## 2.0 Introduction

This part of the Guide includes detailed instructions and procedures for complying with the reporting requirements for continuous releases. These instructions are intended to assist you in supplying the information required by the implementing regulations "Reporting Continuous Releases of Hazardous Substances Final Rule" (40 CFR Parts 302.8 and 355.40). The instructions below cover both the standard reporting requirements and the reporting requirements for special circumstances. The standard reporting requirements include the initial telephone notification, the initial written report, and the one-time first anniversary follow-up report. Reporting requirements for special circumstances include reports of SSIs, as well as reports of any changes in the release that make the information submitted in the initial written or follow-up reports inaccurate or out-of-date.

Part 2 of the Guide is organized into six sections. Section 2.1 provides a general overview of how to report continuous releases. Sections 2.2 through 2.5 explain each type of required notification. Within each of these sections are detailed instructions on when and where to submit each required report, as well as instructions on what information to include in the report. Section 2.6 provides a summary of the information that must be provided by reviewing the key elements of the **Suggested Continuous Release Reporting Format** included in **Appendix B** of this Guide. <u>You are strongly encouraged to use this</u> <u>suggested reporting format</u> when completing your written initial and follow-up reports to ensure that you include all of the information required by the Rule.

This part of the Guide also provides other materials to assist you in completing your written reports including **Exhibit 2-1**, the checklist of the information required in the initial written and follow-up reports, which appears on page 19. This checklist is another method that can be used to verify that all required information has been collected and submitted.

## 2.1 General Overview of How to Report a Continuous Release

If you have established that your release is continuous and stable in quantity and rate, you may begin reporting under CERCLA Section 103(f)(2). As discussed in Part 1 of this Guide, the continuous release reporting regulation provides you with two options for reporting continuous releases of CERCLA hazardous substances. You may aggregate multiple concurrent releases of the same hazardous substance from contiguous or adjacent facilities and report them in a single notification, or you may consider each facility separately and submit reports on a per facility basis. Although you may elect either option for notification of continuous releases, whichever option you elect must also be used for reporting statistically significant increases (SSIs) in the release and reporting changes in information previously submitted.

To report a continuous release from your facility, you must comply with the standard reporting requirements under the Rule which require you to make an initial telephone notification, an initial written report, and a one-time, first anniversary followup report. In the written reports (i.e., the initial written report and the follow-up report), you must provide specific information that describes your This information includes continuous release. identifying the facility and providing certain ecological and population-density information on the surrounding area, as well as information on the source of the release. You must identify all sources of continuous release from your facility (e.g., smoke stacks, waste piles, valves) whenever those facility-wide releases equal or exceed an RQ. You must also provide substance-specific information on each hazardous substance released from each identified source (40 CFR 302.8(e)).

In addition to the standard reporting requirements of the initial telephone notification and the written reports, under certain circumstances you must make additional reports. You must report any SSIs in the release, as well as any changes in the release that make the information submitted in the initial written or follow-up reports inaccurate or out-of-date. The specific information required in each of these types of continuous release reports is outlined in the sections below. The instructions for reporting continuous releases contained in this part of the Guide are written for those who elect to report each facility separately and therefore they refer to "facilities" rather than "sites." The instructions for reporting releases from sites are the same as those described for facilities below.

## 2.2 Initial Telephone Notification

#### When should you notify?

The continuous release reporting regulation requires that an initial telephone notification be made as soon as you have a sufficient basis for establishing that the release is continuous and stable in quantity and rate. You may rely on release data, engineering estimates, knowledge of the plant's operations and release history, professional judgment, or any other method that has a strong technical basis to establish the basis for asserting that the release is continuous and stable in quantity or rate, or you may report the release (to the NRC for CERCLA hazardous substances or to the SERC and LEPC for non-CERCLA EHSs) for a period sufficient to establish the continuity and stability of the release; (for further information on how to establish a release as continuous and stable in quantity and rate, refer to pages 3 and 4 of this Guide).

If a sufficient basis for establishing the release as continuous exists for a CERCLA hazardous substance, a minimum of one telephone call may be made to the NRC, SERC, and LEPC. For non-CERCLA EHSs, only the appropriate SERC and LEPC need be notified. In either case, you may report all continuous releases of hazardous substances at your facility in one telephone report to each authority.

#### Who must be notified?

If you are the person in charge, owner or operator, of the facility from which a continuous release of a hazardous substance occurs, you must telephone the following organizations:

- For CERCLA hazardous substances:
  - National Response Center (NRC) Toll-free telephone number: 1-800-424-8802; Washington, DC area: 1-202-267-2675;
- For CERCLA hazardous substances and non-CERCLA EHSs:
  - The State Emergency Response Commission (SERC) of any state likely to be affected by the release; and
  - The Local Emergency Planning Committee (LEPC) of any area likely to be affected by the release.

#### **Required information**

The person in charge (for CERCLA hazardous substances) or the owner or operator (for non-CERCLA EHSs) is required to provide the information listed below to government authorities in the initial telephone notification.

- 1. Identify your report as a report of a continuous release under CERCLA Section 103(f)(2). It is very important for tracking purposes that the person at the NRC, SERC, and LEPC to whom you speak understands that you are giving the initial telephone notification of a continuous release (rather than an episodic report).
- 2. Identify the name and location of the facility responsible for the release and provide the corporate affiliation and address.
- 3. Identify each hazardous substance released.
- 4. Provide your name and telephone number and, if different, the name and telephone number of the person in charge of the facility.

If you are reporting a release of a CERCLA hazardous substance, when you make this initial telephone call to the NRC, you will be assigned a CR-ERNS number. This CR-ERNS number will become the identifier for your facility. Your CR-ERNS number will never change; it is the number that identifies you in the CR-ERNS database.

If you are reporting a non-CERCLA EHS to the appropriate SERC or LEPC you will not receive a CR-ERNS number as your SERC and LEPC will use their own methods to track your continuous release.

## 2.3 Initial Written and Follow-Up Reports

# Where and when to submit initial written and follow-up reports?

Within 30 days of your initial telephone call to the NRC, SERC, and LEPC, the initial written report of CERCLA hazardous substances must be submitted to the appropriate government authorities. You must send one copy of the completed initial written report containing the information described in this Section to each of the following organizations:

The EPA Regional Office for the geographical region in which your facility is located;

The SERC of any state likely to be affected by the release; and

The LEPC of any area likely to be affected by the release.

For reports of CERCLA hazardous substances, the one-time, first anniversary follow-up report must be submitted within 30 days of the first anniversary date of the initial written report to the EPA Regional Office. The first anniversary follow-up report must be submitted to the EPA Regional Office <u>only</u>. You are not required to submit the one-time first anniversary follow-up report to the SERC and LEPC.

Reports of releases of non-CERCLA EHSs must be reported only to the SERC and LEPC. No notification of Federal authorities is required.

### What information is required?

The information that you are required to submit for all initial written and follow-up reports can be divided into three primary sections: <u>general</u> <u>information</u>; <u>source information</u>; and <u>hazardous</u> <u>substance information</u>. These sections are described briefly below and the specific information to be included in each of these sections is described more fully in the following pages.

- <u>Section I General Information</u>. This section includes identifying information about your facility, as well as information concerning the area surrounding your facility.
- <u>Section II Source Information</u>. This section includes information on each source of the release including: the identity of each source; the basis for stating that the release from a source qualifies as continuous and stable in quantity and rate; the environmental medium affected by the release; the names and quantities of the CERCLA hazardous substances or EHSs released from the source; and the normal range and frequency of the release. This information must be provided <u>separately</u> for <u>each source</u> of the continuous release.
- <u>Section III Hazardous Substance Information</u>. This section includes the upper bound of the normal range for each hazardous substance released across all sources at a facility. This number is also known as the SSI trigger. Section II should be completed for each release source before you calculate the upper bound of the normal range of the release for each CERCLA hazardous substance or EHSs across all sources at the facility.

#### Section I: General Information

The information required in Section I of the initial written report and follow-up reports includes general information identifying your facility, as well as information regarding the area in which your facility is located. This general information is important because it provides a better understanding of the potential risks resulting from exposure from the facility's release. A signed statement asserting that the continuous release is continuous and stable in quantity and rate, and that the information supplied is accurate and current to the best of your knowledge, is also required in Section I.

# EXHIBIT 2-1 CHECKLIST OF INFORMATION REQUIRED IN INITIAL AND FOLLOW-UP WRITTEN REPORTS

In addition to the information required on the following pages, Section I must clearly identify the type of written report that you are submitting (i.e., an initial written report, a first anniversary follow-up report, or a written report of the change in source or composition of a previously reported release). You must also include information on the initial notification of the release, such as the date of the release and the date of the initial call. For CERCLA hazardous substances, the CR-ERNS number assigned to you by the NRC will also be required.

## Section I: General Information Part A: Facility Information

In Part A, provide the following information:

- 1. The complete name of your facility (and company identifier where appropriate). If multiple facilities are included in your written report, provide the plant site name with the name of the facility.
- 2. The full address of your facility, including the street address or highway marker, city, county, state, and zip code. A post office box number should not be used as the facility address. The address provided should be the location of the facility where the hazardous substance release occurs.
- 3. The location of your facility by its latitude and longitude in units of degrees, minutes, and seconds. **Exhibit 2-2** includes helpful hints on how to obtain the latitude and longitude coordinates of your facility.
- 4. The nine digit number assigned by Dun and Bradstreet (D&B) to your facility. This number can be obtained via telephone by an officer of your company from the national office of Dun and Bradstreet (at 1-800-234-3867). If your facility has not been assigned a D&B number, please specify that the information is not applicable.
- 5. For reports of CERCLA hazardous substances, the CR-ERNS number assigned by the NRC when you made the initial telephone report. Be certain to include the CR-ERNS number on <u>each</u> page of your report.

6. The name, telephone number (including area code), and an alternate telephone number for the person in charge of your facility.

#### EXHIBIT 2-2 SOURCES OF INFORMATION FOR IDENTIFYING THE LOCATION OF YOUR FACILITY

Sources of data on latitude and longitude coordinates of your facility include EPA permits (e.g., NPDES permits), county property records, facility blueprints, and site plans.

In addition, information on the latitude and longitude of your facility may be obtained from a United States Geological Survey (USGS) topographical map. These maps are available in both the 7.5 minute and 15 minute series. These maps may be obtained from the USGS distribution center at your local public library. If you would like to order a map from USGS, contact:

> U.S. Geological Survey Branch of Distribution Box 25286 Federal Center Denver, CO 80225

If you are not certain on which map your site is located, consult the index of topographic maps for your state, which may be obtained from USGS free of charge. USGS maps are also available at commercial dealers such as surveyors or outdoor recreation equipment dealers. In Part B, provide the following information:

1. Choose the range listed below that most accurately describes the population density within a one-mile radius of your facility:

0-50 person(s) 51-100 persons 101-500 persons 501-1000 persons more than 1000 persons.

 Identify and describe the location of any sensitive populations or ecosystems (see Exhibit 2-3 for definitions and examples) within a one-mile radius of your facility. If possible, describe the location of the populations or ecosystems in terms of distance and direction from your facility (e.g., located <sup>1</sup>/<sub>4</sub> mile northwest of the facility). Exact addresses are not required.

#### EXHIBIT 2-3 DEFINITIONS

Sensitive populations are populations likely to be more susceptible than average individuals to the effects of exposure to a hazardous substance. Examples of sensitive populations are elementary school children, retirement communities, or hospitals.

Sensitive ecosystems are environments likely to be more susceptible than average environments to the effects of exposure to a hazardous substance, or ecosystems that have been designated for special protection by Federal or state governments. Examples of sensitive ecosystems include wetlands, wildlife refuges, tidal basins, or endangered species habitats.

#### Section II: Source Information

#### General overview

When completing your written reports, you must take into consideration <u>all</u> sources of the release from your facility. For example, if the aggregate amount of a particular hazardous substance released within 24 hours from your facility equals or exceeds an RQ, then <u>each</u> source of the particular release must be identified, even if some release amounts from individual sources do not equal or exceed the RQ. The purpose of requiring information on the source(s) of the release is to provide EPA with sufficient information to evaluate the risk associated with the continuous release. Providing this information accurately in the initial written and first anniversary follow-up report will minimize future requests by EPA for additional information or clarification.

In this section of the written report, you should identify and describe separately <u>each</u> continuous release <u>source</u>. If the continuous release of the same hazardous substance comes from two or more sources (e.g., two stacks), then information should be reported separately for <u>each</u> of the sources. For example, if a stack is one of several sources of a hazardous substance release at your facility, you must provide information on that stack including: the stack height; the identity of the hazardous substance(s) being released from the stack; the quantity released; and the frequency of the release from the stack. If you have a release of a particular hazardous substance from three stacks, you should report <u>each</u> stack separately and provide the required information specified for each stack.

Although the continuous release reporting regulation allows multiple concurrent releases of the same CERCLA hazardous substance to be considered as if they were one continuous release, aggregate reporting of such releases from different sources complicates risk analyses. Area sources are most readily aggregated for purposes of continuous release reporting and risk evaluation when the frequency of the release from each source is the same. Similarly, aggregated stack releases are most readily evaluated if the frequency of the release from each stack is the same and the stack configurations (e.g., stack height, diameter, throughput) are the same. If you elect to aggregate releases across facilities, be certain to identify information about each source of the release from all of your facilities. Also, note that if you aggregate your releases, EPA may request clarifying information about the releases from each of the individual sources.

#### **Identification of sources**

In Section II, you must identify (i.e., name) and describe each continuous release source. There are several ways to name release sources. It is important to: (1) provide a name that clearly identifies the source (e.g., centrifugal processor A, rather than Unit A); and (2) avoid giving two or more sources the same name. It is also important to remember when naming your sources that EPA, at any time, may contact you with questions regarding releases from one of your named sources. It would be prudent, therefore, to name the sources at your facility in a manner that will be easy for you and other employees to identify them. For example, if your plant has four stacks, two wastepiles. and twenty-four valves, you may name the sources as follows: Stack #1; Stack #2; Stack #3; Stack #4; Wastepile #1; Wastepile #2; and Valves in Building #2. Note that the "Valves in Building #2" are aggregated in this example and reported as a single source.

#### **Required information**

Section II, Source Information, contains three Parts: Part A, Part B, and Part C. You must provide the information required in each of these Parts for <u>each</u> continuous release source. Be sure to place the name of the source on all pages associated with that specific source. A summary of the type of information required in each Part is provided below.

<u>Part A</u> – Requests information on the basis for asserting that the release from each identified source is continuous and stable in quantity and rate.

<u>Part B</u> – Requires specific information on the environmental medium affected by the hazardous substance release from each identified source.

<u>Part C</u> – Requires information on the hazardous substance(s) and mixture(s) released from the identified source, such as the upper bound of the normal range of the hazardous substance.

The information required in Parts A, B, and C is described more fully below and is used to assist EPA

and other government authorities in evaluating the risks associated with the continuous release. It is important to remember when completing your format to include for <u>each</u> source all of the information required in each part of Section II.

There is one exception to this rule. If the release from any individual source will affect more than one environmental medium (e.g., a wastepile releasing to air and ground water) it must be modeled separately. Therefore, any source that affects two different media should be treated as two separate sources for purposes of reporting. This is desirable because EPA must analyze each release pathway separately to properly evaluate the risks posed by the continuous release. In addition, because the hazardous substance releases to each medium may differ in frequency and quantity, it is useful to distinguish the releases for purposes of risk evaluation.

#### Section II: Source Information

Part A: Basis for Asserting the Release is Continuous and Stable in Quantity and Rate

In Part A of Section II, you must first identify the source of the release (include the name of the source in all subsequent parts), then briefly describe the basis for stating that the release is continuous and stable in quantity and rate. Your description of the basis for stating that the hazardous substance release is continuous and stable in quantity and rate should include whether the release is continuous without interruption, or is a routine, anticipated, intermittent release. It should also include information on when the release is expected to occur (i.e., evidence of predictability of the release). One example of a release that may be predictable and regular is fugitive emissions from valves that occur at different rates over the course of a production cycle as the pressure inside the system changes. Although the rate of such fugitive emissions may not be strictly uniform, it may be predictable in the sense that the rate and amount of the release vary in a similar manner each time the process is operated or decompression occurs.

Your description should also identify the activity that results in the release (e.g., batch process, operating procedure, loading/unloading, maintenance activity, filling of storage tanks). If the release occurs because of a malfunction, this should be explained fully. Note that only certain releases due to malfunctions can qualify as a continuous release. Please refer to the discussion in the preamble of the continuous release Final Rule at 55 FR 30171 or the discussion on page 4 of this Guide to determine whether a malfunction can qualify as a continuous release.

Finally, your description should include information on how you established the pattern of the release and calculated release estimates (e.g., engineering estimates, your best professional judgment, past release data).

In sum, when identifying your sources, refer to the directions above on how to name sources. For each source identified, provide the following information.

- 1. Indicate whether the release is continuous without interruption or abatement or routine, anticipated, and intermittent.
- 2. Identify the activity or activities that cause the release from the source.
- 3. If the release results from a malfunction, describe the malfunction and explain why the release should be considered continuous and stable in quantity and rate.
- 4. Identify how you established the pattern of the release and calculated release estimates.

## Section II: Source Information Part B. Specific Information on the Source

In Part B of Section II of your written report, you must identify the environmental medium (i.e., air, surface water, soil, or ground water) affected by the hazardous substance release from <u>each</u> source identified in Section II, Part A. In addition, you must provide specific information on the source and its affected environment. It is important to remember that if you have a release from a single source that affects two different media (e.g., gypsum stack releasing radon to air and radionuclides to ground water), you should treat the release to each medium as separate source for purposes of reporting. Another important point to remember when completing all sections of the written report is to include the appropriate units, such as kilograms, meters, or curies. For each source identified in Part B, provide the following information.

#### **Environmental medium**

Identify the environmental medium (i.e., air, surface water, soil, or ground water) that is affected by the release from the identified source.

1. Air

If the medium affected is air, provide the following information:

- (a) Indicate whether the source is a stack or ground-based area source.
- (b) If the source is a stack, provide the stack height in feet or meters. The stack height is the distance from the ground to the top of the stack.
- (c) If the source is an area source (e.g., a waste pile, surface impoundment, landfill, valve, pump seal, or storage tank vent), provide an estimate of the surface area or area of the release source including the appropriate unit such as square feet, square meters, or acres.
- 2. Surface Water

If the medium affected is surface water, provide the following information:

- (a) If the release affects any surface water body, give the name of the water body.
- (b) If the release affects a stream, give the "stream order" or the average flow rate (in cubic feet per second). This information can be obtained from your state water resource division of USGS. If you cannot locate this information, use the chart in **Exhibit 2-4** to estimate the flow rate according to the velocity of the stream. If the velocity of the stream fluctuates during the year, use the average velocity when calculating average flow rate.

EXHIBIT 2-4 ESTIMATED AVERAGE STREAM FLOW RATES				
Stream <u>Order</u>	Mean Flow _(CFS)_	Mean Velocity <u>(feet/sec)</u>		
1	0.65	1.0		
2	3.10	1.3		
3	15.00	1.5		
4	71.00	1.8		
5	340.00	2.3		
6	1,600.00	2.7		
7	7,600.00	3.3		
8	56,000.00	3.9		
9	171,000.00	5.6		
10	810.000.00	5.9		

(c) If the release affects a lake, or other large surface water body (e.g., a bay) give the surface area of the lake (in acres) and the average depth (in feet or meters). **Exhibit 2-5** includes sources of information on how to determine the average depth of a lake.

#### EXHIBIT 2-5 SOURCES OF INFORMATION FOR ESTIMATING AVERAGE LAKE DEPTH

If the lake is large enough to be navigable, your local Coast Guard office will have a navigation chart that will provide the average depth of the lake. For smaller lakes, you may estimate the average depth of the lake by relying on your knowledge of the use of the lake and the surrounding area, and your best professional judgment.

3. Soil or Ground Water

If the medium affected is soil or ground water, provide the following information:

(a) If the release is on or under ground, indicate the distance to the closest water well within a two-mile radius of the site. Information regarding the location of public water supply wells may be available through the county office that issues permits for wells.

#### **Optional information**

The following information is <u>not</u> required in the Continuous Release Rule; however, such information will assist EPA in evaluating the risks associated with a continuous release. If the information below is not provided, conservative values will be used to evaluate the risks associated with the continuous release.

1. If the source is a stack release to air, provide the: (a) inside diameter of the stack; (b) gas exit velocity; and (c) gas temperature.

2. If the release affects surface water, provide the average velocity of the surface water.

#### **Section II: Source Information**

Part C. Identity and Quantity of Each Hazardous Substance or Mixture Released

For <u>each</u> source, you must report information about the identity and quantity of the hazardous substances released from the source. In particular, you must identify the normal range of each release and the total annual quantity released during the previous year from each source. The regulatory definition of the "normal range" of a continuous release is provided in **Exhibit 2-6**.

#### EXHIBIT 2-6 NORMAL RANGE

The **normal range** of a continuous release includes all releases of a hazardous substance (in pounds or kilograms) reported or occurring during any 24-hour period under normal operating conditions during the previous year. Only releases that are both continuous and stable in quantity and rate may be included in the normal range.

## **EXHIBIT 2-7: EXAMPLES OF REPORTING SINGLE HAZARDOUS SUBSTANCES**

In this example, your facility has a release which may qualify for reduced reporting as a continuous release. The hazardous substances released from the identified source (Stack A) are nitrogen dioxide (10102440) and nitric oxide (10102439).

The volume of nitrogen dioxide (NO<sub>2</sub>) released in a 24-hour period is between 0 and 120 lbs. During the previous year, 960 lbs of NO<sub>2</sub> was released. The release occurs once per week in February and June for a total of 8 days per year. The amount of nitric oxide (NO) released is between 1 and 115 lbs. The release of NO occurs approximately 120 days each year. A total amount released last year was 13,800 lbs.

For	these	releases	from	the s	pecific s	ource,	vou must	provide	the in	nformation	outlined h	below.
							•					

Name of Months of		Normal I (specify lbs	Range s. or kg)	Total Annual	Number of Days Release		
Months of Hazardous Substance Nitrogen dioxide (NO <sub>2</sub>	CASRN# 10102440	<b>Upper</b> <u>Bound</u> 120 lbs	Lower Bound 0 lbs	Amount Released (specify lbs. or kg) 960 lbs.	Occurs (Per year) 8	the <u>Release</u> February; June	
Nitric oxide (NO)	10102439	115 lbs	1 lb	13,800 lbs.	120	All 12 months	

You are not necessarily required to monitor releases to determine the normal range of the release. You may establish the normal range by using engineering estimates of releases under various operating conditions, knowledge of the operating history of the facility, experience with operating processes, professional judgment, or any other method that has a sound technical basis. EPA will use the upper bound of the normal range to estimate the risks to human health and the environment posed by the hazardous substance release.

To provide the required information regarding the quantity of the hazardous substance released from each identified source, you should begin by determining whether the release is a single hazardous substance or a mixture of hazardous substances. If the release is of one or more single hazardous substances, follow the directions provided below in **Example A**. If the release is a mixture of hazardous substances, you have two options. For a mixture you may complete Part C either: 1) by reporing each hazardous substance as if it were a discrete and separate release (as in **Example A**); or 2) by reporting the release as a mixture and identifying the hazardous substance components of the mixture along with information on the weighted contribution of each component in the mixture (as in **Example B**).

#### **Example A: Single hazardous substances**

For <u>each</u> source, follow the directions below to report each hazardous substance released from the source that is a single hazardous substance or a component of a mixture that you wish to report separately. **Exhibit 2-7** provides an example of how to report releases of single hazardous substances.

- 1. Identify the hazardous substance released by name and by Chemical Abstracts Service Registry Number (CASRN). The CASRN for a hazardous substance can be located in any material safety data sheet or in most chemical supplier company catalogues.
- 2. Provide the upper and lower bounds of the normal range of the release from the identified source (i.e., quantity in pounds, kilograms, or curies) during the previous year.
- 3. Estimate the total annual amount (in pounds, kilograms, or curies) of the hazardous substance

#### **TABLE 2-8: EXAMPLE OF REPORTING A MIXTURE**

In this example, if your facility wants to report the release of a mixture of hazardous substances, you must list each component of the mixture by hazardous substance and include its percentage by weight. For example, for the release of mixture Z, you must provide the following information about its components, ethylene oxide, acrolein, and 2,3,5-tri-chlorophenol:

Name of <u>Mixture</u>	Name of Hazardous Substance <u>Components</u>	Weight <u>CASRN#</u>	N Upper Lo <u>Percentage</u>	Normal Rang Componer wer Up <u>r</u> <u>Bound Bo</u>	ge of Normal Range of nts Mixture per Lower Occurs <u>und Bound</u> Bound	Number of Days Releas Released <u>(Per year)</u>	Total Quantity se of Mixture in Of the <u>Previous Year</u>	Months <u>Release</u>
Ζ	(component	s listed b	elow)		100 lbs 0 lbs	365	79,500 lbs	All 12 Months
Z	Ethylene oxide	75218	10%	10 lbs	0 lbs			Wontins
Z Z	Acrolein 2,3,5-tri-	107028	15%	15 lbs	0 lbs			
	chloropheno	ol 933788	20%	20 lbs	0 lbs			

- 4. Specify the frequency of the release by indicating the number of days the release occurs per year from the identified source. Stating "continuous" is not sufficient, as one source may be continuously operating 365 days a year, while another source may be continuously operating on weekdays, 261 days a year.
- 5. Indicate the actual months the release occurs.

#### **Example B: Mixture**

For <u>each</u> source, follow the directions below to report each mixture released from the source. **Exhibit 2-8** provides an example on how to report a mixture.

- 1. Identify the mixture by name (e.g., Blue Pigment #25).
- 2. Identify each hazardous substance component of the mixture by name and CASRN.
- 3. Estimate the percentage by weight of each hazardous substance component of the mixture.
- 4. Provide the upper and lower bounds (i.e., quantity in pounds, kilograms, or curies) of the normal range of <u>each hazardous substance</u>

<u>component</u> of the mixture that was released from this source. To calculate the upper bound of the normal range of each hazardous substance component, multiply the weight percentage of each component by the upper bound quantity of the mixture.

- 5. Provide the upper and lower bounds (i.e., quantity in pounds, kilograms, or curies) of the normal range of the <u>mixture</u> that was released from the identified source during the previous year.
- 6. Specify the frequency of the release by indicating the number of days the release occurs per year from the identified source. Stating "continuous" is not sufficient, as one source may be continuously operating 365 days a year, while another source may be continuously operating on weekdays, 261 days a year.
- 7. Estimate the total annual quantity (in pounds, kilograms, or curies) of the <u>mixture</u> that was released from the identified source during the previous year.
- 8. Indicate the actual months the release occurs.

## Section III: Hazardous Substance Information

After you provide the required information for all sources of continuous releases from your facility, you must aggregate information of a hazardous substance release from <u>all</u> sources to determine the SSI trigger (upper bound of the normal range) for each hazardous substance released at your facility.

The SSI trigger of a particular hazardous substance is calculated by aggregating the upper bounds of the hazardous substance released across all sources at a facility.

If you are aggregating CERCLA hazardous substance releases from separate, contiguous, or adjacent facilities and reporting them in a single report, aggregate the upper bound of the normal range of the hazardous substance released from all sources at the site to determine the SSI trigger. If you aggregate your releases across facilities, the SSI trigger must also be site-specific, not facility-specific. Aggregating releases across facilities at the same site may reduce your reporting burden; however, EPA will evaluate the risks associated with the releases as if the releases were from one facility.

To calculate the SSI trigger for <u>each</u> hazardous substance you should:

- 1. List each specific source name and enter the upper bound of the normal range of the release from that source. If the identified hazardous substance is a component of a mixture, enter the upper bound of the normal range for that component of the mixture (as determined in Section II, Part C).
- Aggregate the upper bound quantities from each source of the release. Report these totals as the SSI trigger for the hazardous substance. The example that is provided in Exhibit 2-9 illustrates the calculation of the SSI trigger for a release of ammonia.

The above method for calculating the SSI trigger of a hazardous substance assumes that all releases of

#### EXHIBIT 2-9: CALCULATION OF THE SSI TRIGGER FOR A HAZARDOUS SUBSTANCE

Hazardous Substance	Source	Upper <u>Bound</u>
Ammonia	Tank Vents in Building #1	120 lbs.
	Valves in Building #5	115 lbs.
Upper Bour	nd for Ammonia	<u>235 lbs.*</u>
* For purposes of the only sources facility are the T Valves in Buildi	of this example, it is of the ammonia rele Sank Vents in Buildi ng #5.	assumed that ease at the ng #1 and the

the same hazardous substance occur simultaneously (i.e., over the same 24-hour period). To the extent that the frequency of the release differs, you may adjust the SSI trigger so that it more accurately reflects the frequency and quantity of the hazardous substance released from all sources over a 24-hour period. The SSI trigger in the final analysis must reflect the upper bound of the normal range of the release, taking into consideration all sources of the release at the facility. The normal range of the release includes all continuous releases previously reported or occurring over a 24-hour period during the previous year.

#### Signed statement

After providing the information required in Sections I through III, as described above, the person in charge of the facility must sign a statement asserting that the information provided is accurate and current to the best of his or her knowledge. This statement must be similar to the following:

"I certify that the hazardous substance releases described herein are continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(a) or 355.4(a)(2)(iii) and that all submitted information is accurate and current to the best of my knowledge."

In addition, the person in charge of the facility must print clearly his/her name and position and date the certification statement.

## 2.4 Notifications of Statistically Significant Increases

#### When do you submit SSI reports?

An SSI is an episodic release that must be reported whenever the hazardous substance release exceeds the continuous release SSI trigger (i.e., the upper bound of the normal range of the release) within a 24-hour period. The determination of whether a release is an SSI should be based upon calculations or estimation procedures that identify the release as exceeding the upper bound of the reported normal range of the continuous release. The person in charge of a facility must report an SSI of a CERCLA hazardous substance to the NRC, SERC, and LEPC, and the owner or operator of a facility must report an SSI of a non-CERCLA EHS to the SERC and LEPC, as soon as the facility is aware that the release has occurred.

#### Who must be notified?

If you are the person in charge, or owner or operator, of the facility from which an SSI in a continuous release occurs, you must telephone the following government organizations:

- For CERCLA hazardous substances:
  - NRC Toll-free telephone number: 1-800-424-8802; Washington, DC area: 1-202-267-2675;
- For CERCLA hazardous substances and non-CERCLA EHSs:
  - The SERC of any state likely to be affected by the release; and
  - The LEPC of any area likely to be affected by the release.

In addition to these notifications, under the requirements of SARA Title III Section 304, you must submit a written follow-up notice to the SERC and LEPC. For information on the addresses and telephone

numbers of SERCs and LEPCs, contact the RCRA/Superfund/EPCRA Hotline toll free at 1-800-424-9346. (See **Exhibit 1-7** on page 14)

# What type of information is required in SSI reports?

In the telephone notification, the release should be identified as an SSI. For reports of releases of CERCLA hazardous substances, the person in charge of the facility should also provide the original CR-ERNS number assigned by the NRC. This will ensure that the SSI report is recorded correctly and evaluated properly.

The person in charge will be asked to provide all of the information required in an episodic release report under CERCLA Section 103(a). An SSI is a type of episodic release. It represents a release of a hazardous substance above an RQ that has never been evaluated or considered.

# What are that requirements for modifying the SSI trigger?

In the event that a particular continuous release at a facility frequently exceeds the upper bound of the normal range, the person in charge may want to modify the previously established upper bound(s) of the relevant hazardous substances as an alternative to reporting successive SSIs.

To modify the SSI trigger, you must report at least one release as an SSI (to facilitate immediate evaluation). During such a report, you may also notify the government authorities of the new upper bound of the release. For reports of CERCLA hazardous substances, within 30 days of the telephone notification, you must submit a written notification to the EPA Regional Office in your geographical area, describing the new normal range, the reason for the change, and the basis for certifying that the release is continuous and stable at the higher amount. A modification of the SSI trigger is a type of change in source or composition and therefore is reported as a new release under the "old" CR-ERNS number. Although it is not required, it is also advised that you notify the appropriate SERC and LEPC.

## 2.5 Reports of Changed Releases

# Where and when do you submit reports of changed releases?

The person in charge of the facility must notify the appropriate government authorities if there are any of the following changes in a continuous release.

### Change in Source or Composition

If there is a change in the source(s) or composition of a continuous release, the release is considered a "new" release. A change in the source(s) or composition of a release may be caused by factors such as equipment modifications or process changes. The new release may pose a hazard that warrants timely evaluation and, therefore, to report this new release under CERCLA Section 103(f)(2), you must establish the new release as continuous and stable in quantity and rate (i.e., for CERCLA hazardous substances, call the NRC, SERC, and LEPC; for non-CERCLA EHSs, call the SERC or LEPC; and in both cases, submit a new initial written report and follow-up report).

For CERCLA hazardous substances, when you make the initial telephone call to the NRC, provide your original CR-ERNS number. When submitting your new written initial report to the EPA Regional Office, SERC, and LEPC (for a report of a release of a CERCLA hazardous substance), or only the SERC and LEPC (for a report of a release of a non-CERCLA EHS), be certain to specify whether you are adding a new source(s), deleting a source(s), or modifying the list of hazardous substances previously reported. In addition, if your change report includes information that has already been submitted, please clearly differentiate between the new or changed information and the previously reported information by either placing a check mark in the left hand margin, highlighting the information, or using any other means to identify the changed or new information. It is important to clearly identify new or changed information.

Please note that each time you submit a written report of a change in the source or composition of a release, you must recalculate the upper bound of the normal range for each affected hazardous substance. For example, if you add a source from which two single hazardous substances (i.e., HS #1 and HS #2) are released and you have previously reported releases of these same substances from other sources, you must recalculate, in Section III of the reporting format, the upper bound of the normal range for both HS #1 and HS #2. To obtain the new upper bound for HS #1, you must add the upper bound of HS #1 released from the new source to the upper bound of HS #1 released from all other sources at your facility. The new upper bound for HS #2 should be calculated in a similar manner.

#### Other Changes

If there is a change in the information submitted in the initial written or follow-up reports of a release of a CERCLA hazardous substance (other than a change in the source or composition of the release) the person in charge must notify the EPA Regional Office in writing within 30 days of determining that the information submitted previously is no longer valid. One example of a change in the information submitted previously, other than a change in the source or composition of the release, is a change in ownership in the facility.

All notifications of changes in releases of CERCLA hazardous substances must include the CR-ERNS number assigned by the NRC in your initial telephone notification that identifies the facility. You must also include a signed statement (see page 27 of this Guide) certifying that the release is continuous and stable in quantity and rate, and that all the reported information on the release is accurate and current.

Although not required, it is advised that the appropriate SERC and LEPC be notified of any changes in other information regarding release of either CERCLA hazardous substances or non-CERCLA EHSs.

## 2.6 Summary

Prior to sending your report to the appropriate government authorities, ensure that you have:

- 1. Included the original CR-ERNS number identifying your facility on each page of the report, if applicable;
- 2. Completed all information requested in Sections I, II, and III;
- 3. Included supplementary pages, if needed. (It would be helpful to number the additional pages of information submitted sequentially in accordance with the sections and subsections of the reporting format (e.g., Section II, Part A, page 2).)
- 4. Indicated the appropriate units (e.g., meters, kilograms, or curies), in all sections;
- 5. Provided a unique name for each source identified and have indicated the source name on Parts A, B, and C of Section II;
- 6. Included the certification statement and signed the report; and
- 7. Made sufficient copies of the report for your files.

**APPENDIX** A

ACRONYMS

# ACRONYMS

CASRN	 Chemical Abstracts Service Registry Number
CERCLA	 Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR	 Code of Federal Regulations
CR-ERNS	 Continuous Release Emergency Response Notification System
EHS	 Extremely Hazardous Substance
EPA	 Environmental Protection Agency
EPCRA	 Emergency Planning and Community Right-to-Know Act
FR	 Federal Register
LEPC	 Local Emergency Planning Committee
NRC	 National Response Center
RQ	 Reportable Quantity
SARA	 Superfund Amendments and Reauthorization Act of 1986
SERC	 State Emergency Response Commission
SSI	 Statistically Significant Increase
TERC	 Tribal Emergency Response Commission
TRI	 Toxic Release Inventory
VNTSC	 John A. Volpe National Transportation Center

**APPENDIX B** 

SUGGESTED CONTINUOUS RELEASE REPORTING FORMAT (BLANK)

APPENDIX C

SUGGESTED CR-ERNS REPORTING FORMAT -- ADDENDUM TO TRI FORM R (BLANK)

APPENDIX D

COMPLETED SUGGESTED CONTINUOUS RELEASE REPORTING FORMAT

# **APPENDIX E**

## COMPLETED SUGGESTED CR-ERNS REPORTING FORMAT --ADDENDUM TO TRI FORM R