

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

**MUNICIPAL WASTE WATER TREATMENT PLANTS AND  
PUBLICLY OWNED TREATMENT WORKS**

*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.*

**TABLE OF CONTENTS**

|      |   |   |
|------|---|---|
| 1    | Good Faith Commitment.....  | 1 |
| 2    | Facility Contact .....  | 1 |
| 3    | Facility Description .....  | 2 |
| 4    | Known Sources .....   | 2 |
| 5    | Potential Sources .....   | 3 |
| 6    | Strategy for Identifying Unknown Sources (Trackdown).....             | 3 |
| 7    | Previous Minimization Activities .....                                | 4 |
| 8    | Recommendations for Action Under Other Regulatory Programs .....      | 4 |
| 9    | Pollutant Minimization Measures .....                                 | 4 |
| 9.1  | Actions to Minimize Known and Probable On-Site Sources.....           | 4 |
| 9.2  | Actions to Minimize Known and Probable Collection System Sources..... | 5 |
| 9.3  | Actions to Identify and Control Potential Sources.....                | 5 |
| 10   | Source Prioritization.....  | 5 |
| 11   | Key Dates .....   | 6 |
| 12   | Measuring, Demonstrating, and Reporting Progress .....                | 6 |
| 12.1 | Sampling and Analytical Approaches .....                              | 6 |
| 12.2 | Estimated Baseline Load.....  | 7 |
| 12.3 | Anticipated Reductions to Baseline Load .....                         | 7 |
| 12.4 | Continuing Assessment.....  | 7 |
| 13   | References .....  | 7 |

# 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.

|                              |               |
|------------------------------|---------------|
| _____<br>Name 1<br>Job Title | _____<br>date |
| _____<br>Name 2<br>Job Title | _____<br>date |
| _____<br>Name 3<br>Job Title | _____<br>date |

# 2 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 pollution 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:

- Facility name and address;
- Description and map of the facility's service area;
- Description and map or schematic diagram of the collection system;
- Description of any wastes accepted from outside the collection system (e.g., wastes trucked or transported by rail to the collection system for treatment);
- Map of all point and non-point source releases from the facility or site and description of the nature of such releases;
- All local, state and federal permits and permit numbers for permits that relate to releases of the pollutant;
- 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>); and
- A list of all known industrial users of the collection system and pretreatment permit numbers, if any.

### 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. 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 at the treatment plant 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 legacy sludges;
- Use, storage, or processing of treatment chemicals and additives, such as flocculants, or chemicals formed under high temperature chlorination;
- Use or storage of raw materials or finished products, including bulk liquids;
- 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 on-site PCB sources.

Known and probable sources in the collection system may include, but are not necessarily limited to, the following:

- Indirect dischargers with known or historic PCB discharges;
- Combined sewer areas serving known or historic PCB waste or spill sites;

This section should be a concise focused description of likely collection system PCB sources. This section should include a description of the basis for identification as a known and probable source.

## **5 Potential Sources**

*Rule Section 4.30.9.E.5*

The intent of this section is to provide information regarding caches of PCB material which could potentially impact the collection system in the future. Information in this section may be the result of database searches or outreach activity. Given the complexity associated with tracking every potential source in a collection system, facilities may instead focus on a shorter subset of potential sources with a higher perceived likelihood of impacting the collection system.

Potential sources could include material, equipment, processes, soil areas, sediment areas, or facilities that are part of the collection system or within the service area, known to contain the pollutant, but not deemed a source because no pathway exists. *If known*, provide estimate of the mass of the pollutant present.

## **6 Strategy for Identifying Unknown Sources (Trackdown)**

*Rule Section 4.30.9.E.6*

This section describes activities associated with tracking PCBs from the plant influent back up through the collection system to identify unknown sources. This section should describe proposed, on-going, and completed trackdown studies, including sampling and analytical methodologies. This section should address CSOs and stormwater runoff from PCB-contaminated sites. This section should include a description of the sampling and analytical methods (including detection limits and data quality objectives) to be used for trackdown and identification. This section should also include a plan for using *existing* trackdown results to control sources to the collection system.

In some instances, PCB introduction will be beyond the control of the POTW. However, in instances where the POTW becomes aware of a source beyond their ability to control,

communication with other regulatory authorities is necessary to ensure that appropriate action can be taken (See Section 8).

## **7 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, 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.

## **8 Recommendations for Action Under Other Regulatory Programs**

### *Rule Section 4.30.9.E.8*

This section describes known or potential sources of PCBs to the collection system that are beyond the control of the POTW. Recommendations for remediation activities under other regulatory authorities should be included. This section will help establish communication with other regulatory authorities to ensure that appropriate action can be taken.

## **9 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.

### **9.1 Actions to Minimize Known and Probable On-Site Sources**

This section includes a detailed description of the actions proposed to minimize the impact of known and probable on-site (treatment plant) sources identified in previous sections. Minimization activities could include, but would not necessarily be limited to, the following:

- Removal;
- Engineering controls (such as caps and containment dikes);
- Fluid changeout;
- Substitutions / modifications of raw or finished materials used in the treatment process;
- Modifications to material handling including transport; and
- Remedial activities for spills and leaks (current or legacy).

This section should include an estimated schedule for completion of each of the minimization activities.

## **9.2 Actions to Minimize Known and Probable Collection System Sources**

This section includes a detailed description of the actions proposed to minimize the impact of known and probable collection system sources identified in previous sections. Minimization activities could include, but are not necessarily limited to, the following:

- Indirect Discharge Permit review and amendment;
- Recommendations for improved and upgraded industrial pre-treatment;
- Remedial activities for spills and leaks (current or legacy); and
- Recommendations for remediation by other agencies under other regulatory programs;
- Explore hydraulic controls to minimize PCB mass loads through CSOs.

This section should include an estimated schedule for completion of each of the minimization activities.

## **9.3 Actions to Identify and Control Potential Sources**

This section describes the activities proposed for controlling potential sources contributing to the facility's PCB load to the Delaware Estuary or its tributaries identified as part of trackdown.

# **10 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.

## **11 Key Dates**

*Rule Section 4.30.9.E.11*

This section should include an estimated schedule for completion of each of the minimization activities described above.

This section should include an overall schedule for all proposed *planned* activities included in other portions of this Minimization Plan. The overall schedule should include target start and completion dates. 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.

## **12 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.

### **12.1 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 may 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;
- Demonstrate reductions in a surrogate parameter such as solids or organic carbon; and
- Effluent volume reductions (if likely to reduce PCB mass).

### **12.2 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.

### **12.3 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.

### **12.4 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 annually 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 project team and lines of responsibility and/or communication.

## **13 References**

(If Any)