

INSTRUCTIONS

2008 Biennial Pollution Prevention (P2) Progress Report
(Using 2007 EHS data)

TOXIC USE CATEGORY

Toxics and Hazardous Waste Reduction Law
38 MRSA Sections 2301-2313

<http://www.maine.gov/dep/innovation/thwrp/forms.htm>



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Instructions for completing the Toxic Use Category of the Biennial Pollution Prevention (P2) Progress Report.

Applicability: If a facility is required to report to the Maine Emergency Management Agency (MEMA) under EPCRA, Title III, Section **312** for Extremely Hazardous Substances (EHS), this report must be completed unless that facility meets any of the following exemptions:

- A. Drinking water supply treatment facilities;
- B. Municipal wastewater treatment facilities;
- C. Wholesale distributors of chemicals;
- D. Hazardous substance transporters;
- E. Retail and wholesale distribution facilities of motor fuel, aviation fuel, heating oil or other refined petroleum products;
- F. Agricultural activities;
- G. Commercial hazardous waste treatment or storage facilities;
- H. For purposes of the planning, reporting and fee requirements relating to hazardous waste generation only, pilot plants or pilot production units;
- I. Hazardous waste transporters;
- J. Hazardous waste generated as a result of remedial or corrective actions or facility closures required by law or undertaken to protect employee health and safety, public health and safety or the environment;
- K. Households;
- L. Zinc emissions from tire burning;
- M. Sulfuric acid emissions from burning fuel that is approved by the department; and/or
- N. Lamps, mercury-containing thermostats, polychlorinated biphenyl ballast and batteries, defined as universal waste in 40 Code of Federal Regulations, Section 273.2

Hardcopy Reporting Instructions:

1. Clearly print information on the report form in the spaces provided.
2. You have the option of submitting the report by e-mail or hardcopy. If you choose electronic reporting, built in macros will do most math calculations automatically.
3. For additional guidance when filling out the report, please refer to both:
A) the Toxics Law: <http://www.maine.gov/dep/innovation/thwrp/forms.htm>
B) the P2 Guidebook: <http://www.maine.gov/dep/innovation/thwrp/forms.htm>

Electronic Reporting Instructions:

Please note that this form is also available on the Toxics Web site at:
<http://www.maine.gov/dep/innovation/thwrp/forms.htm>

1. The **Company Name** must be in cell **B1**.
2. The **Physical Address** of the site being reported on must be in cells **B2** and **B3**.
3. The **City, State** and **Zip Code** must be in cell **B4**.
4. The **Use ID #** (if known) must be in cell **B5**.
5. Each **EHS used** can only have **one line** and the first EHS must begin with **Row 8**.
6. If **more than one CAS #** or Waste Minimization Code is used, they must be **separated by a comma**.
7. If a facility needs **additional** rows on the spreadsheet, call Jim Rodrigue at 207-287-8867 for instructions on “un-protecting” the spreadsheet.

SHEET 1. BASE YEAR AND REPORT YEAR (2007) INFORMATION

- 1.0 **Chemical Identification** - CAS # (Chemical Abstracts Service #). Enter the numerical code for each Extremely Hazardous Substance (EHS) reported under EPCRA, Title III, Section **312**. This number can be found on the Material Safety Data Sheet (MSDS).
- 1.1 **Chemical Name** – write the chemical name that corresponds to each CAS #.
- 1.2 **Base Year** – the reductions or increases in the number of pounds of toxic chemicals used by a given facility will be calculated based upon a facility’s base year amounts. Any new regulated EHS chemical added after the base year will be considered an increase in the facility’s overall EHS use level.

Note: Each facility will have a single base year for the Toxics Use category. Once calculated, that base year must remain constant across all reporting years.

Calculating your facility's base year for the Toxics Use category:

If your facility was in business for the entire year of 1990, **and** your facility used a regulated EHS in 1990, **then:**

Your base year for the Toxics Use category is 1990.

If complete data is not available for 1990, **then:**

You must contact the DEP in order to review and approve an alternate base year.

If your facility was not in business for the entire year of 1990, **or** did not use a regulated EHS in 1990, **then:**

Your base year for the Toxics Use category is the 1st full year your facility began using a regulated EHS above the threshold quantity.

Filling in column 1.2:

If the given regulated EHS was used in the base year calculated above, **then:**

You must list the base year in this column. (Format = YYYY, example: 1990).

Otherwise:

You must leave this column blank for that particular EHS.

- 1.3 Base Year Amount Reported** – enter the number of pounds for each EHS reported under EPCRA, Title III, Section 312 during the base year calculated in Section 1.2. This information may be found on the TIER II report submitted to the Maine Emergency Management Agency (MEMA).

Filling in column 1.3:

If a given regulated EHS was used in the facility's base year, **then:**

You must enter the number of pounds reported under EPCRA, Title III, Section 312.

Otherwise:

You must leave this column blank for that particular EHS.

Note: Be sure to enter the sum of column 1.3 on the bottom line of the report. If reporting electronically, this summation will be done automatically for you.

- 1.4 2008 Amount Reported** – enter the number of pounds of each EHS used during 2007 in the Report Year column. This information may be found on the TIER II report (EPCRA, Section 312) submitted to MEMA for 2007. Be sure to enter the sum for all EHS(s) reported on the bottom line of the report. If reporting electronically, this will be done automatically.

1.5 2008 Activity Production Index (API) – the API is a ratio of your facility’s current (2007) activity/production, to its base year activity/production. The API indicates whether the activity/production has increased or decreased in relation to the base year. It is used to adjust the amount of EHS(s) used up or down in relation to the activity/production.

Filling in column 1.5:

If the given EHS was not used in the facility’s base year, **or** the year 2007 is the facility’s base year for the Toxics Use category, **then:**

You must use a value of 1.0 for that EHS’s API.

Otherwise

Use the formula listed below to calculate the API for the given EHS.

API Formula:

The API is calculated using a unit of product that is unique for your operation. It should be an activity or product that is closely related to the use of each reported EHS.

Examples of a unit of product include: number of “widgets” produced, amount of hours a particular operation is conducted, or pounds or square footage of material processed.

Once your unit of product is chosen it should remain constant across all reporting years.

For example, “XYZ Corp.” uses the number of “widgets” produced as the API. In the base year, they produced 100 “widgets” and had an API of 1. In 2007, “XYZ Corp” produced 200 “widgets”. Therefore, the API would be 2 as the following ratio demonstrates:

$$\text{API} = \frac{200 \text{ (widgets in 2007)}}{100 \text{ (widgets in base year)}} \quad \text{API} = 2$$

Please note the API is closely tied to production. If a facility has different processes that use an EHS, more than one API may be derived to represent each production process. A production process is also known as a Production Unit. To determine the API, insert the unit of production (such as # of widgets produced) into the numerator and denominator of the following formula:

$$\text{API} = \frac{\text{2007 Production or Activity}}{\text{Base year Production or Activity}}$$

All EHS chemicals start with an API of 1 in the base year. In subsequent years, a facility will have a higher API if the activity/production has increased, or a lower API if the activity/production has decreased. Most API’s will fall in the range of 0.5 – 3.0.

For additional information on calculating the API, please refer to the P2 Planning Guidebook dated May 2006.

1.6 2008 Adjusted Amount – the 2008 Adjusted Amount is the number of pounds of an EHS used during 2007, normalized by the API, and is calculated as follows:

$$\text{Toxic Use Adjusted Amount 2008} = \frac{\text{Pounds of EHS used in 2007}}{\text{API 2007}}$$

Note: If you are using the Excel formatted spreadsheet provided by the Toxics Program via email or downloaded from the Web site, column 1.6 and 1.7 will be calculated automatically.

1.7 2008 Reduction % – the following equation is used to calculate reductions or increases in EHS(s) used. It should be performed for each EHS, and for the total EHS(s) used, using the information from the spreadsheet in columns 1.3 and 1.6.

Toxics Use Reduction % =

$$\left(\frac{\text{Adjusted Amount Lbs. (column 1.6) - Lbs. toxics used in base year (column 1.3)}}{\text{Pounds of toxics used in base year (column 1.3)}} \right) \times 100$$

The reduction amount calculated must be reported as an increase if the amount is a positive number, or as a decrease if the amount is a negative number.

1.8 Waste Minimization Code – using the attached waste minimization code(s) (also available on the Toxics Web site), provide the code(s) that best describes the method(s) used to achieve the reporting year (2007) reductions. More than one code may be used, but be sure to separate them by a comma if filing electronically. If the use of an EHS has increased since the base year (i.e. a positive number in column 1.7), the waste minimization code will be N/A.

1.9-2.1 Future Reduction Goal – enter your facility specific planned reduction goal from your Pollution Prevention Plan for each of the following biennial reporting periods:

- (1.9) 2008
- (2.0) 2010
- (2.1) 2012

At a minimum, you must enter a goal for the aggregate amount of toxic chemical(s) (EHS) used in the total line at the bottom of the page. You may also enter a specific reduction goal for each EHS used.

Goals should be established from existing baseline data and build upon current reductions. For example, if you have already achieved a 40% reduction, your reported reductions should match the 40% reduction goals you had previously set for 2008, a 50% reduction by 2010 and a 60% reduction by 2012. A 100% reduction goal indicates a plan for complete elimination of the toxic use (EHS) chemical. If you anticipate no further

reductions, your goal should be set at your current percentage from column 1.7. For example, if your facility has achieved a 40% reduction to date, and you do not anticipate making further reductions, your future reduction goal is 40%.

Please refer to the Toxics Law, Sections 2305.2-A and 2305-A, and the Pollution Prevention Planning Guidebook dated May 2006, for additional information.

- 2.2 Production Unit I.D.** – provide the identification code (up to ten characters) for the Production Unit where the EHS is used. Production Unit means “a process, line, method, activity or technique, or a combination or series thereof, used to produce a product.” It should be a term that is easily recognized by all employees throughout the facility. For example, a facility may identify the Production Unit where the EHS is used as "Forklift" (for Sulfuric Acid). The I.D. code must be identical to the one used in the facility’s P2 Plan and should remain constant from year to year. For additional information on determining the facility’s Production Unit(s), please refer to the P2 Planning Guidebook dated May 2006.
- 2.3 Report Confidentiality** – if any line items are confidential, please enter the word **TRUE** in the “Confidential” column for the appropriate rows on Sheet 1.
Note: Only line items with the word **TRUE** entered in the “Confidential” column will be considered confidential.

SHEET 2. WRITTEN EXPLANATIONS AND CERTIFICATION

- 2.4 Explanation of Facility’s Progress** – attach a written explanation (Word Document if reporting electronically) as to why the facility’s progress is greater than or less than that anticipated in the P2 Plan schedule for implementation, if this applies. This portion should be written in a complete and concise (1 page) format and pertain to the reported EHS(s). The information will be provided to the public on the Toxics Program’s Web page along with the spreadsheet, as an additional explanation of the data.
- 2.5 Written Description of Employee Notification and Involvement** – attach a written explanation (Word Document if reporting electronically) of “employee notification” and “involvement” in the P2 Planning process. This section should be concise (1 page), but comprehensive, including “methods of notification,” “training,” and “involvement” of employees in the P2 Planning process. Please refer to the Toxics Law, Sections 2305.4 and 2306, or the P2 Guidebook dated May 2006 for additional information.
- 2.6 Host Municipality** – a copy of this report must be sent to the municipality (town manager or selectmen) in which the facility is located, at the time of submission to the DEP, **(by July 1, 2008)**.
- 2.7 Report Certification** – the senior official representing facility management, by initialing the acknowledgement box on the report, verifies the contents of the report, completion and updating of the P2 Plan, and availability of the Plan to the Department for review.

This section needs to be completed and dated or the progress report will not be considered valid. Should the Department need clarification or have questions about the report, the environmental contact person (if different than the senior official), should be noted with the phone number and e-mail address.

**This report must be submitted by July 1, 2008 to:
The facility's host municipality and**

Jim Rodrigue, Manager

Toxics and Hazardous Waste Reduction Program
Maine Department of Environmental Protection

17 State House Station
Augusta, Maine 04333

(207) 287-8867 (phone)

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ID	CODE ID	WASTE MINIMIZATION CODE DESCRIPTION
1		RECYCLING
2	W01	ON SITE BENEFICIAL USE/REUSE BEGAN DURING 1995
3	W02	OFF SITE BENEFICIAL USE/REUSE BEGAN DURING 1995
4		SOURCE REDUCTION ACTIVITY
5	W11	BEGAN TO SEGREGATE TYPES OF HAZARDOUS WASTE TO MAKE THEM MORE AMENABLE TO RECYCLING
6	W12	BEGAN TO SEGREGATE (STOPPED COMBINING) HAZARDOUS WASTE FROM NON HAZARDOUS WASTE (NOTE: FOR PURPOSES OF HAZARDOUS WASTE REPORTING, REDUCES VOLUME OF HAZARDOUS WASTE, BUT DOES NOT REDUCE TOTAL WASTE VOLUME)
7	W13	IMPROVED MAINTENANCE SCHEDULING, RECORDKEEPING, OR PROCEDURES
8	W14	CHANGED PRODUCTION SCHEDULE TO MINIMIZE EQUIPMENT AND FEEDSTOCK CHANGEOVERS
9	W19	OTHER CHANGES IN OPERATING PRACTICES (SPECIFY IN COMMENTS)
10		INVENTORY CONTROL
11	W21	INSTITUTED PROCEDURES TO ENSURE THAT MATERIALS DO NOT STAY IN INVENTORY BEYOND SHELF LIFE
12	W22	BEGAN TO TEST OUTDATED MATERIAL/CONTINUE TO USE IF STILL EFFECTIVE
13	W23	ELIMINATED SHELF LIFE REQUIREMENTS FOR STABLE MATERIALS
15	W24	INSTITUTED BETTER LABELLING PROCEDURES
16	W25	INSTITUTED CLEARINGHOUSE TO EXCHANGE MATERIALS THAT WOULD OTHERWISE BE DISCARDED
17	W29	OTHER (SPECIFY IN COMMENTS)
18		SPILL AND LEAK PREVENTION
19	W31	IMPROVED STORAGE OR STACKING PROCEDURES
20	W32	IMPROVED PROCEDURES FOR LOADING, UNLOADING, AND TRANSFER OPERATIONS
21	W33	INSTALLED OVERFLOW ALARMS OR AUTOMATIC SHUT OFF VALVES
22	W34	INSTALLED SECONDARY CONTAINMENT
23	W35	INSTALLED VAPOR RECOVERY SYSTEMS
24	W36	IMPLEMENTED INSPECTION OR MONITORING PROGRAM OF POTENTIAL SPILL OR LEAK SOURCES
25	W39	OTHER (SPECIFY IN COMMENTS)
26		RAW MATERIAL MODIFICATIONS
27	W41	INCREASED PURITY OF RAW MATERIALS
28	W42	SUBSTITUTED RAW MATERIALS
29	W49	OTHER (SPECIFY IN COMMENTS)
30		PROCESS MODIFICATIONS
31	W51	INSTITUTED CLOSED LOOP RECYCLING
32	W52	MODIFIED EQUIPMENT, LAYOUT, OR PIPING
33	W53	CHANGED PROCESS CATALYST
34	W54	INSTITUTED BETTER CONTROLS ON OPERATING CONDITIONS (FLOW RATE, TEMPERATURE, PRESSURE, RESIDENCE TIME)
35	W55	CHANGED FROM SMALL VOLUME CONTAINERS TO BULK CONTAINERS TO MINIMIZE DISCARDING OF EMPTY CONTAINERS
36	W58	OTHER (SPECIFY IN COMMENTS)

37		CLEANING AND DEGREASING
38	W59	MODIFIED STRIPPING/CLEANING EQUIPMENT
39	W60	CHANGED TO MECHANICAL STRIPPING/CLEANING DEVICES (FROM SOLVENTS OR OTHER MATERIALS)
40	W61	CHANGED TO AQUEOUS CLEANERS (FROM SOLVENTS OR OTHER MATERIALS)
41	W62	REDUCED THE NUMBER OF SOLVENTS USED, TO MAKE WASTE MORE AMENABLE TO RECYCLING
42	W63	MODIFIED CONTAINMENT PROCEDURES FOR CLEANING UNITS
43	W64	IMPROVED DRAINING PROCEDURES
44	W65	REDESIGNED PARTS RACKS TO REDUCE DRAGOUT
45	W66	MODIFIED OR INSTALLED RINSE SYSTEMS
46	W67	IMPROVED RINSE EQUIPMENT DESIGN
47	W68	IMPROVED RINSE EQUIPMENT OPERATION
48	W71	OTHER (SPECIFY IN COMMENTS)
49		SURFACE PREPARATION AND FINISHING
50	W72	MODIFIED SPRAY SYSTEMS OR EQUIPMENT
51	W73	SUBSTITUTED COATING MATERIALS USED
52	W74	IMPROVED APPLICATION TECHNIQUES
53	W75	CHANGED FROM SPRAY TO OTHER SYSTEM
54	W78	OTHER (SPECIFY IN COMMENTS)
55		PRODUCT MODIFICATIONS
56	W81	CHANGED PRODUCT SPECIFICATIONS
57	W82	MODIFIED DESIGN OR COMPOSITION
58	W83	MODIFIED PACKAGING
59	W89	OTHER (SPECIFY IN COMMENTS)
60		OTHER SOURCE REDUCTION ACTIVITY
61	W99	SPECIFY IN COMMENTS

2.4 Attach a brief (1 page) written explanation (Word Document if reporting electronically), as to why the facility's progress is greater than or less than, that anticipated in the Pollution Prevention (P2) plan's schedule for implementation, if this applies. This attached explanation will be the written dialogue section on the Toxics Program's Web page.

2.5 Attach a brief (1 page) written explanation (Word Document if reporting electronically), of how the employees were "notified" and "involved" in the P2 planning process. Please refer to the Toxics Law or the Guidebook dated May 2006 for more information.

2.6 A copy of the report must be sent to the **municipality** in which the facility is located, by **July 1, 2008**.

2.7 Progress report certification: As a Senior Management Official of the facility, I have personally examined this progress report and I certify, by initialing the "Yes" box below, that the information is complete and accurate. I also certify that a P2 Plan has been prepared, **updated** and is on site and available for the Department's inspection. P2 plans must be updated by **01/01/08** and every 2 years thereafter.

_____ Yes, I certify that this report is complete and accurate, that the P2 plan has been prepared, **updated** and is available for inspection.

Please Print:

A. Last Name _____ First Name _____ Middle Initial _____

B. Title _____

C. Signature _____

D. Report Prepared by (if other than Senior Official) _____ Phone _____ Ext _____

E. Facility Environmental Contact: (if other than Senior Official) _____ Phone _____ Ext _____

F. Environmental Contact's E-mail address _____

Submit by July 1, 2008 to: Jim Rodrigue, Manager
Toxics Program
Maine DEP
17 State House Station
Augusta, ME 04333-0017