

**RECOMMENDED OUTLINE FOR
POLLUTION MINIMIZATION PLANS FOR POLYCHLORINATED BIPHENYLS
IN THE DELAWARE ESTUARY**

INDUSTRIAL DISCHARGERS

DISCLAIMER

The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures may affect regulatory requirements.

The policies and procedures herein are not an adjudication or a regulation, and there is no intent on the part of DRBC to give this guidance document that weight or deference. The DRBC reserves the right to deviate from the policies and procedures set forth herein if circumstances warrant.

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1 Good Faith Commitment

Rule Section 4.30.9.E.1

This section includes a signed and dated statement by the highest ranking official having day-to-day managerial and operational responsibilities for the facility, expressing the company's good faith commitment to reducing discharges of the target pollutant through the PMP process. This section may include a description of specific resources to be allocated to the pollution minimization effort and delegation of specific authorities to a designated individual, where appropriate.

_____ Name 1 Job Title	_____ date
_____ Name 2 Job Title	_____ date
_____ Name 3 Job Title	_____ date

2 Discharger / Facility Contact

Rule Section 4.30.9.E.2

This section includes the name and contact information for an individual who will serve as the facility contact for information concerning the PMP. The contact should be both knowledgeable of the effort and authorized to direct and implement specific pollutant minimization activities.

To convey some sense of the organizational structure and resources that will be directed toward pollutant minimization, this section may also include a flow chart showing the lines of responsibility and/or communication for the pollutant minimization project team and a table outlining roles and responsibilities of key project individuals.

3 Facility Description

Rule Section 4.30.9.E.3

This section provides a description of the facility relevant to pollutant minimization, including the following:

- company and facility name and address, including any parent companies or on-site subsidiaries;
- raw materials and industrial processes used, and products generated that either contain the pollutant or that may be related to the generation or release of the pollutant;
- for facilities accepting non-facility wastes, a description of all such wastes;
- a map showing the facility location and the locations of all point and nonpoint source releases from the facility or site and a description of such releases;
- all local, state and federal discharge permits and permit numbers for permits that relate to releases of the pollutant; and
- receiving stream for all discharges, including River Mile in instances where the receiving stream is the main stem Delaware River (see <http://www.nj.gov/drbc/mileage.htm>).

4 Known Sources

Rule Section 4.30.9.E.4

This section includes descriptions of PCB sources known to be contributing to the facility's overall PCB load to the Delaware Estuary, and probable sources where releases are likely but not confirmed. Known and probable sources include all materials, equipment, processes, soil areas or sediment areas within a facility, site, or service area, from which the pollutant is released directly or indirectly into a wastewater treatment system, sewage collection system, stormwater collection system, stream or river. This section should include a description of the pathways if known and a site map or collection system map showing location of known sources and pathways.

Given the TMDL target, known and probable sources will likely include PCBs at concentrations much lower than existing regulatory thresholds. Facilities should not limit known and probable sources to high concentration matrices. Known and probable sources could include, but would not necessarily be limited to, the following:

- Use, storage, or processing of transformers;
- Use, storage, or processing of hydraulic equipment;
- Use, storage, or processing of raw materials or finished products, including bulk liquids;
- Process water sources;
- Sediment in piping systems still impacted by legacy PCB use or discharge; and

- Spills, leaks, and remedial activities (current or legacy) potentially contributing PCB load.

This section should not include a detailed discussion of *each and every occurrence of industrial equipment and materials*, but rather should be a concise focused description of likely PCB sources. This section should also include an estimate of the pollutant mass present, if known.

5 Potential Sources

Rule Sections 4.30.9.E.5 and 4.30.9.E.6

This section describes any material, equipment, process, soil area, sediment area or facility on the site known to contain or generate the pollutant, but not deemed a source because it is not known to be releasing the pollutant or because no pathway to surface water or groundwater has been identified. This section should also include an estimate of the pollutant mass present, if known.

This section may not be applicable to every facility. Specifically, where sources and a remedial course of action are well established, investigation for unknown sources may not apply.

6 Previous Minimization Activities

Rule Section 4.30.9.E.7

This section describes previous, ongoing or planned pollutant minimization activities underway or to be undertaken voluntarily or in accordance with a federal or state requirement for the pollutant. This section may include PCB pollution minimization activities completed or initiated after the initial TMDL PCB sampling performed in response to DRBC Resolution 2000-13, which may potentially result in a facility PCB load which is currently lower than the load estimated from the TMDL data. This section should include the level of pollutant reduction targeted, the level of pollutant reduction attained, measures completed, measures underway, and the schedule for planned activities. This section will allow facilities to highlight PCB reduction efforts already completed.

7 Pollutant Minimization Measures

Rule Section 4.30.9.E.9

This section includes descriptions of measures to be taken to achieve the maximum practicable reduction of discharges to the air, soil or water.

7.1 Actions to Minimize Known and Probable Sources

Minimization activities could include, but would not necessarily be limited to, the following:

- Removal of PCB containing material, including residuals, stored on-site;
- Engineering controls (such as caps and containment dikes);
- Fluid changeout;
- Modifications to industrial processes that include or result in PCBs;
- Substitutions of or modifications to raw or finished materials;
- Modifications to material handling;
- Discharge stream separation so as to isolate a stream containing PCBs;
- Discharge minimization aimed at overall PCB mass load reduction;
- Add / enhance / modify pre-treatment;
- Remedial activities for spills and leaks (current or legacy). Include the facility spill control plan; and
- Piping system cleanout; and
- Routinely inspect the facility, especially during storm events where stormwater is a major contributor of PCBs to ensure implementation of BMPs.

7.2 Actions to Identify and Control Potential Sources

This section describes the activities proposed for tracking down and identifying potential sources contributing to the facility's PCB load to the Delaware Estuary or its tributaries. This section should include a description of any sampling and analytical methods (including detection limits and data quality objectives) to be used for trackdown and identification.

For industrial dischargers, the strategy for identifying potential sources may include, but not be limited to, investigations of industrial processes or equipment similar to those known to have generated the pollutant elsewhere; investigation of historic activities on the site; or investigation of possible soil or sediment contamination or stormwater management system contamination as a result of historic or ongoing activities.

8 Source Prioritization

Rule Section 4.30.9.E.10

This section includes prioritization of known and potential sources, either individually or in categories, from most to least significant, on the basis of available information. Factors to be considered in prioritizing known sources include, but are not limited to, available information on pollutant mass (or volume of the discharge and concentration of the pollutant), and likelihood of release into Basin waters. Factors to be considered in prioritizing potential sources include, but are not limited to, current or past industrial

activity, presence and type of equipment containing the pollutant, waste management activities and overall condition of the site and facilities.

9 Key Dates

Rule Section 4.30.9.E.11

This section should include an estimated schedule each of the minimization activities described above. The overall schedule should include target start and completion dates (if known). This section could be in the form of a matrix, calendar, or Gantt chart.

This section should also identify PMP activities performed on an on-going or as-needed basis, even if these activities are not amenable to scheduling with specific start and end dates.

10 Measuring, Demonstrating, and Reporting Progress

Rule Sections 4.30.9.E.12 and 4.30.9.E.13

The key factor for determining whether or not the pollution minimization approach is successful will be the measurement and demonstration of reduced PCB loads over time. This section includes a description of how progress in PCB pollution minimization will be tracked and documented over time. Measuring and demonstrating progress is not limited to end of pipe load reductions but could also include mass and impact reductions from various sources and minimization or elimination of pathways.

10.1 Sampling and Analytical Approaches

At a minimum, direct effluent sampling using Method 1668A once every two years is required. Facilities already performing direct effluent sampling using 1668A for any other reason, such as to satisfy an NPDES or DRBC requirement, may utilize those results to satisfy the PMP requirements. DRBC specific quality control specifications for Method 1668A are available at:

<http://www.state.nj.us/drbc/PCB-Modifications020305.pdf>

For some facilities, analytical uncertainties may mask effluent reductions. In these instances, Method 1668A should be supplemented with alternative approaches to estimating a baseline load and subsequent reductions. Alternative approaches include, but are not limited to, the following:

- Demonstrating concentration reductions in waste streams *prior to* treatment;
- PISCES effluent sampling;
- Estimating the PCB mass removed from site / system;

- Demonstrating reductions in a surrogate parameter such as solids or organic carbon; and
- Reducing effluent volumes (if likely to reduce PCB mass).

10.2 Estimated Baseline Load

The PMP must include an estimate of the facility baseline loading to surface water in units of grams/year. The baseline loading should be the summation of all loads from all facility sources and pathways prior to initiation of pollutant minimization activities.

As described in the previous section, alternative sampling methods may be used to supplement effluent measurements using Method 1668A. If an alternative approach is used, the corresponding baseline load in grams/year and any subsequent reductions must be computed. The PMP should also include a description of how that baseline was calculated. Baseline loads may include estimated loads taking into account a variety of sources and pathways.

10.3 Anticipated Reductions to Baseline Load

This section should include an estimate of the load reductions anticipated from proposed pollutant minimization activities and a description of how the estimate was made.

10.4 Continuing Assessment

Rule Section 4.30.9.F

This section describes the plan for monitoring the actual load on an ongoing periodic basis, and comparing that load to the baseline and the estimated load reductions described in the previous sections.

This section should include confirmation that a report will be submitted 12 months after the submittal of the initial Pollutant Minimization Plan and each following year documenting how elements of the minimization plan were accomplished and comparing baseline and subsequent PCB mass loadings. The annual report should also indicate any changes to the facility's operation, site boundary, service area or waste streams during the preceding year that might affect releases, along with any changes in the project team and lines of responsibility and/or communication.

11 References

(If any)