|  |  |
| --- | --- |
| **Science** | |
| Improved Information for Reduction Strategy | * . |
| PCB Monitoring |  |
| Inadvertent Production  Should this be retained? | * **Explore opportunities to reduce the inadvertent manufacture of PCBs** through the implementation of pollution prevention measures in applicable industries. Review Environmental Council of States resolution on PCBs for additional opportunities to reduce the inadvertent manufacture of PCBs. |
| Identify Sources | * Support enhancement of available **information on 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 literature search to investigate **whether land application of biosolids in commercial and agricultural practices is a pathway for PCBs** in unregulated and NPDES regulated stormwater. Based on results, determine whether additional research is needed. * 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. Based on results, determine whether additional research is needed. * 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. * **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. * Conduct literature search to **evaluate the contribution of smaller combustion sources** to PCB loads in the watershed. Example sources include residential wood stoves, fireplaces, oil burners that use recycled oil and backyard trash burning. 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 informative as part of a future source track-down study. * High-volume storm flows are being assessed to measure sediment bound PCBs and their contribution to overall loading in several branches of the Anacostia River. |
| BMP Effectiveness | * 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 nutrient, sediment, and toxic contaminant reductions * Multiple projects underway to assess the effectiveness of specific BMPs in the removal of PCBs, including dry ponds, bioretention. * Project underway to assess the enhancement of PCB degradation in stormwater controls, including detention basins (e.g., enhanced media, and biofilm coated activated carbon). |
| Status and Change in Environmental Conditions | * **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. * **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 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. * As monitoring and implementation plans advance by jurisdictions to comply with local TMDLs, the data available will increase considerably and can be inventoried and assessed for status or trends. These data can be used to update the story map and any delistings that occur. |