Toxic Contaminants Policy and Prevention Outcome

Effective date: 2016-2018

Goal: *Toxic Contaminants*
Outcome: Policy and Prevention
Long term Target: Reduce the impact to human health and resources (Language from goal statement)
2 year Target: Completion of performance targets related to key actions
Partner contributions to 2 year target: As-listed under performance targets

Management Approach 1: Regulatory Approaches

Key Action *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action*	**Partners Responsible** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month and year) for each step.*	**Estimated Project Cost** *Best estimate total cost of project (need)*	**Available funding by Partner**	**Total Available Funding** *Roll up of estimated funding*	**Factors Influencing and/or Gap** *ID related factor or gap in Mgmt. Strat*
1. Continue jurisdictional monitoring programs for PCB occurrence to assess need for new TMDLs and progress related to reducing PCB loads.	Continue statewide fish tissue sampling for PCBs at 125 sites. Not all are in the Susquehanna Drainage. These are rotated to new locations every year.	PA	Statewide	Sampling summer of each year. Lab analysis in fall. Analysis Following spring.	$200,000			
	1) Estuarine probabilistic monitoring which includes a list of PCB congeners in sediment; 2) All mainstem tributaries to Bay listed as impaired. Fish PCB monitoring used on an as needed basis to monitor status; 3) TMDL source investigation studies included where PCB TMDL being developed. Includes sediment monitoring	VA	1) Virginia estuarine tributaries. 2) Where-ever needed (funds for fish monitoring have been reduced). 3) Tidal James River and tributaries, Elizabeth River and tributaries	1) on-going 2) fish monitoring as needed to update data sets. 3) 2017	1) $10K annually 2) $100K annually 3) $25-50K	1) $10K annually 2) $100K annually 3) $25-50K		

Commented [WD1]: JURISDICTIONS: Please provide brief descriptions of current monitoring programs/activities in place for PCBs.

	and low level water column samples.							
2. Continue TMDL implementation utilizing to the extent possible the outputs of this strategy including data compilations, results of enhanced monitoring, guidance documents and local-level input	1) Potomac River PCB implementation - includes point sources and MS4s. Point sources that exceed WLAs will submit PMPs. 2) Tidal James/Elizabeth Rivers – point sources that have not screened effluents using the low level method will be required to do so. Facilities that have screened their effluents and exceed their WLA will be required to submit PMPs.	VA	1) Virginia's embayments in the Potomac River. 2) Tidal James/Elizabeth Rivers and applicable tributaries	1) On-going 2) On-going once TMDL is completed	1) Unknown 2) Unknown			
3. Develop guidance on integration of the various programs addressing toxics to reduce inconsistencies in analytical methods, target thresholds, and investigation and remediation approaches (e.g. extent to which risk assessment requirements under contaminated site regulations evaluate potential carcinogenic effects from fish consumption by comparing ambient surface water concentrations of PCBs with human health criterion used in site cleanups).								

Commented [WD2]: JURISDICTIONS: Please provide brief description of anticipated TMDL implementation activities for the 2016-18 timeframe.

Commented [WD3]: ALL TCW: Please provide suggested first steps for developing guidance document on integrating various toxic reduction efforts.

4. Determine consistent implementation measures to use throughout the Bay watershed for tracking TMDL development and implementation progress.	Maps will be developed to track locations where PCB TMDLs are active, under development, and needed.							
5. Determine whether the jurisdictions compile existing PCB outfall monitoring data for NPDES dischargers and assist with development of systems to compile all available information from governmental and academic organizations. This inventory will help determine whether there is a need for additional monitoring requirement to support TMDL development and implementation.	Reasonable potential analysis during permit reviews includes PCBs	PA	Statewide	No specified time. New permits and as permit renewals come due.				
	Virginia has an Access Database used to store PCB data obtained from a wide array of matrices (sediment, water, effluent, etc.). The database structure, obtained from DRBC, was designed specific to storing data analyzed and reported using method 1668 including 209 PCB congeners (aka DRBC protocol).	VA	Statewide	NA				
6. EPA conducts an on-going National-scale Air Toxics Assessments (NATA). The 2011 NATA will be reviewed upon release to identify the sources of and exposures to air toxics, including PCBs, within the Chesapeake Bay watershed.								
7. Assess the information that is available and forthcoming (e.g., the characterization of								

Commented [WD4]: JURISDICTIONS: Please indicate whether you have a database on PCB outfall monitoring or if not, some partners who may have some of that data

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Anacostia river sediments by DC Department of Environment) that describes the most highly contaminated in-stream sediments in the watershed to engage the jurisdictions and federal regulators to explore the feasibility of additional remedial actions such as capping and/or dredging.								
8. The EPA Region 3 HSCD Site Assessment program will continue to track sites that are being evaluated in the Chesapeake Bay Watershed. Additionally, a GIS desktop tool is being developed to assist HSCD in identifying potential land sources of contamination in the watershed. This project is not limited to PCBs, but any type of contamination that could be migrating from CERCLA sites and affecting the watershed. The GIS tool will help to identify potential CERCLA sites and their proximity to environmentally sensitive areas and receptors to better focus on priority site evaluations. The use of EJ SCREEN will be evaluated to identify the location of such sites in areas with diverse populations.								
9. The HSCD Site Assessment Program will conduct work								

Commented [WD6]: D.C. partners: Please provide some recommended next steps.

Commented [WD7]: EPA HSCD: Please provide some more details on the steps to accomplish these projects.

share meetings with our State counterparts once per year to determine who will be the lead agency for further investigation of any potential PCBs sites that are on the active sites list.								
10. HSCD and TCW will continue to evaluate sites to identify industries or processes that used PCBs. Once this list is generated, the CERCLA, Brownfields, and RCRA programs can better focus resources on identifying and investigating these types of sites. As significant sources of PCBs, or other contaminants that are migrating into the watershed from contaminated land sources are discovered, HSCD will share this information as part of the progress monitoring of this strategy. Additionally, if there are potential land sources that other programs have found, HSCD can investigate those potential sources under the appropriate authority.								
11. The EPA R3 NPDES Permits Branch will continue to address PCBs through the CWA framework. Where waters have been identified as impaired and a TMDL has been established creating WLA for point sources, the NPDES Permitting program will ensure that permits are	This Key Action can be broken out into multiple performance targets.							

Commented [WD8]: EPA HSCD: Please provide suggested steps for identifying potential industries and processes that use PCBs. Is a program already in place?

consistent with the TMDL. The NPDES Permitting Program will draft and review permits with a focus on ensuring that PCB WLAs are clear and enforceable. The NPDES Enforcement Program, through state oversight and its independent compliance monitoring and enforcement authorities, will ensure that permit requirements are met. If a permittee is in non-compliance with its compliance obligations, EPA will take timely and appropriate action, including exercising its enforcement authority, to ensure that the permittee returns to compliance in an expeditious manner.								
12. The EPA R3 Land and Chemicals (LCD) Toxics Program Branch will continue to ensure compliance with PCB TSCA regulations through its PCB inspection and enforcement program. Inspections will be targeted based on potential for releases, cumulative burden on EJ communities, or permitting. The R3 Toxics Program Branch will also responds to on tips/complaints that involve potential for illegal disposal and significant risk.								
13. The EPA R3 LCD Office of Materials Management will								

Commented [WD9]: EPA LCD: Please provide a brief description of PCB inspection and enforcement program in the context of how it may help to achieve this key action.

continue to partner with the Maryland Department of Environment to oversee the PCB clean up at the Lockheed Martin plant located in Middle River, Maryland. The Middle River facility, which is located on Cowpen Creek, is considered to be a major contributor to PCBs in the Bay. Phase 2 of the clean-up is commencing.								
Management Approach 2: Education and Awareness								
Key Action *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action*	**Partners Responsible** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month and year) for each step.*	**Estimated Project Cost** *Best estimate total cost of project (need)*	**Available funding by Partner**	**Total Available Funding** *Roll up of estimated funding*	**Factors Influencing and/or Gap** *ID related factor or gap in Mgmt. Strat*
1. Develop PMP guidance document for the control and reduction of PCBs in NPDES regulated stormwater and wastewater including an inventory of stormwater BMP options. This document would provide guidance to all Bay jurisdictions in implementing PCB load reductions established for dischargers through TMDL development while recognizing the need for flexibility in PMP design. Develop guidance for unregulated sources of PCBs								

Commented [WD10]: EPA LCD and MDE: Please elaborate on next steps for the cleanup that may fall within the 16-18 timeframe.

for use in developing implementation plans under TMDLs.								
2. Working with local government and non-profit organizations, the TCW will inform the public regarding risks from consuming contaminated fish by developing communications materials and corresponding procedures for their dissemination throughout the targeted communities.								
3. Compile education materials regarding existing procedures and best practices for containment and prevention of release of PCBs.								
Management Approach 3: Voluntary Programs								
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4. Coordinate a voluntary action program to reduce transformers and other PCB containing equipment (e.g., fluorescent light ballasts). Include those classified as PCB free (less than 50 ppm) Provide to program participants information on remediating PCB contamination on-site								

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from historical releases of these transformers and use EPA's EJ SCREEN tool to help identify where such equipment is located in areas with diverse populations.								
5.								

Management Approach 4: Science

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1. Support research on cost-effective tools for track-down studies and provide a mechanism for municipalities to share information on lessons learned from PMP development and implementation strategies and methods for documenting and sharing the information.								
2. Identify barriers and opportunities related to more frequent use of EPA 1668 for contaminated sites, wastewater and regulated and unregulated stormwater dischargers as a screening tool (as is underway in VA) or for a targeted subset of permittees. This effort could also be								

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Commented [WD13]: All TCW: Please provide any information you may have on projects currently underway that address these science priority items, or the first steps towards beginning those studies.

targeted to industrial stormwater permittees with SIC classifications that indicate the facility has the potential for PCB contamination on site from historical use or current operation or disposal of PCB containing materials.								
3. Encourage use of the high-sensitivity congener-based methods to analyze PCBs to ensure that PCB sources are being characterized accurately when such characterization can help with source identification								
4. A project is underway to determine the relative amount of PCB reduction that might occur across the range of BMPs implemented for the Chesapeake Bay nutrient and sediment TMDL. The BMPs will be cross-correlated with contaminant pathways and their association with land use and industrial sources (e.g., urban stormwater, agriculture, landfills, dredged material disposal facilities, hazardous waste sites, and industrial operations). The study will assess and explain the most beneficial management actions that could leverage current TMDLs and watershed implementation plans (WIPs) to achieve multiple benefits for	CSN will provide further details.							

nutrient, sediment, and toxic contaminant reductions.								
5. Review the 2015 NATA report to determine the need for further investigation of atmospheric sources of PCBs, characterization of PCB concentrations in atmospheric deposition to the watershed and Bay, and determine the significance of these sources for bioaccumulation in fish. Homolog distribution profiles for PCBs in atmospheric deposition could be evaluated to determine whether mid-weight congeners are present at levels that significantly contribute to bioaccumulation in fish.								