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Part VII

Environmental Protection Agency

40 CFR Parts 302 and 355
Reporting Continuous Releases of Hazardous Substances; Final Rule

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 302 and 355

[FRL 3635-3]

Reporting Continuous Releases of Hazardous Substances

AGENCY: U.S. Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Section 103(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, requires that the person in charge of a vessel or facility from which a hazardous substance has been released in a quantity that is equal to or greater than its reportable quantity (RQ) shall immediately notify the National Response Center (NRC) of the release. Section 102(b) establishes an RQ of one pound for hazardous substances, except those substances for which RQs have been established at other levels pursuant to section 311(b)(4) of the Clean Water Act. Section 102(a) authorizes the U.S. Environmental Protection Agency (EPA) to adjust RQs for hazardous substances and to designate as hazardous substances those substances that, when released into the environment, may present substantial danger to the public health or welfare or the environment. In addition to the reporting requirements under CERCLA, section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA) or Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires that releases of hazardous substances in quantities equal to or greater than their RQs (or one pound if a reporting trigger is not established by regulation) be reported to State and local authorities.

Section 103(f)(2) of CERCLA provides relief from the reporting requirements of section 103(a) for a release of a hazardous substance that is continuous, stable in quantity and rate, and either is a release from a facility for which notification has been given under section 103(c) or is a release for which notification has been given under section 103(a) for a period sufficient to establish the continuity, quantity, and regularity of the release. Section 103(f)(2) provides further that in such cases, notification shall be given annually or at such time as there is any statistically significant increase in the quantity released of any hazardous substance. Relief from reporting under section 103 also applies to notification required under section 304 of SARA Title III. This final rule presents the Agency's interpretation of the section 103(f)(2) reporting requirements.

EFFECTIVE DATE: September 24, 1990.

The information collection requirements contained in 40 CFR 302.8 and 40 CFR 355.40 have been approved by the Office of Management and Budget (OMB) and have been assigned the control numbers 2050-0086 and 2050-0092.

ADDRESSES: The toll-free telephone number of the National Response Center is 800/424-8802; in the Washington, DC metropolitan area, the number is 202/267-2675.

The record supporting this rulemaking is available for public inspection at the U.S. Environmental Protection Agency, Superfund Docket—Room 2427, 401 M Street, SW., (OS-240), Washington, DC 20460 (Docket Number 103(f)CR). The docket may be inspected between 9 a.m. and 4 p.m. Monday through Friday, excluding Federal holidays. To review docket materials, you may make an appointment by calling 202/382-3046. The public may copy a maximum of 50 pages from any regulatory docket at no cost. Additional copies cost $.20 per page.

FOR FURTHER INFORMATION CONTACT: Mr. Hubert Watters, Project Officer, Response Standards and Criteria Branch, Emergency Response Division (OS-210), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, 202/382-2463; or the RCRA/Superfund Hotline, 800/424-9346; in Washington, DC, 202/382-3000. The Telecommunications Device for the Deaf (TDD) Hotline numbers are toll-free 800/553-7672 or 202/475-9652 in the Washington, DC metropolitan area.

To request a copy of the information packet available on this regulation, including further explanations of the reporting requirements and an IBM-compatible computer disk that may be used to complete the written reports required under today's final rule, contact the RCRA/Superfund Hotline or the Telecommunications Device for the Deaf (TDD) Hotline at the numbers listed above.

SUPPLEMENTARY INFORMATION: The contents of today's preamble are listed in the following outline:

I. Introduction

A. Statutory Authority

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (Pub. L. 96-510), 42 U.S.C. 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) (Pub. L. 99-499), establishes broad Federal authority to respond to releases or threats of releases of hazardous substances from vessels and facilities. Section 101(14) of CERCLA defines the term "hazardous substance" by reference to other environmental statutes with authority further granted to the Administrator of the U.S. Environmental Protection Agency (EPA) to designate additional hazardous substances under CERCLA section 102(a). The CERCLA list currently contains 724 hazardous substances, plus 1500 radionuclides.

Section 102(b) of CERCLA establishes RQs at one pound for releases of hazardous substances except for those substances for which RQs were established at a different level pursuant to section 311(b)(4) of the Clean Water Act (CWA). Section 102(a) of CERCLA authorizes the EPA Administrator to adjust all of these RQs by regulation (See 40 CFR 302.4). Sections 103(a) and (b) of CERCLA require that, as soon as the person in charge of a vessel or facility has knowledge of a release of a hazardous substance from such vessel or facility in a quantity equal to or greater than the RQ for that substance that person shall notify the National Response Center (NRC). This notification informs the government of a release so that government personnel can evaluate the need for a field response and undertake any necessary response action in a timely fashion. Under section 104 of CERCLA, the Federal government may respond whenever there is a release or a substantial threat of a release of a hazardous substance into the environment. Response activities are to be taken, to the greatest extent possible,

in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR part 300), which was developed originally under the CWA and which has been revised to reflect the responsibilities and authority created by CERCLA.

Section 104(e)(2)(B) of CERCLA gives the Agency the authority to require persons who have or may have relevant information to furnish information or documents upon reasonable notice relating to the nature or extent of a release or threatened release of a hazardous substance or pollutant or contaminant at or from a facility or vessel. If consent is not granted regarding any request for information or documents made under section 104(e)(2)(B), the Agency may issue a compliance order under section 104(e)(5).

Section 103(f)(2) of CERCLA modifies the general notification requirements of section 103(a) for certain releases. Releases may be reported less frequently than otherwise would be required, if they are "continuous" and "stable in quantity and rate," and if notification has been given under section 103(a) "for a period sufficient to establish the continuity, quantity, and regularity" of the release.[1] Section 103(f)(2) pertains only to releases that are continuous and stable in quantity and rate, and requires that reports be made "annually, or at such a time as there is any statistically significant increase" in the quantity of the hazardous substance released above that previously reported or occurring.

In addition to reporting requirements established by CERCLA, section 304 of the Emergency Planning and Community Right-to-Know Act (EPCRA) or Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires the owner or operator of certain facilities to report releases of extremely hazardous substances (EHSs) and CERCLA hazardous substances to State and local entities. SARA Title III section 304 notification must be given immediately after a release of an RQ or more (one pound or more if a reporting trigger is not established by regulation). The notification is to be given to the community emergency coordinator for each local emergency planning committee (LEPC) for any area likely to be affected by the release, and to the state emergency response commission (SERC) of any State likely to be affected by the release. SARA Title III section 304 notification requirements apply only to releases of EHSs and CERCLA hazardous substances (defined at 40 CFR part 355 Appendices A and B and § 302.4, respectively) that have the potential for off-site exposure.

Section 109 of CERCLA and section 325 of SARA Title III authorize EPA to assess civil penalties for failure to report releases of hazardous substances that equal or exceed their RQs. Section 103(b) of CERCLA, as amended authorizes EPA to seek criminal penalties for failure to report releases of hazardous substances and for submitting false or misleading information in a notification made pursuant to CERCLA section 103, and establishes the maximum penalties and years of imprisonment for violation of the CERCLA section 103 reporting requirements.

B. Background of this Rulemaking

On May 25, 1983, EPA published a Notice of Proposed Rulemaking (NPRM) (48 FR 23552) to clarify procedures for reporting releases and to adjust RQs for 387 CERCLA hazardous substances. In the preamble to the May 25, 1983 NPRM, the Agency discussed the reporting requirements for continuous releases and specifically requested comments on a number of issues, seeking information that would enable EPA to develop a system that imposed a minimal burden on both the regulated community and the government, while achieving the underlying statutory objectives. The reporting requirements for continuous releases were discussed again in the preamble to a final rule adjusting RQs, published on April 4, 1985 (50 FR 13456). EPA noted that due to the complexity of the issues, the Agency would study the continuous release reporting requirements further and would not promulgate, at that time, a regulation related to continuous releases.

On April 19, 1988, EPA published a proposed rule (53 FR 12868) presenting the Agency's interpretation of section 103(f)(2) and responding to comments made in response to the May 25, 1983 NPRM. The official public comment period for the April 19, 1988 proposed rule ended on June 20, 1988. EPA received a total of 29 comment letters, including three letters received after the close of the official comment period. The comments received together with the Agency's responses, are contained in the document, "Responses to Comments on the April 19, 1988 Notice of Proposed Rulemaking on Reporting Continuous Releases of Hazardous Substances" (Responses to Comments), which is available for inspection at the U.S. Environmental Protection Agency, Superfund Docket—Room 2427, 401 M Street, SW., Washington, DC 20460 (Docket Number 103(f)CR).

Today, the Agency is promulgating the final rule on reporting of continuous releases. In preparing this rule, EPA considered all of the public comments submitted on the April 19, 1988 proposed rule. These comments are addressed in sections II–IV of this preamble. Section V provides a summary of the analyses supporting today's rule.

EPA notes that although releases claimed to be continuous may qualify for reduced reporting under section 103(f)(2), such releases are not permitted nor are they necessarily risk-free. (See the Notice of Proposed Rulemaking on Reporting Exemptions for Federally Permitted Releases of Hazardous Substances (53 FR 27268; July 19, 1988)). Also, other provisions of the Act may apply even where CERCLA does not require notification. For example, a party responsible for releasing a CERCLA hazardous substance that is not a federally permitted release is liable for the costs of cleaning up that release and for any natural resource damages, even if the release is not subject to the notification requirements of CERCLA. Similarly, proper reporting of a release in accordance with section 103(a) or section 103(f)(2) does not preclude liability for cleanup costs. The fact that a release of a hazardous substance is reported properly or that it is not subject to the notification requirements of CERCLA will not preclude EPA or other government agencies from seeking reimbursement under section 107 for the cost of cleanup from parties responsible for the release, or from pursuing an enforcement action against those parties pursuant to section 106.

This rulemaking, therefore, should not be interpreted as reflecting Agency policy or the applicable law with respect to other provisions of the Act. Furthermore, all releases of CERCLA hazardous substances, including federally permitted releases, are subject to liability provisions of State statutes, common law, and Federal statutes other than CERCLA.[2]

C. Organization of the Final Rule

Today's final rule amends 40 CFR by adding § 302.8. Section 302.8(a) provides that no notification is required for

[1] Section 103(f)(2) also allows releases to be reported less often if notification has been given under section 103(c), which requires notification to the Federal government of the existence of certain facilities that are or have been used for storage, treatment, or disposal of hazardous substances but do not have Resource Conservation and Recovery Act (RCRA) interim status or a RCRA permit.

[2] CERCLA section 114(a); see Senate Report No. 96-848 (1980), p. 46.

releases that qualify as continuous and that are stable in quantity and rate, except as provided in § 302.8(c). Section 302.8(b) provides definitions of terms relevant to continuous release reporting. Section 302.8(c) lists all of the notification requirements for continuous releases. Section 302.8(d) requires the person in charge of a facility or vessel to establish the continuity and stability of the release and to notify the NRC by telephone to alert government authorities that the release will be reported as a continuous release under CERCLA section 103(f)(2). Section 302.8(e) requires the submission of an initial written notification to the appropriate regional EPA office to report baseline release information. Section 302.8(f) requires that a one-time follow-up report [3] be submitted on the first anniversary of the initial written report. Subsequent reports, under § 302.8(g) and (h) are required only when there is a change in the release, and at such times as there is an increase in the release that is statistically significant as defined in § 302.8(b). Initial written notification and the subsequent one-time follow-up notification are to be made under § 302.8(e) and (f) to the appropriate Regional EPA office for the geographical area where the releasing facility or vessel is located.

Section 302.8(e) and (f) also lists the information that must be submitted in the initial written report and the follow-up report, respectively, for each substance that is claimed to qualify for continuous release reduced reporting. Section 302.8(j) provides that a copy of the SARA Title III section 313 Toxic Release Inventory form may be submitted in lieu of an initial written report or follow-up report and lists the additional information that must be included with the form. Section 302.8(g)(1) explains that if there is any change in the source or composition of a release, the release is considered a "new" release for reporting purposes and requires the submission of initial telephone and written notifications. Section 302.8(g)(2) and (3) describes the notification required if there is a change in any of the other information submitted in the initial written notification and/or follow-up notification, other than a change in source or composition. Section 302.8(h) requires that notice of a statistically significant increase be made to the NRC and the release be identified as a statistically significant increase in a continuous release. Section 302.8(k) explains that the person in charge may rely on engineering estimates, the operating history of the facility or vessel, or any currently available release data to support the notifications required in § 302.8(c), and provides that documentation supporting the continuous release determination and all notifications and evaluations shall be kept on file for one year at the facility or, in the case of a vessel, at an office in the United States in a port of call or place of regular berthing. The documentation must be made available to EPA upon request to enforce the requirements of § 302.8. Section 302.8(l) explains the reporting requirements for multiple concurrent releases under today's rule.

Today's rule also amends 40 CFR part 355 to identify the SERC and LEPC as the recipients of the initial continuous release reports, reports of statistically significant increases, and reports of changes in the source, composition, or normal range of the release, and to indicate that continuous releases are otherwise exempt from SARA Title III section 304 emergency release notification. 40 CFR part 355 also provides references to today's changes to 40 CFR part 302. (For further explanation of the relationship of SARA Title III section 304 notification to CERCLA section 103 reporting, see section II.C of today's preamble.)

II. Continuous Release Reporting Requirements

A. General Requirements Overview

CERCLA notification provisions create a reporting process that informs government officials of releases that require immediate evaluation to determine the need for response action. The RQ reporting triggers are not in themselves assessments of the risk associated with releases of hazardous substances. The actual hazards will vary with the circumstances of the particular release, and many factors other than the size of the release could influence the government's response.

Accordingly, the primary purpose of CERCLA's notification requirements is to alert government officials to releases that may require timely and proper response action in order to prevent or mitigate damage to public health or welfare or the environment. The purpose of section 103(f)(2) is to reduce unnecessary release notifications. Section 103(f)(2) contemplates that, in general, if a release is continuous and stable in quantity and rate, Federal officials should not have to be notified each time the release occurs to decide whether a response is needed. Thus, instead of reporting every release that equals or exceeds the RQ as it occurs, the person in charge of a vessel or facility is allowed to report less often for continuous and stable releases.

Nevertheless, government response authorities will continue to need some notification of hazardous substance releases that equal or exceed their RQs on a continuous basis. Today's rule, therefore, requires four kinds of notification of a continuous release: (1) Initial telephone and written notifications; (2) a written follow-up report to the appropriate EPA Regional Office on the first anniversary of the initial written notification; (3) notification of changes in the source or composition of the release or other submitted information; and (4) immediate reports of any statistically significant increase (SSI) in the release. Under today's rule, an SSI is defined as a release, within a 24-hour period, that exceeds the upper bound of the previously reported normal range of the release. The normal range is defined as the range of releases (in pounds or kilograms) reported or occurring over any 24-hour period under normal operating conditions during the previous year. An SSI in the release must be reported to the NRC, SERC, and LEPC as soon as the person in charge has knowledge that the release has occurred.

An annual evaluation of each hazardous substance release being reported under the provisions of today's final rule must be made within 30 days of the anniversary date of the initial written notification. The annual evaluation must consider and verify the information concerning the release during the period since the submission of the follow-up report or previous annual evaluation. No further reporting is required, however, unless a change has occurred in the composition or source(s) of the release or in other submitted information. The type of notification required when a change in the release occurs varies according to the nature of the change. (Reporting requirements for changed releases under 40 CFR 302.8(h) are described in section II.B.3 of today's preamble.)

Notification must be made by: (1) The owner or operator of a facility for which initial notification of the release has been provided under section 103(c), or (2) the current person in charge of the vessel or facility for which the initial notification was made under section

[3] The one-time follow-up report required under CERCLA section 103(f)(2) for releases claimed to be continuous does not take the place of, and should not be confused with, the written notice that is required under SARA section 304(c) to provide SERCs and LEPCs with additional information on episodic releases reported under SARA section 304(b).

103(a) and for which the initial written report was made establishing the continuity, stability, and regularity of the release. The person in charge of the vessel or facility, of course, always has the option of reporting continuous releases under CERCLA section 103(a) and SARA Title III section 304 as they occur.

Reporting under section 304 of SARA Title III is closely tied to reporting under CERCLA section 103. All releases of CERCLA hazardous substances, including EHSs that are also CERCLA hazardous substances, that must be reported under CERCLA section 103(a) must also be reported to SERCs and LEPCs under the provisions of SARA Title III section 304, if the releases have a potential for off-site exposure. Releases of other EHSs, that are not CERCLA hazardous substances, must be reported to SERCs and LEPCs if they occur in a manner that would require notification under CERCLA section 103(a). Similarly, releases exempt from reporting under CERCLA section 103(a), such as federally permitted releases, or releases subject to reduced reporting requirements under CERCLA section 103(f)(2), are not subject to SARA Title III section 304 reporting.

Owners and operators of facilities subject to the notification requirements of SARA Title III section 304 must qualify releases as continuous and stable under today's definitions by submitting initial telephone and initial written notifications to SERCs and LEPCs. The CERCLA section 103(f)(2) one-time follow-up report does not apply to facilities subject to the provisions of SARA Title III section 304 and, therefore, the owners and operators of such facilities are not required to submit this follow-up report on continuous releases to the SERC or LEPC. EPA, however, will make the information in the continuous release follow-up reports available to the SERCs and LEPCs, should they wish to receive it.

B. Key Concepts Included in the Final Rule

1. Continuous Releases

Under today's final rule, EPA defines "continuous" as a release that occurs without interruption or abatement or that is routine, anticipated, and intermittent during normal operations or treatment processes.

In the April 19, 1988 proposed rule, EPA proposed to define "continuous" as a release that is (1) continuous without interruption or abatement; (2) continuous during operating hours; or (3) continuous during regularly-occurring batch processes. The period over which releases were to be evaluated was 24 hours.

EPA indicated in the April 19, 1988 NPRM, however, that it was aware of situations in which certain routine, anticipated, intermittent releases are predictable and stable with respect to quantity, rate, and time of occurrence. EPA listed as examples releases that are stable in quantity and rate and that result from (1) production of a batch of a substance at the same time every week; (2) startup of a machine every workday morning and its shutdown every workday evening; and (3) use of a hazardous substance at a facility every day or at the same time every week. The Agency stated that it believed that per-occurrence reporting of such releases would not enhance the ability of the Oil and Hazardous Substances Coordinator (on-scene coordinator or OSC) to determine whether a field response is necessary. Consequently, EPA indicated in the April 19, 1988 proposed rule that it would consider allowing these routine, anticipated, intermittent releases to be deemed "continuous" releases and thus subject to the reduced reporting requirements of section 103(f)(2).

The Agency described and solicited comments on two options under which routine, anticipated, intermittent releases that are predictable and stable in quantity, rate, and time of occurrence would qualify for the reduced reporting requirements under section 103(f)(2). Under the first option, the Agency proposed to grant an administrative exemption from section 103(a) reporting for such releases on the basis that response officials would not need information about routine, anticipated, intermittent releases on a per-occurrence basis. Thus, such releases would not be defined as "continuous" releases, but would be subject to analogous requirements pursuant to EPA's general rulemaking authority under CERCLA. Under the second option, EPA proposed to define "continuous" to include these routine releases. The effect of both options would be the same: Routine, anticipated, intermittent releases that are predictable and stable in quantity and rate would be subject to reduced reporting requirements.

EPA received twenty letters containing comments on the proposed definition of "continuous." All of the commenters stated that routine, anticipated, intermittent releases that are incidental to normal plant operations should be considered "continuous" releases. The commenters stated that, based upon the operating history of a plant, a number of routine releases from various kinds of normal plant operations and processes are anticipated in the normal course of operations and are predictable in terms of quantity, quality, nature, and frequency of occurrence. Examples provided by commenters include releases associated with: batch processes; shutdowns for scheduled maintenance; catalyst changeouts; loading and unloading; decompression of pressure vessels; drawing off of liquid at regular intervals during a production process; venting that occurs each time a storage tank is filled; removal of fly ash or dust from pollution control devices; and cyclical operations at production facilities. Most of these commenters urged the Agency to define "continuous" to include such releases rather than creating an administrative exemption.

EPA agrees with the commenters that routine, anticipated, intermittent releases incidental to normal plant operations or treatment processes could have a high degree of regularity and predictability associated with them. Routine, anticipated, intermittent releases that are also stable in quantity and rate do not require per-occurrence reporting to the NRC. Expanding the definition of continuous to include such releases is consistent with the fundamental purpose of CERCLA section 103(a) reporting requirements, which is to alert government response officials to releases that require immediate evaluation to determine whether a field response may be necessary. A release that occurs in the course of normal operations or treatment processes and is predictable and regular in terms of frequency, quantity, and rate does not require immediate evaluation. The initial notifications and the follow-up report, combined with immediate notification of SSIs will provide response authorities sufficient information to evaluate and respond to the release, if necessary. Moreover, EPA interprets the term "continuous" as used in section 103(f)(2) as distinguishing releases that are routine and regular from releases that are episodic and variable. Thus, the term "continuous" encompasses releases that are routine, anticipated, intermittent releases, as well as releases that are uninterrupted. In the final rule, therefore, the Agency has defined "continuous" to include such releases. Also, EPA believes that releases that are continuous during operating hours or regularly-occurring batch processes are routine, anticipated, intermittent releases and, therefore, it is not necessary to list these two types of releases as separate parts of the definition of continuous. Accordingly,

the definition in today's final rule does not include the descriptions of these releases.

Episodic releases, such as those associated with accidents, emergency shutdowns, or pipe ruptures, however, are not routine or regular and do not come within the definition of continuous. Such releases in an RQ or more must be reported to the NRC, SERC, and LEPC as soon as the person in charge is aware that they have occurred.

Many commenters objected to what they perceived as a focus in the proposal on the time of the occurrence of an intermittent release rather than the timing of the release. Commenters noted that certain batch processes occur at the same point in a predictable sequence, but do not occur necessarily at the same time of day or on the same day of the week. One commenter cited the example of pharmaceutical manufacturing processes that may occur once every 32 hours, rather than at an exact time within a 24-hour or week-long period. Other batch operations, according to the commenter, vary in duration, depending on the specific characteristics of the product and the size of the order. Releases from these kinds of processes, the commenters concluded, although predictable in terms of timing rather than time, are the kinds of routine, anticipated releases that should come within the definition of continuous.

EPA agrees with the comment that it is not necessary for a release that otherwise satisfies the definition of continuous to always occur at the same time. Under today's final rule, a release that is predictable with respect to timing is a release that recurs either at a specified time, or at a specific interval, or in association with an anticipated event. In order to qualify a release as "continuous" under today's final rule, therefore, the person in charge must describe in the initial written report and one-time follow-up report the pattern of continuity, including a description of the timing of the release in terms of the frequency of the release and the fraction of the release from each release source and the period during which it occurs. Under today's final rule, for example, a hazardous substance release may be continuous if it occurs during a process that is run infrequently but at anticipated intervals that depend on the market demand for a product. Thus, the final rule is sufficiently flexible to encompass emissions, such as those from batch processes described above, that are predictable in terms of timing, but do not necessarily occur at the same time of week or month.

2. Stable in Quantity and Rate

In order for a release to qualify for reporting under CERCLA section 103(f)(2), the person in charge of a facility or vessel must not only demonstrate that the release comes within the definition of continuous, but also that the release is stable in quantity and rate. In the April 19, 1988 proposed rule, EPA discussed quantitative and qualitative indicators for determining that releases are "stable in quantity and rate." Because of the many different types of releases, and the variation in the types of facilities that may be releasing hazardous substances in a manner that could be defined as continuous, EPA determined that quantitative measures for complying with this statutory requirement, such as a predetermined percentage variation from the mean, would be difficult to establish and insufficiently flexible. Accordingly, in the April 19, 1988 NPRM, the Agency proposed and solicited comments on a qualitative measure under which a qualifying release would have a "predictable quantity and rate during normal operations" and would not be "the result of malfunction or upset conditions." The Agency also solicited comments and supporting data on other qualitative and quantitative measures that might be appropriate. Commenters, on the whole, endorsed EPA's qualitative approach to the "stable in quantity and rate" requirement. EPA has maintained a qualitative approach in today's final rule, and is defining "stable" as "predictable and regular."

Among other things, today's rule allows the person in charge of a facility or vessel to develop the basis for claiming that a release is continuous and stable in quantity and rate. A brief statement of the basis must be provided in the initial written and follow-up reports, and should include such factors as the pattern of the release (e.g., whether the release is uninterrupted or is an intermittent release, and whether the release results from an operating procedure, a batch process, or other operating activity). The statement should also describe the source of the extreme values of the normal range of releases. For example, during the year, the minimum quantity of a release of a hazardous substance may be the result of one batch process, whereas the maximum quantity of a release results from another process.

A commenter supported EPA's proposal to allow the person in charge to develop the basis for asserting continuity and stability, but stated that if EPA determines that the basis is inadequate, the Agency should mitigate penalties for failure to notify under section 103(a) in consideration of the good faith effort on behalf of the person in charge. The Agency acknowledges that the non-quantitative definitions of continuous and stable in quantity and rate rely on the professional judgment of the person in charge of a facility or vessel to make and support the initial determination that a release is continuous and stable in quantity and rate. Nonetheless, information submitted to the NRC, the EPA Region, SERC, and LEPC is subject to review and verification, and the Agency may require modification, clarification, or additions. Penalties for failure to notify, if appropriate, will be imposed taking into account all factors related to the issue. The Agency agrees, however, that if a good faith effort is made by the person in charge to act in accordance with the definitions of continuous and stable in quantity and rate, and if the person in charge has also complied with the other requirements of the continuous release reporting regulation and other pertinent regulations, that these facts may be considered when determining any potential penalties.

Some commenters urged EPA not to equate stability with uniformity, or a constant rate of release. These commenters stated that predictability should be the primary criterion for determining whether a release is stable in quantity and rate. One commenter noted that there are many predictable releases that follow a decreasing rate of release over time. The commenter cited the example of the rate of release from a pressurized batch reactor where the rate is likely to be greatest at the beginning of the process, when the pressure is highest, and then to decline as the pressure decreases, until the system is stabilized. This commenter observed that, although the rate of such fugitive emissions is not strictly uniform, it is predictable in the sense that the rate and amount of release vary in basically the same manner each time the decompression occurs or the process is operated.

Another commenter provided the example of fugitive emissions from valves that occur at different rates over the course of a production cycle as the pressure inside the system changes. These emissions can be calculated on a statistically sound basis, the commenter stated, because the owner or operator knows that historically a given number of valves will release a given amount of a hazardous substance over the course of a year.

The Agency agrees that releases need not be uniform in quantity and rate of emission in order to be considered stable. Predictability and regularity are the criteria set forth in 40 CFR 302.8(b) that define the "stable in quantity and rate" requirement. Thus, emissions such as the releases described by the commenters, if they are predictable and regular, may qualify for reporting under CERCLA section 103(f)(2).

Several commenters stated that releases from malfunctions should qualify for reduced reporting under section 103(f)(2) because malfunctions such as leaking valves are continuous during certain processes and occur with a certain statistical regularity. Other commenters disagreed, stating that malfunctions are abnormal releases that are not routine or anticipated under normal operating conditions. The Agency believes that it is not possible to define releases from malfunctions with sufficient precision to determine, by definition alone, whether they qualify for reporting under section 103(f)(2). Some such releases may qualify, whereas others may indicate a problem at the facility or vessel. The determinative question is whether such releases are both continuous and stable in quantity and rate under the definitions in today's final rule. To ascertain whether the release, including a "malfunction," is "continuous," the person in charge must determine whether, under the regulatory definition, it (1) occurs without interruption or abatement, or (2) is routine, anticipated, intermittent, and incidental to normal plant operations or treatment processes. If the release falls within the regulatory definitions of continuous, the person in charge must make a further determination that the release is stable in quantity and rate, i.e., predictable and regular in amount and rate of emission. For example, fugitive emissions or releases from valves or pump seals may qualify for reporting under section 103(f)(2) if they come within the definitions of continuous, and are regular and predictable in the amount and rate of emissions. Determinations about specific releases must be based on professional judgment and knowledge of the operating history of the facility or vessel.

In the initial written report and the follow-up report, the person in charge must include the frequency of such releases from each release source and the period over which they occur. For example, the reports may include a statement that a release from a valve occurs every 32nd hour, i.e., whenever a certain batch process is run, or that a release occurs four times a year, all during the month of May, or that a release occurs throughout the year on a monthly basis, whenever a certain activity occurs.

Releases that are unanticipated, episodic events, such as spills, pipe ruptures, equipment failures, emergency shutdowns, or accidents would not qualify for the reduced reporting requirements of section 103(f)(2). Although some of these releases may occur with some statistical frequency, episodic events are not incidental to normal operations and, by definition, are not continuous or anticipated, and are not sufficiently predictable or regular to be stable, and therefore do not satisfy the statutory requirements of section 103(f)(2). Such releases, therefore, must be reported on a per-occurrence basis under section 103(a).

One commenter stated that the proposed definition was too narrow and suggested that EPA should define "stable in quantity and rate" solely by reference to the definition of "statistically significant increase." In this commenter's opinion, any release that is not an SSI should be considered "stable in quantity and rate," whether it results from a malfunction or from normal operations.

The Agency does not agree. A release must be established as "continuous" and "stable in quantity and rate" before it may be reported under section 103(f)(2). To qualify a hazardous substance release for reduced reporting under today's final rule, the person in charge must establish the continuity and stability of the release and must submit initial telephone and written notifications to the NRC, the EPA Region, the SERC, and the LEPC. After initial notifications have been made, the person in charge of the facility or vessel can limit reporting to the follow-up report and reports of SSIs.

In addition, although some malfunctions incidental to normal operations may qualify as continuous and stable in quantity and rate under the definitions in today's final rule, others are unanticipated, episodic releases, such as pipe ruptures or emergency shutdowns. Although the amount of the hazardous substance released may be less than the upper bound of the reported normal range, these releases are outside the scope of the continuous release reporting regulation and must be reported on a per-occurrence basis under CERCLA section 103(a) and SARA Title III section 304. For these reasons, EPA does not agree that a release that is "stable in quantity and rate" can be defined as any release that is not an SSI.

3. Reporting Requirements

Congress intended, in CERCLA section 103(f)(2), to reduce otherwise applicable reporting requirements for continuous releases, but did not intend to eliminate them entirely. Accordingly, today's final rule requires an initial telephone and written notification, a one-time follow-up report on the first anniversary of the submission of the initial written notification, and reports of SSIs in continuous releases. Also, changes in information submitted in the initial notifications or the follow-up report may require notification to the appropriate authorities.

Initial telephone notification under the authority of CERCLA section 103(f)(2) and SARA Title III section 304(b) notifies government authorities of the intent of the person in charge of the facility or vessel to establish the release as continuous and stable in quantity and rate under the definitions in today's final rule. The initial telephone notification consists of (1) a minimum of one telephone report to the NRC, the SERC of any State likely to be affected by the release, and the LEPC for any local area likely to be affected by the release; and (2) within 30 days of the initial telephone notification, submission of an initial written notification to the appropriate EPA Regional Office for the geographical region in which the facility or vessel is located, and the appropriate SERC and LEPC.

Within 30 days of the first anniversary date of the initial written notification, the person in charge must evaluate the reported releases and submit a one-time written follow-up report to the appropriate EPA Regional Office. (No follow-up report need be submitted to the SERC or LEPC). The follow-up report must contain information concerning the release during the period since the submission of the initial written report. Following the submission of the follow-up report, the person in charge must evaluate each hazardous substance release annually and must document each annual evaluation. The annual evaluation must take into account all information concerning each release during the period since the submission of the follow-up report or prior annual evaluation. EPA need not be notified of the annual evaluation, however, unless there is a change in the information submitted previously.

An SSI in a release must be reported to the NRC, SERC, and LEPC whenever the person in charge knows that a release has exceeded the upper bound

of the previously reported normal range of the release within a 24-hour period. Under today's final rule, the normal range is defined to include all releases (in pounds or kilograms) of a hazardous substance reported or occurring during any 24-hour period under normal operating conditions during the preceding year.

If there is no change in a release after initial or follow-up notifications have been made, no additional reports are required. The notification that must be made when a change in a release occurs varies with the nature of the change.

If there is any change in the composition or source(s) of a release, the release is considered a new release. The new release must be reported to the NRC on a per-occurrence basis until there is a sufficient basis to establish its continuity and stability under the definitions in today's rule. When the basis is established, the person in charge must notify government authorities of the intent to report under section 103(f)(2) by making an initial telephone call to the NRC, SERC, and LEPC and, within 30 days, submitting initial written reports to the appropriate EPA Region, SERC, and LEPC.

If a change in a release results in an increase in quantity of a release above the normal range, the release must be reported to the NRC, SERC, and LEPC as an SSI as soon as the person in charge knows that the release exceeded the upper bound of the reported normal range. If a change results (or will result) in a number of releases that exceed the reported normal range, the person in charge may continue to report the releases as SSIs, or modify the normal range to reflect the change. To modify the normal range, the person in charge must report at least one release as an SSI by telephone, but may at the same time inform the NRC, SERC, and LEPC that the normal range of the release has changed. Within 30 days from the telephone notification, the person in charge of the facility or vessel must submit a letter to the appropriate EPA Region describing the new normal range, the reason for the change, and the basis for asserting that the release is continuous and stable at the increased quantity. For all other changes in the information submitted in the initial written or follow-up notification, the person in charge must notify the appropriate EPA Region by letter within 30 days of determining that the information submitted previously is no longer valid.

Information used to develop and support the initial written notification and follow-up report, and to document annual evaluations, as well as information relevant to SSIs, establishment of the normal range, and the continuity and stability of continuous releases should not be sent to EPA. This information should be sufficient to substantiate the normal range of releases over the year and to support the other information included in the initial written report, the follow-up report, or the most recent annual evaluation. Supporting information should be kept on file at the facility, or in the case of a vessel, at an office within the United States, in either a port of call, a place of regular berthing, or at the headquarters of the business that operates the vessel. EPA may request that the person in charge of a facility or vessel submit such information as is necessary to enforce the reporting requirements under section 103(f)(2).

In summary, the reporting requirements for continuous releases have four basic components: Initial telephone and written notifications, a one-time written follow-up report on the first anniversary of the initial written notification, notification of changes, and immediate reporting of SSIs.

Written initial notification reports, follow-up reports, and notification of changes in a release should be submitted to the appropriate EPA Regional Office in the geographic area where the facility or vessel is located. Written initial notifications to SERCs and LEPCs should be submitted with the SARA Title III section 304(c) follow-up notice in the manner required by SARA Title III section 304. Addresses of the appropriate EPA Regional Offices are:

EPA, Region I, Oil and Hazardous Materials Section, 60 Westview Street, New England Regional Laboratory, Lexington, MA 02173
EPA, Region III (3-HW-20), Emergency Response Section, 841 Chestnut Street, Philadelphia, PA 19107
EPA, Region V, Emergency & Remedial Response Section, 230 South Dearborn Street, Chicago, IL 60604
EPA, Region VII, Emergency Response and Spill Branch, 25 Funston Road, Kansas City, KS 66115
EPA, Region IX (T-4-9), Emergency Response Section, 215 Fremont Street, San Francisco, CA 94105
EPA, Region II—Building 209, Emergency Response Branch, Woodbridge Avenue, Edison, NJ 08837
EPA, Region IV, Emergency & Remedial Response Section, 345 Courtland Street NE, Atlanta, GA 30365
EPA, Region VI, Emergency Response Branch, 1445 Ross Avenue, 9th Floor, Dallas, TX 75202
EPA, Region VIII, Emergency Response Branch, One Denver Place, 999 18th Street (8HWN-ER), Denver, CO 80202-2413
EPA, Region X, Superfund Response and Investigation Section, 1200 6th Avenue, Seattle, WA 98101

a. Initial Notification (Establishing the Release Baseline). In addition to requiring that a release be established as continuous and stable in quantity and rate, CERCLA section 103(f)(2) requires that notification of the release be made under CERCLA section 103(a) for a period sufficient to establish the continuity, quantity, and regularity of the release. In the April 19, 1988 NPRM, EPA proposed a flexible approach, allowing the person in charge to determine the period sufficient to establish the continuity, quantity, and regularity of a specific release in order to qualify for reporting under CERCLA section 103(f)(2).

One commenter was concerned that if a number of reports were submitted to the NRC under CERCLA section 103(a) to establish that a release is continuous and stable in quantity and rate, the repeated reports would trigger EPA's Accidental Release Information Program (ARIP)[4] questionnaires. The Agency agrees that notification to qualify for continuous release reporting should not automatically require completion of an ARIP questionnaire. So long as the person in charge has a sufficient basis for establishing the continuity and stability of a release, multiple reports over a period of time are not necessary. The person in charge may rely on release data, engineering estimates, knowledge of the plant's operations and release history, and professional judgment to establish the basis for reporting under section 103(f)(2). Today's final rule, therefore, requires a minimum of one telephone call to the NRC under CERCLA section 103(a), and to the SERC and LEPC under SARA Title III section 304, and, within 30 days of the telephone notification, an initial written notification to the EPA Region, SERC, and LEPC. The initial telephone notification will alert appropriate authorities to the intent of the person in charge to report the release as a continuous release, will enable the EPA Regional Office to establish a record and file of the release report, and will partially satisfy the statutory requirement that the person in charge report the release under section 103(a) for a period sufficient to establish the continuity and stability of the release[5];

[4] Reports to the NRC of certain releases, such as repeated releases and releases that cause injury or death, trigger an ARIP questionnaire that requests information pursuant to CERCLA section 104, RCRA section 3007, section 114 of the Clean Air Act, and section 308 of the Clean Water Act.

[5] The Agency has determined that one call to the NRC, SERC, and LEPC, in combination with the initial written notification, will satisfy the statutory

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the initial written notification will provide information on the profile of the release during the previous year. During the initial telephone notification to the NRC, SERC, and LEPC, the person in charge of the facility must identify the release as "continuous" and must inform the government of the intention to report the release under section 103(f)(2). The continuous release reports will be so marked and will be given a case number. This initial notification, therefore, will not automatically trigger an ARIP questionnaire. The Agency may send an ARIP questionnaire to the person in charge of a facility, however, if it deems it appropriate based on the information in the initial notifications and follow-up report.

If the person in charge of the facility or vessel does not have a sufficient basis for establishing a release as continuous and stable, as defined by today's rule, and the release equals or exceeds the RQ and is not otherwise exempt from CERCLA notification provisions, the release must be reported on a per-occurrence basis to the NRC, SERC, and LEPC under the provisions of CERCLA section 103(a) and SARA Title III section 304.[6] Until such time as the person in charge develops a sufficient basis for establishing the continuity and stability of the release, these release reports may trigger an ARIP questionnaire.

Initial Telephone Notification. To satisfy initial telephone notification requirements, the person in charge must identify the release in the telephone call to the NRC, SERC, and LEPC as a report under section 103(f)(2) of a continuous release above the RQ, and must provide the following information for each release:

(1) The name and location of the facility or vessel; and

(2) The name(s) and identity(ies) of the hazardous substance(s) being released.

Initial Written Report. Initial written notification of a continuous release must be made to the appropriate EPA Regional Office, SERC, and LEPC within 30 days of the initial telephone call to the NRC, SERC, and LEPC, notifying the government of the intention of the person in charge of the facility or vessel to report under the requirements of section 103(f)(2). Under today's rule, the initial written report must include the following information:

(1) The name of the facility or vessel; the location, including the longitude and latitude; the case number assigned by the NRC or EPA; the Dun and Bradstreet number of a facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.

(2) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0–50 persons, 51–100 persons, 101–500 persons, 501–1,000 persons, more than 1,000 persons.

(3) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

In addition to the preceding general information, the following substance-specific information must be supplied for each hazardous substance release claimed to qualify for reporting under section 103(f)(2):

(4) The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available). If the release is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.

(5) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(6) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the source is a stack, the stack height (in feet or meters) must be provided. (If the release is attributable to a malfunction, the source must be identified as such.)

(7) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(8) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(9) An estimate of the total annual amount of the hazardous substance released in the previous year (in pounds or kilograms).

(10) The environmental medium(a) affected by the release:

If surface water, the name of the surface water body;

If a stream, the stream order or average flowrate (in cubic feet/second) and designated use;

If a lake, the surface area (in acres) and average depth (in feet or meters);

If on or under ground, the location of public water supply wells within two miles.

(11) A signed statement that the hazardous substance release(s) described is continuous and stable in quantity and rate under the definitions in 40 CFR 302.8(b) and that all reported information is accurate and current to the best knowledge of the person in charge.

In today's final rule, EPA requires, under the authority of section 104(e), that specific information about the source(s) of the release, the medium(a) affected, and certain ecological and population-density information be included in the initial written notification and follow-up reports. If the substance released is a mixture, the person in charge is required to identify and estimate the components of the mixture and their approximate concentrations and quantities. The Agency believes that this information is necessary to determine the need for a government response action.

To ensure that persons in charge can supply the information required in the initial written report and follow-up report without monitoring or measuring releases, the Agency has deleted the proposed provisions requiring information about the dates and numbers of times the release exceeded the RQ in a 24-hour period, the amount of the mean release, and the largest single release. Under today's rule, persons in charge may estimate the normal range and frequency of the release and the total annual amount released; these estimates, however, must have a sound technical basis. Various factors can be used to arrive at the estimates, including the operating history of the facility or vessel, knowledge of the operating processes any currently available data, and the professional judgment of the person in charge.

A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate must be included as part of the initial written notification to the EPA Region, SERC, and LEPC; however, the substantiating information should not be submitted with the report. The substantiating information must be kept on file at the facility or, in the case of a vessel, at an office within the United States in either

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requirement of CERCLA section 103(f)(2)(B) that a release be reported for a period sufficient to establish its continuity and stability. If the person in charge does not have a basis supported by existing data, engineering estimates, operating history and experience, or professional judgment sufficient to qualify for reporting under section 103(f)(2), the release must be reported under section 103(a) for the length of time necessary to establish it as continuous and stable under the definitions in today's rule.

[6] In general, EPA does not expect that multiple reports will be necessary to establish the continuity and stability of a release. The Agency believes that most facilities already have a sufficient basis to qualify a release for reporting under section 103(f)(2) and, therefore, only one telephone call to the NRC, SERC, and LEPC would be necessary.

a port of call, a place of regular berthing, or at the headquarters of the business that operates the vessel, EPA, the SERC, or LEPC may request and/or inspect this information, as necessary, to ensure compliance with the requirements of today's rule.

EPA's receipt of the initial written report without comment should not be interpreted to indicate approval of the report or the information it contains. There is no requirement for review of the reports submitted under sections 103(a) and 103(f)(2) of CERCLA, or section 304 of SARA Title III within a time limit. EPA, the SERC, or LEPC may re-evaluate the information submitted in the initial written report upon receipt of the follow-up report from the facility or vessel, receipt of information about an SSI, receipt of notification of changes in the release, or at any other time, and may contact the person in charge of the facility or vessel to review the basis for reporting under section 103(f)(2). EPA may also take other enforcement action, as appropriate.

One commenter asked EPA to allow a 60- to 90-day delay between the date of promulgation and the effective date of today's rule so that facilities could implement activities to establish releases as continuous and stable in quantity and rate. EPA agrees. The effective date of today's final rule is delayed 60 days to better enable persons in charge of facilities and vessels to comply effectively with the continuous release reporting requirements. In particular, the delay in the effective date will allow facilities sufficient time to call the RCRA/Superfund Hotline to request the guidance material that will fully explain today's requirements and to obtain a copy of the computer disk that will facilitate completion and evaluation of the written reports required under today's rule.

Several commenters requested a clarification about whether EPA expects a facility to perform monitoring beyond that which is currently performed to determine the continuity and quantity of releases. One commenter stated that if extensive additional monitoring is required, facilities may be unwilling or unable to expend the resources to demonstrate their qualification for reduced reporting. The commenter concluded that only available data should be required to establish the continuity and stability of releases.

EPA agrees that, to comply with the requirements of today's rule, persons in charge may use readily available information. EPA does not expect a facility or vessel to perform additional monitoring in order to comply with today's rule. Neither the identification of SSIs nor the other reporting requirements in today's final rule necessitates monitoring or measuring of releases to acquire empirical data. EPA has limited the information required in the initial and follow-up reports to data that can be calculated or estimated. For example, the Agency has eliminated the proposed requirements that the person in charge report the number of times the amount of the release during any 24-hour period exceeded the RQ, the mean release, and the single largest release.

Although no monitoring or measuring of releases is required, estimates provided in the reports, such as the total annual amount of the release and the normal range, must have a sound technical basis. This basis can be provided by engineering estimates, mass balance analysis, or other estimating techniques used by the person in charge of the facility or vessel, as well as by any data available from monitoring that is being performed currently. For example, in the case of a facility with a coal-fired boiler, the person in charge can estimate the hazardous substance releases from the boiler by considering such factors as the hazardous constituents in the particular type(s) of coal used, the volume of coal used, the efficiency of the boiler, and the amount of energy produced.

One commenter suggested that industry and Federal resources would be used effectively if the baseline determination was documented solely in the annual report rather than established by a series of reports during an initial reporting period. EPA disagrees. The Agency believes a minimum of one telephone call is necessary to alert government authorities to the intent of the person in charge of a facility or vessel to report a release as a continuous release. Accordingly, if there is a sufficient basis to establish the continuity and stability of the release under the definitions in today's rule, the person in charge need only make an initial one-time telephone notification to the NRC, SERC, and LEPC and, within 30 days, submit an initial written report to the EPA Region, SERC, and LEPC to establish the baseline information for a release. The initial written report must cover a period of time sufficient to satisfy the requirement of section 103(f)(2)(B) that notification establish the continuity, quantity, and regularity of the release. If, however, the person in charge of a facility or vessel does not have a basis for qualifying a release for reporting under section 103(f)(2), the release must be reported on a per-occurrence basis for a period sufficient to establish its continuity and stability. When the basis is established, the person in charge can begin reporting under section 103(f)(2) by notifying the NRC, SERC, and LEPC and then, within 30 days, submitting the initial written notification. The initial written notification to the EPA Region, SERC, and LEPC will allow response officials to assess potential threats to public health and welfare and the environment from the release in question.

b. Follow-up Report. The April 19, 1988 NPRM required the submission of annual reports on continuous releases. Under section 103(f)(2)(B) that authorizes annual reports of continuous releases, the final rule requires that, within 30 days of the first anniversary date of the initial written notification, the person in charge must evaluate the reported releases and submit a one-time follow-up report to the EPA Region for the geographical area where the releasing facility or vessel is located. The purpose of the one-time follow-up report is to verify or update the information submitted in the initial written report. Although follow-up reports need not be submitted to SERCs or LEPCs, EPA will make the submitted information available to them.

After the submission of the follow-up report, the person in charge must annually reevaluate each reported hazardous substance release within 30 days of the anniversary date of the initial written notification to determine whether there have been changes in the release that require modification of the information previously submitted. Each annual evaluation must be documented, but no annual report or notification of the annual evaluation is required. Notification subsequent to the follow-up report must be made only if there is a change in any of the information submitted previously. Nevertheless, if EPA determines that annual evaluation is not occurring or submitted information is not being properly updated, the Agency may reconsider requiring more frequent reporting. In addition, under the authority of CERCLA section 104(e)(4), the Agency intends to make periodic inspections and targeted audits of facilities reporting under section 103(f)(2) to ensure that the hazardous substances released do not pose a hazard to public health or welfare or the environment and that proper reporting and recordkeeping has occurred.

One commenter stated that although the requirement to submit annual reports to the EPA Region seemed practical, it contradicted the language of the statute which, in section 103(f)(2)(B),

requires that "* * * notification [shall be given] in accordance with subsections (a) and (b) of this paragraph * * *" The commenter stated that notification "in accordance with section 103(a)" means notification to the NRC and not to the EPA Region.

EPA believes that it is more appropriate to require that the follow-up report and subsequent notifications of changes in previously submitted information be directed to the EPA Region rather than to the NRC. The NRC is set up to receive immediate telephone notifications of hazardous substance releases for which a response may be necessary. The required initial written notification and follow-up report are not immediate release reports and are unlikely to trigger immediate field responses. EPA Regions are better equipped than the NRC to review such reports. Releases that are SSIs, however, must be reported to the NRC as they occur.[7]

Several commenters stated that the statutory language gives EPA the authority to require annual reporting *or* SSI reporting, but not both. These commenters also stated that the person in charge should be allowed to choose which report to submit. Although EPA believes that the statute does not preclude requiring both annual reporting and SSI reporting, EPA has decided not to require annual reports, but instead to require an initial written notification, a one-time follow-up report, and reports of changes in previously submitted information, in addition to reports of SSIs.

As noted by the Agency in the April 19, 1988 NPRM, the primary function of CERCLA's notification requirements is to alert government officials to the existence of a situation that may require a government response to protect public health or welfare or the environment. Section 103(f)(2) reduces the notification requirements for releases that are continuous and stable in quantity and rate, but does not eliminate them. Notification of such releases, therefore, must be sufficient to enable officials to determine if a field response is necessary.

SSI reports and initial written notification and follow-up reports are complementary reports that serve different purposes but are equally important. SSIs must be reported immediately to the NRC, SERC, and LEPC because such releases are episodic releases that must be reported under CERCLA section 103(a) and SARA Title III section 304(b). Under today's rule, SSIs are defined as releases that exceed the upper bound of the reported normal range, where the normal range is defined to include all releases (in pounds or kilograms) of a hazardous substance reported or occurring over any 24-hour period under normal operating conditions during the previous year. The initial written report and follow-up reports are the vehicles for establishing and confirming the normal range of a release and will provide the baseline against which to evaluate SSI reports.

As noted above, SSIs are episodic releases that must be reported under CERCLA section 103(a) and SARA Title III section 304(b). Other episodic releases are one-time releases at or above the RQ resulting from occurrences such as emergency shutdowns or pipe ruptures. Such occurrences are not part of the continuous release reporting regime. They must be reported if released in an RQ or more as soon as the person in charge knows they have occurred, whether or not they exceed the upper bound of the reported normal range of releases. Because, by definition, an SSI is a release above the reported normal range, it has not been previously reported or evaluated and may pose a substantial threat to human health or the environment. Such releases should be evaluated on the basis of reasonably current and accurate information. The Agency has concluded, therefore, that requiring SSI reports, initial written and follow-up reports, and reports of changes in previously submitted information best fulfills the intent of the statute and its underlying purpose.

The requirements for the information that must be submitted in the follow-up report are the same as those for the initial written report. If the information submitted in the initial or follow-up reports raises concern about the potential threat posed by the release, EPA has broad authority under CERCLA section 104(e) to procure additional information and under section 104(a) to take any action necessary to prevent or mitigate damage to public health or welfare or the environment. For example, if EPA determines that the upper bound of the reported normal range for a given release is high enough to raise concern about the potential threat posed by the release, the Agency may require the person in charge of the facility or vessel to report all releases at or above some specified level within the reported normal range. (See section II.B.4., below, for a complete discussion of the normal range approach.)

If EPA determines that the reported basis is inadequate for establishing that the release is continuous and stable in quantity and rate, or other information is insufficient or unclear, the Agency may request additional information, clarification, or modifications. EPA may also ask to review the materials on file at the facility or vessel that support information submitted in the report.

Upon review, if EPA determines that the documentation does not adequately support the information in the initial written or follow-up report, the Agency may require that the person in charge amend the report to reflect supporting information. If EPA determines that the release does not qualify for reporting under section 103(f)(2), the person in charge must resume reporting the release under section 103(a) until a sufficient basis for reporting under section 103(f)(2) is developed and reported.

Several commenters requested that State-permitted emissions reports be accepted as substitutes for annual reports under CERCLA section 103(f)(2). Since the proposal, EPA has determined that it will require a one-time follow-up report rather than annual reports. Nonetheless, the Agency does not believe that a State report can be used in lieu of the follow-up report. Reports submitted under State programs vary widely in format and information and might not include the information required in the follow-up report. Also, under today's rule follow-up reports need be submitted only once, unless there is a change in previously submitted information. Therefore, follow-up reports should not be unduly burdensome to persons in charge of facilities or vessels that also must submit reports under State programs.

c. Reports of Changes in Previously Submitted Information. After initial notification reports have been submitted for a release and reporting under section 103(f)(2) has commenced, a change in the composition or source of the release may make it necsssary for the person in charge to requalify the changed or "new" release under section 103(f)(2). In the April 19, 1988 NPRM, EPA proposed that the person in charge requalify such a release under section 103(f)(2) when there is a "substantial" change in the composition or character of the release. The Agency is today defining a substantial change to be *any* change in the composition or source(s) of the release. A change in the composition or source(s) of a release may be caused by factors such as equipment modifications

[7] The Federal government has exercised its discretion in previous rulemakings to allow, in certain limited circumstances, immediate notification to the EPA or Coast Guard OSC, rather than to the NRC. (See 40 CFR 300.63(b) and 33 CFR 153.203.)

or process changes. The changed or "new" release may pose a hazard warranting notification and evaluation and must be qualified anew for reporting under section 103(f)(2). To qualify the new release for reporting under section 103(f)(2), the person in charge must establish the new release as continuous and stable in quantity and rate by reporting to the NRC, SERC, and LEPC on a per-occurrence basis. When the basis has been established, the person in charge must submit initial telephone notifications to the NRC, SERC, and LEPC and initial written reports to the appropriate EPA Region, SERC, and LEPC[8] within 30 days of the initial telephone notification.

If a change at a facility or vessel results in an increase in the quantity of a release above the reported normal range although other reported characteristics of the release remain unchanged, the release must be reported immediately to the NRC, SERC, and LEPC as an SSI as soon as the person in charge knows that the release has exceeded the upper bound of the reported normal range. If a change results (or will result) in a number of releases that exceed the normal range and the person in charge wishes to modify the normal range to reflect the change, the person in charge must report at least one release as an SSI, but may at the same time inform the NRC, SERC, and LEPC that the normal range of the release is being modified. Within 30 days from the telephone notification, the person in charge of the facility or vessel must submit a letter to the EPA Region describing the new normal range, the reason for the change, and the basis for stating that the release is continuous and stable at the increased quantity. Persons in charge of facilities or vessels that must report releases of CERCLA hazardous substances and EHSs under SARA Title III section 304(b) must include this information with the written notice that is required under SARA Title III section 304(c).

For all other changes in the information submitted in the initial or follow-up notification, the person in charge must notify the EPA Region in writing within 30 days of determining that the information submitted previously is no longer valid. (Such notification to SERCs and LEPCs is not required.) For example, if there is a change in the person in charge of a facility or vessel, the new person in charge must notify the EPA Region of the change. Notifications of changes in a release or in other submitted information must include the NRC/EPA-assigned case number and a signed certification statement that the release is continuous and stable in quantity and rate and that all the reported information is accurate and correct to the best knowledge of the person in charge.

One commenter stated that, rather than requiring a new justification for reporting under section 103(f)(2), EPA should allow persons in charge to report changes in the frequency of a release by amending the annual report. As an example, the commenter cited more frequent startups and shutdowns of units under normal conditions and argued that, although there would be an increase in the annual total amount released, the change in frequency would not result in any greater impact on public health and the environment or in any greater need for repetitive immediate reports than do startups and shutdowns of batch operations.

The Agency agrees that for changes in frequency it is not necessary to submit a completely new written report under section 103(f)(2). A change in the frequency of a release under normal conditions may not result in any greater impact on public health or the environment; however, that may not be the case in all situations. Under today's final rule, therefore, a change in the frequency is among the changes that the person in charge must report to the EPA Region in writing within 30 days. An explanation for the change in the release frequency must be included in the letter to the EPA Region. A new initial written report is not required.

d. Statistically Significant Increase Reports. Reports of SSIs must be made by notifying the NRC by telephone as is required in 40 CFR 302.6 for notifications of episodic releases of hazardous substances that equal or exceed an RQ (50 FR 13456; April 4, 1985), and to the SERC and LEPC in the manner set forth in 40 CFR 355.40(b). Callers should identify the releases as SSIs and include the case number assigned by the NRC or EPA when initial telephone notification of the release was made, to ensure that the information is recorded correctly. EPA will immediately evaluate such releases to determine the need for a response action. In determining whether an SSI has occurred and must be reported, the person in charge of the facility or vessel should use a 24-hour period for measuring the quantity released.

One commenter suggested that reports of SSIs should be made in amendments to the annual report as soon as practicable rather than by notifying the NRC by telephone. The Agency does not agree that an SSI in a release should be reported by inclusion in or amendment to a written report. EPA interprets the provisions of section 103(f)(2) to require an SSI, like any other episodic release, to be reported to the NRC under section 103(a) as soon as the person in charge is aware of its occurrence. Notification to the NRC is appropriate because an SSI is an episodic release; it is a release above the RQ that has not been reviewed or evaluated previously. Thus, like episodic releases of hazardous substances, an SSI must be evaluated promptly to determine whether a government response is necessary. It would not be sufficient to report SSIs to the EPA Region when the person in charge decides to amend the previously submitted written report. Today's final rule, therefore, requires that notification be given when an increase in the quantity of the hazardous substance being released during any 24-hour period exceeds the upper bound of the reported normal range of the release (40 CFR 302.8(c)(5), 40 CFR 355.40(a)(2)(iii)(B)).

One commenter stated that "the 24-hour time period over which releases must be aggregated" seemed excessive and urged that it be shortened considerably, perhaps to one hour. EPA does not agree that the time period for determining an SSI in a release should be shortened. The Agency believes that 24 hours is an appropriate length of time in which to determine whether SSIs have occurred because it is the length of time used to determine whether other types of episodic releases equal or exceed the RQ and must be reported under section 103(a) (50 FR 13456; April 4, 1985). The regulated community is also familiar with the 24-hour period as it was established under regulations implementing section 311 of the Clean Water Act, the predecessor of CERCLA. In addition, the Agency is concerned that releases that may pose threats to public health or welfare or the environment may not be brought to the attention of government authorities if the 24-hour period is shortened. For example, if the period were shortened to one hour from the onset of the release as the commenter suggests, a release that continues for more than one hour may not reach the full rate of emission within the shortened time period. As a result, the threat posed by the release would be inaccurately evaluated. Within 24 hours, however, most releases should have

[8] In all communications with the NRC, EPA Region, SERC, and LEPC, the person in charge of the facility or vessel should include the NRC/EPA-assigned case number to properly identify the release in question.

reached their full emission rate. In addition, the Agency believes 24 hours is an appropriate length of time for releases that occur during batch processes or certain other operating procedures.

One commenter suggested that EPA allow the person in charge to use any routine 24-hour reporting period employed, such as a period from 7 a.m. of one day to 7 a.m. of the next day, rather than a calendar day. EPA agrees with this suggestion. The Agency does not intend that the person in charge be required to use a calendar day as the 24-hour period for measuring releases. If a release is continuous without interruption or abatement, the 24-hour period for determining whether an SSI in the release has occurred can be any routine, continuous 24-hour operating period that reasonably reflects the quantity typically released over that length of time. If the release is continuous during operating hours, or during regularly-occurring batch processes, or follows some other pattern, but is a routine, anticipated, intermittent release, the 24-hour period for determining the total amount of the release should begin at the onset of the release.

Several commenters stated that the released quantity of a hazardous substance frequently cannot be determined accurately on a 24-hour or daily basis. One commenter stated that in large, continuous processes with many pieces of equipment and storage tanks, any estimate of releases is subject to inventory errors so large that only annual data give a good measure of average loss per day. The commenter cited the example of losses from tank openings, pump seals, and other connections as not being generally known or measured.

EPA realizes that for some facilities or vessels, the persons in charge may not be able to quantify releases on a daily or a 24-hour basis. In such instances, persons in charge can use their knowledge of the processes, equipment, and operating history of the facility or vessel and the approximate amount of annual total releases to estimate or calculate the normal range of such releases. The same knowledge and judgment can also be employed to estimate the amount released within a 24-hour period and to determine whether it exceeds the upper bound of the reported normal range and must be reported to the NRC.

If a release is continuous without interruption or abatement, the person in charge can estimate the amount released over a 24-hour period by dividing the estimate of the total amount released by the number of 24-hour periods over which the release extends. If the release is continuous during operating hours, or during regularly-occurring batch processes, or follows some other pattern, but is a routine, anticipated, intermittent release, the period for determining an SSI begins at the onset of the release and continues for 24 hours. Releases of the same hazardous substance from the same facility must be aggregated for the 24-hour period to determine if an SSI has occurred. This does not mean that the person in charge should postpone notifying the NRC, SERC, and LEPC until the 24-period has ended. The NRC, SERC, and LEPC must be notified as soon as the person in charge knows that the quantity of a release within the 24-hour period exceeds the upper bound of the reported normal range.

4. Statistically Significant Increases

In today's final rule, the Agency defines an SSI as any release of a hazardous substance that exceeds the upper bound of the reported normal range. The normal range is defined to include all the releases (in pounds or kilograms) of a hazardous substance reported or occurring over any 24-hour period under normal operating conditions (i e., normal conditions that prevail during the period establishing the continuity, quantity, and regularity of the release) during the preceding year. The definition reflects comments received on the NPRM definition of an SSI and is based upon the language of CERCLA section 103(f)(2)(B) that requires that notification shall be given "* * * at such time as there is any statistically significant increase in the quantity of any hazardous substance or constituent thereof released, above that previously reported or occurring." The definition of SSI, therefore, does not include releases within the reported normal range of the release. The Agency considers any release that exceeds the reported normal range to be statistically significant because the normal range is established based on a set of historical data representing all releases reported or occurring during normal operations over the previous year.

In the proposed rule, EPA had selected as the definition of SSI the five percent significance level for the Type I error rate, but solicited suggestions from interested parties with data supporting a Type I error rate other than five percent (Type I error is the probability of falsely assuming a difference) Several commenters objected to EPA's choice of the five percent significance level as being too stringent. One commenter stated that the Agency might be overburdened with reports to such an extent that releases requiring responses could be obscured. Another commenter suggested that EPA change the confidence level from 95 to 99 percent to reduce the frequency of unnecessary reporting and reduce the burden on the facilities and vessels, the NRC, SERCs, and LEPCs.

The Agency agrees with the commenters that the five percent significance level might burden facilities and vessels, and the NRC, SERCs, and LEPCs with a large number of SSI reports without providing a commensurate benefit in protection of human health and welfare and the environment. At a five percent, significance level, the NRC would receive approximately 18 reports per year for each hazardous substance released in a manner that is continuous without interruption or abatement (i.e., 5 percent of 365 days). Given the number of facilities and vessels that could qualify for reporting under section 103(f)(2), the NRC could be overburdened by reports at the five percent significance level. Also, if a continuous release is sufficiently stable to qualify for reduced reporting, the Agency believes that the number of reports required at the five percent significance level is unnecessary to protect public health and welfare and the environment, and might result in the government's inability to evaluate or respond to the most hazardous releases.

In the April 19, 1988 NPRM, the Agency proposed to allow the person in charge of a facility or vessel to select the appropriate statistical test for identifying SSIs at the five percent significance level. EPA included a nonparametric test and two parametric statistical tests: A control chart test and the Student-test. The Agency also proposed to allow the person in charge of a facility to use other statistical tests, provided that a demonstration is made to show that the test used is appropriate given the underlying release distribution. A number of commenters stated that quantification of releases to provide data for statistical tests is not possible for certain facilities. Some commenters objected to the use of the statistical tests because of the expense and burden of collecting the necessary data. Other commenters stated that releases from many facilities are "calculated" or "estimated" and, therefore, use of the statistical tests "does not make sense" for such facilities. Several commenters stated that CERCLA does not require monitoring for purposes of reporting under CERCLA section 103(a) and,

therefore, many facilities would not have the data necessary to use the tests. These commenters suggested that rather than using a statistical test to identify SSIs, persons in charge of facilities could establish a normal range for releases from those facilities and SSIs would be defined as those releases outside the normal range.

One commenter noted that the language of section 103(f)(2) requires reporting of "any statistically significant increase in the quantity of any hazardous substance or constituent thereof released, above that previously reported or occurring." Notification at the five percent significance level, the commenter stated, would not only require reporting of releases above the range of releases previously reported or occurring, but also would require reports of the largest five percent of releases within that range. Such reporting would be redundant and contrary to the intent of the statute.

The Agency agrees that the use of statistical tests may require empirical release data that are unavailable for some facilities or vessels whose releases could otherwise qualify for reporting under section 103(f)(2), and that the establishment of a normal range of releases provides an acceptable approach to identifying SSIs. The Agency also agrees that, in order to be consistent with the language of section 103(f)(2), the normal range, properly identified, will include all releases under normal operating conditions reported or occurring over the previous year. Thus, the definition of statistically significant will not include releases within that reported range. An SSI in an otherwise continuous and stable release is defined as any release greater than the upper bound of the reported normal range of the release.

Specification of the normal range must be made in the initial written notification report to the EPA Region, SERC, and LEPC. Identification of the normal range of a release should be based on professional judgment, the operating history of the facility or vessel, experience with the operating equipment and processes, and any existing data. Releases included in the normal range are to be evaluated over a 24-hour period. The Agency believes that persons in charge, in most cases, would have adequate information available to provide reasonable estimates or approximations of the normal range of a release, without measuring or monitoring. To establish a normal range, for example, historical data or engineering estimates of releases and operations under varying conditions could provide a reasonable indication of the nature, frequency, and source(s) of a normal range of releases that are predictable in quantity and rate of emission.

Justification of the normal range must be kept on file at the facility, or in the case of a vessel, at an office within the United States in either a port of call, place of regular berthing, or at the headquarters of the business that operates the vessel. Only those releases that are both continuous and stable in quantity and rate may be included in the normal range. Any release outside the upper limit of the reported normal range would be an SSI that would require an immediate report to the NRC, the SERC, and the LEPC. In allowing persons in charge to use this normal range approach, the Agency is not suggesting that releases within the normal range are federally permitted or risk-free. Generally, the Agency believes that the normal range approach promulgated today will result in reports of releases that may pose a hazard to human health, welfare, or the environment, without overburdening the resources of facilities or vessels, or the government. For some releases, however, reporting only those releases above the reported normal range as SSIs may not be sufficiently protective of human health, welfare, and the environment. EPA, therefore, may review initial written notification reports and follow-up reports to determine if the release poses a potential hazard, taking into consideration the characteristics of the substance being released, the quantity and frequency of the release, the sensitivity of the location of the release, and any other relevant factors. If EPA determines, based on such factors, that the release poses a threat or potential threat to human health or welfare or the environment, EPA may take any authorized action necessary to prevent or mitigate the danger, including requiring the person in charge to report releases at or above some specified level below the upper bound of the reported normal range on a per-occurrence basis. Receipt of an initial or follow-up report without comment should not be interpreted as an indication of EPA approval of the normal range or of the other information the report contains.

One commenter suggested that an SSI should be defined with reference to some significant change in plant operations, such as an increase in capacity, a major equipment modification, or some unusual release that occurs as a result of a malfunction or upset condition. EPA does not agree with this comment. An SSI may or may not be the result of a malfunction or unusual occurrence. Some releases that result from malfunctions are episodic releases that are not continuous and stable in quantity and rate and, therefore, do not qualify for reduced reporting under section 103(f)(2). Such releases from malfunctions, although they may not exceed the upper bound of the reported normal range of the continuous release, must be reported on a per-occurrence basis under section 103(a). Also, changes in plant operations may not result in an SSI, but in a change in the source or composition of the release. Any change in source or composition is considered a "new" release for purposes of reporting under section 103(f)(2). Such changes must be re-evaluated in a timely manner, based on the full scope of information required in the initial written report, which must include a statement that the release is continuous and stable in quantity and rate under the changed conditions. EPA, therefore, does not agree that SSIs in releases can be defined as the commenter suggests.

Another commenter stated that actual daily release quantities are known for only a few sources of a few substances and that release quantities are often determined by using engineering calculations, emission factors, and operating experience. The commenter suggested that release estimates, because they are not actual daily release figures, should be rounded to two significant digits of accuracy and an SSI should be defined as a release that, when the increased release is rounded to two significant digits, results in an increase of at least one in the less significant digit.

EPA does not agree that an SSI should be defined as a numeric increase in estimated release figures because, given the variety of release sources, any such figure would be arbitrary and potentially inappropriate for some releases. The Agency believes, therefore, that for releases that only can be estimated by calculations, operating experience, and professional judgment, it is more appropriate that persons in charge estimate the normal range of the release to include the releases previously reported or occurring under normal operating conditions, and to report, as SSIs, those releases that exceed the upper bound of the reported normal range. The normal range approach can much more readily be adapted to the many different sources of releases.

Several commenters questioned whether monitoring is required to obtain

data for reporting SSIs. One commenter stated that because no monitoring is required for purposes of reporting under section 103(a), many facility owners and operators may decide that section 103(a) reporting is less difficult and expensive than qualifying for reduced reporting under section 103(f)(2). If owners or operators opted to report continuous releases under section 103(a), the commenter believed the NRC could be overwhelmed by unnecessary reports.

As has been noted at section II.B.3 of this preamble, the Agency does not intend that monitoring systems be installed in facilities or vessels in order to collect empirical data to qualify releases for reduced reporting. The Agency believes the normal range method for identifying SSIs in releases established in today's rule is sufficiently flexible to permit persons in charge of facilities or vessels to qualify releases for reduced reporting under section 103(f)(2) without installing monitoring devices or incurring other excessive regulatory burden or expense. By using engineering estimates, knowledge of the operating history of the facility or vessel, experience with operating processes, and professional judgment, the person in charge can establish a normal range of releases on a sound technical basis. SSIs above this normal range can be estimated in the same fashion without monitoring or measuring.

C. Relationship to Reporting Under SARA Title III

SARA Title III (sections 301–329) addresses emergency planning and community right-to-know and requires, among other things, emergency and annual notification to State and local governments in addition to the notification requirements of section 103 of CERCLA.

Section 304 Reporting

To clarify the types of releases exempt from section 304 notification, the April 19, 1988 NPRM proposed revising the applicability section of the regulations implementing section 304 to add definitions of "continuous" and "statistically significant increase." Several commenters misinterpreted the proposed rule language as incorporating CERCLA section 103(f)(2) continuous release annual report requirements under section 304.

Section 304 of SARA Title III provides release reporting requirements that parallel the requirements of section 103(a) of CERCLA, but are intended to make release information available immediately to the SERC of any State likely to be affected by the release and emergency response coordinator for the LEPC for any area likely to be affected by the release. In general, a release of an EHS or a CERCLA hazardous substance must be reported immediately to a SERC and LEPC if it (1) is in an amount equal to or in excess of the RQ (or one pound if an alternative quantity has not been established by regulation), and (2) occurs from a facility at which a hazardous chemical is produced, used, or stored and in a manner that would require notice under CERCLA section 103(a).[9] The addition of the definitions in today's final rule clarify the meaning of the statutory phrase, "occurs in a manner which would require notice under CERCLA section 103(a)."

To the extent that releases are continuous and stable in quantity and rate as defined by CERCLA section 103(f)(2) and today's final rule, they do not occur in a manner that requires notification under CERCLA section 103(a). Accordingly, when persons in charge of facilities or vessels releasing EHSs or CERCLA hazardous substances submit the initial notification reports (including the initial written reports, which should be submitted with the follow-up report required by SARA Title III section 304(c)) to the appropriate SERC and LEPC, identifying releases of EHSs and CERCLA hazardous substances as continuous and stable in quantity and rate under the definitions in today's final rule, they need not report again to the SERC and LEPC, except for reports of SSIs. No CERCLA section 103(f)(2) follow-up reports are required under SARA Title III section 304.

If there is a change in the composition or source(s) of a release, however, the release is considered a new release and must be qualified for reporting as a continuous release. Accordingly, the new release must be reported to the NRC, SERC, and LEPC on a per-occurrence basis for a period sufficient to establish its continuity and stability. When the basis is established, the owner or operator must make an initial telephone report to notify the NRC, SERC, and LEPC of the intent to report the release as a continuous release and, within 30 days, submit initial written notifications to the EPA Region, SERC, and LEPC. No other changes in releases must be reported to the SERC or LEPC, unless there is an increase in the quantity of the release, and the owner or operator wants to modify the reported normal range of the release to redefine SSIs. To modify the reported normal range, the owner or operator must submit at least one SSI report to the NRC, SERC, and LEPC and, within 30 days, submit a letter to the EPA Region describing the new normal range, the reason for the change, and the basis for stating that the release in the increased amount is continuous and stable in quantity and rate under definitions in today's rule. Information on the change in the normal range should also be submitted to the SERC and LEPC, along with the SARA Title III section 304(c) follow-up report, in order to redefine SSIs under section 304.

EPA intends to maintain the information submitted on continuous releases in its computerized Emergency Response Notification System data base. The Agency will make this information available to EPA program offices, and, upon request, will share with SERCs and LEPCs information not submitted directly to them. Continuous release information, together with the information collected under other sections of SARA Title III, will provide the SERCs and LEPCs with a comprehensive picture of chemical hazards in a particular community. EPA believes this information can be used by facilities, as well as by other government authorities, to further pollution and accident prevention goals and objectives.

Initial telephone notification to the SERC and LEPC required under today's rule must include the same information as is contained in the initial telephone notification to the NRC under 40 CFR 302.8(d)(3). To satisfy the requirements under today's rule and the requirements for a follow-up notice under SARA Title III section 304(c), the initial written notification to the SERC and LEPC must identify the facility or vessel, the person in charge, the hazardous substance being released (and whether it is an extremely hazardous substance under 40 CFR part 355, appendix A), the source(s) of the release and the medium(a) it may affect, its frequency, the basis for stating that the release continuous and stable in quantity and rate, the normal range of the release, an estimate of the total annual amount released, the population density within a one-mile radius of the facility, the identity and location of sensitive populations and ecosystems within that area, if any, and any known or anticipated acute or chronic health risks associated with the release, and proper precautions, including medical attention that should be taken as a result of the release. Information from

[9] Section 304 of Title III excludes releases that result in exposure only to persons within the facility boundaries, releases that are federally permitted, releases of pesticide products exempt from CERCLA section 103(a) reporting under CERCLA section 103(e), and releases that do not come within the definition of release in CERCLA section 101(22).

initial reports will establish the release as continuous, assist State and local officials in emergency planning, and provide a basis for the SERC or LEPC to evaluate reports of SSIs.

Commenters on section 304 requirements should note that the Agency has proposed to designate 232 EHSs as CERCLA hazardous substances (54 FR 3388; January 23, 1989). When that proposed rule becomes final and effective, continuous releases of EHSs that are newly designated as CERCLA hazardous substances will be subject to all the requirements applicable to releases of CERCLA hazardous substances, including submission of follow-up reports to the appropriate EPA Regional office under CERCLA section 103(f)(2).

Section 313 Reporting

A number of commenters urged EPA to allow substitution of the Toxic Release Inventory (TRI) report required under SARA Title III section 313 for the annual reports required under the April 19, 1988 NPRM. In today's final rule the Agency is not requiring annual reports but only an initial written notification and a one-time follow-up report. Nevertheless, to provide flexibility, the Agency is allowing persons in charge to submit a copy of the TRI report in lieu of the CERCLA section 103(f)(2) initial written and follow-up reports, provided that certain supplemental continuous release information is submitted with the TRI report.

Under SARA Title III section 313, covered facilities must submit, on or before July 1 of each year, a TRI form to the EPA Administrator and to the State official or officials designated by the Governor of the State in which the facility is located. Annual notification requirements under section 313, however, are different in scope and purpose from CERCLA section 103 reporting requirements. SARA Title III section 313 requirements apply only to facilities in the Standard Industrial Classification (SIC) Major Groups 20 through 39 (unless the Administrator exercises the discretion granted in sections 313(b)(1) or 313(b)(2) to add or delete SIC groups or individual facilities) that have inventories of listed chemicals greater than specified threshold amounts. There are no such restrictions on the applicability of CERCLA notification requirements. Also, the universe of substances covered by CERCLA section 103 is not the same as the universe covered by SARA Title III section 313 requirements; some substances subject to CERCLA notification requirements are not subject to section 313, and other substances not subject to CERCLA notification requirements are subject to section 313 notification requirements.

The purpose of the reporting requirements differs as well. The purpose of the SARA Title III section 313 reporting requirements is to provide the public with information concerning the release of toxic chemicals into the environment, whereas the purpose of CERCLA notification requirements is to alert response officials to releases that may require a government response to protect public health and welfare and the environment.

In accordance with its statement in the preamble to the April 19, 1988 proposed rule to resolve, if possible, the concern about duplicate reporting, the Agency initiated discussions with EPA Regional personnel to determine whether the data submitted under section 313 would be adequate for their needs. On the basis of these discussions, EPA determined that the use of the SARA Title III section 313 report to satisfy the initial written and follow-up reporting requirements of CERCLA section 103(f)(2) is feasible so long as certain additional continuous release information is included with the section 313 report. The additions will provide EPA Regions with information that is not requested for purposes of the SARA Title III section 313 report, but is required in the continuous release initial written notification or follow-up report.

If the TRI report[10] is submitted in lieu of the initial written or follow-up report, the following continuous release information must be submitted with a copy of the TRI report:

(1) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0–50 persons, 51–100 persons, 101–500 persons, 501–1000 persons, more than 1,000 persons.

(2) The identity and location of any sensitive populations or ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands). In addition, the following information must be supplied for each hazardous substance release claimed to qualify for reporting under section 103(f)(2).

(3) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(4) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(5) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

Also, the person in charge must include in the report the case number assigned by the NRC or EPA and a signed statement that the hazardous substance release(s) described in the notification is continuous and stable in quantity and rate under the definitions in 40 CFR 302.8, and that all the reported information is accurate and current to the best of his or her knowledge.

This additional information must be submitted to the appropriate EPA Regional Office, along with a copy of the most recent SARA Title III section 313 annual report, within 30 days of the initial telephone notification to the NRC. A subsequent TRI report plus addendum must also be submitted within 30 days of the first anniversary date of the initial written submission. The additional information required for purposes of satisfying the requirements of today's rule should not, however, be submitted by an owner or operator when submitting the Form R report under SARA Title III section 313 to the Toxic Release Inventory data base. Rather, a copy of Form R should be submitted with the additional information to the EPA Region. (The addresses of appropriate EPA Regional Offices are listed in section II.B.3 of this preamble.) Owners and operators that do not choose to substitute the section 313 report must submit the CERCLA section 103(f)(2) initial written report within 30 days of the initial telephone notification and a follow-up report on or before the anniversary date of the initial written report.

RQ Adjustments

One commenter stated that although the proposed rule does not address modification of RQs, it highlights the need for EPA to modify the RQs for non-CERCLA EHSs. The commenter noted, for example, that the RQ for sulfur dioxide was set by SARA Title III section 304 at one pound, but that emission levels far above 200 pounds per day are permitted for power plants burning fossil fuels.

EPA has proposed a rule to designate 232 EHSs as CERCLA hazardous substances (54 FR 3388; January 23, 1989). On August 30, 1989, the Agency

[10] EPA acknowledges that the information required in the CERCLA section 103(f)(2) initial written report and follow-up report under today's final rule is not identical to the information required in the SARA section 313 report, plus the addendum. The Agency, however, believes that the requirements are comparable and, regardless of the reporting option exercised, it will be able to derive the information necessary to evaluate the release.

proposed adjustments to the RQs for these and other EHSs (54 FR 35988). When the Agency promulgates the final rule, it will simultaneously adjust the RQs for these substances. Also, the commenter should note that releases in compliance with permits under other Federal programs may be exempt from CERCLA notification requirements under the federally permitted release exemption. (See CERCLA section 101(10), CERCLA section 103(a), and SARA Title III section 304(a)).

D. Multiple Concurrent Releases

In § 302.8(e) of the April 19, 1988 proposed rule (53 FR 12868 at 12869), EPA stated that multiple concurrent releases of the same substance occurring at various locations from contiguous plants or installations on contiguous property that are under common ownership or control shall be added together to determine whether such releases constitute a continuous release or an SSI. Several commenters found the multiple concurrent release section of the proposed rule confusing and inconsistent with the CERCLA definition of facility. These commenters inferred that the proposed rule adopted the SARA Title III definition of "facility" for purposes of the continuous release rule. The commenters stated that the aggregation of release data from different facilities on contiguous grounds under common ownership would be inconsistent with the definition of "facility" under CERCLA, and would be difficult because there are often different persons in charge of the various facilities.

The Agency did not intend to adopt the SARA Title III definition of facility for the purposes of the continuous release rule. In today's final rule, therefore, § 302.8(l) allows the person in charge to aggregate release data from separate, contiguous, adjacent facilities or to consider each facility separately. Persons in charge, however, must aggregate multiple concurrent releases of the same substance from a particular facility, to determine if an RQ has been equaled or exceeded (See 50 FR 13456 at 13459; April 4, 1985 and CERCLA section 101(9)). For the purpose of determining whether a release is continuous and stable in quantity and rate, and for the purpose of identifying SSIs, however, the aggregation of release data from separate facilities is optional. The person in charge may either consider the releases separately or in the aggregate, provided that whichever approach is elected is used for both purposes. This option should eliminate any difficulty or confusion that persons in charge of different facilities at one plant or company might otherwise have experienced.

E. Administrative Reporting Exemptions

One commenter on the April 19, 1988 proposed rule maintained that emissions that are considered *de minimis*, or that are exempt from regulation under other Federal or State statutes or regulations because their impact is insignificant, do not warrant reporting to the NRC. The commenter cited the example of emissions from small internal combustion engines used in the field. According to the commenter, releases from these engines easily could equal or exceed the 10-pound RQ for oxides of nitrogen, yet could be significantly below the annual emission level that would trigger a permitting requirement. Other examples the commenter mentioned were emissions from flares at tank batteries and gas processing plants, venting of small amounts of sour gas (gas containing hydrogen sulfide), and fugitive emissions. The commenter stated that these emissions have been identified to other authorities and are clearly normal, routine emissions that should be exempt from CERCLA section 103(a) reporting requirements.

The EPA would consider granting an administrative reporting exemption if EPA or another appropriate Federal agency determines that certain releases pose a hazard only rarely and that the government would rarely, if ever, respond to such releases, or if the Agency concludes that it is technically or administratively infeasible or inappropriate to respond to such releases. The commenter has not provided sufficient data or analysis for the Agency to determine whether the releases mentioned are actually *de minimis* and thus would rarely pose a hazard or that government authorities would rarely, if ever, want to respond to reports of such releases. The Agency, therefore, is not granting any administrative exemptions from section 103(a) or section 103(f)(2) notification requirements in today's final rule. Under the definitions of continuous and stable in quantity and rate promulgated in today's rule, however, releases such as the ones cited by the commenter may qualify for reporting under section 103(f)(2).

Another commenter proposed that EPA exempt from all continuous release notification requirements, air releases from electric utility fossil fuel-fired steam/electric generating units because some emissions from such facilities cannot be measured to any reasonable degree of accuracy, and because reporting the facility emissions that are measurable or monitorable would duplicate reporting associated with other Federal and State regulatory and permit requirements.

The Agency is aware that some releases are not measured or monitored and that persons in charge of facilities or vessels emitting such releases will not be able to provide empirical data about such releases. Consequently, for this type of release, the Agency is allowing persons in charge to make reasonable estimates or calculations of the information necessary to comply with section 103(f)(2) requirements on the basis of experience with operating processes and equipment, professional judgment, and any available data.

Also, certain releases are considered federally permitted releases under CERCLA section 101(10) and are exempt from CERCLA and SARA Title III notification and liability provisions. Congress was explicit in listing the types of releases that are exempt from notification and liability provisions. Releases that do not come within the provisions of section 101(10), however, are subject to CERCLA notification and liability provisions, regardless of any permits or licenses that may control these releases. (For further clarification, see the proposed rule on federally permitted releases (53 FR 27268; July 19, 1988)).

III. Comments on the Federally Permitted Release Rule

A number of commenters stated that it would not be possible to assess the full impact of the continuous release rule until the federally permitted release rule was proposed. One commenter suggested that the two rules be combined for final promulgation.

The Agency understands that the provisions of today's rule and the federally permitted release rule have a related effect on CERCLA notification requirements for many facilities and vessels. Some releases that do not qualify as federally permitted releases under one of the Federal acts enumerated in CERCLA section 101(10) may nevertheless qualify for reduced reporting as continuous releases under CERCLA section 103(f)(2). Accordingly, the Agency has examined all comments received on the federally permitted release proposal that address reporting requirements for continuous releases. Those comments raised no significant issues regarding continuous releases that had not already been raised in the comments on the continuous release proposal.

Moreover, the Agency believes that persons in charge of facilities and vessels have had ample opportunity to

assess the impact of the rules on the basis of the proposals published in the Federal Register. The federally permitted release rule was proposed on July 19, 1988 (53 FR 27268) and the comment period was extended to October 19, 1988 to accommodate comments. The federally permitted release rule is a complex rulemaking involving the provisions of a number of statutes in addition to CERCLA section 101(10). The Agency believes it would be inappropriate to delay promulgation of today's final rule until the promulgation of the federally permitted release rule, which is not expected until the Spring of 1991. By promulgating the continuous release rule today, the Agency will enable industry to begin reporting immediately under its provisions.

IV. Regulatory Costs

In the economic analysis supporting the April 19, 1988 NPRM, EPA assumed as a baseline the costs that the regulated community incurs when fully complying with section 103(a) reporting requirements. One commenter suggested that in so doing EPA assumed an extremely costly base situation that did not reflect reality, resulting in very large and unrealistic cost savings attributable to the continuous release reporting rule. The commenter also stated that continuous releases are not currently being reported because the Agency had stated, in a 1981 draft document, entitled "Interim Implementation Policy" that it did not wish to receive notification of routine, continuous, or anticipated intermittent releases.

The draft Interim Implementation Policy document did not suggest that facilities or vessels were permanently exempt from reporting continuous releases, but rather that, at that time, EPA did not intend to enforce strictly the notification requirements for continuous releases. In its first final rule on notification requirements and reportable quantity adjustments for hazardous substances, the Agency made it quite clear that, although it was not promulgating a continuous release rule at that time, "[n]otification of releases must be given 'annually, or at such time as there is any statistically significant increase' in the quantity of the hazardous substance being released" (50 FR 13458; April 4, 1985).

EPA does not agree with the comment that the baseline used in the economic analysis supporting the proposed rule was inappropriate. The purpose of an economic baseline is to provide a measure of the estimated costs that the affected community, government agencies, and other parties, such as the general public, would incur if a regulation were not promulgated. Estimates of the post-regulation costs can be determined once the baseline is established. The difference between the post-regulation costs and the baseline costs is the incremental cost (or cost savings) attributable to the final regulation.

Today's continuous release reporting regulation clarifies the reduced reporting requirements for facilities that release CERCLA hazardous substances at levels that equal or exceed an RQ on a continuous basis. As such, it is deregulatory in nature and results in cost savings to affected facilities and vessels relative to the costs that would be incurred were they to report on a per-occurrence basis under CERCLA section 103(a). The economic analysis supporting the NPRM used as its baseline the reporting requirements that would prevail without section 103(f)(2). That is, the economic baseline assumed that all facilities and vessels would report releases under CERCLA section 103(a). EPA believes that this is an appropriate approach, but acknowledges that many facilities and vessels with continuous releases of hazardous substances are not reporting under section 103(a) and have interpreted the statutory provisions of section 103(f)(2) as not requiring any reports of releases that are continuous and stable in quantity and rate.

Under the final rule, the person in charge of any facility or vessel that releases a CERCLA hazardous substance in a quantity equal to or exceeding the RQ in a manner that is continuous and stable in quantity and rate may submit initial and follow-up notifications, reports of SSIs in the release, and reports of changes in previously submitted information, instead of reporting such releases on a per-occurrence basis. Because of the numerous facilities that have interpreted the provisions of section 103(f)(2) not to require any reports, and have, to date, submitted no reports to the Agency, in the economic analysis supporting today's final rule, the baseline assumptions have been modified to represent the situation in which no reporting has occurred. As a result, the $5.9 million cost estimate for the final rule represents annual costs assuming that the facilities and vessels that release hazardous substances in a continuous manner are not currently complying with section 103(a) or section 103(f)(2) notification requirements. That is, it represents costs incurred to submit initial and follow-up notifications. SSI reports, and reports of changes in previously submitted information, as required by the continuous release reduced reporting regulation, without taking credit for the cost savings associated with daily notifications that are no longer required. The burden is expressed as a cost rather than a cost savings in order to reflect more accurately the reality of the reporting situation for these facilities. Therefore, the Agency believes it has responded fully to the commenter's concerns by estimating the potential costs of the final regulation assuming no prior compliance with CERCLA reporting requirements. The economic impact analysis (EIA) clearly shows that today's final rule is nonmajor, generating costs well below $100 million.

The same commenter stated that EPA failed to comply with the Paperwork Reduction Act requirement to ensure that it has taken every reasonable step to ensure that the collection of information is the least burdensome alternative necessary for the proper performance of the Agency's functions and to comply with legal and program objectives. The Agency does not agree that it failed to comply with requirements of the Paperwork Reduction Act in the publication of the proposed rule.

The Agency considered several alternative definitions of "continuous," "stable in quantity and rate," and "statistically significant increase." In the NPRM, as well as in today's final rule, EPA selected definitions that provide the person in charge of a facility or vessel the greatest flexibility in evaluating individual release situations. In particular, "continuous" was defined in the NPRM as "continuous without interruption or abatement, or continuous during operating hours, or continuous during regularly-occurring batch processes." The Agency stated, however, that it acknowledged that certain routine, anticipated, intermittent releases should also be reportable under section 103(f)(2). The Agency also proposed to allow persons in charge to determine whether a release is stable in quantity and rate. Similarly, the NPRM provided that the person in charge could use any appropriate statistical test to identify SSIs. Today's final rule provides even greater flexibility. By allowing the person in charge to determine the normal range of the release and to thereby identify SSIs, the Agency has selected the least burdensome and least expensive option that conforms with legal and program objectives.

The economic analysis supporting today's final rule considers three options: (1) Use of a broad definition of continuous to include routine,

anticipated, and intermittent releases, a definition of SSIs as releases above the normal range, and a definition of the normal range to include all releases under normal operating conditions reported or occurring during the preceding year; (2) use of the more restrictive NPRM definition of "continuous" as without interruption or abatement, and a definition of SSI as any release in the top 5 percent of all releases occurring under normal operating conditions; and (3) per-occurrence reporting. Annualized total costs to industry and government of these three options are: $5.9 million under Option 1; $48.7 million under Option 2; and $873.9 million under Option 3, per-occurrence reporting under section 103(a).

The following table summarizes the estimated costs of the analyzed options:

ESTIMATED COSTS OF CONTINUOUS RELEASE REPORTING OPTIONS

	Estimated number of facilities	Estimated number of SSIs annually	First year total costs (88 dollars) (million)	Annualized total costs (88 dollars) (million)	Annualized cost per facility
Option 1	10,200	1,510	$11.0	$5.9	$510
Option 2	10,200	143,200	53.9	48.7	3,490
Option 3	10,200	2,864,200	874.1	873.9	62,190

Costs to industry and government are incurred in preparing and processing notifications of hazardous substance releases, recordkeeping, and responding to releases. The substantial difference in estimated total annualized costs among the three options results largely from differences in the number of releases that must be reported as SSIs. Under Option 1, about 1,500 SSIs are expected to be reported, whereas the estimated number of SSIs, under Option 2, is about 143,200. Under Option 3, all 2,864,000 releases of hazardous substances estimated to occur each year in a continuous and stable manner must be reported to government authorities. The estimated cost to industry of reporting SSIs is approximately $215 per release for releases of CERCLA hazardous substances, and $205 per release for releases of non-CERCLA EHSs.[11] The corresponding government costs for processing and evaluating an SSI report is estimated at about $85 per report for CERCLA hazardous substances and $55 per report for non-CERCLA EHSs.

The average cost per facility to comply with the reporting requirements under each option, based on an estimated universe of 10,200 affected facilities, is approximately $510 annually under Option 1, $3,490 annually under Option 2, and $62,190 annually for per-occurrence reporting under section 103(a). The cost savings of reporting under the final rule are considerable, therefore, as compared with costs that persons in charge of facilities or vessels would incur if they reported on a per-occurrence basis. In selecting the first option in the final rule, EPA believes it has provided persons in charge of facilities and vessels with the least burdensome, most flexible approach to reporting under section 103(f)(2) and has fully complied with the requirements of the Paperwork Reduction Act.

One commenter suggested that EPA should use the actual number of emergency release reports to the NRC as the basis for estimating the number of facilities that will report under section 103(f)(2) and actual estimates for time spent by industry in the past to prepare annual reports. The Agency does not agree. The number of episodic releases reported annually to the NRC is not representative of the number of facilities or vessels that are likely to report under CERCLA section 103(f)(2). Based on information in the Toxic Release Inventory data base, the New Jersey Community Right-to-Know data base, and the Philadelphia Air Management Services data base, the Agency estimates that approximately 10,200 facilities are likely to release hazardous substances in a continuous and stable manner at reportable levels. This estimate exceeds the 4,900 reports of hazardous substance releases reported to the NRC in 1988.

The Agency believes that persons in charge of many facilities and vessels have interpreted the provisions of section 103(f)(2) not to require any reports, and currently are not reporting continuous releases to the NRC. The Agency believes, therefore, that the number of episodic release reports to the NRC cannot be used as a basis for estimating the number of facilities and vessels potentially affected by today's final rule.

Similarly, the Agency does not believe that annual reports submitted by industry to date can be used to estimate costs of compliance with today's rule. Annual reports submitted to date do not include the information required in the initial written notification or the follow-up report promulgated in today's rule. In fact, many of the annual reports submitted to date tend simply to identify the facility and the release, and to provide little additional information. Cost estimates based on such reports could underestimate reporting costs.

Several commenters stated that EPA substantially understated the cost of implementing the proposed rule by not including the costs of installing and operating special systems to monitor releases of hazardous substances. EPA does not agree that monitoring costs should be included in the cost estimates attributable to the continuous release reporting rule. Neither the identification of SSIs nor compliance with the reporting requirements in today's final rule requires monitoring or measuring of releases to acquire empirical data. Use of the normal range to identify SSIs, rather than the use of statistical tests, has eliminated any need for monitoring equipment. The normal range approach requires only that estimates be made of the quantity of each release relative to the reported normal range. This estimation can be based on professional judgment; a precise determination of the quantity of the release is not necessary. Also, EPA has limited the information required in the initial and follow-up reports to data that do not require monitoring. Therefore, because the provisions of today's final rule do not require or necessitate additional monitoring, EPA does not believe it is appropriate to include monitoring costs in the calculations of the estimated total costs of today's regulation.

One commenter stated that the Agency had underestimated costs by inappropriately assuming that a facility or vessel would release only one hazardous substance subject to the

[11] The cost difference between reporting a release of a CERCLA hazardous substance and reporting a release of a non-CERCLA EHS reflects the fact that releases of non-CERCLA EHSs need not be reported to the NRC.

continuous release reporting requirements and, consequently, underestimated the costs to facilities or vessels reporting more than one hazardous substance release. The commenter suggested use of the Philadelphia Air Management Services data to derive an estimate of the number of facilities or vessels releasing multiple hazardous substances at levels that equal or exceed the RQ. The Agency performed the analysis suggested by the commenter, as well as analyzing data submitted under SARA Title III section 313. On the basis of these analyses, the Agency determined that, on average during a given year, facilities tend to manufacture, use, or store approximately five CERCLA hazardous substances and EHSs, and release approximately four substances. This estimate, of course, varies considerably by industry category.

Not all of the hazardous substance releases equal or exceed the RQ. Based on the Philadelphia data, less than 6 percent (approximately one in 18 releases) of releases equaled or exceeded the RQ and would be reportable under CERCLA. Thus, on average, across all facilities, it is assumed that approximately one of 18 releases will occur at a reportable level. If releases are not independent, then it may be more likely that a facility will have multiple releases at reportable levels. It is not clear, however, whether these multiple releases would occur simultaneously from the same source (i.e., in a mixture) or whether they would occur as independent releases from different sources. Mixtures are reportable as one release and thus costs would not increase proportionately with the number of multiple, simultaneous releases. Releases of different hazardous substances from different sources, in contrast, must be reported separately.

The economic analysis supporting today's final rule, therefore, assumes that affected facilities releasing CERCLA hazardous substances release at most two hazardous substances in a continuous and stable manner at levels that equal or exceed an RQ, and that facilities that release non-CERCLA EHSs release one EHS at a reportable level. The analysis, however, also includes a sensitivity analysis showing that, if a facility or vessel has multiple continuous releases of hazardous substances occurring in an unrelated manner at levels that equal or exceed the RQ, regulatory costs for that particular facility or vessel could increase roughly in proportion to the number of hazardous substances released at or above the RQ.

One commenter stated that EPA should revise its estimates of the number of facilities affected by the regulations to account for the possibility that some facilities that release federally permitted air emissions also may be releasing hazardous substances that are not federally permitted as defined in CERCLA section 101(10) and the proposed regulation clarifying the federally permitted release exemption. EPA agrees that some of these facilities that have Federal permits also may be releasing substances that are not considered federally permitted under CERCLA section 101(10). The Agency, therefore, has modified its estimates of the universe of facilities potentially affected by today's final rule to include some facilities that have Federal permits but may not be entirely exempted under section 101(10) from CERCLA reporting. The Agency estimates that approximately 10,200 facilities release CERCLA hazardous substances and non-CERCLA EHSs in a manner that is continuous and stable in quantity and rate, and at levels that equal or exceed the RQ. This estimate includes facilities that have Federal permits, but also release other hazardous substances not covered by permit limitations.

The information used for the cost estimates supporting the April 19, 1988 NPRM was based upon the data available at that time. In support of the final rule, however, the Agency used more recent and accurate data on facilities that release hazardous substances. The Agency used two new data bases generated as a result of SARA Title III requirements to estimate the number of facilities potentially affected by the reporting requirements under CERCLA section 103(f)(2). The New Jersey Right-to-Know data base is used to estimate the total number of facilities that manufacture, process, or use CERCLA hazardous substances and non-CERCLA EHSs in the State of New Jersey and the nation as a whole; the SARA Title III section 313 Toxic Release Inventory data base is used to estimate the relationship between the number of facilities that release CERCLA hazardous substances and non-CERCLA EHSs and the number of facilities that manufacture, process, or use the substances. The Agency believes that these data bases provide the best currently available data for estimating the number of facilities that will be affected by the CERCLA section 103(f)(2) requirements. (See Economic Impact Analysis Supporting the Final Continuous Release Reporting Regulation under section 103(f)(2) of CERCLA, available in the Superfund Docket, for details on these data bases and the methodology used to estimate the costs attributable to today's final rule.)

The 10,200 facilities estimated to be eligible to report releases under section 103(f)(2) are estimated to release approximately 13,660 CERCLA hazardous substances and 1,475 non-CERCLA EHSs in a continuous and stable manner. Under Options 1 and 2, facilities are assumed to provide initial notification for these hazardous substance releases in the first year of implementation at a unit cost of $360 for CERCLA hazardous substances and $350 for non-CERCLA EHSs. In addition to the costs of providing initial notification, persons in charge will incur costs for providing information or clarification at the request of government authorities, for providing notification of changes in submitted information, for recordkeeping, and for reporting SSIs. Option 3, reporting under section 103(a), does not have any initial or annual reporting requirements; rather, facilities must report releases immediately as they occur.

One commenter stated that EPA should include, in the estimate of the overall cost of the regulation, the cost of reporting to State and local authorities under SARA Title III section 304. EPA agrees with the commenter and has provided an estimate of these costs in the economic analysis supporting the final rule. Of the total annual cost estimate of $5.9 million for reporting and processing reports under the continuous release reporting regulation, the annualized cost of all reporting under SARA Title III 304, including SSI reports, is estimated at $0.8 million.

One commenter argued that the continuous release reporting rule is a major rule because it will impose costs on society of over $100 million annually, and that even if it is not, it is likely to cause a major increase in costs or prices. The Agency does not agree that the continuous release rule is a major rule. Even assuming a baseline of no reporting under section 103(a), the annual cost to facilities and vessels of complying with CERCLA section 103(f)(2) requirements is estimated to be $5.18 million; the cost to the government of processing reports is estimated to be $0.76 million. This is well below the $100 million cost of a major rule and the rule does not meet the other criteria for a major rule. (Criteria for a major rule are listed in the summary of supporting analyses in section V, below.)

V. Summary of Supporting Analyses

A. Executive Order No. 12291

Executive Order (E.O.) No. 12291 requires that regulations be classified as major or nonmajor for purposes of review by the Office of Management and Budget (OMB). Under E.O. No. 12291, major rules are regulations that are likely to result in:

(1) An annual effect on the economy of $100 million or more; or

(2) A major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or

(3) Significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

As demonstrated by an economic analysis (Economic Impact Analysis Supporting the Final Rule on Continuous Release Reporting under Section 103(f)(2) of CERCLA) performed by the Agency, available for inspection in the Superfund Docket Room 2427, U.S. EPA, 401 M Street SW., Washington, DC 20460, this final rule is nonmajor, because the rule will result in estimated annualized costs of $5.9 million, with $5.18 million incurred by facilities and vessels, and an estimated annualized cost of $0.76 million incurred by the government. Moreover, the rule will not cause a major increase in costs or prices mentioned in (2) above or cause any of the significant adverse effects mentioned in (3) above.

OMB completed its review, as required by E.O. No. 12291, on March 9, 1990 without comment.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 requires that a Regulatory Flexibility Analysis be performed for all rules that are likely to have a "significant impact on a substantial number of small entities." EPA certifies that this final regulation will not have a significant impact on a substantial number of small entities and that a Regulatory Flexibility Analysis is not required. See Chapter Five of the Economic Analysis supporting today's final rule, available in the Superfund Docket

C. Paperwork Reduction Act

The information collection requirements contained in this rule have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control numbers 2050-0086 and 2050-0092.

Public reporting burden for this collection of information is estimated at 9 hours per response for the initial written report, at 5 hours per response for the follow-up report, and at 2.2 hours per change notification letter, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for EPA."

List of Subjects

40 CFR Part 302

Air pollution control, Chemicals, Hazardous materials transportation, Hazardous substances, Hazardous wastes, Intergovernmental relations, Natural resources, Nuclear materials, Pesticides and pests, Radioactive materials, Reporting and recordkeeping requirements, Superfund, Waste treatment and disposal, Water pollution control.

40 CFR Part 355

Chemical accident prevention, Chemical emergency preparedness, Chemicals, Community emergency response plan, Community right-to-know, Contingency planning, Extremely hazardous substances, Hazardous substances, Reportable quantity, Reporting and recordkeeping requirements, Threshold planning quantity.

Dated: June 21, 1990.

William K. Reilly,

Administrator.

For the reasons set out in the preamble, title 40 of the Code of Federal Regulations is amended as follows:

PART 302—DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

1. The authority citation for part 302 is revised to read as follows:

Authority: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

2. Part 302 is amended by adding § 302.8 to read as follows:

§ 302.8 Continuous releases.

(a) Except as provided in paragraph (c) of this section, no notification is required for any release of a hazardous substance that is, pursuant to the definitions in paragraph (b) of this section, continuous and stable in quantity and rate.

(b) *Definitions.* The following definitions apply to notification of continuous releases:

Continuous. A continuous release is a release that occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes.

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

Routine. A routine release is a release that occurs during normal operating procedures or processes.

Stable in quantity and rate. A release that is stable in quantity and rate is a release that is predictable and regular in amount and rate of emission.

Statistically significant increase. A statistically significant increase in a release is an increase in the quantity of the hazardous substance released above the upper bound of the reported normal range of the release.

(c) *Notification.* The following notifications shall be given for any release qualifying for reduced reporting under this section:

(1) Initial telephone notification;

(2) Initial written notification within 30 days of the initial telephone notification;

(3) Follow-up notification within 30 days of the first anniversary date of the initial written notification;

(4) Notification of a change in the composition or source(s) of the release or in the other information submitted in the initial written notification of the release under paragraph (c)(2) of this section or the follow-up notification under paragraph (c)(3) of this section; and

(5) Notification at such times as an increase in the quantity of the hazardous substance being released during any 24-hour period represents a statistically significant increase as defined in paragraph (b) of this section.

(d) *Initial telephone notification.* Prior to making an initial telephone notification of a continuous release, the person in charge of a facility or vessel

must establish a sound basis for qualifying the release for reporting under CERCLA section 103(f)(2) by:

(1) Using release data, engineering estimates, knowledge of operating procedures, or best professional judgment to establish the continuity and stability of the release; or

(2) Reporting the release to the National Response Center for a period sufficient to establish the continuity and stability of the release.

(3) When a person in charge of the facility or vessel believes that a basis has been established to qualify the release for reduced reporting under this section, initial notification to the National Response Center shall be made by telephone. The person in charge must identify the notification as an initial continuous release notification report and provide the following information:

(i) The name and location of the facility or vessel; and

(ii) The name(s) and identity(ies) of the hazardous substance(s) being released.

(e) *Initial written notification.* Initial written notification of a continuous release shall be made to the appropriate EPA Regional Office for the geographical area where the releasing facility or vessel is located. (Note: In addition to the requirements of this part, releases of CERCLA hazardous substances are also subject to the provisions of SARA Title III section 304, and EPA's implementing regulations codified at 40 CFR part 355, which require initial telephone and written notifications of continuous releases to be submitted to the appropriate State emergency response commission and local emergency planning committee.)

(1) Initial written notification to the appropriate EPA Regional Office shall occur within 30 days of the initial telephone notification to the National Response Center, and shall include, for each release for which reduced reporting as a continuous release is claimed, the following information:

(i) The name of the facility or vessel; the location, including the latitude and longitude; the case number assigned by the National Response Center or the Environmental Protection Agency; the Dun and Bradstreet number of the facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.

(ii) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0–50 persons, 51–100 persons, 101–500 persons, 501–1,000 persons, more than 1,000 persons.

(iii) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(iv) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information must be supplied:

(A) The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available); and if the substance being released is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.

(B) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(C) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the release is from a stack, the stack height (in feet or meters).

(D) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(E) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(F) An estimate of the total annual amount that was released in the previous year (in pounds or kilograms).

(G) The environmental medium(a) affected by the release:

(*1*) If surface water, the name of the surface water body;

(*2*) If a stream, the stream order or average flowrate (in cubic feet/second) and designated use;

(*3*) If a lake, the surface area (in acres) and average depth (in feet or meters);

(*4*) If on or under ground, the location of public water supply wells within two miles.

(H) A signed statement that the hazardous substance release(s) described is(are) continuous and stable in quantity and rate under the definitions in paragraph (a) of this section and that all reported information is accurate and current to the best knowledge of the person in charge.

(f) *Follow-up notification.* Within 30 days of the first anniversary date of the initial written notification, the person in charge of the facility or vessel shall evaluate each hazardous substance release reported to verify and update the information submitted in the initial written notification. The follow-up notification shall include the following information:

(1) The name of the facility or vessel; the location, including the latitude and longitude; the case number assigned by the National Response Center or the Environmental Protection Agency; the Dun and Bradstreet number of the facility, if available; the port of registration of the vessel; the name and telephone number of the person in charge of the facility or vessel.

(2) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0–50 persons, 51–100 persons, 101–500 persons, 501–1,000 persons, more than 1,000 persons.

(3) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(4) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information shall be supplied:

(i) The name/identity of the hazardous substance; the Chemical Abstracts Service Registry Number for the substance (if available); and if the substance being released is a mixture, the components of the mixture and their approximate concentrations and quantities, by weight.

(ii) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(iii) The source(s) of the release (e.g., valves, pump seals, storage tank vents, stacks). If the release is from a stack, the stack height (in feet or meters).

(iv) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(v) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(vi) An estimate of the total annual amount that was released in the previous year (in pounds or kilograms).

(vii) The environmental medium(a) affected by the release:

(A) If surface water, the name of the surface water body;

(B) If a stream, the stream order or average flowrate (in cubic feet/second) and designated use;

(C) If a lake, the surface area (in acres) and average depth (in feet or meters);

(D) If on or under ground, the location of public water supply wells within two miles.

(viii) A signed statement that the hazardous substance release(s) is(are) continuous and stable in quantity and rate under the definitions in paragraph (a) of this section and that all reported information is accurate and current to

the best knowledge of the person in charge.

(g) *Notification of changes in the release.* If there is a change in the release, notification of the change, not otherwise reported, shall be provided in the following manner:

(1) *Change in source or composition.* If there is any change in the composition or source(s) of the release, the release is a new release and must be qualified for reporting under this section by the submission of initial telephone notification and initial written notification in accordance with paragraphs (c)(1) and (2) of this section as soon as there is a sufficient basis for asserting that the release is continuous and stable in quantity and rate;

(2) *Change in the normal range.* 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 statistically significant increase in the release. If a change will result in a number of releases that exceed the upper bound of the normal range, the person in charge of a facility or vessel may modify the normal range by:

(i) Reporting at least one statistically significant increase report as required under paragraph (c)(7) of this section and, at the same time, informing the National Response Center of the change in the normal range; and

(ii) Submitting, within 30 days of the telephone notification, written notification to the appropriate EPA Regional Office describing the new normal range, the reason for the change, and the basis for stating that the release in the increased amount is continuous and stable in quantity and rate under the definitions in paragraph (b) of this section.

(3) *Changes in other reported information.* If there is a change in any information submitted in the initial written notification or the follow-up notification other than a change in the source, composition, or quantity of the release, the person in charge of the facility or vessel shall provide written notification of the change to the EPA Region for the geographical area where the facility or vessel is located, within 30 days of determining that the information submitted previously is no longer valid. Notification shall include the reason for the change, and the basis for stating that the release is continuous and stable under the changed conditions.

(4) Notification of changes shall include the case number assigned by the National Response Center or the Environmental Protection Agency and also the signed certification statement required at (c)(2)(xi) of this section.

(h) *Notification of a statistically significant increase in a release.* Notification of a statistically significant increase in a release shall be made to the National Response Center as soon as the person in charge of the facility or vessel has knowledge of the increase. The release must be identified as a statistically significant increase in a continuous release. A determination of whether an increase is a "statistically significant increase" shall be made based upon calculations or estimation procedures that will identify releases that exceed the upper bound of the reported normal range.

(i) *Annual evaluation of releases.* Each hazardous substance release shall be evaluated annually to determine if changes have occurred in the information submitted in the initial written notification, the follow-up notification, and/or in a previous change notification.

(j) *Use of the SARA Title III section 313 form.* In lieu of an initial written report or a follow-up report, owners or operators of facilities subject to the requirements of SARA Title III section 313 may submit to the appropriate EPA Regional Office for the geographical area where the facility is located, a copy of the Toxic Release Inventory form submitted under SARA Title III section 313 the previous July 1, provided that the following information is added:

(1) The population density within a one-mile radius of the facility or vessel, described in terms of the following ranges: 0–50 persons, 51–100 persons, 101–500 persons, 501–1,000 persons, more than 1,000 persons.

(2) The identity and location of sensitive populations and ecosystems within a one-mile radius of the facility or vessel (e.g., elementary schools, hospitals, retirement communities, or wetlands).

(3) For each hazardous substance release claimed to qualify for reporting under CERCLA section 103(f)(2), the following information must be supplied:

(i) The upper and lower bounds of the normal range of the release (in pounds or kilograms) over the previous year.

(ii) The frequency of the release and the fraction of the release from each release source and the specific period over which it occurs.

(iii) A brief statement describing the basis for stating that the release is continuous and stable in quantity and rate.

(iv) A signed statement that the hazardous substance release(s) is(are) continuous and stable in quantity and rate under the definitions in paragraph (b) of this section and that all reported information is accurate and current to the best knowledge of the person in charge.

(k) *Documentation supporting notification.* Where necessary to satisfy the requirements of this section, the person in charge may rely on recent release data, engineering estimates, the operating history of the facility or vessel, or other relevant information to support notification. All supporting documents, materials, and other information shall be kept on file at the facility, or in the case of a vessel, at an office within the United States in either a port of call, a place of regular berthing, or the headquarters of the business operating the vessel. Supporting materials shall be kept on file for a period of one year and shall substantiate the reported normal range of releases, the basis for stating that the release is continuous and stable in quantity and rate, and the other information in the initial written report, the follow-up report, and the annual evaluations required under paragraphs (e), (f), and (i), respectively. Such information shall be made available to EPA upon request as necessary to enforce the requirements of this section.

(l) *Multiple concurrent releases.* Multiple concurrent releases of the same substance occurring at various locations with respect to contiguous plants or installations upon contiguous grounds that are under common ownership or control may be considsred separately or added together in determining whether such releases constitute a continuous release or a statistically significant increase under the definitions in paragraph (b) of this section; whichever approach is elected for purposes of determining whether a release is continuous also must be used to determine a statistically significant increase in the release.

(m) *Penalties for failure to comply.* The reduced reporting requirements provided for under this section shall apply only so long as the person in charge complies fully with all requirements of paragraph (c) of this section. Failure to comply with respect to any release from the facility or vessel shall subject the person in charge to all of the reporting requirements of § 302.6 for each such release, to the penalties under § 302.7, and to any other applicable penalties provided for by law.

(Approved by the Office of Management and Budget under the control number 2050–0086).