P2 Reporting

This document is non-regulatory and does not take the place of NPDES permit requirements

Pollutant Minimization Program permit requirements are derived from:

1.) San Francisco Bay Basin Plan (for General & Targeted Programs)
2.) State Implementation Policy (SIP) (for Targeted Programs)
3.) Resolution R2-2003-0096

Two "types" of programs:

1.) **General programs (Basin Plan § 4.13.2.3)**
Pollutants of concern are selected according to local needs. Programs can be general, flexible, and long-term (e.g., inspection prioritization, non-targeted waste discharge analysis, general outreach.)

2.) **Targeted programs (Basin Plan § 4.13.2.4; SIP § 2.4.5)**
Triggered when pollutants of concern with effluent limitations are exceeded in the past year. Programs may include a mitigation or control strategy specific to reducing a particular pollutant (e.g., more comprehensive monitoring in receiving water, biota, or sediments; best management practices; or focused outreach). Targeted programs are like general programs but with tasks more focused on particular pollutants.

Report review:

1. **Obtain overview of various programs**
2. **Ensure that permit requirements are met**

<u>**General Program Reporting Requirements**</u>

Most NPDES permits contain the following requirements for general P2 reporting:

(1) *Brief description of the treatment plant, treatment plant processes, and service area.*

<u>This can include:</u>
- Type of wastewater and treatment (i.e., municipal, secondary treatment)
- Plant processes (i.e., primary clarification, activated sludge basins, chorine contact).
- Service area (i.e., jurisdiction, number of people served)

(2) *Discussion of the current pollutants of concern.*

<u>This can include:</u>
- Identification of pollutants of concern in the service area
- Brief discussion of why pollutants were chosen

(3) *Identification of sources for the pollutants of concern.*

This can include:
- Identification of sources; or
- Discussion on how sources will be identified, if not already

(4) *Identification of tasks to reduce the sources of the pollutants of concern.*

This can include:
- Identification of tasks addressing the pollutants of concern
    - Can be specific to one pollutant or cover multiple pollutants
    - Can be individual tasks (e.g., inspections, collection programs), or regional or national efforts (e.g., BAPPG activities)
- A description of the tasks performed and the results
- If applicable, reasons why tasks don't necessarily cover all pollutants of concern

(5) *Outreach to employees.*

This can include:
- Discussion of tasks to inform employees (e.g., staff trainings, staff meetings) about pollutants of concern, their sources, and pollutant reduction strategies
    - This can be implied when reporting task descriptions (**Requirement 4**) and public outreach programs (**Requirement 6**), but specific acknowledgement of employee outreach clarifies that it is done.
- If applicable, reasons why employee outreach doesn't necessarily cover all pollutants of concern

(6) *Continuation of Public Outreach Program.*

This can include:
- Discussion of outreach done in the previous year and coordination with other agencies if applicable. For example:
    - New or existing community events (e.g., fairs, P2 Week)
    - Outreach to schools and businesses (e.g., tours, lessons during inspections)
    - Residential outreach (e.g., bill inserts, newsletters)
    - General public outreach (e.g., advertisements)
- If applicable, reasons why public outreach doesn't necessarily cover all pollutants of concern

(7) *Discussion of criteria used to measure Pollutant Minimization Program and task effectiveness.*

This can include:
- Identification of evaluation criteria. For example:
    - Amount of waste or pollutants collected (e.g. pounds of pharmaceuticals, gallons of grease as criteria to measure program effectiveness)
    - Number of inspections and violations

- o   Influent monitoring results
- o   Number of outreach activities
- o   Responses from outreach activities
- Hard numbers that reflect evaluation criteria
- If applicable, reasons why evaluation criteria doesn't necessarily cover all pollutants of concern

(8) *Documentation of efforts and progress.*

This can include:
- Summary of all pollution prevention activities and results. For example:
  - o   All tasks in **Requirement 4**
  - o   All outreach activities (**Requirements 5** and **6**)
- Summary or discussion of tasks and results not captured in **Requirements 4**, **5**, and **6**.
  - o   If all activities and results are captured in **Requirements 4**, **5**, and **6**, then this requirement is satisfied (this is true in many cases).

(9) *Evaluation of Pollutant Minimization Program and task effectiveness.*

This can include:
- An evaluation of success in achieving criteria identified for **Requirement 7**. For example:
  - o   Reported numbers (e.g., pounds or gallons of waste collected, monitoring data)
  - o   Description of general responses from outreach events (e.g., outreach attendance, changes in consumer behavior)
- A discussion linking evaluation criteria to evaluation results, and what the results say about program effectiveness (i.e., how the results demonstrate progress).
  - o   The outcome of **Requirement 7** should guide the efforts described for **Requirement 8**, and **Requirement 8** efforts should inform the efforts required for **Requirement 9**.
  - o   Example: Evaluation criteria = number of SSOs related to FOG.
    - Effort = Inspections of food service establishments to prevent FOG entering the sewer system.
    - Evaluation = 3 FOG-related SSOs, down from 4 FOG-related SSOs last year.
- An explanation when no clear link to progress is demonstrated. If applicable, a consideration of potentially more useful or measurable evaluation criteria.

(10) *Identification of specific tasks and time schedules for future efforts.*

This can include:
- New or continuing activities intended for the next year based on the evaluation of the Pollution Prevention Program.

Targeted Program Reporting Requirements

Individual NPDES permits contain the following requirements for targeted P2 reporting:

(a) All Pollutant Minimization Program monitoring results for the previous year;

This can include:
- An attachment of monitoring data (i.e. spreadsheet), or monitoring data integrated in the main body of the report (i.e., in the discussion for **Requirement 2**), for the particular priority pollutant.

(b) List of potential sources of the reportable priority pollutants;

This can include:
- List or brief discussion clearly identifying potential sources.
  - Can be satisfied in discussion for **Requirement 3**.

(c) Summary of all actions undertaken pursuant to the control strategy;

This can include:
- Brief description of control strategy
  - Can be satisfied in discussion for **Requirement 4**.
- Identification of tasks specifically targeted for reducing the priority pollutant pursuant to the control strategy.
  - Can be satisfied in discussion for **Requirement 4**.

(d) A description of actions to be taken in the following year.

This can include:
- New or continuing activities intended for the next year based on the evaluation of the Pollution Prevention Program.
  - Can be satisfied in discussion for **Requirement 10**.

Reporting Features Suggestions

There is not *one* correct way to structure a P2 report. However, the more clearly information is presented, the more streamlined the reporting becomes, and the easier the reports are to evaluate. Below are some reporting features that can help streamline reports.

Logical Structure

P2 reports are an opportunity to showcase P2 program success. This is easier if the P2 report structure is clear and logical.

A table of contents that clearly addresses all content of the report (i.e. **Requirements 1-10** and additional attachments) is helpful, particularly when it sets forth the content in a logical order (i.e. following the order of the requirements; identifying pollutants of concern, identifying tasks to reduce pollutants of concern, evaluating the effectiveness of the tasks, and identifying changes to your program as appropriate based on your program evaluation). A logical report structure maintains the order that information is presented for each pollutant throughout each section (especially true if reports are organized by pollutant).

See pages 9 and 10 for an example.

General Reporting Formats

Tables: Tables are an effective tool in summarizing and presenting information. A table can address several reporting requirements at once, including pollutants of concern reduction tasks, task evaluation criteria, task results, and future goals. Descriptive text to complement the tables can then be more concise and reserved for more detailed information that does not fit in the tables.

American Canyon summarizes pollutants of concern sources (**Requirement 3**), tasks to reduce the pollutants of concern (**Requirement 4**), evaluation criteria (**Requirement 7**), and evaluation results (**Requirement 9**) in one table:

Nickel
Goal: Identify potential nickel sources in the City. Attempt to control and/or eliminate the increasing concentration trend of nickel in the Industrial Influent.

Source	Message	Implementation	Evaluation Criteria	Results
Vehicle Service Facilities	Follow BMPs to minimize Nickel entering the waste stream	Continue permitting and inspection program of vehicle service facilities, mail BMPs to Users	% of facilities permitted, rate of compliance, % of facilities receiving BMPs	• 100% of facilities permitted • 100% compliance • 75% facilities receive BMPs
Machine Shops	Follow BMPs to minimize Nickel entering the waste stream	Issue BMPs to potential Nickel contributors	# of facilities receiving BMPs	• 0% of facilities received BMPs

Las Gallinas Valley Sanitation District summarizes pollutants of concern tasks (**Requirement 3**), pollutants of concern task accomplishments (**Requirement 8**), planned tasks for the following year (**Requirement 10**), evaluation criteria (**Requirement 7**), and evaluation results (**Requirement 9**) in one table:

Pollutant	Goals	2014 Accomplishments	2015 Plans	Evaluation Criteria / Results
Mercury Section 4.B	Facilitate recycling of mercury thermometers and mercury containing materials	1) Continue to recycle mercury thermometers and switches and mercury containing materials 2) Continued exchange program at district office	1) Continue to promote proper mercury disposal and thermometer exchange 2) Continue thermometer exchange at district office	Amount of mercury thermometers exchanged and number of mercury containing devices disposed properly – 247 grams of mercury collected (over 0.54 lbs) and unknown additional mercury in other waste dropped off

Lists: Like tables, lists are an effective tool in summarizing and presenting information concisely.

Dublin San Ramon Services District uses list format to clearly address criteria for identifying pollutants of concern:

> A pollutant of concern (POC) is defined as a substance that exceeds the applicable water quality objectives from the California Toxic Rule (CTR), NPDES permit limits, or the water quality criteria established in the Regional Water Quality Control Board (RWQCB) Basin Plan. The District identifies pollutants of concern:
>
> - By reviewing monitoring data from DSRSD and EBDA influent, effluent, biosolids, and industrial discharges;
> - When they are designated as such by the RWQCB in the District's NPDES permit; or
> - When applicable pollutants are addressed by the Bay Area Pollution Prevention Group (BAPPG).

East Bay Municipal Utility District uses list format to concisely identify program evaluation criteria:

> ## 5.8 Criteria used to Measure the Programs' and Tasks' Effectiveness
>
> EBMUD uses the following criteria to measure the effectiveness of its established P2 programs:
> - Changes in pollutant concentration levels in the District's MWWTP influent
> - Number of people who visit EBMUD's P2 webpages
> - Number of gallons of residential cooking oil collected
> - Number of pounds of unwanted/expired pharmaceuticals collected
> - Number of facilities in compliance with the terms/conditions of their P2 permit

Headings: Headings can be used to help organize report structure. Reports that clearly identify sections of the report (i.e. by pollutant, by requirement) prevent key information from getting lost.

Combining Requirements

Reporting for separate requirements can be combined in a logical manner. For example, reporting for **Requirements 2** and **3** addresses pollutants of concern and can be combined; reporting for **Requirements 4 through 6** address tasks and activities, and can also be combined; and reporting for **Requirements 7 through 10** address evaluating program effectiveness and can be combined.

The Town of Yountville combines pollutants of concern identification (**Requirement 2**) and pollutants of concern sources (**Requirement 3**) in one section of its report, followed by a brief narrative complementing the table:

Pollutant	Concern	Sources
Mercury	Regional pollutant of concern	Dental and medical waste, vehicle service facilities, household hazardous waste, and background

Las Gallinas Valley Sanitation District combines pollutants of concern reduction tasks (**Requirement 4**), employee outreach (**Requirement 5**), public outreach activities (**Requirement 6**), pollutants of concern reduction results (**Requirement 8**), and planned tasks for the following year (**Requirement 10**) in one section of the report, and evaluation criteria (**Requirement 7**) and evaluation results (**Requirement 9**) in another section.

Quantifying Results

Quantifying results translates information into a concise and easily understandable format. Quantities can be used as evaluation criteria to measure program effectiveness. Examples of quantifiable results include (1) outreach message distribution; (2) behavior changes (i.e. increased recycling, less product purchased); (3) frequency of inspections and violations; (4) amount of pollutant collected; (5) reduction trends in influent and effluent; (6) legislative progress as a result of agency collaboration and support.

San Francisco Public Utilities Commission highlights the success of its mercury reduction program by quantifying the amount of mercury collected and kept out of the environment:

Mercury:
- 39,904 fluorescent lamps were collected from municipal operations totaling approximately 2,260 g of mercury.
- 158,478 fluorescent lamps were collected from residential and commercial operations totaling approximately 2,168 g of mercury.

The City of Palo Alto quantifies the effectiveness of its FOG control program:

Evaluation Criteria	2014 Evaluation (number inspected)
Facilities Inspected	121
Inspections	250
Verbal Warnings	49
Warning Letters	1
Notices of Noncompliance	9
Compliance Agreements	0
Percent compliance related to total inspections	75%
Plan Sets Reviewed	51
Number of grease related SSOs	15
Number of grease related SSOs in commercial areas	4

The City of Millbrae structures its report clearly and in a logical order by treating each permit requirement as its own section:

San Francisco Public Utilities Commission structures its report clearly by treating each pollutant of concern as its own section, and addressing each permit requirement under each section: