

Massachusetts  
Department  
*of*  
ENVIRONMENTAL  
PROTECTION

*2008*

Toxics  
Use  
Reporting  
Instructions



**Developed in collaboration with the Office of Technical Assistance and Technology and the Toxics Use Reduction Institute**

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## WHAT'S NEW FOR CALENDAR YEAR 2008 REPORTS

### Changes for 2008 Reports

**Higher Hazard Substance Designations Effective Reporting Year 2008:** The TURA Administrative Council has designated trichloroethylene (TCE), cadmium, and cadmium compounds as higher hazard substances. These designations lower the reporting threshold for these substances to 1,000 pounds beginning in reporting year 2008, for toxics use reports due July 1, 2009. These designations were contained in revisions to 301 CMR 41.00 promulgated on December 28, 2007.

Note that one common substitute for trichloroethylene is perchloroethylene (also known as tetrachloroethylene or PCE). Perchloroethylene (chemical abstract service number 127-18-4) has been designated as a higher hazard substance for reporting year 2009. This chemical will be subject to the 1,000 pound reporting threshold for reporting year 2009 reports due July 1, 2010.

**Form A Threshold:** The United States Environmental Protection Agency (EPA) has changed the reporting threshold for using the Form A in lieu of the Form R. First, the Form A may not be used for persistent, bio-accumulative and toxic (PBT) chemicals (a Form R must be used for these chemicals). Second, a Form A may be used ONLY if the amount of total releases was 500 pounds or less and the amount of the chemical manufactured, processed or otherwise used did not exceed 1 million pounds during the reporting year. These same Form A rules and thresholds apply for TURA reporting.

### **TURA Form and eDEP Changes**

**Production Ratio Added to Form S:** For reporting year 2008, the production ratio has been added as a mandatory field on the Form S to ensure more complete reporting of production ratio data. (See page 19.) This is the same production ratio reported on the Form R.

The eDEP system has been upgraded to check for certain reporting errors. If the production ratio is less than 0.2 or greater than 10, the online system will suggest that the data entered may be in error and ask the user to check the data to ensure that it is accurate and make any needed changes prior to completing the report. The system also will now check whether total use equals the amounts shipped in product and generated as byproduct. If there is no approximate balance, the online system will ask you to double check your values and make changes if necessary. MassDEP expects these changes to reduce the number of exception reports that MassDEP sends to facilities regarding apparent reporting errors.

### **Online Payment Option for Toxics Use Fee**

Facilities now may elect to pay the toxics use fee at the time they file their Toxics Use Report via eDEP, eliminating the need for subsequent billing. There are three options for making payment:

1. Pay electronically at the time of filing by providing bank account information. (select "ACH" in eDEP);
2. Provide a check number and then mail the check to MassDEP (select "CHECK" in eDEP and enter check number);
3. Request that MassDEP send you an invoice (select "CHECK" in eDEP and enter "Billed").

## Reporting Reminder

As a reminder, TURA amendments in 2006 changed TURA reporting requirements:

- **The reporting of toxics present in fuel oil used in combustion, except when the production of electricity, steam or heat is the primary business of a facility (i.e., a power plant) is no longer required.** This means that facilities (other than power plants) should not include in toxics use reports polycyclic aromatic compounds or benzo(g,h,i)perylene present in fuel oils used for combustion. Please note that this change does not affect Toxics Release Inventory reporting to the U.S. Environmental Protection Agency (facilities must still file Form Rs for toxics in fuel oils above reporting thresholds).
- **TURA's 10,000/25,000 pound reporting thresholds are consistent with the federal Toxics Release Inventory (TRI) program.** Previously under TURA, when a facility had exceeded the 10,000 pounds threshold for otherwise using a chemical, the facility had to report all chemical use, including manufactured or processed, greater than 10,000 pounds. Now, manufactured or processed chemicals do not need to be reported below 25,000 pounds (unless they are PBT chemicals or higher hazard substances, which have lower reporting thresholds).

## Training

MassDEP, OTA, and TURI have scheduled training on 2008 toxics use reporting. Please refer to MassDEP's website at <http://www.mass.gov/dep/toxics/turatri.htm> to find out more about 2008 TURA reporting trainings.

## Online TURA Reporting

More than 95% of TURA facilities submit their Toxics Use Reports online via the eDEP system. MassDEP encourages continued online filing. If you have not yet filed electronically, you can register online and begin right away. With online filing no paper submittals are needed. Tips on eDEP TURA filing can be found on MassDEP's web site at [www.mass.gov/dep/toxics/approvals/turforms.htm#report](http://www.mass.gov/dep/toxics/approvals/turforms.htm#report).

### *Advantages*

- ✓ Complete forms more quickly and easily, as many data fields will fill themselves in or pre-populate based on prior years' submittals.
- ✓ The system completes the Fee Worksheet automatically.
- ✓ Avoid improperly completed forms through data entry controls.

### *Easy to Set up*

**Register** online with eDEP at [www.mass.gov/dep](http://www.mass.gov/dep) and click on eDEP Online filing. It takes about 15 minutes to sign up online and receive confirmation by email. To register you will need your MassDEP Facility ID# and TAX ID# (FEIN/TIN). Please contact MassDEP-TURA at 617-556-1011 if you need to obtain your ID numbers.

Note to first-time filers: You cannot use eDEP for TURA if your facility is filing under TURA for the first time. In this case, please contact MassDEP at 617-292-5982 to obtain a paper copy of the Toxics Use Reduction Report forms.

### ***Requirements***

- ✓ You need a computer and connection to the Internet.
- ✓ Microsoft Windows NT4.0, 2000 or XP
- ✓ You must use Microsoft Internet Explorer® 5.0 or higher or Netscape Navigator® 7.0, Firefox 3.0, Adobe Acrobat Reader Version 7.0.7 or higher (please note that Adobe Acrobat Reader 6.0 will not work with eDEP). All may be downloaded for free from the vendors' websites
- ✓ Macintosh OS 10.4.11 or higher, Apple Safari Browser, Apple Reader for Mac 9.0 or higher.

### ***Need Additional Information on eDEP TURA Reporting?***

- ✓ **Contact Walter Hope at MassDEP (617) 292-5982 or [Walter.Hope@state.ma.us](mailto:Walter.Hope@state.ma.us)**

# Chapter 1

## *GUIDE TO COMPLETING THE TOXICS USE REPORT*

### INTRODUCTION

The Toxics Use Reduction Act (TURA) requires that large quantity users of toxic materials:

1. report annually on their use of toxic materials and pay a toxics use fee; and
2. engage every other year in a planning process designed to help them uncover opportunities to reduce their use of toxic chemicals and their wastes.<sup>1</sup>


Under TURA, the preferred means of reducing toxic chemical use and toxic wastes is "toxics use reduction" or TUR. TUR can be achieved by a variety of means, including input substitution (or replacing chemicals used in production), redesigning or modernizing production processes, improving storage and handling practices, training employees in more efficient production techniques, and in-process reuse or recycling.


Across Massachusetts, many facilities have found that TUR has helped them improve production efficiency, cut chemical purchase costs, and improve worker health and safety. Along with those benefits, facilities are reducing the risk of chemical releases to the environment in a cost-effective way.

The key to identifying TUR opportunities is having a clear idea of what chemicals are being used, how and why they are being used, and in knowing what wastes are being produced.

These instructions include tips for how to avoid some common mistakes. Those mistakes are highlighted throughout the instructions as well as in **Appendix D**, and examples are provided to help clarify potentially confusing issues.

### EASY ONLINE TURA FILINGS

MassDEP has enhanced online filing of toxics use reports via the internet. Features that are specific to eDEP filing are indicated in these directions by the flag symbol . For more information about online filing, go to [www.mass.gov/dep/service/compliance/edeponlf.htm](http://www.mass.gov/dep/service/compliance/edeponlf.htm). Tips on eDEP TURA filing can be found on the MassDEP web site at [www.mass.gov/dep/toxics/approvals/turforms.htm#report](http://www.mass.gov/dep/toxics/approvals/turforms.htm#report).

 Many of the fields in the eDEP TURA forms will pre-fill themselves based on previous TURA submissions (if applicable), and on other existing databases.

 **Note: NEED HELP WITH REPORTING?**

For assistance in reporting contact: Lynn Cain at 617-292-5711 or Cynthia Chaves at 617-292-5848 at MassDEP.

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<sup>1</sup> After several planning cycles, facilities may choose to develop a resource conservation plan or implement an environmental management system.

## WHO MUST FILE THE 2008 TOXICS USE REPORT?

A facility is required to file the 2008 Toxics Use Report if it:

1. **employed the equivalent of at least 10 full-time employees (FTEs) in 2008** (see Appendix J and EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for RY 2008" for a full definition);  
AND
2. **conducted any of the business activities described by the North American Industrial Classification System Codes (NAICS) which correspond to Standard Industrial Classification (SIC) codes 10 - 14, 20 - 39, 40, 44 - 51, 72, 73, 75 and 76** (see Appendix A for a cross-reference from SIC to NAICS codes);  
AND
3. **was a Large Quantity Toxics User (LQTU)**, that is, the facility manufactured, processed or otherwise used a TURA-regulated chemical in excess of a reporting threshold in 2008. See below for reporting thresholds (see Appendix J for definitions of manufactured, processed, and otherwise used).

**All three criteria must be met before a facility is required to file under TURA.** If one of the above statements is not true, a facility is not required to file under TURA (see page 8 of these instructions if your facility reported previously but is exempt this year).

## WHAT ARE THE CONTENTS OF A TOXICS USE REPORT?

The annual toxics use report contains information about toxics use and waste during the previous calendar year.

A complete toxics use report includes the following:

- ✓ Form S Cover Sheet
- ✓ Form R for each chemical (or Form A; however Form As are not permitted for PBTs)
- ✓ Form S for each chemical
- ✓ Fee worksheet

TURA reporting supplements federal Form R reporting -- the annual Toxic Release Inventory form submitted to the U.S. Environmental Protection Agency (EPA) under Section 313 of the federal Emergency Planning and Community Right to Know Act (EPCRA).

Many of TURA's reporting definitions and concepts are the same as those of EPCRA. You must obtain the EPA "Toxic Chemical Release Inventory Reporting Forms and Instructions for RY 2008" to complete a Massachusetts toxics use report. EPA also maintains an EPCRA hotline which can answer questions about EPCRA or supply the Form R. The hotline number is 800-424-9346, or you can visit the EPA web site at [www.epa.gov/tri](http://www.epa.gov/tri)

## WHAT TOXIC SUBSTANCES ARE SUBJECT TO TURA REPORTING?

All the substances on the EPCRA Toxics Release Inventory (TRI) list and on the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund") reportable quantities list are subject to TURA reporting and planning, except for those chemicals that have been specifically delisted. See Appendix B for the list of chemicals subject to reporting and a list of chemicals that have been delisted under TURA, including the dates of delisting. Appendix B also contains rules for reporting chemical categories and specifically listed chemicals vs. chemical categories.

EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for RY 2008" provides in-depth definitions and guidance for determining whether your facility meets any of the federal reporting thresholds. The TURA definitions of "manufacture," "process," or "otherwise use" are the same as those of EPCRA (see Appendix J) as are the rules for determining amounts for comparison to thresholds.

## WHAT ARE THE THRESHOLD QUANTITIES FOR REPORTING?

The threshold amounts for a facility to be a Large Quantity Toxics User (LQTU) are:

- A. **25,000** pounds for a toxic substance that was **manufactured** or **processed** during the reporting year; or
- B. **10,000** pounds for a toxic substance that was **otherwise used** during the reporting year;
- C. **1,000** pounds for a higher hazard substance; or
- D. For **PBT** chemicals, **100 lbs, 10 lbs, or 0.1 gram**, depending on the specific PBT chemical. Please see the next table for a list of PBT chemicals and their specific reporting thresholds.

Please note that in past years when a facility exceeded the 10,000 pounds threshold for otherwise using a chemical, the facility had to report all chemical use (including manufactured or processed) greater than 10,000 pounds. As of reporting year 2006, manufactured or processed chemicals no longer need to be reported below 25,000 pounds (unless they are PBT chemicals or higher hazard substances, which have lower reporting thresholds).

## PBT Chemical and Chemical Category Reporting Thresholds

Chemical Name or Chemical Category Name	CAS Number or Mass DEP Chemical Category Code	Threshold (pounds, unless otherwise noted)
Aldrin	309-00-2	100
Benzo(g,h,i)perylene	191-24-2	10
Chlordane	57-74-9	10
Dioxin and dioxin-like compounds (manufacturing; and the processing or otherwise use of dioxin and dioxin-like compounds if the dioxin and dioxin-like compounds are present as contaminants in a chemical and if they were created during the manufacturing of that chemical)		0.1 gram
Heptachlor	76-44-8	10
Hexachlorobenzene	118-74-1	10
Isodrin	465-73-6	10
Lead (this lower threshold does not apply to lead when contained in stainless steel, brass or bronze alloy)	7439-92-1	100
Lead compounds		100
Mercury	7439-97-6	10
Mercury Compounds		10
Methoxychlor	72-43-5	100
Octachlorostyrene	29082-74-4	10
Pendimethalin	40487-42-1	100
Pentachlorobenzene	608-93-5	10
Polychlorinated biphenyls (PCBs)	1336-36-3	10
Polycyclic aromatic compounds (PACs)		100
Tetrabromobisphenol A	79-94-7	100
Toxaphene	8001-35-2	10
Trifluralin	1582-09-8	100

## WHAT ARE THE EXEMPTIONS TO TURA REPORTING?

Some of the exemptions to TURA reporting are the same as those under EPCRA. These include exemptions for certain chemical uses, the de minimis exemption (the de minimis exemption does not apply to PBTs) and the article exemption. These exemptions are summarized below. (Please refer to EPA's TRI Forms and Instructions for more detail on when an exemption applies.)

### 1. Exempt Uses

A listed chemical is exempt when it is **otherwise used** in:

- Janitorial or grounds maintenance
- Maintenance of motor vehicles operated by a facility
- Structural components of a facility
- Personal items (office supplies, food, drugs, cosmetics, etc.)
- Intake air or water

The facility maintenance and structural components exemptions DO NOT apply to chemicals used in association with process equipment.

### 2. De Minimis Exemption

The Deminimis exemption allows facilities to disregard certain minimal concentrations of a listed chemical found in mixtures or trade name products. Under EPA's rules, the chemical must be processed or otherwise used. The de minimis quantity levels are:

- < 0.1% by weight for OSHA carcinogens
- < 1% by weight for other chemicals

The exemption DOES NOT apply to chemicals that are manufactured, intentionally or coincidentally, by the facility. The de minimis exemption DOES NOT apply to PBTs.

### 3. Article Exemption


Listed chemicals in an "article" are exempt if the item meets certain criteria. The article must be a manufactured item which:

- is formed to a specific shape or design during manufacture;
- has end use functions dependent in whole or in part on its shape or design; and
- does not release a listed chemical under normal processing or otherwise use.

The exemption only applies to articles that are processed or otherwise used. For example, a firm that buys and attaches metal arms to chairs could be eligible for the exemption. The firm that manufactured the arms generally would not be eligible. Also, to qualify for the exemption, the article must retain its initial thickness or diameter.


## WHAT IF WE REPORTED LAST YEAR BUT ARE EXEMPT THIS YEAR?

If your facility does not have to report this year but reported in a previous year, MassDEP recommends that you notify MassDEP in writing and explain why. This will help MassDEP distinguish facilities that are exempt from those that are out of compliance.

 **Note:** You may complete the toxics use report Form S Cover Sheet (Section 3) if your facility is newly exempt from reporting (see p. 14 of this guidance). You also may send a letter to MassDEP explaining why your facility is newly exempt.

## WHEN ARE THE TOXICS USE REPORTS DUE?

The toxics use reports (containing information for calendar year 2008) are due (filed online or postmarked) by **July 1, 2009**.

Please note that filing a late toxics use report may result in MassDEP enforcement action, and if the report is more than 30 days late, Mass DEP will impose an administrative fee of \$1,000  **Note: Please do NOT send toxics use reports to MassDEP's regional offices.**

## WHEN IS THE TOXICS USE FEE DUE?

The toxics use report includes a fee worksheet that must be completed and filed with your toxics use report due by July 1, 2008. . There are three options for making payment. At the time of eDEP filing you can:

1. Pay electronically by providing bank account information.
2. Provide a check number and then mail the check to MassDEP.
3. Request that MassDEP send you an invoice.

TURA requires on-time payment of fees. Section 19, subpart F of the TURA statute assesses an administrative fee of \$1,000 for any toxics use report that is filed more than 30 days late, and for any toxics use fee that is not paid within 30 days billing (in cases where MassDEP bills a facility).

## WHAT IF I HAVE A FINANCIAL HARDSHIP?

In cases of severe financial hardship, a toxics user who employs less than 100 full-time employees may apply to MassDEP for a waiver of the toxics use fee for the year.

MassDEP may waive the fee, in whole or in part, or may extend the time for payment or partial payment.

A toxics user who employs more than 100 full-time employees may apply to MassDEP for a payment plan.

**Applications for fee waivers or payment plans are due July 1, 2009.**

To request an application for a fee waiver or payment plan write to:

Attn: Steve White  
MassDEP  
TURA Fee Waiver Request  
One Winter Street, 7th Floor  
Boston, MA 02108

## HOW DO I FILE FEDERAL TRI FORM Rs WITH MassDEP TO COMPLY WITH EPCRA AND TURA?

EPCRA requires that facilities file federal Form Rs with the state as well as with EPA. TURA also requires facilities to include Form Rs in the toxics use report. Facilities can meet both requirements by filing with MassDEP a complete toxics use report, which includes a Form R for each chemical reported.

☞ You have three options for filing Form Rs/Form As with MassDEP:

- Complete the “State Only Form R/Form A via the eDEP system. (This can be used for filing federal Form Rs with MassDEP.)
- Zip the TRIME Form R State Submittal files (TRI files 1-17) and email them as an attachment to Walter Hope at [walter.hope@state.ma.us](mailto:walter.hope@state.ma.us).
- Submit a hard copy or disk copy of the Form R/Form A to Walter Hope at MassDEP, One Winter Street, Boston, MA 02108.

For more detailed instructions on how to fill out the Form R, please refer to EPA’s *Toxic Chemical Release Inventory Reporting Forms and Instructions* available at [www.epa.gov/tri/report/index.htm](http://www.epa.gov/tri/report/index.htm).

## WHEN SHOULD I FILE A STATE-ONLY FORM R?

TURA regulates more chemicals than EPCRA and a broader range of facilities (i.e., NAICS codes). As a result, some facilities have TURA-only reporting obligations that are not required under EPCRA. Since a federal Form R is not required in these instances, facilities must submit a State-Only Form R/A in their toxics use report when reporting to meet TURA-only requirements. State-Only Form R/As automatically appear in the eDEP TURA system when you fill out your toxics use report.

Since the State-Only Form R/A asks for the same data as the federal Form R, you should refer to EPA’s *Toxic Chemical Release Inventory Reporting Forms and Instructions* when filling out the State-Only Form R/A.

☞ **Note:** Do not send State-Only Form R/As to EPA.

## WHEN CAN I FILE A FORM A (FEDERAL OR STATE-ONLY) INSTEAD OF A FORM R?

Both EPA and MassDEP allow the simplified Form A to be used when a facility does not exceed 500 pounds of total releases of a chemical and the amount of the chemical manufactured, processed, or otherwise used does not exceed one million pounds. If your facility qualifies for Form A reporting, you may submit a Form A in lieu of a Form R. See EPA’s *Toxic Chemical Release Inventory Reporting Form and Instructions* for guidance on eligibility for Form A reporting (Note: Form As are not permitted for PBT chemicals under TURA and TRI.).


If you are filing a Form A to meet TURA-only reporting requirements and are using the eDEP system, fill in just the Form A section of the State-Only Form R/A.

## HOW CAN I CORRECT A PREVIOUSLY FILED REPORT?

If you would like to correct an error in a previously filed report, the following steps should be taken:

1. Photocopy the page which contains the information to be corrected;
2. Clearly identify at the top of the page the year of the report that you are correcting;
3. Write the corrected information next to the erroneous data element;
4. Clearly identify the new information by circling it in red ink; and
5. Have the facility official who certified the report initial and date the change at the top of the page.

If the person who originally certified the report has left the facility or is unavailable, have the senior management official who currently signs toxics use reports initial and date the change.

 **Note:** Send corrections to the Department of Environmental Protection - TURA, 7<sup>th</sup> Floor, One Winter Street, Boston, Massachusetts 02108-4747.

✓ **Example: how to correct a previously filed report**

**Section 1: Facility-Wide Use of Listed Chemical**

1026

Lead Compounds

a. CAS #

b. Chemical Name (Dioxin should be in grams, decimal points may be used)

Facility-wide use of chemical identified in a. Enter the total amount (in POUNDS, except for dioxin) for each applicable category. **NOTE:** 'Generated as byproduct' (item f.) means all waste containing the listed chemical before the waste is handled, transferred, treated, recycled or released. Please refer to the reporting instructions before completing this section.

c. Manufactured

100,000 66,650

d. Processed

e. Otherwise Used

650

f. Generated As Byproduct

66,000

g. Shipped In Or As Product

h.  Check here to input Form R or A information to MassDEP

## Chapter 2

### DETAILED FORM S COVER SHEET INSTRUCTIONS

The Form S Cover Sheet is divided into four sections.

In Section 1, facilities provide general information and state whether any Trade Secret claims are being made.

In Section 2, a senior management official certifies that the information contained in the toxics use report is true, accurate, and complete.

In Section 3, facilities may elect to provide information about any chemical reported last year that is not being reported this year, including the reasons why.


In Section 4, facilities provide a facility-wide listing of production units and production process codes.



#### Reporting Guidance

If you are a first time filer, you will need to understand a few key terms in order to file your Toxics Use Report. You will need to define your production units and develop a measure called the “unit of product” to evaluate changes in byproduct. To help you do so, please see Appendix I – Note on Production Units.

#### COMPLETING SECTION 1 OF THE COVER SHEET

 **Note:** If filling out forms manually, please fill in the reporting year, facility name, and MassDEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items will pre-populate. Filling out this information ensures that your submittal stays together.

#### ✓ Example

#### Section 1: General Information

Facility Name and Address:

Jane Smith

a. Name

211 Main Street

b. Street Address

Anytown

c. City

MA

d. State

02100

e. Zip Code

- f. Are you making a trade secret claim for any information submitted in this COVER SHEET and/or Form S(s)? Yes  No
- g. If YES, attach a statement substantiating the claim. This copy is: Sanitized  Unsanitized
- h. Are all chemicals only used to treat wastewater? Yes  No   
(if yes, then there are no production units associated with this facility).

i. Taxpayer Identification Number  
(Federal Employer Identification Number or FEIN)

j. Toxics Release Inventory (TRI) Identification Number

**Explanation of Items a-e.**

Facility Name and Address: Write in the facility name and address. Also, when you write your facility name, put the facility name first, then any division, if applicable. For example: "ACME Electronics, Aerospace Division". Do not leave this section blank.

**Explanation of Item f.**

Trade Secret Claim: You may **not** withhold information from MassDEP because it is confidential. You may, however, request that the agency keep the information Trade Secret. MassDEP must determine whether or not a claim of Trade Secret meets the standards for Trade Secret protection.

You should carefully read the Trade Secret regulations (310 CMR 3.00) before you make a claim. There are penalties for frivolous claims.

If you are claiming a Trade Secret, please call MassDEP at (617) 556-1011 to receive a special reporting package.

**Explanation of Items g-h.**

Sanitized or Unsanitized: Please refer to the Glossary (Appendix J) for the definition of sanitized vs. unsanitized Trade Secret claims.

Waste Treatment Chemicals: You do not need to assign a production unit number for waste treatment chemicals.

**Explanation of Items i-j.**

Taxpayer Identification Number: Please enter your facility's Federal Employee Identification Number or FEIN.

Toxics Use Release Inventory (TRI) ID Number: Please enter your facility's federal TRI number.

## COMPLETING SECTION 2 OF THE COVER SHEET

☞ If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

### ✓ Example

This CERTIFICATION STATEMENT should be signed after all of the pages of the Form S Cover Sheet have been completed.

I hereby certify that I have reviewed this and all attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and information in these documents are accurate based on measurements and/or reasonable estimates using data available to the preparers of these documents. I am aware that there are significant penalties for willful or intentional submission of false or incomplete information. I agree on behalf of the filing facility to remit the required Toxics Use Fee (as determined on the Fee Worksheet form) to the Commonwealth of Massachusetts as required by 301 CMR 40.03. I further certify that the information contained within this filing is true and accurate pertaining to TURA billing information.

John Doe

a. Authorized Signature

John

c. First Name (print)

Plant Manger

e. Position/Title

5/25/2008

b. Date (mm/dd/yyyy)

Doe

d. Last Name (print)

johndoe@xyz.com

f. Email Address

Do not complete Section 2 until all of the required forms are present, complete, and accurate. The certification statement must be signed by a "senior management official," that is, by an official who has management responsibility for the person(s) completing the report, and who has the authority to act as an agent for the facility.



COMPLETING SECTION 4 OF THE COVER SHEET

**✓ Example**

A PRODUCTION UNIT is best thought of as the combination of the process (or activities) used to produce a product or service and the product or service. In this section, please identify the PRODUCTION UNITS at the facility, then use the production unit number to report on chemical use in the Form S.

If there has been a substantial change in a PRODUCTION UNIT from the previous reporting year, the PRODUCTION UNIT must be given a new, unique number.

<p>a. Production Unit #</p> <p>Is this production unit IN USE for the reporting year of this submittal?</p>	<p>b. Describe the Process:</p> <p><u>Aluminum processing – electropolishing and plating of aluminum parts</u></p> <hr/> <p>c. Describe the Product:</p> <p><u>Aluminum parts ready for further processing</u></p> <hr/>
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Enter up to four (4) six-digit NAICS Codes that best describe the Product from this Production Unit:

<u>332813</u>	<u>                    </u>	<u>                    </u>	<u>                    </u>
d. NAICS Code	e. NAICS Code	f. NAICS Code	g. NAICS Code

h. Check the appropriate description for the unit of product:

area     dollar     hours     kilowatt     length     N/A     number  
 volume     weight

☞ Many of the fields in the eDEP application will pre-fill themselves based on previous TURA Form S submissions (if applicable). Production unit numbers may have been changed by MassDEP due to the incorrect re-use or changing of Production Unit descriptions in the past. Filers should use the listed Production Unit numbers, or if necessary, create new production units where necessary.

☞ Filers that are reporting only on TURA listed chemicals that are used ONLY for wastewater treatment are not required to describe production unit information (since creating and cleaning wastewater is not a ‘product’). However, facilities filing electronically will have to create a place holder production unit to complete the Form S.

☞ NAICS Codes may be changed if necessary, and are found in Appendix A.

☞ The Unit of Product section has been changed, please select the most accurate description or N/A.

**Production Process Step Information For This Production Unit**

i. Enter the production process codes to identify the process steps that involve TURA-reportable chemicals as an input, output or throughput. (See the reporting guidance document for the list of production process codes and instructions on when a given code needs to be listed.)

1. <u>BB-02</u> Process Code	2. <u>BB-04</u> Process Code	3. _____ Process Code	4. _____ Process Code
5. _____ Process Code	6. _____ Process Code	7. _____ Process Code	8. _____ Process Code
9. _____ Process Code	10. _____ Process Code	11. _____ Process Code	12. _____ Process Code
13. _____ Process Code	14. _____ Process Code	15. _____ Process Code	16. _____ Process Code
17. _____ Process Code	18. _____ Process Code	19. _____ Process Code	20. _____ Process Code
21. _____ Process Code	22. _____ Process Code	23. _____ Process Code	24. _____ Process Code

At least one process code must be selected for each production unit; process codes are listed in Appendix H. Please note that dashes should be included when entering process codes.

List the TURA-reportable chemicals associated with this production unit. If a chemical is associated with ALL the process steps entered in i. above, check ALL. If a chemical is associated with some but not all of the process steps, check the numbers that correspond to the process codes entered in i. above (i.e. box 1 below corresponds to the process code entered in i.1).

j. Production unit number: 01  
Prod. Unit #

k. TURA Chemical 766939 Sulfuric acid  
CAS # Chemical Name

Check "All" or the numbers that correspond to the process codes entered in i. All.

1. <input type="checkbox"/>	2. <input type="checkbox"/>	3. <input type="checkbox"/>	4. <input type="checkbox"/>	5. <input type="checkbox"/>	6. <input type="checkbox"/>	7. <input type="checkbox"/>	8. <input type="checkbox"/>	9. <input type="checkbox"/>	10. <input type="checkbox"/>	11. <input type="checkbox"/>	12. <input type="checkbox"/>
13. <input type="checkbox"/>	14. <input type="checkbox"/>	15. <input type="checkbox"/>	16. <input type="checkbox"/>	17. <input type="checkbox"/>	18. <input type="checkbox"/>	19. <input type="checkbox"/>	20. <input type="checkbox"/>	21. <input type="checkbox"/>	22. <input type="checkbox"/>	23. <input type="checkbox"/>	24. <input type="checkbox"/>

To complete Section 4, you must have identified the production units at your facility.

If you are reporting on production units that you reported on previously, the production unit numbers, process descriptions, product descriptions and units of product should be the same as reported last year. The information on Process Codes, described in the explanation of item i above and also in Appendix H, should be reported.

**Note:** If you are a first time filer please see Appendix I and MassDEP's "Note on Production Units" which explains factors to be considered when dividing the facility into production units. The Guidelines can be obtained from MassDEP by calling (617) 292-5711, or by visiting MassDEP's web site at [www.mass.gov/dep/toxics/toxicsus.htm](http://www.mass.gov/dep/toxics/toxicsus.htm).

It may be difficult to break out chemicals that are being used at very low quantities (i.e., dioxin, mercury as an impurity) into a specific production unit, process or product. Selection of a production unit which is the entire facility is acceptable in these cases.

Under TURA, facilities must identify only those processes and products that involve a listed chemical. In thinking about production processes, facilities typically begin by identifying the basic process, operation or technology used

to make the product. In identifying processes, a facility must be sure to account for such intermittent processes such as equipment cleaning, as well as out-of-process activities such as materials storage and handling.

Ultimately, the facility must obtain a complete understanding of its processes or activities that involve reportable chemicals. With the exception of the operations listed below, every operation which uses any amount of chemical for which a report is filed must be included in a production unit. The following operations are NOT considered to be production units:

- pilot plants;
- pilot production units;
- start-up production units for either two years from the date of initial operation or until operational efficiency is achieved, whichever time period is shorter; and
- waste treatment units and pollution control equipment. If you reported a waste treatment unit last year, simply omit it, and its number, from the facility-wide listing of production units. Do not reuse the production unit number.

Please note that the chemicals associated with these operations must be accounted for in the facility-wide totals on the Form S itself.

a: Assign a Production Unit Number.

If this is your first time reporting, assign the number 1 to the first production unit, 2 to the second, etc., and check “Yes” or “No” to indicate if the production unit is new.

In order to track progress in toxics use reduction over time, production units must keep the same number from year to year. If you have reported on the production unit previously, use the same number for each production unit that you used in previous years.

Assign a new production unit number (one you have never used before) if: 1) your facility has begun the production of a new product; or 2) your facility has redefined production units by changing the products and/or production processes included in the production unit.

☞ eDEP facilities will find their production units listed sequentially, any new production units will be assigned the next highest sequential number (i.e. previously used highest number was 14, new production unit number will be assigned 15).

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 **AVOID A COMMON MISTAKE**

**If you eliminated a production unit, do not re-assign its number to an existing or new production unit.**

☞ Many of the fields in the eDEP Form S will pre-fill themselves based on previous TURA Form S submissions (if applicable). Production unit numbers may have been changed by MassDEP due to the incorrect re-use or changing of Production Unit descriptions in the past. Filers should use the listed Production Unit numbers, or if necessary, create new production units where necessary.

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Complete steps b. through h. if this is your first time reporting on a production unit or the information reported on for the production unit is NOT exactly the same as last year.

b. Describe the Process.

Describe the production process(es) included in the production unit.

c. Describe the Product Produced by the Production Unit.

Describe the product or family of products produced by the processes (see Appendix H for further guidance) entered in b. (If you have filed previously use the description as reported in earlier years.) Then enter all of the applicable 6-digit North American Industry Classification System (NAICS) Codes for the product made. List the NAICS code that best represents the product or family of products first, then enter any other codes that apply. Appendix A provides a cross-reference from SIC to the list of 6-digit NAICS codes.


d-g. Enter NAICS codes.

Enter up to four NAICS codes that best describe the product from the production unit. NAICS codes are referenced in Appendix A.

h. Describe the Unit of Product Associated with the Production Unit.

A unit of product is a measure of the product outputs or the amount of work produced by a process. If you are a first time filer, please see Appendix I and MassDEP's "Note on Production Units". If you filed previously, you already should have chosen a unit of product for the production unit. Please check the unit of product that applies or N/A.

Sometimes, however, it may not be possible to identify a physical measure that reliably reflects outputs. In this case, a non-physical measure may be used as a way to quantify changes in production. Examples of this may include: hours of operation and dollar sales. Non-physical measures can be affected by things that have nothing to do with changing levels of production. For instance, dollar sales will be influenced by changes in inflation, or perhaps, by product pricing.

 **Note:** In most cases, a physical measure will be adequate as a unit of product. Examples of physical measures include number or weight.

i. Indicate Process Codes to Describe Production Units.

The complete list of process codes and appropriate definitions can be found in Appendix H. To fill out Section 4 of the form, place the appropriate codes in the space provided, in the order in which the processing step takes place. In the rare event that the production unit has more than twenty-four individual process codes, note the production unit number on the continuation page and add the additional codes in the space provided.

j. Select a Production Unit.

k-n. Chemical Names and CAS numbers.

**List by name and CAS number each chemical used in the production unit in the appropriate space. Check the space marked "ALL" if the chemical is used in all of the processes in the production unit. Otherwise, check the number that corresponds to the process code in which the chemical is used from i. If more than four chemicals are used in the production unit, note the production unit number on the continuation page and add the additional chemicals in the space provided.**

## CHAPTER 3: DETAILED FORM S INSTRUCTIONS

A Form S must be completed for each reportable chemical. The Form S is divided into four sections which include information about each reportable chemical.

In Section 1, facilities provide information on the amount of chemical that is manufactured, processed or otherwise used at the facility and report the amount produced as byproduct facility-wide, and the amount shipped in or as product.

In Section 2, facilities give an explanation if the chemicals reported are not in materials balance.

In Section 3, facilities indicate whether the chemical is used in waste treatment or for pollution control.

In Section 4, facilities provide information on the chemical at the production unit level, including indicating and explaining changes from the previous year in use and byproduct..

To complete the Form S, you should first complete a Form R and read EPA's Toxic Chemical Release Inventory Reporting Forms and Instructions. Once you complete the Form R, it will help you in filling out the Form S.

### COMPLETING SECTION 1 OF THE FORM S

#### ✓ Example

#### Section 1: Facility-Wide Use of Listed Chemical

108883

a. CAS #

Toluene

b. Chemical Name (Dioxin should be in grams, decimal points may be used)


Facility-wide use of chemical identified in a. Enter the total amount (in POUNDS, except for dioxin) for each applicable category. **NOTE:** 'Generated as byproduct' (item f.) means all waste containing the listed chemical before the waste is handled, transferred, treated, recycled or released. Please refer to the reporting instructions before completing this section.

\_\_\_\_\_ 20000 \_\_\_\_\_  
c. Manufactured d. Processed


\_\_\_\_\_ 2000 \_\_\_\_\_  
e. Otherwise Used f. Generated As Byproduct

18000 \_\_\_\_\_  
g. Shipped In Or As Product h.  Check here to input Form R or A information to MassDEP i. Production Ratio

#### Explanation of Item a-b.

 **CAS Number and Name:** Enter the **chemical abstract service (CAS) number** for the listed chemical from your Form S cover sheet, Section 4. If the chemical is a chemical category, please refer to the CAS # list in Appendix B. Please note that CAS #s should be entered without dashes.

Enter the chemical name as it appears on the Form S cover sheet, Section 4.

 **PBT Note:** All PBT chemicals can be listed as half pounds except for dioxin and dioxin-like compounds. Dioxin and dioxin-like compounds should be reported in grams. A decimal point should be used to report grams of dioxin and dioxin-like compounds.

## Explanation of Items c-i.

**Facility-Wide Use of chemical:** Enter the total quantity of the toxic chemical that was manufactured, processed, or otherwise used facility-wide during 2008. Also enter the total quantity of the chemical generated as byproduct or shipped in or as product. Please refer to Appendix D, Common Reporting Errors, #1.

You should enter the total quantity in pounds (or in grams for dioxin and dioxin-like compounds) for all categories that apply. Include in these totals chemical use in pilot plants, pilot production units, start-up production units and waste treatment units.

**Production ratio:** Enter the production ratio for this chemical in field i. This is the same production ratio that is reported on the Form R.

☞ eDEP will only allow the entry of whole pounds, ½ pounds for PBT chemicals, and/or grams for dioxin and dioxin-like compounds.

☞ **Field h is used for eDEP reporting to automatically populate the Form S with information from the Form R/Form A.**

## Reporting Guidance

To complete Section 1, you need to understand the terms, "manufacture," "process," and "otherwise use", "byproduct", and "shipped in or as product".

The terms "manufacture," "process," and "otherwise use" have the same meaning under TURA as in EPCRA. Below are the general definitions of those terms. You should consult EPA's "Toxic Chemical Release Inventory Reporting Forms and Instructions for RY 2008" for more detailed guidance.

You **manufacture** a listed chemical if you create it (or cause it to come into being) as a product, impurity or waste. Manufacturing also includes importing the chemical into the United States. Chemicals that are "coincidentally" manufactured during production, fuel combustion, or waste treatment, are considered "manufactured" under TURA and are subject to reporting requirements.

You **process** a chemical if it is intentionally incorporated into your product. Included are chemicals used as reactants, performance enhancers or components of a product.

You **otherwise use** a chemical if your use does not fit the manufacturing or processing categories. "Otherwise Used" is a default category. Examples include use of cleaners, degreasers and coolants to maintain equipment.

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## AVOID A COMMON MISTAKE

The same chemical in the same formulation can be considered processed in some circumstances and otherwise used in others. For example, when a solvent is mixed with other substances to make a coating, the solvent is considered to be processed, since it is being incorporated into a product (the coating). When that coating is applied, however, the solvent is considered to be "otherwise used" since it is merely serving as a carrier that will evaporate off, rather than remain in the product.

**Chemicals brought on-site but held in inventory, rather than used in a production process during the reporting year, should not be reported in the facility-wide total use.**

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☞ eDEP facilities that do not have a mass balance with their chemical use (i.e. manufacture, process or otherwise use do not equal) should respond to at least one of the materials balance options in Section 2.

## Reporting Guidance

### BYPRODUCT

Byproduct is defined as: "nonproduct outputs of toxic or hazardous substances generated by a production unit, before handling, transfer, treatment or release. Otherwise used substances shall be counted as byproduct when they leave a production unit." (it is equivalent to the sum of Part II, Sections 8.1 - 8.8 of the EPA Form R).


Once a chemical is manufactured, processed, or otherwise used, only three things can happen to it:

- It can become a product or a part of one.
- It can be consumed or transformed during the production process.
- It can end up as a "byproduct."

If a chemical does not become a product and it is not consumed or transformed in the production process, as a general rule it is a "byproduct." Generally, byproduct encompasses all of the "non-products" or wastes that leave the production unit.

However, the following are not byproducts:


1. Materials that are reused in a process in their current form without any type of treatment or recovery are not byproducts. They are an input, but their subsequent use is not counted in the amount manufactured, processed, or otherwise used.
  2. Any substances that are recycled through a process that is "integral" to the production unit are not byproducts because they never leave the production process (see Appendix G for further guidance on integral recycling).
  3. Untreated materials that are shipped off-site for reuse without any type of treatment or recovery are not byproducts, but are products.
- 

 **Note:** When MassDEP reviews the byproduct numbers, MassDEP compares the amount reported in the Form S with the amounts reported in Part II, Section 8 of the Form R. In general, the sum of items 8.1 through 8.8 should equal the amount of byproduct reported in the Form S. (The Form S byproduct number may be slightly different due to the way the numbers are rounded off in the Form R.)

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### A BYPRODUCT IS ANY AMOUNT OF A LISTED CHEMICAL THAT LEAVES THE PRODUCTION UNIT AS PART OF:

- Fugitive Emissions (or evaporative losses)
  - Wastewaters
  - Spent Materials going to on-site or off-site recycling
  - Solid Waste
  - Stack Emissions
  - Hazardous Waste
-

 **Note:** When MassDEP reviews the Form S, the agency checks to see if the sum of the manufactured, processed, and otherwise used amounts reported in section 1 equal the sum of those amounts reported in the generated as byproduct and shipped in or as product amounts . This is because in many -- but not all -- cases, the two totals should be in balance. The sum of the amount manufactured, processed and otherwise used often equals the sum of byproducts and the amount shipped in or as product. See explanation of Section 2 for a discussion of when the two sides might not be in balance.

⌘ eDEP facilities that do not have a mass balance with their chemical use (i.e. manufacture, process or otherwise use do not equal) will generate a validation message in the eDEP system, be asked to double-check their data for errors and will need to respond to at least one of the options in Section 2 to explain why there is not a mass balance.

## COMPLETING SECTION 2 OF THE FORM S

### Reporting Guidance

#### MATERIALS BALANCE

Manufactured + Processed + Otherwise Used = Byproduct + Shipped in Product

You can think of the amount of a chemical that is manufactured, processed or otherwise used as an input. Generally, the byproducts and the amount shipped in product can be viewed as the outputs. Put another way, in general, the amount of the chemical "used" equals the amount contained in the product plus the amount generated as byproduct. This concept of a "materials balance" is incorporated into the design of the Form S.

#### ✓ Example

#### Section 2: Materials Balance

When the amounts reported in c, d and e in Section 1 are added together, the sum will in many cases equal the sum of f and g. In other words, lines c, d and e will often form a "materials balance." If lines c,d and e are not in approximate balance, you must use this section to explain why. Indicate all the reasons that apply by entering the number of pounds on the appropriate line below (e.g., 4,000 Chemical was held in inventory).

a. Chemical Was Recycled On Site

4,000

c. Chemical Was Held in Inventory

b. Chemical Was Consumed or Transformed

d. Chemical Is A Compound

e. Other

f. Did anything non-routine occur at your facility during the reporting year that affected the data reported? Yes \* No  \*If your answer is Yes, you may explain in Section 4.m on Page 3.

#### Explanation of Section 2.

There are circumstances where the amounts in line c, d, and e of Section 1 will not be in balance with lines f and g. Section 2 includes several options to allow facilities to explain why this is so. *It is important to complete this item because it will clarify what might otherwise be considered a reporting error.* Section 2 lists four of the most common reasons and an "other" category. Indicate all of the reasons that apply by entering the number of pounds on the appropriate line.

**Chemical was recycled on-site** (in a method that is not integral to the production process): With non-integral recycling, the chemical is counted as a byproduct each time it leaves the production unit for recycling. Facilities report as manufactured, processed, or otherwise used only the amount of the chemical newly added during the year. In these cases, the sum of byproduct and shipped in product will exceed the facility's total use and a materials imbalance may result. Please record the quantity of chemical that was recycled on-site, so that the apparent imbalance can be reconciled. (See Appendix G, *Integral Recycling Guidance Under the Toxics Use Reduction Act*, for further explanation).

**Product was held in inventory:** Year-to-year inventory changes can affect the apparent materials balance. The Form S requires that a facility report the amount of a chemical shipped in or as product during the reporting year. Some products manufactured in one year might not be shipped until the next.

**Chemical was consumed or transformed:** If a chemical is consumed or transformed during production, either partially or totally, the amount generated as byproduct plus the amount shipped in or as product may be less than the amount manufactured, processed or otherwise used.

**Chemical is a compound:** For metals reported as compounds, the total weight of the compound in the amount manufactured, processed or otherwise used is counted. However, in calculating byproducts, only the weight of the parent metal being reported is counted. Refer to Appendix F for more information on metals reporting and planning.

#### **Explanation of Item f.**

If there was a non-routine occurrence which would affect information in the report, please note that here and report it in Section 4.m. An example of a non-routine occurrence is a major chemical spill that led to an unusual increase in byproducts for the year.

eDEP facilities that check 'yes' for this option will be required to provide an explanation regarding the non-routine occurrence.

✓ Example

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**Section 3: Chemicals Used in Waste Treatment Units**

a. Is this chemical used to treat waste or control pollution?

Yes     No\*    \*If your answer is No, please skip ahead to Section 4.

b. Please enter the amount of the chemical (in pounds) used to treat waste or control pollution.

\_\_\_\_\_ Pounds

c. Did the use of this chemical for waste treatment or pollution control increase or decrease by 10 percent or more compared with the previous reporting year?

c.1  Yes\*     No    \*If your answer is Yes, you may explain in Section 4.m on Page 3.

c.2  Yes     No    Are there more chemicals to report? (Use ONLY if ALL chemicals are used to treat waste or control pollution).

**Explanation of Item a-c.**

a. Is this chemical used to treat waste or control pollution? If your answer is No, please skip ahead to Section 4. If your answer is Yes,

b. Please enter the amount of the chemical (in pounds ) used to treat waste or control pollution,

c.1. Did the use of this chemical for waste treatment or pollution control increase or decrease by 10 percent or more compared with the previous year? Check Yes or No. If Yes, provide an explanation in Section 4.m. on page 3 of the Form S.

c.2. Are there more chemicals to report? This question applies only if all chemicals are used to treat waste or control pollution.

COMPLETING SECTION 4 OF THE FORM S

**Please refer to Appendix C of the 2008 Toxics Use Reporting Appendices for examples in completing Section 4 of the Form S, Toxics Use by Production Unit.**

**Section 4: Toxics Use by Production Unit**

\_\_\_\_\_ a. Production

b. Quantity of Chemical Code:

<b>Use</b>	<input type="checkbox"/> 1. $\leq 5,000$ lbs.	<input type="checkbox"/> 2. $> 5,000 \leq 10,000$ lbs.	<input type="checkbox"/> 3. $> 10,000$ lbs. $\leq 100,000$ lbs.
	<input type="checkbox"/> 4. $> 100,000$ lbs. $\leq 500,000$ lbs.	<input type="checkbox"/> 5. $> 500,000$ lbs.	

In Section 4, you provide information on chemical use and byproduct in a given production unit. You also report your progress in reducing use and byproduct generation. First time filers need only fill out b. in Section 4.

**Explanation of Item 4a.**

Enter the production unit number from the Form S Cover Sheet.

**Explanation of Item 4b.**

**Quantity of Chemical Code:** Enter the quantity of chemical code to indicate the amount of the toxic substance that was manufactured, processed, or otherwise used in the production unit during the reporting year. Please refer to Appendix G for guidance on determining the quantity of toxic chemical to report if it was integrally or non-integrally recycled.

**Explanation of Item 4c.**

c. Did the use of this chemical in this production unit increase or decrease by 10 percent or more compared with the previous reporting year and/or did you implement toxics use reduction?

Yes     No\*    \*If your answer is No, skip ahead to g. below.

Look at the amount of the chemical use in this production unit for the current reporting year and the previous year, and figure out if the amount in the current reporting year increased or decreased from the previous year by at least 10 percent.

For example, if your 2007 use was 50,000 lbs., then a 10% increase would be 55,000 lbs. or greater ( $50,000 * 1.1$ ), or a 10% decrease would be 45,000 lbs. ( $50,000 * .9$ ) or less.

If you did not report a chemical in the production unit in the previous year because you either used it below threshold or did not use it at all, you should still complete this section as appropriate. If your use of the chemical in the prior year was 0 and you are reporting the chemical this year, then you should check yes for 4.c. and complete fields d-f. If you implemented TUR, even if your increase is less than 10%, you must still provide information in fields d, e, and f.

**Explanation of Items 4d-f.**

Process code(s) where most significant changes occurred (up to three in descending order)	Type of Change (Enter "I" for Increase, "D" for Decrease)	Technique Code(s) (up to three per process code)		
d.1. _____	2. _____	3a. _____	3b. _____	3c. _____
e.1. _____	2. _____	3a. _____	3b. _____	3c. _____
f.1. _____	2. _____	3a. _____	3b. _____	3c. _____

If your answer to 4.c. is Yes,

- List the process codes associated with the chemical use in this production unit in the Form S Cover Sheet (up to three in descending order ) in Items d, e, and f.
- Indicate the type of change in chemical use (I for Increase or D for Decrease), and
- Indicate the applicable technique code/s (see p. 29 for the new list of technique codes) - up to three per process code. These codes explain what factors caused the increase or decrease in use.

**Explanation of Item 4g.**

g. Was byproduct generated for this chemical less than 1 percent of use in this production unit?

Yes\*    No      \*If your answer is Yes, skip ahead to l. on Page 3.

Figure out what percentage of use byproduct generated was for this chemical in this production unit. If byproduct generated was less than 1 percent of use in this production unit, then check Yes, and skip to Section m.

If byproduct generated was 1 percent or more of use in this production unit, then check No.

**Explanation of Item 4h.**

h. Did the byproduct generated for this chemical in this production unit increase or decrease by 10 percent or more compared with the previous reporting year and/or did you implement toxics use reduction?

Yes    No\*      \*If your answer is No, skip ahead to m. on Page 3.

Look at the amount of byproduct generated in this production unit for the current reporting year and the previous year, and figure out if the amount in the current reporting year increased or decreased from the previous year by at least 10 percent.

For example, if your 2007 byproduct was 5,000 lbs., then a 10% increase would be 5,500 lbs. or greater (5,000 \* 1.1), or a 10% decrease would be 4,500 lbs. (5,000 \* .9) or less.

If you did not report a chemical in the production unit in the previous year because you either used it below threshold or did not use it at all, you should still complete this section as appropriate. If your byproduct from the chemical in the prior year was 0 and there is byproduct in the production unit in the current year and the answer to

4.g. is no, then you should check yes for 4.h. and complete fields i-k. If you implemented TUR, even if your increase is less than 10%, you must still provide information in fields i-k.

**Explanation of Items 4i-k.**

Process code(s) where most significant changes occurred (up to three in descending order)	Type of Change (Enter "I" for Increase, "D" for Decrease)	Technique Code(s) (up to three per process code)		
i.1. _____	2. _____	3a. _____	3b. _____	3c. _____
j.1. _____	2. _____	3a. _____	3b. _____	3c. _____
k.1. _____	2. _____	3a. _____	3b. _____	3c. _____

If your answer to 4.g. is no and your answer to 4.h is yes,

- List the process codes associated with the byproduct generation in this production unit in the Form S Cover Sheet (up to three in descending order) in Items i, j, and k.
- Indicate the type of change (I for Increase or D for Decrease), and
- Indicate the applicable technique code/s (see p. 29 for the new list of technique codes) - up to three per process code. These codes explain what factors caused the increase or decrease in byproduct.

l. Are there more production units that use this chemical?  Yes  No

**If Yes, add a new production unit in Section a, and follow the same instructions for Sections 4b-k. If No, proceed to Section n.**

**Explanation of Item 4.m.**

m. You may add any comments or explanations regarding chemical use and/or byproduct generated in this production unit, chemical use in waste treatment (from Section 3), and non-routine occurrences at your facility (from Section 2).

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Provide any comments or explanations here regarding:

- chemical use and/or byproduct generated in this production unit,
- chemical use in waste treatment (from Section 3), and
- non-routine (or one-time) occurrences at your facility (from Section 2).

Are there more chemicals to report?

If Yes, begin a new Form S for another chemical. If No, then your report is complete.

## Techniques Code Matrix

Description of Technique	Technique Code
<b>TUR Techniques</b>	
Input substitution	10
Product reformulation	20
Production unit redesign	30
Production unit modernization	40
Improved operation and maintenance	50
Integral recycling/reuse	60
<b>Waste Minimization</b>	
Byproduct sold in commerce as product	63
Byproduct used in on-site waste treatment	64
Byproduct reused in manufacturing	65
Non-integral on-site recycling	66
Off-site recycling	67
<b>Other Activity</b>	
Production increased	68
Production decreased	69
Reporting threshold was lowered	70
Change in definition of byproduct otherwise used	71
Production/process step outsourced	72
Chemical replaced a more toxic chemical	73
Chemical required by customer or specification	74
Returned to using toxic chemical because safer alternative did not meet technical requirement	75
Returned to using toxic chemical because safer alternative did not meet customer preference	76
Byproduct increase because of cleanup, decommissioning or spill	77
Improved operation of waste treatment unit	78
Increase due to installation of pollution control device	79
Other	80

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## WHAT IS "TOXICS USE REDUCTION"?

**Toxics Use Reduction** is defined in the Toxic Use Reduction Act as:

In-plant changes in production processes or raw materials that reduce, avoid, or eliminate the use of toxic or hazardous substances or generation of hazardous byproducts per unit of product, so as to reduce risks to the health of worker, consumers, or the environment without shifting risks between workers, consumers or parts of the environment. Toxic use reduction shall be achieved through any of the following techniques:

**Input Substitution** is replacing a toxic or hazardous substance or raw material used in a production unit with a non-toxic or less toxic substance. Examples include:

- Aqueous cleaning instead of solvent cleaning
- Soy based inks instead of chemical inks
- Alkaline plating baths instead of cyanide baths

**Product Reformulation** is substituting for an existing end-product, an end-product which is non-toxic or less toxic upon use, release or disposal. Examples include:

- Latex based coatings instead of oil based coatings
- Unbleached paper instead of bleached paper

**Production Unit Redesign or Modification** is developing and using production units of a different design than those currently used. Examples include:

- Ozonation instead of chlorine based system for controlling corrosion
- Electrostatic powder paint spray instead of solvent based paint

**Production Unit Modernization** is upgrading or replacing existing production unit equipment and methods with other equipment and methods based on the same production unit. Examples include:

- Continuous closed system instead of batch process
- Countercurrent and reactive rinsing instead of single tank rinsing in electroplating

**Improved Operation and Maintenance of Production Unit Equipment** is modifying or adding to existing equipment or methods including, but not limited to, such techniques as improved housekeeping practices, system adjustments, product and process inspections, or production unit control equipment or methods. Examples include:

- Installation of Floating Roofs on Chemical Storage Tanks (instead of no roofs)
- Strict inventory controls to prevent expiration of chemicals

**Recycling, Reuse, or Extended Use of Toxics** is using equipment or methods which become an integral part of the production unit of concern, including but not limited to filtration and other closed loop methods. Examples include:

- Acid regeneration instead of disposal of acid
- Silver recycling unit instead of discharge of silver in wastewater

## WHAT IS NOT "TOXIC USE REDUCTION"?

Toxics use reduction focuses on the production process, rather than the byproduct. In other words, "reduction" is to occur through changes in the production process, rather than through changes in how the waste generated by the production process is handled. Thus, toxics use reduction does not include any practice which promotes or requires, or which is:

- Shifting the toxic discharge from one medium to another (air to water);
  - Recycling, unless it is integral to the production process;
  - Treatment of toxic waste to make it less toxic or non-toxic; and
  - Incineration.
-

## CHAPTER 4: DETAILED STATE-ONLY FORM R/A INSTRUCTIONS

The State-Only Form R/A must be completed for State-only reportable chemicals and State-only required NAICS Code filers. It can also be completed for TRI chemicals. This form contains a portion of the fields used in the US EPA Form R and Form A. When filling out this form, please refer to instructions in US EPA's Toxic Chemical Release Inventory Reporting Forms and Instructions, available at <http://www.epa.gov/tri/report/index.htm>.

The State-Only Form R/A is divided into the following sections:

In Section 1, facilities provide the chemical name and CAS number of the chemical they are reporting.

The second section is for facilities that are eligible for filling out the State-Only Form A.

In Section 4, facilities enter the maximum amount of chemical onsite at any time during the calendar year.

In Section 5, facilities provide the quantity of toxic chemical entering each environmental media onsite.

In Section 6, facilities provide the quantity of the chemical transferred in wastes to off-site locations.

In Section 7A, facilities enter codes for on-site waste treatment methods and efficiency.

In Section 7B, facilities enter codes for on-site energy recovery processes.

In Section 7C, facilities enter codes for on-site recycling processes.

In Section 8, facilities provide the quantity of toxic chemical released, used in source reduction and recycling activities, and treated. Facilities also provide their production ratio, and the activity codes for their source reduction activities.

### ✓ Example

## Section 1 Toxic Chemical Identity

1310732

1.1 CAS Number


Sodium hydroxide

1.2 Toxic Chemical or Chemical Category Name

Please note that MassDEP does not accept the US EPA chemical category identifiers ('N###'); please refer to Appendix B of MassDEP's Toxics Use Reporting Forms and Instructions for the appropriate Massachusetts reporting number for chemical categories).

Are you filing a Form R  yes, continue to Section 4 (note: Sections 2 and 3 are not required for State Only reporting)  no, fill out only the State Only Form A section below.

### Explanation of Section 1.

 **CAS Number and Name:** Enter the **chemical abstract service (CAS) number** for the listed chemical from your Form S cover sheet, Section 4. If the chemical is a chemical category, please refer to the CAS # list in Appendix B. Please note that the CAS number should be entered **without** dashes. Enter the chemical name as it appears on the Form S cover sheet, Section 4.

Check if you are filling out a Form R or a Form A.

### ✓ Example

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## State Only Form A

This chemical meets the Form A filing eligibility criteria (i.e., the annual reporting amount did not exceed 500 pounds this reporting year AND the amount manufactured, processed or otherwise used did not exceed 1 million pounds).

Form A Production Ratio or Activity Index

1.2

Are there additional Form A chemicals to report?  yes (paper filers copy this page as necessary)  no

### Explanation of State Only Form A Section.

Please check the first box if your chemical meets the eligibility requirements for filling out a Form A.

Please indicate your facility's production ratio for the reporting year.

Please check if there are additional Form A chemicals to report.

### ✓ Example

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## Section 4

Enter the maximum amount of the toxic chemical onsite at any time during the calendar year

03

4.1 Two-Digit Code From TRI Instructions

### Explanation of Section 3.

Please enter the code for the maximum amount of the toxic chemical onsite at any time during the calendar year.

✓ Example

## Section 5

### Quantity of the Toxic Chemical Entering Each Environmental Medium Onsite

5.1-2 Air Emissions  check if not applicable

10	120
5.1 Fugitive or non-point air emissions (pounds/year)	5.2 Stack or point air emissions (pounds/year)

5.3 Discharges to Receiving Streams or Water Bodies  check if not applicable

\_\_\_\_\_  
Total Release (pounds/year)

5.4 Underground Injection Onsite to Class I or Class II-V wells  check if not applicable

_____ 5.4.1 Underground Injection onsite to Class I Wells (pounds/year)	_____ 5.4.2 Underground Injection onsite to Class II-V Wells (pounds/year)
--	---

5.5 Disposal to Land Onsite  check if not applicable

_____ 5.5.1A RCRA Subtitle C landfills (pounds/year)	_____ 5.5.1B Other landfills (pounds/year)
_____ 5.5.2 Land treatment/application farming (pounds/year)	_____ 5.5.3 Surface Impoundment (pounds/year)
14000	
_____ 5.5.4 Other disposal (pounds/year)	

### Explanation of Section 5.

- 5.1-2 Please check if your facility did not have air emissions to report.
- 5.1 Please enter your facility's fugitive or non-point air emissions in pounds/year.
- 5.2 Please enter your facility's stack or point air emissions in pounds/year.
- 5.3 Please check if your facility did not have any discharges to receiving streams or water bodies. If your facility did have any discharges to receiving streams or water bodies, please enter the total release, in pounds/year.
- 5.4 Please check if your facility did not have any underground injection onsite to class I or class II-V wells. If your facility did have any underground injection onsite to class I or class II-V wells, please enter the total amount, in pounds/year.
- 5.5 Please check if your facility did not have any disposal to land onsite.
- 5.5.1A Please enter your facility's RCRA Subtitle C landfill disposal in pounds/year.
- 5.5.1B Please enter your facility's other landfill disposal in pounds/year.
- 5.5.2 Please enter your facility's land treatment/application farming disposal in pounds/year.
- 5.5.3 Please enter your facility's surface impoundment disposal in pounds/year.
- 5.5.4 Please enter your facility's other disposal in pounds/year.

✓ Example

## Section 6

Transfers of the toxic chemical in wastes to off-site locations

6.1.A Total Quantity Transferred to POTWs  check if not applicable

\_\_\_\_\_  
6.1.A.1 Total Transfers to POTWs

6.2 Transfers to Other Off-site Locations  check if not applicable

\_\_\_\_\_  
20000

6.2.A Total Transfers (pounds/year)

### Explanation of Section 6.

- 6.1.A Please check if your facility did not have transfers to POTWs to report.  
6.1.A.1 Please enter your facility's total transfers to POTWs in pounds/year.  
6.2 Please check if your facility did not have transfers to other off-site locations to report.  
6.2.A Please enter your facility's total transfers to other off-site locations in pounds/year.

✓ Example

## Section 7A

On-site Waste Treatment Methods and Efficiency:  check if not applicable

1. General Waste W  
Stream Code: 7A.1a

Waste Treatment Method(s) Sequence alpha-numeric codes:

H121 \_\_\_\_\_  
7A.1b.2 7A.1b.3 7A.1b.4 7A.1b.5 7A.1b.6 7A.1b.7 7A.1b.8

Waste Treatment Efficiency Estimate: (7A.1c)

- greater than 99.9999%     greater than 99.99% to 99.9999%     greater than 99% to 99.99%  
 greater than 95% to 99%     greater than 50% to 95%     greater than 0% to 50%

### Explanation of Section 7A.

Please check here if your facility did not have any on-site waste treatment to report.

- 7A.1a Please enter the code for your general waste stream.  
7A.1b.1-8 Please enter the appropriate waste treatment method sequence alpha-numeric code.  
7A.1c Please check an estimate range for the efficiency of your system.

Please check no when you have filled out all of your on-site waste treatment methods information to report, and move on to the next section.



8.4 Quantity recycled onsite	<u>2000</u>	<u>2050</u>	<u>3000</u>	<u>3050</u>
8.5 Quantity recycled offsite	<u>3000</u>	<u>2050</u>	<u>2000</u>	<u>1500</u>
8.6 Quantity treated onsite	_____	_____	_____	_____
8.7 Quantity treated offsite	_____	_____	_____	_____

8.8 Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year) \_\_\_\_\_

8.9 Production Ratio or activity index 0.92

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year?  yes, continue below  no

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	<u>W13</u>	<u>T04</u>	_____	_____
		a	b	c
8.10.2	_____	_____	_____	_____
		a	b	c
8.10.3	_____	_____	_____	_____
		a	b	c

Are there additional State Only Form R chemicals to report?  yes  no  
(if yes, continue with additional State Only Form Rs as needed)

**Explanation of Section 8.**

**8.1-8.8.** Please enter, in pounds per year, the amount of chemical in each source reduction and recycling category, for the prior year and the current year. Please enter an estimate for the amount of chemical in each source reduction and recycling category for the following year and the second following year.

**8.9** Please enter the production ratio for your facility for the reporting year.

**8.10** Please check if your facility engaged in source reduction activities during the reporting year.

**8.10.1-3** Please enter your 3-digit source reduction activity code here. For sub-items a, b, and c, please enter the 3-digit code for the method you used to identify these source reduction activities.

Are there any additional State only Form R chemicals to report? Please check yes or no.





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# Form Keys

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## TURA Form S Cover Sheet Key

 **Note:** If you are filling out the forms on paper, please fill in the reporting year, facility name, and MassDEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be pre-populated. Filling out this information ensures that your submittal stays together.

 **Note:** Dioxin and dioxin-like compounds should be reported in grams. Decimal points may be used in reporting dioxin and dioxin-like compounds.


### **Section 1: General Information**

- a. Facility Name and Address – Name. Please enter your facility name here.
- b. Facility Name and Address – Street Address. Please enter the street address of your facility.
- c. Facility Name and Address – City. Please enter the town or city where your facility is located.
- d. Facility Name and Address – State. Pre populated. Facility must be located in Massachusetts
- e. Facility Name and Address – Zip. Please enter the zip code for where your facility is located.
- f. Are you making a trade secret claim? Please check either yes or no.
- g. Sanitized or Unsanitized. Please check if this TURA submittal is either sanitized or unsanitized.
- h. Are all chemicals used to treat wastewater? Please check yes or no. If yes, no production unit numbers are needed. If some but not all chemicals are used to treat wastewater, a placeholder production unit must be entered to complete the Form S online.
- i. Taxpayer Identification Number (Federal Employer Identification Number or FEIN). Please enter your facility's Federal Employee Identification Number or FEIN.
- j. Toxics Release Inventory (TRI) ID Number. Please enter your facility's Federal TRI number.

 **Note:** If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

### **Section 2: Certification Statement**

- a. Authorized Signature. Signature of authorized personnel at the facility.
- b. Date. Date of signature.
- c. First Name. Please enter the first name of the person who signed on line a.
- d. Last Name. Please enter the last name of the person who signed on line a.
- e. Position/Title. Please enter the position/title of the person who signed on line a.
- f. Email address. Please enter the email address of the person who signed on line a.

 **Note:** Please see Appendix B for CAS #s and chemical names.


### **Section 3: Chemicals Previously Reported that Are Not Reportable This Year**

- a.1. CAS # of chemical not reportable. Please enter the CAS # of the chemical that you reported last year, but are not reporting this year. Please note that CAS #s should be entered without dashes.
- a.2. Chemical Name. Please enter the name of the chemical that you reported last year, but are not reporting this year.
- a.3. Explanation of why the chemical is not reportable. Please check up to four codes, indicating why this chemical is no longer reportable. Code descriptions are located at the top of the page.
- a.4. CAS # of Chemical Substituted. If another chemical was substituted for the chemical on line a.1, please enter the CAS # here. Please note that CAS #s should be entered without dashes.
- a.5. Chemical Name. If another chemical was substituted for the chemical on line a.1, please enter the chemical name here.

If you have additional chemicals that need to be listed in this section, please continue to fill out this section.


- f. Do you have more chemicals not subject to reporting this year? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.


#### Section 4: Facility-Wide Listing of Production Units


 **Note:** If the chemicals are only used to treat waste, you do not need to fill out this section.

- a. Production Unit Number. Please assign this production unit a number. Please use consistent numbers from year to year, and do not reuse numbers after a production unit has been discontinued. Is this production unit in use for the reporting year of this submittal? Please check yes or no.
- b. Describe the process. Please describe the function of the production unit.
- c. Describe the product. Please describe the end product of the production unit.
- d. NAICS code. Please enter the NAICS code that best describes the production unit. Check Appendix A for a reference to NAICS codes.
- e. NAICS code. Please enter the NAICS code that best describes the production unit. Check Appendix A for a reference to NAICS codes.
- f. NAICS code. Please enter the NAICS code that best describes the production unit. Check Appendix A for a reference to NAICS codes.
- g. NAICS code. Please enter the SIC code that best describes the production unit. Check Appendix A for a reference to NAICS codes.
- h. Check the appropriate unit of product. Please check one.
- i. Production Process Step Information for This Production Unit. Please enter as many process codes as necessary for this production unit. Please see Appendix H for guidance. Please note that dashes should be included when entering process codes.
- j. Please enter the production unit number.
- k. CAS # and name of chemical. Please enter the CAS # of the first chemical associated with this production unit. Then check the process codes associated with that chemical. Check **all** if the chemical is associated with all process codes. Please note that CAS #s should be entered without dashes.
- l. See directions for k.
- m. See directions for k.
- n. See directions for k.
- o. Are there more chemicals to report? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional chemicals.
- p. Have additional production units been added to this facility? Please check yes or no. If yes, and you are filling out the form on the web, an additional sheet will appear. If you are filling out the form on paper, please attach a second sheet for those additional production units.

## TURA Form S Key

 **Note:** If you are filling out the forms on paper, please fill in the reporting year, facility name, and MassDEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be pre-populated. Filling out this information ensures that your submittal stays together.

 **Note:** Dioxin and dioxin-like compounds should be reported in grams. Decimal points may be used in reporting dioxin and dioxin-like compounds.

 **Note:** Please see Appendix B for CAS #s and chemical names.

### **Section 1: Facility-Wide Use of Listed Chemical**

- a. CAS # . Please enter the CAS # of the chemical that you are reporting. Please note that CAS #s should be entered without dashes.
- b. Chemical Name. Please enter the name of the chemical that you are reporting.
- c. Manufactured. Please enter the number of pounds of the chemical manufactured at your facility in this reporting year.
- d. Processed. Please enter the number of pounds of the chemical processed at your facility in this reporting year.
- e. Otherwise Used. Please enter the number of pounds of the chemical otherwise used at your facility in this reporting year.
- f. Generated as Byproduct. Please enter the number of pounds of the chemical generated as byproduct at your facility in this reporting year.
- g. Shipped in or as Product. Please enter the number of pounds of the chemical shipped in or as product at your facility in this reporting year.
- h. Check here to input Form R or Form A information to MassDEP through eDEP.
- i. Provide the production ratio for the chemical for the reporting year.

### **Section 2: Materials Balance**

- a. Chemical was recycled on site. If a materials balance is not apparent, please enter the number of pounds of the chemical was recycled on site.
- b. Chemical was held in inventory. If a materials balance is not apparent, please enter the number of pounds of the chemical was held in inventory.
- c. Chemical was consumed or transformed. If a materials balance is not apparent, please enter the number of pounds of the chemical was consumed or transformed.
- d. Chemical is a compound. If a materials balance is not apparent, please enter the number of pounds of the chemical was a compound.
- e. Other. Please indicate in number of pounds and provide a **brief** explanation.
- f. Non-Routine. Please indicate if anything non-routine occurred at your facility in the past year. If yes, please check this box and explain in Section 4.m.

### **Section 3. Chemicals Used in Waste Treatment Units**


- a. Is this chemical used to treat waste or control pollution? If your answer is No, skip ahead to Section 4. If your answer is Yes,
- b. please enter the amount of the chemical (in pounds ) used to treat waste or control pollution, and,
- c. Did the use of this chemical for waste treatment or pollution control increase or decrease by 10 percent or more compared with the previous year? (Look at the amount of this chemical used in waste treatment in 2007 and 2008, and determine if the amount increased or decreased by 10 percent or more.) Check Yes or No. If Yes, provide an explanation in Section 4.1 on page 3 of the Form S.

### **Section 4. Toxics Use by Production Unit**


- a. Production unit #. Enter the production unit # from the Form S Cover Sheet, Section 4.
- b. Quantity of Chemical Code. Please check the amount using the check boxes.

- c. Did the use of this chemical in this production unit increase or decrease by 10 percent or more compared with the previous reporting year? Calculate this and check yes or no. If no, skip to 4g.
- d-f. If your answer to 4c is yes, then indicate the process code or codes associated with the chemical (up to three in descending order) and production unit, the type of change (I for increase and D for decrease), and the applicable technique code or codes (up to three in descending order).
- g. Was the byproduct generated for this chemical less than 1 percent of use in this production unit? If your answer is Yes, skip to 4(l). If your answer is No, proceed to section 4h.
- h. Did the byproduct generated for this chemical in this production unit increase or decrease by 10 percent or more compared with the previous reporting year? Calculate this and check yes or no. If no, skip to 4(l).
- i-k. If your answer to 4c is yes, then indicate the process code or codes associated with the chemical (up to three in descending order) and production unit, the type of change (I for increase and D for decrease), and the applicable technique code or codes (up to three in descending order).
- l. Are there more production units that use this chemical? If yes, add a new production unit in Section a, and if no, proceed to section 4m.
- m. You may add any comments or explanations regarding chemical use and/or byproduct generated in this production unit, chemical use in waste treatment (from Section 3), and non-routine occurrences at your facility (from Section 2).

## Toxics Use Fee Worksheet Key


 **Note:** If you are filling out the forms on paper, please fill in the reporting year, facility name, and MassDEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be pre-populated. Filling out this information ensures that your submittal stays together.

- a. Facility Name. Please enter your facility name.
- b. Facility Street Address. Please enter the street address of your facility.
- c. City. Please enter the town or city where your facility is located.
- d. State. Pre populated. Facility must be located in Massachusetts
- e. Zip. Please enter the zip code for where your facility is located.
- f. Base fee. Please enter your base fee from the table above.
- g. # of Form Ss. Please enter the number of Form Ss you are filing.
- h. Multiply line g by \$1,100. Please enter that amount.
- i. Sum of line f and h. Please enter the sum of line f and h.
- j. Fee. Please enter the amount from line i or from the 3<sup>rd</sup> column of the table (max fee), whichever is less. This is your fee.


 **Note:** If you are filling out these forms on the web, all certification statements, regardless of where they are located in the forms, must be signed at the very end of the submittal.

- k. Authorized Signature. Signature of authorized person at the facility.
- l. Date. Date of signature.

## Toxics Use State Only Form R/A Key

 **Note 1:** If you are filling out the forms on paper, please fill in the reporting year, facility name, and MassDEP facility ID number in the top right corner of each page. If you are filling out the forms on the web, these items should be pre-populated. Filling out this information ensures that your submittal stays together.

 **Note 2:** Please see Appendix B for CAS #s and chemical names.

 **Note 3:** The sections in the State Only Form R/A correspond to the same sections in EPA's Form R. For more detailed instructions on how to fill out the State Only Form R, please refer to EPA's Toxic Chemical Release Inventory Reporting Forms and Instructions available at [www.epa.gov/tri](http://www.epa.gov/tri).

### **Section 1: Toxic Chemical Identity**

- 1.1 CAS Number. Please enter the CAS # of the chemical that you are reporting. Please note that CAS #s should be entered without dashes.
- 1.2 Toxic Chemical or Chemical Category Name. Please enter the name of the chemical that you are reporting. Please note that MassDEP does not accept the US EPA chemical category identifiers ('N###'); please refer to Appendix B of MassDEP's Toxics Use Reporting Instructions for the appropriate Massachusetts reporting number for chemical categories.

Please check the appropriate box to indicate if you are filling out a State-Only Form R/A.

### **State-Only Form A**


Please check the box to indicate that the chemical you are reporting meets Form A requirements. Please note that, under TURA and TRI, a Form A may not be filed for PBT chemicals.

Please enter the production ratio or activity index for this chemical.

Please indicate if there are additional Form A chemicals to report.

### **Section 4**

- 4.1. Please enter the maximum amount of the toxic chemical onsite at any time during the calendar year, using the two-digit code from the TRI instruction package.

 **Note 4:** Range codes are **NOT** accepted for any items in Section 5 or 6. Please enter your amounts in pounds, except for dioxin, which should be entered in grams.

### **Section 5**

- 5.1-2 Please check if not applicable.
- 5.1 Fugitive or Non-point Air Emissions. Please enter your fugitive or non-point emissions in pounds here.
- 5.2 Stack or Point emissions. Please enter your stack or point emissions in pounds here.
- 5.3 Discharges to Receiving Streams or Waterbodies. Please check if not applicable. Please enter the total release in pounds.
- 5.4 Underground Injection Onsite to Class I or Class II-V wells. Please check if not applicable.
  - 5.4.1 Please enter the total amount injected onsite to Class I wells in pounds.
  - 5.4.2 Please enter the total amount injected onsite to Class II-V wells in pounds.
- 5.5 Disposal to Land Onsite. Please check if not applicable.

- 5.5.1A Please enter the total amount disposed to RCRA Subtitle C landfills onsite in pounds.
- 5.5.1B Please enter the total amount disposed to other landfills onsite in pounds.
- 5.5.2 Please enter the total amount disposed for land treatment/application farming onsite in pounds.
- 5.5.3 Please enter the total amount disposed for surface impoundment onsite in pounds.
- 5.5.4 Please enter the total amount disposed for other disposal onsite in pounds.

**Section 6**

- 6.1A Total Quantity Transferred to POTWs. Please check if not applicable.
- 6.1.A.1 Total Transfers to POTWs. Please enter your total transfers to POTWs in pounds.
- 6.2 Transfers to Other Off-site Locations. Please check here if you did not transfer any wastes to other off-site locations.
- 6.2.A Total Transfers. Please enter your total transfers to other off-site locations in pounds.

**Section 7A**

On-Site Waste Treatment Methods and Efficiency. Please check if not applicable.

- 7A.1a. General Waste Stream Code. Please enter your waste stream code. Please see TRI instructions.
- 7A1b.1-8. Waste Treatment method(s) Sequence alpha-numeric codes. Please see TRI instructions.
- 7A.1c Please check an estimate range for the efficiency of your system. Please see TRI instructions.

Do you have additional 7A On-site Waste Treatment Methods and Efficiency information to report? Please check yes or no.

**Section 7B**

On-Site Energy Recovery Processes. Please check if not applicable.

- 1-4. Energy Recovery Methods. Please enter your 3-character energy recovery method code here. Please see TRI instructions.

**Section 7C**

On-Site Recycling Processes. Please check if not applicable.

- 1-10. Recycling Methods. Please enter 3 –character recycling method code. Please see TRI instructions.

**Section 8**

- 8.1a Total on-site disposal: Underground injection and landfills. Please enter in prior year (column A), current reporting year (column B), following year, (column C) and second following year (column D) quantity in pounds total on-site disposal to Class I underground injection wells, RCRA Subtitle C Landfills, and other landfills.
- 8.1b Total other on-site disposal or releases. Please enter in prior year (column A), current reporting year (column B), following year, (column C) and second following year (column D) quantity in pounds total other on-site disposal or other releases.
- 8.1c Total off-site disposal: Underground injection and landfills. Please enter in prior year (column A), current reporting year (column B), following year, (column C) and second following year (column D) quantity in pounds total off-site disposal to Class I underground injection wells, RCRA Subtitle C Landfills, and other landfills.
- 8.1d Total other off-site disposal or releases. Please enter in prior year (column A), current reporting year (column B), following year, (column C) and second following year (column D) quantity in pounds total other off-site disposal or other releases.
- 8.2 Quantity Used for Energy Recovery On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity used for energy recovery on-site in pounds.

- 8.3 Quantity Used for Energy Recovery Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity used for energy recovery off-site in pounds.
- 8.4 Quantity Recycled On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity recycled on-site in pounds.
- 8.5 Quantity Recycled Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity recycled off-site in pounds.
- 8.6 Quantity Treated On-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity treated on-site in pounds.
- 8.7 Quantity Treated Off-site. Please enter in prior year (column A), current reporting year (column B), following year (column C), and second following year (column D) quantity treated off-site in pounds.
- 8.8 Quantity Released to the Environment (One-time). Please enter pounds.
- 8.9 Production Ratio or Activity Index. Please enter production ratio or activity index here.
- 8.10 Source Reduction Activities. Did your facility engage in source reduction activities this year? Please check yes or no.
- 8.10.1 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.1a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.
- 8.10.2 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.2a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.
- 8.10.3 Source Reduction Activities. Please enter source reduction code here. Please see TRI instructions.
- 8.10.3a-c. Methods to identify Activity. Please enter method code here. Please see TRI instructions.

Are there additional State Only Form R chemicals to report? Please check yes or no.



Massachusetts Department of  
Environmental Protection  
One Winter Street  
Boston, MA 02108-4746

Commonwealth of Massachusetts  
Deval L. Patrick, Governor

Executive Office of Energy and Environmental Affairs  
Ian A. Bowles, Secretary

Department of Environmental Protection  
Laurie Burt, Commissioner