1: Develop materials, website updates, training initiation. Update County owned property inventory and inspect facilities for PCB potential.
Years 2–3: Expand outreach, workshops, and school programs. Create action plans for potential implementation measures identified for County properties including identifying costs and funding sources if required.
Years 4–5: Continue outreach and evaluate effectiveness. Complete action plans.
Ongoing: Annual reporting and adaptive management

Public Comment

Montgomery County held a public comment period from April 9th, 2026 to April 24th, 2026. A notice regarding this TMDL Action Plan was posted in the local newspaper, and social media with a link tothe County's website with a comment space. Comments were accepted through an online form, email, or in person.