Summary of Activity Types in 3/16/2015 Draft Management Strategy

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| Activity Category | Management Approach Activity |
| Regulatory | |
| EPA TMDL Support | * If opportunities exist for any multi-jurisdictional PCB TMDLs, provide organizational and technical assistance. * Provide technical support to understand whether PCB impairments could be addressed through a TMDL alternative. TMDL alternatives are a new approach that have been given to the states through the long-term version for the 303(d) program and which allows for addressing an impairment without necessarily developing a TMDL. This approach may be valuable in waterbodies where there are not very many permitted sources. * Encourage thoughtful consideration of TMDL endpoints. In particular, determine whether there is inconsistency in how the ambient water quality standard or the fish consumption values are used. * Investigate whether risk assessment requirements under contaminated site regulations to evaluate potential carcinogenic effects from fish consumption by comparing ambient surface water concentrations of PCBs with human health criterion. |
| Enhance TMDL Progress Monitoring | * Coordinate with the states in conducting consistent implementation measures throughout the Bay watershed. |
| Data Compilation | * Develop inventory of existing PCB outfall monitoring data for NPDES regulated stormwater dischargers and compile all available information from governmental and academic organizations. This inventory will demonstrate the widespread extent of PCB contamination in stormwater and the need for a monitoring requirement to support TMDL development and implementation. * Compile data on the locations and scale of electrical equipment with less than 50 ppm PCBs. * EPA conducts an on-going National-scale Air Toxics Assessments (NATA). The 2005 NATA included PCBs as a pollutant. However, PCBs were not a risk driver in Region 3 in 2005. The 2011 NATA is expected to be released during summer 2015 and a review of this newer data will be completed to identify areas of concern in the Chesapeake Bay watershed. * Assess the information that is available and forthcoming (e.g., the characterization of Anacostia river sediments by DC Department of Environment) that describes the most highly contaminated in-stream sediments in the watershed and to engage the jurisdictions and federal regulators in exploring the feasibility of additional remedial actions such as capping and/or dredging. * Develop inventory of existing contaminated site PCB concentration data in all environmental media and compile all available information from governmental and academic organizations. This inventory will demonstrate the widespread extent of PCB contamination in contaminated sites and the need for a high resolution monitoring requirement to support TMDL development and implementation. * The EPA Region 3 HSCD Site Assessment program is currently working on a GIS project to identify potential land sources of contamination along the Elizabeth and James Rivers. This project is not limited to PCBs, but any potential source of contamination along these rivers. Currently, GIS maps have been made that show locations of all CERCLA and RCRA sites in the area in addition to many layers of environmental data and potential receptors that will help to focus on priority site evaluations. |
| Permits and Enforcement | * 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 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 these compliance limits 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. |
| Drinking Water Source Protection | * Identify opportunities for improved communication between the SDWA delegated authorities and the public water supply utilities and any entity that has located an upstream source of PCBs or is conducting any type of activity (e.g., dredging) which could impact a public water supply. This effort would aid in reevaluating the monitoring frequency at the public water supply and preventing impacts to drinking water supplies. |
| Education and Awareness | |
| Guidance Development | * Develop PMP guidance document for the control and reduction of PCBs in unregulated and NPDES regulated stormwater including an inventory of 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. * Encourage EPA to provide guidance on integration of the various programs addressing toxics to reduce inconsistencies in analytical methods, target thresholds, and investigation and remediation approaches. |
| Education and Awareness Activities | * Coordinate educational workshops to provide public and regulated stormwater facilities owners with knowledge regarding human health impacts from PCBs, existing sources of PCBs in the environment, and actions that can be taken to eliminate these sources preventing the contribution of PCBs within unregulated and NPDES regulated stormwater * The TCW will conduct a workshop on sediment remediation technologies to provide the latest information on ongoing remediation activities in the watershed, recent developments in remediation options, and the costs associated with remediation. * Working with local government and non-profit organizations, the TCW will develop communications materials and corresponding procedures for their dissemination throughout the targeted communities. * The TCW will also organize, through the assistance and guidance of PCBs experts and academic researchers, several training workshops for local government and non-profit employees to gain technical capacity for the monitoring and investigation of PCBs sources within their respective jurisdictions. The workshop will present several different approaches to source-tracking PCBs, including consideration of various factors (e.g. varying land use; financial resources; stormwater infrastructure, etc.). The workshops will present best practices for conducting chemical and biological source tracking of watershed PCBs sources, as well as best practices for conducting historical (e.g. what public and private records to review, how to access those records, etc.) and community-participatory research (i.e. survey community members for knowledge about current and historic formal/informal dumping sites that could be a source of PCBs contamination and pursuing/promoting/facilitating clean-up of vacant/under-utilized former industrial sites). |
| Voluntary | |
| Voluntary Programs | * Coordinate a voluntary action program to remove all transformers containing PCBs including those classified as PCB free (less than 50 ppm) from operation and remediate PCB contamination on-site from historical releases of these transformers. This program could also be expanded to include additional PCB containing equipment (e.g., fluorescent light ballasts). * The TCW will work with local non-profits to explore the use of volunteers to support the work of PCBs source-tracking, identifying the best opportunities for volunteers to receive technical training to support PCBs field sampling activities (e.g. volunteer MS4 outfall sampling programs such as Blue Water Baltimore’s Outfall Screening Blitz) and community-participatory research into local environmental history. |
| Science | |
| Research | * Conduct research initiative to investigate whether construction activities associated with the demolition/remodeling of buildings PCB containing materials and disturbance of contaminated soils is a source of PCBs in unregulated and NPDES regulated stormwater. * Conduct research initiative to investigate whether land application of biosolids in commercial and agricultural practices is a source of PCBs in unregulated and NPDES regulated stormwater. * Conduct research initiative to investigate whether land application of dredged material from the maintenance of stormwater BMPs is a source of PCBs in unregulated and NPDES regulated stormwater. * Conduct research initiative to investigate the PCB removal effectiveness of stormwater BMPs that are designed to remove sediments and nutrients. Use the findings to enhance BMP scenario tools to allow analysis of multiple pollutant reduction benefits. * 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. A trackdown workshop in addition to a dynamic database that is voluntarily updated by participating municipalities as new information becomes available would be useful. * Conduct research initiative to investigate atmospheric sources of PCBs, characterize PCB concentrations in atmospheric deposition to the watershed and Bay, and determine the significance of these sources for bioaccumulation in fish. As a part of this study, homolog distribution profiles for PCBs in atmospheric deposition would be evaluated to determine whether mid-weight congeners are present at levels that significantly contribute to bioaccumulation in fish. * Smaller combustion sources, such as residential wood stoves, fireplaces and backyard trash burning, by themselves, may not have any measurable impacts on the Chesapeake Bay. However, the sheer number of them, combined with their poor dispersion characteristics, might make these sources, when aggregated, a measureable source of deposition to the Bay or to smaller sub-watersheds. An evaluation of these sources in the Chesapeake Bay watershed could be considered as part of a future source track-down study. * 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, which will also establish opportunities to reduce the volume of sediment entering surface waters. The BMPs will be cross-correlated with contaminant loading mechanisms 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 nutrient, sediment, and toxic contaminant reductions. |
| PCB Monitoring | * Encourage use of method 1668 to analyze PCBs as it is the most sensitive method. This would ensure that PCB sources are being characterized accurately. * Assess the feasibility of establishing more frequent permit requirement for NPDES regulated stormwater dischargers (as is underway in VA), or a targeted subset of permittees, to monitor outfalls and apply high resolution congener based PCB analytical methods such as EPA Method 1668 either as a general requirement or as the result of targeted requirements. This requirement would also include 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. |
| Inadvertent Production | * Explore opportunities to reduce the inadvertent manufacture of PCBs through the implementation of Pollution Prevention measures at applicable manufacturers. Review Environmental Council of States resolution on PCBs for additional opportunities to reduce the inadvertent manufacture of PCBs. |