Fill-in-the-Blank

POLLUTION PREVENTION PLAN

May 2023

POLLUTION PREVENTION PLAN

For

Facility Name: _____

Address: _____

Facility ID number: _____

Facility NAICS: _____

Base Year: _____

This Plan Covers Years: _____

Original Date of Plan: _____

Revision Date (if any): _____

POLLUTION PREVENTION PLAN

TABLE OF CONTENTS

1.0 GENERAL INFORMATION

It is recommended that a narrative description of the facility, its products and any other information pertinent to future pollution prevention planning be included in the introduction to the Plan. The Introduction should also include, as inserts or addendum on replacement pages, a summary of any Plan revisions that may have been made during the year.

2.0 PERSONNEL INFORMATION AND CERTIFICATIONS

Personnel Information

Facility Name:
Facility Phone Number:
Physical Address:

Mailing Address:

Owner / Operator of the Facility:
Name:
Title:
Phone: ( ) -

Highest Ranking Corporate Official at the Facility:
Name:
Title:
Phone: ( ) -

Highest Ranking Corporate Official with Direct Operating Responsibility:
Name:
Title:
Phone: ( ) -

Non-Management Employee (Union) Representative:
Name:
Title:
Phone: ( ) -

Certifications **(N.J.A.C. 7:1K-4.3(b)1)**

Highest ranking corporate official at facility with direct operating responsibility:

"I certify under penalty of law that I have read the Pollution Prevention Plan and that the Pollution Prevention Plan is true, accurate and complete to the best of my knowledge."

_____ _____

Name, Title Date

Highest ranking corporate official at facility:

"I certify under penalty of law that I am familiar with the Pollution Prevention Plan and that it is the corporate policy of this industrial facility to achieve the goals of the Pollution Prevention Plan."

_____ _____

Name, Title Date

3.0 FACILITY-LEVEL INFORMATION (N.J.A.C. 7:1K-4.3(b)2)

Covered Hazardous Substances

The following TRI hazardous substances are used at this facility above threshold:

Hazardous Substance Name	CAS Number	Reporting Threshold

Facility–Level Materials Accounting Information

A complete *facility level* materials accounting is required for all hazardous substances used at the facility which exceed the reporting threshold.

One way to satisfy this requirement is to attach a copy of your facility's annual ***Release and Pollution Prevention Report (RPPR)***.

Another way to display this information is to complete Table 1 below. Table 1 has an advantage over the RPPR in that it allows you to easily track and compare **USE** and **NPO** from subsequent years. It is recommended that Table 1 be included in the Plan for ease of comparison in subsequent years, even if the RPPR is included.

The difference between annual inputs and annual output quantities cannot exceed five percent.

APPENDIX A: SELF-VERIFICATION OF MATERIALS ACCOUNTING DATA WORKSHEET provides additional guidance for calculating input/output balances.

USE can be calculated using the equation:

USE = Consumed + Shipped (as/in product) + NPO

Table 1 Facility-Level Inventory Summary:

Hazardous Substance:						
Reporting Threshold:				**CAS Number:**		
	Base Year	**1st Year**	**2 nd Year**	**3 rd Year**	**4 th Year**	**5 th Year**
INPUTS: (pounds)						
Starting inventory						
Produced onsite						
Brought onsite						
Recycled out of process & re-used onsite						
OUTPUTS: (pounds)						
Consumed onsite						
Shipped offsite as/in product						
Ending inventory						
Total NPO						
Recycled out of process & re-used onsite						
Destroyed through onsite treatment						
Destroyed through onsite energy recovery						
Release to air through stack emissions						
Release to air through fugitive emissions						
Discharged to POTW						
Discharged to surface waters						
Discharge to ground water						
Onsite land disposal						
Transferred offsite						
USE (pounds)						

Inputs must equal outputs within 5% or less.

4.0 PROCESS-LEVEL INFORMATION AND INVENTORY DATA
(N.J.A.C. 7:1K-4.3(b)3-4; 7:1K-4.9)

Process–Level Materials Accounting Information

Process level materials accounting data is required for *each TRI hazardous substance* used in *each process* at the facility.

The first step is to identify and provide a description of each process that uses a covered hazardous substance. One way of presenting this information is to fill in the table below. Another way to satisfy this requirement is to provide a narrative description of each process N.J.A.C. 7:1K-4.3(c)2.

The ***Pollution Prevention Process Level Data Worksheet (P2-115)*** shown below is required to be completed and included in your Pollution Prevention Plan.

Facilities may submit P2-115s to the Department in lieu of Sections C and D of the RPPR.

Three additional items not listed on the P2-115 are also required to be contained in your Plan:

1) An identification/description of the product(s), co-product(s), and/or intermediate product(s) produced at the facility.

2) If processes were grouped – a short explanation of why your facility chose to group the processes. Grouping can make pollution prevention planning easier by combining several similar processes or sources and treating them as a single aggregate process or source throughout the P2 Plan.

* Treatment systems that use hazardous substances or generate NPO not generated elsewhere at the facility are required to be included as separate sources or production processes.

APPENDIX B: GROUPING provides additional guidance on the grouping decision as well as an example of inappropriate grouping.

3) A process flow diagram is required to be in the P2 Plan. The necessary components of a process flow diagram are raw material inputs, products, and nonproduct outputs and an explanation of the steps that turn input into product and nonproduct output.

Calculating USE and NPO on the P2-115:

USE = Consumed + Shipped (as/in product) + NPO
(On the P2-115 shown below USE is the sum of the items shown in red.)

NPO = Calculated by summing the data elements shown in blue on the form below *(i.e., from "Recycled out of process" down to "End. Inv. as NPO – Beg. Inv. as NPO")*

POLLUTION PREVENTION PROCESS-LEVEL DATA WORKSHEET (P2-115)

Note: This worksheet is required as part of the Pollution Prevention Plan, and is optional as a submittal in lieu of Sections C and D of the Release and Pollution Prevention Report. All optional submittals are not confidential.

Use one worksheet for each hazardous substance in each process.

Base Year _____

FACID	Process ID (from P2 Plan Summary) _____
	Units of Production (e.g. type of "widget," lbs. Of chemical, square feet of product) _____
	Is process targeted? (Y/N) _____
	Is this a grouped process? (Y/N) _____

Facility Location

CAS No.: _____ Hazardous Substance: _____

	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Production quantity						
USE (pounds)						
Consumed						
Shipped off-site as (or in) product						
NPO (pounds)						
Recycled out of process						
Destroyed: on-site treatment						
Destroyed: on-site energy recovery						
Stack air emissions						
Fugitive air emissions						
Discharge to POTWs						
Discharge to surface waters						
Discharge to groundwater						
On-site land disposal						
Transferred off site						
End. Inv. as NPO minus Beg. Inv. as NPO						
P2 techniques used in given year (see codes in RPPR Appendix E)						
Was this process discontinued or sent off site in the given year? (Y/N)						
Did facility make process change(s) that triggered a Plan modification? (Y/N)						
Was facility's P2 progress (targeted process only) less than anticipated? (Y/N)						

CERTIFICATION OF OWNER OR OPERATOR - I certify under penalty of law that the information submitted in this Pollution Prevention Plan Progress Report is true, accurate and complete to the best of my knowledge. (Signature required on only one P2-115.)

Signature: _____ **Date:** _____ **Phone No: (_____)**_____

Name: _____ **Title:** _____

5.0 ANNUAL HAZARDOUS WASTE GENERATION, TREATMENT, STORAGE AND DISPOSAL
(N.J.A.C. 7:1K-4.3(b)5)

The Rules require that information on annual "hazardous waste" generation, treatment, storage, and disposal and amounts of waste generated for each process be included in the Plan. This includes **all "hazardous waste,"** not just wastes containing TRI "hazardous substances" regulated under the P2 Program.

"Hazardous Substance" refers to TRI substances and is defined by the Pollution Prevention Act to mean any substance on the list established by the United States Environmental Protection Agency for reporting pursuant to 42 U.S.C. §11023, and any other substance which the Department defines as a hazardous substance for the purposes of the Act pursuant to N.J.A.C. 7:1K-3.5.

"Hazardous waste" refers to RCRA regulated waste and is defined by the Pollution Prevention Act to be any solid waste defined as hazardous by the Department pursuant to the hazardous waste statute (N.J.S.A. 13:1E-1 et seq.).

In addition to your RCRA Hazardous Waste Biennial Report, alternate year's data must be included in your Plan.

Completion of this section with all hazardous wastes meets the waste minimization planning requirements under RCRA. All hazardous wastes must be reported whether or not they contain a covered substance under pollution prevention planning.

Table H-1 Facility-Level Inventory of Hazardous Waste:

This table contains information covered under N.J.A.C. 7:1K-4.3(b)5i-ii.

Name of covered substance in waste:				
CAS No.				
Hazardous waste Category				
Amount generated				
Amount treated outside of a production process				
Amount stored outside of a production process				
Amount disposed outside of a production process				
Address of off-site TSD facility receiving the waste				
Description of the type of treatment method used at each TSD				
Amount recycled onsite				
Amount recycled offsite				

Hazardous waste inventory data must be completed annually.

Table H-2 Process-Level Inventory of Hazardous Waste:

This table contains information covered under N.J.A.C. 7:1K-4.3(b)5iii.

Process Name	Hazardous Waste Type	Quantity Generated (lbs.)

Hazardous waste inventory data must be completed annually.

6.0 PART IA COST DATA (*"the cost of doing business as usual"*) is located in Table C-1 of section 9.0 along with the Part II cost analysis (*"the estimate of costs to determine potential savings associated with implementing a P2 option"*).

PART II OF THE PLAN

N.J.A.C.7:1K-4.5

7.0 SOURCE-LEVEL NPO DATA (N.J.A.C. 7:1K-4.5(a)2)

Table S-1 Source-Level Inventory of NPO:

Process Name	Source of NPO	Quantity Generated (lbs.)

8.0 TARGETING (N.J.A.C.7:1K-4.4)

Targeting of Sources/Processes

The Rules allow a facility to concentrate pollution prevention resources on a process or processes which account for a significant amount of **USE, NPO,** or **Releases** at the facility (a significant amount is defined to be at least 90%).

Targeting is required for facilities that use or generate Persistent, Bioaccumulative, and Toxic (PBT) substances at or above the reporting threshold - see note below. Targeting will be of no help to facilities that have only one process; however, it may prove beneficial to facilities with numerous processes.

Again, there are several ways to present this information. One way to satisfy this requirement is to provide a narrative description of your targeted process or processes which explains why you targeted each process and indicates the percent of USE, NPO, or Releases the process or processes cover. Another way of presenting this information is to fill in Table T-1 below.

Note: All processes or sources at covered facilities that use or generate PBTs above reporting thresholds are required to be targeted for P2 Planning.

Table T-1 Targeted Process Justification:

This table contains information covered under N.J.A.C. 7:1K-4.4(b).

Process Name	Targeted? (Y/N)	Basis for Targeting (USE, NPO, or Releases)	Percent covered by this process

9.0 POLLUTION PREVENTION OPTIONS (N.J.A.C. 7:1K-4.5(a)4)

Identifying Options

Facilities are required to list and evaluate potential pollution prevention options that may reduce the use and or generation of hazardous substances. However, the rules do not require facilities to implement any of the options identified in the Pollution Prevention Plan, implementation is strictly voluntary. The rule is designed to help facilities assemble data and identify ways to prevent pollution and increase efficiency, which in turn may lead to cost savings and environmental benefits. The intent is that if facilities identified ways to reduce waste and save money, they would implement the options on their own accord.

There are three steps to follow:
1) List all potential options.
2) Perform a *Technical Analysis* of each option.
3) Perform a *Financial Analysis* of technically feasible options.

The first thing to do is list all available options, not just the options you plan to implement. Listing all options allows you to document for future Plan revisions (*and for the benefit of the next person assigned to prepare or update the Plan*) all options considered and will allow you to disregard the option if future conditions remain the same or revisit the option if conditions at the facility have changed (e.g., the price of a raw material becomes too expensive, new technology becomes affordable, etc.). This information may be presented as a narrative or in tabular form (see Table O-1 below).

Table O-1 Description of Pollution Prevention Options:

Option Number	Description of Option	Processes Affected	Sources Affected

Technical Analysis

A ***Technical Analysis*** is performed on all options and is simply a discussion as to whether or not the option is possible to implement. Depending on the option, some technical analyses may be very descriptive and detailed while others may be short and concise. In any case, the cost of implementation is NOT considered in the *Technical Analysis*. The *Technical Analysis* simply answers the question "**is the option possible to implement?"** A narrative description is usually the easiest way to present this information; however, Table O-2 is provided below for those who prefer to present the information in a tabular format.

Table O-2 Technical Analysis of Pollution Prevention Options:

This table contains information covered under N.J.A.C. 7:1K-4.5(a)5i.

Option Number	Is it Feasible? (Y/N)	Will it be implemented in the next five years? (Y/N)	Description of Option	Explanation

Financial Analysis

A **Part II *Financial Analysis*** ("*the costs or savings associated with implementing a P2 option"*) is only required for those options that are found to be technically feasible. The *Financial Analysis* compares the cost of using, generating, and releasing hazardous substances, required under 7:1K-4.3(b)6, with the cost or saving which may be incurred through the implementation of a particular pollution prevention option. This type of information is best displayed in tabular form. The cost information required in 7:1K-4.3(b)6 (Part IA - *"the cost of doing business as usual")* and 7:1K-4.5(a)5ii (Part II - *"the estimate of costs to determine potential savings associated with implementing a P2 option"*) have been combined in Table C-1, below. Facilities may wish to include other costs pertinent to their particular operation in order to understand the cost/benefits associated with using a hazardous substance or implementing a P2 option.

Table C-1 Financial Analysis of Pollution Prevention Options:

This table contains information covered under N.J.A.C. 7:1K-4.3(b)6 and 4.5(a)5ii.

Option Number:			
	Cost associated with using hazardous substances. **("Part 1A cost data")**	Cost to determine potential savings associated with the implementation of P2 option. **("Part II cost analysis")**	Net Savings (+ or -)
OSHA compliance			
Consultants fees			
Storage & handling			
Monitor, track, report			
Treatment			
Transport. & disposal			
Permit fees			
Liability insurance			
Overhead			
Raw material purchase			
Operations & maintenance savings			
Capital costs			
R&D			
Training			
Other Costs			
Total			

Selection of Pollution Prevention Options

Table O-3 below summarizes which pollution prevention options your facility intends to implement over the course of the five-year planning cycle.

Table O-3 Pollution Prevention Options which will be Implemented during this Five Year Planning Cycle:

This table contains information covered under N.J.A.C. 7:1K-4.5(a)6 & 11.

Option Number	Description of Option	Is it Feasible? (Y/N)	Explanation

10.0 POLLUTION PREVENTION GOALS

The rules require that the Plan provide the following:

1) Five-year Facility-level USE and NPO reduction goals.
2) Targeted process-level USE and NPO per unit product.

The first step is to calculate source-level data on expected reductions in targeted processes due to the implementation of pollution prevention options (see Table G-1).

The next step is to sum the targeted process-level expected reductions that will yield projected facility-level reductions for each hazardous substance as shown (see Table G-2). Percent goals can then be calculated for the entire facility (see Table G-3).

The data in Table G-4 is then used to perform a per-unit-of-product analysis, which then is used to calculate per-unit-of-product goals in percentages for each process as required.

Table G-1 Expected Source-Level USE and NPO Reductions (lbs.):

This table contains information covered under N.J.A.C. 7:1K-4.5(a)9 & 10.

Source	Option Number	Expected USE Reduction (lbs.)	Expected NPO Reduction (lbs.)

Table G-2 Projected Process-Level USE and NPO Reduction Goals in Pounds and Percent:

Process:						
Hazardous Substance:						
Original NPO (lbs.)						
Reduction (lbs.)						
New NPO (lbs.)						
%NPO Goal						
Original USE						
Reduction (lbs.)						
New USE (lbs.)						
% USE Goal						

Table G-3 Projected Facility-Level USE and NPO Reduction Goals in Pounds and Percent:

	Quantity of hazardous substance (lbs.)					
Hazardous Substance:						
Original NPO (lbs.)						
Reduction (lbs.)						
New NPO (lbs.)						
%NPO Goal						
Original USE (lbs.)						
Reduction (lbs.)						
New USE (lbs.)						
% USE Goal						

Facility
% NPO Goal = $\frac{\text{Original NPO - New NPO}}{\text{Original NPO}} \times 100$

Facility
% USE Goal = $\frac{\text{Original USE - New USE}}{\text{Original USE}} \times 100$

Table G-4 Process-Level Analysis of USE and NPO per Unit of Product for each Hazardous Substance (Calculated from P2-115 Data):

This table contains information covered under N.J.A.C. 7:1K-4.5(a)7 & 8.

Process:						
Hazardous substances:						
Unit of Product						
Orig. NPO/ Unit Of Product.						
Reduction						
New NPO/ Unit of Product						
%NPO Goal						
Orig. USE/Unit of Product						
Reduction						
New USE/Unit of Product						
% USE Goal						

11.0 EXPECTED IMPACT OF IMPLEMENTED OPTIONS ON POST-TREATMENT MULTI-MEDIA RELEASES

Table I-1 Expected Multi-media Releases (lbs.):

		Hazardous Substance:				
	Media					
Base Year	Air					
	Waste					
	Water					
Fifth Year	Air					
	Waste					
	Water					
% Reduction	Air					
	Waste					
	Water					

INFORMATION REQUIRED IN THE POLLUTION PREVENTION PROGRESS REPORT (Sections C & D of the RPPR)

PART IB OF THE PLAN (N.J.A.C.7:1K-4.3(c))

12.0 FACILITY-LEVEL INFORMATION ON REDUCTIONS

The Pollution Prevention Program rules include two progress reporting options. Both options are intended to provide information about the progress your facility has made toward the pollution prevention goals that were established in your P2 Plan and reported to the Department in your P2 Plan Summary.

Option 1 – Submission of the Pollution Prevention Process-Level Data Worksheet (P2-115). The P2-115 is the DEP-recommended approach to satisfy the Pollution Prevention Progress Report requirement.

Option 2 – Submission of Sections C and D of the Release and Pollution Prevention Report (RPPR).

The instructions on the following pages pertain only to reporting **Option 2 – Sections C and D of the RPPR**. To simplify the progress report calculations, the information on the P2-115s contained in the P2 Plan will be used to calculate Sections C and D. Calculations must be included in the P2 Plan and the results of the calculations must be submitted on the RPPR. Even if no options have been implemented or zero goals were set, calculations for all substances must be performed annually to determine progress on USE and NPO, and must be included in the P2 Plan.

Even if the P2-115 Worksheet(s) are not submitted, the P2-115 Worksheet(s) must still be prepared and be in the Pollution Prevention Plan.

Section C: Facility-Level Substance-Specific Pollution Prevention Progress

Production Ratio - The production ratio normalizes the variation in units produced from one year to the next. Choosing an appropriate unit of product in the P2 Plan is critical to developing a useful production ratio. This information should have already been collected for all of the production processes.

The example below illustrates the use of process-level data to develop facility-level progress from the P2-115s. Refer to the abbreviated P2-115s to identify the variables (by letter) in the formulae.

The formula for calculating the Production Ratio relative to the Base Year (PR_{BY}) is as follows:

For the simplest scenario, when one substance is only used in one process, the formula for calculating the Production Ratio to the Base Year (PR_{BY}) is as follows:

$$PR_{BY} = \frac{H}{A}$$

For those facilities that use one substance in multiple processes, the following formula applies:

$$PR_{BY} = \frac{[(H / A * C) + (T / M * O)]}{(C + O)}$$

The formula for calculating the Production Ratio relative to the Previous Year (PR_{PY}) is as follows:

The formula for calculating the Production Ratio to the previous year for a substance in a single process is:

$$PR_{PY} = \frac{H}{G}$$

For calculating the Production Ratio using one substance in multiple processes, the formula is:

$$PR_{PY} = \frac{[(H / G * I) + (T / S * U)]}{(I + U)}$$

If the same substance is used in more than two (2) processes, treat the additional processes identical to the way the second process was added to the example of the single process (i.e., add all process-level information to obtain facility-level information).

Percent Change for USE and NPO - Calculate the percent change (reduction, increase, or no change) in total facility-wide use and total facility-wide NPO generated for each substance from the Base Year to this Reporting Year (current year).

Percent Change for USE for a substance for a single process:

$$\text{Percent Change for USE} = \frac{[(C * PR_{BY}) - J]}{C * PR_{BY}} * 100$$

Percent Change for USE for a substance in multiple processes:

$$\text{Percent Change for USE} = \frac{[(C + O) * PR_{BY} - (J + V)]}{(C + O) * PR_{BY}} * 100$$

Percent Change for NPO for a substance in a single process:

$$\text{Percent Change for NPO} = \frac{[(E * PR_{BY}) - L]}{E * PR_{BY}} * 100$$

Percent Change for NPO for a substance in multiple processes:

$$\text{Percent Change for NPO} = \frac{[(E + Q) * PR_{BY} - (L + X)]}{(E + Q) * PR_{BY}} * 100$$

A positive result means a reduction and a negative result means an increase. If P2 progress is negative, the electronic system will require a check box to be checked and an explanation given.

The following two P2-115s are abbreviated to illustrate the variables needed to calculate the Production Ratio (PR) and the Percent Change for USE and NPO.

POLLUTION PREVENTION PROCESS-LEVEL DATA WORKSHEET (P2-115)
Base Year 2025

FACID: 12345600000

ACME MANUFACTURING
PO BOX 12345
ANYWHERE, NJ 90210

Process ID (from P2 Plan Summary): WIDGETLINE

Units of Production (e.g. type of "widget," lbs. of chemical, square feet of product): Widgets

Is process targeted? (Y/N): Y

Is this a grouped process? (Y/N): Y

CAS No.: 108-88-3	**Hazardous Substance:** Toluene					
	Base Year	2026	2027	2028	2029	2030
Production quantity (widget, lbs., ft^2, etc.)	**A**	**B**	**G**	**H**		
USE (pounds)	**C**	**D**	**I**	**J**		
Consumed						
Shipped off-site as (or in) product						
NPO (pounds)	**E**	**F**	**K**	**L**		

POLLUTION PREVENTION PROCESS-LEVEL DATA WORKSHEET (P2-115)
Base Year 2025

FACID: 12345600000

ACME MANUFACTURING
PO BOX 12345
ANYWHERE, NJ 90210

Process ID (from P2 Plan Summary): THINGAMABOBS

Units of Production (e.g. type of "widget," lbs. of chemical, square feet of product): Thingamabobs

Is process targeted? (Y/N): Y

Is this a grouped process? (Y/N): Y

CAS No.: 108-88-3	**Hazardous Substance:** Toluene					
	Base Year	2026	2027	2028	2029	2030
Production quantity (widget, lbs., ft^2, etc.)	**M**	**N**	**S**	**T**		
USE (pounds)	**O**	**P**	**U**	**V**		
Consumed						
Shipped off-site as (or in) product						
NPO (pounds)	**Q**	**R**	**W**	**X**		

In Table R-1, the first two columns are the actual USE and NPO amounts independent of production. The Actual USE and NPO reductions (%) take into account the Production Ratio as calculated above.

Table R-1 Facility-Level Information on Reduction Quantities (lbs.):

Year	USE (lbs.)	NPO (lbs.)	USE Reduction Goal (%)	Actual USE Reduction (%)	NPO Reduction Goal (%)	Actual NPO Reduction (%)
Base Year						
Year 1						
+ / -						
Year 2						
+ / -						
Year 3						
+ / -						
Year 4						
+ / -						
Year 5						
+ / -						

Section D: Process-Level Pollution Prevention Information for Targeted Processes

Complete one Section D for each targeted process or targeted grouped process

To complete Section D, refer to the units of product, which were identified in the P2 Plan. Once the appropriate units of product have been determined from the P2 Plan, the units cannot be changed in subsequent years, unless the P2 Plan, P2 Plan Summary, and previous P2 Progress Reports have been modified.

Percent Change for USE - State the total progress made toward achieving each substance-specific process-level pollution prevention goal for USE identified in the P2 Plan and in the P2 Plan Summary submitted to the DEP. (Refer to the P2-115 for Toluene in process "Thingamabobs" for the variables in the following formula.)

$$\text{Percent Change for USE} = \frac{[(O / M) - (V / T)]}{(O / M)} * 100$$

Percent Change for NPO - State the progress made toward achieving each substance-specific process-level pollution prevention goal for NPO identified in the P2 Plan and in the P2 Plan Summary submitted to the DEP. (Refer to the P2-115 for Toluene in process "Thingamabobs" for the variables in the following formula.)

$$\text{Percent Change for NPO} = \frac{[(Q / M) - (X / T)]}{(Q / M)} * 100$$

Table R-2 shows process-level information on reductions in USE and NPO for targeted processes.

Table R-2 Process-Level Information on Reductions for Targeted Process(es):

Year	No. of Units of Prod.	USE (lbs.)	USE/ Unit Prod.	NPO (lbs.)	NPO/ Unit Prod.	USE/ Unit Prod. Reduct. Goal (%)	Actual USE/ Unit Prod. Reduct. (%)	NPO/ Unit Prod. Reduct. Goal (%)	Actual NPO/ Unit Prod. Reduct. (%)
Base Year									
Year 1									
+ / -									
Year 2									
+ / -									
Year 3									
+ / -									
Year 4									
+ / -									
Year 5									
+ / -									

APPENDIX A: SELF-VERIFICATION OF MATERIALS ACCOUNTING DATA WORKSHEET

(All Quantities Must Be Reported in Pounds except for Dioxin and Dioxin-Like Compounds Reported in Grams)

This table is included to allow the balancing of inputs and outputs to within 5% as required at N.J.A.C. 7:1K-4.3(b)2x.

CAS#: _____ Substance: _____

Inputs		**Outputs**	
5. Starting Inventory	_____	8. Quantity Consumed (chemically reacted)	_____
6. Quantity Produced On Site	_____	9. Quantity Shipped Off Site as (or in) Product	_____
7. Quantity Brought On Site	_____	10. Ending Inventory	_____
12. Quantity Recycled Out-of-Process & Re-Used On Site	_____	12. Quantity Recycled Out-of-Process & Re-Used On Site	_____
		13. Quantity Destroyed through On-Site Treatment	_____
		14. Quantity Destroyed through On-Site Energy Recovery	_____
		15. Stack Air Emissions	_____
		16. Fugitive Air Emissions	_____
		17. Discharge to POTWs	_____
		18. Discharge to Surface Waters	_____
		19. Discharge to Groundwaters	_____
		20. On-Site Land Disposal	_____
		21. Other Off-Site Transfers	_____
Sum of Inputs:	_____	≈ **Sum of Outputs:**	_____

APPENDIX B: GROUPING

Grouping makes pollution prevention planning easier by combining several similar processes and treating them as a single aggregate process throughout the Pollution Prevention Plan. Grouping focuses your attention on whether your similar operations are being run consistently.

Grouping reduces the workload surrounding pollution prevention because it shrinks the number of processes that must be studied by identifying "grouped processes" that represent their component processes in the Pollution Prevention Plan. Grouping does not eliminate anything from consideration in the Plan, but it does organize what must be considered in a more manageable way.

When grouping, the object is to collect several processes together, which are similar enough in terms of their products, material use, and process steps to be treated as a single process. Grouping simplifies process evaluation by minimizing the number of times data needs to be collected or recorded. Remember that once you have grouped processes together, they will remain grouped throughout the Plan.

Grouping is NOT a required step in pollution prevention planning. Poorly grouped processes create situations where the data collected for a grouped process does not apply to some of its components.

As an example of grouping processes inappropriately, consider a paint manufacturer that produces several colors of both oil-based and latex-based paints. Using color as the only criterion for grouping would be inappropriate. It could lead to "yellow oil-based paint" and "yellow latex-based paint" being in the same grouped process. Logically, the latex and oil products should be in separate groups since they are manufactured using different types of chemicals. Color could be a criterion to further group the processes, within the latex and oil groups, to address any concerns with heavy metal content of the pigments, which may vary by color.