INSTRUCTIONS

SECTION I: GENERAL INFORMATION

Incident Number:

If you are reporting a release of a CERCLA hazardous substance to the National Response Center (NRC), you will be assigned an incident number when you make the initial telephone call to the NRC (1-800-424-8802). This number will become the identifier for your facility. It is the number that also identifies you in EPA's continuous release database.

The information required in Section I of the initial and follow-up written reports include general information identifying your facility, as well as information regarding the area in which your facility is located. 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.

In addition, 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 to the NRC. For CERCLA hazardous substances, the incident number assigned to you by the NRC will also be required.

Type of Report - *Select the type of report you are submitting.*

Initial Written Report - Within 30 days of the initial telephone notification, you are required to submit an initial written report to EPA Headquarters (HQ), State or Tribal Emergency Response Commission (SERC or TERC), and Tribal or Local Emergency Planning Committee (TEPC or LEPC (for releases of CERCLA hazardous substances) and to only the appropriate SERC or TERC and LEPC or TEPC (for releases of non-CERCLA EHSs). The purpose of this report is to confirm your intent to report your release as a continuous release under CERCLA section 103(f)(2), and to provide government response officials with sufficient information about your release to enable them to determine if the release qualifies as a continuous release.

First Anniversary Follow-up Written Report - For releases of CERCLA hazardous substances, you are required to reassess your initial continuous release report to verify and update the information reported in the initial written notification on all substances reported previously. After the evaluation, within 30 days of the first anniversary of your initial written report, you must submit a one-time written first anniversary follow-up report to EPA HQ. The first anniversary report must be sent to the appropriate EPA Regional Office for all reports of CERCLA hazardous substances. Note: You are not required to submit first anniversary report for releases of non-CERCLA EHSs.

Written Notification of a Change to Initial Notification and/or Written Notification of a Change to Follow-up Report - [NOTE: For these reports, select the report type that reflects the notification or report for which you are reporting a change.]

- □ Notification of a <u>change in source or composition</u>, which is treated as if it were a new release (i.e., with a telephone call to the NRC, SERC, and LEPC, followed by an initial written report and a first anniversary follow-up report).
- □ Notification of a <u>change in the normal range</u>, if there is a change in the release such that the quantity of the release exceeds the upper bound of the reported normal range, the release must be reported as a <u>statistically significant increase</u>.

Note: For CERCLA hazardous substances, notification of any <u>other reported information</u> (e.g., a change in facility ownership) in a written letter to EPA HQ. This is not required for non-CERCLA EHSs, however, you may notify the SERC or TERC and the LEPC or TEPC of this change.

Part A. Facility or Vessel Information

- 1. For reports of CERCLA hazardous substances, provide the incident number assigned by the NRC when you made the initial telephone call to report your release as continuous. Be certain to include the NRC incident number on <u>each</u> page of your report.
- 2. The complete name of your facility (and company identifier where appropriate).
- 3. The name, telephone number (including area code), and an alternate telephone number for the person in charge of your facility.
- 4. 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.

- 5. 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. http://www.dnb.com/US/duns_update/
- 6. The location of your facility by its latitude and longitude in units of degrees, minutes, and seconds. See below for helpful hints on how to obtain the latitude and longitude coordinates of your facility.

Part B. Population Information

- 1. Select the range that most accurately describes the population density within one-mile radius of your facility.
- 2. Identify and describe the location of any sensitive populations or ecosystems within 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 ½ mile northwest of the facility). Exact addresses are not required.

Sensitive population means population that is 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 ecosystem means environment that is 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. Example of sensitive ecosystems includes wetlands.

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. If these sources are not available to you and you have Internet access with a computer, go to this website http://www.mapcoordinates.net/en. In the box on the map that says "Show Location", type the street address, town, state and zip of your facility. Another box on the map will then display the Lat/long coordinates of your address.

Or you may also go to www.google.com and click on the Google Apps symbol (nine small squares in a box) and select "Maps." In the "Search Google Maps" box on the left, enter your street address, town, state and zip. A map showing the location of the address will appear with a red marker. Then place the cursor directly on the center of the red marker and right click with mouse on the map. Left click on "What's here" on the pop-up menu. At the bottom of the map, you'll see a card with the address and the lat/long coordinates.

SECTION II: SOURCE INFORMATION

(Part A)

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.

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 releases 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 waste piles, and twenty-four valves, you may name the sources as follows: Stack #1; Stack #2; Stack #3; Stack #4; Waste pile #1; Waste pile #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 (A, B, and 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. There is one exception to this rule. If the release from any individual source will affect more than one environmental medium (e.g., a waste pile 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.

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

You must first identify the source of the release (include the name of the source in all subsequent parts, B and C), 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, July 24, 1990.

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).

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)

Part B - Specific Information on the Source:

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 a 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.

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 below 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.
 - 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). Below are sources of information for estimating the average lake depth.
- 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 underground, indicate the distance to the closest public water supply 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.

Estimated Average Stream Flow Rates			
		Mean	
Stream	Mean Flow	Velocity	
<u>Order</u>	(CFS)	(feet/sec)	
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	

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.

Optional information – The following information is not required to comply with the regulation; 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)

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.

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.

Reporting Single Hazardous Substance: For each source, follow the directions below to report each hazardous substance or components of a mixture that you wish to report separately.

Normal Range

The <u>normal range</u> of a continuous release includes all releases of a hazardous substance (in pounds, kilograms, or curies) 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.

- 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 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 released from the identified source during the previous year.
- 4. Specify the frequency of the release by indicating the number of days the release occurs per year from the identified source. Simply 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 or few days in any month.
- 5. Indicate the actual months (or days) the release occurs.

Reporting a Mixture - For <u>each</u> source, follow the directions below to report each mixture released from the source.

- 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</u>
 <u>hazardous substance 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: 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 <u>all</u> 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).
- 2. 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 below 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 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.

Calculation of the SSI Trigger for a Hazardous Substance			
Hazardous		Upper	
Substance	Source	Bound	
Ammonia	Tank Vents in Building #1	120 lbs.	
	Valves in Building #5	115 lbs.	
Upper Bound for Ammonia		235 lbs.	

For the purposes of this example, it is assumed that the only sources of the ammonia release at the facility are the Tank Vents in Building #1 and the Valves in Building #5.

Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection of information is estimated to average 21.3 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200
Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.