

[Mountain Run \(Culpeper\) PCBs TMDL](#)

Public Meeting #1 January 13, 2021

Public Comment Period through February 16, 2021

Public Comments Received and DEQ Response

Public Comment Received

Andrew Orlans

Marshall, Fauquier County

1/13/2021

I was wondering, as Rick [*sic*] mentioned how expensive it is to do a lot of sampling, and his computer modeling software and testing equipment that can identify 190 different toxins must also be quite costly, could you please tell me 1) how much money is being spent on all these studies and sampling? 2) How much money is spent on mitigation efforts? 3). How much more money would you need to adequately investigate and bring enforcement action against the worst offenders? 4) Why is it that some of the worst offenders (e.g. the railroad maintenance yards) have been "grandfathered" into the status of accepted polluters? Has there been any attempt to end this legislative license to emit toxic substances into Virginia State waterways?

DEQ Response

1) Each PCB water and sediment sample costs \$675. This cost includes testing via EPA Method 1668, which tests for all 209 PCB compounds within each sample. Computer modeling and TMDL development typically cost approximately \$50,000 to \$100,000, depending on the size and complexity of the TMDL watershed.

2) & 3)

Because this project is ongoing and the PCBs sources have not been identified, the actions needed to reduce PCBs sources is unknown at this point. The TMDL program does not establish new authorities for DEQ; rather, DEQ implements the TMDL provisions through current and existing programs. If this TMDL study indicates that permitted discharges include elevated levels of PCBs, DEQ will require corrective actions (such as pollutant minimization plans) through the [applicable permitting program](#). Enforcement actions are applicable only for specific activities that do not meet regulatory requirements (e.g., permit requirements are not met, there is an unauthorized/unpermitted discharge, etc.). There are state programs (such as the [Voluntary Remediation Program](#) and the [Brownfields Program](#)) as well as federal programs that may be applicable for non-regulatory sources. The Commonwealth of Virginia does not bear the cost of mitigation when PCBs are found on private property; instead, the property owner is responsible for mitigation costs. Mitigation costs are variable and site-specific, depending on the magnitude of the contamination. After TMDL development, a [TMDL implementation plan](#) would further characterize PCBs sources and identify potential sources of funding for reducing non-regulatory sources. More information about the implementation process is available in the [DEQ presentation from the public meeting](#).

4) The federal [Toxics Substances Control Act](#) (TSCA, 15 U.S.C. §2601 et seq.) was originally promulgated in 1976, and addressed the production, use, and disposal of PCBs. The TSCA was amended in 2016 by the [Frank R. Lautenberg Chemical Safety for the 21st Century Act](#) (Lautenberg Chemical Safety Act); however, the update did not address PCBs topics such as inadvertent PCBs production and transformer/locomotive equipment that have levels of PCBs greater than 50 parts per million. During the [April 8, 2015, Chesapeake](#)

[Mountain Run \(Culpeper\) PCBs TMDL](#)

Public Meeting #1 January 13, 2021

Public Comment Period through February 16, 2021

Public Comments Received and DEQ Response

[Bay Toxic Contaminants Full Workgroup Meeting](#), the Environmental Protection Agency (EPA) provided an update related to the phase out of grandfathered uses of PCBs through old equipment.

The PCBs Total Maximum Daily Load for the Roanoke River Watershed (EPA approved April 9, 2010) included data from rail yards in Roanoke, Virginia, that indicated that rail yards may be contaminated for PCBs. As such, railyards are preliminarily included as potential sources for the Mountain Run PCBs TMDL study; however, the sources and allocations will be determined as TMDL development progresses.



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482

www.deq.virginia.gov

Matthew J. Strickler
Secretary of Natural Resources

David K. Paylor
Director
(804) 698-4000

March 22, 2021

Ryan L. Hendrix

Via Email: rhendrix@pfrwta.com

dick@aqualaw.com

mashworth@aqualaw.com

Response letter to the Virginia Association of Municipal Wastewater Association, Inc. comments on Proposed PCB TMDLs: Lower James & Elizabeth Rivers, Upper James River, Mt. Run

Thank you for your comments during the initial comment periods of the Mountain Run, James, Maury, Jackson River, and tidal James and Elizabeth River PCB TMDL development process. Your comments were reviewed by the Virginia Department of Environmental Quality (DEQ) Central Office Water Planning section. The following document includes your original comments with DEQ responses following the comments.

We appreciate your interest in this TMDL project and look forward to working with you on its development.

Sincerely,

A handwritten signature in blue ink that reads "Mark A. Richards".

Mark A. Richards
TMDL Team Lead
Virginia Department of Environmental Quality
Central Office

cc: Rebecca Shoemaker, NRO
Jennifer Rogers, PRO
Paige Haley, TRO
Will Isenberg, CO

I. TMDL Efforts Should be Matched to the Underlying Standards

As you know, the human health water quality standard for PCBs and the Department of Health's fish consumption criterion are both predicated on long term (lifetime) human consumption. That is, both are calculated in ways that assume a lifetime of exposure to levels of the contaminant that may increase the risk of health impact beyond a defined *de minimis* level. Given this, we see the task of TMDL development as determining conditions (including wasteload allocations and load allocations) that will over a comparable long term reduce the typical or average water column and consumable fish flesh concentrations to levels below the applicable criteria. This point is reflected not only in the calculations that lead to these criteria, but also in the manner in which the water quality standard is expressed. In the case of those human health criteria, the regulation specifies design stream flows for calculating steady state wasteload allocations. Those are the harmonic mean flow for carcinogen contaminants, and the 30Q10 flow for non-carcinogens. 9 VAC 25-260-140.B, fn. 6. In both cases (carcinogens and non-carcinogens) these are essentially long term flow statistics that effectively approximate and implement the intended long term exposure assumptions.

Some of the Department personnel will recall the debate in which the New River TMDL TAC engaged over this issue. The TMDL contractor initially modeled the respective systems and calculated WLA and other reductions to levels at which the modeling projected a scenario in which there were essentially zero instantaneous instream exceedances of either the water column standard or the calculated waterway-specific target concentrations. VAMWA and some of its members argued that this was wrong because of the reasoning addressed above. It was also inconsistent with the methodology used by EPA's contractors in developing the Lower Potomac TMDLs and other TMDLs that VAMWA cited. That error was eventually corrected.

Accordingly, we urge the Department to make sure that the TMDL contractors for these projects carefully coordinate their methodologies with the underlying standards.

DEQ Response: To the extent that is practicable, DEQ will utilize long term exposure factors to account for the human consumption of fish tissue that contains unsafe levels of Polychlorinated Biphenyls (PCBs), a potentially carcinogenic contaminant.

With regard to the PCB study project identified as the James, Maury, Jackson PCB TMDL study, and other on-going studies that includes Lewis Creek in Staunton and Mountain Run near Culpeper, a harmonic mean flow year will be utilized in setting allocations and reductions. For these studies the harmonic mean flow year will be selected within the TMDL segment by comparing each flow year during the 10 year TMDL modeling period to the long term annual harmonic mean flow record. The flow year that most closely resembles the long-term harmonic mean flow will then be selected. This process is consistent with that used in the New River PCB TMDL study.

For the tidal James River watershed, while the harmonic mean flow can be utilized similarly to the free flowing rivers and streams, there are a couple of options that DEQ and VIMS would like to discuss during the Technical Committee Advisory Subcommittee meetings scheduled for March 25th (Piedmont region) and March 30th (Tidewater region). The rationale for not using the long-term harmonic mean flow is based on the concept that the fate and transport dynamics for PCBs

in an estuary depend on resuspension and depositional processes of sediment. Setting allocations to the long-term harmonic mean flow will increase the amount of time it takes to meet the instream TMDL condition as erosion of the bottom sediment will not occur or will be greatly reduced. Conversely, if high (wet) flows are used, a significant portion of the existing PCBs in the sediment will be transported outside the estuary in a nonrealistic manner. VIMS is proposing that the more realistic approach is to use a 3-year flow period that represents high, medium and low flow conditions, where after repeatedly running the model will lead to meeting the TMDL condition more quickly when compared to using the harmonic mean flow. This approach was used for the Baltimore Harbor PCB TMDL in Maryland (MDE, 2011).

Lastly, until DEQ's contractors have run various modeled scenarios used to address the frequency rate of TMDL endpoint exceedance within each segment, it is difficult to know which will be the most applicable approach to use. The scenarios to be considered for the modeled instream PCB concentration at the TMDL boundary area will include the arithmetic mean, the median, the 95% Upper confidence limit, and the 90th percentile (i.e., 10% exceedance rate which is consistent with the fish tissue assessment approach). Recall 9 VAC 25-260-140 does not include a footnote that stipulates a frequency for exceeding the numeric WQC of carcinogenic pollutants. In these instances, the default assumption can be "Not to Exceed."

MDE, 2011. Total Maximum Daily Loads of Polychlorinated Biphenyls in Baltimore Harbor, Curtis Creek/Bay, and Bear Creek Portions of Patapsco River Meshohaline Tidal Chesapeake Bay Segment, Maryland. Maryland Department of the Environment, p 168.

II. The Development of any Target Numbers Should be Limited and Based on the Adopted, Controlling Criteria

What has driven the impaired waters listings and this TMDL process is the VDH fish consumption advisories, based on the VDH 100 parts per billion (ppb) threshold. The Department's adopted 640 pg/1 water quality standard is also relevant. We note from the Department's presentations an apparent focus also on the 18 ppb fish concentration number, which we understand to be considered to correlate with the 640 standard. We note the consistent use of the 18 ppb number on the Department's fish concentration graphs along with VDH 100 ppb number.

We believe that the development of the TMDLs should focus on and use as their ultimate targets the VDH fish concentration number, and not the 18 ppb number; as well as the adopted 640 pg/1 standard. The process should not also focus on the parallel 18 ppb number because VDH is the agency with the responsibility for establishing this threshold and using it in its public health programs, and there should not be conflicting criteria between the sister Commonwealth agencies. The 640 pg/1 number is a proper target because it is a relevant binding regulatory requirement.

Although we recognize the use of the 18 ppb fish concentration number, and in some of these efforts a site-specific water column number (water target concentration) that correlates with the localized fish data, we see these as tools for the TMDL development process, rather than appropriate targets. For these reasons we advocate the use of the 100 ppb and 640 pg/1 values as the ultimate targets, and we believe the TMDL should avoid references to the 18 ppb number or calculated water targets as if they were binding requirements, or reference to these values as ultimate compliance points. If the processes are designed to eventually achieve the VDH number

and allow the removal of the fish consumption advisories, and to achieve consistency with the 640 pg/l water quality standard, that should be defined as the ultimate end point and conclusion to the process.

DEQ Response: Since the establishment of the 640 pg/L Water Quality Criterion (WQC) in Virginia's Water Quality Standards on January 29, 2010, DEQ has applied the same risk-based assumptions to the assessment of fish tissue. As the commenter notes, the 640 pg/L WQC is directly linked to the 18 ppb fish tissue value. Both the WQC and the 18 ppb fish tissue value are derived from the same risk-based equation using Federal Environmental Protection Agency (EPA) guidelines. The WQC is derived from the fish tissue value through the application of a bioconcentration factor in the denominator. As such, the WQC was designed to prevent water column concentrations of PCBs that could ultimately result in the bioconcentration of PCBs in fish tissue at such levels that potential risk to consumers of fish is increased. Moreover, the fish tissue value of 18 ppb is utilized to provide a benchmark of acceptable risk in the fish tissue itself that is consistent with EPA guidelines. Both the 640 pg/L WQC and the 18 ppb fish tissue screening value are protective of the "fishable" component of the general standard 9 VAC 25-260-10 A, which requires that water quality be supportive of "...production of edible and marketable natural resources, e.g., fish and shellfish".

DEQ's fish screening value of 18 ppb and VDH's value of 100 ppb diverge in part because they serve different purposes. VDH consumption advisories seek to mitigate human health risks once a waterbody has become contaminated, whereas DEQ's fish screening value is designed to mitigate the risk of excess contamination in all of Virginia's waters. With the different programmatic intentions in mind, it is important to note that the derivation of VDH's fish tissue value diverges from EPA guidance in that it inserts additional assumptions into the equation. For example, the equation includes a factor that accounts for how long individuals are expected to live in a certain region. While this is an appropriate assumption for the population in general, not all communities can relocate outside the watershed. Specifically, many communities of lower economic means that supplement their diets with fish from state waters do not have the means to relocate. As such, DEQ's role, consistent with EPA guidelines, is to ensure that excess contamination in fish above 18 ppb shall not be exceeded in order to protect all individuals in the population.

Lastly, DEQ acknowledges the impact of fish tissue impairment listings on the regulated community. Although the fish tissue screening value of 18 ppb is directly linked to the WQC, like the VDH value, it is not listed in code. As such, DEQ outlines the process for determining water quality impairments with the 18 ppb threshold value in the Integrated Report Water Quality Assessment Guidance. This guidance is issued every two years with a 30-day comment period, a public meeting, and consistent availability on the agency website. Through this, DEQ provides transparency and opportunity for public comment on the use of the 18 ppb fish tissue threshold for impairment listing decisions.

Based on the reasons described above, DEQ intends to use the 18 ppb fish tissue threshold and 640 pg/L WQC as the dual TMDL endpoints that must be protected in order to meet water quality standards. The fish consumption use for impaired waters can either be restored by the 640 pg/L WQC, or by a site-specific endpoint in cases where the WQC is not protective of the 18 ppb fish tissue threshold.

III. There is a Risk that the Detailed Hydrologic and Risk Analysis Components may be Beyond the Accuracy of the Underlying Data

We always consider in these projects the detailed hydrologic, risk analysis and other technical tasks undertaken to be interesting from a technical and risk management standpoint. However, we are concerned that the precision of these analyses may mask the uncertainties inherent in the process. Some of the factors that we believe contribute to uncertainty and to results that should be considered estimates at best are the known inaccuracy of PCB analytical procedures at part per quadrillion concentrations; variations in fish concentration data; the (because of costs and resources) relatively small fish, water column and sediment data sets that form the factual/data basis of this work; and the substantial uncertainty in the air deposition numbers and the mechanics of the air deposition concept itself.

Accordingly, although we recognize the limitations of resources, we recommend that the final TMDL itself recognize and state these reservations.

DEQ Response: The commenter mentions that there do not appear to be enough sample results, which leads to additional uncertainty in the TMDL development process. While the labor and associated analytical costs inhibit the number of fish and water samples that can be collected within a particular watershed, there were more than adequate fish tissue results to list these watersheds as impaired and to maintain those listings. As related to meeting an adequate number of water and sediment samples, having limited data is a very common observation regardless of the impairment and pollutant associated with TMDL development, and is a main reason for employing the use of a fate and transport model. Lastly, a required element within the TMDL process includes the Margin of Safety, which takes into account uncertainties associated with the model and other aspects of TMDL development.

To ensure valid data are generated for use in these studies, strict quality assurance protocols are followed for field collection of fish and water samples and applied to the analytical procedures. First, it was mistakenly assumed that variations in fish tissue tPCB concentrations are based solely on faulty analytical procedures. Variations in fish PCB concentrations can be due to several factors such as fish size, time of year the samples are collected and whether or not the sample result was part of a composite (i.e., 5-10 fish). Regarding the use of method 1668 for ambient water column and sediment samples, DEQ has now been using this analytical method in Virginia for PCB studies since 2005 and has amassed more than 1,000 statewide ambient water samples. DEQ has complete confidence in the tPCB results due to the adherence of the strict collection and analytical guidelines included within TMDL Guidance Memo No. 09-2001. Guidance for monitoring of point sources for TMDL development using low-level PCB method 1668. DEQ has also competitively selected a laboratory that is capable of routinely meeting the strict analytical guidelines included within the protocol.

Regarding the mechanics of atmospheric deposition, please refer to comment V. below. Recognizing the need to generate better information related to the atmospheric deposition of PCBs, DEQ assembled a team of experts and pursued opportunities to perform such a study during a three-year period beginning in 2011. Unfortunately, these studies were not funded. Alternatively, for TMDL development, it is an accepted practice to use appropriate literature based values in

lieu of actual data for loadings development. This is a common practice for Bacteria TMDL development where literature based loading values are applied for a variety of sources.

Lastly and as applicable, uncertainties will be addressed within the final PCB TMDL reports for each project. This will in part occur within the MOS and by managing the TMDL implementation through staged or adaptive management.

IV. We recommend a Focus on Contaminated Sites Rather than Pass-Through Sources

With rare exceptions Publicly Owned Treatment Facilities are pass-through sources of PCBs, meaning that any PCBs are from the potable water systems that feed the POTWs' domestic sewer system and other customers, and in turn from the surface water and ground water raw water supplies that feed the potable water systems. Although the TMDLs must address POTWS and include WLAs, we believe that a more useful exercise involves the examination and consideration of sites from which there is or may be PCB contaminated runoff beyond background concentrations. The depictions of historic and current contaminated sites within the affected watersheds that are included in the current Department public meeting and TAC presentations illustrate the prevalence of such sites in some of these TMDL projects.

In light of the recognized inadequacy for human health-based water quality efforts of the federal TSCA-based PCB soil cleanup levels, a primary focus on such sites would be a useful and effective approach.

DEQ Response: Whether or not POTWs are sources themselves of PCBs, each POTW is, a point source loading of PCBs, and as such requires a Waste Load Allocation (WLA) as part of the TMDL. This comment is not a TMDL issue, but rather raises an implementation issue regarding VPDES permitting. With that said, for those POTW systems in Virginia that have monitored their influent for PCB concentrations, anecdotal evidence suggests that in most instances there is at least a magnitude difference in the existing load entering the waste treatment facility than from the load that would be expected from a potable water system. In fact, the usual difference in observed concentration between the influent and treated effluent ranges from an 85% to 95% reduction in effluent (DEQ's PCB Data Base), which is indicative of the elevated loadings entering these facilities. Lastly, POTWs with collection systems that are old and have leaky infrastructure would be prone to receiving PCB contamination from the associated commercial and urban land use areas. PCB trackdown studies within the wastewater collection system can be an effective way to determine the origin of the source(s).

As the commenter is aware, an accounting of all known contaminated sites is also included in PCB TMDL study reports, which is expressed in the LA portion of the equation. While specifically addressing how reductions from contaminated sites will be attained is a topic more suited for TMDL implementation, when opportunities do arise to achieve TMDL based reductions from these sites, there is collaboration between staff from DEQ's Water Planning Division and staff from the Land Division. An example of an on-going collaborative effort is taking place within the Lewis Creek PCB TMDL study area in Staunton, Virginia. In this watershed, the operator of a contaminated site is working with DEQ's Voluntary Remediation Program (VRP) toward achieving reductions that are consistent with the impending TMDL. Similar work is occurring in the James, Maury, Jackson River PCB TMDL study area in Richmond. In collaboration with

DEQ's Water Planning Division, DEQ's VRP is working with the developer of a contaminated site to identify opportunities for voluntary remediation of PCBs.

V. The TMDLs Should Fully Consider Atmospheric Deposition

Although we recognize that atmospheric deposition is highly complex and poorly defined, it is also clearly an important factor. We also recognize that atmospheric deposition is probably more an effect of the exchange of PCB loads from soils and surface waters with the atmosphere, than an independent source. As such, the TMDL calculations should consider the reductions in atmospheric loadings and deposition that will certainly occur as PCB loadings in the water column and sediments are slowly reduced through natural processes, further sedimentation, and the correction of the relatively rare active sources of PCBs.

DEQ Response: Atmospheric deposition to land and water and the exchange back to the atmosphere is extremely complex. Atmospheric deposition theoretically occurs both on the land and surface water throughout the watersheds of interest. While the deposition of the dissolved PCB constituent is applied at a steady rate, there is uncertainty with depositional rates associated with different land uses. Studies (Offenburg et al., 1999; Van Ry et al., 2002) have shown a significant depositional gradient can exist between urban/industrial (elevated), commercial and rural areas (lower). A difference in molecular weight PCBs due to re-emission from localized sources between urban (higher molecular) and rural (lower molecular) areas was also identified (Du et. al., 2009).

In the non-tidal watersheds, atmospheric deposition on the water surfaces is modeled as a constantly applied rate of dissolved PCBs deposited evenly across all reaches using the MONTH-DATA block in HSPF. Atmospheric deposition of PCBs on the land surfaces adsorb to soil particles. These soil-attached PCBs enter the stream network during runoff events. PCB loadings from the land surfaces to the stream network are modeled using the loading rate associated with the HPSF wash off potency factor (POTFW), which varies by land uses. HSPF does not account for exchange with the atmosphere.

In the absence of more recent information from the tidal portion of the watershed, there are available atmospheric PCB results from the tidal estuary including the Chesapeake Bay. The measured atmospheric deposition on the watersheds in the Chesapeake Bay ranges from 1.6 to 16.3 $\mu\text{g}/\text{m}^2/\text{year}$ of tPCBs (CBP, 1999). This study estimated a tPCB wet deposition of 1.1 kg/year and a dry aerosol deposition of 1.0 kg/year for the James River below the fall line, which is on the lower end of the deposition rate in the Bay. In general, the atmospheric tPCB deposition rate decreases over the years. Given the water surface area of the James River of $6.81 \times 10^6 \text{ m}^2$, the estimated total atmospheric tPCB deposition rate is 3.08 ($\mu\text{g}/\text{m}^2/\text{year}$). Using the same rate, the estimated deposition rate for the watershed is about 26.41 kg/year. According to the Delaware River watershed study (Totten et al., 2006) an approximate 1% PCB load was discharged to the estuary. VIMS used 3.08 ($\mu\text{g}/\text{m}^2/\text{year}$) loading as a constant deposition rate for the watershed as background deposition. Only a portion of the deposited tPCB will be discharged to the estuary. The estimated runoff is about 2%, which is about 5% of preliminary estimation of the total PCB loading

The rate of 3.08 $\mu\text{g}/\text{m}^2/\text{year}$ will be the deposition rate to the surface of the James River estuary. The James River PCB model is an organic carbon-based model that includes algae particulate

and dissolved carbon sorbed PCBs, and free dissolved PCBs. The dissolved PCB phase, which will be dynamically computed, interacts with the atmosphere by transporting between the James River and the atmosphere. In the regions with the higher water PCB concentrations, PCBs will be modeled as fluxing to the atmosphere. Total PCB gaseous concentrations in Baltimore Harbor region varied seasonally, ranging from 67 to 1400 pg/m³ with a mean concentration of 330 pg/m³ (0.3 pg/l) (Bamford et al., 2002), which is much lower than the mean water column concentration (3,960 pg/l) from the Baltimore Harbor (Shen et al., 2012). The mean and median tPCB concentrations from the tidal James River watershed are 15,560 and 755 pg/l, respectively. The mean gaseous concentration of 0.3 pg/l can reasonably be applied to the tidal James River model. This also suggests that tPCBs will be transported to the atmosphere given high mean tPCB concentration in the James River.

Bamford, H.A., F. C. Ko, J.E. Baker. 2002a. Seasonal and Annual Air-Water Exchange of Polychlorinated Biphenyls across Baltimore Harbor and the Northern Chesapeake Bay. *Environmental Science & Technology*. 2002, 36, 4245-4262.

Chesapeake Bay Program (CBP). 1999. Chesapeake Bay Basin Toxics Loading and Release Inventory. U.S. Environmental Protection Agency. Chesapeake Bay Program, Annapolis, MD. EPA903-R99-006.

Du, S; Wall, SJ; Cacia, D; Rodenburg, LA. 2009. Passive Air Sampling for Polychlorinated Biphenyls in the Philadelphia, USA Metropolitan Area. *Environ. Sci. Technol.* 2009, 43, 1287-1292.

Offenberg., J.H., J.E. Baker. 1999. Influence of Baltimore's Urban Atmosphere on Organic Contaminants over the Northern Chesapeake Bay. *Journal of the Air & Waste Management Association*. 1999, 49, 959-965.

Shen, J., B. Hong, L. Schugam, Y. Zhao, J. White. 2012. Modeling of Polychlorinated Biphenyls (PCBs) in the Baltimore Harbor. *Ecological Modelling*. 242. 54-68.

Totten, L., Panangadan, M., Eisenreich, S.J., Cavallo, G., Fikslin, T., 2006. Direct and indirect atmospheric deposition of PCBs to the Delaware River watershed. *Environmental Science and Technology* 40, 2171–2176.

Van Ry, D. A.; Gigliotti, C. L.; Glenn, T. R. IV; Nelson, E. D.; Totten, L. A.; Eisenreich, S. J. 2002. Wet Deposition of Polychlorinated Biphenyls in Urban and Background Areas of the Mid-Atlantic States. *Environ. Sci. Technol.* 2002, 36, 3201-3209.

VI. The TMDLs Should Include an Implementation Discussion

Although Implementation Plans are not part of these TMDL projects, each TMDL should include an implementation discussion. Consistent with our comments above, that discussion should focus on any identified actual active sources of PCBs, including in appropriate cases the multiple known historic or current contaminated sites in the watersheds. Consistent with the Department's past and current practice, the implementation discussion should refer to the use of Pollutant

Minimization Plans for POTWs discharging PCBs above the applicable WLAs, and leading ultimately to routine monitoring in conjunction with POTW pretreatment programs, rather than permanent separate PMP efforts.

DEQ Response: For PCB TMDL studies, it has been a common practice for DEQ to include a chapter in the report that addresses both TMDL Implementation and Reasonable Assurance. A good example includes Chapter 7 from the New River PCB TMDL (VT-BSE, 2018). The information included in the chapter provides the required Reasonable Assurance element necessary to attain EPA's approval, as well as information that highlights both the implementation of PCB loadings from point sources (WLAs) and non-point sources (LAs). For the impending PCB TMDLs as applicable, DEQ will consider including additional but general information that emphasizes contaminated sites within the LA section of this chapter.

As the commenter noted, Implementation Plans are not part of these TMDL projects. As such, DEQ will not address site-specific Pollutant Minimization Plans (PMPs) within the TMDL study report. Specific detail to address this topic is more appropriate within PMP guidance that is currently under development.

VT-BSE, 2018. PCB Total Maximum Daily Load Development for Reed Creek, the Upper New River, Peak Creek, Walker Creek, Stony Creek, and the Lower New River. VT-BSE Document No. 2018-0001, July 2018.