



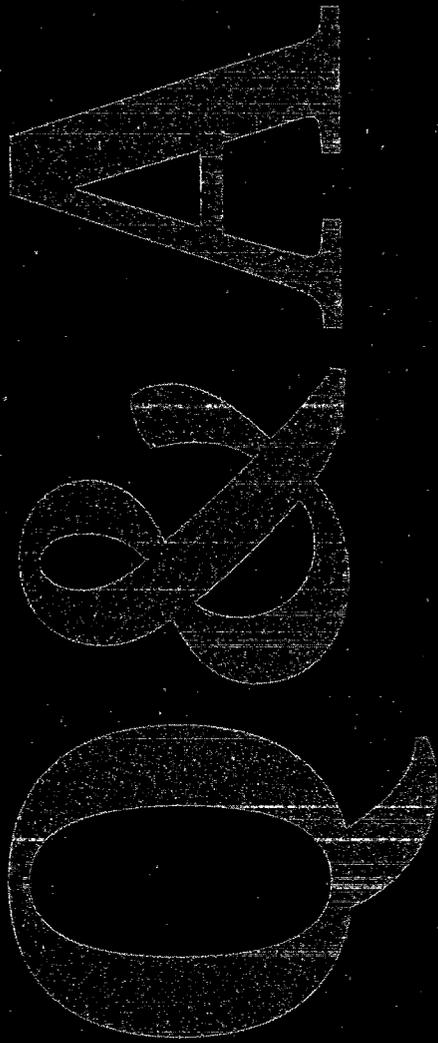
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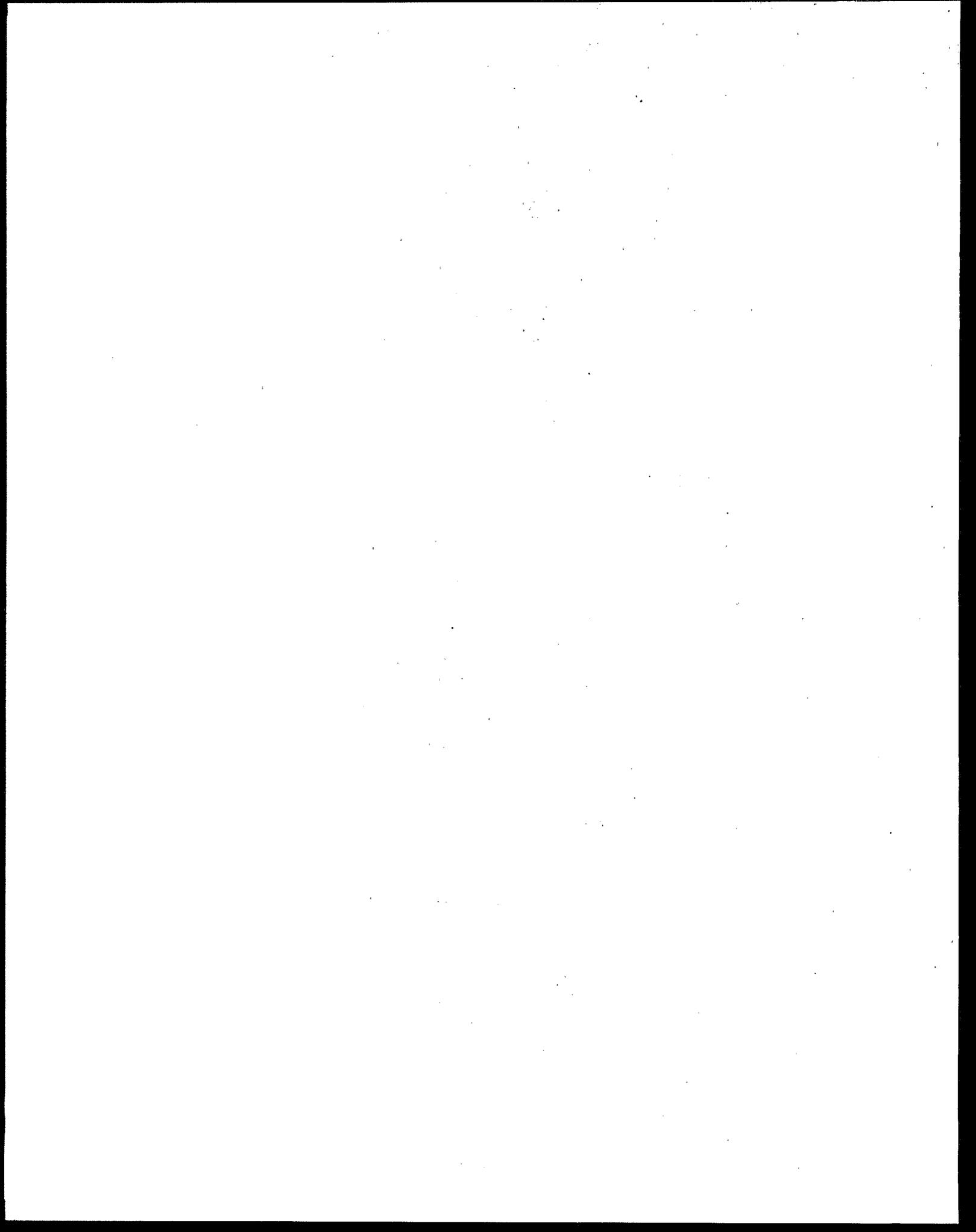
EPCRA Section 313 Questions and Answers

Revised 1997 Version



Section 313 of the Emergency Planning and Community Right-to-Know Act

Toxic Chemical Release Inventory



INTRODUCTION

The Environmental Protection Agency (EPA) has prepared this "1997 EPCRA Section 313 Questions and Answers Document" to help clarify reporting requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA, or Title III of the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499). The EPCRA Section 313 program is also referred to as the Toxic Release Inventory or TRI. This document supersedes all previous versions of the "EPCRA Section 313 Question and Answer Document." Use this document as guidance beginning with the 1998 reporting year for reports due July 1, 1999.

Under Section 313, *facilities* are required to report *releases* and other *waste management* of specifically listed chemicals. They also are required to report transfers of *toxic chemicals* for *waste management* to off-site locations. *Facilities* that meet all three of the following criteria are subject to EPCRA Section 313 release and other *waste management* reporting:

- the *facility* has 10 or more *full-time employees*;
- the *facility* is included in Standard Industrial Classification (SIC) codes 20 through 39;¹ and
- the *facility* "*manufactured*" (defined to include *imported*), "*processed*," or "*otherwise used*," in the course of a calendar year, any specified chemical in quantities greater than a set threshold.

Reports under Section 313 (EPA Form R or Form A) must be submitted annually to EPA and designated *State* (or Tribal) agencies. Reports are due by July 1 of each year and cover activities at the *facility* during the previous calendar year.

The Agency developed this document to facilitate *facility* reporting and to provide additional explanation of the reporting requirements. It supplements the instructions for completing Form R. Terms printed in italics in the text of the questions and answers are defined in the glossary in Appendix B to this document. Also, questions and answers that address the revised interpretation of the term "*otherwise use*" (62 FR 23834; May 1, 1997) are noted by asterisks.

Copies of EPA Form R, instructions for completing the Form, and related guidance documents are available from the National Center for Environmental Publications and Information (NCEPI), P.O. Box 42419, Cincinnati, Ohio

¹Beginning January 1, 1998, an additional seven new industries in SIC codes outside of 20-39 will be covered by the EPCRA section 313 requirements. For more information about which industries have been added, refer to the definition of *covered SIC code* in the glossary of this document.

45242-2419. Additional information may be obtained by calling the EPCRA Hotline at 1(800)535-0202 or by accessing EPA's TRI Homepage on the Internet at <http://www.epa.gov/opptintr/tri>.

The questions and answers in this document are organized in sections as listed in the table of contents on the following page. There is also an expanded keyword index at the end of this document. The terms in the index are also found in the sidebar of the document near relevant questions.

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Section 1. DETERMINING WHETHER OR NOT TO REPORT: FACILITY**A. Types of Facilities That Must Report****Reporting
Criteria****1. What facilities are subject to EPCRA Section 313 reporting?**

Facilities must report release, transfer, and other waste management information pursuant to EPCRA Section 313 if they: (1) have 10 or more full-time employees or the equivalent; (2) are in a *covered SIC code*; and (3) exceed any one threshold for “*manufacturing*” (including *importing*), “*processing*,” or “*otherwise using*” a toxic chemical listed in 40 CFR Section 372.65.

**Reporting
Criteria, Form
R, Form A,
Alternate
Threshold****2. Is a facility which meets the employee and toxic chemical activity thresholds, and is in a covered SIC code described in question one, required to report if it had no releases of the toxic chemical during the reporting year?**

Yes, even if it releases no toxic chemicals into the environment, the facility must submit either the Form R or Form A (Alternate Threshold Certification Statement). If the facility meets the employee and chemical activity thresholds and is in a covered SIC code, but its annual reportable amount of the toxic chemical does not exceed 500 pounds and the facility has not “*manufactured*,” “*processed*,” or “*otherwise used*” more than one million pounds of the toxic chemical, the facility may submit Form A (the two page certification statement) instead of the Form R. However, if the facility exceeds either the 500 or one million pound limits, it must report on the Form R. (See Section 5A of this document on Alternate Threshold Reporting.)

**Reporting
Criteria,
Facility
Closure****3. Must the Form R report be submitted by July 1 for facilities that were in operation during part of the reporting year, but which were closed by December 31?**

Yes. A facility that operated during any part of a reporting year must report if it meets the reporting criteria for that reporting year.

**SIC Code,
Definition of
Facility, Vessels****4. In Alaska several fish processors have factories on ships. They use ammonia and chlorine in their fish processing operations. Is each ship a covered facility under Section 313 or is the whole group of ships (assume one company) a covered facility?**

A facility is defined as all buildings, equipment, structures, and other stationary items which are located on a single site or adjacent or contiguous sites owned or operated by the same person (40 CFR Section 372.3). A ship is not a facility as defined under Section 313. It is not stationary and it is not located on a

- single site (if it moves to other locations). Therefore, the ships should not report even if they are in a *covered SIC code*.
- Definition of Facility, Facility Construction**
- 5. A recently constructed *facility* which has not begun production but is in a *covered SIC code* has used several listed *toxic chemicals* in preparing a reactor bed and distillation columns for manufacturing. Is the *facility* required to report these chemicals if they exceed the threshold levels?**
- Yes. Once a *covered facility* has been constructed, any *toxic chemicals* used to prepare production equipment for manufacturing activities must be included in the threshold determinations that reporting year. This includes start-up activities.
- Pipeline, Facility**
- 6. A petroleum *facility* sends its hazardous waste containing a Section 313 *toxic chemical* to a land treatment *facility* by underground pipeline. The two *facilities* are owned and operated by the same individual. The land treatment *facility* is not adjacent nor contiguous to the petroleum *facility*, but the petroleum *facility* maintains "right-of-way" of the pipe-line. Are the two *facilities* considered to be one under EPCRA Section 313?**
- Since the land treatment *facility* is not adjacent nor contiguous to the petroleum *facility* and they are connected only by a pipeline, the *facilities* are considered two separate *facilities* with the same owner/operator, even though the petroleum *facility* controls "right of way" of the pipeline. However, *releases* and other *waste management* activities associated with loading or unloading activities or leaks from a pipeline within the *facility* would be covered.
- Definition of Facility, Contiguous/ Adjacent**
- 7. A company had been operating its manufacturing processes in a leased warehouse that is neither contiguous nor adjacent to the *facility*. In June, it bought a different warehouse and moved the manufacturing operations there. These two locations are neither adjacent nor contiguous. The company did not shut down or close during this time. How should the company make threshold determinations and report for Section 313?**
- Because the operations were carried out at two distinctly separate, physical sites, the company operated two separate *facilities*. The company, therefore, must make threshold and *release* determinations and other *waste management* estimates individually for each *facility*. The company need only file Form Rs for the *facility(ies)* that exceeded the reporting thresholds during the reporting year. If independently both *facilities* meet the reporting criteria, the company must submit the appropriate forms for each *facility*.
- SIC Code**
- 8. *Facilities* in the scrap and waste materials businesses are in SIC Code 5093, indicating that they assemble, shred, sort, melt, and wholesale scrap metal ingots and waste materials. When they landfill residuals a small**

volume of air pollutants are generated. How extensive will the reports be for such operations?

Such scrap metal processing *facilities* are not covered by Section 313 reporting requirements if their primary SIC codes are in 5093.

SIC Code

9. Is an automobile proving ground *facility* subject to reporting under Section 313?

Provided the automobile proving ground is not an auxiliary *facility*, the SIC code for "automobile proving and testing grounds" is 8734. It, therefore, is not within a *covered SIC code* and would not need to report.

*Reporting
Criteria, SIC
Code*

10. I run a trucking company and all I do is pick up the chemicals at the vendor and take them to the customer. Must I report under Section 313?

Trucking companies are generally not in a *covered SIC code*. If you are not in a *covered SIC code*, then you are not required to report under Section 313.

*SIC Code,
Form R
Revisions*

11. A *facility* whose SIC code is outside the *covered SIC codes* believes that their current SIC code is misrepresentative of the *facility's* activities. In actuality, the *facility* may be better represented by an SIC code within the *covered SIC codes*. If the *facility* changes its SIC code to a *covered group*, should they back report for previous reporting years under EPCRA Section 313?

If the *facility* has not altered its operations and should have been classified in a *covered SIC code* and has met the threshold and employee criteria, it is required to report for all the previous years under Section 313 of EPCRA. If the mix of activities at the *facility* shifted from non-covered to *covered SIC codes*, then it should begin reporting for the year in which the change occurred.

*SIC Code,
NAICS*

12. Effective January 1, 1997, the Office of Management and Budget adopted the North American Industry Classification System (NAICS), a new economic classification system that replaces the 1987 Standard Industrial Classification (SIC) system (62 FR 17228; April 19, 1997). How will EPA update its EPCRA Section 313 regulations to reflect this change?

EPA will be addressing this SIC code change, as it relates to EPCRA Section 313, in an upcoming Federal Register notice.

*Employee
Threshold,
Contractor
Hours**B. Employee Threshold***13. When should an individual's time spent working for a *facility* be counted for purposes of determining whether or not a *facility* exceeds the 20,000 hour employee threshold?**

If an individual is employed by the *facility* or by the *facility's* parent company to work for the *facility*, then all of the hours worked by the individual should be counted toward the 20,000 hour employee threshold. For example, a headquarters engineer spends most of her time at headquarters but some of her time is spent at a *covered facility*. The time the engineer spends at the *covered facility* and the time the engineer spends working for the *covered facility* while at headquarters should be included in the *facility's* employee threshold determination. If the individual is hired by the *facility* (or by the *facility's* parent company) as a contractor to work at the *facility* and is based at the *facility*, then all hours worked by the contractor should be counted. If the individual is not an owner, contractor, nor an employee of the *facility*, then the individual's time spent working at the *facility* should not be counted toward the 20,000 hour employee threshold. For example, the time spent by individuals who are performing intermittent service functions at the *facility* such as municipal trash collectors or the electric utility company repairing power lines should not be counted.

*Employee
Threshold,
Vacation
Hours, Sick
Leave***14. Under the Section 313 regulations a *full-time employee* is defined to "...mean 2,000 hours per year of full-time equivalent employment." The definition of *full-time employee* goes on to stipulate that "(a) *facility* would calculate the number of *full-time employees* by totaling the hours worked during the reporting year by all employees including contract employees and dividing the total by 2,000 hours" (40 CFR Section 372.3). (It follows that 20,000 hours worked is equivalent to 10 *full-time employees*.) When calculating the total number of hours worked by all employees during the reporting year should vacation and sick leave used be included toward the 20,000 hour threshold?**

Yes. When making the *full-time employee* determination the *facility* should consider all paid vacation and sick leave used as hours worked by each employee who claims such vacation or sick leave. If the *facility* meets or exceeds the 20,000 hour threshold (including vacation and sick leave), the *facility* is considered to have 10 or more *full-time employees*.

*Employee
Threshold,
Part-Time
Employee,
Full-Time
Employee***15. Would a *facility* with nine *full-time employees* and four part-time employees be required to report under Section 313?**

The total hours worked by all employees should be reviewed. A *full-time employee* is defined on a time equivalent basis of 2,000 labor hours per year

(40 CFR Section 372.3). If the total hours worked by all employees at a *facility* including contractors, is 20,000 hours or more, the criterion for number of employees has been met.

*Employee
Threshold,
Full-Time
Employee*

16. A manufacturing facility has 8 employees. Each employee worked 2,500 hours in the reporting year. Consequently, the total number of hours worked by all employees at this facility is 20,000 hours. How should the facility determine whether it meets the 10 full-time employee threshold for purposes of reporting under Section 313?

One *full-time employee* is equal to 2,000 hours (40 CFR Section 372.3). The number of *full-time employees* is determined by dividing the total number of hours worked, 20,000, by 2,000 hours, or 10 *full-time employees*. Therefore, even though only eight persons worked at this *facility*, the number of hours worked is equivalent to 10 *full-time employees*, and this *facility* has met the employee criterion.

*Employee
Threshold,
Full-Time
Employee*

17. Is an "employee" a group of people who work 2,000 hours per year (such as three people who work 1/3 time) or is it one person who works full-time?

An "employee" can be either a single person or a group of people, including the owner. The regulatory criterion is that the total hours worked by all employees is equal to or greater than 20,000 for that reporting year at the *facility*.

*Employee
Threshold,
Sales Staff*

18. Does the full-time employee determination include the hours worked by sales staff whose office is included in the same building as the production staff?

Yes. All persons employed by a *facility* regardless of function (e.g., sales, clerical) or location count toward the employee threshold determination (40 CFR Section 372.22(a)).

*Employee
Threshold,
Truck Drivers*

19. The employee threshold under Section 313 is 10 full-time employees or the equivalent, 20,000 work hours/year. This includes all sales staff, clerical staff and contractors. Would this also include delivery truck drivers who returned to the facility only to pick up a shipment and then leave again?

If the truck drivers are employed by the *facility* or the *facility's* parent company, and paid by the *facility* or by the parent company, then they are employees of the *facility* and would be factored into the employee threshold. If they are based at the *covered facility*, all of the hours worked by the truck drivers are counted towards the employee threshold. If the truck drivers are not based at the *covered facility*, then only their time spent servicing the *covered facility* is

*Employee
Threshold*

considered towards the employee threshold. However, *facilities* are not required to count hours worked by contract drivers.

20. A *facility* covered under EPCRA Section 313 has nine full-time employees and one part-time employee. The *facility* also has an employee who works at the *facility*, but does not draw a salary. Should the hours worked by the employee who does not draw a salary be counted towards the employee threshold for the *facility*?

Yes. Even though the employee does not draw a salary, he/she is still working for the *facility*. Therefore, the employee's hours must be counted towards that *facility's* employee threshold.

*Employee
Threshold,
Facility Owner,
Profit Share*

21. The owner of a *covered facility* does not work at the *facility* but draws an income from profit sharing. Would he/she be considered an employee according to the definition under Section 313 of EPCRA (40 CFR Section 372.3)?

No. If the owner of the *facility* does not work at the *facility* and only draws a profit share, the owner is not considered an employee and the reporting *facility* will not count the owner towards the employee threshold.

*Employee
Threshold,
Permanent
Disability*

22. A *covered facility* under EPCRA Section 313 has nine *full-time employees*. The *facility* also has one paid employee who is on permanent disability. Should the *facility* include this employee in their employee threshold determination (40 CFR 372.22(a))?

No, the *facility* does not have to include the disabled employee when determining their employee threshold. The employee would be considered the equivalent of a retired employee.

*Employee
Threshold,
Contractors*

23. An *establishment* leases one acre of land adjacent to the reporting *facility* from a three-acre strawberry farm. The *facility imports* and re-packages methyl bromide for sale and distribution. Does the *facility* have to include the strawberry pickers when determining whether the 10 hour-time employee equivalent criterion applies?

The reporting *facility* should not tabulate the hours worked by farm workers it does not pay. If however, the reporting *facility* actually employs or contracts with these farm workers then the hours worked on-site by these workers would count towards the 10 *full-time employee* equivalent (40 CFR Section 372.3).

*Employee
Threshold,
Contractors*

24. A manufacturing company that normally employs only four employees hires a construction company to modify its *facility*. The construction workers are employees of the construction company and worked on-site

for several months. Do the hours worked by the construction workers count toward the 10 or more *full-time employee* threshold (20,000 hours of work)?

Yes. The hours any contract employee works on-site or off-site for the *facility* must be counted toward the 20,000 hour threshold (40 CFR Section 372.3). In general, a contract employee is a person working on-site or off-site for the *facility* under a specific contractual agreement performing specific tasks or services for the *facility*, except intermittent trash pick-up.

*Employee
Threshold,
Facility Owner*

25. If an individual both owns and works at a *facility*, how should the owner's time be accounted for when determining whether or not the *facility* exceeds the 20,000 hour employee threshold?

The owner must be counted as the equivalent of a *full-time employee* of the *facility* and his/her hours must be applied toward the 20,000 hour employee threshold.

*Employee
Threshold,
Facility
Closure*

26. A manufacturing *facility* was shut down on January 30, 1996. Between January 1, 1996 and January 30, 1996, the *facility* "manufactured" a *toxic chemical* in excess of 25,000 pounds, and 10,000 hours were worked at the *facility*. After the "manufacturing" activities ceased on January 30, 1996, six employees remained to work on electrical wiring and warehouse activities. For purposes of reporting under EPCRA Section 313, does the *facility* have to add the working hours of the 6 employees to the 10,000 hours worked during January 1996 in order to determine if 20,000 hours or more were worked at the *facility* during reporting year 1996?

Yes. In calculating the working hours, the manufacturing *facility* has to include the employees who worked after the *facility* ceased actual "manufacturing" operations regardless of the type of work they did (the number of hours worked do not necessarily correlate directly to the "manufacturing" activities). If, during the 1996 reporting year, the total working hours at the *facility* is equal to or in excess of 20,000 hours, the *facility* owner/operator is subject to reporting for that reporting year (40 CFR Section 372.22).

C. Persons Responsible for Reporting

*Reporting
Responsibility,
Owner/
Operator*

27. Is the owner or the operator responsible for reporting?

Both the owner and the operator are subject to the Section 313 reporting requirements. If no reports are received from a *covered facility* both persons are liable for penalties, provided that the *facility* was required to file a Form R or Form A. As a practical matter, EPA believes that the operator is more likely to have the information necessary for reporting.

*Reporting
Responsibility,
Change of
Ownership*

28. Who is obligated to report *toxic chemical releases* in a given reporting year if the *facility* has changed ownership during the year? Would both owners be obligated to file separate Form Rs for that year?

The owner/operator of the *facility* on the annual July 1 reporting deadline is primarily responsible for reporting the data for the previous year's operations at that *facility*. Any other owner/operator of the *facility* from January 1st of the reporting year to June 30th of the year in which reports are due may also be held liable. The reports submitted must cover the full reporting year.

*Reporting
Responsibility,
Change of
Ownership*

29. A company purchased a *facility* in September through bankruptcy proceedings. The previous owner of the *facility* filed Form Rs under EPCRA Section 313 for the preceding reporting year. The new owner of the *facility* has no plans to continue any manufacturing activities at the site. All listed EPCRA Section 313 *toxic chemicals* at the *facility* were removed or sold by the previous owner as terms of the bankruptcy proceedings prior to final sale to the new owner. Who must submit Form Rs for the months during the reporting year that the *facility* was in operation?

The new owner/operator of the *facility* is liable for filing Form Rs for the months of operation during the previous reporting year since he/she is the owner/operator of the *facility* on the reporting deadline. The purchase of a *facility* through bankruptcy proceedings does not negate the liability for reporting activities at the *facility* during the period it was in operation. The new owner/operator must make every attempt to acquire the necessary information to determine if Form Rs are to be submitted for the reporting year. If reports must be filed, the new owner/operator must submit them in a timely and accurate manner.

*Reporting
Responsibility,
Change of
Ownership,
Definition of
Facility*

30. A *facility* owner sold a quarter of his plant to another company. This purchase transaction was finalized January 15, 1996. The quarter of the plant that was sold was moved to its new location in April of the same year. During the period between sale and move, the entire *facility* kept operating. The new owner, however, controlled and operated the sold part of the *facility*. For purposes of reporting under EPCRA Section 313, is the original owner responsible for 1996 reporting for the part of the *facility* that was sold?

From the time of the purchase transaction on January 15, there are two separate *facilities* with two non-related owners and separate operators. Therefore, the original owner only needs to report three quarters of the *facility*, if he "*manufactured*," "*processed*," or "*otherwise used*" a *toxic chemical* equal to or in excess of a threshold amount for 1996. (Note: The original owner would also include in threshold determination and *release* and other *waste management* calculations any activities that went on in that part of the *facility* that was sold

from the beginning of January 1996 up to the time of the purchase transaction.) The owner of the quarter of the *facility* also needs to report, if that *facility* exceeds the reporting threshold during the period of January 15, 1996 through April 1996. Once the *facility* is moved to its new location, a new threshold determination must be made for the remainder of the reporting year. However, the original owner and purchaser may agree (in their purchase transaction, for example) that the original owner will prepare and submit reports that reflect activities that occurred at the portion of the *facility* that was sold prior to its moving to the new location.

*Reporting
Responsibility,
Change of
Ownership,
NON*

31. When a *facility* changes ownership after a Form R has been submitted, who is required to respond to a Notice of Non Compliance (NON) related to the Form R? Is the current or prior owner/operator required to respond to the NON?

The current owner/operator has the primary responsibility for responding to a NON. However, all prior owners/operators back to January 1 of the reporting year may also be held responsible if the current owner/operator does not respond to the NON in an accurate, complete and timely manner.

*Reporting
Responsibility,
Owner/
Operator,
Business
Interest*

32. Would an owner of a *facility* who has no knowledge of any operations at the *facility* be responsible for reporting?

An owner with no business interest in a *facility* beyond owning the real estate on which the *covered facility* is located is not responsible for reporting (40 CFR Section 372.38(e)). If the owner is part of the same business organization as the operator, or has a business interest in the *facility* and contracts out the operation of a particular site, he/she is not exempt from reporting.

*Parent
Company, Joint
Venture*

33. Who is the parent company for a 50/50 joint venture?

The 50/50 joint venture is its own parent company.

*Definition of
Facility, Joint
Venture*

34. An EPCRA Section 313 *covered facility* transfers wastes containing a *toxic chemical* to a 50/50 joint venture company for treatment. The joint venture is located within the property boundaries of the *covered facility*, and is a partnership between the owners of the *covered facility* and a separate company. Is the joint venture a separate *facility* as defined in 40 CFR Section 372.3?

The term "*facility*" includes all "buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person)" (40 CFR Section 372.3). The joint venture is a separate *facility*

*Parent
Company,
Wholly Owned
Subsidiary*

because a 50/50 joint venture is its own parent company. As its own parent company, the joint venture is not owned nor operated by the same person (or by any other person which controls, is controlled by, or under common control with such person) as the *covered facility*.

35. Mom and Pop Plastics is a wholly owned subsidiary of a major chemical company which is a wholly owned subsidiary of Big Oil Corp. Which is the parent company?

Big Oil Corporation is the parent company.

*Reporting
Responsibility,
Facility*

36. Company A owns a *facility* which manufactures crude oil. It sells the crude oil to Company B, but the oil is kept in tanks on Company A's *facility* that are leased to Company B. Who is subject to reporting under Section 313?

Since the tanks are part of Company A's *facility* and they are the owner/operator of the *facility*, Company A would be subject to Section 313 reporting for any *releases* and any other *waste management* activities involving *toxic chemicals* from the tank.

*Facility,
Business
Interest, Multi-
Establishment*

37. A fish processor rents space in a building. The refrigeration system in the building uses ammonia. The building owner supplies the ammonia, runs the refrigeration system, and bills the fish processor based on the amount of fish processed. Must the fish processor report for ammonia? Another business, a frozen food packager also uses the refrigeration system but is a separate company from the fish processor.

The owner of the building must report on the ammonia if the threshold for ammonia is exceeded since he/she is operating the system - he/she has more than just a real estate interest in the property. If both businesses are in *covered SIC codes* and the owner is operating part of that *facility*, he/she should report.

*Definition of
Facility,
Contiguous or
Adjacent*

38. How would a *facility* report *toxic chemicals* in wastes that are treated in waste treatment units that it does not own? For example, if a *facility* sold a unit that is within its contiguous property to another company, which *facility* should report?

The *facility* creating the waste containing the *toxic chemical* would report the *toxic chemicals* as an off-site transfer. Assuming the waste treatment units are neither owned nor operated by the *facility* creating the waste, the waste treatment is a separate *facility*. The waste treatment *facility* would only report if they "*manufacture*," "*process*," or "*otherwise use*" the *toxic chemical* in excess of the thresholds. In that case, the waste treatment *facility* would report any

release or other *waste management* activities associated with the *toxic chemical* at its *facility*.

D. Multi-Establishment Facilities

Primary SIC Code, Multi-Establishment

39. What is the definition of primary SIC code? How can there be more than one primary SIC code for a facility?

A primary SIC code generally represents those goods produced or services performed by an *establishment* that have the highest value added of production or produce the most revenues for the *establishment*. Form R and Form A provide space for more than one primary SIC code because a *facility* may be made up of several *establishments* each of which may have a different primary SIC code.

Definition of Facility, Establishment, SIC Code

40. Clarify the application of SIC codes for facility versus establishment?

The SIC code system classifies businesses on the basis of an *establishment*, which is generally a single business unit at one location. Many Section 313 covered *facilities* will be equivalent to an *establishment*. However, a reporting *facility* can encompass several *establishments* located within a property boundary owned/operated by the same entity. Therefore, a *facility* can be a multi-establishment complex.

SIC Code, Multi-Establishment

41. Suppose a facility consists of several establishments, some of which have primary SIC codes within the covered SIC codes and some of which have primary SIC codes outside that range. How would this facility determine if it needs to report?

The *facility* must report if those *establishments* that are in the *covered SIC codes* have a combined value of more than 50 percent of the total value of services provided or products shipped or produced by the whole *facility*, or if one of those *covered SIC code establishments* has a value of services or products shipped or produced that is greater than any other *establishment* in the *facility* (40 CFR Section 372.22(b)(3)).

Multi-Establishment, Activity Threshold

42. A facility is comprised of several establishments. None of the establishments meet a chemical activity threshold separately, but together, the facility exceeds a chemical activity threshold. Since no single establishment exceeds the reporting quantities, is it necessary for the facility to file the Form R for each establishment within that facility?

The *facility*, not the *establishments*, must report if the *facility* meets all other reporting criteria. The threshold determination for "*manufacture*," "*process*,"

Facility, Multi-Establishment

or “*otherwise use*” of the listed chemical must be made by adding the amounts of the chemical from appropriate activities of all the *facility’s establishments*.

43. If a company has a plant in one *state* which “*processes*” 15,000 pounds of methanol and a plant in another *state* which “*processes*” the same amount of methanol, do both plants have to report as *establishments of a facility*?

No. The two processing plants are separate *facilities* because they are not located within the same, or adjacent, or contiguous physical boundary. Thus, their activities are not additive, and neither would report for methanol because the “*processing*” threshold of 25,000 pounds has not been met by either *facility*.

Primary SIC Code, Multi-Establishment

44. A multi-establishment *facility* grows wheat and mills it into flour. At the agriculture portion of the *facility*, all of the wheat grain is grown, harvested and placed into a silo. After leaving the silo, 20 percent of the wheat grain is sold, while the remaining 80 percent of the wheat grain is milled into flour and packaged. If the *facility* farms and sells more than it mills into flour and sells, is it a *covered facility*? What is the primary SIC code?

In order to make the *facility* coverage determination, the *facility* must compare the relative value of products shipped and/or produced at the two different *establishments* (i.e., agriculture versus the flour processing). The value of the product produced at the agricultural *establishment* (SIC code 0111, not in a *covered SIC code*) is the market value of all the wheat grain harvested during the reporting year. The value of product from the milling/packaging *establishment* (in SIC code 2041, a *covered SIC code*) is the value of the products shipped and/or produced minus the market value of the wheat grain used to produce the flour. In other words, you do not double count the value of the wheat grain as part of the value of products from the flour processing operation. If the “value-added” of milled flour products is greater than the value of harvested grain, then the *facility’s* primary SIC code would be within a *covered SIC code* and would be subject to reporting.

Multi-Establishment, Off-site Transfer, Form R Submission

45. Each *establishment* of a multi-establishment *facility* files its own Form R for a *toxic chemical*. The waste that this multi-establishment *facility* ships off-site is inventoried on an entire *facility* basis. To report the listed *toxic chemical* in this waste, does each *establishment* estimate their percentage of the total listed *toxic chemical* in the waste or can one *establishment* report the entire quantity of the listed *toxic chemical* in the waste?

If individual *establishments* or groups of *establishments* report separately for one listed *toxic chemical* they must report separately all *releases* and other quantities of the *toxic chemical* managed as waste. Therefore, in the case cited above, one *establishment* cannot report the off-site transport quantity of a *toxic*

*Multi-
Establishment,
Part II
Section 3*

chemical in waste from the entire *facility*. Each *establishment* would have to report separately their percentage of the transfer quantity.

46. A *facility* consists of many *establishments* and the operators have chosen to file Form Rs by *establishment* rather than as a *facility*. Establishment #1 has a manufacturing process that “*otherwise uses*” over 10,000 lbs. of a listed *toxic chemical*. Establishment #1 sends its wastewater to Establishment #2 where it is treated. Establishment #2 just treats the *toxic chemical* and does not use it anywhere else. Since a Form R has to be filed because of Establishment #1’s activities, how is the operator of Establishment #2 to fill out the Form R, specifically Part II Section 3 for activities and uses at the *facility*, and reflect the *releases* resulting from the waste treatment?

Since the *facility* has chosen to report separately as two *establishments*, rather than not answering that Section of the Form R, it is preferred to check the block 3.3c for “*otherwise use*” as an ancillary use. The rest of the Form R can be filled out as if that second *establishment* had triggered reporting itself. If any further questions were to arise about activities at Establishment #2, its required recordkeeping should indicate that the Form R is for treatment only and reflects *releases* and other *waste management* activities transferred to Establishment #2 by the *facility*.

*Multi-
Establishment,
Facility, Right-
of-Way*

47. Two manufacturing *establishments*, owned by the same corporation are divided by a public railroad. One *establishment* has rented parking lot space from the other *establishment*, and a walkway was constructed so the employees can go over the railroad tracks to the parking lot. Is this a multi-establishment *facility* or two separate *facilities*?

Two *establishments* owned by the same corporation separated by a railroad constitute one *facility* for Section 313, since they are still physically adjacent to one another except for a public right-of-way. Therefore, reporting thresholds would be determined by the combined *toxic chemical* volumes “*processed*,” “*manufactured*,” or “*otherwise used*” at both *establishments*.

*Multi-
Establishment,
Facility,
Pipeline*

48. Two manufacturing plants owned by the same parent company are connected to each other by a thin patch of land on which a pipeline rests that joins the two plants. The pipeline and connecting land are also owned by the same parent company. For the purposes of reporting on the Form R, are the plants considered two separate *facilities*, or are they *establishments* of the same *facility*?

Under 40 CFR Section 372.3 the definition of *facility* means, “all buildings, equipment, structures, and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the

same person (or by any person which controls or is controlled by or under common control with such person).” A *facility* may contain more than one *establishment*. Since both plants are connected to each other by a strip of land that is owned by the same parent corporation, they are contiguous and, therefore, are considered adjacent *establishments* of the same *facility*. This *facility* must make threshold determinations based on the combined amounts of listed *toxic chemicals* at both *establishments*. Both *establishments* may report together as the same *facility* or they may report separately provided that the sum of the *releases* of the *establishments* reflects the total *releases* of the *facility* and threshold determinations are based on activities at the entire *facility*.

E. Threshold Determinations

Threshold Determination, Otherwise Use, Multiple Otherwise Use Steps

49. A facility buys 10,000 pounds of a listed toxic chemical in one year and creates a mixture for a metal cleaning bath. In the following year, the facility begins cleaning metal in the bath. How does the facility determine thresholds for both years?

The threshold applies to the total amount of the *toxic chemical* “*otherwise used*” during the reporting year that the *mixture* was created. The *facility* would count the entire 10,000 pounds and any amount added to the bath during that year toward the “*otherwise use*” threshold the first year. Only the amount of the *toxic chemical* added to the bath during the second year would be counted toward the “*otherwise use*” threshold determination for the second year.

Process

50. A facility owner/operator begins a process in December 1996 by mixing a batch of listed toxic chemicals into their product formulation. The mixture remains in the vat until January 1997. At that time, the mixture is packaged into quart containers and sent to their customers. For Section 313 threshold purposes, are the toxic chemicals in the mixture considered “processed” in 1996 or 1997?

“*Process*” is defined as “the preparation of *toxic chemical*, after its manufacture, for distribution in commerce” (40 CFR Section 372.3). The Agency interprets the activity of “*processing*” to be reportable when the *toxic chemicals* are initially prepared. Therefore, the amount of *toxic chemicals* mixed in 1996 would be added to the “*processing*” threshold determination for 1996.

Threshold Determination, Storage, Metal Alloy, Mixture

51. Does steel in storage constitute a covered activity? How would steel that meets a reportable activity threshold be reported?

In general, the storage, in itself, of steel does not constitute a covered activity. However, if the listed *toxic chemicals* in the steel are used elsewhere at the *facility* and meet an activity threshold, any *releases* of the *toxic chemical* from

the steel in storage would be considered in *release* and other *waste management* determinations.

Steel itself is a metal alloy, which is a *mixture* of chemicals (metals). The weight percent of the listed *toxic chemicals* in the steel must be multiplied by the weight of the steel to determine if the threshold amount for any listed *toxic chemical* (metal) is met. Individual listed *toxic chemicals* (e.g., lead, copper) that are actually "*processed*" or "*otherwise used*" (not in storage) count toward the threshold determinations for reporting.

Activity
Thresholds,
Storage,
Maximum
Amount
On-Site

52. If a facility has a chemical in storage but does not "process" or "otherwise use" it during the reporting year, is the owner/operator subject to reporting?

No. The activity of storage in itself would not meet an activity threshold under EPCRA Section 313 (Note: the *facility* may have reporting requirements under other portions of EPCRA such as Sections 311 and 312). However, if the *facility* exceeds the "*manufacturing*," "*processing*," or "*otherwise use*" threshold for the same *toxic chemical* elsewhere at the *facility*, the *facility* must consider *releases* from the storage of the *toxic chemical*. The *facility* must also consider the amount of the Section 313 chemical in storage when calculating the maximum amount on-site during the year.

Threshold
Determination,
Storage

53. Are materials in inventory (i.e., amounts on hand at year end) factored into threshold determinations?

No. Only quantities of a *toxic chemical* actually "*manufactured*" (including *imported*), "*processed*," or "*otherwise used*" during the reporting year are to be counted toward a threshold.

Reuse System,
Threshold
Determination

54. If a facility employs a reuse system, how does it determine the amount that it must consider for threshold determinations?

For reuse systems, the amount considered for threshold determination purposes is the amount added to the system during the reporting year. If the system is completely empty and is started up during the year, a *facility* makes its threshold determination by adding the total amount needed to charge the system to any amount which is added to the system during the reporting year.

Reuse System,
Closed-loop,
Otherwise Use

55. Many facilities maintain reuse operations such as closed-loop refrigeration systems. If a facility utilizes 15,000 pounds of ammonia as a coolant in a closed-loop refrigeration system, this amount of the toxic chemical is considered "otherwise used" under EPCRA Section 313 because the ammonia is not incorporated into the final product. Only the amount of a listed toxic chemical added to a refrigeration system during the reporting

year must be included in the threshold calculation. If the *facility* replaces its refrigeration system but uses the same ammonia to maintain the new system, must the transferred ammonia be considered “*otherwise used*” and therefore included in threshold determinations for EPCRA Section 313 reporting?

In such reuse systems, the amount of listed *toxic chemical* which must be applied toward the “*otherwise use*” threshold would include any quantity added as a result of start-up or total replacement of the contents of the reuse operation. If a reuse system is completely empty and is started up during the year, a *facility* must base its threshold determination on the total amount initially needed to charge the system plus any amount which is subsequently added to the system during the year. In this case, the 15,000 pounds of ammonia should have been counted towards the “*otherwise use*” threshold when it was first used to charge the old system and any ammonia added to maintain the level of ammonia in the old system should also have been counted towards the “*otherwise use*” reporting threshold in the year that it was added. If the *facility* is reusing ammonia from the old system by simply using it again in a new system this amount of ammonia would not have to be counted towards the “*otherwise use*” threshold because it should have already been counted towards that threshold. This is consistent with EPA’s past determinations that once a chemical has been counted towards the “*otherwise use*” threshold, any further use of that listed chemical at a *facility* does not need to be counted again towards the “*otherwise use*” threshold.

*Recycling,
Reuse System,
Threshold
Determination*

56. A *toxic chemical* in a solvent is used, recycled on-site, and then reused as a solvent at the *facility*. How is that *toxic chemical* handled for the purpose of threshold determination for Section 313?

For solvents in an on-site recycle and reuse system, the total amount of new *toxic chemical* added to the system during the reporting year is counted towards the “*otherwise use*” threshold. The amount of the *toxic chemical* that is recirculated in the recycle/reuse system is not considered unless it is replaced.

*Threshold
Determination,
Remediation*

57. If you operate a treatment plant as part of remediation at a Superfund site on your *facility*, do contaminants (already present at the site) have to be included in calculating thresholds and *releases* and other *waste management* activities?

EPCRA Section 313 listed *toxic chemicals* undergoing remediation are not included in threshold determinations because remediated chemicals are not “*manufactured*,” “*processed*,” or “*otherwise used*.” However, if a *covered facility* exceeds an activity threshold for a listed *toxic chemical* elsewhere at the *facility* any *releases* and other *waste management* activities of the listed *toxic chemicals* undergoing remediation must be included in the *facility’s release* and other *waste management* calculations. In that event, a *release* does

not include material already in a landfill but does include any material *released* to the *environment* or transferred off-site due to the remedial activity.

*Threshold
Determination,
Remediation,
Release
Reporting,
Intake Water
Exemption*

58. A facility removes toxic chemicals from groundwater in a clean-up action. The listed toxic chemicals, after treatment, are sent off-site for disposal. Is the facility required to report? Does the exemption for intake water apply?

Since the *toxic chemicals* are not “*manufactured*,” “*processed*,” or “*otherwise used*,” no reporting threshold applies to the cleanup action. If the *toxic chemicals* are “*manufactured*,” “*processed*,” or “*otherwise used*” elsewhere at the *facility* and exceed a threshold, *releases* and other *waste management* activities from the cleanup must also be reported on the Form R. The intake water exemption does not apply since the *toxic chemicals* are not being used in a “*process*” activity.

*Threshold
Determination,
Release
Reporting,
Otherwise Use*

***59. A toxic chemical manufacturer (SIC code 28) receives other facilities’ wastes containing toxic chemicals and disposes of them in their Class I UIC well. Does the receiving facility need to report these toxic chemicals?**

Through reporting year 1997, if the manufacturing *facility* “*manufactures*,” “*processes*,” or “*otherwise uses*” the same *toxic chemical* above the threshold amount, the disposal of other *facilities’* wastes containing this *toxic chemical* in Class I UIC wells would be reported on the Form R even though the amount of the *toxic chemical* in these wastes is not included in the threshold determination.

Beginning in reporting year 1998, the quantity of the *toxic chemical* in waste that is received from off-site for purposes of *waste management* and subsequent on-site disposal (e.g., in a Class I UIC well) would be applied to the “*otherwise use*” threshold.

*Manufacture,
Import,
Threshold
Determination*

60. If a covered facility “manufactures” 19,000 pounds, “processes” 18,000 pounds, and imports 7,000 pounds of toxic chemical X during the reporting year, is it required to report for toxic chemical X?

Yes. For the reporting year, the *facility* would have to report for *toxic chemical X* because it would have exceeded the “*manufacture*” threshold of 25,000 pounds (19,000 (manufacturing) + 7,000 (importing) = 26,000). Note that *importing* constitutes “*manufacturing*,” and therefore, the amounts must be added together for threshold determinations.

*Threshold
Determination*

61. Are the thresholds for “manufacture” and “process” considered separately? That is, if a facility “manufactures” 24,000 pounds of toxic chemi-

cal A and "processes" 24,000 pounds of toxic chemical A, does the facility need to report for toxic chemical A?

No. The *facility* does not have to report because it has not independently exceeded either threshold. Thresholds are considered separately for "*manufacture*," "*process*," and "*otherwise use*" of the same *toxic chemical*. Assuming that no individual threshold is met for chemical A (i.e., "*manufacturing*," "*processing*," or "*otherwise use*"), the *facility* does not trigger reporting for chemical A.

*Threshold
Determination,
Warehouse*

62. How are warehouses affected by Section 313?

A warehouse located within the physical boundary of a *covered facility* is included in estimating threshold and *release* and other *waste management* determinations for the *toxic chemicals*. If the warehouse is not within the physical boundary of the *covered facility*, it may be covered as an *auxiliary facility*. (See *Auxiliary Facility* discussion in Section 1H of this document.)

*Asbestos,
Threshold
Determination*

63. Are releases of asbestos from demolition of an old plant reportable?

Maybe. If friable asbestos is not being "*manufactured*," "*processed*," or "*otherwise used*," no *releases* of asbestos must be reported unless there are other covered activities involving asbestos in the friable form at the *facility*, and the threshold for reporting has been exceeded. If, however, during the demolition of the plant, asbestos is created in the friable form, the "*manufacturing*" threshold may be triggered.

*Concentration
Range, Upper
Bound*

64. If a facility only knows the range of concentration of a Section 313 toxic chemical in a mixture, is it required to use the upper bound concentration to determine thresholds? Use of the average or midpoint of the range will avoid overestimating emissions. If a metal mixture contains a range of 1 to 10 percent of three metals together, how can this information be used to determine thresholds?

The upper bound should be used if the person knows only the upper bound concentration. If a range is available, using the midpoint or average is reasonable. For the combination of three *toxic chemicals*, the owner/operator of the *facility* should split the range among the three *toxic chemicals* based on the knowledge that it has, so the total equals ten percent. The owner/operator of the *facility* does not have to assume ten percent maximum for each *toxic chemical*.

*Concentration
Range, Mixture*

65. A facility uses a mixture in its processing operations and knows only that the mixture contains <99.9 percent of four listed toxic chemicals (combined). How should it report?

The *facility* should proportion the amount of chemicals so that their total percentage equals 99.9 percent, since each one cannot realistically be present at 99.9 percent. The percentage could be divided equally among the four, unless the *facility* has some basis for proportioning them differently.

*Concentration
Range*

66. A *facility* is told by its supplier that the *mixture* the *facility* receives contains as much as 80 percent of 4-aminobiphenyl, a listed *toxic chemical*, and as little as 20 percent. How should the *facility* estimate the concentration of 4-aminobiphenyl in this *mixture*?

If the *facility* knows the upper and lower bound concentrations in a *mixture* (i.e., 80 and 20 percent), it should use the midpoint of these concentrations for threshold determinations. In this instance, 50 percent should be used because it is the midpoint between 80 and 20 percent.

*Concentration
Range, Lower
Bound*

67. A *covered facility* receives a *mixture* from a supplier who only provides the lower bound concentration of a Section 313 listed *toxic chemical* in the *mixture* (e.g., more than two percent toluene). Should the *covered facility* use this information in threshold determinations for the listed *toxic chemical*?

The *facility* should subtract out the percentage of any other known components of the *mixture* to determine what a reasonable "maximum" percentage of toluene could be (e.g., if the *mixture* contains 80 percent water then toluene can be no more than 20 percent). The *facility* then should use the midpoint of the "minimum" and "maximum" percentages in order to determine the pounds of toluene to apply toward the threshold. If no other information is available, the *facility* should assume that the "maximum" is 100 percent.

*Concentration
Range, Upper
Bound, Mixture*

68. A *covered facility* knows that a *mixture* it processes contains up to 56 percent of mustard gas, a listed *toxic chemical*. How should the *facility* estimate the concentration of mustard gas in this *mixture* for threshold determinations?

If the *facility* knows only the upper bound concentration of the listed *toxic chemical*, it should use this upper bound (i.e., 56 percent) for threshold determinations.

*Threshold
Determination,
Facility
Construction*

69. A manufacturing *facility* ceased operations at the beginning of the reporting year and construction work took place through July. At that time, the *facility* resumed manufacturing operations. Listed *toxic chemicals* were used at the *facility* during the construction phase. For purposes of threshold and release and other *waste management* determinations under EPCRA Section 313, does the *facility* include in its calculations the

***toxic chemicals* used during construction when the *facility* was not in operation?**

Yes. Since the *facility* is a manufacturing *facility*, any covered activity of a listed *toxic chemical* will count toward an applicable threshold. Therefore, the *toxic chemicals* used during the construction phase would be counted toward threshold determinations. *Releases* and other *waste management* of a given *toxic chemical*, used during construction, would also be reported if, during the course of a reporting year, an activity threshold was exceeded for that *toxic chemical*. If the *toxic chemical* becomes a fixed part of the *facility* structure and is not process related, then the structural component exemption may apply.

*Threshold
Determination,
Metal Alloys,
Mixture*

70. How does a *facility* determine the threshold for reporting of a listed *toxic chemical* (such as chromium) in a solid piece of steel which it “*processes*?”

Since steel is a *mixture* (and not a compound), the “*processing*” threshold determination is made based on the total amount of each *toxic chemical* present in the steel. If the *toxic chemical* is present in a known concentration, the amount present can be calculated by multiplying the weight of the steel by the weight percent of the listed *toxic chemical*. The threshold for “*processing*” is 25,000 pounds.

*Threshold
Determination,
Metal
Compounds*

71. How are threshold determinations made for metal-containing compounds?

Threshold quantities for metal compounds are based on the total weight of the metal compound, not just the metal portion of the metal compound. The threshold quantities are determined by adding up the total weight of all metal compounds containing the same parent metal. However, *release* and other *waste management* estimates are based solely on the weight of the parent metal portion of the metal compounds. Note that there are a few metal compounds that are separately listed and are not counted in the metal compounds categories. For example, maneb (CAS number 12427-38-2) is a manganese compound that is a separately listed chemical and is not reportable under the manganese compounds category.

*Metal Alloys,
Article
Exemption, De
Minimis
Exemption*

72. Regarding metals in *mixtures*, such as chromium in an alloy (stainless steel), how are thresholds and *releases* and other *waste management* activities accounted for in a foundry type operation where all of the metals are melted down? Could the de minimis and *article* exemptions be applied?

For threshold purposes, if the listed *toxic chemicals* in the metals are “*processed*,” “*otherwise used*,” “*manufactured*” as an impurity (that remains with the product), or *imported*, below the de minimis levels, then the de minimis exemption may be taken for that metal in the alloy. However, the *article*

exemption cannot be taken for this type of foundry operation since in founding, a metal is melted down and poured into a mold. Consequently, the resulting metal is not recognizable as its original form.

*Threshold
Determination,
Metal
Compounds
Solution*

73. If a facility has a solution containing a chromium compound, does the facility need to report on the entire mixture or just the chromium when making a threshold determination under Section 313?

To determine if a facility meets an applicable threshold for the chromium compound (or any *toxic chemical*) in a solution, the facility is required to determine the weight percent of chromium compound in the solution and use that amount for threshold determination.

*Threshold
Determination,
Process,
Electroplating*

74. A product is immersed into a plating bath containing nickel chloride (NiCl) to bond nickel to it prior to distribution in commerce. Nickel is incorporated into the final product whereas the chloride remains in the plating bath. Since nickel chloride is reportable under the nickel compound category of Section 313, which threshold applies?

The total weight of nickel chloride used in the plating bath is considered towards the facility's "processing" threshold determination. If the facility exceeds the threshold, the owner/operator would only report releases and other waste management of the nickel, the parent metal. Because the facility is also creating elemental nickel, the amount of nickel "manufactured" from nickel chloride is considered towards the "manufacturing" threshold. If the facility exceeds both thresholds independently, they may file one Form R for nickel and nickel compounds.

*Threshold
Determination,
Metal
Compounds,
Mixture, Metal
Silicates*

75. A facility manufactures specialty glass products. The starting materials are primarily metal silicates which are ground into a powder, mixed, and heated. The resulting mixture, the specialty glass, has all the metal silicates melted together in a non-crystalline structure. Since the metal silicates do not exist by themselves in the mixture, how should a threshold determination be made?

The metal silicates are "processed" since they become incorporated into a product (the specialty glass) that is distributed in commerce. If the metal silicates still exist as the original metal silicates but just mixed together then each metal silicate that belongs to a particular metal compound category is included in the "processing" threshold calculations for that category. If the metal silicates have been reacted to produce another compound (i.e., if the specialty glass is not just a mixture of individual metal silicates but is another new, metal compound) then the metal silicates have still been "processed," but a new metal compound has also been "manufactured" and its weight (i.e., the

**Threshold
Determination,
New Facility**

whole weight of the glass) must be included in “*manufacture*” threshold calculations.

76. A chemical facility split into two separate facilities on July 1, 1996. The owners of the two new facilities do not have any common business interest. The original facility did not “manufacture,” “process,” or “otherwise use” a toxic chemical in excess of a reporting threshold for the period January 1 through June 30, 1996. Neither of the new facilities independently “manufactured,” “processed,” or “otherwise used” a toxic chemical in excess of a reporting threshold for the period of July 1 through December 31, 1996. However, if the total amount of toxic chemicals are combined for all three facilities for the period of January 1 through December 31, 1996, a reporting threshold will be met. For purposes of EPCRA Section 313, how are thresholds for this combination of facilities to be determined?

In this case each of the two “new facilities” would determine what portion of the “*manufacture*,” “*process*,” or “*otherwise use*” of the “old” facility were attributable to it and combine these amounts with those for the period between July 1, and December 31, 1996, to determine whether the facility met the reporting threshold for 1996. If such a determination cannot be made, each “new facility” would have to combine its figures with those of the entire “old” facility in assessing whether the reporting threshold was met. The “new” facilities would not have to include the “*manufacture*,” “*process*,” or “*otherwise use*” of the other “new” facility in computing the reporting threshold.

**Threshold
Determination,
Manufacture,
Fuel, Natural
Gas**

77. A covered facility purchases natural gas that contains EPCRA Section 313 toxic chemicals. The facility uses the gas on-site to heat buildings and power equipment. Before the natural gas is used, the listed toxic chemicals are removed and destroyed in a flare. The definition of “manufacturing” in 40 CFR Section 372.3 states that, “‘Manufacture’ also applies to a toxic chemical that is produced coincidentally during the ‘manufacture,’ ‘processing,’ ‘otherwise use’ or disposal of another chemical or mixture of chemicals, including a toxic chemical that is separated from that other chemical or mixture of chemicals as a byproduct...” Are the toxic chemicals that are removed from the natural gas coincidentally “manufactured,” and hence subject to threshold determination under EPCRA Section 313?

The removal and destruction of an EPCRA Section 313 toxic chemical from a fuel before it is used by a facility is not considered an activity that falls under the definition of “*manufacturing*.” Facilities that use natural gas in production processes sometimes need to remove impurities from the gas before it is used. Such a facility does not coincidentally produce toxic chemicals as byproducts, but merely separates and removes toxic chemicals already present in the gas. These chemicals would not be subject to threshold determinations for reporting under EPCRA Section 313, and would not be subject to *release* and other

waste management reporting unless an activity threshold is exceeded elsewhere at the *facility*. If the *facility* exceeds an activity threshold elsewhere, all *releases* and other *waste management* activities from the impurity removal process would be reportable.

Although these chemical impurities are usually destroyed, they could also be captured for further use at the *facility* or for sale as products, either of which would constitute a reportable activity under EPCRA Section 313. If the chemicals are collected and sold as products or incorporated into products, they are considered "*processed*" and the amount of each chemical is applied toward its "*processing*" threshold. "*Otherwise use*" refers to any use of a *toxic chemical* that is not covered by the definitions of "*manufacture*" or "*process*" (40 CFR Section 372.3). If the chemicals are collected for further use at the *facility*, the chemicals are considered "*otherwise used*," and the amount of each chemical is applied toward its "*otherwise use*" threshold.

*Threshold
Determination,
Non-isolated
Intermediates,
TSCA*

78. TSCA does not regulate non-isolated reaction intermediates. Do these intermediates still need to be considered for threshold determinations and release and other waste management calculations for EPCRA Section 313?

A *facility* owner/operator would need to consider the quantity of non-isolated reaction intermediates "*manufactured*," "*processed*," or "*otherwise used*" at the *facility* when determining thresholds and *releases* and other *waste management* activities for EPCRA Section 313. There is no exemption for non-isolated intermediates under EPCRA Section 313.

*PCBs,
Transformer,
Disposal,
Threshold
Determination*

79. A manufacturing facility removes PCB-laced oil that was contained in its on-site transformers. Would this activity be considered a "*process*" or an "*otherwise use*" of the PCBs, a listed *toxic chemical*, if the facility only extracts the PCB to dispose of it off-site?

If the PCB laced oil is removed from an on-site transformer for disposal and is not replaced with clean PCB laced oil, this would not be considered a "*process*" or an "*otherwise use*." Removal of a *toxic chemical* from an *article* for disposal does not constitute a "*process*" or "*otherwise use*" activity. Therefore, this activity would not be subject to threshold determinations and *release* and other *waste management* reporting under EPCRA Section 313.

F. "Manufacturing," "Processing," or "Otherwise Use"

*Activity
Thresholds,
Process,
Otherwise Use,
Incorporation*

***80. What is the difference between "*process*" and "*otherwise use*" for the purposes of threshold determinations?**

"*Process*" implies incorporation; the *toxic chemical* is intended to become part of a product distributed in commerce. "*Otherwise use*" implies non-incorporation; the

**Activity
Threshold**

toxic chemical is not intended to become part of a product. Beginning with reporting year 1998, “*otherwise use*” will include the on-site disposal, treatment for destruction and stabilization of *toxic chemicals* in wastes received from off-site for the purposes of further *waste management* and *toxic chemical* produced from the management of wastes received from off-site.

81. If I “*manufacture*” 74,000 pounds of a chemical and “*otherwise use*” 9,000 pounds, am I covered?

Yes. The *facility* has exceeded the “*manufacturing*” threshold of 25,000 pounds for the *toxic chemical*. *Releases* and other *waste management* from all activities including the 9,000 lbs “*otherwise used*” of the *toxic chemical* at the *facility* are reportable.

**Otherwise Use,
Off-site Waste**

***82. A covered facility receives a waste containing 13,000 pounds of a listed *toxic chemical*. The facility disposes of 5,000 pounds of the *toxic chemical* and stabilizes the other 8,000 pounds of the chemical. Does the facility meet a Section 313 chemical activity?**

Until January 1, 1998, this *facility* would not be “*manufacturing*,” “*processing*” or “*otherwise using*” the listed *toxic chemical*. However, beginning January 1, 1998, the *facility* would be “*otherwise using*” the *toxic chemical*. Because the *facility* received the 13,000 pounds of chemical A in wastes received from off-site for the purposes of further *waste management*, the amount of the *toxic chemical* that is subsequently “*stabilized*” or “*disposed*” on-site is considered “*otherwise used*” at the *facility* for the purpose of threshold determinations. The *facility* would need to add the amount of the *toxic chemical* that is involved in all “*otherwise use*” activities to determine whether the “*otherwise use*” threshold of 10,000 has been exceeded. In this case, 13,000 pounds of the chemical would be considered “*otherwise used*.”

**Definition of
Otherwise Use,
Activity
Threshold,
Coincidental
Manufacture,
Off-site Waste**

***83. A covered facility, in treating for destruction listed *toxic chemical* A, which it receives from off-site, “*manufactures*” 11,000 pounds of chemical B, another listed *toxic chemical*. The facility subsequently disposes of chemical B on-site. Would the facility meet the “*manufacture*” or “*otherwise use*” threshold for chemical B?**

This “*manufacture*” of chemical B is below the “*manufacturing*” activity threshold of 25,000 pounds. However, after January 1, 1998, the *facility* would also be “*otherwise using*” the *toxic chemical*. Included in activities covered by EPA’s revised interpretation of “*otherwise use*” is the disposal of a *toxic chemical* that is produced from the management of a waste that is received by the *facility*. In this example, because the *facility* received from off-site a waste containing a chemical that is treated for destruction (i.e., chemical A) and during that treatment produced and subsequently disposed of chemical B, the

disposal of chemical B under EPA's revised interpretation would be considered "otherwise used." Because the *facility* disposed of, or "otherwise used," 11,000 pounds of chemical B, the 10,000 pound statutory threshold for "otherwise use" is met. Thus, the *facility* would need to report all *releases* of, and *waste management* activities involving, chemical B.

Activity
Thresholds,
Otherwise Use

***84. A covered facility "manufactures" 11,000 pounds of chemical A, a listed toxic chemical from the treatment of another toxic chemical which was received from off-site. The facility disposes of 6,000 pounds of chemical A and uses 5,000 pounds of chemical A in a non-incorporative, manufacturing activity at the facility. Does this facility meet an activity threshold?**

This *facility* would not meet the "manufacturing" threshold of 25,000 pounds for chemical "A" nor would it meet the "otherwise use" threshold of 10,000 pounds because it is only "otherwise using" 5,000 pounds. However, after January 1, 1998, the *facility* would meet the "otherwise using" threshold for chemical A. Both the on-site disposal and the non-incorporative activities are considered to be "otherwise use" activities. The on-site disposal of chemical A is included among the various activities covered by EPA's revised interpretation of "otherwise use." The *facility* would add the amounts of chemical A involved in both "otherwise use" activities at the *facility* to determine whether they exceed the 10,000 pound "otherwise use" threshold. Since the total amount of chemical A that is "otherwise used" is 11,000 pounds, the *facility* would need to report on all *releases* of, and *waste management* activities involving, chemical A.

Activity
Thresholds,
Otherwise Use,
Neutralization

85. A facility adds a listed acid to wastewater to neutralize the wastewater prior to discharge. Is this activity "manufacturing," "processing," or "otherwise using" the toxic chemical?

Because the listed acid is not incorporated into the final product and distributed in commerce, nor is it created at the *facility*, the *toxic chemical* is "otherwise used" with a threshold of 10,000 pounds.

Activity
Thresholds,
Otherwise Use,
Wastewater
Treatment

86. Would a chemical used only for wastewater treatment be considered "processed" or "otherwise used" for determining the threshold level?

Because it is not intended to be incorporated into a product distributed in commerce, the *toxic chemical* would be "otherwise used."

Otherwise Use,
Threshold
Determination,
Fumigants

87. Must releases of listed toxic chemicals used as fumigants be reported if the other criteria and thresholds are met?

*Activity
Threshold,
Process,
Ammonia,
Waste*

Yes. Fumigant use would be subject to the 10,000 pound "otherwise use" threshold.

88. A facility converts waste animal parts and blood into protein for use as animal feed. The animal parts and blood contain ammonia which is incorporated into the protein product. Is the ammonia subject to Section 313 reporting?

Yes. Because ammonia (NH₃) is incorporated into the end-product, it is considered "processed" and is subject to the 25,000 pound threshold.

*Relabeling,
Threshold
Determination*

89. Our facility domestically purchases a mixture containing toxic chemicals. We store it and then sell it to our customers without even opening the boxes. Must we report on these toxic chemicals?

No, facilities must only report on those toxic chemicals that they "manufacture," "process," or "otherwise use" in excess of the applicable activity thresholds. Because relabeling or redistributing the toxic chemical where no repackaging of the toxic chemical occurs is not "manufacturing," "processing" or "otherwise using" the toxic chemical (40 CFR Section 373.3), the facility is not conducting a reportable activity. Therefore, it does not need to apply these toxic chemicals to the reporting thresholds.

*Process,
Repackage,
Relabel*

90. Are chemicals, which are bought and sold as is, exempt? Does adding additional labels or changing labels in a warehouse constitute repackaging?

Listed chemicals that are repackaged are considered to have been "processed." However, simple relabeling of a container where no repackaging occurs is neither "processing" nor "otherwise use."

*Threshold
Determination,
Metal
Compounds,
Metals,
Chemical
Conversion,
Copper,
Electroplating*

91. In an electroplating operation, a facility uses an elemental copper anode and an electrolyte solution containing a copper compound. During the electrolytic process, elemental copper is deposited at the cathode (the item being plated). As elemental copper is plated out at the cathode, copper goes into solution at the anode forming a copper compound. For purposes of EPCRA Section 313, how would the facility make threshold determinations for copper and copper compounds?

The electroplating of copper is a two step process in which the elemental copper from the anode is converted into a copper compound in solution and the copper compound in solution is converted to elemental copper.

A constant concentration of copper compounds is thus maintained in the electrolytic solution surrounding the electrodes. In such an electrolytic cell, four separate thresholds are applicable for purposes of EPCRA Section 313:

- a. The amount of copper anode consumed counts towards a “*processing*” threshold for elemental copper (since its purpose is to provide copper to the cathode, via the bath).
- b. The amount of copper compound generated in the electrolytic solution (as a result of dissolution of elemental copper at the anode) would count towards a “*manufacturing*” threshold for copper compounds.
- c. The amount of copper compound converted to elemental copper in the electrolytic solution counts toward a “*processing*” threshold for copper compounds (since it is available for reduction at the cathode).
- d. Finally, the amount of copper deposited at the cathode would count towards a “*manufacturing*” threshold for elemental copper (since elemental copper is being produced from a copper compound).

For example, a *facility* uses up 15,000 pounds of copper anode per year (the anode is composed of elemental copper). The elemental copper is “*processed*” by “*manufacturing*” 37,000 pounds of copper sulfate (copper sulfate (CuSO₄) is 40% copper by weight and, in this example, is the form in which copper exists in the electroplating bath). The copper sulfate is then “*processed*” by “*manufacturing*” 15,000 pounds of elemental copper. The following thresholds apply:

	<u>“Manufacture”</u>	<u>“Process”</u>
Elemental Copper	15,000 lbs	15,000 lbs
Copper Compounds	37,000 lbs	37,000 lbs (CuSO ₄)

The *facility* would file a Form R for “Copper Compounds” because it exceeds the “*manufacturing*” and “*processing*” thresholds for a copper compound.

Activity Thresholds, Process, Otherwise Use, Metal Compounds, Electroplating

92. An electroplating facility uses copper cyanide as its source of copper in plating baths in their electroplating operation. Are they “*manufacturing*,” “*processing*,” or “*otherwise using*” this compound? How do they determine whether they meet the activity threshold and how are *releases* and other *waste management* activities reported for this chemical?

In this process the copper cyanide is both “*manufactured*” and “*processed*.” The copper cyanide is created in the plating solution, and the amount created

should be counted towards the 25,000 pound “*manufacturing*” threshold. The copper cyanide is also being “*processed*” since the copper from the copper cyanide is plated onto an object that is to be distributed in commerce. Thus, the copper cyanide used in this process should be counted towards the “*processing*” threshold for both copper and cyanide compounds.

The copper cyanide is both a copper compound and a cyanide compound and is reportable under both the copper compounds category and the cyanide compounds category. The total weight of the copper cyanide is to be counted towards the thresholds for both categories. However, for reporting *releases* and other *waste management* activities, the total weight of the copper cyanide is to be reported under the cyanide compounds category, but only the weight of the copper is to be reported under the copper compounds category.

*Activity
Thresholds,
Process,
Otherwise Use,
Adhesives*

93. A facility covered under EPCRA Section 313 manufactures shoes. During production the facility uses adhesives that contain solvents such as acetone and toluene. Due to the inefficiency of the process, 20 percent of the solvent remains behind in the shoes when they are sold in commerce. Would the facility count the amount of solvent remaining in the shoes toward the 25,000 pound “*processing*” threshold?

No. The amount of solvent used in the adhesive would count toward the 10,000 pound “*otherwise use*” threshold. Since the retention of the solvents in the adhesives used to produce the shoes is unintentional, it would not be considered “*processed*.” Thus, the facility would file a Form R if it meets a 10,000 pound “*otherwise use*” threshold for the toluene in the adhesive.

*Activity
Thresholds,
Otherwise Use,
Process,
Solvent*

94. If a solvent is used in a process and 85 percent evaporates but 15 percent stays with the product, is the listed *toxic chemical* “*processed*” or “*otherwise used*?” The 15 percent was not necessarily intended to stay with the product.

In this case the entire quantity of the solvent is considered “*otherwise used*” and subject to the 10,000 pound threshold. If the solvent was intended to remain in the product, this would be “*processing*.”

*Activity
Thresholds,
Process,
Impurity*

95. A raw material contains a listed *toxic chemical* as an impurity. The raw material is “*processed*” at the facility, and the facility does not have any devices to remove the impurity, which is incorporated into the final product. However, the intent is not to have an impurity in a final product. Is this facility “*processing*” or “*otherwise using*” the chemical?

For Section 313 reporting purposes, as long as the *toxic chemical* impurity is in the raw material being received at the facility, and there is no system at the facility to remove the impurity, the facility is “*processing*” the *toxic chemical*.

Activity
Thresholds,
Coincidental
Manufacture

96. Do toxic chemicals produced coincidentally to “manufacturing,” “processing,” or “otherwise using” have to be reported?

Toxic chemicals “manufactured” coincidentally are included in determining the quantity of the *toxic chemical “manufactured.”* In the case of coincidental “*manufacture*” of an impurity that remains in the product below the de minimis level for distribution in commerce the de minimis exemption may apply (40 CFR Section 372.38(a)). If, however, the impurity is removed from the final product prior to distribution in commerce, the exemption does not apply.

Activity
Thresholds,
Coincidental
Manufacture,
Wastewater
Treatment

97. How can wastewater treatment “products” be considered as “manufactured” from a treatment process?

The definition of “*manufacture*” includes the coincidental generation of a listed *toxic chemical* as a consequence of the *facility’s* waste treatment or disposal activities. These *toxic chemicals* may not be produced for commercial purposes. They are, nevertheless, created as a result of the *facility’s* activities and their *release* or other *waste management* must be accounted for.

Activity
Thresholds,
Coincidental
Manufacture,
Adhesive,
Neutralization

98. A facility uses a caustic product in the manufacturing of an adhesive. A listed acid is added to neutralize the solution to form another listed Section 313 toxic chemical. Is this a covered activity?

Yes. The *facility* is coincidentally “*manufacturing*” the listed *toxic chemical*.

Activity
Thresholds,
Process

99. A facility draws steel rods into a smaller diameter and then distributes the rods in commerce. Is this “manufacture,” “process,” or “otherwise use?”

This activity is considered “*processing*” because the *toxic chemical* remains incorporated in the final product distributed in commerce.

Otherwise Use,
Manufacturing
Aid, Processing
Aid

100. What is the difference between a manufacturing aid and processing aid?

A chemical processing aid is added directly to the reaction *mixture* or is present in a *mixture* used to aid in processing and does not intentionally remain in the product. Examples include catalysts, solvents, and buffers. A manufacturing aid helps to run the equipment and is never incorporated into the product. Examples include lubricants, coolants, and refrigerants. Since incorporation of the *toxic chemical* into the final product is not intended in either case, *toxic chemicals* that are used as manufacturing aids or as processing aids are considered “*otherwise used*” under EPCRA Section 313.

*Manufacture,
Chemical
Qualifier,
Fume or Dust,
Coincidental
Manufacture,
Mold*

101. We have purchased in excess of 100,000 pounds of aluminum material in block form to make a mold which stays on-site. When making the mold, fumes and dust are byproducts. Do we report these as the *toxic chemical*?

Aluminum appears on the list of *toxic chemicals* as "aluminum (fume or dust)." You must determine if you "*manufacture*," "*process*," or "*otherwise use*" aluminum fume or dust. In this case you do not "*process*" or "*otherwise use*" the fume or dust, but you do "*manufacture*" aluminum fume or dust coincidentally as a byproduct of making molds. Therefore, you must report for aluminum (fume or dust) if you exceed the 25,000 pound "*manufacturing*" threshold for the reporting year.

*Activity
Thresholds,
Process*

102. A facility manufactures a part from stainless steel bar. The annual quantity purchased is 500,000 pounds which is 18 percent chromium and 8 percent nickel. Does the facility have to report under Section 313 for either chromium or nickel?

The facility must report for the quantity of chromium because its quantity (90,000 pounds) is above the "*processing*" threshold of 25,000 pounds. The facility would also have to report for nickel because its quantity (40,000 pounds) is also above the "*processing*" threshold.

*Process,
Activity
Thresholds,
Ingots*

103. A facility melts aluminum ingots, reshapes them, and injects them into die to form parts. Does the 25,000 pound "*processing*" threshold apply to the amount of molten aluminum processed?

For the reporting year, the 25,000 pound threshold applies to the amount of aluminum fume or dust generated at the facility, not the aluminum in molten (liquid) or solid form. Therefore, the facility must determine whether they "*manufacture*" or "*process*" more than 25,000 pounds of aluminum fume or dust during their processing operation.

*Activity
Thresholds,
Lead*

104. A remanufacturer of auto engines cleans the engine parts and thereby produces a lead-containing waste (from gasoline lead deposits) which it disposes of on-site. Are they a "*manufacturer*," "*processor*," or "*otherwise user*" of lead compounds?

None of the EPCRA Section 313 activities apply. Neither lead nor lead compounds are "*manufactured*." Lead is not incorporated into products for distribution in commerce nor is it a manufacturing aid or a processing aid as those terms are defined. Lead in the waste would not be included for threshold determination. The facility does not "*manufacture*," "*process*," nor "*otherwise use*" lead compounds.

Mixture,
Process,
Threshold
Determination

105. Are chromium and nickel as components of stainless steel exempt from reporting if the facility is "processing" the stainless steel?

No. Stainless steel is a solid/solid *mixture*. Chromium and nickel are components of stainless steel. If the *facility* is incorporating the stainless steel into a product it intends to distribute in commerce, the company is "*processing*" the stainless steel as defined in Section 313. For example, if the *facility* makes porous metal filters from stainless steel powder or fabricates pressurized vessels, bar, or ingots of stainless steel, threshold determinations for the nickel and chromium components of the steel are required. The *facility* must report if the amounts "*processed*" exceed the reporting thresholds.

Activity
Thresholds,
Chromium,
Refractory
Brick, Metal
Compounds

106. A glass manufacturer uses a brick in its refractory kiln that contains chromium III compounds. During the manufacturing process, the chromium reacts to generate chromium VI compounds. The chromium compounds, while being used in the kiln, become part of the glass being manufactured. All the brick in the kiln is replaced every four to five years. What activity thresholds apply to chromium in this situation?

The brick, and thus the chromium III compounds in the brick, are being "*otherwise used*" based on the quantity of the bricks installed within a reporting year. The chromium compounds in the bricks are also considered "*processed*," because the chromium compounds in the brick are incorporated as an impurity into the final product (the glass) which is distributed in commerce. The chromium VI compounds generated from the chromium III compounds are considered "*manufactured*." Thus, threshold calculations should be made for all three EPCRA Section 313 activity thresholds. The thresholds would be calculated based on the total weight of the chromium compounds being "*manufactured*," "*processed*," or "*otherwise used*." However, only the weight of the chromium in the chromium compounds are used in *release* and other *waste management* calculations. Any *releases* that go up the stack or are sent off-site for *waste management* must be included. When the brick is replaced and disposed of, the amount of chromium that remains in the brick would also need to be included in *release* and other *waste management* calculations.

Activity
Thresholds,
Process,
Repackage

107. A multi-establishment facility, with a primary SIC code of 2911 operates a petroleum bulk station, and terminal, with SIC code 5171. The bulk station receives gasoline from tanker trucks and stores the gasoline in storage tanks on-site. The facility also loads other tanker trucks with gasoline that distribute the gasoline to service stations. Are the listed toxic chemicals in the gasoline "processed," "otherwise used," or neither?

Since the *facility* repackages the gasoline by transferring it between trucks and bulk storage containers for further distribution into commerce, the *facility* is "*processing*" the listed *toxic chemicals* in the gasoline.

Activity
Threshold,
Otherwise Use,
Solvent

108. If a listed *toxic chemical* is used as a solvent but does not become part of the final product, is the chemical covered for reporting purposes?

If a solvent is not incorporated into a product distributed in commerce, then for the purposes of Section 313, it would be considered "*otherwise used*." It would be subject to reporting if used in quantities exceeding 10,000 pounds per year.

Activity
Thresholds,
Otherwise Use

109. A *facility* uses paint thinners in its processes. The thinners are evaporated or baked out of the finished painted products. Are those chemicals subject to Section 313 regulations?

If the chemical evaporates or is baked out of a finished coating, it has been "*otherwise used*" and is subject to the 10,000 pound threshold.

Process

110. Is soldering light bulbs with lead solder considered "*processing*" of the solder?

Yes, it incorporates the solder into a product for distribution in commerce.

Activity
Thresholds,
Process,
Otherwise Use

111. A *facility* uses methanol in its gas-carburizing heat treatment of steel. The main purpose of methanol in the *facility's* operations is to provide the source of carbon that is deposited on the steel. Is this "*processing*" or "*otherwise use*" of the methanol?

The methanol is being "*processed*," not "*otherwise used*," because the methanol is the source of the carbon for the carburization activity. The methanol is being reacted, and the carbon from it is being incorporated into the steel.

Activity
Thresholds,
Process,
Repackage

112. Does the placing of a bulk liquid containing a small percentage of a Section 313 *toxic chemical* into small bottles for consumer sale constitute a reportable/threshold activity of the *mixture*?

Yes, it is a type of "*processing*" (40 CFR Section 372.3). If the bulk liquid contains a Section 313 listed *toxic chemical* in excess of the de minimis level, the *toxic chemical* in the liquid would have to be factored into calculations in determining whether the "*processing*" threshold is exceeded for that *toxic chemical*.

Activity
Thresholds,
Process,
Otherwise Use,
Paint

113. Paint containing listed *toxic chemicals* is applied to a product and becomes part of an *article*. Does the 25,000 pound "*processing*" threshold apply? What about the volatile *toxic chemicals* from the painting operation - are they "*otherwise used*," and thus subject to the 10,000 pound threshold?

Yes. This is a case in which listed *toxic chemicals* in the same *mixture* may have different uses and therefore, different thresholds. The listed *toxic chemicals* that are incorporated as part of the coating are “*processed*,” whereas the volatile solvents in the paint are “*otherwise used*” because they are not intended to be incorporated into the *article*.

Activity
Thresholds,
Otherwise Use

114. A printing company uses a listed *toxic chemical* to manufacture labels. The chemical is mixed with ink and then applied to the labels. The chemical slows down the ink’s evaporation rate. During the drying process, the chemical is removed and the final product contains no trace of the *toxic chemical*. Does the use of the chemical in this manner constitute “*processing*” because it is used as a “performance enhancer?”

No. The *toxic chemical* is considered “*otherwise used*” because the listed *toxic chemical* is not incorporated into the final product when it is distributed in commerce. A *toxic chemical* is considered a “performance enhancer” if the *toxic chemical* is incorporated into the end product and improves the performance of the end product distributed in commerce.

Threshold
Determination,
Release to
Land, Land
Treatment,
Release
Reporting,
Fertilizer

115. When completing the Form R, how would a *facility* report the *releases* of a listed *toxic chemical* that is used as a fertilizer? Does it matter if the fertilizer is a waste or a purchased product? Would the application on-site constitute a *release* to land on Part II Section 5.5 of Form R?

Based on the information provided, the amount of the *toxic chemical* in the fertilizer applied to land on-site would be counted towards the “*otherwise use*” threshold unless it meets the *facility* grounds maintenance exemption. The *toxic chemical* in the fertilizer would be reported in Part II Section 5.5 of the Form R, regardless of whether it is a purchased product or a waste.

Process,
Repackage,
Article
Component

116. A car manufacturer has a central 25,000 gallon storage tank on-site. A pipe leads from the central storage tank to a fill station where the cars are filled with gas before being sent off-site to be sold. Is the “*processing*” of the *toxic chemical* components of the gasoline considered “*repackaging only*” or “*as an article component*?”

The *toxic chemicals* in the gasoline should be reported as “*processed as an article component*” because they are incorporated into the car which is an *article*. (See Section 3.2 (c) of the Form R and Instructions.)

Activity
Thresholds,
Process,
Chlorine

117. In an aluminum casting process, a *facility* bubbles chlorine gas through molten aluminum. The chlorine reacts with impurities in the aluminum and produces a byproduct called “*dross*,” which is distributed in commerce. Small quantities of unreacted chlorine are emitted during this process. What is the applicable threshold for chlorine in this process?

Activity
Thresholds,
Process,
Otherwise Use,
Methylenebis
(Phenylisocyanate),
Molds

Because the chlorine reacts with impurities and becomes incorporated in the dross, which is distributed in commerce, the chlorine is considered "*processed*." If the amount of chlorine "*processed*," which includes both the chlorine incorporated in the dross and the unreacted chlorine, exceeds 25,000 pounds, a Form R must be filed and any *releases* of chlorine must be reported.

118. A facility uses a listed toxic chemical methylenebis (phenylisocyanate) to create molds from which they produce metal castings. Normally these molds are kept by the manufacturer or are broken up for reuse. Has the toxic chemical been "otherwise used" or "processed" by the facility?

The *toxic chemical* is "*otherwise used*." It is not "*processed*," because it does not become part of a product that is distributed in commerce.

Activity
Thresholds,
Process, Toll
Processor,
Pesticides

119. An agri-chemical manufacturer produces a specialty pesticide for a farmer by blending chemicals which have been supplied by the farmer. It then applies the pesticide to the farmer's crops. Does the blending of the listed toxic chemicals received from the farmer for application to the farmer's crops constitute "processing" of the toxic chemicals? Does the agri-chemical manufacturer, as a "toll processor," have to count the listed toxic chemicals towards the threshold determination?

Yes to both questions. The blending of the *toxic chemicals* and their subsequent transfer back to the farm for application to the farmer's fields constitutes "*processing*." The origin of the processed material is irrelevant, and the return of the blended *toxic chemicals* for application on the farmer's fields can be considered products distributed in commerce. Therefore, the "*processing*" threshold would apply. "Toll-processing" is no different than any other "*processing*." The agri-chemical manufacturer must make threshold determinations based on the amount of any listed *toxic chemical* it "*processes*" as well as any other "*manufacturing*" or "*otherwise use*" activities that occur at its *facility*.

Coincidental
Manufacture,
Ammonia

120. Are meat renderers who process animal waste byproducts (i.e., blood, feathers, bones, etc.) required to report the ammonia generated in the condensate water from the cooking of these byproducts?

The ammonia generated from the rendering (cooking) process is considered to be coincidentally "*manufactured*," and thus, must be reported under EPCRA Section 313 if ten percent of the amount of aqueous ammonia produced exceeds the 25,000 pound "*manufacturing*" threshold.

Activity
Thresholds,
Otherwise Use,
Ammonia,

121. A food processor uses ammonia in its baking processes. In the first process, aqueous ammonia is reacted to form ammonium bicarbonate. The ammonium bicarbonate is added to the dough which is baked in an oven. When baked, the ammonium bicarbonate is dissociated in the

Manufacture

dough and the heat drives off anhydrous ammonia. Is this considered “manufacturing” or “otherwise using” ammonia?

The aqueous ammonia is reacted with another substance to form ammonium bicarbonate which is then used on-site. Therefore, the aqueous ammonia is considered to be “otherwise used” and is subject to the 10,000 pound “otherwise use” threshold. The anhydrous ammonia is being “manufactured” from the breakdown of the ammonium bicarbonate during the baking process which generates anhydrous ammonia, carbon dioxide, and water vapor. Thus, the amount of anhydrous ammonia generated during baking is counted towards the 25,000 pound “manufacturing” threshold.

*Activity
Thresholds,
Process,
Redistribute,
Storage*

122. If a person is simply storing and redistributing a toxic chemical without repackaging it, is this activity considered “processing” of the toxic chemical for Section 313 purposes?

No. The term “process” means the preparation of a listed *toxic chemical*, after its manufacture, for distribution in commerce. Because the *toxic chemical* is not repackaged but is merely redistributed, the *facility* is not “processing” the *toxic chemical*.

*Activity
Thresholds,
Process, Waste*

123. A barge repair facility (SIC code 3731- ship building and repairing) cleans barges at its facility by vacuuming out residual toxic chemicals and selling the waste to a chemical recovery company. Must the facility report for the listed toxic chemicals in waste? Is it a “processor” under Section 313? What if the waste is not sold?

Because the *facility* distributes the *toxic chemicals* in the waste into commerce, they are “processing” the *toxic chemical*. Releases from activities such as spills and equipment cleaning, must be reported if the *facility* exceeds the “processing” threshold. If the *toxic chemicals* in the waste are not distributed into commerce, the *facility* is not “manufacturing,” “processing,” or “otherwise using” the *toxic chemical* and the *toxic chemical* is not subject to reporting.

*Coincidental
Manufacture,
Byproduct,
Threshold
Determination,
Concentration
Information*

124. A listed toxic chemical is “manufactured” as part of a mixture which is a byproduct. The facility does not know the specific concentration of the listed toxic chemical in this byproduct. For determining the threshold for Section 313, does the facility include this byproduct without knowing the specific concentration of the listed toxic chemical?

Because the reporting *facility* is “manufacturing” the *toxic chemical mixture* on-site, the *facility* is required to calculate the amount of the *toxic chemical* coincidentally “manufactured” during the reporting year based upon an estimate of the percentage of the *toxic chemical* in the *mixture*. This quantity is

- aggregated to determine if the *facility* exceeds the 25,000 pound threshold for “*manufacturing*.”
- Activity Thresholds, Process, Otherwise Use, MDI**
- 125. A covered facility uses methylene bis(phenylisocyanate) (MDI) as an ingredient in the making of packing foam. When blown into foam, the MDI reacts to form a polymer. This foam is then packed with metal parts and shipped from the facility. What threshold would apply to the MDI, the “*processing*” or “*otherwise used*?”**
- The MDI would be subject to the “*processing*” threshold, since it is incorporated into a product that is further distributed in commerce.
- Activity Thresholds, Otherwise Use**
- 126. A facility received material X packaged in 50-gallon drums. Material X is immersed in methanol which acts as a packaging/coolant medium for material X during transport. As soon as the facility receives its delivery, it removes material X from the methanol, recaps the drum, and sends it back to the supplier. Should the owner/operator consider the methanol for threshold determinations and *release* and other *waste management* calculations under EPCRA Section 313?**
- Yes. The owner/operator must incorporate the methanol in drums that it opens to remove material X into its threshold determinations and *release* and other *waste management* calculations. The methanol, in this instance, is being “*otherwise used*.”
- Activity Threshold, Otherwise Use, Xylene**
- 127. I use xylene as a carrier to apply coatings to a product. The xylene is not incorporated into the product but it is necessary in order to manufacture it. Is the xylene “*processed*” or “*otherwise used*?”**
- The xylene is “*otherwise used*” since it is not incorporated into the product.
- Activity Threshold, Otherwise Use, Ammonia**
- 128. An engineering company performs reduction processes. In a NO_x reduction process ammonia is used. Ideally, all of the ammonia would be consumed but, realistically, some always escapes out the stack. The ammonia reductions were determined to effect a net reduction in emissions. Are the minor quantities that escape subject to Section 313 reporting?**
- The ammonia used in the process would be “*otherwise used*.” If the “*otherwise use*” exceeds the 10,000 pound threshold, the *facility* would be required to report any *releases* of ammonia.
- Activity Threshold, Process, Ammonia**
- 129. Ammonia, an EPCRA Section 313 chemical, is used at a manufacturing facility to adjust pH levels in cheese products. During this process, the ammonia is converted into a salt which remains with the final cheese product. The cheese is then distributed in commerce. Is this considered a**

**Chemical
Conversion**

covered activity under EPCRA Section 313, and, if so, how should it be reported on the Form R?

Ammonia used in this manner is considered "*processed*" under EPCRA Section 313 and must be applied toward that threshold. The definition of "*process*" found at 40 CFR Section 372.3 affirms that a listed *toxic chemical* prepared for distribution in commerce is a reportable activity even if it is distributed in a different form or physical state from that in which it was originally received. All of the ammonia incorporated into the cheese is "*processed*" as a reactant and should be reported as such on the Form R.

**Chemical
Qualifier,
Fume or Dust,
Aluminum**

130. A facility uses aluminum in its manufacturing operations. These operations involve welding, diecasting, buffing, and grinding. Is the facility subject to Section 313 reporting for this use of aluminum?

Aluminum would be reportable under Section 313 only if a fume or dust was generated (i.e., "*manufactured*") during welding, diecasting, buffing, grinding, or other operations above 25,000 lbs. In some operations, aluminum may be "*processed*" in a fume or dust form.

Process, Fuel

131. A facility covered under EPCRA Section 313 manufactures and repairs airplanes. Prior to beginning any repair work, any fuel remaining in the airplane's fuel tanks is emptied by service personnel at the facility. After the repairs are completed, the airplane is refueled with fuel removed from the airplane's fuel tanks and/or new fuel. Should the owner/operator of the manufacturing and repair facility consider the *toxic chemicals* present in the fuel when making Section 313 threshold and *release* and other *waste management* calculations?

Yes. For purposes of Section 313 threshold and *release* and other *waste management* calculations, the listed *toxic chemicals* present in the fuel are considered to be "*processed*" because they are being further distributed in commerce. Thus, the listed *toxic chemicals* present in the fuel are subject to the 25,000 "*processing*" threshold.

**Otherwise Use,
Threshold
Determination,
Refractory
Brick**

132. Refractory brick containing 12,000 pounds of lead is installed in a reaction vessel. Is the lead in the brick considered "*otherwise used*" for purposes of EPCRA Section 313? Also, are *releases* of lead from the brick during the 1997 reporting year subject to *release* reporting on the Form R if no new bricks are added during the reporting year?

The lead contained in the bricks is considered "*otherwise used*" since it is not incorporated into the final product. The *facility* would count the amount of lead in the bricks that are added to the reaction vessel only for the year in which the bricks are installed. In answer to the second question, if the 10,000

Process,
Repackage

pound threshold is exceeded, then all *releases* of lead would be reported. Neither the lead contained in the refractory bricks in the inventory (*i.e.*, not yet installed), nor in-place lead contained in bricks (*i.e.*, installed in a previous year) are to be included in threshold determinations for the reporting year in question. If no bricks are installed during the reporting year, and lead is not used elsewhere at the facility, then a report would not be required.

133. A facility receives a shipment of five-gallon cans of paint containing a listed toxic chemical. The facility breaks up the shipment into separate five-gallon cans and packages each can in a box with a paint brush for sale. Is the listed toxic chemical repackaged and thus "processed" for purposes of EPCRA Section 313?

No. "Repackaging" refers to the act of removing a *toxic chemical* from one container and placing it in another. Simply repackaging a container that contains a *toxic chemical* does not constitute "processing" of that listed *toxic chemical* under EPCRA Section 313.

Activity
Thresholds,
Process,
Reclamation,
Solvents

134. A reclamation facility receives waste solvents containing an EPCRA Section 313 toxic chemical from a separate facility that generated the wastes (the generating facility). The reclamation facility reclaims the listed toxic chemical and returns it, as a product, to the generating facility. For the purpose of EPCRA Section 313 threshold determinations, is the reclamation facility "processing" the listed toxic chemical?

Yes. By reclaiming the listed *toxic chemical* and returning it to the generator, the reclamation *facility* has prepared the chemical for distribution in commerce by incorporating the chemical into a product. Therefore, the reclamation *facility* is "processing" the *toxic chemical* in the waste solvent it receives. Assuming the reclamation *facility* is a *covered facility* with 10 or more full-time employees, it is required to report under EPCRA Section 313 for the *toxic chemical* if it exceeds an activity threshold (*e.g.*, "processing" more than 25,000 pounds) during the course of a reporting year.

Process,
Naturally
Occurring
Chemical,
Nicotine

135. A cigarette manufacturer receives tobacco which naturally contains nicotine, an EPCRA Section 313 toxic chemical. The manufacturer does not add or alter the concentration of nicotine in the cigarettes when processing the tobacco. Is the nicotine considered to be "processed" even though it is naturally present in tobacco and not added to the finished product?

Yes. There are no provisions under EPCRA Section 313 that exempt naturally occurring chemicals that are known to be a part of a *facility's* raw material. Although the *facility* does not manipulate the concentration of the *toxic chemical* in the raw material, the *facility* is "processing" the *toxic chemical* as

defined in 40 CFR Section 372.3. Thus, the *facility* would need to file a Form R or Form A for nicotine if it is “*processed*” at the *facility* in amounts greater than or equal to the 25,000 pound activity threshold, assuming that the *facility* meets the other applicability criteria found in 40 CFR Section 372.22.

*Process, Intra-
Company
Transfer,
Formaldehyde*

136. A *facility* covered under EPCRA Section 313 uses formaldehyde as an ingredient in feedstock. The feedstock is sent for use to another *facility* under common ownership. The preparing *facility* does not receive direct compensation for the product, nor is the product distributed to the general public. Does such a transfer of a listed *toxic chemical*, after its preparation, to another *facility* under common ownership constitute distribution in commerce and thus need to be considered in threshold determinations for reporting under EPCRA Section 313?

Yes. Under EPCRA, “*process*” means the preparation of a listed *toxic chemical*, after its “*manufacture*,” for distribution in commerce (40 CFR Section 372.3). Distribution in commerce includes any distributive activity in which benefit is gained by the transfer, even if there is no direct monetary gain. Listed *toxic chemicals* that are shipped from one *facility* to another *facility* under common ownership are considered to be distributed in commerce. Although the chemical in the product is not distributed to the general public, the preparing *facility* does derive economic benefit by transferring the listed *toxic chemical*, as both *facilities* are under common ownership. The amount of listed *toxic chemical* prepared at the *facility* must be counted towards the 25,000 pounds “*processing*” threshold.

*Process,
Double
Counting,
Multiple
Processing
Steps*

137. A metal fabrication *facility* covered by EPCRA Section 313 extrudes ingots containing 20,000 pounds of copper into rods. The *facility* then transfers the rods containing 20,000 pounds of copper to another portion of the *facility*, which is completely separate from the extruding operation, for further processing, such as grinding. Has the *facility* “*processed*” 40,000 pounds of copper, and thus exceeded the “*processing*” threshold of 25,000 pounds per reporting year?

No. In this scenario, the *facility* has only “*processed*” 20,000 pounds of copper and would not be subject to reporting pursuant to 40 CFR Part 372 for this *toxic chemical*. For threshold purposes, *facilities* must count the amount of a *toxic chemical* that is “*processed*” during the reporting year. *Facilities* should not, however, double count *toxic chemicals* that are subject to multiple on-site processing steps before being distributed in commerce. Conversely, *facilities* that transfer listed *toxic chemicals* off-site for “*processing*” and receive the same *toxic chemical* back for further “*processing*” must count the listed *toxic chemical* twice when calculating thresholds because the listed *toxic chemical* is considered to be newly obtained.

*Process,
Repackage*

138. A manufacturing facility receives shipments of an EPCRA Section 313 listed toxic chemical in rail cars. The listed toxic chemical is transferred from the rail cars into large tank trucks for distribution to customers. The quantity of the listed toxic chemical held in the tank trucks is approximately equivalent to the amount held in the rail cars. Would the transfer of the listed toxic chemical from the rail cars to the tank trucks be considered repackaging and therefore included in "processing" threshold determinations?

Yes. All activities involving the preparation of a listed toxic chemical, after its "manufacture," for distribution in commerce are to be included in the "processing" threshold determination for that chemical. The Agency defines "processing" to include "...the preparation of a chemical for distribution in commerce in a desirable form, state, and/or quantity (i.e., repackaging)..." (53 FR 4506; February 16, 1988). The act of removing a listed toxic chemical from one container and placing it in another is considered repackaging, regardless of the size of the containers involved. As such, the facility must include any amounts transferred from the rail cars to the tank trucks in its "processing" threshold for that chemical.

*Activity
Thresholds,
Manufacture,
Compounds,
Compounding*

139. The Section 313 definition of "manufacture" includes the term compounding, does this mean that if a chemical is mixed with other chemicals in order to compound a product that the "manufacturing" threshold is to be used?

No. Compounding as used under Section 313 means that a chemical has been created not that chemicals have been mixed together to form a new product. Thus, depending on the specifics of the use of the chemical amounts would be counted towards the "otherwise use" threshold or the "processing" threshold, but not the "manufacture" threshold.

*Activity
Thresholds,
Process,
Otherwise Use,
Zinc
Compounds*

140. For reporting under EPCRA Section 313, a facility sprays a solution that contains zinc phosphate onto steel to coat it. Of the 100 pounds of solution that are actually sprayed onto the steel, only 1 pound actually coats the steel; the remaining 99 pounds are overspray. While on the steel the zinc compounds serve a dual purpose; they inhibit corrosion and clean the steel. How is the zinc phosphate process to be reported?

In this process it appears that the primary purpose of applying the zinc phosphate solution is to clean the steel. As such, the Agency considers the 99 percent of the zinc compound used to clean the steel to be "otherwise used" and subject to the 10,000 pound threshold. The one percent of the zinc that is incorporated into the product to inhibit corrosion is counted towards the "processing" threshold.

Activity
Threshold,
Otherwise Use,
Formaldehyde

141. A melamine formaldehyde resin containing a small amount of unreacted formaldehyde monomer is purchased by a facility, dissolved in water and applied to paper to produce a polymer-coated product. In the process of coating the paper all of the formaldehyde evaporates. Is the formaldehyde “processed” or “otherwise used?”

Since the formaldehyde is not incorporated into the product, it is “otherwise used.” The formaldehyde would not be counted at all if the amount is below the de minimis of 0.1 percent in the incoming resin mixture (53 FR 4509; February 16, 1988).

G. Importing

Import

142. Under “manufacture/import,” what constitutes import? Does the threshold apply if you have a broker who imports the toxic chemical for you, stores it for you, and then ships the toxic chemical to you? What criteria apply?

Use of a broker does not negate facility “importation” (“manufacture”) of a listed toxic chemical. If your facility specified that a listed toxic chemical or mixture containing a toxic chemical be obtained from a foreign source and you specified the amount, then your facility “imported” the toxic chemical. The criteria are that you caused the listed toxic chemical to be brought into the customs territory of the U.S. and you “control the identity of the toxic chemical and the amount to be imported.”

Import,
Manufacture

143. Should the amounts of a chemical “manufactured” and imported be added together to count towards the “manufacturing” threshold?

Yes. Because EPCRA defines both creation and importation as “manufacturing,” you must add the amounts of the chemical undergoing each activity together to determine the “manufacturing” threshold.

Import, Foreign
Trade Zone

144. My facility imports over 25,000 lbs of an EPCRA Section 313 toxic chemical to be used in the U.S. to manufacture a product (e.g., used as an intermediate) or to be processed in the United States. The product is then exported in its entirety. Is the chemical subject to the EPCRA Section 313 requirements?

Yes. If the facility that caused the importation meets the employee criterion, covered SIC code criterion, and toxic chemical activity threshold, then the facility must fill out a Form R. The only exception would be if the chemical was imported for entry into “Foreign Trade Zones (FTZ)” for reexport. However, if any portion of the chemical or the product is withdrawn from the FTZ with intention of distribution into the U.S., then the chemicals that were used

*Import, Toll
Processor,
Threshold
Determination*

for the portion entering U.S. commerce are counted toward the TRI activity threshold. Please remember, there are other EPA *importing* requirements under other environmental statutes.

145. Facility A orders 50,000 pounds of a listed *toxic chemical* from a foreign supplier but has that *toxic chemical* shipped directly to a toll processor. The toll processor then sends the formulated product containing the *toxic chemical* to Facility A in the same reporting year. Who is considered the *importer* and thus subject to the “*manufacturing*” threshold for that *toxic chemical*?

The toll processor has not caused the listed *toxic chemical* to be *imported*, therefore they are not subject to the “*manufacturing*” threshold. The toll processor, however, is subject to the “*processing*” threshold for that listed *toxic chemical* and should report. Facility A has *imported* the listed *toxic chemical* when the product is received from the toll processor. This is because Facility A has caused the listed *toxic chemical* to be *imported* and ultimately received the listed *toxic chemical*, even though there was some intermediate processing applied to the *toxic chemical*. There is no practical difference in coverage under the regulations unless the manufacturing *facility* does not further “*otherwise use*” or “*process*” the product. For example, if the *facility* only labels the product containers and ships them to customers, they are still subject for reporting the *toxic chemical* because the act of *importation* is considered “*manufacturing*.”

*Import,
Warehouse*

146. Regarding 40 CFR Section 372.45, a *facility imports* a listed chemical, but it is *imported* directly to stand-alone warehouses (not of the *facility's* ownership). The *facility* controls the sale/distribution of these unaltered products. Should the warehouses properly report on these materials or should the *facility*?

The *facility* should count the chemical towards its “*manufacturing*” threshold only if it actually receives the *toxic chemical* at the *facility*. The warehouse is a separate *facility*, and may not be within a *covered SIC code*; it therefore may not need to report. If the warehouse assumes the SIC code of the *facility* it supports, it is an auxiliary *facility*, and it will need to make employee and threshold determinations. Because the warehouse has not caused the *toxic chemical* to be *imported*, it has not “*manufactured*” the *toxic chemical*. However, if the warehouse “*processes*” or “*otherwise uses*” the chemical above an applicable activity threshold, and meets the other EPCRA Section 313 criteria, it would be required to file the Form R.

Import, Broker

147. A *facility* did not specify a source for a material broker to obtain a listed *toxic chemical*, but learns that the only U.S. manufacturer of the

chemical has gone out of business. Is the facility importing the chemical and, therefore, subject to the "manufacturing" threshold?

Yes. The *facility* knows that it has caused the listed *toxic chemical* to be *imported* to the U.S. because there are no U.S. sources. Therefore, the amount of the chemical that is caused to be *imported* by the *facility* through a broker must be included within the 25,000 pound "manufacturing" threshold determination for that listed *toxic chemical*.

H. Auxiliary Facilities

Auxiliary
Facility, SIC
Code

148. An auxiliary wastewater treatment plant, which is not a RCRA Subtitle C facility, has taken on the SIC code of a covered facility because it primarily services a covered facility. Does the facility where the treatment plant is located have to report even if the rest of the establishments at that facility are not in the covered SIC codes?

A *facility* must report only if it meets the employee, SIC code and activity criteria. As long as the wastewater treatment plant does not represent the *major part* of the goods and services produced at the *facility*, the SIC code criterion is not met. Therefore, the *facility* as a whole need not report. The *covered facility* producing the listed *toxic chemical* in the waste must report the off-site transfer to the *facility* containing the wastewater treatment plant.

Auxiliary
Facility,
Reporting
Criteria

149. Are auxiliary facilities associated with activities at a facility in a covered SIC code exempt from reporting under Section 313?

No. An "auxiliary *facility*" is one that directly supports another *facility/enterprise's* activities and therefore takes the SIC code of the *facility* supported. Auxiliary *facilities* located on separate property must report if they also meet the employee and activity thresholds. Auxiliary *establishments* that are part of multi-establishment *facilities* should be included in *facility* threshold and *release* other *waste management* determinations. For example, a spill from the warehouse would be included in the *covered facility's release* quantities.

Auxiliary
Facility, SIC
Code, Multi-
Establishment,
Laboratory

150. Is my facility covered by EPCRA Section 313, if the value of laboratory research at my facility is greater than 50 percent of the total value of goods and services produced at my facility?

If the research laboratory is a separate *establishment* from the other activities at the *facility* and its SIC code is not in a *covered SIC code*, then the 50 percent test is used to determine if the whole *facility* is in the *covered SIC codes*. In this case, the *facility* would not be subject to reporting because the primary SIC code is not within the *covered SIC codes*. However, if the laboratory is within the *covered SIC codes*, because it is an auxiliary *establishment* providing

Auxiliary
Facility,
Electroplating

research to support operations in the *covered SIC codes*, the *facility* would be covered by Section 313.

151. An airplane engine repair shop (generally SIC code 7699) owns an “auxiliary” facility at a separate location that does metal plating for the engine repair shop and other facilities (generally SIC 3471-- Plating of Metals and Formed Products). Would the plating facility be exempt?

According to the SIC code manual, this *facility* would not be “auxiliary” because it is not primarily engaged in performing support services for one other *facility*. Instead this *facility* would be considered a separate operating *establishment* conducting a “*manufacturing*” activity. It would, therefore, need to make the employee and activity threshold determinations and report, if appropriate, because it falls within a *covered SIC code*.

I. Indian Lands

Indian Lands,
EPCRA
Reporting

152. In 1986, Congress passed EPCRA, to help local communities, including Indian reservations, protect public health and the *environment* from chemical hazards by informing citizens about the chemicals present in their communities. On July 26, 1990, EPA published a rulemaking in the Federal Register designating Indian Tribes and their chief executive officers as the implementing authority for EPCRA on all Indian lands (55 FR 30632). What is EPA’s policy regarding the implementation of the different provisions of EPCRA on Indian lands?

EPA’s policy is to work with Tribes on a government to government basis in implementing the requirements of EPCRA. EPCRA contains four major provisions: planning for chemical emergencies, emergency notification of chemical accidents and *releases*, reporting of hazardous chemical inventories, and *toxic chemical release* reporting. The emergency planning provisions of EPCRA Sections 301-303 are designed to help Indian Tribes prepare for, and respond to chemical emergencies occurring on Indian lands that involve extremely hazardous substances (EHSs), found at 40 CFR Part 355, Appendix A and B. The chief executive officers of federally recognized Tribes must appoint *Tribal Emergency Response Commissions (TERCs)*, responsible for carrying out the provisions of EPCRA in the same manner as State Emergency Response Commissions (SERCs). Alternatively, Tribal leaders can join a Tribal Coalition which functions as the *TERC*, or establish a Memorandum of Understanding with a *State* to participate under the SERC. *TERCs* establish emergency planning districts and can appoint Local Emergency Planning Committees (LEPCs) or act as *TERCs/LEPCs*, performing the functions of both. LEPCs use information collected under EPCRA to develop local emergency response plans to respond quickly to chemical accidents. The chief executive officer should ensure that *TERCs* maintain a broad-based representa-

tion, including Tribal public agencies and departments dealing with environmental, energy, public health and safety issues, as well as other tribal community groups with interest in EPCRA. The Tribal LEPC should also be representative of the community, and should include elected Tribal officials, fire chiefs, Indian Health Services officials, Bureau of Indian Affairs officials, Tribal elders and leaders, representatives of industries on or near the reservation, and members of the general community.

The emergency *release* notification provisions of EPCRA Section 304 require *facilities* to immediately notify *TERCs* and *LEPCs* of *releases* in excess of reportable quantities of *EHSs* and CERCLA hazardous substances, found at 40 CFR Section 302.4. *Facilities* must also provide written follow-up reports on the actions taken to respond to *releases* and possible health effects of the *released* substances. The emergency *release* notification provisions cover *releases* from commercial, municipal, and other *facilities* on Tribal lands, including those owned by the Tribe, and those from accidents on transportation routes within the reservation. Substances covered by this Section include not only *EHSs*, but also hazardous substances subject to the emergency *release* notification requirements of CERCLA Section 103. CERCLA requires notification of *releases* to the National Response Center. In cases where *releases* from *facilities* located on Indian lands may affect areas outside Indian jurisdiction, the legislation under EPCRA Section 304(b)(1) requires that notice be provided to all *SERCs* and *LEPCs* likely to be affected by the *releases*. Response to such *releases* will be handled by cooperation between the affected jurisdictions. EPA encourages Indian Tribes, *SERCs*, and *LEPCs* to participate in joint planning efforts to prepare for such potential emergencies. The hazardous chemical right-to-know provisions of EPCRA Sections 311 and 312, require *facilities* that prepare *material safety data sheets (MSDSs)* for hazardous chemicals under OSHA, and have hazardous chemicals or *EHSs* present above applicable threshold levels, to submit these *MSDSs*, or lists of such chemicals to *TERCs*, *LEPCs*, and local fire departments. *Facilities* are also required to submit hazardous chemical inventory forms which detail the amounts, conditions of storage, and locations of hazardous chemicals and *EHSs* to *TERCs*, *LEPCs*, and local fire departments. It is the responsibility of *TERCs* and *LEPCs* to make this information available to the public.

Toxic chemical *release* reporting under EPCRA Section 313, requires covered *facilities* to submit annual reports on routine and accidental *toxic chemical releases* and other *waste management* activities to EPA and the Tribal environmental, health, or emergency response agency which coordinates with the *TERC*. *TERCs* and EPA make this information available to the community through the national Toxic Release Inventory (TRI) database. The data is also released to the public annually in national and state TRI reports.

The information collected under EPCRA enables *TERCs* and *LEPCs* to paint a picture of the hazardous substances, chemicals, and toxics found on Indian lands. It also allows the Tribal communities to work with industries to reduce the use and *releases of toxic chemicals* into the *environment* and prevent chemical accidents. EPA recognizes that resources are often limited on Indian lands, and is committed to helping Indian tribes comply with EPCRA. EPA provides technical assistance, guidance, and training tailored to the needs and capabilities of Indian tribes. EPA's Office of Chemical Emergency Preparedness and Prevention (CEPPO) can provide *TERCs* with grants/cooperative agreements to aid in the implementation and effectiveness of their EPCRA programs. To be eligible for consideration under this grant program, a tribe or Tribal Coalition must function as an independent *TERC*. To the extent that Tribes have these functions performed by *states*, they are not eligible for these grants. Tribal agencies can also apply for training grants provided by FEMA under EPCRA Section 305(a) to gain or improve skills needed for carrying out emergency planning and preparedness programs. These grants are provided through the *TERCs* or other agencies. The Hazardous Materials Transportation Uniform Safety Act of 1990 (HMTA) also includes funding grants for Indian tribes for training public sector employees in emergency response activities. HMTA provides planning grants for developing, improving, and implementing EPCRA plans, and for developing a training curriculum for *TERCs* and *LEPCs*. Tribes should contact their EPA Regional office for information on how to apply for these grants.

Enforcing the provisions of EPCRA is key to providing Tribal communities with the information necessary to prepare for and prevent chemical accidents. EPA provides assistance to Tribal communities for specific enforcement actions against violators of Sections 302, 311, and 312. Since EPA does not receive or process information under these Sections, actions should be initiated at the tribal and district levels.

Section 2. EXEMPTIONS

A. General, Personal Use, and Intake Water or Air

Exemption
Retention

153. Does a listed toxic chemical retain its exemption even if other formulations, articles, or fuels with the same listed toxic chemical are not exempt?

Yes, the *toxic chemical* retains its exemption. Exempted uses of a listed *toxic chemical* do not need to be reported, even if other (non-exempted) uses of the same listed chemical trigger thresholds at the *facility*.

FDA

154. Is a feed company that is regulated by the Food and Drug Administration (FDA) exempt from filing Form R under Section 313?

No. Section 313 applies to any *facility* that meets all the applicable criteria. There is no specific exemption for *facilities* or *toxic chemicals* regulated by the FDA.

Personal Use
Exemption,
Office Supplies

155. Do office supply type products require coverage under Section 313 reporting?

EPA does not intend to require *covered facilities* to account for listed *toxic chemicals* in typical office supplies such as correction fluid and copier machine fluids. Although not specifically exempt in the regulation, EPA interprets such *mixtures* or products to be equivalent to personal use items or materials present in a *facility's* cafeteria, infirmary, or materials used for routine janitorial activities and *facility* grounds maintenance (40 CFR Section 372.38(c)(3)).

Personal Use
Exemption,
Office Supplies

156. A facility meets the threshold for "otherwise use" of 1,1,1-trichloroethane as a cleaner. Would the release of that listed toxic chemical contained in the office supply product "white-out" also be included?

Office products fall within the same realm as the personal use and janitorial maintenance exemptions. The *release* of 1,1,1, trichloroethane in "white-out" is exempt.

Personal Use
Exemption,
Employee
Comfort

157. A facility adds chlorine to its water supply system. The chlorinated water is used only for drinking purposes by employees. Is this use of chlorine reportable under EPCRA Section 313?

Chlorine that is added by a *facility* to its water supply system to prepare potable water for consumption at the *facility* is exempt from reporting under the personal use exemption, which exempts "personal" use by employees or other persons at the *facility* of foods, drugs, cosmetics, or other personal items

*Personal Use
Exemption,
Office Supplies*

containing *toxic chemicals*, including supplies of such products within the *facility* such as in a *facility* operated cafeteria, store, or infirmary (40 CFR 372.38(c)(3)). Since chlorine is used to prepare an item (i.e., potable water) that will be used only for drinking purposes by *facility* employees, it is exempted from reporting under EPCRA Section 313.

158. A facility uses ammonia in gas cylinders in their blueprint machines. The facility uses a total of 12,000 pounds of reportable ammonia per year in this operation and does not “otherwise use” or “process” any other quantities of ammonia. Is this use exempt from Section 313 reporting under the office supplies for personal use exemption (40 CFR Section 372.38(c)(3))?

Blueprint machines are not typical office supply items for personal use. Since the 10,000 pound “otherwise use” threshold is exceeded, the *facility* must report for the ammonia.

*Personal Use
Exemption,
Cafeteria
Refrigerants*

159. A facility uses listed toxic chemicals in its cafeteria refrigeration units. The units enable the cafeteria to store food that will later be served to staff of the facility. Would these chemicals need to be included in EPCRA Section 313 threshold determinations?

No. Under the personal use exemption “foods, drugs, cosmetics or other personal items containing *toxic chemicals*, including supplies of such products within the *facility* such as in a *facility* operated cafeteria, store, or infirmary” used by employees or other persons at the *facility* are exempt from threshold determinations (40 CFR Section 372.38(c)(3)). The listed *toxic chemicals* used in the cafeteria refrigeration units, therefore, are exempt from threshold determinations and *release* and other *waste management* reporting requirements. Non-exempt uses of the same listed *toxic chemicals* elsewhere at the *facility*, however, must be included in threshold determinations and *release* and other *waste management* reporting.

*Personal Use
Exemption,
Employee
Comfort,
Air
Conditioning*

160. Would listed toxic chemicals used as refrigerants in a facility’s air conditioning unit be exempt from EPCRA Section 313 reporting under the personal use exemption (40 CFR Section 372.38(c)(3))?

Yes, if the air conditioning unit is used for the purpose of maintaining employee comfort, the listed *toxic chemicals* used in the unit would be exempt from EPCRA Section 313 reporting under the personal use exemption. If, however, the air conditioning unit is integral to the *facility*’s operation or activity (e.g., maintaining constant temperature and humidity for machinery or cold storage rooms), then the *toxic chemicals* used in the unit would not be exempted from EPCRA Section 313 reporting.

*Personal Use
Exemption,
Ammonia,
Sewage*

161. A facility covered under Section 313 of EPCRA has met a reporting threshold for ammonia. A sewage system within the facility collects human waste from different parts of the facility. The ammonia present in the sewage is not involved in any "manufacturing," "processing," or "otherwise use" activities at the facility. Since the facility has already exceeded an activity threshold for ammonia, are they required to report the releases of ammonia that are emitted in the sewage?

No. The ammonia present in the sewage is derived from the employees working at the plant and is eligible for the personal use exemption (40 CFR Section 372.38(c)). Therefore, even though the facility has exceeded an activity threshold, they would not be required to report the exempted releases of ammonia.

*Intake Water
Exemption*

162. A facility uses river water as process water. The water taken from the river contains more lead (1.0 ppb) than the water returned to the river (0.5 ppb). Is it subject to the process water exemption (40 CFR Section 372.38 (c)(5))? If not, is the facility treating the water?

The process water can be considered exempt because the listed toxic chemical was present as drawn from the environment. The facility does not need to consider lead in the process water for threshold or release and other waste management reporting.

*Intake Air
Exemption,
Compressed
Air*

163. Would a listed toxic chemical present in compressed air be exempt? What if the listed toxic chemical is present in boiler emissions air?

A listed toxic chemical present in compressed air drawn from the environment would not have to be counted toward a threshold determination because it meets the intake air exemption (40 CFR Section 372.38(c)(5)). If that same listed toxic chemical is present in the boiler emission air only because it was in the compressed air fed to the boiler, then that would remain an exempt use. However, if the listed toxic chemical is created as a result of combustion, you have coincidentally "manufactured" the toxic chemical and must consider it for reporting.

*Intake Water
Exemption,
Personal Use
Exemption,
Employee
Comfort*

164. Are water treatment chemicals such as chlorine covered? Do we have to count the chlorine in the city water we use?

You are not required to account for amounts of a listed toxic chemical present in water that you draw into your facility. For example, chlorine present in water taken from municipal sources does not have to be considered for threshold determinations and release and other waste management estimates. Any chlorine you use to treat process water used in your facility, however, counts toward the "otherwise use" threshold determination. However, if you use the chlorine to treat drinking water for personal use at the facility the chlorine is exempt from threshold and release and other waste management calculations.

Personal Use Exemption, Intake Water Exemption

165. A covered facility draws drinking water from an on-site well. The water contains a Section 313 chemical as a contaminant. Must the facility count the amount of the contaminant in its threshold determinations?

No. The listed *toxic chemicals* in the water would be exempt from Form R reporting under either the personal use exemption if the water is for the employees consumptive use on-site (40 CFR Section 372.38(c)(3)) or would be exempt under the intake water exemption (40 CFR Section 372.38(c)(5)).

B. Facility Maintenance and Structural Components

Facility Maintenance Exemption, Process Equipment Maintenance

166. How is routine janitorial maintenance defined in the exemption list? Is equipment maintenance included?

Equipment maintenance such as the use of oil or grease is not exempt. The routine janitorial and *facility* grounds maintenance exemption is intended to cover janitorial or other custodial or plant grounds maintenance activities using such substances as bathroom cleaners, or fertilizers and pesticides used to maintain lawns (40 CFR Section 372.38(c)(2)).

Facility Maintenance Exemption, Process Equipment Maintenance

167. An EPCRA Section 313 toxic chemical is used to clean a process-related tower at a manufacturing facility. Is the use of the chemical exempt from threshold and release and other waste management calculations under the routine janitorial and facility grounds maintenance exemption of 40 CFR Section 372.38(c)(2)?

No. Materials used to maintain process-related equipment at a *facility* (e.g., cleaners and lubricants) are not exempt under Section 372.38(c)(2). Because the tower is process related, the exemption does not apply. This exemption only applies to the use of products that are specifically used for routine janitorial or *facility* grounds maintenance.

Facility Maintenance Exemption, Recreational Use, Swimming Pool

168. A facility maintains a swimming pool on the facility site for recreational use by the facility employees. Chlorine is used to treat the swimming pool water. Is the chlorine so utilized by the facility subject to threshold and release and other waste management calculations under EPCRA Section 313?

No. The chlorine used to treat the swimming pool water is exempt from threshold and *release* and other *waste management* calculations under the exemption found at 40 CFR Section 372.38(c)(2) for use of products for routine janitorial or *facility* grounds maintenance.

*Facility
Maintenance
Exemption,
Manufacture*

169. An EPCRA Section 313 covered facility uses 55-gallon drums of paint containing a listed toxic chemical to paint lines on the roads and air strips on the facility's grounds. Paint is also used to maintain road signs and facility building signs. Would the listed toxic chemicals in the paint be exempt from EPCRA Section 313 reporting requirements under the facility grounds maintenance exemption found at 40 CFR Section 372.38(c)(2)?

The facility grounds maintenance exemption in 40 CFR Section 372.28(c)(2) applies to the use of products used for routine janitorial or facility grounds maintenance. This exemption includes both individually packaged products (e.g., cans of paint) and substances in bulk containers (e.g., 55-gallon drums of paint). Therefore, if the paint in the drums used to maintain the roads and the signs is similar, the listed toxic chemicals in the paint would be exempt from EPCRA Section 313 reporting requirements.

*Facility
Maintenance
Exemption,
Similar in
Type or
Concentration,
Coincidental
Manufacture*

170. A facility has an ornamental pond on-site. Does the addition of listed toxic chemicals to an ornamental pond on a facility site qualify for the routine janitorial or facility grounds maintenance exemption (40 CFR Section 372.38(c)(2))?

Yes. The facility grounds maintenance exemption applies. The facility owner/operator should also be aware that coincidental "manufacture" of other toxic chemicals may result (e.g., nitrate compounds) and, any listed chemicals "manufactured" must be applied to the "manufacturing" threshold.

*Facility
Maintenance
Exemption*

171. It appears that janitorial type chemicals are exempt. Does this mean that if I use formaldehyde as a disinfectant in a sterile area in excess of the threshold, it is exempt?

No. The use of the disinfectant described in the question seems to be process-related and is therefore not exempt. Also, "janitorial type chemicals" are not exempt; rather, chemicals used for routine janitorial or facility grounds maintenance are exempt.

*Facility
Maintenance
Exemption,
Otherwise Use*

172. A facility uses a contact cleaner to clean relays at the covered facility, that are used to control lights. For Section 313 purposes, is this use exempt as part of routine janitorial grounds maintenance or must the amount of the listed toxic chemical in the cleaner used be included in an applicable threshold?

The use of the cleaner is not exempt because it is not janitorial use and does not relate to facility grounds maintenance. The use is integral to the production processes of the facility. Unlike other equipment repair or maintenance, the chemicals are not being incorporated into the structure of the facility. There-

*Facility
Maintenance
Exemption,
Otherwise Use,
Cooling Towers*

fore, the amount of the listed *toxic chemicals* in the cleaner must be included in the calculation of “*otherwise use*” for the *facility*.

173. Are pesticides which are used to control algae in cooling water towers exempt?

No, such pesticides would not fit the routine maintenance exemption. The “*otherwise use*” threshold would apply.

*Facility
Maintenance
Exemption,
Pesticides*

174. Would a facility that exterminates insects using pesticides containing listed *toxic chemicals* need to report for the listed *toxic chemicals*?

If the pesticides are used as part of routine *facility* maintenance and are not process related, they would be exempt under the *facility* maintenance exemption (40 CFR Section 372.38(c)(2)). If the pesticides are used for the comfort of the *facility* personnel, the listed *toxic chemicals* would be exempt under the personal use exemption (40 CFR Section 372.38(c)(3)). However, if the pesticides are used to support the *facility's* process, neither exemption would apply, and a *covered facility* would need to consider the “*otherwise use*” of the listed *toxic chemical* in the pesticides in making threshold and *release* and other *waste management* determinations.

*Structural
Component
Exemption,
Paint,
Stationary
Equipment,
Mobile
Equipment,
Welding Rods*

175. Would the structural component exemption apply to welding rods used to maintain process equipment and therefore be exempt (40 CFR Section 372.38(c)(1)) as a structural component of the *facility*? Does it matter if the equipment is not attached to the *facility* (a reactor) but is mobile (e.g., baskets on wheels)?

No, because the welding rod is used to maintain process equipment. However, if the same rods are used to maintain the *facility* (such as in the repair of a door frame) then the *facility* maintenance exemption may apply.

*Structural
Component
Exemption,
Paint,
Solvents*

176. Are solvents and other listed *toxic chemicals* in paint used to maintain a *facility* exempt?

Yes. Painting to maintain the physical integrity of the *facility* is consistent with the “structural component” exemption (provided that it is used to paint passive structures), even though the solvents in the paint do not become part of the structure (40 CFR Section 372.38 (c)(1)).

*Structural
Component
Exemption,
Paint*

177. A manufacturing company routinely paints the exterior of on-site buildings. The solvent in the paint is an EPCRA Section 313 *toxic chemical*. The paint brushes used to paint the buildings are cleaned with a solvent that is also an EPCRA Section 313 *toxic chemical*. Is the solvent

used to clean the brushes subject to threshold and *release* and other *waste management* calculations under Section 313?

The structural component exemption set out at 40 CFR Section 372.38(c)(1) applies to the solvent in the paint used to paint the *facility*. It also applies to the solvent used to clean the paint brushes since this is part of the painting process. Likewise, any paint and cleaning solvent residues would not be subject to threshold or *release* and other *waste management* calculations.

*Structural
Component
Exemption,
Paint, Pipes*

178. Is the painting of process equipment to meet OSHA standards exempt from Form R threshold and *release* and other *waste management* determinations under the structural component exemption?

No. Painting process pipes would not qualify for the structural component exemption because the exemption only applies to non-process related equipment (40 CFR Section 372.38(c)(1)).

*Structural
Component
Exemption,
Fuels*

179. An EPCRA Section 313 *covered facility* uses a fuel-powered paint sprayer for the sole purpose of painting the *facility's* structure. The listed *toxic chemicals* within the paint used to maintain the *facility's* appearance are exempt from EPCRA Section 313 threshold determination and *release* and other *waste management* reporting requirements under the structural component exemption (40 CFR Section 372.38(c)(1)). The fuel used to power the paint sprayer also contains listed *toxic chemicals* reportable under EPCRA Section 313. Must the listed *toxic chemicals* in the fuel be applied toward the 10,000-pound "*otherwise use*" threshold?

No. The listed *toxic chemicals* are exempt from EPCRA Section 313 threshold determination and *release* and other *waste management* reporting requirements. Although the structural component exemption most commonly applies to *toxic chemicals* incorporated into a *facility's* physical structure, the exemption also extends to *toxic chemicals* whose sole use derives from or is associated with an exempt use. Examples of *toxic chemicals* exempt in this manner include solvents used to clean paint brushes that had been utilized to paint a *facility's* structure and fumes generated from the welding of non process-related pipes during installation at a *facility*. Be aware, however, that combustion of fuels may coincidentally "*manufacture*" Section 313 *toxic chemicals*. Such coincidental "*manufacture*" is not eligible for *de minimis* limitations (see the directive on *de minimis*) and amounts produced must be compared against the "*manufacturing*" threshold. The EPA publication, "Toxic Air Pollutant Emission Factor - A Compilation of Selected Air Toxic Compounds and Sources" (EPA 45/2-88-006a) contains emission factors for many specific compounds emitted during fuel combustion.

*Structural
Component
Exemption,
Pipes*

180. Does the “structural component” exemption (40 CFR Section 372.38(c)(1)) cover the small amounts of abraded or corroded metals from pipes and other equipment that become part of process streams?

If the pipes are not process related, the structural component exemption would apply and the listed *toxic chemicals* contained in the pipes would not need to be considered in threshold and *release* or other *waste management* determinations. If the pipes are process related, the structural component exemption does not apply, and if the *facility* exceeds a threshold for the listed *toxic chemical*, any nonexempted *releases* of the listed *toxic chemical* should be considered in *release* and other *waste management* determinations.

*Threshold
Determination,
Aluminum
Oxide,
Structural
Component
Exemption*

181. A foundry uses aluminum oxide both in grinding wheels as well as in the refractory brick which lines the furnace. Must the facility count the aluminum oxide in the brick toward the reporting threshold, or is the brick exempt as part of the structure of the facility?

The aluminum oxide in the brick must be counted toward the “*otherwise use*” threshold if it is a fibrous, man-made form of aluminum oxide. It does not meet the structural component exemption, because it is a material that is in essence a replaceable insulation liner that is part of the process. If *releases* from the brick amount to less than 0.5 lbs over the course of the reporting year, the *article* exemption may apply.

*Structural
Component
Exemption*

182. Does material contained in the structure of a building need to be reported?

No. Structural materials not associated with the process are exempt from reporting. They are exempt from threshold and *release* and other *waste management* determinations and determinations of maximum quantity on site.

*Structural
Component
Exemption,
Active/ Passive
Degradation*

183. The structural component exemption under EPCRA Section 313 covers the small amounts of abraded/corroded metals from pipes and other non-process related facility equipment (40 CFR Section 372.38 (c)(1)). Does the structural component exemption apply to equipment which regularly suffers abrasion, such as grinding wheels and metal working tools? What criteria can a facility use to decide which pieces of equipment are structural components and which are not?

The Section 313 structural components exemption would not apply to grinding wheels and metal working tools. These items are intended to wear down and to be replaced because of the nature of their use. The structural component exemption applies to passive non-process related structures and equipment, such as pipes. The abrasion/corrosion includes normal or natural degradation,

*Structural
Component
Exemption,
Article
Exemption*

such as occurs in pipes, but not active degradation, such as occurs in a grinding wheel.

184. If a facility stores a listed toxic chemical on-site, and then uses it by installing it in the facility, is the facility required to consider the listed toxic chemical (a component) for Section 313 submission?

When the listed *toxic chemical* is installed as a passive structural component (a component not related to the *facility's* process), then the structural component exemption applies to the *toxic chemical* in the component (40 CFR Section 372.38(c)(1)). If the *toxic chemical* is in a *process* related component but has less than 0.5 lbs of *releases* over the course of the year, it may qualify for the *article* exemption.

*Structural
Component
Exemption,
Degreasers,
Otherwise Use*

185. Are degreasers employed in plant maintenance shops exempt under the structural component exemption (40 CFR Section 372.38 (c)(1))?

No, degreasers used in plant maintenance do not meet the structural component exemption. The listed *toxic chemicals* in the degreasers would be considered "*otherwise used*."

*Structural
Component
Exemption,
Active
Degradation,
Electroplating*

186. As part of the equipment involved in a hard chrome plating process, lead anodes conduct a current to parts being plated. The lead anodes do not provide a metallic ion to the plating process, but only act as bus bars to conduct the electrical current. The anodes require replacement over time due to erosion just as other pieces of electrical supply equipment. The anodes are solidly connected to the electrical supply system for the sole purpose of conducting electricity. Are the anodes considered a structural component of the facility and therefore, exempt from reporting under the structural components exemption (40 CFR Section 372.38 (c)(1))?

No, the lead anodes are not considered exempt as a structural component since they play such an integral role in an electrochemical process. The erosion which the anodes undergo is not the same as other electrical supply equipment since the degradation is specifically caused by contact with process chemicals in a plating bath.

*Structural
Component
Exemption,
Asbestos*

187. A facility is removing asbestos insulation for disposal. Is this covered by the structural component exemption?

Removal of friable asbestos insulation is not being used in the "*manufacture*," "*process*," or "*otherwise use*" of friable asbestos. Since friable asbestos is not being "*otherwise used*" in this activity, the structural component exemption cannot be taken. However, if the *facility* does "*manufacture*," "*process*," or

“otherwise use” friable asbestos in excess of the thresholds elsewhere at the *facility*, this type of off-site transfer would be reportable.

C. Vehicle Maintenance (see also Appendix A: Section 313 Policy Directive #3 - Motor Vehicles Use Exemption)

Motor Vehicle Exemption, Gasoline, Anti-Freeze

188. Please verify that any motor vehicle operated by the *facility*, whether licensed or not, is eligible for the exemption listed in 40 CFR Section 372.38(c)(4). This includes forklifts and automobiles. Also, please verify that gasoline, lubricants, oils and anti-freeze are all considered to be substances subject to this exemption.

The motor vehicle exemption does not include all motor vehicles in any use at the *facility*. It does include benzene in gasoline, lubricants and oils and glycol ether in antifreeze used to maintain and operate a motor vehicle employed at the *facility*. The exemption only applies to the “otherwise use” of the *toxic chemical*. It does not apply to “processing” or “manufacturing.” For example, this exemption would not apply in the case of an automobile manufacturing plant. As part of the production of vehicles, such a *facility* would be incorporating the *toxic chemicals* into an *article* for distribution in commerce.

Motor Vehicle Exemption, Gasoline

189. A single company owns many *facilities* which are required to report under Section 313. The company stores gasoline at one of the *facilities*. The gasoline is used by trucks from all of the *facilities*, which come to the central location for fuel and then leave. Is the gasoline in the storage tank exempt because it is used to maintain motor vehicles even though they are operated from different *facilities*?

Since those trucks are being driven to the one *facility* site to be fueled, they can be considered as being operated by that one *facility*. Therefore, the gasoline stored and used by that one *facility* would be exempt from being reported as long as the listed *toxic chemical* is used to maintain a motor vehicle operated by the *facility* as per 40 CFR Section 372.38(c)(4).

Motor Vehicle Exemption, Jet Fuel

190. An airplane manufacturer uses JP4, a jet fuel, to move the planes around on the *facility*. Can this fuel be considered exempt under the “maintenance of motor vehicles used at the *facility*” exemption?

Amounts of fuel used only at the *facility* to transport vehicles on the *facility's* property do not have to be counted towards threshold and can be included under the motor vehicle exemption. If the jet fuel is in the planes when they leave the site to be sold or distributed in commerce, then the *facility* is considered to be “processing” the jet fuel and is subject to 313 reporting.

D. Laboratory Activities

*Laboratory
Activity
Exemption,
Quality
Control
Activities*

191. Does Section 313 reporting include laboratory chemicals?

Yes. However, the quantity of a listed *toxic chemical* “*manufactured*,” “*processed*,” or “*otherwise used*” in a laboratory under the supervision of a technically qualified person is exempt from threshold and *release* and other *waste management* calculations. This exemption includes laboratories performing quality control activities including those located in manufacturing *facilities* (40 CFR Section 372.38(d)).

*Laboratory
Activity
Exemption,
Technically
Qualified
Individual,
TSCA*

192. 40 CFR Section 372.38(d) lists uses of listed *toxic chemicals* in laboratories which are exempt from threshold determination and *release* and other *waste management* reporting. It states: “if a *toxic chemical* is “*manufactured*,” “*processed*,” or “*otherwise used*” in a laboratory at a *covered facility* under the supervision of a technically qualified individual, as defined in Section 720.3(ee) of this title,” it is excluded from 313 reporting requirements. What is that reference?

Section 720.3(ee) is found in Toxic Substances Control Act (TSCA) regulations (40 CFR 720.3(ee)) and defines “technically qualified individual” as a person or persons who, because of education, training or experience, or a combination of these factors, is capable of understanding and minimizing risks associated with the substance, and is responsible for safe procurement, storage, use, and disposal within the scope of research.

*Laboratory
Activity
Exemption*

193. If a *facility* has manufacturing and exempted laboratory activities on the same site, does the site have to include the exempted laboratory activities in the threshold calculations?

No. The *facility* does not need to consider listed *toxic chemicals* used in exempt laboratory activities when making threshold and *release* and other *waste management* determinations.

*SIC Code,
Pilot Plant,
Laboratory
Activity
Exemption*

194. Does a pilot plant within a *covered SIC code* have to report or is it covered by the laboratory activities exemption?

A pilot plant within the appropriate SIC codes is a *covered facility* if it meets the employee and chemical threshold criteria. Pilot plants are not covered by the laboratory activities exemption.

*Laboratory
Activity Exemption,
Specialty
Chemical
Production*

195. What is meant by “specialty chemical production” as an exception to the laboratory activities exemption?

Specialty chemical production refers to listed *toxic chemicals* produced in a laboratory setting that are distributed in commerce.

*Laboratory
Activity
Exemption,
QA/QC
Activities*

196. Does the exemption for laboratory activities also cover quality control labs?

There is not a specific “quality control lab” exemption. Rather, the exemption applies to laboratory activities in which any listed *toxic chemical* is “*manufactured*,” “*processed*,” or “*otherwise used*” under the supervision of a “technically qualified individual.” This exemption can cover activities in quality control labs.

*Laboratory
Activity
Exemption,
QA/QC
Activities*

197. A facility sends materials that are sampled from processing operations to a laboratory for quality control purposes. Are these quantities exempted under the laboratory activity exemption, provided that they are handled by a technically qualified individual (40 CFR Section 372.38(d))?

No, any quantity of a listed *toxic chemical* “*manufactured*,” “*processed*,” or “*otherwise used*” must be counted for the purpose of threshold determination. The fact that it is drawn from a process for purposes of quality control testing does not allow the *facility* to subtract that quantity from the total amount of the *toxic chemical* factored into the threshold and *release* and other *waste management* determinations.

*Laboratory
Activity
Exemption,
Pilot Plants*

198. If a pilot plant is contained within a laboratory, assuming the rest of the lab deals with research and quality control, must the facility calculate the threshold based on the entire lab, or just on the chemicals used for the pilot plant?

The *facility* would only be required to consider the pilot plant portion of the laboratory.

*Laboratory
Activity
Exemption,
R & D
Activities*

199. A facility manufactures “prototype” vehicles (buses, etc.) for research and development. They “otherwise use” solvents that contain listed toxic chemicals in excess of the activity threshold. Are the listed toxic chemicals exempt under the laboratory activity exemption?

Yes, if the listed *toxic chemicals* contained in the solvents are used under the supervision of a technically qualified individual, they are exempt from threshold determinations and *release* and other *waste management* reporting.

Laboratory
Activity
Exemption,
QA/QC
Activities,
Product Testing

200. A facility tests specific components of a machinery line. Its functions include testing for durability of engines, hydraulic systems, power trains, electrical systems and transmissions; building prototypes of products; and qualitative and quantitative analytical testing of materials in a chemical laboratory. Since these activities are test, development, and research oriented, is the facility eligible for the laboratory activity exemption (40 CFR Section 372.38(d))?

Equipment and component testing is equivalent to laboratory activities and thus is subject to the laboratory activity exemption as long as the testing is overseen by a technically qualified individual.

Product
Testing,
Laboratory
Activity
Exemption

201. Are the following marine engine testing operations that use listed Section 313 toxic chemicals exempt under the laboratory activities exemption: (a) testing of production engines intended for sale in specialized engine test cells; (b) testing engines for research and development purposes in specialized engine test cells; (c) testing for research and development purposes in open water bodies?

Yes, all of the noted operations are considered "product testing" and as such are intended to be included under the laboratory activities exemption as long as they are performed under the supervision of a technically qualified individual (40 CFR Section 372.38(d)).

Product
Testing,
Laboratory
Activity
Exemption

202. If a manufacturer of transportation equipment (airplanes) is required to file a Form R for their uses of benzene as a component in jet fuel, must the facility include emissions of this benzene when the jet fuel is used to power the equipment in an on-site test run?

The facility would not have to include emissions of benzene consistent with the laboratory activities exemption. The benzene is being used for product testing; therefore, emissions resulting from this product testing would not need to be reported.

Laboratory
Activity
Exemption,
Product Testing

203. A small arms manufacturer test fires handguns. The lead bullets are fired at a bullet trap, collected, and sent off-site for recycling. The particulate and smoke is collected in a filter house; used filters are disposed of at a licensed hazardous waste facility. Can the manufacturer claim the laboratory activities exemption for lead?

Test-firing of handguns at a covered facility under the direct supervision of a technically qualified individual would be considered experimental "otherwise use" and would be exempt from reporting under the laboratory activities exemption. If, however, the handguns are fired in any nonexperimental (test) activities, lead and other listed toxic chemicals in the bullets would have to be included in threshold determinations and release and other waste management calculations.

Laboratory
Activity
Exemption,
Laboratory
Support
Activities

204. The owner/operator of a newspaper has a photography laboratory on-site that produces the pictures that appear in the newspaper. The laboratory does not perform product testing or analysis for the newspaper. The primary function of the photography laboratory is to develop film to be used in the newspaper. Will this photo laboratory meet the laboratory activity exemption under EPCRA Section 313 (40 CFR Section 372.38(d))?

No. The laboratory activity exemption, 40 CFR Section 372.38(d), is primarily for laboratories that perform auxiliary functions for the “*manufacturing*” or “*processing*” activities at the *facility*. The photography laboratory does not perform an auxiliary function, but performs activities which are essential to the “*manufacturing*” of the newspaper, i.e., they make a product (photographs) that is used in the “*manufacture*” of another product (newspaper), and is therefore not exempt from reporting under EPCRA Section 313.

Laboratory
Activity
Exemption,
Samples

205. A facility prepares a product that contains a listed toxic chemical for sample distribution. The sample product is prepared on a small scale and is distributed to potential customers for trial use. Would the amount of toxic chemical “*processed*” in the preparation of these samples be exempted from threshold and release and other waste management calculations under the laboratory activities exemption (40 CFR 378.38(d))?

No. Amounts of listed *toxic chemicals* that are “*manufactured*,” “*processed*,” or “*otherwise used*” in conjunction with the preparation of trial samples are not excluded from threshold and release and other waste management calculations under the laboratory activities exemption.

Laboratory
Activity
Exemption,
Activity
Thresholds,
Manufacture

206. A company “*manufactures*” 26,000 pounds a year of a listed toxic chemical, 2,000 of which are “*manufactured*” and used in an on-site laboratory under the supervision of a technically qualified individual. Should the 2,000 pounds be counted toward determination of the “*manufacturing*” threshold under EPCRA Section 313, or will this “*manufacturing*” activity be exempt under the laboratory activity exemption (40 CFR Section 372.38(d))?

The 2,000 pounds are exempt from the threshold determination for “*manufacturing*” under the laboratory activities exemption (40 CFR Section 372.38(d)) because the listed *toxic chemical* was “*manufactured*” in a laboratory under the supervision of a technically qualified individual. The *facility* will count only 24,000 pounds of the “*manufactured*” chemical toward its applicable “*manufacturing*” threshold.

Laboratory
Activity
Exemption,
Threshold
Determination,
Release
Calculation,
Laboratory
Support
Activity

207. A manufacturing facility operates several on-site laboratories and shops (e.g., machine shops, glass blowing shops) that support the laboratories activities. Assuming the activities in the laboratories are exempt under 40 CFR Section 372.38(d), are the listed *toxic chemicals* used in the shops also exempt from threshold determinations and *release* and other *waste management* estimates? If the shops also support some nonexempt laboratory activities, would they be required to account for the fraction of chemicals used for nonexempt purposes?

In either case the listed *toxic chemicals* used in the shops would not be exempt from threshold determinations and *release* and other *waste management* estimates. The fact that the shops support exempt laboratory activities does not exclude the listed *toxic chemicals* used in the shops from threshold determinations and *release* and other *waste management* estimates. The laboratory activities exemption in Section 372.38(d) applies to *toxic chemicals* that are “*manufactured*,” “*processed*,” or “*otherwise used*” for certain purposes such as research or quality control in a laboratory under the supervision of a technically qualified individual. This exemption does not exempt the *facilities* themselves, it only exempts those listed *toxic chemicals* that are “*manufactured*,” “*processed*,” or “*otherwise used*” during certain laboratory activities from threshold determinations and *release* and other *waste management* estimates required under EPCRA Section 313. Specifically, section 372.38(d)(3) states that the exemption does not apply to “activities conducted outside the laboratory.”

Laboratory
Activity
Exemption,
Product Testing

208. A paint manufacturer, at a separate research facility, applies auto coatings (two cars per day) for testing for an automobile manufacturer. The coating contains listed *toxic chemicals*. Is the “*otherwise use*” of the listed *toxic chemicals* exempt as a laboratory activity?

Yes, the “*otherwise use*” of the listed *toxic chemical* is exempt as a laboratory activity, this is not a pilot plant in the sense intended.

Activity
Thresholds,
Otherwise Use,
Laboratory
Activity
Exemption

209. A facility manufactures fire fighting and fire protection equipment. The facility has a training school on how to use that equipment. As part of the training school, on-site fires are set using gasoline containing benzene, a listed *toxic chemical*. For Section 313 threshold determinations, would this be an “*otherwise use*” of benzene, or would this use be exempt as product testing under the laboratory exemption? (40 CFR Section 372.38(d))

The benzene would be considered “*otherwise used*” for the Section 313 threshold determination since the benzene is being used in a nonincorporative activity in order to train individuals to use equipment. The laboratory activity exemption is intended to cover activities in a laboratory (e.g., product testing)

*De Minimis
Exemption,
Mixture, Trade
Name Product*

under the supervision of a technically qualified individual. Training is not considered product testing nor research and development and thus would not be exempt under the laboratory activities exemption.

E. De Minimis (see also Appendix A: Section 313 Policy Directive #2 -- De Minimis Exemption)

210. Please explain the de minimis concentration limitation under Section 313, and its application to *mixtures* and *trade name products* (40 CFR Section 372.38(a))?

The de minimis exemption allows facilities to disregard certain minimal concentrations of listed *toxic chemicals* in *mixtures* or *trade name products* that they “process” or “otherwise use” when making threshold determinations and release and other waste management determinations. The de minimis exemption does not apply to the “manufacture” of a listed *toxic chemical* except if that listed *toxic chemical* is “manufactured” as an impurity and remains in the product distributed in commerce below the appropriate de minimis level or is imported in below de minimis concentrations. The de minimis exemption does not apply to a byproduct “manufactured” coincidentally as a result of “manufacturing,” “processing,” “otherwise use,” or any waste management activity.

When determining whether the de minimis exemption applies to a listed *toxic chemical*, the owner/operator should consider only the concentration of the listed *toxic chemical* in *mixtures* and *trade name products* in process streams in which the listed *toxic chemical* is undergoing a reportable activity. If the listed *toxic chemical* in a process stream is “manufactured” as an impurity or imported, “processed,” or “otherwise used” and is below the appropriate de minimis concentration level, then the quantity of the listed *toxic chemical* in that process stream does not have to be applied to threshold determinations nor included in release or other waste management determinations. If a listed *toxic chemical* in a process stream meets the de minimis exemption, all releases and other waste management activities associated with the listed *toxic chemical* in that stream are exempt from EPCRA Section 313 reporting. It is possible to meet an activity (e.g., “processing”) threshold for a *toxic chemical* on a facility-wide basis, but not be required to calculate releases or other waste management quantities associated with a particular process because that process involves only *mixtures* or *trade name products* containing the *toxic chemical* below the de minimis level.

Once a listed *toxic chemical* concentration is above the appropriate de minimis concentration, threshold determinations and release and other waste management determinations must be made, even if the chemical later falls below de minimis level in the same process stream. Thus, all releases and other quantities managed as waste that occur after the de minimis level has been exceeded

are subject to reporting. If a listed *toxic chemical* in a *mixture* or *trade name* product above de minimis is brought on-site, the de minimis exemption never applies.

The de minimis concentration level is consistent with the OSHA Hazard Communication Standard requirements for development of *Material Safety Data Sheets (MSDSs)*. The de minimis level is 1.0 percent except if the listed *toxic chemical* is an OSHA-defined carcinogen. The de minimis level for OSHA-defined carcinogens is 0.1 percent. For *mixtures* or other *trade name products* that contain one or more members of a listed Section 313 *toxic chemical* category, the de minimis level applies to the aggregate concentration of all such members and not to each individually. The list of *toxic chemicals* in the publication "Toxic Chemical Release Inventory Reporting Form R and Instructions" for the current reporting year contains the de minimis values for each of the *toxic chemicals* and chemical categories.

This de minimis exemption applies solely to "*mixtures*." EPA's long-standing interpretation has been that "*mixture*" does not include waste. Therefore, the de minimis exemption cannot be applied to *toxic chemicals* in a waste even if the waste is being "*processed*" or "*otherwise used*."

De minimis
Exemption,
Mixture,
Impurity,
Waste,
Byproduct

211. Does the de minimis exemption apply regardless of whether a listed *toxic chemical* is present in a *mixture* as an impurity or in a waste or separated out as a byproduct?

The de minimis exemption applies to impurities present in products "*processed*," "*otherwise used*," *imported*, or coincidentally "*manufactured*" as an impurity if it remains in the product for distribution. It does not apply to listed *toxic chemicals* that are "*manufactured*" as a byproduct regardless of whether the byproduct is a waste.

De minimis
Exemption,
Metal
Compounds

212. Does the de minimis exemption apply to the parent metal component of a compound in a *mixture* for Section 313 reporting?

No. For threshold determinations, the weight percent of the whole compound in the *mixture* is used. In general, the de minimis value for compounds is one percent, unless the particular compound is itself an OSHA carcinogen and then the de minimis level is 0.1 percent.

De minimis
Exemption,
Xylene, Mixed
Isomer

213. For calculating de minimis for xylene (mixed isomers), should the isomers be aggregated to determine if the weight percent is less than one?

To determine the de minimis for xylene (mixed isomers), the one percent would be applied to the aggregated isomers weight percent in the *mixture*. For example, if a *mixture* contains 30 pounds each of the three isomers, and 9,910

*De minimis
Exemption*

pounds of Chemical Z, the total xylene would be 90 pounds; and that 90 pounds would constitute less than one percent of the total weight of 10,000 pounds, and would therefore be exempt.

214. We are taking part in an experimental shale oil extraction process. When the shale is extracted, concentrations of a *toxic chemical* are present in trace amounts in the shale far below the de minimis concentration. Does the de minimis exemption apply?

Yes, the de minimis exemption applies to the listed *toxic chemical* present in the shale provided that it is “*processed*” or “*otherwise used*.”

*De minimis
Level*

215. How do we determine whether the de minimis level for a Section 313 listed *toxic chemical* should be 1 percent or 0.1 percent?

The de minimis levels are dictated by determinations made by the National Toxicology Program (NTP), Annual Report on Carcinogens, the International Agency for Research and Cancer (IARC) Minographs, or 29 CFR part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administrations. Listed *toxic chemicals* listed as carcinogens or potential carcinogens under NTP (classified as a known or probable carcinogen), IARC (classified as 1, 2A or 2B), or 29 CFR part 1910, Subpart Z have a 0.1% de minimis concentration level. EPA generally refers to these chemicals as the “OSHA carcinogens.” All other *toxic chemicals* have a 1 percent de minimis concentration level. EPA periodically reviews the latest editions of the IARC and the NTP reports as well as 29 CFR part 1910 Subpart Z to see if a listed chemical’s status has changed and updates the EPCRA Section 313 lists accordingly.

The list of *toxic chemicals* in the publication “Toxic Chemical Release Inventory Reporting Form R and Instructions” for the current reporting year contains the de minimis values for each of the *toxic chemicals* and chemical categories. The list is also available from the EPCRA hotline and on the EPA’s TRI homepage on the internet. Although not required to do so, EPA prepares this list as a courtesy to the reporting public.

*De minimis
Level,
Carcinogen*

216. What is the basis for determining that a *toxic chemical* is subject to the 0.1 percent de minimis level rather than the 1.0 percent de minimis level, and when do changes in *toxic chemical* de minimis levels take effect?

In the final rule (53 FR 4500, Feb. 16, 1988) that implements the reporting requirements of EPCRA Section 313, EPA adopts a de minimis exemption which permits *facilities* to disregard de minimis levels of listed *toxic chemicals*

for threshold and reporting calculations. The regulations adopts a 0.1% *de minimis* level for chemicals which are carcinogens "as defined in 29 CFR 1910.1200(d)(4)." This Section of the CFR reads as follows:

- "(4) Chemical manufacturers, importers and employers evaluating chemicals shall treat the following sources as establishing that a chemical is a carcinogen or potential carcinogen for hazard communication purposes:
- (i) National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition);
 - (ii) International Agency for Research on Cancer (IARC) Monographs (latest editions); or
 - (iii) 29 CFR part 1910, subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration."

Therefore, once a chemical's status under NTP, IARC, or 29 CFR part 1910, subpart Z indicates that the chemical is a carcinogen or potential carcinogen, the reporting *facility* may disregard levels of the chemical below the 0.1% *de minimis* concentration provided that the other criteria for the *de minimis* exemption is met. For convenience purposes, EPA refers to these chemicals as the "OSHA carcinogens."

If in reporting year "A," IARC or NTP classifies a chemical as a probable or known carcinogen (thus lowering the EPCRA Section 313 *de minimis* concentration from 1.0% to 0.1%), the lower *de minimis* concentration for the purposes of reporting would be applicable starting with reporting year "A+1." For example, vinyl acetate was classified as a group 2B chemical by IARC in 1995, so the lower *de minimis* of 0.1% applied starting with the 1996 reporting year (*i.e.*, it was effective as of January 1, 1996 for reports due July 1, 1997).

Suppliers would need to notify their customers of such changes with the first shipment in the year in which the change is applicable. If, as in the vinyl acetate example, the classification changes in 1995, then the supplier would notify customers with the first shipment on or after January 1, 1996.

*De minimis
Exemption,
Release
Reporting*

217. If a *facility* has process streams with less than 1 percent (or 0.1 percent for carcinogens) of a listed chemical, do fugitive *releases* from these streams have to be included in *release* estimates?

De minimis exclusions apply to process streams when a starting material for the process is a *mixture* containing less than 1 percent (or 0.1 percent) of a listed chemical. If the process stream is exempt under *de minimis*, *releases* from the stream are not reported on the Form R.

*De Minimis
Exemption,
Concentration
Range*

218. A facility regulated under EPCRA Section 313 uses a chemical mixture that contains a listed Section 313 toxic chemical. The concentration of the listed toxic chemical is given as a range on the material safety data sheet (MSDS). If the maximum and minimum concentrations are above and below the de minimis concentration level, how can the facility determine quantities for Section 313 compliance?

The amount of the listed *toxic chemical* in the *mixture* that is at or above the de minimis level, and therefore counts towards the threshold, can be assumed to be proportional to the ratio of the amount at or above de minimis concentration to the amount of the total concentration range. The concentration of the chemical in the *mixture* that is not exempt is the average of the de minimis level and the maximum concentrations.

For example, assume that a *facility* manufactures 10 million pounds of a *mixture* containing 0.25-1.20 % of a *toxic chemical* that is subject to a 1% de minimis level. The quantity of the *mixture* subject to reporting is:

$$\frac{10,000,000 \text{ lb} \times (1.20-0.99)}{(1.20-0.25)} = 2,210,526 \text{ lbs} \quad \text{Non exempt mixture}$$

This 2,210,526 pounds of nonexempt *mixture* is multiplied by the average concentration above the de minimis, which is 1.1 percent, or

$$\frac{1.20 + 0.99}{2}$$

$$2,210,526 \times 0.011 = 24,316 \text{ pounds}$$

In this example, the amount of chemical that counts toward a threshold is 24,316 pounds.

*De minimis
Exemption,
Concentration
Range*

219. A covered facility processes a mixture of chemicals which includes a non-carcinogenic listed toxic chemical present between concentrations of 0.5-1.0%, as stated on the MSDS provided with the mixture. Is the listed toxic chemical in the mixture eligible for the de minimis exemption? If not, how would a facility make a threshold determination for a toxic chemical whose concentration ranges from below the de minimis level to the de minimis level?

A listed *toxic chemical* with a concentration range that has an upper bound equal to the de minimis level is not exempt from reporting under EPCRA Section 313. The exception applies only if the chemical concentration is below the de minimis level. The amount of the listed *toxic chemical* in the *mixture* that is at or above the de minimis level, and therefore counts towards the

threshold, is proportional to the ratio of the amount at or above the de minimis concentration to the amount of the total concentration range. The concentration of the chemical in the *mixture* that is not exempt is the average of the de minimis level and the maximum concentration, which in this case is the same. The fraction of the listed *toxic chemical* that is not exempt is the fraction that is at the de minimis level, i.e., 1%. The fraction that is exempt is that below the de minimis level, which is 0.5% - 0.9% (one significant figure).

For example, assume that a *facility* manufactures 10 million pounds of a *mixture* containing 0.5-1.0 % of a *toxic chemical* that is subject to a 1% de minimis exemption. The quantity of the *mixture* subject to reporting is:

$$\frac{10,000,000 \text{ lb} \times (1.0-0.9)}{(1.0 - 0.5)} = 200,000 \text{ lbs}$$

Non exempt *mixture*

*De minimis
Exemption,
Wastestreams*

220. A raw material contains less than the de minimis level of a listed *toxic chemical*. During “*processing*” of the listed *toxic chemical*, its concentration remains below de minimis. However, the concentration of the listed *toxic chemical* in the wastestream that results from that “*processing*” activity is above the de minimis concentration level for that *toxic chemical*. The wastestream containing that listed *toxic chemical* is disposed in an on-site landfill. Should the *toxic chemical* handled in the “*process*” line be included in the *facility*’s threshold determination? Do the quantities of the listed *toxic chemical* in wastestreams that are generated from this process require reporting? What if the listed *toxic chemical* is present in the wastestream above the de minimis level?

No. The de minimis exemption can be applied to the listed *toxic chemical* in the raw material that is “*processed*.” Because the de minimis exemption can be taken, 1) the quantities “*processed*” do not have to be applied to the “*processing*” threshold for that *toxic chemical* at the *facility* and 2) quantities of the listed *toxic chemical* that are *released* or otherwise managed as waste as a result of this specific “*processing*” activity are exempt from *release* and other *waste management* determinations. The exemption applies even if the listed *toxic chemical* is concentrated above the de minimis level in the wastestream resulting from that “*processing*” activity.

*De minimis
Exemption,
Byproduct*

221. A small quantity of a listed *toxic chemical* is “*manufactured*” in a wastestream. Are *facility* owners/operators required to include the amount of the listed *toxic chemical* present in the wastestream as part of the threshold determination if the concentration of the listed *toxic chemical* in the wastestream is below the de minimis level?

Yes. This de minimis exemption applies solely to *mixtures*. EPA’s long-standing interpretation has been that *mixture* does not include waste. Also,

Threshold Determination, De minimis Exemption, Manufacture, Wastewater Treatment

generally, de minimis does not apply to listed *toxic chemicals* that a *facility manufactures*. Therefore, the de minimis exemption cannot be applied to listed *toxic chemicals* “*manufactured*” as a byproduct.

222. If a facility “manufactures” 900,000 gallons per day of a toxic chemical at a 0.5 percent concentration in a wastewater treatment system, is this quantity to be considered for threshold and release and other waste management determinations?

Since the chemical is “*manufactured*” at the *facility* as part of a waste treatment process, the de minimis exemption does not apply and the *toxic chemical* must be considered for both threshold and *release* and other *waste management* determinations.

De minimis Exemption

223. A facility receives chlorine in 100-ton tank car quantities in concentrations above the 1 percent de minimis level. The chlorine is transferred to a bleaching vessel to make a bleaching mixture, where its concentration drops below the de minimis level. Does the de minimis exemption apply?

No. The *mixture* received by and initially “*processed*” by the *facility* contains chlorine above the de minimis concentration level. Because the *mixture* contained chlorine in a concentration above the 1 percent de minimis level, the *de minimis* exemption does not apply. The *facility* must consider the total weight percent of the chlorine in the *mixture* toward a threshold determination. Any amounts of the listed *toxic chemical* that are ultimately *released* or otherwise managed as waste as a result of this processing step should be reported regardless of the concentration of the chlorine in the wastestream.

De minimis Exemption, Wastes

224. How does the de minimis exemption apply to listed *toxic chemical* residues contained within used or spent containers that are sent off-site for disposal?

The de minimis exemption cannot be applied to quantities of the listed *toxic chemical* in used or spent containers that are sent off-site for disposal. The de minimis exemption can only be applied to a listed *toxic chemical* in a mixture or trade name product that is “*processed*,” “*otherwise used*,” “*manufactured*” as an impurity (that remains with the product), or *imported*, provided that the listed *toxic chemical* is present in the *mixture* or *trade name product* below the de minimis concentration level.

De minimis Exemption, Petroleum Refining

225. In petroleum refining processes, mixtures such as crude oils, fuels, and refinery process streams may contain trace amounts of listed *toxic chemicals*. During the refining process, these mixtures may undergo beneficiation activities which would result in the listed *toxic chemicals*

being concentrated to levels that exceed the de minimis levels. Would the de minimis exemption apply to these processes?

Yes, the de minimis exemption would apply to these *toxic chemicals* until they are concentrated above the applicable de minimis level. For purposes of threshold and *release* determinations and other *waste management* estimates, the *facility* would account for a listed *toxic chemical* from the first point in the process in which the concentration of the *toxic chemical* meets or exceeds the applicable de minimis level for that *toxic chemical*, in the process *mixture*.

*De minimis
Exemption, Air
Releases,
Storage Tanks*

226. As a petroleum refiner, do we have to estimate air releases of chemicals from storage tanks containing crude oil if the concentration of the chemical is below de minimis level? We understand that the amounts of these chemicals would be counted towards threshold since we are extracting and purifying them to concentrations above de minimis.

Facilities that receive chemicals into the plant at concentrations below de minimis have to report *releases* and other *waste management* activities from points in the process only after the chemical is concentrated to exceed de minimis. This *facility* would not have to report air emissions from their crude oil tanks for the chemicals present in oil below de minimis. For those above de minimis, they must report *releases* and other *waste management* activities.

*De minimis
Exemption,
Waste
Treatment
Processes*

227. Is the creation of listed chemicals in waste treatment processes exempt if the concentration is less than the de minimis level?

No. The "*manufacture*" of a Section 313 chemical during a waste treatment process is not covered by the de minimis exemption.

*De Minimis
Exemption,
Compound
Category,
Delimited
Category*

228. When determining the de minimis level for members of an EPCRA section 313 category, the total weight of all the members of the category in the *mixture* must be counted and compared to the applicable de minimis level. How would a *facility* determine the de minimis level for a *mixture* containing members of a category, such as the polycyclic aromatic compounds category, where one or more of the members has a different de minimis level than the others?

For delimited categories in which one or more members have a lower de minimis level than the other members, two calculations are done. First, the weight of all members of the category in the *mixture* that have a 0.1% de minimis is determined and compared to the 0.1% de minimis level. Second, the weight of all members of the category in the *mixture* (both those with 0.1% and 1.0% de minimis) is determined and compared to the 1.0% de minimis. If only the first de minimis calculation is exceeded then only those chemicals with the 0.1% de minimis must be included in threshold and *release* and other

waste management determinations. Therefore, category members with the 1.0% *de minimis* would be excluded from threshold and *release* and other *waste management* determinations if only the first *de minimis* calculation is exceeded. If the second *de minimis* calculation is exceeded then all of the category members in the *mixture* must be included in threshold and *release* and other *waste management* determinations.

F. Articles

Article
Exemption,
Threshold
Determination

229. Are “articles” exempt from threshold determinations in normal “processing,” “otherwise use,” or disposal?

An “*article*” would be exempt from threshold determinations if the *article* meets the criteria for exemption. The *article* must be a manufactured item 1) which is formed to a specific shape or design during manufacture; 2) which has end use functions dependent in whole or in part upon its shape or design during end use; and 3) which does not *release* a *toxic chemical* under normal conditions of “*processing*” or “*otherwise use*” of the item at the *facility* or *establishments*. If an item retains its initial thickness or diameter in whole or in part, as a result of normal “*processing*” or “*otherwise use*,” then it meets the first part of the definition. Disposal of materials that are recognizable as the processed *article* is not considered a *release* nor management of a waste containing a listed *toxic chemical* from an *article*, and thus, does not negate the *article* status.

Article
Exemption,
Threshold
Determination

230. Are metal articles exempt from threshold determinations in normal “processing,” “otherwise use” or disposal?

The fact that the item is metal is irrelevant since metals do not have special status under the *article* exemption. If the metal *article* meets all the criteria for the *article* exemption during normal “*processing*” and “*otherwise use*,” then it would be exempt from threshold determinations and *release* and other *waste management* estimates.

Threshold
Determination,
Article
Exemption,
Recycle

231. A facility manufactures “non-article” metal items. If all wastes from the manufacturing process are recycled, are the items still subject to threshold determinations?

If a “*non-article*” metal item is processed but all wastes are recycled, the item is still subject to threshold determinations. The *toxic chemicals* therein must be applied to the appropriate thresholds.

Article
Exemption,
Article
Releases, Half
Pound Policy

232. Please clarify the Agency's half pound policy for the *article* exemption.

The Agency has adopted a "round to the nearest pound policy." If the amount of a listed *toxic chemical* in *releases* from "*processing*" or "*otherwise using*" all like items is equal to or less than a half pound, this amount can be rounded to zero. Thus, the exemption would be maintained. The half pound limit does not apply to each individual *article*, but applies to the sum of all amounts *released* during "*processing*" or "*otherwise use*" of all like items. If the listed *toxic chemical* that is *released* exceeds a half pound and is completely recycled/reused, on-site or off-site, then the item may still maintain its status as an *article*.

Article
Exemption,
Manufacturing
Article

233. Does the *article* exemption in the Section 313 rule apply to preparation (i.e., "*manufacturing*") of the *article*? What about "*processing*" or "*otherwise using*" that *article*?

The *article* exemption applies to the normal "*processing*" or "*otherwise use*" of an *article*. It does not apply to the "*manufacture*" of an *article*. For example, "*manufacturing*" of *articles* such as tableware is not exempt. *Toxic chemicals* "*processed*" into *articles* produced at a *facility* must be factored into threshold determinations and *release* and other *waste management* estimates.

Article
Exemption,
Manufacturing
Article

234. A *facility* uses sheet metal to "*manufacture*" metal desks. When "*manufacturing*" the desks, the operator welds and solders some of the sheet metal together. Must the *facility* include the *toxic chemicals* in the welding rods, solders, and the metals being joined for its threshold determination? Does the metal desk meet the *article* exemption?

If 0.5 lbs. or less of the *toxic chemical* is *released* from all like *articles* in the reporting year and the overall thickness or diameter of the sheet metal is not changed when processed into the desk, the sheet metal would retain its *article* status. The desk itself would not meet the criteria for the *article* exemption because the exemption does not apply to the "*manufacturing*" of *articles*. Also, because air emissions are generated from the welding and soldering rods when they are used, the owner/operator must assess the entire amount of the *toxic chemical* in the rods for "*processing*" threshold purposes.

Article
Exemption,
Article
Releases,
Welding Rods

235. Our *facility* uses welding rods for equipment maintenance. Can these be considered *articles*?

One of the three qualifying criteria for the *article* exemption (40 CFR 372.3), states that an *article* "does not *release a toxic chemical* under normal conditions of '*processing*' or '*otherwise use*' of that item at the *facility* or *establishment*." When the welding rod is used, a listed *toxic chemical* is *released*. Therefore, the welding rod can not be considered an *article*.

Article
Exemption,
Fume or Dust
Qualifier

236. A facility generates steel dust when it “processes” sheet steel metal. Each dust particle is actually an alloy containing more than one type of metal (e.g., chromium and aluminum). If the *toxic chemical* in the steel is listed with a qualifier which includes dust (e.g., aluminum), does EPA consider the dust particle the listed *toxic chemical*?

In this example, EPA considers steel dust particles which contain aluminum in the dust form a listed *toxic chemical*. Therefore, that weight percentage of the steel dust which is aluminum would be subject to threshold and *release* and other *waste management* reporting as aluminum dust.

Article
Exemption,
Recycle

237. A facility uses a die block to “manufacture” items. When the block becomes worn and needs adjustments such as shaving and melting to restore its shape, how does the facility report on *releases* resulting from that activity?

If, upon shaving and melting the die block, the diameter or thickness are not retained in whole or in part or *toxic chemicals* are *released* in an amount which exceeds 0.5 pounds for all like items, then the block would no longer qualify for the *article* exemption and the *facility* would have to perform threshold determinations and report *releases* and other *waste management* of the listed *toxic chemical*. When threshold determinations are made, the *facility* must consider the weight of the *toxic chemical* contained in the entire block for threshold determinations. However, only quantities in like *articles* that do not meet the *article* definition and were placed into use within the reporting year would be considered towards thresholds. Those items in use from previous years would not be considered in the threshold determinations for the current reporting year.

Article
Exemption,
Fume or Dust
Qualifier

238. A company processes a galvanized sheet metal containing elemental zinc, not a zinc compound. When the sheet metal is processed it generates zinc dust, all of which is captured and sent off-site for recycling. The sheet metal is formed to a specific shape and its end use functions depend in whole on its shape during end use. Can the company claim an exemption because the sheet metal remains an *article*, or must it do a threshold determination for zinc because it has coincidentally “manufactured” zinc in the dust form?

Elemental zinc is listed with a qualifier, fume or dust, and is only reportable in the form of fume or dust. Thus, the zinc in the sheet metal would not count toward the threshold determinations since it is not in the fume or dust form. The zinc that is generated (in the form of fume or dust) as a result of the sheet metal processing is reportable and would be counted toward the 25,000 pound threshold determination for “*manufacturing*,” regardless of the sheet metal’s *article* status.

If the sheet metal contained other *toxic chemicals* (e.g., chromium), the sheet metal would qualify as an *article* if all *releases* from the metal during processing are recycled or reused, and it meets the other criteria for the *article* exemption. However, if wastes containing the listed *toxic chemical* are not recycled or reused, and if these wastes amount to more than 0.5 pounds for all like items, then the *article* exemption would not apply.

*Article
Exemption,
Process,
Batteries*

239. If an automobile manufacturer receives finished car batteries and places these batteries into the cars they sell, must the automobile manufacturer report the lead which is incorporated in the battery?

If the car battery is completely sealed while present at the *facility*, it would be considered an *article*, and thus would be exempt from EPCRA Section 313 reporting. If lead is *released* from the batteries under normal "*processing*" at the *facility*, as might occur during maintenance of the battery, the *release* would negate the *article* exemption. If the exemption is negated, the amount of lead and any other *toxic chemical* in these non-*article* batteries would be applied toward the 25,000 pound "*processing*" threshold to determine if the *facility* must report.

*Article
Exemption,
Reportable
Release*

240. I am a power tool manufacturer and we use copper, a listed *toxic chemical*. We receive copper plates and shave the rough edges of them. The shavings are vacuumed and sold to a scrap metal *facility* which makes ingots and sells them. Is the copper plate an *article*? How do I consider the shavings?

Because all of the copper *released* from the plate is collected and reused, no reportable *release* has occurred and the *article* exemption is maintained. If the copper is disposed of, on the other hand, the plates lose the *article* status.

*Article
Exemption,
Glass*

241. If glass is purchased (with about a 20 percent lead content) and its form is physically changed to make light bulbs, is that considered "*processing*" or does the *article* exemption apply?

The *article* exemption does not apply because: (1) the end use of the glass is not dependent on the specific shape or design of the glass entering the process - the glass is melted and reshaped, and/or (2) emissions result from heating of the glass during "*processing*."

*Article
Exemption,
Article
Releases*

242. A *facility* cuts metal sheets containing nickel, releasing fumes. It then further grinds the metal to its final shape, producing grindings. For the sheets to retain their *article* status, the fumes and grindings must be equal to or less than 0.5 pound/year to any media. Does this value apply to aggregate grindings and fumes from like *articles* being "*processed*" or "*otherwise used*" in the same way (i.e., cutting or grinding) or to grindings

and fumes generated from all manners of “*processing*” or “*otherwise use*” of like *articles* (i.e., cutting and grinding)?

The 0.5 pound/year *release* value applies to aggregate grindings and fumes from like *articles* being “*processed*” or “*otherwise used*” in all manners at the *facility*. This value applies to the total aggregate grindings and fumes of the listed *toxic chemical* from both steps of the process (i.e., cutting and grinding). The various shapes resulting from the cutting are “the same type of item” as the initial sheet. Thus, the amount of fumes resulting from cutting should be added to the amount of resulting grindings.

Article
Exemption,
Article
Releases,
Supplier
Notification

243. A facility uses plastic containing di-(2-ethylhexyl) phthalate (DEHP) to wrap its products. The plastic is cut by a hot wire, a process during which minute quantities of DEHP are released. Is the plastic exempt from reporting and from supplier notification because it can be considered an article?

The plastic wrap containing DEHP is not exempt as an *article* because quantities of DEHP are *released* during the cutting process. If a *facility releases* 0.5 pounds or less of DEHP during the reporting year from all like items, this amount can be rounded to zero and therefore would be exempt. If the *facility* can reasonably document that none of its customers are likely to *release* more than 0.5 pounds, no supplier notification is required.

Article
Exemption,
Sheet Metal,
Threshold
Determination

244. A facility “processes” sheet metal that contains a listed toxic chemical. When “processed,” some pieces of the sheet metal are cut generating shavings which contain the listed toxic chemicals and which are not 100 percent recycled. Thus, the sheet metal does not meet the article exemption criteria. Must the facility consider the amount of the listed toxic chemical in the entire piece of sheet metal for threshold determinations or may the facility consider just the amount of listed toxic chemical in the area of the sheet metal that is cut?

All of the listed *toxic chemical* in the entire piece of cut sheet metal must be counted toward the “*processing*” threshold, not just the weight of the listed *toxic chemical* in the section of the item on which work is done. The weight of the listed *toxic chemical* in the entire piece of sheet metal is used; the exemption cannot apply to a portion of the *article*.

Article
Exemption,
Wire

245. I use copper wire in one of my products. I cut it and bend it and then heat seal it into a glass bulb. How do I consider the copper wire for Section 313 reporting?

First, the wire would remain an *article* if during the manufacture of the glass bulbs no *toxic chemicals* are *released*, and if the wire meets the other two

criteria of the *article* exemption (i.e., it is formed to a specific shape or design during manufacture and it has end use functions dependent in whole or in part upon its shape or design). If the wire is not an *article*, then for an element such as copper, both copper metal and copper compounds are subject to Section 313 reporting. Determine the form of the copper in the wire first. If it is pure copper wire, the entire weight of the wire must be used. If it is an alloy, the weight percent times the wire weight must be used. If there are copper compounds, the entire weight of each copper compound must be used for the threshold determination.

Article
Exemption,
Wire

246. We cut copper wire into segments which are then wound around a motor part. The ends are not stacked and our engineer determined that no copper is released. Is the wire still an *article*?

Cutting the wire into segments and winding it around a motor part do not negate the exemption since the diameter and thickness of the wire is not changed. The copper wire remains an *article* as long as no *toxic chemicals* are released during use. Since your engineer determined no copper is released, the *article* exemption does apply and the copper wire does not have to be considered for threshold determination.

Article
Exemption,
Wire

247. Copper wire at a facility is cleansed by dipping it into a sulfuric acid solution. This acidic solution etches away a portion of the surface of the wire. The etched copper reacts with the acid to form copper sulfate. The wastestream containing the copper sulfate is sent directly to a POTW and no other releases of copper occur on-site to any other environmental media. Is the *article* exemption (40 CFR 372.38(b)) negated for the copper wire?

The transfer of the copper sulfate to the POTW constitutes a *release* from the *article*. The *release* from the copper wire in the form of a copper compound would negate the *article* exemption for the copper wire. If the facility exceeds an activity threshold for the copper wire, a report must be filed for copper. In addition, if the 25,000 pound "*manufacturing*" threshold is exceeded for the copper sulfate, a report must also be filed for copper compounds. If a threshold for copper and copper compounds is individually met, the facility may file one report for both.

Article
Exemption,
Sheet Metal

248. I run a metal fabrication facility, SIC code 34. If I cut the metal sheets and send the shavings off-site for reuse, can I consider the metal sheets *articles*?

Yes. If the only thing separated from the metal sheets during cutting are shavings, and if all the shavings are sent off-site for reuse, and the thickness of

Article
Exemption,
Sheet Metal,
Article
Releases

the metal sheet is not completely altered during "processing," then the metal sheets are still considered *articles* and are exempt. If cutting results in shavings or other waste materials from the sheets, and if these shavings are completely captured and sent either on-site or off-site to be either recycled or reused, then the item (in this case, metal sheets) can retain the *article* exemption, given that the other criteria for exemption are met.

249. A facility "processes" metal sheets containing nickel in a four-step process: 1) sheets cut with a laser saw (releasing nickel fumes); 2) pieces further ground to their final shape (releasing grindings); 3) ground pieces sent off-site for heat treatment; 4) heat treated pieces returned to facility where holes are bored (producing turnings) and the resultant pieces are assembled into the final product. How are releases reported?

Although the pieces are sent off-site in step 3, they are returned to the process as essentially the same material. Thus, the activity is to be treated as a continuous process activity. If there is scrap material which is recognizable as the original form of the *article*, and if *releases* from steps 1, 2, and 4 (collectively), which are not recycled, do not exceed 0.5 pounds, then the metal sheets could be exempt as *articles*.

Article
Exemption,
Sheet Metal

250. Does the *article* exemption apply to flat rolled sheet metals, if they are used in operations which typically produce scrap but no release?

Assuming the scrap metal pieces are recognizable as the original piece, the *article* exemption does apply to these metals if the forming process caused 0.5 pounds or less of *releases* of a listed *toxic chemical* from all like items or retains thickness of sheet metal in whole or in part. Once an operation is performed on a metal that causes a *release* which is not recycled which exceeds 0.5 pounds, however, such as heating, grinding, welding, the *article* exemption no longer applies and *releases* must be reported when chemicals in a sheet metal are "processed" in quantities greater than 25,000 pounds.

Article
Exemption,
Article
Releases

251. A metals working plant machines, cuts, forms, and joins plate, cylinder, and other purchased metal alloy parts. Alloys of nickel and chromium, in above *de minimis* levels, are "processed" in amounts that exceed 50,000 pounds per year. Does the *article* exemption apply since emissions from operations such as welding represent only a small fraction of the total metallic component of the surface area "processed?"

Releases of the chemicals contained in *mixtures*, including alloys, during fabrication operations disqualifies the item processed from the *article* exemption. Wastes generated in a form recognizable as the processed *article* (e.g., pieces of a plate or cylinder) are exempt from *release* and other *waste manage-*

Article
Exemption,
Bar Stock

ment calculations. *Releases* include the chemical component of fumes, dust, grindings, and turnings generated from metal fabrication activities.

252. Is bar stock that is used to make precision tuned parts an *article* and thus exempt from Section 313 reporting? The bar stock is “*processed*” to produce parts that in whole or in part retain the basic dimensional characteristic of the bar stock. The production of the part itself is dependent upon the specific shape and dimension of the bar stock and there are no *releases* during “*processing*.”

Bar stock is an *article* if its basic dimensional characteristics are maintained in whole or in part in the finished product and if processing the bar stock does not result in *releases*. If the end product is totally different in diameter or thickness, then the bar stock would not be an *article*.

Article
Exemption,
Bar Stock

253. Can facilities which extrude copper bars or rods into wire treat the bar or rod as an *article*?

No. If you are completely changing the shape or form of an item during “*processing*,” the *article* exemption no longer applies. An *article* has end use functions dependent in whole or in part upon its shape or design during end use. The end use function is dependent upon the copper being in the shape of the wire, so the copper bar cannot be considered an *article*.

Article
Exemption,
Manufacturing
Article

254. A manufacturer of plastic bottles makes the bottles by blow-molding a mixture of plastic resin and polymer pellets that contain lead chromate (a *toxic chemical*) and fillers. Once the bottles are made, they are checked for flaws (i.e., a quality assurance check). Any bottles that do not pass the quality assurance test are placed in the *facility* dumpster and are subsequently disposed of in the local municipal landfill. Do these substandard bottles meet the *article* exemption and thereby exempt the lead chromate from being a *release* of listed *toxic chemical* under Section 313?

No. The “*manufacture*” of *articles* is not exempt. Thus, the lead chromate that is sent to the landfill is considered a *release* of lead chromate since the substandard bottles that are disposed of are waste from the “*manufacturing*” process.

Article
Exemption,
Lead Bricks

255. A *facility* (ship builder) incorporates lead bricks in ships as ballast for distribution in commerce. They remain permanently with the ship. The lead bricks could be considered *articles* and therefore be exempt from reporting. However, the *facility* infrequently cuts some of the bricks, generating lead dust, which it collects and sends to an off-site lead reprocessor. How should the *facility* report? What should be counted towards the threshold if the lead bricks are not considered *articles*?

If all of the lead is recycled or reused then the lead dust does not have to be counted as a *release*. Therefore, the cut bricks retain their *article* status. If while cutting the bricks, there are *releases* which are not recycled and that exceed 0.5 pounds for a year, then the cut bricks would not be considered *articles*. In this case, count only the lead in bricks actually "*processed*" (i.e., cut) toward the threshold determination. Any amounts of *toxic chemicals* sent off-site for recycling would be reported appropriately on the Form R.

*Article
Exemption,
Article
Releases*

256. During the construction and repair of ships, small quantities of a listed *toxic chemical* are emitted in the form of fumes when steel plates are being welded together. The steel plates qualify as *articles* because they are formed to a specific shape during "*manufacture*" and their end use function is dependent upon their shape. Are these steel plates *articles* and should the amount of *toxic chemical* (fumes from the steel plates) emitted from the steel plates during the welding process be included in determining the threshold?

If the "*processing*" or "*otherwise use*" of all like manufactured items results in the *release* of 0.5 pounds or less of a *toxic chemical*, EPA will allow this quantity to be rounded to zero and the manufactured items may be exempt as *articles*. If the listed *toxic chemical* that is *released* exceeds 0.5 pounds over a calendar year and is completely recycled or reused, on-site or off-site, then these steel plates may also be exempt as *articles*. Any amount that is not recycled or reused will count toward the 0.5 pound per year cut-off value.

*Article
Exemption,
Battery*

257. How should a *facility* owner/operator handle the reporting requirement for listed *toxic chemicals* found in industrial and commercial batteries under EPCRA Section 313 that it employs onsite? What if the *facility* manufactures the batteries?

A manufactured item (e.g., maintenance-free batteries) containing a listed *toxic chemical* may be considered an *article* if the *facility* uses the item as intended and the listed *toxic chemical* is not emitted during its "*processing*" or "*otherwise use*." If the *facility* services the item by replacing the listed *toxic chemical*, the amount of the listed *toxic chemical* added during the reporting year must be counted toward the threshold determination. For *facilities* which manufacture batteries, lead that is incorporated into a lead acid battery is "*processed*" to manufacture the battery, and therefore must be counted toward threshold determinations and *release* and other *waste management* estimates. The *article* exemption does not apply to the manufacture of an item. However, the use of the battery elsewhere in the *facility* does not have to be counted. Disposal of the battery after its use does not constitute a *release*.

Article
Exemption,
Catalyst

258. A facility uses a catalyst containing a listed toxic chemical in a fixed bed reactor. The catalyst is in the form of cylindrical or trilobed extrudates (pellets) in a specific size. It is used to promote a toxic chemical reaction and is not physically altered during use. The spent catalyst is sent to a reclaimer for eventual reuse. Can the catalyst be exempted as an article under Section 313?

No. Although the catalyst is “*manufactured*” to a specific shape or design, and has end use functions dependent upon its shape during end use, EPA believes that *releases* occur during transfer operations; therefore, the *article* exemption does not apply. Such catalysts usually contain dust size material that is not the same size and shape of the pellets. The likely *releases* would be dust emissions and potential spills that occur during charging and removing the catalyst from the reactor. Such operations are part of the normal conditions of “*processing*” and “*otherwise use*” that must be considered under the *article* definition. The intent of EPCRA is to capture all *releases*, whether they are intentional or not. The spent catalyst sent off-site for recycling does not itself constitute a *release* that invalidates the *article* exemption, as long as all of the *toxic chemical* is recycled. The *facility* should also consider whether any on-site regeneration of the catalyst results in the *toxic chemical* being *released* in wastestreams.

Article
Exemption

259. A facility “processes” a metal item containing nickel. The finished product retains in part the dimension characteristics of the original item and all the metal shavings resulting from the process are sent off-site for recycling. Since the Pollution Prevention Act requires reporting of recycled amounts of a listed toxic chemical, does that mean the material is not an article?

The Pollution Prevention Act requirements do not affect the *article* status of the metal item. If all of the *releases* from the *article* are sent off-site for recycling, the item would still be exempt as an *article*. If this is the only occurrence of nickel in the *facility*, the *facility* would not have to report for nickel.

Article
Exemption,
End Use
Function

260. A facility “manufactures” lead came (i.e., slender, grooved, lead rods). A lead billet is placed into a press and pushed through a die to produce a unique form. The facility “processes” 100,000 pounds of lead came. Is this process exempt from reporting under the article exemption?

The *article* exemption does not apply. The lead billet does not qualify as an *article* because it does not have an end use function other than to be of a size and shape convenient to further “*processing*,” and the end product is significantly different in shape and dimension from the starting material. Since the “*processing*” quantity exceeds the 25,000 pounds threshold, the *facility* must report.

Article
Exemption,
Recognizable
as an Article,
Disposal,
Process

261. A manufacturing facility produces neon signs by bending leaded glass tubing. The facility uses enough tubing annually to “process” in excess of 25,000 pounds of lead, an EPCRA Section 313 toxic chemical. When signs are formed from glass tubing, the diameter of the tubes remains unchanged and lead is not released during the heating or bending process, qualifying the tubes for the article exemption. If a discrete number of glass tubes are broken and discarded during the year, under what circumstances would disposal of the broken tubes constitute a release that negates the article exemption, and how would the facility calculate the amount of lead used in their operation?

Disposal of the glass does not necessarily constitute a release which automatically negates the article exemption. For the tubing to meet the definition of an article when discarded, the diameter of the tubing must remain intact and unchanged. As a result, shards of glass no longer qualify as articles. If more than 0.5 pounds of lead is released and not recycled, then the article exemption would not apply to this process.

Article
Exemption,
Light Bulbs

262. A facility subject to EPCRA Section 313 crushes light bulbs and uses the crushed glass in their process. The light bulb stems are not used in the process and are disposed of. There is a lead “button” in each light bulb stem which is disposed of. Is this button considered an article and therefore exempt from threshold and release and other waste management calculations under 40 CFR Section 372.38(b)?

No, the lead buttons from crushed light bulbs would not be considered articles and the lead would not be exempt from threshold and release and other waste management calculations. On-site disposal of a listed toxic chemical however, is not a covered activity (i.e., “manufactured,” “processed,” or “otherwise used”), therefore the lead in these buttons would not be counted toward any threshold. The facility would only be required to report the release of lead buttons if a threshold for lead was exceeded by a covered activity elsewhere at the facility.

Article
Exemption,
PCB
Transformers

263. A facility uses PCB transformers. Are these considered to be articles, and therefore exempt from reporting under Section 313?

PCB transformers are considered to be articles, as long as PCBs are not released from the transformers during normal use or if the facility does not service the transformer by replacing the fluid with other PCB-containing fluid. (See also: Section 313 Policy Directives - Directive #6: PCBs Threshold Determinations and Release Reporting.)

Article
Exemption,
PCB
Transformers

264. A facility has a PCB transformer on-site which it uses for energy. The PCBs were removed from the transformer and disposed of. Is the amount of PCB removed for disposal counted towards the "otherwise use" threshold? How is this activity covered under EPCRA Section 313?

If the *facility* removes the entire transformer including the PCB laced oil as an *article*, the amount of PCB in the *article* would not be included in Section 313 threshold and *release* and other *waste management* reporting. If a *toxic chemical* is present in an *article* at a *covered facility*, a person is not required to consider the quantity of the *toxic chemical* present in such *article* when determining whether an applicable threshold has been met or when determining the amount to be reported as a *release* or other *waste management*.

If the *facility* removes the PCB laced oil from the *article*, this removal would negate the *article* exemption. To determine if the *facility* exceeds a threshold, the operator of the *facility* shall count the amount of the chemical added to the recycle/reuse operation during the reporting year (40 CFR Part 372.25(e)).

If a *facility* has a transformer that leaks PCB laced oil, this leaking would also negate the *article* exemption. To determine if the *facility* exceeds a threshold, again, the owner/operator of the *facility* must count the amount of the chemical added to the recycle/reuse operation during the reporting year.

The *facility* would be "otherwise using" the PCB added to the transformer (ancillary use). Only the amount of PCB added to the transformer needs to be aggregated for threshold determination, and the *facility* will most likely not be adding PCB laced oil to the transformer. Therefore, it is unlikely that the *facility* will exceed the 10,000 pound "otherwise use" threshold. The *facility*, therefore, would not be required to report *releases* of the PCBs for Section 313.

If, however, the *facility* exceeds the 10,000 pound threshold and needs to report PCBs, the PCBs removed from the transformer and sent off-site for final disposal would be a reportable *release*.

Article
Exemption,
Process,
Article
Releases

265. I process a plastic pipe which contains formaldehyde (3 percent by weight). I also know how much formaldehyde is released when I process the pipe. Do I need to report these emissions?

If the quantity of the formaldehyde *released* during "processing" of all like items exceeds 0.5 lbs, the *facilities* cannot take the *article* exemption for the pipe; all formaldehyde incorporated into the pipe should be counted toward the "processing" threshold. The *facility* should report if the "processing" threshold

Article
Exemption,
Article
Releases,
Polyurethane
Foam

is exceeded. If the quantity of formaldehyde *released* during “*processing*” of the pipes is 0.5 lbs or less, the *facility* would not have to report because it is part of an *article*.

266. A facility buys and sells rigid polyurethane insulating foam containing Freon 113, a fluorocarbon, in higher than the de minimis concentrations. The facility cuts the foam and packages it to be sold and distributed in commerce. Does the facility need to report the Freon 113, a Section 313 chemical, released to the air as a result of cutting polyurethane foam?

Freon 113 in foam pieces that are cut, counts toward the “*processing*” threshold. If the threshold is met, the *facility* must report all *releases* of Freon 113 as a result of cutting polyurethane foam and any diffusion of Freon 113 in polyurethane foam to the *environment* under normal storage conditions. Note that the polyurethane foam may meet the *article* exemption if it has 0.5 pounds or less, from all like items, of Freon 113 *released* during “*processing*” and maintains a specific shape or design.

**Section 3. DETERMINING WHETHER OR NOT TO REPORT:
LISTED TOXIC CHEMICALS (See also Appendix A: Section 313 Policy
Directive #5 - Toxic Chemical Categories)**

A. General Questions

*Toxic Chemical
List*

267. What list of *toxic chemicals* is subject to reporting under EPCRA Section 313?

EPCRA Section 313 defined the list of *toxic chemicals*. The initial list (with certain technical modifications and revisions) appears in the regulations (40 CFR Section 372.65) and in the instruction booklet for completing Form R. EPA, from time to time, has revised the list. The most recent instructions booklet for completing the Form R contains the updated chemical list. To obtain information on the latest additions or deletions from the list of *toxic chemicals* contact the Emergency Planning and Community Right-to-Know Information Hotline.

*Toxic Chemical
List*

268. What is the difference between the Section 313 list of *toxic chemicals* and other EPCRA lists of regulated chemicals?

Some overlaps exist between lists of chemicals covered by different Sections of EPCRA. Section 313 focuses on *toxic chemicals* that may cause chronic health and environmental effects, although the list does contain chemicals that cause acute health effects. The Section 313 list was developed from lists of regulated *toxic chemicals* in New Jersey and Maryland. The other EPCRA lists cover chemicals of concern for emergency planning purposes. The EPA "List of Lists" document identifies *toxic chemicals* that are specifically listed and must be reported under various Sections of EPCRA.

*Chemical
Name,
Trade Name*

269. Can common or trade names other than those listed in the regulations be used for submissions?

No. EPA has provided a list of standard chemical names and CAS numbers for all chemicals that must be reported. The regulations require the use of these standard names. Many Form Rs submitted previously could not be processed because unlisted CAS numbers or names were used.

*CAS Number,
Chemical
Name,
Mixtures*

270. We use a *toxic chemical* with a CAS number not on the list of Section 313 *toxic chemicals*. There are similar *toxic chemicals* on the list, but none with the same CAS number. How can I be sure I do not have to report?

Although CAS numbers are useful, a *facility* should also use the *toxic chemical* name to determine if a *toxic chemical* is listed on the EPCRA Section 313 list. Be aware, however, that *mixtures* are often assigned CAS numbers. These

TOXIC
CHEMICALS

*Chemical
Categories,
Activity
Thresholds,
Metal
Compounds,
Release
Reporting*

mixtures may contain individually listed *toxic chemicals*. The *facility* should use all available information, including the *toxic chemical* name as well as process and chemical knowledge, to determine if a component of the *mixture* is a listed *toxic chemical* under Section 313. CAS numbers may be of limited use in this case. Also, certain specific compounds (e.g., copper chloride) are not listed individually on the EPCRA Section 313 list with a specific CAS number, but are reportable under a compound category.

271. How are *toxic chemical* categories handled under Section 313 threshold determinations and *release* reporting?

All *toxic chemicals* in the category that are “*manufactured*,” “*processed*,” or “*otherwise used*” at a *facility* must be totaled and compared to the appropriate thresholds. A threshold determination for *toxic chemical* categories is based on the total weight of the compound. Except for metal compound categories and nitrate compounds, the total weight of the compound *released* or otherwise managed as waste must be reported. *Releases* and other *waste management* quantities of metal compounds are reported as the parent metal portion of the compounds. If the metal and corresponding metal compounds exceed thresholds, a joint report for metal compounds, including the parent metal, can cover both reporting requirements. Similarly, *releases* and other *waste management* quantities of nitrate compounds are reported as the nitrate portion of the compound.

*Chemical
Categories,
Category
Code, CAS
Number*

272. If an item on the Section 313 list incorporates *toxic chemicals* with multiple CAS numbers (i.e., nickel compounds), how is the CAS number of the item described?

Do not enter a CAS number in such cases. Instead, enter the appropriate category code (provided in the instructions to the Form R) in the space for the CAS number in Part II Section 1.1 of Form R. The individual chemical members of a listed category are not required to be, and should not be, identified in the report.

*Chemical
Categories,
Health Effects*

273. Do the *toxic chemical* categories such as nickel compounds include all compounds, even those which have not been associated with adverse health effects? What is the authority for this decision?

The Section 313 list established by Congressional legislation included categories. EPA interprets these listings to mean all compounds of nickel, for example, regardless of whether specific toxicological problems have been identified for a specific compound in the category. However, EPA may grant, and has granted, petitions to delete specific compounds from a category if the Agency determines that the compound is found to not meet the listing criteria.

*Threshold
Determination,
Chemical
Conversion*

274. Some toxic chemicals released into the environment react to form other toxic chemicals, for example, phosphorus (a listed toxic chemical) oxidizes in air to form phosphorus pentoxide (not a listed toxic chemical). Which should be reported, the transformed toxic chemical or the source toxic chemical? How would the report(s) be prepared if both the source and resulting toxic chemical are listed?

Report releases of the listed toxic chemical. The facility is not responsible for reporting a toxic chemical resulting from a conversion in the environment (e.g., outside of a facility air stack).

*Metal
Compounds,
Threshold
Determination*

275. Do we count the nonmetal portion of metal compounds?

The nonmetal portion of metal compounds is included in threshold determinations but not in release and other waste management determinations.

*Chemical
Deletions,
Effective Date*

276. EPCRA Section 313(d) provides for the addition and deletion of chemicals to and from the list of toxic chemicals found at 40 CFR Section 372.65. According to EPCRA Section 313(d)(4), any revision to the list made on or after January 1 and before December 1 of any reporting year will take effect beginning with the next reporting year. Any revision made on or after December 1 and before January 1 of the next reporting year will take effect beginning with the reporting year following the next reporting year. While all additions to the list are subject to these provisions, the Agency has not applied the delayed effective dates specified in EPCRA Section 313(d)(4) for any rules deleting chemicals from the EPCRA Section 313 list. To date, the promulgated final rules delisting chemicals have been effective on the date of publication of the final rule in the Federal Register. Moreover, when EPA has issued the final rule before July 1, the Agency has relieved facilities of their reporting obligation for the previous reporting year in addition to obviating future reporting. Given the statutory language, why has EPA not promulgated a delayed effective date for those actions deleting substances from the list of toxic chemicals?

Although the statutory language outlines a delayed effective date provision, EPA interprets EPCRA Section 313(d)(4) to apply only to actions which add to the list of toxic chemicals. As explained in the final rule deleting di-n-octyl phthalate from the EPCRA Section 313 list, published on October 5, 1993 (58 FR 51785), the Agency believes that it may, in its discretion, make deletions effective immediately upon the determination that a chemical does not satisfy the listing criteria found at EPCRA Section 313(d)(2). Since a deletion from the list alleviates a regulatory burden, and 5 U.S.C. Section 553(d)(1) permits any substantive rule which relieves a restriction to take effect without delay, EPA is authorized to delete chemicals from the list effective immediately. The Agency believes that the purpose of EPCRA Section 313(d)(4) is to provide

facilities with adequate time to incorporate newly listed chemicals into their data collection processes. Because *facilities* can immediately cease reporting on a delisted chemical, and since the chemical no longer satisfies the listing criteria, EPA has not specified a delayed effective date for deletions from the list of *toxic chemicals* under EPCRA Section 313.

B. Toxic Chemical-Specific Questions

Acids

pH,
Neutralization,
Release
Reporting

277. A strong mineral acid solution is neutralized, i.e., the pH of the solution is adjusted to pH 6 or greater, before release to surface waters. How do we report this release on the Form R?

For purposes of EPCRA Section 313 reporting, a discharge of pH 6 or above contains no reportable amount of mineral acid. The *facility* owner/operator should report zero, not NA, in Part II Section 5.3 of the Form R.

Coincidental
Manufacture,
Combustion
Byproducts,
Hydrochloric
Acid, Metal
Compounds

278. A facility has a coal-fired boiler. The combustion of the coal generates aerosol forms of hydrochloric acid as a byproduct. Should the aerosol forms of the HCl emissions be reported under EPCRA Section 313?

Yes. In the combustion of coal, the *facility* will be coincidentally “*manufacturing*” aerosol forms of hydrochloric acid, as well as hydrofluoric acid and sulfuric acid. The combustion of coal will also result in the coincidental “*manufacture*” of new metal compounds. The *facility* must submit a Form R if it “*manufactures*” more than 25,000 pounds of any of these listed *toxic chemicals*.

Acid Aerosol,
Treatment for
Destruction,
Hydrochloric
Acid, Sulfuric
Acid

279. A wastestream containing aerosol forms of hydrochloric and sulfuric acid goes up a stack. Before exiting the stack, the wastestream passes through a scrubber where the acid aerosols are captured in an aqueous solution. How is this to be reported under Section 313?

When a scrubber is used to remove sulfuric or hydrochloric acid aerosols prior to or in a stack, the acid aerosols are usually converted to the non-aerosol form. The non-aerosol forms of sulfuric and hydrochloric acid are not reportable under EPCRA Section 313 because the qualifier to the sulfuric acid and hydrochloric acid listing includes only acid aerosol forms. Sulfuric and hydrochloric acid as discrete chemicals have not actually been destroyed by the scrubber, but the form of these acids reportable under EPCRA Section 313 has been destroyed. Therefore, since sulfuric or hydrochloric acid aerosols removed by scrubbers are converted to non-reportable forms, the quantity removed by the scrubber can be reported as having been treated for destruction. However, all of the sulfuric acid or hydrochloric acid aerosols that are produced prior to or

*Acid Aerosols,
Acid Reuse
System*

after the scrubber count towards that “*manufacturing*” threshold, and any acid aerosols that are not removed by the scrubber and continue out of the stack must be reported as a *release* to air.

280. How are sulfuric and hydrochloric acid aerosols that are generated over and over again in acid reuse systems to be reported under Section 313?

When solutions of sulfuric acid and hydrochloric acid are aerosolized the “*manufacture*” of a listed chemical (sulfuric acid or hydrochloric acid aerosols) has occurred. This is a result of the qualifier to the sulfuric acid and hydrochloric acid listings, which excludes non-aerosol forms and limits the reporting to aerosol forms only. The addition of the acid aerosol qualifier has an impact on certain processes that, prior to the addition of the qualifier, would not have been considered to be “*manufacturing*” a listed chemical. Acid reuse systems that use aqueous solutions of sulfuric acid or hydrochloric acid to generate acid aerosols, use the acid aerosols, condense them back into solution, and then reuse the acid solution again and again are impacted by the addition of the acid aerosol qualifiers. In such processes, the continuous reuse of the acid solutions generates very large quantities of acid aerosols that technically should be counted towards the “*manufacture*” (the generation of the acid aerosol is the “*manufacture*” of sulfuric or hydrochloric acid (acid aerosol)) and “*otherwise use*” thresholds. This may result in many *facilities* greatly exceeding the “*manufacture*” and “*otherwise use*” reporting thresholds that, prior to the addition of the qualifier, would not have exceeded thresholds.

While it is technically correct to apply all of the quantities of acid aerosols generated in such systems towards the “*manufacture*” and “*otherwise use*” reporting thresholds, EPA did not intend to increase the reporting burden as a result of the addition of the acid aerosol qualifiers. In addition, under EPA’s general approach to reuse systems a listed *toxic chemical* is not counted toward thresholds each time it is reused but only once per reporting period, and that approach would apply to sulfuric acid or hydrochloric acid reuse systems were it not for the aerosol qualifiers. Therefore, EPA is providing the following guidance to reduce the reporting burden for *facilities* that operate such processes and to bring the treatment of such systems into alignment with EPA’s general approach to reuse.

Rather than having *facilities* count all quantities of acid aerosol generated in such systems towards the “*manufacture*” and “*otherwise use*” thresholds, EPA will allow *facilities* to apply the total volume of acid in these systems only once to these thresholds. For example, if an acid reuse system starts the year with 2,000 pounds of acid and 500 pounds is added during the year then the total amount applied towards acid aerosol thresholds would be 2,500 pounds.

Fuming
Sulfuric Acid,
Sulfuric Acid,
Oleum

Threshold
Determination,
Coincidental
Manufacture,
Combustion
Byproducts,
Sulfuric Acid

This reflects a one time per year counting of all of the acid molecules as being in the acid aerosol form rather than counting them over and over again each time the acid aerosol form is generated and subsequently used. Since in these acid reuse systems the acid aerosols are “*manufactured*” and then “*otherwise used*” the 10,000 pound “*otherwise use*” threshold would be the threshold that triggers reporting from such systems.

This guidance applies only to acid reuse systems and the reporting of sulfuric acid and hydrochloric acid aerosols under EPCRA Section 313. This guidance does not apply to any other types of processes or to any other listed chemical.

281. A facility uses fuming sulfuric acid. This particular chemical is not listed as reportable under Section 313 of EPCRA, but it is chemically similar to sulfuric acid which is reportable. Should the facility report if it meets threshold amounts and is a covered facility?

Fuming sulfuric acid, more commonly known as Oleum, is a *mixture* of sulfuric acid and sulfur trioxide. The *facility* must report on the acid aerosol forms of the sulfuric acid portion of the *mixture* in accordance with Section 372.30(b) if this portion exceeds the applicable threshold. The *facility* should also note that sulfur trioxide reacts rapidly with water to form sulfuric acid. Any sulfuric acid aerosol formed from sulfuric trioxide at the *facility* must be counted toward the “*manufacturing*” threshold.

282. A utility boiler, located at an EPCRA Section 313 covered facility, burns residual oil. As a result of the burning operation, the facility emits sulfur dioxide (SO₂), sulfur trioxide (SO₃), and particulate sulfates through a point source. Once emitted, the sulfur trioxide readily reacts with water vapor (both in air and in flue gases) to form a sulfuric acid mist. For purposes of EPCRA Section 313, must the facility report on the generation of sulfuric acid?

The sulfuric acid formed in the chemical reaction of sulfur trioxide and water that often occurs in the air after releasing sulfur trioxide is not included in threshold determinations. The *facility* owner/operator is not responsible for tracking or reporting on the formation of a listed *toxic chemical* once a chemical is *released* from a *facility*. However, if the reaction of sulfur trioxide and water takes place prior to being emitted (e.g., in the stack), the *facility* would be required to factor the quantity of sulfuric acid mist generated towards the “*manufacturing*” threshold, and if the threshold is exceeded report all *releases* and other *waste management* estimates of sulfuric acid aerosols from the *facility*.

*Coincidental
Manufacture,
Hydrochloric
Acid*

283. Must a facility report itself as a “manufacturer” of hydrochloric acid aerosols, if the hydrochloric acid aerosol is formed in the stack?

Yes, assuming thresholds are exceeded, the *facility* must report for hydrochloric acid aerosol. It is irrelevant where at the *facility* the acid aerosol forms.

*pH,
Concentration
Range, Waste
Treatment*

284. Listed acids such as nitric acid are commonly used throughout the manufacturing sector as product ingredients, reactants, and chemical processing aids. Often, listed acids are present in aqueous wastestreams that are neutralized on site. If the listed acid is neutralized on site, EPCRA Section 313 requires an indication on the Form R of the range of concentration of the listed *toxic chemical* in the influent wastestream. These concentrations are expressed in percentages, parts per million (ppm), or parts per billion (ppb). If the pH of a waste stream containing a listed mineral acid is quantified, can the pH data be used to calculate the total mineral acid concentration in the influent wastestream?

In cases where only one acid is present in solution, the total mineral acid concentration can be derived by using the pH value of the solution and the molecular weight and ionization constant of the acid. In order to assist the regulated community in EPCRA Section 313 reporting, EPA derived a table which lists the total acid concentration for each listed mineral acid at different pH values (“Estimating Releases and Waste Treatment Efficiencies for Mineral Acid Discharges Using pH Measurements” (EPA 745/F-97-003), June 1991). The concentrations are expressed in pounds per gallon (lbs/gal) and can be converted to the appropriate units for reporting purposes. The concentration that must be reported is based on the amount or mass of the *toxic chemical* in the wastestream compared to the total amount or mass of the wastestream. For example, assume that a *facility* treats, by neutralization, a wastestream containing nitric acid (HNO_3) where the pH of the influent stream is 4. A pH of 4 corresponds to a concentration of 0.000052 pounds of HNO_3 per gallon of wastestream (“Estimating Releases and Waste Treatment Efficiencies for Mineral Acid Discharges Using pH Measurements,” Table 1). The amount of HNO_3 in the influent wastestream can be converted using the following calculation:

Influent Wastestream

$$(0.000052 \text{ lbs/gal}) \times (1 \text{ gal}/3.78 \text{ liters}) \times (453,000 \text{ mg}/1 \text{ lb})$$

$$= 6.2 \text{ mg/l of } \text{HNO}_3 \text{ in the wastestream}$$

Since mg/l of solutions or dispersions of a chemical in water is equivalent to ppm, 6.2 ppm of HNO_3 is the concentration in the influent wastestream.

*Chemical
Qualifier,
Hydrochloric
Acid, Acid
Aerosols*

The Form R requires a range of influent concentration, thus the *facility* should select the appropriate range code and enter that value in the Range of Influent Concentration column in the On-Site Waste Treatment Methods and Efficiency section of the Form.

285. Hydrochloric acid, also known as hydrogen chloride (CAS number 7647-01-0), is a listed *toxic chemical* under EPCRA Section 313. Hydrochloric acid can exist in both aqueous solution and in a gaseous, anhydrous form. On July 25, 1996, EPA modified the listing of hydrochloric acid to include only acid aerosols including mists, vapors, gas, fog and other airborne forms of any particle size (61 FR 38600). Does the modified listing of hydrochloric acid refer to both the aqueous and the anhydrous forms of this chemical?

Yes. The CAS number 7647-01-0 identifies both aqueous and anhydrous forms of hydrochloric acid. The listing modification also applies to both aqueous and anhydrous forms of hydrochloric acid. Beginning with the 1995 reporting year, an EPCRA Section 313 *covered facility* that “*manufactures,*” “*processes,*” or “*otherwise uses*” more than a threshold quantity of hydrochloric acid aerosols, either in aqueous or anhydrous forms, must submit a Form R or a Form A for hydrochloric acid aerosols.

*Concentration,
Nitric Acid*

286. How should nitric acid (CAS number 7697-37-2) be reported under Section 313? It does not exist in a pure or anhydrous form. Commercial nitric acid is produced at a concentration of 70 percent nitric acid in water.

The listed CAS registry number for nitric acid specifically relates to the molecular formula HNO_3 . Therefore, *facilities* are required to count the amount of nitric acid in solutions toward thresholds and *release* and other *waste management* calculations. If 100 pounds of 70 percent nitric acid is *released*, the *release* should be reported as 70 pounds of nitric acid.

Compound and Compound Categories

*Metal
Compounds,
Metals,
Threshold
Determination*

287. For Section 313 reporting, a catalyst contains 61 percent total nickel, which includes 26 percent nickel metal and 35 percent nickel contained in compounds. Should the threshold determination be based on the 61 percent total nickel?

The 61 percent total nickel cannot be used in the threshold determinations. Nickel compounds are a listed *toxic chemical* category, therefore the full weight of nickel compounds (not just the 35% nickel contained in the compounds) must be used in the threshold determination for nickel compounds.

Chemical
Qualifier,
Cyanide
Compound

A separate threshold determination is required for the nickel metal since nickel is a separately listed *toxic chemical* under Section 313.

288. In the Federal Register, (53 FR 4538; February 16, 1988) EPA describes cyanide compounds as $X+CN^-$ where $X=H^+$ or any other group where a formal dissociation may occur; examples are KCN and $Ca(CN)_2$. Are cyanide compounds that do not dissociate reportable?

Cyanide compounds that do not dissociate are not reportable. However, dissociable cyanide compounds are not limited to the simple salts. Rather this category includes all cyanide compounds for which dissociation upon *release* to the *environment* is expected to occur.

Metal
Compounds,
Compound
Category,
Electroplating

289. A facility uses chromium compounds in its electroplating operation, and as a result, a hexavalent chromate compound is generated. Are the hexavalent chromate compounds reportable under Section 313?

The hexavalent chromate compounds are members of a reportable *toxic chemical* category, chromium compounds, and have been "*manufactured*" by the oxidation/reduction reaction that occurred in the electroplating operation. As a result, the total amount of the hexavalent chromate compounds produced must be compared to the "*manufacturing*" threshold for chromium compounds.

Metal
Compounds,
Cyanide
Compounds,
Threshold
Determination,
Process,
Electroplating

290. An electroplating facility uses metal cyanide compounds in their electroplating operations. Are they "*processing*" or "*otherwise using*" those cyanide compounds, how do they determine whether they meet the threshold, and which threshold applies?

The parent metal is plated onto a substance electrochemically, leaving the cyanide as waste product. The metal compounds are "*processed*," the cyanide compounds are "*processed*" because the metal cyanide is the source of the metal that is plated and subsequently distributed in commerce. Metal cyanides are reportable as both cyanide compounds and metal cyanides. The total compound weight is applied for threshold determinations for both categories.

Metal
Compounds,
Threshold
Determination,
Copper
Compounds

291. We manufacture and use copper wire. We also use copper compounds in various parts of our processes. The Section 313 list contains both copper and copper compounds. Should we combine these categories for our determination of thresholds and reporting? Do we report the *release* and other *waste management* of copper compounds as copper metal?

Copper and copper compounds are separate entries on the Section 313 list, and therefore should be tallied separately to determine if thresholds are exceeded. Copper compounds are a listed category and will include the aggregate of all

TOXIC
CHEMICALS

*Compound
Category,
Threshold
Determination,
Release
Reporting*

copper compounds (other than the free metal). For both submissions, report *releases* and other *waste management* activities as copper (e.g., as the copper ion in wastewater), not as the total mass of copper compounds *released*. If a *facility* exceeds thresholds for both the parent metal and compounds of the same metal, EPA allows the *facility* to file on combined report (e.g., one report for copper compounds, including copper).

292. How would a compound that falls into two reporting categories be reported (e.g., PbCrO₃) on the Form R?

A compound that has constituents in two listed categories would have to be included under both categories when submitting a Form R. In the example indicated, the total weight of PbCrO₃ must be included in determining the threshold for both lead compounds and in determining the threshold for chromium compounds. In reporting the *releases* of lead, only the stoichiometric weight of the lead in PbCrO₃ *released* or otherwise managed as waste would be included. Likewise, only the chromium in PbCrO₃ that is *released* and otherwise managed as a waste would be included on the Form R.

*Metal
Compounds,
Threshold
Determination,
Lead
Compounds,
Chromium
Compounds,
Lead*

293. If a facility uses lead, lead chromate, and other chromium compounds for Section 313 reporting requirements and threshold determinations, can they be considered separately or must they be combined into categories? When reporting *releases* and other *waste management* activities, must quantities of categories be determined as well?

Threshold determinations for metal containing compounds are made separately from parent-metal threshold determinations because they are listed separately under Section 313. In the scenario presented in the question, the *facility* would apply the quantity of the lead metal "*manufactured*," "*processed*," or "*otherwise used*" to the appropriate threshold for lead. The *facility* would apply the quantities of the lead chromate "*manufactured*," "*processed*," or "*otherwise used*" to the appropriate threshold for lead compounds and would apply the quantities of the lead chromate and other chromium compounds "*manufactured*," "*processed*," or "*otherwise used*" to the appropriate threshold for chromium compounds. However, a *facility* may, once a threshold has been met individually, combine the parent metal and its metal compounds for reporting. In completing the Form R, only the weight of the parent metal (not the entire compound weight) is to be considered.

*Metal
Compounds,
Chromium
Compounds*

294. Are chromium compounds (e.g., chromic acid CAS No. 11115-74-5 or chromic acetate CAS No. 1066-30-4) reportable under Section 313?

All chromium compounds are reportable. They must be aggregated together for purposes of threshold and maximum amount on-site calculations. How-

Metal
Compounds,
Release
Reporting,
Lead
Compounds,
Lead

ever, *release* and other *waste management* amounts should be for chromium metal portion only.

295. An EPCRA Section 313 covered facility “processes” both lead in the elemental form and lead compounds. The facility exceeds the 25,000 pounds per year “processing” threshold for lead compounds, but not for elemental lead, and must submit a report for lead compounds only. When calculating *releases* and other *waste management* activities from the lead compounds, the owner/operator is only required to account for the weight of the parent metal *released* (40 CFR Section 372.25(h)). Should the facility account for both *releases* of lead from activities involving lead compounds and *releases* of lead from activities involving elemental lead?

No. In the case when an activity threshold is exceeded only for lead compounds, the report is only required to be based on the *releases* and other *waste management* estimates of lead, the parent metal, from lead compounds only. *Releases* and other *waste management* estimates of lead resulting from activities involving elemental lead need not be included in the *release* and other *waste management* calculations. Conversely, if the *facility* were to exceed an activity threshold for only elemental lead, the report would only have to be based on *releases* and other *waste management* estimates from activities involving elemental lead only.

Metals, Metal
Compounds,
Form R
Submissions,
Lead
Compounds,
Lead

296. A facility has determined that it needs to report under EPCRA Section 313 for both elemental lead and lead compounds. Can this facility file one Form R that takes into account both the *releases* and other *waste management* activities of lead and lead compounds, or is it required to report separately?

If a *covered facility* exceeds thresholds for both the parent metal and compounds of that same metal, it is allowed to file one joint report (e.g., one report for lead compounds and elemental lead). EPA allows this because the *release* and other *waste management* information reported in connection with metal compounds will be the total pounds of the parent metal *released* and otherwise managed as a waste.

Compound
Categories,
Release
Reporting,
Threshold
Determination,
Metal
Compounds

297. In calculating threshold quantities for metal-containing compounds, please confirm that it is the calculated amount of the metal contained in the compound rather than the weight of the metal compound itself that goes into the estimate?

Thresholds are determined by adding up the total weight of compounds containing the same parent metal. However, *release* and other *waste management* calculations are based on only the weight of the parent metal portion of compounds *released* or otherwise managed as wastes.

*Threshold
Determination,
Metal
Compounds*

298. An oxidation/reduction reaction that occurs as part of a waste treatment operation results in the formation of 2,500 pounds of lead chromate. How must a threshold determination be made for this compound?

Lead chromate meets the criteria for both a lead compound and a chromium compound. In such cases, the total amount of the compound "*manufactured*," "*processed*," or "*otherwise used*" must be applied to the threshold determination for both metal compound categories. The weight of the entire compound, not the weight of the parent metal, is applied for the threshold determination of each metal compound category.

Fume or Dust

*Chemical
Qualifier,
Fume and Dust*

299. There are three chemicals on the list with the qualifier "fume or dust" (zinc, aluminum, and vanadium). What exactly is a "fume" or a "dust?"

EPA does not have a regulatory definition of a fume or a dust, but considers dusts, for purposes of reporting, to consist of solid particles generated by any mechanical processing of materials including crushing, grinding, rapid impact, handling, detonation, and decrepitation of organic and inorganic materials such as rock, ore, and metal. Dusts do not tend to flocculate except under electrostatic forces. A fume is an airborne dispersion consisting of small solid particles created by condensation from the gaseous state, in distinction to a gas or vapor. Fumes arise from the heating of solids such as lead. The condensation is often accompanied by a chemical reaction, such as oxidation. Fumes flocculate and sometimes coalesce.

*Coincidental
Manufacture,
Fume or Dust,
Processing*

300. A facility processes aluminum, vanadium, and zinc. These three toxic chemicals are listed under Section 313 with the qualifier "fume or dust." Is this processing operation subject to reporting?

If the processing of these substances generates (*i.e.*, "*manufactures*") any fume or dust or if the three substances were "*processed*" or "*otherwise used*," at any time, as a fume or dust, the activities would be reportable under EPCRA Section 313. The "*manufacturing*," "*processing*," or "*otherwise use*" of these substances in fume or dust form would be subject to threshold determinations.

*Fume or Dust,
Vanadium
Pentoxide*

301. Vanadium pentoxide is not explicitly listed under Section 313, although vanadium does appear on the list. Are we correct in assuming that we don't need to report for vanadium pentoxide?

Vanadium is listed only as a fume or dust under Section 313. Vanadium compounds are not listed under EPCRA Section 313. However, as a result of

Chemical Qualifier, Fume or Dust, Metal Vapors, Aluminum

using vanadium pentoxide or elemental vanadium, a fume or dust of vanadium may be “*manufactured*” and could be subject to Section 313 reporting.

302. A facility coats materials with aluminum using the vacuum deposition process. Is the facility subject to the reporting requirements under Section 313 for aluminum fume?

No. In vacuum deposition, the aluminum is converted to the vapor state under low pressure. The vapor then condenses on the material which is being coated. A metal fume consists of finely divided particulate dispersed in a gas. Because a metal fume and a metal vapor are different physical forms of a metal, metal vapor is not considered to be a type of fume. However, any aluminum fume that is produced as a result of the condensation of the metal vapor should be applied to threshold determinations for aluminum.

Chemical Qualifier, Aluminum, Fume or Dust, Coincidental Manufacture

303. A facility manufactures aluminum cookware. It generates aluminum dust of various particle sizes during polishing and edging of the cookware. The facility collects the larger particles of aluminum dust by wet cloth. Does the facility consider only smaller dust particles that escaped for reporting purposes?

Aluminum in the form of dust is a listed Section 313 *toxic chemical*. All of the aluminum dust (no size limit) generated should be considered toward the “*manufacturing*” threshold. Provided the *facility* meets the activity threshold for aluminum fume or dust, and employee and SIC code criteria, the amount of the aluminum dust particles that escape the *facility*’s collector system should be reported as *released*.

Threshold Determinations, Fume or Dust, Zinc, Particles, Mixture

304. A facility processes a zinc/mercury amalgam alloy and mercuric oxide to produce batteries. The amalgam is in particulate form. The molten amalgam is injected into a cooling chamber which produces particles with desired characteristics (such as size). Since zinc is listed as “fume or dust” only, would the facility need to consider the zinc from the amalgam towards the applicable “processing” threshold?

Yes, EPA considers “dusts” to be solid particles generated by any mechanical processing of materials (including *mixtures*). This includes, but is not limited to, handling, crushing, grinding, and rapid impact of materials such as rock, ore, metals, and alloys. In this case, the particles produced would constitute a dust and require a threshold determination.

Miscellaneous

Concentration, Xylene, Mixed

305. Is Xylene (mixed isomers) CAS number 1330-20-7 a specified weight percent combination of m-xylene, o-xylene, and p-xylene? Does the *mix-*

Isomers

ture need to contain all three individual isomers or can it contain any combination of two of the isomers?

Xylene (mixed isomers) is an unspecified *mixture* that could contain just two of the individual isomers or all three in any weight/percent combination.

*Mixtures,
Xylene
(Mixed
Isomers), De
Minimis
Exemption,
Threshold
Determination*

306. Xylene mixed isomers are present in two of a facility's refined products. For EPCRA Section 313 reporting, may the isomers be reported separately? For a mixture of the isomers, how are thresholds and de minimis to be determined? Reported separately, the facility exceeds thresholds but is below de minimis concentrations.

All of the xylene isomers are individually listed under EPCRA Section 313. In addition, there is a listing for xylene (mixed isomers) which covers any combination of xylene isomers. When the threshold and de minimis concentration for each isomer in the *mixture* are exceeded independently, the *facility* may report under the individual isomer listings or under the mixed isomers listing. When the threshold and/or de minimis for each isomer in the *mixture* are not exceeded independently, but are exceeded collectively, the *facility* should report under the CAS number for xylene (mixed isomers).

*Mixtures,
Xylene (Mixed
Isomers),
Concentration*

307. A facility "processes" two of the three xylene isomers in separate streams, along with an additional stream containing a mixture of xylene isomers of unknown concentrations. How would the facility determine if an activity threshold has been exceeded? How would the facility report the xylene on the Form R?

The *toxic chemical* list at 40 CFR Section 372.65, contains four xylene listings (mixed isomers, ortho-, meta-, and para-xylene) which appear with their own CAS number. The CAS number specified for xylene (mixed isomers), 1330-20-7, applies to any combination of xylene isomers. The *facility* must make separate threshold determinations for each individual chemical listed at Section 372.65. If the thresholds are not exceeded for any of the individual xylene listings of Section 372.65, then the *facility* would not have to report on any *releases* of xylene at the *facility*. For example, if the *facility* "processes," in separate streams, 10,000 pounds of ortho-xylene (CAS number 95-47-6), 10,000 pounds of para-xylene (CAS number 106-42-3), and 10,000 pounds of xylene where the isomers are mixed in unknown concentrations (CAS number 1330-20-7), a threshold is not exceeded for any of the xylene listings. Therefore, no reports for xylene would be required. The quantities of the individual xylene listings "processed" by the *facility* should not be aggregated for the purposes of making threshold determinations.

If the thresholds are exceeded for two or more of the individual isomer xylene listings, the *facility* has two choices when filling out the Form R. The *facility*

may file separate Form Rs for each isomer or unique isomer *mixture* listed in Section 372.65, or the *facility* may file one combined report. For example, the *facility* "processes," in separate streams, 30,000 pounds of ortho-xylene (CAS number 95-47-6), 30,000 pounds of para-xylene (CAS number 106-42-3), and 30,000 pounds of xylene where the isomers are mixed in unknown concentrations. Because the activity threshold for each of the three xylene listings is exceeded independently, the *facility* can report *releases* and other *waste management* activities from each of three listings separately on three different Form Rs (one for ortho-xylene, one for para-xylene, and one for the mixed isomers) or the *facility* can report all xylene *releases* and other *waste management* estimates on one Form R as xylene (mixed isomers).

Glycol Ethers
Category,
Diethylene
Glycol

308. Although the category of glycol ethers requires reporting under Section 313, I am not clear on whether the glycol ether, diethylene glycol, requires reporting.

Diethylene glycol is not subject to reporting. Glycol ethers, with the following structure, are reportable: $R-(OCH_2CH_2)_n-OR'$, where $n = 1, 2, \text{ or } 3$, $R = \text{alkyl C7 or less, or phenyl or alkyl substituted phenyl, and } R' = H \text{ or alkyl C7 or less or } OR'$, consisting of a carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate. The R groups for this structure are unsubstituted alkyl or aryl groups. For diethylene glycol, neither R or R' contain alkyl or aryl groups and thus it is not subject to reporting under Section 313. For more information refer to EPA's document entitled, "Toxic Release Inventory: List of Toxic Chemicals Within the Glycol Ethers Category" (EPA-745-R-95-006).

Glycol Ethers
Category,
Dipropylene
Glycol

309. Are dipropylene glycol ethers having a $HOC_3H_6OC_3H_6OH$ structure considered a glycol ether for Section 313 toxic chemical reporting?

Dipropylene glycol ethers are ethers but not Section 313 reportable glycol ethers since it has $(OCH_2CH_2CH_2)_n$ or $(OCH_2CH(CH_3))_n$ instead of $(OCH_2CH_2)_n$ in its structure. Propylene glycol based ethers are not covered by this category.

Glycol Ethers
Category,
Ethylene
Glycol, Mono
Butyl Ether

310. Is ethylene glycol mono butyl ether a Section 313 chemical reportable as a glycol ether?

Using the structural definition of glycol ethers as they appear in the final rule, ethylene glycol mono butyl ether is reportable under Section 313.



In this case R is equal to butyl - $(CH_3CH_2CH_2CH_2-)$; $R'=H$; and $n=1$.

*Mixtures,
Polyethylene*

311. Is polyethylene considered a *mixture*, the components of which must be counted for purposes of reporting under Section 313 of EPCRA?

Polyethylene is not a listed chemical and thus is not subject to reporting under Section 313. Polyethylene is a reaction product, not a *mixture*, and is not subject to reporting under Section 313. A "*mixture*" is any combination of two or more chemicals if the combination is not, in whole or in part, a result of a chemical reaction. If the combination resulted from a reaction but could have been produced without a chemical reaction, it is still treated as a *mixture*. Any EPCRA Section 313 listed *toxic chemicals* used in the manufacture of polyethylene should be evaluated against the proper Section 313 activity threshold.

*Mixtures,
Mineral Oil*

312. A *facility* uses hydraulic fluid which is 95 percent mineral oil and 5 percent other unspecified components. Does the *facility* have any 313 chemicals to report?

Mineral oil is a highly refined *mixture* of saturated C15 to C50 hydrocarbons. Barring any information to the contrary, it is unlikely that mineral oil contains significant quantities of any Section 313 chemicals.

*Vinyl Chloride,
Polyvinyl
Chloride*

313. Are vinyl chloride, a listed *toxic chemical*, and polyvinyl chloride, not listed, the same thing?

Polyvinyl chloride is not a listed *toxic chemical* and does not need to be reported. It is a polymer of vinyl chloride. Only unreacted vinyl chloride mixed with the polymer should be evaluated for threshold determinations.

*Monomer,
Co-polymer,
ABS*

314. Are *toxic chemical* monomers such as acrylonitrile, butadiene and styrene, which are contained in a plastic co-polymer known as ABS, reportable under Section 313?

These chemicals are monomers that react to make the ABS co-polymer which is not reportable under Section 313. However, if any unreacted acrylonitrile, butadiene, or styrene monomers are present in the ABS co-polymer in excess of de minimis concentrations then they are reportable.

*DEHP, MSDS,
DOP*

315. A *facility* uses a *toxic chemical* known to them as DOP, which they think is n-dioctyl phthalate. N-dioctylphthalate has the CAS No. 117-84-0 and is not on the Section 313 list. However, the *MSDS* from their supplier states that the *toxic chemical* is called DEHP or DOP and has the CAS No. 117-81-7. DEHP is di(2-ethylhexyl) phthalate on the Section 313 list. Should this chemical be reported?

DOP is a commonly used acronym for both di(2-ethylhexyl) phthalate (DEHP) and n-dioctylphthalate (DNOP). DOP is also listed as a synonym for DEHP in

*Asbestos, CAS
Number*

the Section 313 Common Synonyms document. However, as the supplier provided the acronym DEHP and the CAS No. is 117-81-7, the *facility* has sufficient information to distinguish between DNOP and DEHP and thus should report for DEHP.

316. Asbestos, with CAS number 1332-21-4, is a listed *toxic chemical* under Section 313. The synonym list does not contain reportable asbestos forms. Our *facility* uses the following forms of asbestos and would like to know if they are reportable: Actinolite (CAS 77536-66-4), Amosite (CAS 12172-73-5), Anthrophyllite (CAS 17068-78-9), Chrysotile (CAS 12001-29-5), Crocidolite (CAS 12001-28-4), and Tremolite (CAS 77536-68-6).

The Section 313 listing for asbestos (CAS 1332-21-4) includes specific forms of asbestos, such as those mentioned above, that have their own individual CAS numbers. Therefore, those types of asbestos are reportable as long as they are "*manufactured*," "*processed*," or "*otherwise used*" in the friable form.

*Chemical
Qualifier,
Aluminum
Oxide, Fibrous
Forms*

317. A *facility* was advised by one supplier that aluminum oxide, CAS No. 1344-28-1, is a listed *toxic chemical* under Section 313. The *facility* was advised by another supplier that this *toxic chemical* was on the *toxic chemical* list in error. Is aluminum oxide included on the *toxic chemical* list in error? Is aluminum oxide included on the *toxic chemical* list and therefore potentially reportable under Section 313?

Only fibrous forms of aluminum oxide are reportable under Section 313. Other forms of aluminum oxide are not subject to reporting (55 FR 5220, February 14, 1990).

*Chemical
Qualifier,
Aluminum
Oxide, Fibrous
Forms*

318. A dinnerware manufacturer wants to know if she has to report aluminum oxide in her clay, which is a raw material for her product.

Aluminum oxide in clay is usually part of another compound or mineral, such as kaolin, and is not present as a listed *toxic chemical*. In addition, it is unlikely the clay contains man-made, fibrous forms of aluminum oxide. Naturally occurring aluminum oxide, known as corundum, has a separate CAS No., 1302-74-5, and is not reportable.

*Chemical
Qualifier,
Aluminum
Oxide, Fibrous
Forms*

319. Are aluminosilicates reportable as aluminum oxide (fibrous forms)?

Aluminosilicates, aluminoborosilicates, zeolites, aluminum silicate hydroxides, and other related materials are either naturally occurring or are prepared by fusion at high temperatures. As a result, these materials are not considered to be fibrous forms of aluminum oxide under Section 313 and are not subject to reporting.

TOXIC
CHEMICALS

Mixtures,
Zeolite,
Aluminum
Oxide

320. For Section 313 purposes, is zeolite considered to be a *mixture* that contains aluminum oxide or is it considered to be a compound which is not a reportable substance?

Zeolite is an aluminum silicate compound which is not reportable under Section 313.

Formaldehyde,
Paraformaldehyde

321. Is paraformaldehyde, CAS No. 30525-89-4, reportable as formaldehyde under Section 313?

No. Paraformaldehyde is hydrated polymerized formaldehyde, a solid material that is different from formaldehyde. At ambient temperature, vaporization occurs, emitting formaldehyde gas. Though paraformaldehyde itself is not reportable, any formaldehyde "*manufactured*" as a gas or a solution during the "*manufacture*," "*processing*," or "*otherwise use*" of paraformaldehyde must be applied to any threshold determination for formaldehyde.

Mixtures,
Toluene
Diisocyanate,
Threshold
Determination

322. A facility receives a chemical *mixture*, 70 percent of which is toluene diisocyanate (TDI). Of this 70 percent, 80 percent is 2,4-TDI, with CAS number 584-84-9, and 20 percent is 2,6-TDI, with CAS number 91-08-7. The CAS number that appears on the *MSDS* for TDI is 26471-62-5. How should the *facility* report?

CAS number 26471-62-5 covers the *mixture* of the 2,4 and 2,6 TDI isomers. The 2,4 and 2,6 TDI isomers are also individually listed under EPCRA Section 313. When the threshold and *de minimis* concentration for each isomer in the *mixture* are exceeded independently, the *facility* may report under the individual isomer listings or under the mixed isomers listing. When the threshold and/or *de minimis* for each isomer in the *mixture* are not exceeded independently, but are exceeded collectively, the *facility* should report under the CAS number for TDI (mixed isomers).

Chemical
Qualifiers,
Activity
Thresholds,
Ammonia,
Aqueous,
Anhydrous,
Release
Reporting

323. A manufacturing *facility* subject to EPCRA Section 313 processes an aqueous ammonia solution from water-dissociable ammonium salts in tanks and open vats. Evaporative losses occur at several points during processing. Are these evaporative losses considered *releases* of aqueous ammonia or anhydrous ammonia for purposes of EPCRA Section 313 reporting?

Evaporation and drying losses from aqueous ammonia solutions result in the *release* of anhydrous ammonia, which is 100 percent reportable under the EPCRA Section 313 ammonia listing. Although EPA modified the ammonia listing on June 30, 1995 (60 FR 34172), the modification only limits the quantity of aqueous ammonia that is reportable. The modification does not apply to anhydrous ammonia, which remains 100 percent reportable. *Facility*

owners or operators must still include all anhydrous ammonia "*manufactured*," "*processed*," or "*otherwise used*" at a *covered facility* in threshold determinations and *release* and other *waste management* reporting. Anhydrous ammonia generated through the evaporation or drying of aqueous ammonia solutions derived from water-dissociable ammonium salts or other sources must be counted toward the applicable activity threshold. For example, if a *facility* "*processes*" aqueous ammonia, it has "*processed*" 100 percent of the aqueous ammonia in that solution. If the ammonia stays in solution, then 10 percent of the total aqueous ammonia is counted toward thresholds. If there are any evaporative losses of anhydrous ammonia, then 100 percent of those losses must be counted toward the "*processing*" threshold. If the "*manufacturing*," "*processing*," or "*otherwise use*" thresholds for the ammonia listing are exceeded, the *facility* must report 100 percent of these evaporative losses in Part II Sections 5 and 8 of the Form R.

*Threshold
Determination,
Release
Reporting,
Chemical
Qualifier,
Ammonia,
Aqueous,
Anhydrous*

324. Ammonia is included on the EPCRA Section 313 toxic chemical list with the qualifier "includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing" (40 CFR Section 372.65). As this qualifier indicates, the quantities applied to EPCRA Section 313 threshold determinations depend on the specific form of ammonia "manufactured," "processed," or "otherwise used," and release and other waste management calculations depend on the form of ammonia released or otherwise managed as waste. How does one distinguish between anhydrous ammonia and aqueous ammonia for the purpose of this listing? What are the differences in threshold and release and other waste management calculations for the two forms of ammonia?

The term "anhydrous" generally means "lacking water," whereas "aqueous" means "dissolved in water." Anhydrous ammonia (in either the gas or liquid state) may, however, contain a small amount of water. The presence of water in anhydrous ammonia does not constitute aqueous ammonia unless the amount of water present is sufficient to dissolve the ammonia. If ammonia is not actually dissolved in water, then the ammonia must be considered anhydrous. *Facilities* must be able to distinguish between anhydrous ammonia and aqueous ammonia when making threshold determinations and *release* and other *waste management* estimates because different percentages of the total amount of ammonia apply depending on the form of ammonia present.

If anhydrous ammonia is "*manufactured*," "*processed*," or "*otherwise used*," then 100 percent of the anhydrous ammonia must be counted when determining whether an activity threshold has been exceeded. If the *facility* exceeds an activity threshold for ammonia (anhydrous and/or aqueous), then all of the anhydrous ammonia *released* and otherwise managed as wastes must be included in the *facility's release* and other *waste management* calculations.

Total aqueous ammonia includes both the ionized (NH_4^+) and un-ionized (NH_3) forms of ammonia present in aqueous solutions. When a *facility* “*manufactures*,” “*processes*,” or “*otherwise uses*” aqueous ammonia, it is conducting a threshold activity on 100 percent of the aqueous ammonia. However, the *facility* owner/operator counts only 10 percent of the total aqueous ammonia involved in a covered activity when making threshold determinations. Similarly, when estimating annual *releases* and other *waste management* estimates of ammonia from a *facility*, only 10 percent of the total aqueous ammonia must be included in the calculations.

Dissolving water-dissociable ammonium salts in water constitutes “*manufacturing*” of aqueous ammonia. According to the ammonia qualifier, 10 percent of the total amount of aqueous ammonia created must be applied toward the 25,000 pound “*manufacturing*” threshold as well as the “*processing*” or “*otherwise use*” threshold depending on the use of the aqueous ammonia at the *facility*. However, since 100 percent of the anhydrous form of ammonia is reportable under the ammonia listing, all anhydrous ammonia used to make aqueous ammonia must be applied toward either the “*processing*” or “*otherwise use*” threshold, depending on the use of the aqueous ammonia solution at the *facility*.

Threshold Determination, Concentration, Chemical Qualifiers, Ammonia, Ammonium Hydroxide

325. An EPCRA Section 313 covered facility maintains a Material Safety Data Sheet (MSDS) for ammonium hydroxide (CAS #1336-21-6). The MSDS lists the concentration of total ammonia in the ammonium hydroxide at 29 percent. To assist covered facilities in calculating total ammonia in aqueous solutions, EPA has published a guidance document titled EPCRA Section 313 “Guidance for Reporting Aqueous Ammonia,” which lists NH_3 equivalent weight percents for chemical sources of aqueous ammonia. Ammonium hydroxide is listed as a chemical source of aqueous ammonia consisting of 48.59 percent total aqueous ammonia (Table 1, p. 12). When calculating the weight of total aqueous ammonia from ammonium hydroxide, should a facility use the percentage on the MSDS or the percentage in the Agency’s guidance document? When calculating the weight of total aqueous ammonia in other solutions of aqueous ammonia, what percentage should a facility use if given the choice between EPA’s guidance document and solution-specific information?

The chemical ammonium hydroxide (NH_4OH) is a misnomer. It is a common name used to describe a solution of ammonia in water (i.e., aqueous ammonia), typically a concentrated solution of 28 to 30 percent ammonia. EPA has consistently responded to questions regarding the reportability of these purported ammonium hydroxide solutions under the EPCRA Section 313 ammonia listing by stating that these are 28 to 30 percent solutions of ammonia in water and that the solutions are reportable under the EPCRA Section 313

ammonia listing. For a more detailed discussion, see page 34175 of the Federal Register final rule of June 30, 1995 (60 FR 43172).

Facilities should use the percent total ammonia specified on the label of ammonium hydroxide solutions they purchase to determine the total ammonia content in these solutions. Ammonium hydroxide has the chemical formula NH_4OH ; however, as discussed above, strong evidence indicates that the species NH_4OH does not exist. Bottles of concentrated aqueous ammonia purchased from chemical supply companies are almost always labeled ammonium hydroxide. These solutions primarily consist of molecules of NH_3 dissolved in water (along with small amounts of ionized ammonia). The 48.59 percent listed in Table 1 for ammonium hydroxide is based on the ammonia weight of the chemical formula NH_4OH , not the actual concentration of total ammonia in ammonium hydroxide solutions. The actual concentration may vary depending upon the amount of NH_3 used to make the solution. Thus, Table 1 may not accurately reflect the actual weight of total aqueous ammonia in any given solution labeled ammonium hydroxide.

The percentages, reported in Table 1 as NH_3 equivalent weight percents for chemical sources, are the precise percentages of total ammonia (expressed as NH_3 equivalent weights) contained in each chemical listed based on the molecular formula for each chemical. Except for ammonium hydroxide, these numbers are exact for the pure chemical and do not vary. *Facilities* can use these numbers to calculate how much total ammonia will be in aqueous solutions made from these chemicals. If more specific information on the actual concentration of total ammonia in an aqueous solution is available from another source such as an *MSDS*, label, or measurement, *facilities* can use this information rather than performing the calculations prescribed in the "EPCRA Section 313 Guidance for Reporting Aqueous Ammonia."

*Chemical
Categories,
Threshold
Determination,
Release
Reporting,
Delimited
Category,
PACs*

326. On November 30, 1994 (59 FR 61432), EPA finalized the addition of 286 chemicals and chemical categories to the EPCRA Section 313 *toxic chemical* list. These additions, effective for the 1995 reporting year, include 39 chemicals as part of two delimited chemical categories. A delimited category includes a finite number of chemicals specifically designated by EPA to be included as part of that category. Are threshold and *release* and other *waste management* calculations for these two delimited chemical categories different than threshold and *release* and other *waste management* determinations for other EPCRA Section 313 listed chemical categories?

Threshold determinations are made in the same manner for both delimited and nondelimited categories. If a *facility* "*manufactures,*" "*processes,*" or "*otherwise uses*" more than one member of a listed chemical category, the total volume of all the members of the category must be counted towards the appli-

cable activity threshold (40 CFR Section 372.27(d)). If an activity threshold is exceeded, the owner/operator of the *facility* is required to report under EPCRA Section 313. The report must cover all non-exempt activities at the *facility* involving members of the category.

The two delimited categories added on November 30, 1994, are diisocyanates and polycyclic aromatic compounds (PACs). The diisocyanates category consists of 20 specific members and the PACs category consists of 19 specific members. For reporting of delimited categories, only the members that are specifically listed as part of the category are subject to EPCRA Section 313 reporting. When reporting other nondelimited chemical categories, any unique chemical substance that contains the named category compound as part of that chemical's structure, or any compound meeting the specified molecular formula, is subject to threshold determinations.

EPA has developed guidance to facilitate accurate reporting for PACs entitled "Guidance for Reporting Toxic Chemicals within the Polycyclic Aromatic Compounds Category" (EPA 745-R-95-003). The guidance contains a list of Chemical Abstract Service (CAS) numbers for the individual chemicals within the PAC category and a CAS number list of some *mixtures* that might contain chemicals within the PACs category.

CAS Numbers,
Radioactive
Cobalt,
Threshold
Determination

327. Must a *facility* consider the use of the radioactive Cobalt-60 (CAS number 10198-40-0) in its threshold calculations for cobalt (CAS number 7440-48-4)?

Cobalt-60 with CAS number 10198-40-0 is not on the list of *toxic chemicals* under EPCRA Section 313. The listed *toxic chemical* is cobalt with CAS number 7440-48-4. As such, Cobalt-60 is not reportable under EPCRA Section 313.

CAS Numbers

328. The Chemical Abstract Service (CAS) maintains a computerized filing system that contains two main index files. The chemical abstract (CA) file provides bibliographic information referencing chemicals appearing in over 9,000 journals, papers, and symposiums from 1967 to the present. The CA file is an important tool for people interested in learning about the research, patents, and uses for specific chemicals. The chemical registry number file assigns CAS registry numbers to unique chemicals for purposes of identification. Assigning a CAS number to a particular chemical facilitates managing and regulating that chemical by universally identifying it with a specific number. Only one CAS number is assigned to each chemical and under EPCRA Section 313, only one CAS number is listed per *toxic chemical*. If chemicals are to be assigned only one CAS number, why are some chemicals listed with multiple Chemical Abstract Service (CAS) numbers in 40 CFR Table 302.4 and the Title III List of Lists?

There are two possible reasons for a chemical to have multiple numbers. The CAS numbers could refer to different forms of a chemical where each is considered unique for its particular properties and characteristics. The CAS registry number file includes the registry number, synonyms, chemical structure, and molecular formula for each chemical recorded in the file. If specific research has been done on a particular form of a chemical, a separate CAS number may be assigned to that particular form to facilitate the search process in the CAS file. For example, sodium hypochlorite is listed with two CAS numbers, 7681-52-9 and 10022-70-5. The former refers to the sodium salt form of hypochlorous acid, sodium hypochlorite, while the latter refers to the pentahydrate form of sodium hypochlorite. Both forms could be called sodium hypochlorite, thus sodium hypochlorite has, in effect, two CAS numbers.

A chemical may also be listed with multiple CAS numbers when multiple numbers have been inadvertently assigned to the same chemical. This multiple assignment can occur when forms of a chemical are originally believed to be unique, but after further review by chemists are identified as the same chemical. In this case, all the CAS numbers are cross-referenced, allowing the chemical to be located with any assigned number. The misassigned numbers are deleted as registry numbers, but remain on file for referencing purposes. The CAS number first assigned is the more accurate number to use when denoting the chemical. Although all of the numbers will find the chemical, only the more accurate number will prompt the CAS registry file system to display the name, synonyms, and characteristics associated with the chemical. Chromic acid, listed with CAS numbers 1115-74-5 and 7738-94-5, illustrates this situation. After further review by chemists, the first CAS number, 1115-74-5, was deleted as a registry number, but remains on file for future reference. CAS number, 7738-94-5 is the more accurate number to identify chromic acid because it was the first registry number assigned.

*Chemical
Categories,
Waste
Treatment, Off-
site Transfer,
Barium Sulfate,
Barium
Chloride*

***329. Waste containing barium chloride is shipped off-site to a RCRA Treatment, Storage, or Disposal (TSD) facility. The TSD facility treats the barium chloride, converting it to barium sulfate. The barium sulfate is stabilized and subsequently disposed. Since barium sulfate is excluded from the EPCRA Section 313 barium compounds category, should the barium chloride be reported as shipped off-site for treatment or transferred off-site for disposal?**

Barium chloride is being converted into a chemical that is not reportable under EPCRA Section 313. Therefore, the barium chloride would be considered to be treated for destruction. The barium chloride should be reported in Section 6.2 as transferred off-site for treatment. M69 — other waste treatment — should be used. Despite the fact that barium chloride is a metal compound, the quantity of barium chloride transferred off-site should be reported in Section 8.7 rather than Section 8.1. The *waste management* of barium chloride is

reported this way in Section 8 because the metal compound that barium chloride is converted to (barium sulfate) is not reportable and thus the barium chloride can be considered to be destroyed.

The following is effective starting January 1, 1998:

The TSD *facility* receiving the barium chloride should apply the quantity of the barium chloride that is converted to barium sulfate to the “*otherwise use*” threshold because it 1) received the barium chloride from off-site for purposes of *waste management* and 2) treated the barium chloride for destruction (a listed chemical converted into a non-listed chemical). The TSD should also report the quantity of barium chloride that was treated for destruction in Section 8.6 — quantity treated on-site. It should also report any other *releases* or other *waste management* activities associated with the treatment for destruction.

Threshold Determinations, Mixtures

330. A petroleum refinery manufactures naphtha from crude oil. A paraffin, olefin, naphthalene and aromatics (PONA) analysis revealed that the naphtha contains 2.5 percent by weight of C9 alkylbenzenes. Only two out of a possible eight C9 alkylbenzenes are reportable under Section 313. How would this manufacturer calculate the Section 313 reporting threshold for the generic chemical name category of C9 alkylbenzenes in this instance?

The *facility* should not report for the generic *mixture* name, such as C9 alkylbenzenes, but for the specific chemical. Since the *facility* does not know the concentration of each chemical in the naphtha, and assuming 2.5 percent as the upper bound for each is unrealistic, the *facility* should assume that each listed C9 alkylbenzene is present and divide the concentration evenly between the eight.

CAS number, MDI

331. A *facility* processes methylenebis(phenylisocyanate) abbreviated MDI. MDI is listed under the EPCRA Section 313 diisocyanates category with the CAS number 101-68-8. The MDI purchased by the *facility*, however, has the CAS number 26447-40-5. How should the *facility* treat this material with regard to Section 313 reporting requirements?

The EPCRA Section 313 listed chemical and the purchased chemical are not necessarily the same chemical. The purchased chemical is termed by the Chemical Abstract Service as an incompletely defined substance which may be or may contain the listed chemical. The *facility* must use all available information (e.g., supplier notification information), to identify the amount of the listed *toxic chemical* present in the purchased material for threshold determinations and *release* and other *waste management* calculations. If this material does

contain MDI, the quantity of MDI present should be included in all threshold calculations for the diisocyanates category.

C. Mixtures (see also Appendix A: Section 313 Policy Directive #4 - Compounds and Mixtures)

*Mixture,
Compound*

332. What is the difference between a *mixture* and a compound?

When a compound is formed, the identities of the reactant chemicals are lost, but in a *mixture*, the individual components retain their own identity and could be separated again. For example, polyethylene is a reaction product, not a *mixture* (and is not subject to reporting under Section 313). Steel fabricated into its solid form is considered a *mixture* because the individual metals retain their chemical identity.

*Mixture,
Compound,
Release
Reporting*

333. Must a *facility* report the various *mixtures* of compounds and substances that it manufactures?

A *facility* must consider the specific compounds within *mixtures*, not the *mixtures* themselves, to determine whether a report must be filed. The individual listed chemicals or chemical compounds in *mixtures* are separately reported.

*Mixture, CAS
Number*

334. When a company has a *mixture* on-site which does not have its own CAS number, what CAS number should be used?

The company should use the best available information (e.g., *MSDSs*, supplier notifications, and process and chemistry knowledge) at the *facility* to identify the listed Section 313 *toxic chemicals* in the *mixture*, in accordance with 40 CFR Section 372.30. A separate report must be filed for each *toxic chemical* for which the fraction of the *toxic chemical* in the *mixture* multiplied by the total weight of the *mixture* "processed" or "otherwise used" exceeds the applicable threshold. The *toxic chemicals* are treated as if they were present in pure form and each is reported under its own CAS number.

*Mixture Name,
Part II
Section 1*

335. When should the "*mixture component identity*" field on Form R be used?

The *mixture component identity* field is to be used only when a *facility* knows that a *mixture* it purchases and "processes" or "otherwise uses" contains a listed Section 313 *toxic chemical* but it does not know which *toxic chemical* (i.e., the supplier keeps the *toxic chemical* identity a trade secret). The *facility* must use the *toxic chemical* or the *toxic chemical* category name field in all other circumstances (unless it is declaring the *toxic chemical* a trade secret *toxic chemical* and is filling out a sanitized version of the form).

TOXIC
CHEMICALS

*Mixture, TDI
(Mixed
Isomers),
Threshold
Determination*

336. A facility has three separate process streams, one containing 2,4-toluene diisocyanate (TDI), with CAS number 584-84-9, the second containing 2,6-TDI, with CAS number 91-08-7, and the third containing TDI (mixed isomers) with CAS number 26471-62-5. How should a facility calculate the thresholds and releases for each isomer and for mixtures of TDI isomers? If the facility knows the composition of the mixture, should they total the amount of the pure 2,4-TDI and 2,6-TDI with the amount in the mixture to determine if the threshold for the individual isomers has been met?

No. The Section 313 list of *toxic chemicals* includes listings for pure 2,4-TDI, pure 2,6-TDI and TDI (mixed isomers). The facility should calculate the thresholds separately for each process stream that contains the pure TDI isomers and the mixed TDI isomers. The individual TDI isomers of the mixed isomer process stream should not be applied to the thresholds of the pure isomers. If the individual thresholds for the pure TDI isomers are not met, no reporting is necessary. If the individual thresholds for the pure TDI isomers are exceeded, the facility may file a single report for TDI (mixed isomers) and include the total quantity released or otherwise managed as waste of all three process streams, or they may file three separate reports. If the threshold for each TDI isomer in the mixed isomer process stream are not exceeded independently, but are exceeded collectively the facility must report under the CAS number for TDI (mixed isomers).

*Metal Alloys,
Mixture*

337. How is galvanized sheet metal considered for EPCRA Section 313 reporting? Are metals in alloys subject to Section 313 reporting?

Galvanized sheet metal is an alloy of several different metals. An alloy is considered a *mixture* for Form R reporting because the individual metals in the alloy retain their chemical identities. Like all other listed *toxic chemicals* in *mixtures*, alloys are subject to Form R reporting. When determining whether a facility meets an activity threshold, the owner/operator should only consider the weight percent of the listed chemical in the alloy.

*Mixture,
Threshold
Determination*

338. My company brings in natural and synthetic rubber in slab form. We then add chemicals to the rubber to change it to what we're making (i.e., tennis balls). Do we need to consider the toxic chemicals in the rubber we receive?

Yes. Rubber is a *mixture* for reporting purposes. Therefore, the *toxic chemical* weights must be added to the threshold determination if their concentrations are above the de minimis concentration limit (1 percent, or 0.1 percent for OSHA carcinogens). The weight added would be the weight percent of the *toxic chemical* multiplied by the weight of the rubber slab.

Section 4. COMPLETING THE FORM R: RELEASES AND WASTE MANAGEMENT CALCULATIONS

A. Releases of the Toxic Chemical

Release

339. What is the definition of a *toxic chemical* "release" under EPCRA Section 313?

Under Section 329, EPCRA defines a *release* as any "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the *environment*." Under Section 313, *facilities* are required to take into account in their reports all *releases* including "routine" and "accidental" *releases* into any environmental medium.

Accidental Releases, EPCRA 304

340. What is the difference between a *release* under EPCRA Section 304 and a *release* under EPCRA Section 313? Would accidental *releases* reported under Section 304 have to be included in the Section 313 report?

Section 304 *releases* are accidental *releases* of extremely hazardous substances, requiring an emergency notification. Reporting under Section 313 includes the total amount of *toxic chemicals* entering each environmental medium from both routine operational and accidental *releases*. Thus, Section 304 *releases* of listed Section 313 *toxic chemicals* must be factored into *releases* reported under Section 313.

Monitoring

341. Is it true that the *facilities* need not make any special effort to measure or monitor *releases* for Section 313 reporting and may use information that is on hand?

Yes, EPCRA Section 313 states that *covered facilities* need not conduct monitoring or other activities beyond that required by other statutory or regulatory requirements. Congress included this language to limit the burden on the affected industry for development of *release* and other required data. Without measurement or monitoring data, the *facility* is required to make reasonable estimates using best available data.

Reasonable Estimates

342. Section 313(g)(2) of EPCRA states that the owner/operator of a *facility* may use readily available data. In some cases, the available data may be known to be non-representative and reasonable estimates offer more accurate *release* information. Would EPA, in this instance, favor use of the estimates rather than data?

Yes, it is preferable to use reasonable estimates using best available information if available data (including monitoring data) is known to be non-representative.

*Reporting
Deadline, Best
Available
Information*

343. Form R requires estimates of the *release* to the *environment* of listed *toxic chemicals* in specific release categories. If a *facility* is unable to complete its estimate of these *releases* by the deadline, should the company leave that entry blank and promise a future estimate, or make the best estimate possible and submit later revisions?

Any *covered facility* must report by July 1 for the previous reporting year, and the data provided should be the best estimate using the best data available. Records supporting the data must be kept for three years. If more accurate data are developed, the *facility* may submit revised forms. EPA can take enforcement action if they believe that the data do not represent reasonable estimates.

*Releases,
Disposal*

344. Is the disposal of *toxic chemicals* in wastes in the form of dusts, shavings, or turnings that result from grinding or drilling of metal items considered a "*release of a toxic chemical*?"

Yes, disposal of dusts, shavings, or turnings containing Section 313 *toxic chemicals* is considered a *release*.

*Loading
Emissions*

345. Tank trucks and rail cars physically enter a *facility*. While loading for transport, *toxic chemical* emissions occur. Are these emissions subject to reporting under Section 313?

Yes, because the loading and the *releases* occur within the *facility* boundary, the *releases* must be reported if the *facility* meets the *toxic chemical* activity, employee, and SIC code criteria.

*Fugitive Air
Emissions, Lab
Hoods*

346. Are *releases* from lab hoods considered fugitive air emissions?

The *releases* from lab hoods are point source air emissions. Therefore, the *releases* are reportable and should be accounted for in Part II Section 5.2 of Form R, if the *facility* exceeds an appropriate threshold.

*Emission
Factors, Best
Available
Information*

347. A paint manufacturer needs to estimate emissions of Section 313 chemicals. How can the owner/operator estimate solvent emissions from open or partially open mixing tanks, and speciate total solvent emissions data into specific compound emissions?

Facilities should use the best available information. Emission factors are available in "Compilation of Air Pollutant Emission Factors (AP-42)" for estimating total VOC emissions from paint manufacturing.

*Releases,
Landfills,
Migration*

348. Do we need to report leaking, abandoned landfills? What if we don't know if it is leaking?

*Releases,
Groundwater,
Migration*

Leaks from landfills need not be reported. EPA requires reporting of the amount of a *toxic chemical* placed in an on-site landfill during the year. It is not necessary to estimate migration from the landfill.

349. Are groundwater *releases* required to be reported? If so, what if a *facility* has a surface impoundment which it suspects is leaking? How is the amount being *released* calculated?

Releases to underground injection wells, surface impoundments, or landfills should be reported. Estimates of amounts leaking from such disposal and possibly reaching groundwater should not be reported. EPA may model the potential for such leaks or migration, but does not require *facilities* to estimate such further migrations.

*Releases,
Disposal,
Ultimate
Disposition,
Recycling*

350. A *facility* discharges waste containing listed Section 313 metals to an on-site cooling pond. The metals accumulate and settle over time, and the water is then drained from the cooling pond, leaving the heavy metal sludge. The sludge is then dredged and sent off-site to a recycler. How should the *toxic chemicals* left in the pond after the sludge has been removed for recycling be reported?

A *facility* must report the ultimate disposal of listed *toxic chemicals* from the *facility* during the reporting year. Listed *toxic chemicals* remaining in the sediments after the sludge is sent off-site to a recycler are "*released to land.*" Listed *toxic chemicals* sent to a receiving stream when the wastewater is drained are "*released to water.*"

*Release,
Definition of
Facility*

351. A *facility* is adjacent to a lagoon which the *facility* does not own but to which it pays to discharge wastes. The *facility*, however, is in effect the operator of the lagoon. In one year, the *facility* *released* a listed mineral acid into the lagoon as an attempted pH control. Must the *facility* report for the *release* of the listed mineral acid, even though the *process* was a one-time treatment method that will not be repeated?

Yes, the *facility* must report the *release* of the listed acid if it meets the threshold criteria for reporting. The *facility* was acting as operator of the waste treatment site and must report listed chemicals "*otherwise used*" in excess of the threshold. Because the *facility* operates the lagoon and it is adjacent to the rest of the site, the lagoon is part of the *facility*.

*Chemical
Conversion,
Chlorine*

352. How are chlorine *releases* reported? Must chlorine, CAS number 7782-50-5, be reported if it is transformed into another chemical compound during the *release* process?

*Acid, Release
Reporting,
Release to
Land*

If chlorine is present in waste *released* by a *facility* it must be reported even though the chlorine may be transformed in the *environment* subsequent to the *release*. If the chlorine is transformed in the wastestream prior to any *releases*, the *facility* must still report if an activity threshold is met, but the amount reported may be zero.

353. A facility mines magnesium-rich brine from an on-site well. After extracting the magnesium, it disposes of the brine in on-site disposal wells. In order to keep the disposal well formation clean and usable, the facility pumps 280,000 pounds of a reportable mineral acid into the wells. The facility considers this an "otherwise use" of the acid. Since the acid would be neutralized before it leaches off-site, is it also a release to land?

Yes. The *facility* must consider their use of a reportable acid as an on-site *release* to land even though subsequent to the *release* the acid may be neutralized in the *process* of cleaning the well. EPA does not allow *facilities* to reduce the quantity reported as *released* to the *environment* based on conversions of a chemical in the *environment* after the chemical has been *released* by the *facility*.

*Fugitive
Emissions,
Point Source
Emissions*

354. Our facility paints metal cabinets and the paint solvents contain a listed toxic chemical. The system consists of a closed, vacuum vented painting room and a closed oven room vented by an oven stack. Is the vent to the outside of the building over the painting room a "release from building ventilation systems" fugitive emission?

No, fugitive *releases* are emissions that are not in a confined directional air flow. Since your building vent system over the painting room is a confined air stream, it can be combined with the oven stack as a stack or point emission in Part II Section 5.2 of Form R.

*Pipes, Release
Reporting*

355. Where does one report routine leaks from pipes? Would these be reported as disposal to land?

Reporting leaks from pipes requires determining where the *released toxic chemical* goes. For example, a *toxic chemical* that evaporates would be reported as a fugitive air emission in Part II Section 5.1 of Form R. A nonvolatile material leaking into land, or any material leaking from an underground pipe, would be reported as a *release* to land and entered in Part II Section 5.5.4, Other Disposal. In either case, the *toxic chemical* would also be reported in Section 8.1.

*Combustion
Unit Efficiency,
Release
Calculations*

356. In calculating releases from incinerators, boilers or industrial furnaces and like units, is it sufficient to base the amount released on the efficiency of the unit?

Release calculations based solely on the efficiency of the unit may not be sufficient. The best available information must be used. For example, the 99.99% efficiency of an incinerator may not refer to the destruction and removal of the chemical being reported in the Form R. If that is the case, the efficiency has no relation to the *release* quantity of the chemical being reported.

Even if the surrogate waste is the chemical being reported, the 99.99% efficiency may not only include the quantity of the chemical destroyed by combustion, but may also include the quantity of the chemical that is physically removed. The quantity of the chemical removed can include undestroyed chemical in the ash, and undestroyed chemical discharged from air pollution control devices like scrubbers, precipitators, baghouses, etc. Furthermore, *releases* of the chemical due to faulty equipment upstream from the feeding point of the combustion device can also be counted as quantity removed and included in the 99.99% efficiency calculation. As a result, *release* calculations based solely on the efficiency of the unit can count the chemical removed as destroyed. This will result in under reporting of the quantity of the chemical *released* to the *environment*.

The *facility* should also examine its operating records to account for chemical *releases* during upset conditions such as those *released* from an emergency dump stack.

*Combustion
Unit Efficiency,
Metals,
Treatment for
Destruction*

357. Why can I not use the efficiency of a combustion unit (e.g., incinerator, industrial furnace or boiler) to calculate *releases* of metals from the unit?

Metals cannot be destroyed by combustion. Therefore, the efficiency of a combustion unit has no relation to the *releases* of metals from the unit.

*Asbestos,
Definition of
Friable*

358. A manufacturing *facility* uses more than 10,000 pounds of friable asbestos in a diaphragm cell *process* during the course of a reporting year. During the *process*, material containing friable asbestos is washed in a treatment unit where it coagulates and is removed by a pressure filter. The filter cake containing asbestos is wetted with ethylene glycol, and the resulting filter cake/ethylene glycol *mixture* is subsequently landfilled on-site in a closed container. Should the *facility* report the placement of this asbestos in a landfill as a “*release to land*” on the Form R?

EPA interprets “friable” under EPCRA Section 313 “...as being crumbled, pulverized, or reducible to a powder with hand pressure” (53 FR 4519; February 16, 1988). *Facilities* are required to report on-site *releases* or off-site transfers for disposal of only the friable form of asbestos. In the above scenario, the *facility* must report if it meets employee and SIC code criteria. However, the *facility* will report zero *releases* of friable asbestos to land

because the ethylene glycol/asbestos *mixture* is not considered to contain friable asbestos since the asbestos contained therein is wet (*i.e.*, with ethylene glycol). The *facility* would report the amount of friable asbestos that is treated in Part II Section 8.6. Note that because ethylene glycol is also a listed *toxic chemical*, the *facility* would also need to consider this chemical for threshold determinations and *release* and other *waste management* estimates.

Byproduct,
Chemical
Identity,
Chemical
Conversion,
Release
Reporting

359. Do the Section 313 reporting requirements overlook the possibility that a substance can lose its chemical identity as a byproduct in a reaction, and that the difference between "input and output" volumes may not always be due to a release?

EPA does recognize that a *toxic chemical* can lose its chemical identity in a reaction by being converted into a new chemical. The *facility* must still account for the amount they either "*manufacture*" or "*process*" regardless of whether the listed *toxic chemical* is converted to another *toxic chemical* in the process. *Releases* and other *waste management* estimates must then be calculated for any part of the *process* involving the Section 313 listed *toxic chemical*. In addition, if the byproduct created is a listed *toxic chemical*, the *facility* must consider it toward the "*manufacturing*" threshold.

Monitoring,
Detection Limit

360. If a facility monitors for a toxic chemical and the measurement is below the limit of detection of the method, can they report zero releases?

The *facility* must use reasonable judgment as to the presence and amount of the listed *toxic chemical*; based on the best available information. Note that an indication that a reportable chemical is below detection is not equivalent to stating that the chemical is not present. If the reportable Section 313 chemical is known to be present, a concentration equivalent to half the detection limit should be used. The *facility* should not estimate *releases* based solely on monitoring devices, but also on their knowledge of specific conditions at the plant.

Emission
Factors, Basis
of Estimate

361. If a company measures its own leaks (valve, flange, pump, etc.) and determines a new fugitive factor, is the code "E" or "M" or "O"?

The company should use the code M if it measured *releases* of the *toxic chemical* from its equipment at the *facility* to determine its *release* amount. "E" is used only for published emission factors which are chemical specific. However, in this case, the company would use "O" which is used if it measured leaks generally or applied non-published factors developed at other *facilities*.

Basis of
Estimate

362. If total releases are obtained using a combination of estimating techniques, how do we report "Basis of Estimate" in Section 5, Column B?

- Report the basis of estimate code associated with the technique used to calculate the major portion of each *release* entry. See examples in the current Form R instructions.
- Emission Factors**
- 363. Are SOCFI (Synthetic Organic Chemicals Manufacturing Industry) emission factors applicable to the petroleum refining industry as well as organic chemical manufacturers?**
- Yes, SOCFI fugitive emission factors can be used for the petroleum refining industry even though they are based upon synthetic organic chemicals manufacturing. The refinery user would have to correct for differences in concentrations of the *mixtures*, because SOCFI factors are based upon pure substances being *released*.
- Basis of Estimate, Emission Factors**
- 364. EPA's fugitive emission factors for equipment leaks for the Synthetic Organic Chemical Manufacturing Industry (SOCFI) and some air emission factors listed in EPA's document AP-42, "Compilation of Air Pollutant Emission Factors," are not chemical specific. Should the basis of estimate code be entered as "E" or "O"?**
- Use "O" for non-chemical-specific emission factors.
- Fugitive Air Emissions, Emission Factors**
- 365. The emission factors used to estimate releases to air from leaks in pipes are time dependent. What amount of time should be used to determine fugitive emissions from emission factors?**
- In using emission factors to determine fugitive emissions to the air from leaks in pipes, a *facility* must use the total amount of time which a pipe contains the listed *toxic chemical*, since a *release* will occur whether a *toxic chemical* is moving or stagnant in the pipe.
- Stormwater, Rainwater Run-off**
- 366. Should we report the composition of stormwater as it falls from the sky or do we report its composition once the rainwater has run off soil?**
- The composition should be counted once the rainwater has run onto and off the soil, equipment, concrete pads, etc. as a portion of the total *facility release* to surface water.
- Air Emissions, Storage Tanks**
- 367. How does one use the storage tank equations in Appendix C of EPA's technical guidance entitled "Estimating Releases and Waste Treatment Efficiencies" (EPA 560/4-88-002) to estimate air emissions for a specific toxic chemical in a liquid mixture?**
- You must estimate emissions of the total *mixture* using average molecular weight and vapor pressure for the *mixture*, then multiply by the mole fraction

*Fugitive Air
Emissions,
Storage Drums*

of the *toxic chemical* in the gaseous emission. The required formulas are found in the referenced technical guidance document but are not listed in a step-by-step procedure.

368. How does a *facility* owner/operator estimate fugitive or working losses from drums contained in a warehouse or storage *facility*?

Fugitive emissions from drums in storage at a *covered facility* may include emissions from opening and emptying the drums. The *facility* may consider each drum as a small tank and estimate the amount of *toxic chemical* contained in the vapor space using methods such as partial pressure determinations found in EPA's technical guidance document, "Estimating Releases and Waste Treatment Efficiencies" (EPA 560/4-88-002) for the Form R.

*Estimating
Emissions,
Unknown
Composition*

369. Is there any recommended approach for estimating emissions from *facilities* whose raw material is of a constantly varying and unknown composition? For example, tar plants receive crude coal tar in batches. No analysis is done on incoming raw materials or on products (or on intermediates) at such *facilities*.

If available, data on the average composition for the specific material or published data on similar substances should be used.

*Off-site
Transfer, Point
Source Air
Emissions*

370. A covered manufacturing *facility* sends a *toxic chemical* in a waste to an off-site RCRA regulated treatment, storage, and disposal *facility* (TSDF) for recycling. Are emissions discharged by the off-site TSDF included as point source emissions on the manufacturing *facility's* Form R or are they not reported?

The owner/operator of the manufacturing *facility* should report the *toxic chemical* as sent off-site for recycling in Section 6.2, Transfers to Other Off-Site Locations and in Section 8.5 Quantity Recycled Off-Site. The manufacturing *facility* owner/operator is only responsible for reporting *toxic chemical releases* and *waste management* activities from his/her own *facility*. If the TSDF that recycles the manufacturer's waste is subject to EPCRA Section 313 reporting, the TSDF owner/operator would report *releases* resulting from the recycling activity.

ppm

371. If the calculated threshold of a listed *toxic chemical* is based on the mass utilization of the solution, would the emission of a million pounds of wastewater stream containing 1 ppm of the *toxic chemical* be the actual mass of the chemical or mass of the wastewater?

Parts per million (ppm) of Section 313 chemical in wastewater indicate the concentration of *toxic chemical*, not the actual total mass of the *toxic chemical*.

Air Emissions,
Toluene,
Partial Vapor
Pressure

Only the actual mass of the *toxic chemical* being *released* should be reported. A million pounds of wastewater stream containing 1 ppm of the *toxic chemical* is equivalent to one pound of the *toxic chemical*.

372. We “manufacture” paint and one of the chemicals we use is toluene. We used the “Estimating Releases and Waste Treatment Efficiencies” guidance document but the answer given is for toluene and mineral spirits and thus is much too high. Can we use the six percent present in the paint mixture times the number and report that?

The partial vapor pressure of toluene in formulations, which is a function of its vapor fraction and mole fraction (not weight percent), can be used. See Appendix C, Note (1), p.C-6 of “Estimating Releases and Waste Treatment Efficiencies” (EPA 560/4-88-002).

Air Emissions,
Horizontal
Storage Tanks

373. How should a facility estimate emissions from horizontal storage tanks? The AP-42 equations were developed for vertical tanks.

For fixed roof tanks, the working loss equation for vertical tanks can be used. For breathing losses, one can still use the vertical tank equation, except that an effective tank diameter must be substituted for D in the equation. D is the square root of $\{(4)(\text{area of liquid surface})\}/\pi$. H is the same as for vertical tanks.

Estimating
Releases,
Chlorine,
Water
Treatment

374. How can one estimate emissions of chlorine from use in cooling water treatment? We have tried to estimate the emission for some cooling water systems based on the amount of water evaporation, wind drift and the amount of chlorine used, but the releases seem too high.

Estimating emissions based on the amount used overestimates *releases* since chlorine is only slightly soluble in water, it reacts with chemicals in the water and it dissipates in side reactions. Measured residual chlorine times recirculation rate times lost water fraction may also overestimate *releases* (residual includes other forms of chlorine), but may be the only way to make a reasonable estimate. Please refer to EPA’s “Guidance for Food Processors” (EPA 560/4-90-014; June 1990).

pH, Acid
Neutralization,
Mineral Acids

375. In Part II Section 6.1 of Form R (discharges to POTW), if the facility monitors a reportable acid in waste and the pH is above 6 (considered to be 100 percent neutralized), would the release reported be zero or NA?

Since there is a potential for *release* of the particular *toxic chemical* to the POTW, the *releases* to the POTW on Part II Section 6.1 of Form R would be reported as zero rather than NA.

*Waste
Treatment,
Release to
Land,
Absorbent*

376. If a reportable chemical were spilled outside a building at a facility and an absorbent (e.g., kitty litter) was used to absorb the toxic chemicals, would the use of the absorbent be listed as a treatment and be reported in Part II Section 8 of Form R?

No, the use of the absorbent would not be considered treatment for Section 8 of the Form R but it would be treatment of the wastestream in Section 7A of the Form R. Only if the *toxic chemical* was destroyed such that it was no longer the chemical subject to EPCRA Section 313, would that activity be considered treatment in Section 8. If the absorbent were drummed and sent to a landfill, that would be listed as a transfer to an off-site location for disposal. Any amount of the *toxic chemical* left on the ground must be accounted for as a *release* to land and reported in sections 8.1 and 5.5.

*Basis of
Estimate, Zero
Releases, NA
vs. 0*

377. For releases or transfers off-site that are reported as zero, what should be reported as a basis of estimate? If we put "NA" (i.e., there's no potential for release) is it necessary to put "NA" in "the basis of estimate" column of the Form R?

Leave the basis of estimate box blank or enter NA. If you report zero *releases* then you need to provide a basis of estimate.

*Release to
Water*

378. A facility discharges wastewater containing a listed toxic chemical to a stream on-site. This stream, however, is only present during certain times of the year when there is heavy rainfall. Should this release be reported as a release to water or a release to land?

If the stream is a named, recognizable waterway, then the *facility* should report the discharge as a *release* to water in Part II Section 5.3 and report the name of the receiving stream in the same Section. If the *release* is not to a named, recognizable waterway, the *release* should be reported as a *release* to land.

*Release
Reporting,
Releases to
Land,
Disposal,
Containment
Area*

379. If a facility had a cement lining or other leak restricting device in the area where they store toxic chemical containers and a release from the storage area of the stored toxic chemicals occurs, how is this reported on Form R?

If the *facility* does not have specific measures for land filling, land farming, or land disposal, then for the purposes of Form R, the *releases* would be entered on Part II Section 5.5 4, Other Disposal. This would apply to amounts *released* that were not cleaned up and removed from the site or otherwise treated and disposed on-site.

*Release
Reporting,
Containment
Area*

380. If a listed *toxic chemical* is released into a containment area made entirely of concrete (i.e., there is no contact of the *toxic chemical* with the ground, or the area is designed to catch such materials in the event of an accidental spill), how should this be reported on the Form R?

The material does not have to be reported as *released*, if the concrete containment area is part of regular processing operations (or is designed to catch such materials in the event of an accidental spill; etc.) However, any material that is not further used (e.g., fugitive air emissions, transfers off-site) must be reported appropriately on the Form R as a *release*.

*Release
Reporting,
Landfill,
Remediation*

381. For *release* reporting under Section 313, would a *facility* need to include a listed *toxic chemical*, such as lead, from remediation activities where contaminated soil is dug up and removed to a Hazardous Waste Landfill?

If the threshold for lead has been exceeded elsewhere at the *facility*, the amount of lead in the contaminated soil would be included in the *release* reporting. If the ultimate disposal is removing the soil to a hazardous waste landfill off-site, then this would be reported in Part II Section 6.2 of Form R as a transfer to an off-site location for disposal, rather than an on-site *release* to land. In addition, beginning with reporting year 1991, *releases* associated with remedial actions are also reportable in Part II Section 8 of Form R.

*Estimating
Releases,
Reporting
Acids, pH*

382. A wastestream containing a reportable acid is neutralized to a pH of 5.5 and then *released* to a river. How does one calculate the amount of acid that is *released* to the river?

For purposes of reporting under EPCRA Section 313, EPA considers a reportable acid wastestream that has been neutralized to a pH above 6 to be completely neutralized. However, if the pH is below this level (e.g., 5.5), calculate the amount of acid *released* based on the amount of base it would take to raise the pH of the wastestream to 7 (not 6). For more information on pH measurements, EPA has published "Estimating Releases and Waste Treatment Efficiencies for Mineral Acid Discharges Using pH Measurements" (EPA 745/F-97-003).

*Release
Reporting,
Acid
Neutralization,
pH*

383. How would a *facility* report under Section 313 on a wastestream which is neutralized to a pH above 6 before discharged to a POTW?

Facilities that use Section 313 chemicals for pH adjustments and neutralization must report if they meet the 10,000 pound "otherwise use" threshold, even if these chemicals are consumed and no *releases* result. The listed *toxic chemical* is reported as zero pounds *released* to the POTW in Section 6.1 Discharges to Publicly Owned Treatment Works and the entire amount neutralized is reported

*POTW, Part II
Section 6.1*

in Section 8.6 Treated On-Site. The neutralization process is reported under Section 7A of Form R On-Site Waste Treatment Methods and Efficiency.

384. A facility uses a mixture containing a listed toxic chemical. During daily use, the employees become contaminated with the mixture containing the listed toxic chemical. When they finish working with the chemical, they wash it off their hands and down the drain. Would this be a release to a POTW even if the facility does not have a permit to discharge the listed toxic chemical to the POTW?

This activity would need to be reported as a transfer to a POTW in Section 6.1 regardless of the existence of a discharge permit.

*Releases to
Land,
Ultimate
Disposition*

385. A manufacturing facility "otherwise used" benzene in excess of a reporting threshold during each of reporting years 1995 and 1996. In 1995, the facility generated wastes containing benzene and placed these wastes in an on-site lagoon. The benzene on this waste was reported as a release to land on the Form R for benzene for reporting year 1995. In 1996, benzene from the sludge was released to air. For the purpose of reporting under EPCRA Section 313, does the owner/operator need to report releases to an on-site landfill and/or fugitive air emissions of benzene on the Form R for benzene for the 1996 reporting year?

The facility should not have reported all of the benzene which was transferred to the on-site lagoon as a release to land. The majority of the benzene will evaporate. The purpose of sending a waste to a lagoon is so that the volatiles (in this case benzene) will evaporate and the solids will settle. The facility should have determined, to the best of its ability, what percentage of the benzene evaporated. It should have reported this amount as a fugitive air emission. The balance should have been reported as a release to land. When completing the Form R for benzene for reporting year 1996, the facility would not report as a release to land any benzene in sludge that was transferred from the on-site lagoon to the on-site landfill as this material was already reported as a release to land on the Form R for the previous year. However, the facility must report on the Form R for benzene for reporting year 1996 any air emission of benzene that occurred as a result of transferring the sludge from the on-site lagoon to the on-site landfill.

*Release
Reporting,
Stockpiles,
Storage*

386. A manufacturing facility that produces electricity by burning coal stores the coal in an on-site stockpile that is exposed to the outside atmosphere. The facility meets the threshold criteria (40 CFR Section 372.22) for filing a Form R for the toxic chemical benzene. Since the stockpiled coal contains benzene and is exposed to the outside atmosphere, would all the benzene in the coal need to be reported on the Form R as a release to land on-site?

No. A *facility* does not have to report *toxic chemicals* contained in an on-site stockpile of material that is intended for “*processing*” or “*otherwise use*” as a *release* to land on-site. However, any *toxic chemical* that escaped to air or remains in the soil from the stockpile material (e.g., evaporative losses to air, material leached to the ground, etc.) must be reported as *released* to the *environment* on-site. Once a *facility* meets the criteria for filing a Form R under EPCRA Section 313 for a *toxic chemical* (such as benzene), all *releases* of that chemical at the *facility* are to be reported. Because storage is associated with the “*processing*” or “*otherwise use*” of the coal, *releases* from the stock pile will be eligible for the de minimis exemption.

*Storage Tanks,
Point Source
Air Emissions,
Fugitive Air
Emissions*

387. Why are *releases* from storage tanks considered point source air emissions for Section 313 reporting while *releases* from similar operations (i.e., tank trucks and railcars) are considered fugitive emissions?

Storage tanks and railcars or tank trucks are similar operations. However, it is the nature of *releases* rather than their source that is most important in their classification for reporting. Because emissions from railcars and tank trucks are most often small, scattered, and the result of manual transfer operations, they are considered fugitive. Emissions from storage tanks, meanwhile, are most often considered point source because they are usually from vents, ducts, or other confined air streams. If a *facility* has sufficient reason to believe that the nature of *releases* from rail cars and tank trucks are similar to those of storage tanks, they may report them as point source emissions, or vice versa. The *facility* must, however, document all assumptions and estimates made to support their reasoning.

*Release
Reporting,
Transportation
Exemption,
RQ, EPCRA
Section 304*

388. A *facility* receives a shipment of gasoline from a tank-truck. The loading dock is located within the *facility* boundaries. The tank-truck delivers gasoline through a hose into the tank operated by the *facility*. While stationed at the dock, the valve of the tank-truck ruptures and the gasoline leaks from the hose of the tank-truck. This *release* occurs before the shipping papers are signed off by the *facility* operator. Gasoline contains listed Section 313 *toxic chemicals* such as benzene. If an activity threshold for benzene is met, would the *facility* be required to report this quantity of benzene *released* on the Form R?

No. In the above case, the chemicals in the tank-truck are considered in transport until shipping papers are signed at the loading dock. Section 327 of EPCRA states that “(e)xcpt as provided in Section 304, this title does not apply to the transportation, including the storage incident to such transportation, of any substance or *toxic chemical* subject to the requirements of this title, including the transportation and distribution of natural gas.” In the above scenario, the material in the tank-truck is considered to fall under the transportation exemption, and *releases* from this truck would be exempt from reporting

*Release
Reporting,
Vessels,
Facility, Barge
Terminal*

under Section 313. This *release*, however, would be reportable under EPCRA Section 304 of EPCRA, if the quantity of any extremely hazardous substance (EHS) or CERCLA hazardous substance *released* exceeds the reportable quantity (RQ) within a period of 24 hours. EPA would encourage the *facility* to include the amount in its Form R in order to provide the public with the full picture of benzene *releases* that reporting year.

389. A facility covered under EPCRA Section 313 has a barge terminal where listed toxic chemicals may be loaded to a barge. If an activity threshold is met for one of these chemicals, are releases from the barge reportable?

Releases from the *covered facility* (i.e., barge terminal) must be reported. This would include *releases* from buildings, equipment, and storage at the terminal. The barge terminal ends where the equipment physically meets the barge. *Releases* from the barge itself (e.g., air displacement of volatiles) are not reportable since barges are not covered under the definition of a *facility* (EPCRA Section 329(4)).

*Release
Reporting,
Release to
Land,
Disposal,
Storage*

390. A facility has an on-site concrete basin used as a collection pond for 80 percent of the facility's waste and storm-water. No NPDES permit was assigned to this concrete basin. The wastewater is temporarily collected in the basin and sent to an off-site biological treatment plant. How would the facility report releases of listed toxic chemicals placed in the concrete basin on the Form R?

The amount of listed *toxic chemical* collected in the basin would be considered on-site storage. However, any leaching into the ground or volatile air emissions would be reported as *releases* to land and air, respectively in Sections 5.5.4 Other Disposal and 5.1 Fugitive or Non-Point Air Emissions of the Form R. Also, if the *toxic chemical* is sent off-site to the treatment *facility* during the reporting year, it is reported as an off-site transfer in Section 6.2 of the Form R.

*Release
Reporting,
Underground
Injection,
Waste Disposal*

***391. A listed toxic chemical manufacturer (SIC code 28) receives other facilities' wastes containing listed toxic chemicals and disposes of them in their deep well. Does the receiving facility need to report these toxic chemicals?**

Starting with reporting year (RY) 1998 this is a reportable activity; and the quantity disposed of would be applied to the "otherwise use" threshold. However, prior to RY 1998 the receiving and disposing of *toxic chemicals* would not be factored into a threshold determination because it does not fit any definition of "process" or "otherwise use." However, if the *manufacturing facility* "manufactures," "processes," or "otherwise uses" the same listed *toxic chemical* above the threshold amount, the disposal of other *facilities'* wastes

Ultimate
Disposition,
Air Emissions

containing this listed *toxic chemical* would be reported as a *release* on Form R even though the amount of the listed *toxic chemical* in these wastes was not included in the threshold determination.

392. A facility subject to EPCRA Section 313 “processes” items containing listed Section 313 toxic chemicals. During “processing,” dusts are released to air within the facility and some of this dust settles out within the facility (on rafters, equipment, floors and in adjacent rooms). If a “processing” threshold is met, how would the facility report the releases of the toxic chemicals present in the dust on the Form R in Section 5?

The *facility* must account for the amount of the listed *toxic chemical released* to various *environmental media*. Reporting of *releases* is based on the entire reporting year. If during the year an amount in dusts that settle out are collected and disposed of, then this would be reported in an amount disposed of on-site or off-site in the appropriate Section of Form R (e.g., if the dusts are sent off-site for disposal they would be reported in Part II Section 6.2). Any amount of *toxic chemical* in dusts that remain airborne would be reported as a *fugitive release* (Part II Section 5.1 of Form R). Amounts *released* that settle outside of a building on facility structures or equipment that are not collected and disposed of should be reported in Section 5.5.4 of Form R as a *release* to land on-site.

Ultimate
Disposition,
Asbestos,
Double
Counting,
Release
Reporting

393. A Section 313 substance (e.g., friable asbestos) is emitted as an air particulate which deposits on the facility grounds or roof, such that it will be washed into a NPDES permitted pond or swept into a solid waste pit for landfill. Will the release be reported as a release to land or water, but not air? This would prevent a substance from being reported twice, once as an air emission, and once as a water/land emission.

If the *facility* can develop a reasonable estimate of that part of a *release* to air that is deposited within the *facility* (and subsequently collected or deposited in an on-site landfill or surface impoundment), then these quantities can be separated from the air *release* figure(s) and reported as *released* to land (on-site). The remaining air *releases* not deposited on the *facility* would be reported as *releases* to air.

Releases to
Land,
Disposal,
Remediation,
Part II Section
8.8

394. A TRI covered facility that exceeds an activity threshold for lead brings in lead-contaminated soil from a CERCLA remedial action off-site, mixes it with on-site remediation waste (that also contains lead), and places the combined waste in an on-site landfill. How is this reported on the Form R? It is pretty clear that all of the lead will be reported in Section 5.5.1, and that the lead in the on-site remediation waste gets reported in Section 8.8. But would the lead in the remediation waste brought in from off-site also be reported in Section 8.8? Or 8.1? Or perhaps not at all?

The amount of lead-contaminated soil brought on-site, from off-site, mixed with on-site remediation waste, and placed in an on-site landfill, would be reported in Sections 5.5.1 and Section 8.1, NOT Section 8.8. This is not remediation material, because it was not generated on-site, but merely brought on-site for treatment. The on-site remediation waste would be reported in Section 8.8.

Releases to Land, Disposal, Off-site Transfer, Release Reporting

395. A facility continually places material containing a listed toxic chemical on the land in a pile during a reporting year for disposal. The facility is intending to have the pile hauled off-site during the next reporting year. Must the facility report the listed toxic chemical in the pile as released to land for the reporting year in which it places the material in the pile?

Material that is added to a pile during a reporting year does not have to be reported, for that reporting year, as a reportable release to land on-site if the pile was used only for temporary storage. EPA will consider the pile used for temporary storage if the facility routinely made off-site transfers of material from the pile during that reporting year. The facility must transfer the listed toxic chemical off-site before that year's report is submitted or July 1, whichever comes first.

If a facility did not make such routine transfers during a reporting year in which material was added to the pile, EPA will consider the pile used for disposal and the quantity of listed toxic chemical placed on the pile during that reporting year and present at the end of that year must be reported, during the reporting year, as a release to land, regardless of the facility's intention to transfer the material off-site in an ensuing year. If, in an ensuing year, such material is transferred off-site, the movement would be reported as a transfer off-site (assuming a threshold for the chemical transferred has been exceeded during that reporting year).

Off-site Transfer, Direct Reuse

396. An iron/steel mill has 5 to 8 percent of a listed toxic chemical in their waste slag. The slag is shipped off-site where it is directly reused as cement material or landscape rock. One common use is for roadbed material under railroad tracks. Is the reuse as landscape or roadbed rock reportable on Form R as an off-site transfer?

The listed toxic chemical in the sludge that is sent off-site for further use as road aggregate or landscape rock is not reported as an off-site transfer in Part II Section 6.2 of the Form R.

Release Reporting, RCRA Empty, Off-site Transfer

397. An EPCRA Section 313 covered facility sends a 55-gallon drum containing less than one inch of a listed toxic chemical off site for disposal. For purposes of the RCRA hazardous waste regulations, the container is considered an empty container as defined in 40 CFR Section 261.7 (i.e., RCRA-empty). Must the facility report the listed toxic chemical contained

in the RCRA-empty container as an off-site transfer for purposes of disposal on the Form R, even though it is not considered to contain hazardous waste under RCRA?

Yes. The definition of an empty container pursuant to 40 CFR Section 261.7 does not apply to EPCRA Section 313. Even though the residue remaining in a container rendered RCRA-empty is no longer considered a hazardous waste under the federal RCRA regulations, it is still considered a *toxic chemical* under EPCRA. The status of a listed *toxic chemical* as a nonhazardous waste under RCRA has no impact on the applicability of EPCRA regulations on that chemical.

Under EPCRA Section 329, the term “*release*” is defined as “any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the *environment* (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any *toxic chemical*.” In Section 8.1 of the Form R, EPA requires *facilities* to report all *releases* of listed *toxic chemicals*, except those quantities *released* to the *environment* as a result of remedial actions, catastrophic events, or one-time events not associated with production *processes*. Disposal of a RCRA-empty container which contains any amount of a listed *toxic chemical* is generally reportable in Section 8.1 when transferred from or disposed of at an EPCRA Section 313 *covered facility*. If, however, the *facility* has total reportable amounts of the chemical not exceeding 500 pounds, it may be eligible for the higher alternate reporting threshold in 40 CFR Section 327.27.

*Otherwise Use,
Release to
Land, Land
Treatment,
Nitrate
Compounds*

398. Are listed *toxic chemicals*, such as nitrate compounds from waste treatment systems, that are used for farming at a *facility* to be reported as a *release* to land and is this an “*otherwise use*” activity?

The use of listed *toxic chemicals* such as nitrate compounds for farming is to be reported as a *release* to land under EPCRA Section 313. Listed *toxic chemicals* applied to land during use for farming constitute a *release* to an *environmental* medium (land) and are to be reported as such. This is consistent with the instructions for Section 5.5 of the Form R which state that land treatment/application farming is a disposal method that is considered a “*release* to land.” Thus, whether or not this use is intended to be a disposal method, the total quantity *released* to land during use for farming should be reported as a *release* to land under Section 5.5.2 of the Form R. The amount of a listed *toxic chemicals* used for farming at a *covered facility* is to be applied towards the “*otherwise use*” reporting threshold.

*Off-site
Transfers*

399. A *facility* sends many solvent wastes off-site for recycling. However, the receiving *facility* may incinerate some solvents instead. This depends on the disposer, and the generator is always notified. Is it acceptable to report this as a *release* to a waste broker (recycling) (M93)?

When reporting off-site transfers of waste in Section 6.2 of Form R, it is acceptable to enter M93 in Section 6.2.C if you do not know the final disposition of the listed *toxic chemical*. A reporting *facility* must also identify whether the listed *toxic chemical* was sent off-site for treatment, energy recovery or recycling in Part II Section 8 of Form R.

*Point Source
Air Emissions,
De Minimis
Exemption*

400. If a facility processes steel and releases chromium up the stack, do they have to report?

Yes, if the chromium content in the steel exceeds de minimis concentration levels and all three reporting criteria are met, the *facility* is required to submit a Form R for chromium.

*Article
Exemption,
Release
Reporting*

401. A facility builds and repairs ships. During its welding operations, the facility uses a filler material to bind steel plates. This welding operation releases minor quantities of a listed toxic chemical. How are estimates of toxic chemical releases to be made?

If *releases* of the listed *toxic chemical* from the steel plate processing are recycled or reused or if the total amount *released* is 0.5 pounds or less for the reporting year, then the *releases* are exempt from reporting under the *article* exemption. EPA has developed tables to be used in estimating *releases* of metal in fumes for various types of welding and one for cutting mild steel. These tables can be found in "Clarification and Guidance for the Metal Fabrication Industry" (EPA 560/4-90-012).

*Point Source
Air Emission,
Recycling,
Phosphoric
Acid*

402. During the manufacture of phosphoric acid, traces of the listed toxic chemical are pumped along with solid material to gypsum stacks. The phosphoric acid percolates through the stack slowly and is recirculated back to the manufacturing process. Is the manufacturer required to report the presence of the chemical in the gypsum stacks as a release?

EPA considers this to be a recirculation of the process water. The *facility* is not required to report the presence of the chemical in a process water recirculation system as a *release*. If process water containing the listed *toxic chemical* escapes the recirculation system and enters the *environment*, either as a *release* or an off-site transfer, then it would be necessary to report such *releases* or transfers of the chemical.

*Release
Reporting,
Underground
Injection,
Permits*

403. Should only underground injections that are covered by Underground Injection Control Wells (UIC) permits be reported?

Report all underground injection regardless of permit status.

Release
Reporting,
Reuse

404. A facility “manufactures” a listed toxic chemical in a reactor. Attached to the reactor is a water cooled condenser, the function of which is to condense escaping unreacted starting material and reaction solvent (e.g., toluene) and to return it directly to the reactor. The facility used a threshold amount of toluene during the calendar year and must file a Form R for toluene. How would the facility report this activity on the Form R?

In this situation, the listed *toxic chemical* does not undergo any recovery steps, it merely changes physical *state* and is directly reused. Although the amount “*manufactured*” would be considered towards the *facility’s* chemical activity threshold, processes that directly reuse a listed *toxic chemical* on-site are not reported on the Form R.

Air Emissions,
Storage,
Mixtures

405. For estimating air emissions of specific chemicals from floating roof tanks that contain mixtures, how does one calculate the average vapor molecular weight and true vapor pressure to use in AP-42 equations? Does one calculate emissions for the mixture then adjust by weight percentage later or vice versa?

Calculate emissions of the *mixture* then adjust for concentration. Convert chemical fractions from weight to mole, calculate the *mixture’s* true vapor pressure, calculate the chemical's gas mole fraction, calculate the average vapor molecular weight, and use storage tank equations to calculate *mixture* emissions. Then calculate the gaseous weight fraction and multiply by total *mixture* emissions to get each chemical's emissions. *Facilities* may choose to refer to EPA’s technical guidance entitled “Estimating Releases and Waste Treatment Efficiencies” (EPA 560/4-88-002)

B. Transfers to Off-Site Locations

Off-site
Transfer, Waste
Broker

406. How should a facility report a transfer in which it sends wastes containing a Section 313 toxic chemical off-site to a waste broker who in turn sends the wastes to a recycling facility?

Facilities are required to report information on off-site transfers for purposes of recycling in both Sections 6 and 8 of Form R. In Section 6, the *facility* should report the final disposition of the listed *toxic chemical* in the waste of which it has knowledge. When a *facility* knows that a listed *toxic chemical* in wastes sent to a broker is ultimately being recycled, but does not know the location of the recycler, the waste broker is considered the final destination, and the transfer should be reported as M93 (transfer to waste broker-recycling) along with the location of the waste broker. If the location of the recycler to whom the broker sends wastes containing the listed *toxic chemical* is known, the recycler is considered the final destination, and the transfer should be reported

as recycling with the appropriate code, and the location of the recycler, not the waste broker, should be reported. The *facility* would also report the amount of the listed *toxic chemical* sent off-site for recycling in Section 8.5 Quantity Recycled Off-Site.

Off-site
Transfer

407. The Form R instructions require the listing of different types of on-site waste treatment for a particular wastestream. Does this apply to sequential treatment of a *toxic chemical* sent off-site? Should the same estimate for amount sent off-site be entered for both waste treatment steps or just the final treatment step?

The reporting *facility* is not required to list sequential waste treatment steps for waste sent off-site. The *facility* should report in Section 6.2 the one code that best describes the primary type of *waste management* activity occurring within the sequence and report the total quantity of the listed *toxic chemical* sent to this off-site location.

Off-site
Transfer,
Ultimate
Disposition,
Residue,
Recycle

408. A residue of a listed *toxic chemical* is present in empty drums that are sent to an off-site *facility* where the drums are recycled, but the listed *toxic chemical* is not recycled. The *facility* has no information as to how the listed *toxic chemical* in the drum is managed. How should the *facility* report this activity?

Though the drums are recycled, the final disposition of the *toxic chemical* is unknown. Because this *facility* does not know how the listed *toxic chemical* is managed, the listed *toxic chemical* should be reported as an unknown disposal, code M99 (Unknown Disposal) in Section 6.2.C and quantity *released* in Section 8.1.

Off-site
Transfer,
Residue

409. A *facility* receives listed *toxic chemicals* in a tank car. Once emptied, the car remains at the *facility* for a period of time before being returned to the supplier. Does the residue in the tank car that leaves the *facility* have to be counted as an off-site transfer for Section 313?

If the *facility* knows the car will be refilled, the residue is not counted as an off-site transfer. If the *facility* knows it will be cleaned out and the quantity disposed, it must be counted as an off-site transfer for disposal.

Off-site
Transfer,
Recycle

410. If a waste is sent to an off-site *facility* to be recycled or reclaimed, does the material meet the requirements for being recycled or reclaimed for the purposes of Section 313 regardless of what the off-site recycling *facility* actually does with the waste?

In order to report the listed *toxic chemical* as recycled off-site, the reporting *facility* must have positive knowledge that the listed *toxic chemical* being reported is actually being recycled by the off-site *facility*.

Off-site
Transfer,
POTW, Release
to Water

411. A facility treated its wastewater on-site and discharged it to a pipe which runs through a POTW and then on to a stream. The POTW does not treat the waste but it monitors the wastewater and allows it to pass into the stream if it meets treatment standards. If it does not meet standards, the POTW shuts a valve in the pipe and the wastewater is released to a water body under the POTW's NPDES permit. How should the wastewater be listed on Form R?

The *facility* should consider the wastewater as a transfer off-site to the POTW since the POTW is ultimately responsible for the *release*. The POTW has the authority to allow or prevent that *release* and it enters the stream under their NPDES permit. Because the POTW does not treat (destroy) the listed *toxic chemical* but allows it to pass through into the stream, the *facility* should also report the quantity sent off-site in Section 8.1.

Off-site
Transfer,
Recycle,
Threshold
Determination

412. How do we treat a solvent sent off-site for distillation and returned to us for reuse?

The amount of solvent sent to another *facility* for distillation is reported as a transfer of the *toxic chemical* to an off-site location for recycling (i.e., it should be reported in Part II Sections 6.2 and 8.5 of Form R). The quantity of the solvent returned to you must be treated as if it were a quantity of the *toxic chemical* purchased from any other supplier and must be used for threshold determination.

Off-site
Transfer

413. A printer uses solvent to clean presses and sends soiled rags to a launderer. Is the listed *toxic chemical* in the material sent to the launderer considered waste transferred to an off-site location? Which disposal code should be used?

The material sent to the launderer is considered an off-site transfer. The *facility* could use code M 90 Other Off-site-Management or M99 (Unknown Disposal) in Part II Section 6.2.C of Form R.

Off-site
Transfers, Part
II Section 6.2,
Waste Brokers,
RCRA ID No.

414. A facility sends waste off-site to another facility. During the reporting year, the off-site transfer facility is bought by another company. The off-site transfer facility name changes but the RCRA ID number and facility address remains the same. What name should be reported as the off-site transfer facility?

The *facility* should give the name of the off-site transfer *facility* as it was known on December 31 of the reporting year; that information being the most accurate and up-to-date information known.

RCRA ID
Number,
Landfill

415. What RCRA ID number does a *facility* list if it sends a non-hazardous waste containing a Section 313 *toxic chemical* to a solid waste landfill?

If an off-site location such as a solid waste landfill does not have a RCRA ID number, the *facility* would enter "NA" in the space provided. If the *facility* does have such a RCRA ID number, it must list the number if known, even though the waste being transferred may not be a listed RCRA hazardous waste.

Release
Reporting,
Form R: Part
II Section 6.2

416. Our *facility* produces 200,000 pounds of a listed *toxic chemical* in waste annually. Of that amount, we treat 100,000 pounds on-site and send 100,000 pounds to an off-site treatment plant that has a 99.9 percent efficiency. Can we factor in the efficiency when we report the off-site transfer amount in Part II Section 6.2 of Form R?

Section 6.2 of Form R requires you to report the actual amount of listed *toxic chemical* you send off-site. The efficiency would be taken into account by the off-site *facility* if they are reporting under Section 313.

Off-site
Transfer, Fuel
Blending, Heat
Value, Energy
Recovery,
Metals,
Ultimate
Disposition

417. A manufacturing *facility* sends a listed *toxic chemical* in a paint thinner waste to a firm for fuel blending purposes. Should the amount of toluene and xylene in the waste be reported on the Form R, Part II Section 6 as a transfer off-site?

A listed *toxic chemical* in a wastestream sent off-site for waste fuel blending is considered combusted for energy recovery if the listed *toxic chemical* has a significant heat value (at least 5,000 BTUs per pound) and is combusted in an energy recovery device. EPA believes that waste blended into fuel will be combusted in an integrated energy recovery device. Where both elements are met, the quantity of the listed *toxic chemical* must be reported as an off-site transfer for purposes of energy recovery on Form R. However, other reportable *toxic chemicals* in the waste *mixture* (e.g., metal pigments) that are incombustible or that do not add significant heat value to energy recovery upon combustion must be reported as off-site transfers for purposes of waste treatment or disposal, as appropriate. Please note that metals cannot be treated or combusted for energy recovery purposes and, therefore, should be reported as disposed in Section 8 of the Form R, unless the *facility* has knowledge the metals are being recovered.

Off-site
Transfer,
Facility

418. A petrochemical company generates a wastestream which contains a listed *toxic chemical*. The wastestream is treated at a treatment plant that is located within the boundaries of the petrochemical *facility*. The treatment plant is neither owned nor operated by the petrochemical company, and an agreement has been made between the petrochemical company and the treatment plant that the petrochemical company is responsible for disposal of the sludge generated by the treatment plant (e.g., by transfer-

ring the sludge to a landfill). The treatment plant has a NPDES permit and the remaining waste is discharged to a receiving stream. (In other words, some of the listed *toxic chemical* sent to the treatment plant returns to the petrochemical plant in sludge and is subsequently sent to an off-site landfill. The remainder of the listed *toxic chemical* which does not return to the petrochemical plant in sludge is sent directly to a receiving stream). How should the petrochemical plant report these off-site transfers of *toxic chemicals* in wastes? Should the petrochemical plant report the treatment occurring at the treatment plant in Part II Section 7, Waste Treatment Methods and Efficiencies of Form R?

Even though the treatment plant is located within the boundaries of the petrochemical plant, it is neither owned nor operated by the same person as the petrochemical plant. Therefore, the treatment plant and the petrochemical plant are separate *facilities*. Since the petrochemical plant does not directly treat the waste, it is not responsible for filling out Part II Section 7A, Waste Treatment Methods and Efficiencies, on its Form R for the *toxic chemical*.

The petrochemical plant reports only two off-site transfers: 1) the total amount of listed *toxic chemical* that is sent to the treatment plant (along with the name and address of the treatment plant); and 2) the amount of listed *toxic chemical* that is sent to a landfill in sludge (along with the name and address of the landfill). This can be interpreted as reporting a portion of the *toxic chemical* twice, but since the treatment plant is a separate *facility*, the total amount sent to the treatment plant has to be reported as an off-site transfer. The petrochemical plant does not need to report the receiving stream since the waste is not discharged directly from the petrochemical plant to the receiving stream.

*pH, Off-site
Transfer,
Neutralization,
Off-site
Landfill, Acids*

419. A manufacturing facility, with 10 or more full-time employees, generates a wastestream in the form of a filter press cake that contains nitric acid, a listed mineral acid under EPCRA Section 313. Before the filter cake is sent to an off-site landfill for disposal, the nitric acid in the filter cake is neutralized to pH 7. How should the facility report the disposal of this nitric acid on its Form R?

Because the nitric acid is neutralized to a pH 6 or above during on-site treatment, no nitric acid is present in the filter cake sent off-site for disposal; therefore, the off-site transfer would not be reported in the Form R for nitric acid. The on-site waste treatment for the nitric acid must be reported in Section 7A, On-Site Waste Treatment Methods and Efficiency and in Section 8.6, Quantity Treated On-Site. In addition, the *facility* must determine if the neutralization of the nitric acid in the filter cake results in the "manufacture" of a water dissociable nitrate compound category in an aqueous solution, which is a listed category under EPCRA Section 313.

C. Waste Treatment Methods and Efficiency

Waste
Treatment, Part
II Section 7A

420. Does Section 7A, On-Site Waste Treatment Methods and Efficiency, of the Form R apply only to the facility completing the report?

Yes, this Section of Form R applies only to the treatment of wastestreams containing *toxic chemicals* that occur on-site at the reporting *facility*.

Waste
Treatment, Part
II Section 7A

421. Where multiple sources are combined for waste treatment, should each source be listed in the Part II Section 7 of Form R with a common efficiency, or should only the combined wastestream be shown?

Report only the combined (or aggregate) wastestream and report the treatment and its efficiency. However, a wastestream that is treated before combination with other wastes, which are then subsequently treated, should be reported on a separate line.

Sequential
Process,
Influent
Concentration,
Part II Section
7A

422. A facility has a sequential waste treatment process in which the influent concentration and treatment efficiency for each step is known. How should they report in Section 7A of the form?

The *facility* should report influent concentration for the first step and report overall treatment efficiency for the entire process as per the Form R instructions.

Sequential
Process, Part II
Section 7A

423. If a wastewater treatment system contains an oil skimmer or other phase separation treatment, is this reported as a sequential waste treatment step for each of the separated phases, or just for one phase?

The separation step is a sequential waste treatment step for one liquid phase (the one with the larger volume, typically the water phase). The other phase must be considered a new wastestream and must be listed separately on the form if treated subsequent to its separation.

Acids, pH,
Complete
Neutralization

424. We send our sludge to a biological treatment device on-site. The microbes in the system exist in buffered solution. As a result, the *toxic chemical* (a mineral acid) in the sludge is neutralized (pH 7.3). How do I account for biological and neutralization treatment in one process in Part II, Section 7A of Form R? After that, the waste goes to settling ponds where solids settle out. Is this also a sequential treatment step?

First, list the biological treatment, even though it does nothing to the *toxic chemical*, and then enter the neutralization treatment, which has a 100 percent efficiency since pH 7.3 is considered complete neutralization for an acid. As for the settling ponds, the *toxic chemical* ceased to exist upon complete neutral-

*Treatment for
Destruction,
Incineration,
Treatment
Efficiency*

ization, so this step does not need to be included in Part II Section 7A of the Form R for the mineral acid.

425. A facility has a liquid wastestream containing a Section 313 chemical which is incinerated. The incineration destroys 99.9% of the chemical. However, 0.1 percent is released to air. Does the facility need to report this wastestream in the waste treatment Section of Form R?

If the threshold is met, the *facility* must report this liquid wastestream as treated for destruction in Part II, Section 7 of Form R. The listed *toxic chemical* remaining after incineration in the gaseous wastestream must be reported as stack or point source air emissions in Part II Section 5.2 of Form R. The amount of the listed *toxic chemical* destroyed is also reported in Part II Section 8.6 of Form R, and the stack or point source air emissions are also reported in Part II Section 8.1 of Form R.

*Treatment for
Destruction,
Facility
Maintenance
Exemption,
Composting*

426. On-site wastewater treatment plant sludges which may contain trace amounts of Section 313 toxic chemicals are composted on-site on concrete pads. The finished compost is then used as daily cover for the on-site sanitary landfill and for landscaping around the site. Is this considered land treatment, land impoundment, or not a release?

Some listed *toxic chemicals* in the composted material may degrade such that the chemical is treated for destruction in the compost. In those cases, the listed *toxic chemical* should be reported as treated on-site (in Sections 7A, On-site Waste Treatment and Efficiencies and 8.6 Quantity Treated On-site). If the listed *toxic chemical* is not destroyed, the amounts applied to the on-site sanitary landfill as cover should be reported on Part II Section 5.5.1B, Other Landfills and in Section 8.1, Quantity Released on the Form R. Although any quantities used as landfill cover would not be exempt from reporting, the amount used for landscaping on-site is exempt under the *facility* grounds maintenance exemption (40 CFR Section 372.38(c)(2)).

*Nitrate
Compounds,
Release to
Land, Waste
Treatment,
Recycling*

427. Are listed toxic chemicals, such as nitrate compounds, that are used as fertilizer for growing crops considered to be recycled or treated since they are taken up by the crops and recycled back into the environment? Can a facility reduce the amount of toxic chemicals reported as released to land by the amount the crops take up?

Although during such use nitrate compounds or other listed *toxic chemicals* may be taken up by plants and cycled back into the ecosystem, such use is not considered treatment or recycling under EPCRA Section 313. The *toxic chemicals* are reported as *released* to land on the Form R. EPA does not allow *facilities* to reduce the quantity reported as *released* to the *environment* based on conversions of a chemical in the *environment* after the chemical has been *released* by the *facility*.

*Acids,
Neutralization*

428. We have two wastestreams, one containing “an unlisted caustic material” and the other phosphoric acid, that are combined for neutralization. The combined wastestream then stays in the settling pond until the solid settles out. The water is sent to a POTW, the solid to a landfill. How should we report on these listed *toxic chemicals*? When does a listed *toxic chemical* cease to exist by neutralization?

Neutralization is the treatment method for phosphoric acid. If the pH is 6 or above then the efficiency is 100 percent (*i.e.*, no phosphoric acid is *released*) and no off-site transfer should be reported. If the waste is acidic, (*i.e.*, pH below 6) report the transfer of phosphoric acid sent off-site and calculate efficiency from the input and the remaining acid.

*Acids,
Neutralization*

429. Nitric acid or phosphoric acid is spilled onto a concrete pad and immediately neutralized with a base. How is this reported on the Form R? How would the spill be reported if it was spilled directly on the land and neutralized?

If the acid spilled on the concrete pad is 100 percent neutralized, the *facility* would only report any non-neutralized air *releases* of the *toxic chemical* in Sections 5 and 8 on the Form R. If the spill was *released* directly to land before being neutralized, only the amount of the chemical that seeped into the land (*i.e.*, not neutralized) and any air *releases* occurring as a result of the spill should be reported in Sections 5 and 8 on the form. Note that if the spill is considered a one time, non-routine event, the entire amount spilled (that is not neutralized) should be reported in Section 8.8 of the Form R.

*Release
Reporting,
Auxiliary
Scrubber*

430. How is an auxiliary scrubber that is designed and used only to mitigate emergency *releases* reported?

The influent concentration and treatment efficiency of the scrubber as it operates during an emergency event should be reported. The emergency scrubber is not considered to be “sequential” treatment with a scrubber which treats routine emissions from the same *process*, unless the two units function in series on a single waste system.

*Release
Reporting,
Metal
Compounds,
Influent
Concentration,
Metals*

431. In Section 7, should the influent concentration to a treatment system for metal compounds in a wastestream be reported for the parent metal only? How do I consider treatment efficiencies for metal compounds?

For metal compounds, the calculation of the reportable concentration and waste treatment efficiency must be based on the weight of the parent metal, not on the weight of the metal compounds. Metals are not destroyed, only physically removed or chemically converted from one form to another. The waste treatment efficiency reported must represent only the physical removal from

Waste
Treatment, Part
II Section 7A,
Treatment
Efficiency

the wastestream (except for incineration) not the percent conversion from one form to another. If a listed waste treatment method converts but does not remove a metal (e.g., chrome reduction), the method must be reported with a waste treatment efficiency of zero.

432. A wastestream containing glycol ethers is sent through several treatment steps, none of which are specifically intended to remove the glycol ethers. During the settling process, some of the glycol ethers present in the wastestream unintentionally evaporate into the ambient air. Should the facility owner/operator report the glycol ether as being treated and, if so, what waste treatment efficiency estimate is reported?

Any releases of a listed *toxic chemical*, even during treatment, must be estimated and reported in Part II Section 5 of the Form R. Part II Section 7 of Form R must be completed if a wastestream containing the glycol ethers is treated, regardless of whether the treatment methods actually remove the glycol ethers. If, for whatever reason, glycol ethers are removed during the treatment of a wastestream, the owner/operator should use the best information available to determine how much of the glycol ethers are removed during the treatment process and use this information to estimate a "treatment efficiency" for the *toxic chemical*.

Waste
Treatment,
Storage Tank,
Air Emissions,
Part II
Section 7A

433. A facility owner/operator has a conservation vent on a bulk storage tank. The conservation vent prevents emissions from the tank during material loading, unloading, and storage. Should this conservation vent be listed in Part II Section 7A of the Form R as a waste treatment method since it is reducing the *toxic chemical* emissions from the tank?

No. Part II Section 7 of Form R is only for the description of waste treatments that occur on-site. In the above scenario, the conservation vent functions as a preventive device. The conservation vent does not function as a waste treatment step. (Another example of a preventative device is a floating roof storage tank, the function of which would not be considered waste treatment).

D. Waste Management

Activity
Thresholds,
Waste
Management
Activities

434. If I count the amount of a listed *toxic chemical* towards an activity threshold, am I automatically exempted from reporting this amount as undergoing a *waste management* activity on the Form R?

No. If, for example, a *facility* combusts a *toxic chemical* in a waste for energy recovery, the owner/operator would consider the amount combusted for energy recovery towards the "*otherwise use*" threshold. If the *facility* exceeds a threshold for this chemical, the owner/operator would also report the amount

*Recycling,
Reuse, Metals*

for energy recovery in Sections 7 and 8 on the Form R. If the *toxic chemical* is burned in an energy recovery device and has 5,000 BTUs/lb.

435. If I send metal scraps containing chromium off-site to be remelted and subsequently reused, do I report the amount of *toxic chemical* in the metal as recycled off-site?

Because the chromium in the metal scraps is not actually being recovered but merely melted and reused, the amount of the *toxic chemical* in the metal scraps would not be reportable anywhere on the Form R including in Section 8.

*Release
Reporting,
Waste
Treatment,
POTW, Metals,
Part II Section 8*

436. If I send ten pounds of chromium (or any metal) to a POTW or other wastewater treatment facility where should I report the ten pounds in Section 8?

Because metals cannot be destroyed, they should not be reported as treated in Section 8.6 or 8.7 of the Form R. If you do not know what the POTW does with the metal constituents they receive, you should assume they are sent to a landfill and report the ten pounds sent to a POTW in Section 8.1 on the Form R.

*Waste
Treatment,
Source
Reduction, Part
II Section 8.10*

437. Would RCRA permitted incineration of a listed *toxic chemical* count as a source reduction activity under Part II Section 8.10 of Form R?

Section 8.10 of Form R is for reporting actions or techniques that prevent a *toxic chemical* from becoming a waste to be disposed of, recycled, recovered, or treated. Incineration is considered waste treatment (assuming there is no energy recovery) and is reportable under Sections 6.2.C or 7A, depending on whether it is performed on- or off-site.

*Release
Reporting,
Remediation,
Part II
Section 8.8*

438. Is dredging a lagoon (or surface impoundment) containing a Section 313 *toxic chemical* once every five years (routine procedure) considered a remedial action under the Pollution Prevention Act? If so, how should releases from the dredging be reported in Section 8.8 of the Form R?

Because the dredging of the lagoon (or surface impoundment) occurs routinely every five years, it is not considered a remedial action under the Pollution Prevention Act, and accordingly, *releases* from the dredging should not be reported as *releases* from remedial actions. Instead, *releases* resulting from dredging would be reported in Sections 5 or 6 and in Section 8 of the Form R, depending on the ultimate disposition of the chemical.

*Production
Ratio, Activity
Index, Batch
Processor, Part
II Section 8.9*

439. For the purposes of reporting in Section 8.9 of the Form R, a facility must provide a ratio of the reporting year production to prior year production, or provide an activity index based on a variable other than production that is the primary influence on the quantity of the reported toxic chemical recycled, used for energy recovery, treated, or released (including disposal). How should one-time or batch processors determine an activity index or production ratio for reporting in Section 8.9 of the Form R?

A one-time processor in its first year of using a listed *toxic chemical* should report "NA" in Section 8.9 of the Form R. If a one-time processor uses a listed *toxic chemical* on a yearly basis but in different products, applications, and quantities, then a production ratio based on production or application involving the *toxic chemical* should be calculated as follows: (production involving the *toxic chemical* in the current year divided by production involving the *toxic chemical* in the prior year).

Batch processors should calculate a ratio based on campaigns involving the *toxic chemical* from year to year as follows: (campaign production in the current year divided by the campaign production in the prior year).

*Source
Reduction,
Economic
Reasons*

440. If a facility modifies a process for economic reasons resulting in a waste reduction, should this be reported as source reduction?

Yes. Any changes that result in less of the listed *toxic chemical* being generated in waste may be included. Codes are provided to identify changes such as equipment and technology modifications, as well as process changes, procedure modifications, and improved housekeeping.

*NA vs. 0, Part
II Section 8.8*

441. On the Form R, a facility owner/operator must provide information about routine and non-routine releases for each reported toxic chemical. Specifically, in Section 8.8, an owner/operator must report the quantity of any release of a listed toxic chemical into the environment or transferred off-site as a result of a remedial action, catastrophic event, or one-time event not associated with production processes. If the facility did not experience any such release or transfer, must the owner/operator report zero, or may the owner/operator report "not applicable" (NA) in Section 8.8?

While either notation, NA or zero, may be entered in Section 8.8 of the Form R, they are not synonymous. If a remedial action, catastrophic event, or one-time event not associated with production processes results in a release into the environment or an off-site transfer of the listed *toxic chemical* and the annual aggregate release was less than 0.5 pound, then a facility owner/operator should enter zero in Section 8.8. An owner/operator should only report NA for Section 8.8 on the Form R if no release or transfer occurred as a result of these activities.

Section 5. FORM A AND FORM R SUBMISSIONS**A. Form A (Alternate Threshold Reporting)****Form A
Criteria**

442. EPA published a final rule in the Federal Register on November 30, 1994 (59 FR 61488), which created an alternate threshold of one million pounds for certain *facilities*. How can a *facility* that exceeds one of the original thresholds qualify for the alternate threshold?

Facilities which have a *total annual reportable amount* of no greater than 500 pounds for a listed *toxic chemical* may qualify for the 1 million pound alternate threshold for that chemical, beginning with the 1995 reporting year. For purposes of the alternate threshold, the *total annual reportable amount* includes *toxic chemicals* listed at 40 CFR Section 372.65 which are *released* (including disposal), treated, recycled, and burned for energy recovery at the *facility* and amounts transferred from the *facility* to off-site locations for the purposes of recycling, energy recovery, treatment, and/or disposal. These amounts correspond to column B, Sections 8.1 through 8.7 of the reporting Form R. If a *facility's* combined *total annual reportable amount* does not exceed 500 pounds for a specific *toxic chemical*, the *facility* can qualify for reduced reporting requirements unless the amount of that *toxic chemical* "*manufactured*," "*processed*," or "*otherwise used*" within the reporting year exceeds one million pounds.

Covered facilities that qualify for the alternate threshold are not exempt from reporting, but must fulfill certain requirements. In lieu of submitting a Form R, the owner/operator of a *facility* must submit an annual certification statement (Form A) indicating that the *facility* met the requirements for use of the alternate threshold for a specific chemical. The *facility* must also maintain, and make available upon request, records substantiating the claim. The Form A includes basic information regarding the *facility's* identification, the chemical in question, and a statement of accuracy to be signed by a *senior management official* of the *facility*.

Form A

443. What is the Form A and who may submit this form?

The Form A provides certain *facilities* the option of submitting a substantially shorter form with a reduced reporting burden. *Facilities* which meet the SIC code, employee, and chemical activity thresholds but the *facility's* amounts "*manufactured*," "*processed*," or "*otherwise used*" do not exceed one million pounds and the *facility's total annual reportable amount* is less than 500 pounds for the *toxic chemical*, may submit a Form A instead of a Form R.

Release
Reporting, RQ

444. What is the *total annual reportable amount* and is it the same as an RQ?

The *total annual reportable amount* applies to EPCRA Section 313 listed *toxic chemicals* and is *facility specific*. A *facility's total annual reportable amount* is equal to the combined total quantities *released* at the *facility* (including disposed), treated for destruction at the *facility* (as represented by amounts destroyed or converted by treatment *processes*), recovered at the *facility* as a result of recycle operations, combusted for the purpose of energy recovery at the *facility*, and amounts transferred from the *facility* to off-site locations for the purpose of recycle, energy recovery, treatment, and/or disposal. The *total annual reportable amount* is not the same as a reportable quantity (RQ). An RQ is chemical specific and applies to Extremely Hazardous Substances (EHS) or CERCLA Hazardous Substances. In the case of an accidental *release*, a *facility owner/operator* would refer to a chemical's RQ to determine if the *facility* has *released* enough such that reporting to a Local Emergency Planning Committee, SERC, and the National Reporting Center is required under EPCRA Section 304 and CERCLA Section 103.

Form A,
Documentation

445. If I qualify and file a Form A, must I submit any other documentation to EPA and the state?

No. If a *covered facility* meets the criteria and files the Form A, the owner/operator need not submit any other documentation to EPA and the *state*.

Form A,
Effective Date

446. If my *facility* meets the Form A criteria on reporting years prior to 1995, may I withdraw my Form Rs and submit Form As instead?

No. *Facilities* may use the Form A beginning with the 1995 reporting year. *Facilities* may not use this form for prior years.

Form A
Criteria

447. If I meet the criteria for filing a Form A for one *toxic chemical*, may I use it for all of the *toxic chemicals* covered at my *facility*?

No. Like the Form R, the Form A is *toxic chemical specific*. A *facility* must not "*manufacture*," "*process*," or "*otherwise use*" more than one million pounds of each specific *toxic chemical* and the *total annual reportable amount* for the *toxic chemical* must be less than 500 pounds. In some instances, a *facility* may submit the Form A for some chemicals and the Form R for other chemicals.

*B. Form R Submissions**Deadline
Extension***448. Are there any extensions that a *facility* can get for filing Form R?**

EPCRA Section 313(a) mandates that *covered facilities* report to EPA by July 1 of each year. On occasion, however, EPA has extended the date for submitting the Form R. If EPA chooses to extend the deadline, *facilities* should verify with their *state* representative that the *state* will also extend their reporting deadline. No extensions are ever made on an individual *facility* basis. If EPA extends the deadline a notice of this effect is published in the Federal Register.

*Electronic
Form R***449. Can commercially developed electronic versions of the Forms be submitted for compliance with Section 313?**

The Agency encourages submission of Forms using the EPA software provided with the Form R package. The Agency has also approved the facsimile outputs of certain privately developed software packages. A list of the providers of software packages is made available by EPA. Contact the Emergency Planning and Community Right-to-Know Information Hotline for more information (1-800-535-0202).

*Reporting
Deadline,
Weekends***450. Form R is to be submitted on or before July 1 of the year following the reporting year. When is the official due date if July 1 falls on Saturday or a Sunday?**

If the reporting deadline falls on a Saturday or Sunday, the EPA will accept the forms which are postmarked on the following Monday (*i.e.*, the next business day).

*Signature,
Certification***451. The instructions state that photocopied versions of Part I may be submitted. Does this mean that a senior official at a *facility*, certifying the validity of the forms, only has to sign one submission? Are *facilities* required to include an original signature on forms going to the *state* or Indian Country as well as EPA?**

No. The final rule (February 16, 1988; 53 *FR* 4500) states that each unique *toxic chemical* submission must contain an original signature. The purpose of the requirement is to ensure that the certifying official has reviewed each *toxic chemical* submission. A photocopied signature or no signature does not fulfill this purpose. An original signature on the certification statement is not required for the copy that is sent to the *state*. However, if the *state* requires an original signature under their *state* Right-To-Know laws, then the *facility* must comply.

Certification Statement, Senior Management Official

452. May a representative from a consulting firm that prepares a Form R or Form A for a covered facility sign the certification in lieu of the covered facility's owner/operator?

No. A representative from a consulting firm preparing a Form R or a Form A for a *covered facility* cannot sign the certification in Part I, Section 3 of either the Form R or the Form A. The certification must be signed by the owner/operator, or a *senior management official* employed by the *facility* subject to EPCRA Section 313 *toxic chemical release* inventory reporting. *Senior management official* means an official with management responsibility for the person or persons completing the report, or the manager of environmental programs for the *facility* or *establishments*, or for the corporation owning or operating the *facility* or *establishments* responsible for certifying similar reports under the other environmental regulatory requirements (40 CFR Section 372.3).

Form R, Certification, Signature

453. Can a plant manager of a facility or a designee sign the certification statement on the Form R? That is, can a plant manager qualify as a "senior management official?"

Section 313 requires that a senior official with management authority over the person or persons filling out the form certify the accuracy and completeness of the form. This person could be a plant or *facility* manager rather than a senior corporate executive and should be the senior person in a position to attest to the accuracy of the information provided.

Senior Management Official, Certification

454. If a facility has a manager who is the originator of the data in the Form R report, would he/she sign the form or would it be the facility manager to whom this manager reports?

Senior management official means "an official with management responsibility for the person or persons completing the report, or the manager of environmental programs for the *facility* or *establishments*, or for the corporation owning or operating the *facility* or *establishments* responsible for certifying similar reports under other environmental regulatory requirements" (40 CFR Section 372.3). Your *facility* must make the determination regarding who meets this definition.

Mailing Address, Part I Section 4.1

455. A facility regulated under EPCRA Section 313 uses a Post Office box number or a mailing address different from its physical address to receive its mail. When the physical location is listed as the mailing address, the mail is returned to the sender by the Post Office. For reporting on the Form R Part I Section 4.1, what should the facility list as its mailing address?

Since reporting year 1991, Form R contains a separate field for mailing addresses. The *facility* should enter its mailing address in this field if it is different from the *facility's* physical address. The *facility* must always enter its physical address in the appropriate Section of the Form R. EPA encourages *facilities* to notify their address changes in advance.

Facility Reporting, Location Change, Reporting Requirements

456. Company Y sold its timber preserving chemical manufacturing business to Firm X in September, transferring only the operating rights of the business. After the sale, all manufacturing operations were moved to Firm X's production *facility* in another city. In February of the following year, Company Y was converted to a warehousing *facility* (SIC code 4225). What is Company Y's reporting obligation under Section 313?

Though manufacturing operations ceased in September of the reportable year, Company Y must submit, no later than July 1 of the subsequent year, a Form R for any listed *toxic chemical* "manufactured," "processed," or "otherwise used" in excess of threshold levels within the reportable year. No reporting is required for the following reporting year and subsequent reporting years as long as the *facility* operations are not classified within a *covered SIC codes*.

Facility Name Change, Parent Company Name

457. The owner/operator of a *facility* is preparing Form Rs for a *facility*. The *facility* and its parent company both changed their names after the reporting year. What names should be reported by the owner/operator (for both the *facility* and the parent company) on the Form Rs covering the reporting year?

The *facility* should report the names used by the *facility* and parent company during that reporting year. When the owner/operator submits Form Rs for the next reporting year, these reports should reflect the names used by the *facility* and parent company during the new reporting year. (Note: the TRI *Facility* Identification number will not change.)

TRI Facility Identification Number, Change of Ownership

458. The owner/operator of Poultry Products submits a Form R in 1996 and receives a TRI identification number. The following year Poultry Products is bought by Allen Family Foods and reports the new name on its 1997 Form R. Is the TRI identification number changed to reflect the change in *facility* name?

No, the TRI identification number is established by the first Form R submitted by the *facility*. This identification number is retained by the *facility* even if the *facility* changes ownership and name. This identification number will stay with this *facility* as long as the *facility* location does not change. The TRI identification number remains the same even if the *facility* changes names, production processes, SIC codes, etc.

*TRI Facility
Identification
Number,
Change of
Ownership*

459. A portion of a *facility* covered under EPCRA Section 313 is sold in July 1997 to a new owner. For reporting on the Form R for the year 1997, what TRI *facility* identification numbers should be used by the reporting *facilities* (40 CFR 372)?

For purposes of reporting on the Form R, the portion of the *facility* that was not sold during the year would maintain the TRI identification number originally assigned to the *facility*. The *facility* under new ownership would, however, indicate in Part I Section 4.1 that the report is a first time submission by the *facility*. Once the reports have been submitted by the new *facility*, a new identification number will be assigned to the *facility* for use in subsequent years.

*Public Contact,
Part I Section
4.4*

460. Can the “public contact” listed on Part I Section 4.4 be located elsewhere in the parent organization and not at the *facility*?

Yes. The public contact listed on Part I does not have to be located at the *covered facility*.

*Public Contact,
Technical
Contact, Part I
Section 4.4*

461. If the public contact item (Part I Section 4.4) is left blank, can the *facility* later use a public contact to speak to the news media on behalf of the technical contact?

If a public contact is not identified, EPA will enter the technical contact into the database as a public contact. Thus, this person would receive public inquiries. You may, of course, use any person you choose to respond to such inquiries.

*Technical
Contact*

462. Regarding the technical contact, can this person be a different person for (a) each *toxic chemical*? (b) each separate part of a *facility*?

Yes. A *facility* can identify different technical contacts for different *toxic chemicals* or different *establishments* within the *facility*, preferably with one “technical contact” listed on each form. Up to two names can be entered into the technical contact field on the database, but only one technical contact phone number can be listed.

*SIC Code,
Multi-
Establishment,
Part I Section
4.5*

463. The instructions for completing Form R indicate that the report should contain only *covered SIC codes* in Part I Section 4.5 on page 1. A *facility* has the option of reporting as an entire *facility* or as separate *establishments*. If an *establishment* filled out a separate Form R, what SIC code would be used in Part 1, Section 4.5? Would a SIC code be entered for an *establishment* not in *covered SIC codes*?

When a *facility* opts to file separate Form Rs for each *establishment* it should list in Part 1 Section 4.5 of each Form R submitted the SIC code only of the *establishment* being reported on that Form R. If the *establishment's* SIC code is not within a *covered SIC code*, that *establishment* can either list the SIC code or enter NA. The listing of SIC codes outside the *covered SIC codes* is not required in the Form R instructions.

Dun &
Bradstreet
Number, Part I
Section 4.7

464. If a *facility* does not have a Dun & Bradstreet number but the parent corporation does, should this number be reported?

Report the Dun and Bradstreet Number for the *facility*. If a *facility* does not have a Dun and Bradstreet Number, enter NA in Part I Section 4.7. The corporate Dun and Bradstreet Number should be entered in Part I Section 5.2 relating to parent company information.

Multi-
Establishment,
Dun &
Bradstreet
Number

465. If two plants are separate *establishments* under the same site management, must they have separate Dun & Bradstreet numbers?

They may have separate Dun & Bradstreet numbers, especially if they are distinctly separate business units. However, different divisions of a company located in the same *facility* usually do not have separate Dun & Bradstreet numbers.

Latitude/
Longitude

466. Our *facility* operations cover a large area. What longitude should be reported for our *facility* and how can we locate this information?

Report the latitude and longitude for a location central to the operations for which you are reporting. You may find this information on your NPDES permit. See the instructions for completing Form R for a detailed description on how to determine latitude and longitude from United States Geological Survey (USGS) maps of your *facility* location.

NPDES
Permit, Part I
Section 4.9

467. If a *facility* has a NPDES permit, but does not discharge *toxic chemicals* to surface water, does the *facility* have to fill in Part I Section 4.9?

Yes. This information is part of the *facility* identification section of Form R and is intended for use in obtaining other information about the *facility*.

NPDES
Permit,
Releases to
Receiving
Stream

468. If a *facility* enters an NPDES permit number on Form R but does not discharge the *toxic chemical* to a receiving stream, must it also enter a receiving stream name?

No. If there are no *releases* of the *toxic chemical* to the receiving stream noted in the NPDES permit, the *facility* would not need to list the stream name.

However, the NPDES permit number must be supplied whether or not there are *releases* of the specific reported chemical to a receiving stream or water body.

Maximum Amount On-site, Threshold Determination

469. In determining maximum amount on-site and thresholds, do we count water in a solution (e.g., an aqueous solution of ammonium nitrate)?

No. Exclude the water in solutions when calculating the maximum amount of the *toxic chemical* on-site.

Maximum Amount On-site, Part II Section 4

470. For Part II, Section 4 of the Form R, a facility must calculate the maximum amount of a toxic chemical on-site at any one time during the reporting year. The facility must add up the amounts of the toxic chemical present at all locations within the entire facility (e.g., storage tanks, process vessels, on-site shipping containers). Must the facility include the amount of the toxic chemical in a wastestream or in scrap metal prior to being smelted when determining the maximum amount on-site?

Yes. When determining the maximum amount on-site for Part II Section 4 of the Form R, the *facility* must aggregate all nonexempt quantities of the *toxic chemical*. *Toxic chemicals* present in waste as well as in scrap metal are not exempt from reporting on the Form R and thus must be included when calculating the maximum amount on-site for Part II Section 4.

Maximum Amount On-site, Part II Section 4

471. Part II Section 4 of the Form R records the maximum amount of a toxic chemical on site at any time during the reporting year. When determining this amount, the covered facilities must aggregate all nonexempt quantities of the toxic chemical. Does this amount include concentrations of the toxic chemical present in products?

Yes. *Facilities* must indicate the maximum amount of the *toxic chemical* on-site at any one time during the reporting year. The maximum amount on-site includes raw materials, in-process materials, product inventory, and quantities present in wastes. Owners or operators must total all quantities of the nonexempt amounts of the *toxic chemical* present at the *facility* when completing Section 4.1 (Part II) of the Form R.

Maximum Amount On-site, Part II Section 4, Multi-Establishment

472. In Part II Section 4.1 of the Form R, facilities must enter a range code indicating the maximum quantity of a toxic chemical on-site at any time during the reporting year. If a facility is reporting by establishment, should the quantity reported in Section 4.1 represent the maximum quantity at the establishment or the maximum quantity for the entire facility?

If a Form R is being submitted for "part of a *facility*" (i.e., an *establishment* or group of *establishments*), the range code selected for the maximum amount of

Maximum Amount On-site, Fume or Dust, Part II Section 4

a *toxic chemical* on-site should be reflective of the *establishment* or group of *establishments*, not of the entire *facility*.

473. The list of *toxic chemicals* under EPCRA Section 313 contains three substances with a “fume or dust” qualifier (aluminum, zinc, and vanadium). For purposes of reporting the maximum amount on-site (Part II Section 4 of the Form R), should *facilities* only report the maximum amount of fume or dust on-site or the maximum amount of all forms of the chemical on-site at any one time?

When determining the maximum amount on-site for Part II Section 4 of the Form R, only the reportable form of a chemical (e.g., fume or dust) is to be considered.

Receiving Streams, Part II Section 5.3

474. Explain the naming of receiving streams.

Facility owner/operators must report the name of each stream to which *toxic chemicals* being reported are directly discharged. You should report the name of the receiving stream or water body as it appears on the NPDES permit for the *facility*. If the stream is not named in a permit, enter the name of the off-site stream or water body by which it is publicly known or enter the first publicly named water body to which the receiving waters are a tributary, if they are unnamed. You should not list a series of streams through which the *toxic chemical* flows, but only the first water body it enters from your facility. Do not enter names of streams to which off-site treatment plants discharge. Enter “NA” in Section 5.3.1, if you do not discharge the listed *toxic chemical* to surface water bodies.

Receiving Streams, Part II Section 5.3

475. A *facility* determines that it can estimate stormwater *releases* of a listed *toxic chemical* from the *facility*. However, such *releases* go to a city-owned storm sewer system and the *facility* has no direct knowledge of the receiving stream or surface water body to which the *toxic chemicals* is ultimately *released*. What do they report as the “stream or water body name” on Part II Section 5.3 of the Form R?

The *facility* would put “city-owned storm sewer” or the equivalent because this is all they know. To leave the stream or water body name item blank or put “NA” would be identified as an error when the Form R is entered to the computerized database of Section 313 data.

Receiving Stream, Part II Section 5.3.1

476. A *facility* owner/operator’s NPDES permit lists not only the first stream into which they discharge their waste, but also the subsequent streams it will flow through. The first three streams are listed on the permit as “unnamed creek.” The fourth listed stream is the first with a name, Grove Creek. Since the *facility* does not discharge directly into

Grove Creek, what should they list in Section 5.3.1 for receiving stream or water body name on Form R?

Since Grove Creek is the first named receiving stream, it should be listed in Section 5.3.1 even though the waste is not directly discharged into it.

*Blank Data
Elements, NA*

477. In some sections of Form R, facilities are asked to report "NA" if that section does not apply to a submission. Are blank spaces left on the form the equivalent of "NA?"

No. A *facility* must enter "NA" to inform the Agency that the submitter has not just overlooked a section of the Form R.

*Significant
Figures*

478. Please explain the "two significant figures" reporting guideline.

Estimates should be rounded to no greater than two significant figures (i.e., 4224 should be entered as 4200). The number of "significant figures" is the number of non-zero digits. One significant digit should be reported if the estimation techniques used do not support the two digit accuracy.

*Release
Estimate,
Significant
Figures*

479. When reporting release estimates on Form R, EPA recommends release estimates be rounded to no more than two significant figures. Should release estimates always be reported in whole numbers, or should decimal places be reported in certain instances?

When reporting *release* and other *waste management* estimates on Form R, always report using whole numbers (i.e., round to the nearest pound).

*Audit
Provisions*

480. Are specific audit provisions in the regulations? Will audit results be made public? Can released information be changed? What about resolving differences of opinion, i.e., does the auditor have final judgement?

Specific audit provisions are not in the EPCRA Section 313 regulations. The Agency, however, has the responsibility to assure that the data submitted is based on reasonable estimates. Audit results will be used to identify problems with calculating *releases*. In resolving differences of opinion, we expect that a final judgement will be made by the Agency. Also note that EPA has finalized a self-audit policy (December 12, 1995; 60 FR 66706) for *facilities* who choose to conduct their own audits.

Enforcement

481. The enforcement requirements of EPCRA (Section 325), state that the civil and administrative penalties for Section 313 non-compliance shall not exceed \$25,000 for each violation. Is a non-compliance violation determined on a per facility or per toxic chemical basis? Also, is that penalty assessed on a per day basis?

Section 325(c)(i) states: "any person who violates any requirements of Section 313 shall be liable to the United States for a civil penalty in an amount not to exceed \$25,000 for each such violation," for each day a violation continues. Therefore, the *facility* can be assessed a penalty for each Form R not submitted or willfully submitted wrong, and the penalty can be assessed on a per day basis. EPA assesses penalties on a per *toxic chemical/facility* basis which may include per day penalties, depending on the circumstances of the violation. An Enforcement Response Policy (ERP) is available for EPCRA 313 which describes the types of violations and associated penalties (8/10/92). Also note that the Department of Treasury recently increased the fines from \$25,000 to \$27,500 for violations occurring after January 30, 1997; (December 31, 1996; 61 FR 69360).

Signature,
NOTE

482. A *facility* received a Notice of Technical Error (NOTE) stating that they did not have an original signature on the Form R submitted to EPA. How should the *facility* respond to this NOTE?

EPA must have an original signature on file. A *facility* must resubmit a complete Form R with an original signature, and this new form should be attached to the NOTE and returned to EPA and to their *state* contact.

Form R
Submission

483. Can a *facility* submit one original copy each of Part I (Facility Identification Information) with several copies of Part II (Chemical Specification Information) for different listed *toxic chemicals*?

No. Submission of multiple copies of Part II, with only one copy of Part I, would be considered non-compliance. The final rule clearly requires that each completed submission contains all parts of Form R (including Part II, even if it is left blank).

Form R
Submission

484. How can a *facility* be assured that the Agency has received a submitted form?

To be notified of receipt of submissions, *facilities* should send forms using the U.S. Post Office "Return Receipt Request" mail service. The Agency will not respond to cover letters requesting acknowledgment.

Source
Reduction,
Data Sources

485. Where can *facilities* obtain source reduction figures from previous years?

Facilities should use the best information they have available to them. For example, they may use inventory data, recycle/reuse data, engineering reports on process modification, and product development studies.

*Information
Access*

486. A facility would like to receive information on who requested their Section 313 Form R's. Can they request this information from the EPCRA Reporting Center?

No, the request for the names cannot be made to the EPCRA Reporting Center. EPA purposely does not keep a record of individuals or organizations which make requests to the EPCRA Reporting Center. This protects the anonymity of the requestor.

C. Form R Withdrawals

Withdrawal

487. Has EPA allowed facilities to withdraw Form Rs submitted under EPCRA Section 313?

Yes. EPA has permitted facilities that have filed a Form R under EPCRA Section 313 to request that EPA withdraw the Form R data from EPA's database (i.e., the Toxics Release Inventory System (TRIS)) and from the public version of the database.

Withdrawal

488. What is the effect of a withdrawal?

If EPA approves the request, the data contained in the Form R that is the subject of the request is deleted from EPA's database and from the public database that is updated the next time. However, the Form R submission itself, the withdrawal request, and EPA's approval are retained in a miscellaneous document file.

*Withdrawal,
EPA review*

489. What information does EPA consider when reviewing requests to withdraw a Form R?

When EPA reviews a request to withdraw a Form R submitted under EPCRA Section 313, the only information that EPA considers in its review of the request is the information contained in the withdrawal request and/or the Form R that was submitted.

*Withdrawal,
EPA Contact*

490. To approve a withdrawal request, has EPA ever contacted the submitter of the withdrawal request?

In a few cases, EPA has contacted the submitter of the withdrawal request to clarify certain aspects of the information submitted on the Form R or with the request for withdrawal of the Form R.

*Withdrawal,
Validity*

491. In approving the withdrawal request does EPA verify the validity of a request to withdraw a Form R through inspections or audits?

No. For purposes of approving a withdrawal request, EPA has never attempted to verify the validity of a request for withdrawal by inspecting the *facility* or auditing the information filed with the Form R or withdrawal request. Therefore, when EPA approves a withdrawal request EPA is merely granting the request on the basis of the representations and information provided by the submitter in its request and, in some cases, on its Form R.

*Withdrawal,
EPA Approval*

492. Is EPA's approval of a request to withdraw Form R a determination by the Agency that the submitter was not required to report under EPCRA Section 313?

No. EPA's approval of a withdrawal request does not communicate an Agency determination that the submitter was not required to file the Form R that is the subject of the withdrawal request. EPA's approval merely granted the request. An inspector would need to visit the *facility* and review the *facility's* records for EPA to determine that a Form R in fact did not need to be filed. However, as noted above, for purposes of approving a withdrawal request, EPA has never attempted to verify the validity of a withdrawal request through inspections or audits.

*Withdrawal
Requirements*

493. A facility mistakenly determined a Section 313 toxic chemical to be "otherwise used," rather than "processed," at their facility. As a result, the facility reported the listed toxic chemical on Form R with 15,000 pounds used during the previous reporting year. Since they will not be reporting this toxic chemical for the next reporting year, is there any need to withdraw the previous year's reporting forms to prevent an enforcement contact by EPA?

The *facility* is not required to withdraw the report. A *facility* may request to withdraw a form submitted unnecessarily (i.e., a legitimate case of over reporting). Since the *facility* over reported as a result of a threshold determination error, it should thoroughly document the mistake in its recordkeeping for that Form R. No documentation, in addition to the withdrawal request, need be sent to the *state* or EPA at this time.

Revision

494. If a facility finds that it has submitted the forms with minor errors (e.g., boxes incorrectly checked, NA in the wrong place, all pages were not sent for each toxic chemical even if the pages should be blank), should the forms be resubmitted or should the facility wait for EPA to send error notices requesting revisions?

The *facility* should resubmit the form as soon as the errors are discovered to the same address (i.e., the EPCRA Reporting Center). The box that says "Enter 'X' here if this is a revision" (in the upper right hand corner of Page 1)

should be checked. The information elements that are different from the initial report should be made and circled in dark ink. The original, incorrect elements should be crossed out.

*Withdrawal,
Chemical
Deletion*

495. EPCRA Section 313(d) provides for the addition and deletion of chemicals from the list of *toxic chemicals* found at 40 CFR Section 372.65. When a *toxic chemical* is deleted, the final action is effective upon publication in the Federal Register, thereby relieving *covered facilities* of EPCRA Section 313 reporting requirements for the newly deleted chemical from the date of publication forward. If a *facility* submits a Form R for a newly deleted chemical, must the *facility* submit a formal written withdrawal request to the Agency?

Facilities need not submit a formal written withdrawal request because the Agency does not enter a Form R received for a newly delisted *toxic chemical* into the TRI database. *Facilities* that submit Form Rs for that chemical will receive a Notice of Data Change informing the *facility* that the data on the Form R was not entered into the database due to the chemical's deletion from the *toxic chemical* list. The Agency does not, however, remove from the database information from Form Rs submitted for years during which the *toxic chemical* was listed as an EPCRA Section 313 *toxic chemical*.

In the case where only certain forms of a *toxic chemical* are delisted, the Agency will not automatically exclude the Form Rs because the Agency cannot determine for which form of the chemical the threshold determinations and reported data were based. For example, non-aerosol forms of sulfuric acid were delisted on June 30, 1995 (60 FR 34182), making aerosol forms the only EPCRA Section 313 reportable forms of sulfuric acid. In this case, without written clarification from the *facility* and review of the data submitted, the Agency cannot assume Form Rs submitted for sulfuric acid for reporting year 1994 represent reporting for only non-aerosol forms of sulfuric acid. Therefore, the Agency will enter the data as received, unless the *facility* submits a written revision or withdrawal request, as appropriate.

*Withdrawal,
Inappropriate
Submission*

496. A *facility* submitted a Form R for isopropyl alcohol, CAS number 67-63-0, but does not *manufacture* the *toxic chemical* by the strong acid process. How should the *facility* notify EPA about the correction?

The *facility* should submit a withdrawal request to the EPA's EPCRA Reporting Center clearly stating why the original isopropyl alcohol submission should be removed. In this request, the *facility* should give the reporting year and the name of the chemical in question as well as a contact name and phone number. EPA will take action on the request based on the information provided by the *facility*. If EPA approves the withdrawal request, the data will be removed

from the EPA Database, TRIS. The *facility* will be notified whether the request is approved or not. The request should also be copied and sent to the *state/* Indian Country for their information.

FORM A/FORM R
SUBMISSIONS

FORM A/FORM R
SUBMISSIONS

Section 6. SUPPLIER NOTIFICATION (See Appendix A: Section 313 Policy Directive #9 Supplier Notification)

*Supplier
Notification,
Notification
Date*

497. By what exact date must supplier notification be done?

A supplier must notify each customer of any *toxic chemical* present in a *mixture* or *trade name product* with at least the first shipment of the *mixture* or *trade name product* in each reporting year (40 CFR Section 372.45(c)(1)).

*Supplier
Notification,
Thresholds*

498. Companies are required to notify their customers of the presence of listed *toxic chemicals* in the products sold to them, regardless of the volume of those *toxic chemicals*. Why are there no supplier notification thresholds for Section 313?

No lower limit was placed on the volume of *toxic chemicals* distributed to customers of suppliers because EPA cannot predict what combination of volumes will trigger a threshold for any given user/processor of *mixtures* and *trade name products*.

*Supplier
Notification,
De minimis
Exemption*

499. Is a facility subject to supplier notification requirements if it distributes products containing more than the de minimis level of a listed metal compound?

Yes, if you are in SIC codes 20-39 and you distribute these products to other *facilities* in *covered SIC codes*, you are subject to the supplier notification requirements. *Articles* and consumer products are exempt from supplier notification; however, if the supplier has knowledge that *articles* are distributed to customers whose use will negate the *article* exemption, he/she should provide notification of *toxic chemicals* present in the *articles*.

*Supplier
Notification,
De minimis
Exemption*

500. Does a supplier have to tell a customer that a Section 313 *toxic chemical* is present below the de minimis level (1.0 percent; or 0.1 percent for OSHA carcinogens)?

No. Such information is not required.

*Supplier
Notification,
SIC Code*

501. Do supplier notification requirements apply only to a situation where the customer is in SIC code 20 through 39 and has more than 10 employees?

A company in SIC codes 20-39 is responsible for providing supplier notification to all *facilities* in *covered SIC codes* with 10 or more employees, and to customers who in turn may sell or distribute to *facilities* in a *covered SIC code*. Such a customer may be a wholesale distributor who is not in a *covered SIC code* but sells to other *facilities* in a *covered SIC code*. *Facilities* in a *covered*

Supplier
Notification,
Mixtures,
Chemical
Conversion

SIC code but not in SIC codes 20-39, however, are not required to initiate supplier notification.

502. Are some mixtures of Section 313 listed toxic chemicals exempted from the supplier notification requirements? A mixture as defined in EPCRA Section 313 does not include a combination of toxic chemicals produced as the result of a chemical reaction (40 CFR Section 372.3).

Mixtures are not exempt from supplier notification unless the amount of the *toxic chemical* in the *mixture* is below de minimis levels. A *mixture* is defined as a combination of two or more chemicals if the chemicals are not part of a wastestream and they were not combined as a result of a chemical reaction. However, if this combination was formed by a *toxic chemical* reaction but could have been formed without one, it is also considered a *mixture*. Any other combination formed by a chemical reaction is not considered a *mixture*. If a listed *toxic chemical* is present in a *mixture* at a concentration below the de minimis level, this quantity of the substance is exempt from Section 313 supplier notification requirements.

Mixtures,
Supplier
Notification

503. Is supplier notification required for mixtures of water and a listed acid if the facility distributes the mixture under the name of the acid? Note that EPA interprets mixture to exclude for example, a water and phosphoric acid mixture distributed as phosphoric acid.

Supplier notification would be required for *mixtures* of water and an acid as with any other *mixture*, regardless of the name it is distributed under if the concentration of the Section 313 chemical in the *mixture* is greater than the de minimis level.

Supplier
Notification

504. 40 CFR Section 372.45(b)(1) states that to fulfill the supplier notification requirement the notification shall include "a statement that the mixture or trade name product contains a toxic chemical or toxic chemicals subject to the reporting requirements of Section 313..." Does a facility have to include the word "toxic" in its notifications?

The word "toxic" does not have to appear in the statement to fulfill the requirement of 40 CFR Section 372.45(b)(1). However, the statement should clearly state that the *toxic chemical* is subject to EPCRA Section 313.

Supplier
Notification,
Sales Samples

505. Are sales samples covered for purposes of supplier notification?

Sales samples are covered unless they meet one of the stated exemptions in 40 CFR Section 372.45(d) of the regulation, such as *articles* or products distributed to the general public.

*Supplier
Notification,
Consumer
Product
Exemption*

506. A company that makes conveyors for bottling facilities also sells small cans of spray paint to them for use in touch-ups of the paint on the conveyors. The paint is not distributed to or used by the general public. Is the company exempt from supplier notification under the consumer product exemption because the paint is packaged and used like a consumer item? (40 CFR Section 372.45(d)(2)(iii))

No. The exemption does not apply because the paint is not packaged for distribution to the general public.

*Supplier
Notification,
Distributors*

507. Is supplier notification required for distributors in SIC codes other than 20-39 which do not "manufacture" or "process" listed toxic chemicals or mixtures containing toxic chemicals?

Distributors in SIC codes outside of 20-39 who do not "manufacture" or "process" toxic chemicals are not required to prepare notice that the mixture or trade name products which they distribute contain a toxic chemical. They should, however, pass along such notices prepared by their supplier to any facility in a covered SIC code who purchases a mixture or trade name product containing a toxic chemical.

*Supplier
Notification,
Distributors*

508. If a distributor does not receive supplier notification from his/her supplier, will he/she be in violation for not sending the supplier notification with his/her first shipments to other covered facilities or facilities who will in turn send it to covered facilities?

No, if the secondary supplier does not receive the information, he/she cannot develop a notice.

*Supplier
Notification,
Negative
Declaration*

509. A manufacturer lists toxic chemicals on Section II of the MSDS under hazardous ingredients: it is possible that none of the toxic chemicals listed are subject to Section 313 reporting. Is the supplier required to state that none of the chemicals are subject to 313 reporting, removing the need for customers to audit Section II?

A manufacturer is required, and a supplier should include, the Section 313 statement in their MSDS if one or more of the toxic chemicals in the mixture or trade name product are listed Section 313 toxic chemicals. The facility is not required to make a "negative declaration" that none of the components in the mixture are subject to Section 313. A manufacturer or supplier may, however, provide this statement on its own initiative.

*Supplier
Notification,
Distributors*

510. To what extent is a facility covered under 40 CFR Section 372.45 required to determine if the facility receiving a shipment distributes the toxic chemical to a manufacturer?

*Supplier
Notification,
Distributors*

The *facility* should use the best available knowledge. The manufacturer of the *mixture* must send the supplier notification to the "middle man" distributor if he/she has a reasonable basis to conclude that the distributor provides the product to *covered facilities*. Such a conclusion could be based on the nature of the product and its intended market.

511. Is supplier notification required for products produced by a *facility* and then distributed directly to a manufacturing *facility* or through a distributor to another manufacturer?

Yes, supplier notification is required in both instances. The intent is to provide a notification that will be passed on by the non-covered distributor. That distributor may be transshipping, relabeling or even repackaging, but because they are not in the *covered SIC codes*, they are not required to develop and distribute such notice. They are encouraged to pass the notice through to their customers.

*Supplier
Notification,
Auxiliary
Facilities*

512. A company distributes *toxic chemicals* through *satellite facilities*. *MSDSs* are distributed from a central *facility*. The *MSDSs* arrive either prior to or after the shipment of the *toxic chemical*. Is it acceptable for the supplier notification to be attached to the *MSDS* and for current distribution operations to remain the same? If not, must the supplier notification be sent in the same package as the chemical?

No, the requirement states that the notice must accompany at least the first shipment during the year to a customer. If the *MSDS* does not accompany that shipment then the supplier notification must still be sent in the package. The *MSDS*, however, also must incorporate or have attached to it the supplier notification information.

*Supplier
Notification,
Repackaging*

513. A *covered facility* repackages and distributes some *toxic chemicals* manufactured by other companies. Is the *facility* responsible only for passing on the manufacturer's information to its customers or is it required to provide supplier notification?

The repackaging *facility* must provide supplier notification to its customers only if it is in SIC codes 20-39. If the only information the *facility* knows is from the *MSDS*, all it can do is provide this same information to its customers. If the *facility* knows the product contents or concentrations are different from what appear on the supplier's notice, the *facility* must provide the more accurate information to its customers. EPA suggests, but does not require, that the repackager inform the supplier of the inaccuracy in their *MSDS*.

If the *facility* is not in SIC codes 20-39 but is a newly *covered facility* beginning in 1998, it would not be required to initiate supplier notification. It

should, however, pass along such notices prepared by their supplier to any facility in a covered SIC code who purchases a mixture or trade name product containing a toxic chemical.

Trade Name,
Generic Name,
Part II Section 1

514. MSDSs for the solvents we use give trade names or generic names only. Do we have to contact the manufacturer for more information to report under Part II of Form R?

If a trade name or generic name is provided and if the presence of a Section 313 toxic chemical is known, then that can be reported in Part II Section 2 of the Form R. Suppliers are required to provide the identity of the listed toxic chemical (CAS number and toxic chemical name) and concentration in mixtures. The manufacturer may claim the information trade secret, but must provide a name that is descriptive of the toxic chemical, provide at least an upper bound concentration in the mixture, and indicate that the mixture contains a toxic chemical (40 CFR Section 372.45(e)).

Supplier
Notification,
CAS Number

515. I own a small chemical company that supplies some Section 313 toxic chemicals to customers. My customers are requesting MSDS information and want the CAS number for every toxic chemical in my mixtures. I thought I only had to supply that information for the listed toxic chemicals.

If you wish, you may provide them with the CAS numbers for all of the toxic chemicals in your mixtures, but under Section 313 you are only required to provide information on the listed toxic chemicals (i.e., those toxic chemicals and chemical categories subject to reporting under Section 313).

MSDS

516. Is a company required to contact suppliers if an MSDS sheet does not contain complete or consistent language and/or information?

No. The company must use the best information at hand, but the EPCRA regulations do not require them to contact the supplier. If, however, the company does voluntarily contact the supplier and the supplier provides more detailed information then that becomes the "best" information and the facility must use it.

Supplier
Notification,
MSDS

517. A facility produces industrial non consumer products and includes supplier notification information on the product label. Is this sufficient? Must the MSDS be distributed as the primary vehicle of notification?

Inclusion of Section 313 supplier notification information on the product label will satisfy the notification requirements. However, the regulations state that if the products are required to have an MSDS then the supplier notification must

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*Supplier
Notification,
MSDS*

be included with the *MSDS* for those non-consumer products. But the *MSDS* does not have to be distributed as the primary vehicle of notification.

518. The supplier notification provision requires that the notice be attached to the *MSDS* for the first shipment, if an *MSDS* is required. What options would a *facility* have to give this notice if no *MSDS* were required under OSHA for the shipment?

The *facility* may use a number of other mechanisms such as a letter, a label, or a written notice within whatever shipping papers accompany the shipment.

*Supplier
Notification,
MSDS*

519. EPA states in the preamble to the rulemaking on the supplier notification requirements that the notification must be attached to the *MSDS* and must not be detached. However, *MSDSs* must be submitted only one time unless changes are made, while the supplier notification must be submitted annually. How should this inconsistency be handled?

The supplier notification is to be part of the *MSDS* if the product is required to have an *MSDS*. If an *MSDS* is not required for the product, the notice must be in writing. Thus, in subsequent years, the supplier should submit the notification in writing.

*Supplier
Notification,
Notification
Letter*

520. Would EPA accept an annual notification by letter to customers as satisfying the supplier notification provisions under 40 CFR Part 372, Subpart C?

Once customers have been supplied with the *MSDS* containing the Section 313 information, then it would be acceptable for a *facility* to refer to the *MSDS* by letter in subsequent years, provided the customer has the most current version of the *MSDS*. The letter must accompany the first shipment of the *mixture* or *trade name product* for the year. Also, the supplier notification regulations require that a new notification be provided when the presence or composition of a listed *toxic chemical* in the product changes.

*Supplier
Notification,
Pesticide*

521. Is supplier notification required for pesticide products packaged for distribution to the general public?

If the pesticides products are distributed for use by the general public, supplier notification is not required (40 CFR Section 372.45(d)(2)(iii)).

*Supplier
Notification,
Mixtures,
Chemical
Categories*

522. If a *mixture* contains a listed *toxic chemical* compound that is a member of a reportable Section 313 *toxic chemical* category, how should that be addressed on the supplier notification? Is it acceptable to provide the percent of the parent metal?

If a *mixture* contains a *toxic chemical* compound (e.g., 12 percent zinc oxide) that is a member of a reportable chemical category (e.g., zinc compounds), the supplier is required to notify his/her customers that the *mixture* contains a zinc compound at 12 percent by weight. Supplying only the weight percent of the parent metal (zinc) does not fulfill the requirement, but may be provided to aid receiving *facilities* in estimating *releases*. The customer must be told the weight percent of the entire compound for threshold determinations.

Supplier
Notification,
Pure Chemical,
Trade Name

523. Do the supplier notification requirements under 40 CFR 372.45 require notification for a shipment of a pure (i.e., 100%) toxic chemical that has not been assigned a trade name?

A manufacturer is not required to provide supplier notification for a pure *toxic chemical* (i.e., a product labeled with the listed Section 313 chemical or identified by CAS number). The identity of the *toxic chemical* will be known based on label information and CAS numbers as long as a trade name is not used. Supplier notification applies to *mixtures* and *trade name products*.

Supplier
Notification,
Import

524. How will the supplier notification work for imported products - do exporters from Japan have to comply?

No. Foreign suppliers are not required to comply with supplier notification. However, under the Toxic Substance Control Act (TSCA), an importer must certify that the chemicals in the *imported mixture*, as well as pure substances, meet the TSCA requirements. Therefore, the importer should have requested content and composition data on *imported mixtures*.

Supplier
Notification,
Waste

525. A facility sends empty drums containing toxic chemicals residue to a drum recycler (within a covered SIC code.) Must the facility provide supplier notification?

No, the supplier notification requirement only applies to *mixtures* and *trade name products* that are supplied or distributed. The only *toxic chemicals* being transferred are in the form of waste, and notification does not apply to wastes.

Supplier
Notification,
Intra-company
Transfers

526. Do transfers of products or materials from one of our company's facilities to another require supplier notification?

Yes. The language of the regulations cover material that it "sells or otherwise distributes." In this sense, the "otherwise distributes" language would apply to intra-company transfers. However, if the company has developed an internal communications procedure that alerts their other *facilities* to the presence and content of *toxic chemicals* in their products, then the Agency would accept this as satisfying the supplier notification requirement.

Supplier Notification, Multi-Establishment, SIC Code

527. A multi-establishment facility is not covered (i.e., does not meet the SIC code criterion) but one of the establishments within the facility is within a covered SIC code. Does the language “facility or establishment” in the supplier notification part of the EPCRA Section 313 regulations subject this one establishment to the supplier notification provisions?

No. EPA has determined as a matter of policy that the phrase “or establishment” does not extend coverage of the supplier notification provisions beyond that of a “facility” as defined by 40 CFR Section 372.22 (b) of the regulations. Therefore, in the case of a multi-establishment facility not subject to the regulations, an establishment in a covered SIC code within that facility would not be required to provide Section 313 supplier notification. However, the Agency encourages such an establishment to comply voluntarily so that its customers will have the information necessary to make proper compliance determinations under the Section 313 rules. The “or establishment” language provides an option similar to that available to establishments that submit reports as a part of a covered facility. For example, if only one establishment in a covered facility is actually distributing a product containing a toxic chemical then that establishment may assume the supplier notification responsibility for that facility.

Supplier Notification, Manufacture

528. Is a facility owner/operator responsible for preparing EPCRA Section 313 supplier notification information for a mixture or trade name product which contains a listed toxic chemical that they did not “manufacture?”

Yes, the owner/operator may be responsible. The requirement for developing supplier notification for a mixture or trade name product containing a listed toxic chemical is the responsibility of the facility in SIC codes 20-39 that “manufactures” or “processes” a Section 313 toxic chemical and sells or otherwise distributes a mixture or trade name product containing that toxic chemical.

Supplier Notification, Activity Thresholds

529. A manufacturing facility “otherwise uses” nitric acid to clean reaction vessels. The same facility also buys nitric acid solution (bought as “Trade Name X”) and resells it to other customers (no repackaging or relabeling of the solution takes place). Is the owner operator of the manufacturing facility in SIC codes 20-39 required to develop supplier notification for the nitric acid it sells under 40 CFR Section 372.45?

No. A manufacturing facility in SIC codes 20-39 is required to prepare and distribute supplier notification if it “... ‘manufactures’ (including imports) or ‘processes’ a toxic chemical...” and ... “sells or otherwise distributes a mixture or trade name product containing the toxic chemical...” to a facility that is required to file Form Rs or to a person who may sell or otherwise distribute such mixture or trade name product to a covered facility (40 CFR Section

372.45(a)(2) and (3)). In the above example, the manufacturing *facility* does not “*manufacture,*” *import,* or “*process*” nitric acid (it only “*otherwise uses*” nitric acid) and so is not required to develop supplier notification for the nitric acid it sells. However, if a supplier notification is provided with Trade Name X nitric acid solution, the manufacturing *facility* is encouraged to pass this information along to its customers. (Note: if a supplier notification is incorporated in or attached to the *MSDS* received by the manufacturing *facility* with the Trade Name X nitric acid solution it buys, “...any copying and redistribution of the *MSDS* shall include copying and redistribution of the notice attached to copies of the *MSDS* subsequently redistributed” (40 CFR Section 372.45(c)(5)).

*Supplier
Notification,
Pure Chemical,
Concentration*

530. Under 40 CFR Section 372.45, supplier notification is required for mixtures and trade name products containing listed toxic chemicals. The notification is not required for toxic chemicals labeled as pure. If a facility covered by the supplier notification requirements receives a substance which is labeled as a toxic chemical but no concentration is given, are they required to notify the recipient when selling or otherwise distributing the substance?

No, supplier notification is not required for pure substances labeled as the *toxic chemical*. If a substance is labeled as a *toxic chemical* and no concentration is given, then the processor (supplier) and the recipient of the *toxic chemical* should consider it to have a concentration of 100 percent.

*Supplier
Notification,
Article
Exemption*

531. A manufacturer distributes an item to its customers. Some of the customers use the item in such a way that allows them to claim the “article exemption.” (40 CFR Section 372.38(b)). However, some of the customers utilize the supplied item in such a way that negates the article exemption. When should the manufacturer provide a supplier notification for the items it distributes since it is not required to provide such a notification for articles (40 CFR Section 372.45(d)(1)(i)), and may not know the end result of the distributed items?

If the manufacturer knows that normal “*processing*” or “*otherwise use*” of the item by recipients would not negate its *article* status, no notification is necessary. If, however, the manufacturer believes the recipient may use an item in such a way that negates its *article* status, the manufacturer must provide a notification to that recipient.

*Supplier
Notification,
Applicability,
Article
Exemption,*

532. A company manufactures metal parts which it sends to an electroplating job shop to be plated, and which are then returned. Is this manufacturing company considered to be a “supplier” and thus subject to supplier notification?

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NOTIFICATION

Electroplating

No, if the metal parts can be considered *articles*. In that case, the manufacturing company is not considered to be a supplier to the owner and does not need to meet the requirements for supplier notification.

*Supplier
Notification,
Article
Exemption*

533. A facility manufactures paper products. Is the facility subject to the supplier notification provision of Section 313?

A paper product can generally be considered an *article*. Supplier notification would be required only if the release of a *toxic chemical* occurred upon further "processing" or "otherwise use" by a *covered manufacturing facility* of those products. This *release* would negate the *article* status of the product.

*Supplier
Notification,
Paint,
Janitorial
Products*

534. Are manufacturers shipping "maintenance products" such as paint or janitorial products exempt from supplier notification since they are exempt from threshold determinations by the receiving facility?

No. These manufacturers are still required to provide the supplier notification.

*Supplier
Notification,
Consumer
Product
Exemption*

535. Company A packages a listed chemical as a root destroyer and sells it to Company B, who then sells it directly to the public. (Company B does not use the product commercially and is not in a covered SIC code.) Is this considered a consumer product and thus considered to be exempt from supplier notification provisions (40 CFR Section 372.45(d)(2)(iii))?

Yes, the product is exempt from supplier notification because it is being packaged for sale to the public. Even if the product were being used commercially by Company B, no supplier notification would be required because Company B is not in the *covered SIC codes*.

*Supplier
Notification,
Concentration*

536. When a manufacturer considers the actual weight percent concentration of a toxic chemical in a mixture to be a trade secret, the Section 313 final rule states that an upper bound concentration can be used, but can be no larger than necessary to adequately protect the trade secret. Does that mean that a lower bound (i.e., not less than 5 percent) or a range (5-10 percent) is not acceptable in a supplier notification?

A lower bound is not acceptable. A range that includes the upper bound concentration is acceptable. An upper bound was chosen so the user would not underestimate the quantity for purposes of threshold and *release* determinations and other *waste management* estimates.

*Supplier
Notification,
Corporate
Headquarters*

537. A manufacturing facility is required to provide a Section 313 supplier notification for a mixture. One of the facilities receiving the supplier notification has requested that its notification go to that facility's corporate headquarters, and the headquarters has guaranteed that they will deliver

the notification to the *facility*. By sending the notification to the corporate headquarters, is the manufacturing *facility* fulfilling its supplier notification requirement even though the manufacturing *facility* is not directly giving the notification to the *facility* to which it supplies the chemical?

As long as the corporate headquarters can guarantee that the receiving *facility* will obtain the notification by the first shipment in the reporting year, the manufacturing *facility* is fulfilling its supplier notification requirement by sending the notification to the corporate headquarters as requested.

*Supplier
Notification,
De minimis
Exemption,
Chemical
Compounds*

538. A manufacturing *facility* distributes a *mixture* containing three different manganese compounds. Each manganese compound, taken separately, would be below the de minimis level for Section 313 reporting. However, if the three manganese compounds are added together, the de minimis level is exceeded. Is this *facility* required to fulfill the supplier notification requirement (40 CFR Section 372.45) for this *mixture*?

The compounds are included in the manganese compound category. Therefore, the *facility* must add together the weight percent of all manganese compounds when making de minimis and threshold determinations. Since the percent of manganese compounds exceeds the de minimis level, the *facility* would have to fulfill the supplier notification requirements for this *mixture*.

*Supplier
Notification,
Concentration*

539. A *facility* in SIC code 28 distributes a product containing nitric acid, a listed *toxic chemical* to other *covered facilities* and therefore is required to provide these other *covered facilities* with supplier notification. The concentration of nitric acid in the product varies from batch to batch. The *facility* knows the concentration of nitric acid in each batch. Can this *facility* give a range of concentration for the nitric acid in this product in order to fulfill its supplier notification requirement?

No. Every time a concentration of a *toxic chemical* in a *mixture* changes, the supplier must provide an updated notification with the new concentration. Therefore, this *facility* cannot provide a concentration range value in order to fulfill the notification requirement. Instead, the *facility* must provide a new notification with each product that has a different concentration of the listed *toxic chemical*.

*Supplier
Notification,
Concentration*

540. Is there any margin of error allowed in the weight percent listed in a supplier notification (i.e., +/- 0.5 percent)?

The Agency does not specify any margin of error or degree of precision in the percentage figures for the notice.

SUPPLIER
NOTIFICATION

Supplier
Notification,
Trade Secret

541. A facility is required to provide the supplier notification (40 CFR Section 372.45) for some of its products that contain listed toxic chemical(s). The products contain antimony compounds, a listed toxic chemical category. However, the facility considers the chemical names of the antimony compounds in their products a trade secret. Does this facility have to give the exact chemical names of these antimony compounds in order to fulfill the supplier notification requirement?

No, this facility's antimony compounds are not specifically listed in the Section 313 toxic chemicals list; however, they do fall into the antimony compounds category. Since the name of the toxic chemical is not listed, the facility does not need to provide the chemical name to fulfill the supplier notification requirement. This facility needs to identify that the products contain an antimony compound subject to Section 313, the concentration of the compound in the mixture, and the stoichiometric amount of antimony in the compound.

Supplier
Notification,
Trade Secret

542. Regarding supplier notification, when a facility decides that it will consider a toxic chemical component of a product as a trade secret, is it required to fill out and submit a substantiation form under provisions of Section 322?

No. The trade secret conditions in the supplier notification provisions of the regulations apply to applicable state law, not to EPCRA Section 322. Facilities are, however, required to keep a record of the reasons for considering specific chemical identity or composition a trade secret.

Supplier
Notification,
Consumer
Product
Exemption

543. The preamble to the Section 313 final rule (53 FR 4510; February 16, 1988) states that consumer product exemptions similar to those found in the OSHA Hazard Communication Standard (HCS) and the regulations implementing Sections 311 and 312 of EPCRA are incorporated into the Section 313 supplier notification provision (53 FR 4510). The consumer product exemptions under OSHA HCS and EPCRA Sections 311 and 312 are broader than the exemption that is listed in the Section 313 final rule.

The Code of Federal Regulations (CFR) implementing Section 313 exempts from supplier notification, "(a)ny consumer product as the term is defined in the Consumer Product Safety Act packaged for distribution to the general public" (40 CFR Section 372.45(d)(iii)).

OSHA HCS has a broader exemption that includes consumer products or hazardous substances that will be used in the workplace in the same manner as normal consumer use, and which results in a duration and frequency of exposure that is not greater than exposures experienced by consumers (52 FR 31878; August 17, 1987).

Section 311(e) expands the consumer product exemption to include substances to the extent they are present in the same form and concentrations as a product packaged for distribution and use by the general public (40 CFR Section 370.2 "Hazardous Chemicals").

A facility "manufactures" 16-ounce boxes of a detergent that contains a Section 313 toxic chemical. The facility primarily distributes its detergent to consumers, however, it distributes to some covered facilities also used by industry. The Consumer Product Safety Act defines the detergent as a consumer product.

The manufacturer distributes the 16-ounce boxes of detergent to three facilities within a covered SIC code. Each facility uses the detergent in a different way. The first facility exclusively uses the detergent to supply the company lunchroom for the employees to wash their dishes. The second facility uses the detergent in industrial size washers to clean metal articles. The third facility uses the detergent to clean and degrease their distillation towers.

To which of these facilities would the manufacturer be required to provide supplier notification?

The manufacturer would not be required to include supplier notification with the shipment of the 16-ounce boxes of detergent sent to any of these facilities.

For the product to be exempt from supplier notification under 40 CFR Section 372.45(d)(2)(iii), it must be packaged for distribution to the general public. This detergent is being distributed to covered facilities in the same form that it is packaged for distribution to the general public (i.e., the 16-ounce box). Therefore, no supplier notification is required. If the same detergent was sold to manufacturing facilities in drums or other "industrial quantity" packages, then supplier notification would be required, regardless of the end use at the facility.

*Supplier
Notification*

544. The requirements for supplier notification for mixtures or trade name products containing listed toxic chemicals, are found in 40 CFR Section 372.45. The requirements specify in Section 372.45(a) that supplier notification is required for persons who meet the following criteria:

- 1. Is in SIC codes 20-39;**
- 2. "Manufactures" (including imports) or "processes" a toxic chemical; and**
- 3. Sells or otherwise distributes a mixture or trade name product containing the toxic chemical.**

SUPPLIER
NOTIFICATION

When the second criterion says a “*toxic chemical*,” does this refer to the *toxic chemical* being distributed or to any *toxic chemical* which is “*manufactured*” or “*processed*” at the *facility*? For example, a person “*processes*” benzene at their *facility* and also distributes a *mixture* containing xylene which they buy from another *facility*. The xylene is simply redistributed, not “*processed*,” by the *facility*. Is a supplier notification required for the *mixture* which contains xylene because the *facility* “*processed*” benzene?

When the second criterion says a “*toxic chemical*,” it is referring to the *toxic chemical* in the *mixture* which is being distributed from the *facility*. Therefore, a *facility* owner/operator would not be responsible for preparing a supplier notification for a *mixture* that contains a *toxic chemical* that he/she did not “*manufacture*” or “*process*.” The requirement for developing a supplier notification for a *mixture* is ultimately the responsibility of the *facility* which “*processed*” or “*manufactured*” the *toxic chemical* in the *mixture*. The *facility* that is redistributing the *toxic chemical* is not repackaging it and thus is not “*processing*” it.

Supplier
Notification,
Deleted
Chemicals

545. The regulations at 40 CFR Section 372.45(c)(1) state that “the person shall provide the written notice described in paragraph (b) of this Section to each recipient of the *mixture* or *trade name product* with at least the first shipment of each *mixture* or *trade name product* to each recipient in each reporting year beginning January 1, 1989.” Is the supplier required to notify customers if a Section 313 *toxic chemical* that is present in the *mixture* is later delisted by EPA, since the chemical is no longer a Section 313 *toxic chemical*?

As stated in 40 CFR Section 372.45(c)(1), the supplier is only required to notify recipients if the *mixture* or *trade name product* contains a listed *toxic chemical*. The supplier is not responsible for providing modified notice as an immediate result of the Agency’s delisting activity. If the *mixture* contains other Section 313 *toxic chemicals*, then the supplier would simply delete the delisted chemical from the next year’s notification.

Supplier
Notification,
Effective Date,
New Chemicals

546. When must I begin providing a supplier notification (40 CFR Section 372.45) for a newly added chemical?

For a chemical added on or after January 1 and before December 1 of any reporting year, supplier notifications are to be provided with the first shipment of the chemical in the following reporting year and every year thereafter. For example, a chemical added on April 1, 1998, requires a notification beginning with the first shipment of the chemical in the 1999 reporting year.

For a chemical added on or after December 1 of any reporting year and before January 1 of the next reporting year, supplier notifications are to be provided

with the first shipment of the chemical in the year following the next reporting year and every year thereafter. For example, a chemical added on December 10, 1998, requires a notification beginning with the first shipment of the chemical in the 2000 reporting year.

*Supplier
Notification,
Mass Mailing*

547. Could a manufacturer do a mass mailing of notifications to all customers at one time in the beginning of the year instead of sending an individual supplier notification with each shipment?

Yes. Note that the regulations require that supplier notification be made to each customer by "at least the first shipment," so the timing of the mass mailing is important. Also, the notification must be included with the *MSDS* if one is required for the product. The supplier also must be cautious of formulation changes that would occur between the mass mailing and the actual first shipment.

SUPPLIER
NOTIFICATION

Section 7. TRADE SECRETS

Trade Secret,
Chemical
Identity

548. How can the identity of a listed *toxic chemical* be protected from disclosure for trade secrecy purposes?

Section 313 allows only the specific identity of a *toxic chemical* to be claimed as a trade secret. The rest of Form R must be completed. This information is accessible to the public, including information on *releases* and other *waste management* of the *toxic chemical*. For trade secrecy claims, two versions of the Form R (one identifying the *toxic chemical*, the other containing only a generic chemical identity) and two versions of a trade secret substantiation form (July 28, 1988; 53 FR 28772) must be completed and sent to EPA.

Trade Secret,
Part I Section
2.1

549. On the Form R, if I do not check the "Trade Secrets" box in Part I Section 2.1, what other blocks can I leave blank? Do I still have to fill in the CAS number?

If the *toxic chemical* for which you are reporting is not a trade secret, you may leave the boxes in Section 2.2 blank. The CAS number, however, must be filled in along with the *toxic chemical* name (Part II Section 1.1 and 1.2). If you are reporting for a *toxic chemical* category, no CAS number applies. If you are claiming that the *toxic chemical* is a trade secret you must enter the generic name in Part II Section 1.3.

Trade Secret,
Confidentiality
Agreement,
Public
Disclosure

550. For claiming trade secrets under EPCRA Section 313, would disclosure, without a confidentiality agreement to the *state* and/or city having jurisdiction, negate a *toxic chemical* identity's trade secret status under Federal provisions?

In general, disclosure of information claimed as trade secret to Federal, *state* or local government officer or employee, or the reporter's own employee, would not negate the claim of trade secrecy. However, disclosure of a *toxic chemical* identity to any other *person* without a confidentiality agreement would negate the *toxic chemical* identity's trade secret status under Federal Provisions. Where a trade secret claim is made, *state* Governors are permitted to request that EPA provide access to all materials relating to this claim. The decision to provide information to any state employee is left to the Governor's discretion.

Trade Secret,
Public
Disclosure,
Confidentiality
Agreement,
Foreign
Governm

551. A company with both domestic and foreign operations wishes to claim on a Form R that the identity of a TRI-listed chemical that it processes is a trade secret. The company has entered into confidentiality agreements with all nongovernment entities that have knowledge of the identity and/or usage of the TRI chemical. These confidentiality agreements prevent the nongovernment entities from disclosing information about the chemical's identity or usage. The company, however, has not

entered into a confidentiality agreement with one of the foreign governments where it operates because the government is required by its laws to keep information regarding foreign business interests confidential. If the company discloses the identity of the chemical to this foreign government, is it required to report this disclosure on Trade Secret Substantiation Form?

Yes. Because the company has not entered into a tangible confidentiality agreement with the foreign government, it must report the disclosure on the Trade Secret Substantiation Form. In other words, it should check "yes" when answering question 3.2 on the Form. However, because the foreign government's laws guarantee confidentiality of the TRI chemical's identity and usage, regardless of the existence of a confidentiality agreement, the identity of the chemical is protected; the company should explain this when answering question 3.1 on the Form.

APPENDIX A. SECTION 313 POLICY DIRECTIVES

This appendix contains in-depth descriptions of some of the more complex issues involved in Section 313 reporting.

The questions and answers contained in the body of this document address specific situations. For some issues, such as the *de minimis* and *article* exemptions, however, multiple factors become involved in determining threshold and *release* and other *waste management* calculations. These issues have generated many inquiries and requests for clarification from regulated *facilities*. The directives contained in this appendix provide comprehensive written interpretations of such issues. While the information contained in these directives is the most up-to-date guidance available from EPA, no new policy information is contained in this appendix that is not represented in other EPA documents.

If you feel you have specific circumstances or situations for which you need additional EPA guidance, contact your Regional Section 313 coordinator or call the Emergency Planning and Community Right-to-Know Information Hotline at 1-800-535-0202, or 1-703-920-9877.

DIRECTIVE #1 - ARTICLE EXEMPTION

Listed *toxic chemicals* contained in *articles* that are “*processed*” or “*otherwise used*” at a *covered facility* are exempt from threshold determinations and *release* and other *waste management* determinations. The exemption applies when the *facility* receives the *article* from another *facility*. The exemption only applies to the quantity of the *toxic chemical* present in the *article*. If the *toxic chemical* is “*manufactured*” (including *imported*), “*processed*,” or “*otherwise used*” at the *covered facility* other than as part of the *article*, in excess of an applicable threshold quantity, the *facility* is required to report (40 CFR Section 372.38(b)). For a *toxic chemical* in an item to be exempt as part of an *article*, the item must meet all of the following three criteria in the Section 313 *article* definition; that is, the item must be one:

- i) that is formed to a specific shape or design during “*manufacture*;”
- ii) that has end use functions dependent in whole or in part upon its shape or design during end use; and
- iii) that does not *release a toxic chemical* under the normal circumstances of “*processing*” or “*otherwise use*” of the item at the *facility*.

If, as a result of “*processing*” or “*otherwise use*,” an item retains its initial thickness or diameter, in whole or in part, it meets the first part of the definition. If the item’s basic dimensional characteristics are totally altered during “*processing*” or “*otherwise use*,” the item does not meet the first part of the definition. An example of items that do not meet the definition would be items which are cold extruded, such as lead ingots which are formed into wire or rods. On the other hand, cutting a “*manufactured*” item into pieces which are recognizable as the *article* would not change the original dimensions as long as the diameter and the thickness of the item remained the same; the *article* exemption would continue to apply. Metal wire may be bent and sheet metal may be cut, punched, stamped, or pressed without losing their *article* status as long as the diameter of the wire or tubing or the thickness of the sheet are not totally changed.

An important aspect of the *article* exemption is what constitutes a *release* of a *toxic chemical*. Any “*processing*” or “*otherwise use*” of an *article* that results in a *release* negates the exemption. Cutting, grinding, melting, or other “*processing*” of a “*manufactured*” item could result in a *release* of a *toxic chemical* during normal conditions of “*processing*” or “*otherwise use*” and, therefore, negate the exemption as an *article*.

However, if the “*processing*” or “*otherwise use*” of all like “*manufactured*” items at a *facility* results in a total *release* of 0.5 pounds or less of a *toxic chemical* in a reporting year, EPA will allow this *release* quantity to be rounded

to zero and the “*manufactured*” items remain exempt as *articles*. *Facilities* should round off and report all estimates to the nearest whole number. The 0.5 pound limit does not apply to each individual *article*, but applies to the sum of all *releases* from “*processing*” or “*otherwise use*” of all like *articles*. If all the *releases* of like *articles* over a reporting year are completely captured and sent for recycling/reuse on-site or off-site, the items may remain exempt as *articles*. Any amount that is *released* and is not recycled/reused will count toward the 0.5 pound per year cut-off value.

DIRECTIVE #2 - DE MINIMIS EXEMPTION

The de minimis exemption allows *facilities* to disregard certain minimal concentrations of chemicals in *mixtures* or *trade name products* they “*process*” or “*otherwise use*” when making threshold determinations and *release* and other *waste management* determinations. The de minimis exemption does not apply to the “*manufacture*” of a *toxic chemical* except if that *toxic chemical* is “*manufactured*” as an impurity and remains in the product distributed in commerce, or if the *toxic chemical* is *imported* below the appropriate de minimis level. The de minimis exemption does not apply to a byproduct “*manufactured*” coincidentally as a result of “*manufacturing*,” “*processing*,” “*otherwise use*,” or any *waste management* activities.

When determining whether the de minimis exemption applies to a listed *toxic chemical*, the owner/operator should consider only the concentration of the *toxic chemical* in *mixtures* and *trade name products* in process streams in which the *toxic chemical* is undergoing a reportable activity. If the *toxic chemical* in a process stream is “*manufactured*” as an impurity, *imported*, “*processed*,” or “*otherwise used*” and is below the appropriate de minimis concentration level, then the quantity of the *toxic chemical* in that process stream does not have to be applied to threshold determinations nor included in *release* or other *waste management* determinations. If a *toxic chemical* in a process stream is below the appropriate de minimis level, all *releases* and other *waste management* activities associated with the *toxic chemical* in that stream are exempt from EPCRA Section 313 reporting. It is possible to meet an activity (e.g., “*processing*”) threshold for a *toxic chemical* on a *facility-wide* basis, but not be required to calculate *releases* or other *waste management* quantities associated with a particular process because that process involves only *mixtures* or *trade name products* containing the *toxic chemical* below the de minimis level.

Once a *toxic chemical* concentration is above the appropriate de minimis level in the process stream, threshold determinations and *release* and other *waste management* determinations must be made, even if the chemical later falls below the de minimis level in the same process stream. Thus, all *releases* and other quantities managed as waste that occur after the de minimis level has been exceeded are subject to reporting. If a *toxic chemical* in a *mixture* or *trade name product* above de minimis is brought on-site, the de minimis exemption never applies.

The 0.1% de minimis levels are dictated by determinations made by the National Toxicology Program (NTP), Annual Report on Carcinogens, the International Agency for Research and Cancer (IARC) Monographs, or 29 CFR part 1910, subpart Z. Therefore, once a chemical’s status under NTP, IARC, or 29 CFR part 1910, subpart Z indicates that the chemical is a carcinogen or poten-

tial carcinogen, the reporting *facility* may disregard levels of the chemical below the 0.1% de minimis concentration provided that the other criteria for the de minimis exemption is met. De minimis levels for chemical categories apply to the total concentration of all chemicals in the category within a *mixture*, not the concentration of each individual category member within the *mixture*.

1. De Minimis Application to the "Processing" or "Otherwise Use" of a Mixture

The de minimis exemption applies only to the "*processing*" or "*otherwise using*," of a listed *toxic chemical* in a *mixture*. Threshold and *release* calculations begin at the point where the chemical exceeds de minimis. If a listed *toxic chemical* is present in a *mixture* at a concentration below the de minimis level, this quantity of the substance does not have to be included for threshold determination, *release* and other *waste management* reporting, or supplier notification requirements. The exemption will apply as long as the *mixture* containing de minimis amounts of a *toxic chemical* never goes above the de minimis limit. Also, see below the two examples in which a "*manufacturing*" activity would qualify for the de minimis exemption.

Examples of "Process" and "Otherwise Use" Scenarios

There are many cases in which the de minimis "limit" is crossed or recrossed within a "*process*" or "*otherwise use*" scenario. The following examples are meant to illuminate these complex reporting scenarios. These applications are further described in the general Section of the Toxic Chemical Release Inventory Reporting Form R and Instructions.

A. Example of Increasing Process Concentration to Above De minimis Levels

A manufacturing *facility* receives toluene which contains less than the de minimis concentration of chlorobenzene. Through distillation, the chlorobenzene content in process streams is increased over the de minimis concentration of 1 percent. From the point at which the chlorobenzene concentration exceeds 1 percent in process streams, the amount present must be factored into threshold determinations and *release* and other *waste management* estimates. The *facility* does not need to consider the amount of chlorobenzene in the raw material, *i.e.*, when below de minimis levels, when making threshold determinations. The *facility* does not have to report emissions of chlorobenzene from storage tanks or any other equipment where the chlorobenzene content is less than 1 percent.

B. Example of Fluctuating Process Concentration

A manufacturer produces an ink product which contains toluene, a listed toxic chemical below the de minimis level. The process used causes the percentage of toluene in the *mixture* to fluctuate: it rises above the de minimis level for a time but drops below the level as the process winds down. The *facility* must consider the chemical toward threshold determinations from the point at which it first exceeds the de minimis limit. Once the de minimis limit has been crossed the exemption cannot be taken.

C. Example of Concentration Levels that Straddle the *De minimis* Level

A *facility* "processes" 9,500,000 lbs. of *mixtures* containing 0.25-1.25% manganese. Manganese is subject to 1% de minimis concentration exemption. The amount of *mixture* subject to reporting is:

$$9,500,000 \times (1.2-0.99)/(1.2-0.25) = 2,000,000 \text{ lbs. non-exempt mixture}$$

The average concentration above de minimis is 1.1%.

$$2,900,000 \times 0.011 \text{ manganese} = 22,000 \text{ lbs manganese (below threshold)}$$

In this example, because the *facility's* information pertaining to the *toxic chemical* is available to two significant figures, the *facility* used 0.99 to determine the amount of the *toxic chemical* below the de minimis level. If the *facility* has information pertaining to the chemical that is available only to one significant figure, the *facility* should use 0.9.

2. De Minimis Application in the "Manufacture" of the Listed Chemical in a Mixture

The de minimis exemption generally does not apply to the "manufacturing" of a *toxic chemical*. The de minimis exemption may apply to *mixtures* and *trade name products* containing *toxic chemicals* that are *imported* into the United States. Another exception applies to *toxic chemicals* that are coincidentally "manufactured" as impurities that remain in the product distributed in commerce at below the de minimis levels. The amount remaining in the product is exempt from threshold determinations. If the chemical is separated from the final product, thereby classifying the chemical as a byproduct, it cannot qualify for the exemption. Any amount that is separated, or is separate, from the product, is considered a byproduct and is subject to threshold determinations and *release* and other *waste management* estimates. Any amount of a *toxic chemical* that is "manufactured" in a wastestream must be accounted for on Form R.

A. Example of Coincidental "Manufacture" as a Product Impurity

Toluene 2,4-diisocyanate reacts with water to form trace quantities of 2,4-diaminotoluene. The resulting product contains 99 percent toluene 2,4-diisocyanate and 0.05 percent 2,4-diaminotoluene. The 2,4-diaminotoluene would not be subject to Section 313 reporting nor would supplier notification be required because the concentration of 2,4-diaminotoluene is below its de minimis concentration of 0.1 percent in the product. Coincidental "manufacture"/production refers only to production of a chemical via a chemical reaction. It would not include separation of a byproduct from a purchased *mixture* during a processing operation.

B. Example of Coincidental "Manufacture" as a Commercial Byproduct and Impurity

Chloroform is a reaction byproduct in the production of carbon tetrachloride. It is removed by distillation to a concentration of less than 150 ppm (0.0150%) remaining in the carbon tetrachloride. The separated chloroform at 90 percent concentration is sold as a byproduct. Chloroform is subject to a 0.1% (1000 ppm) de minimis level. Any amount of chloroform "manufactured" and separated as byproduct must be included in threshold determinations because the de minimis exemption does not apply to "manufacture" of a chemical. *Releases* of chloroform prior to and during purification of the carbon tetrachloride should be reported. The de minimis level can, however, be applied to the chloroform remaining in the carbon tetrachloride as an impurity. Because the concentration of chloroform remaining in the carbon tetrachloride is below the de minimis level, this quantity of chloroform is exempt from threshold determinations, *release* and other *waste management* reporting, and supplier notification.

C. Example of Coincidental "Manufacture" as a Waste Byproduct

A small amount of formaldehyde is "manufactured" as a reaction byproduct during the production of phthalic anhydride. The formaldehyde is separated from the phthalic anhydride as a waste gas and burned, leaving no formaldehyde in the phthalic anhydride. The amount of formaldehyde produced and removed as waste must be included in threshold determinations and *release* and other *waste management* estimates even if the formaldehyde were present below the de minimis level in the process stream where it was "manufactured" or in the wastestream to which it was separated.

The de minimis exemption also does not apply to situations where the "manufactured" chemical is *released* or transferred to wastestreams and thereby diluted to below the de minimis level.

3. De Minimis Levels Impact Supplier Notification Requirements

If the *toxic chemical* in a product (*mixture or trade name product*) is present below the de minimis level for that *toxic chemical*, supplier notification is not required for that chemical.

DIRECTIVE #3 - MOTOR VEHICLE EXEMPTION

The use of “products containing *toxic chemicals* for the purpose of maintaining motor vehicles operated by the *facility*” is exempt from threshold determinations and *release* and other *waste management* reporting under Section 313. This exemption includes *toxic chemicals* found in gasoline, diesel fuel, brake and transmission fluids, oils and lubricants, antifreeze, batteries, cleaning solutions, and solvents in paint used for touch up as long as the products are used to maintain the vehicle operated by the *facility*. Motor vehicles include cars, trucks, some cranes, forklifts, locomotive engines, and aircraft.

1. Motor Vehicles Use Exemption Applies Only to “*Otherwise Use*” of Chemical

The exemption applies only to the “*otherwise use*” of these chemicals, not their “*manufacture*” or “*processing*” for distribution in commerce. For example, “*manufacturing*” gasoline is not exempt from reporting. Similarly, an automobile manufacturer who places transmission fluids in automobiles before shipping them would be “*processing*” the listed *toxic chemical* because the fluid is being incorporated into an item that the *facility* distributes in commerce.

Releases from the storage of fuel or motor vehicle maintenance products are exempt from reporting by virtue of the fact that their use is exempt. For example, *releases* of listed *toxic chemicals* in gasoline stored on-site for use by company owned vehicles, including vehicles from other *facilities*, are exempt from inclusion in *facility-wide release* and other *waste management* determinations for those chemicals.

2. Motor Vehicle Use Exemption Does Not Apply to Stationary Equipment

The motor vehicle exemption does not apply to use of lubricants for stationary process equipment such as pumps or compressors. Likewise, fuels used for furnaces, boilers, heaters, or any stationary source of energy are not exempt.

3. Uses of Fuels in Stationary Equipment May Not Trigger Reporting

In many cases, refined petroleum or fossil fuels may not trigger reporting because any Section 313 chemicals (e.g., metals in fuel oil and coal) are usually present at very low concentrations and are likely to be below the de minimis concentration of 1% (0.1% for carcinogens). “*Manufacturers*,” “*processors*,” and “*otherwise users*” of gasoline will have to take into account that gasoline contains several aromatic compounds that are on the Section 313 list, including benzene, toluene, xylene, naphthalene, and anthracene. Be aware, however, that combustion of fuels may coincidentally “*manufacture*” Section 313 *toxic chemicals*, such as formaldehyde, hydrogen fluoride, and

hydrogen chloride acid aerosols. Such coincidental "*manufacture*" is not subject to de minimis limitations (see directive 2 on the de minimis exemption) and amounts produced must be compared against the manufacturing threshold. The EPA publication, "Toxic Air Pollutant Emission Factor - A Compilation of Selected Air Toxic Compounds and Sources" (EPA 45/2-88-006a) contains emission factors for many specific compounds emitted during fuel combustion.

DIRECTIVE #4 - COMPOUNDS AND MIXTURES1. Definition of Compounds

A "compound" is a distinct chemical that results from the reaction of two or more other chemicals. In the formation of a compound, the reactant chemicals lose their individual chemical identities. Polymers formed as nonreversible reaction products are an example of compounds.

2. Definition of Mixtures

A "mixture" is any combination of two or more distinct chemicals if the combination is not the result of a chemical reaction. In a *mixture*, the individual components retain their identities. *Mixtures* include any combination of a chemical and associated impurities. Alloys are *mixtures* because the individual metals in the alloy retain their chemical identities. Wastes are not *mixtures*.

3. Mixtures Must be Considered for Section 313 Reporting

Threshold determinations and *release* and other *waste management* reporting for Section 313 reporting must include the amount of the listed *toxic chemical* present above the de minimis level in all *mixtures* "processed" or "otherwise used" by the *facility*. If a listed *toxic chemical* is present in a *mixture* at or above the de minimis level, only the amount of the *toxic chemical* and not the *mixture* itself is used for threshold determinations and *release* and other *waste management* estimates.

4. Supplier Notification and Concentration Ranges Provide Information for Reporting

The supplier notification requirements under 40 CFR 372.45 are designed to provide chemical users with information on the identity and concentrations of listed *toxic chemicals* present in the *mixtures* that they use. There can still be situations, however, when a *facility* may not have this information for a *mixture*. If the *facility* knows that a *mixture* contains a *toxic chemical* but no concentration information is provided by the supplier, then the *facility* does not have to consider the amount of the *toxic chemical* present in that *mixture* for purposes of threshold and *release* and other *waste management* determinations. If only a range of concentrations is available for a *toxic chemical* present in a *mixture*, the owner/operator should use the midpoint of the "minimum" and "maximum" percentages in order to determine the amount to apply toward thresholds. If a *facility* owner/operator only knows the lower bound concentration of a *toxic chemical* present in a *mixture*, the owner/operator should assume the upper bound concentration is 100 percent and compute an average based on these lower and upper bound concentration estimates to determine whether

thresholds have been exceeded. If there are other known components present in the *mixture*, the *facility* owner/operator should subtract out the percentage of these components to determine what a reasonable "maximum" percentage of the *toxic chemical* could be.

DIRECTIVE #5 - TOXIC CHEMICAL CATEGORIES**1. All Compounds in a Listed Chemical Category are Aggregated for Threshold Determinations**

Toxic chemical categories listed under Section 313 require a different approach when making threshold determinations and *release* and other *waste management* estimates. For a chemical that is included in a listed metal compound category, the total weight of that chemical compound, not just the parent metal, is used in making threshold determinations. A *facility* will need to calculate the total weight of all compounds that are in the category, sum the amounts involved throughout the *facility* in each threshold activity, and compare the totals to the applicable thresholds. A compound in a listed chemical category that is present in a *mixture* below the de minimis concentration based on the total weight of the compound is exempt from threshold calculations under Section 1. Again, all individual members of a compound category must be totaled to determine if that compound category has exceeded the de minimis concentration in a *mixture*.

2. Make Threshold Determinations for Listed Toxic Chemicals Separately from the Listed Chemical Category

The Section 313 list contains some listed substances that also are members of a listed chemical category. Threshold determinations for a specifically listed *toxic chemical* are calculated separately from the threshold determinations for the chemical category. For example, 2-Methoxyethanol, which is specifically listed on the Section 313 list, is also a member of the glycol ether compound category. Because the chemical is specifically listed, a *facility* must make a threshold determination for 2-Methoxyethanol and a separate threshold determination for all other glycol ethers meeting the criteria for that chemical category that are not specifically listed under Section 313.

3. Calculate Releases and Other Waste Management Based on Parent Metal for Metal Compound Categories

Once a reporting threshold is met for a metal compound, *releases* of compounds are calculated based on the pounds of the parent metal *released* rather than the total weight of the compound. EPA adopted this approach because of the difficulty in calculating *releases* of potentially numerous compounds within a metal compound category, recognizing that methods and data for monitoring the parent metal often exist while those for the compound(s) rarely will.

4. Optional Form R Submission for Parent Metal and Associated Metal Compound Category

If both the parent metal and associated metal compound category exceed their respective thresholds, one Form R, covering all *releases* and other *waste management* of the parent metal from activities involving both the chemical and the chemical category may be filed. For example, if a *facility* "processes" 30,000 pounds of lead and "otherwise uses" 13,000 pounds of lead oxide, the *facility* could submit one Form R for lead and lead compounds. On this Form R, the *facility* would report all activities involving lead and lead compounds and all *releases* and other *waste management* of the parent metal lead. This option, preferred by EPA, is available to *facilities*, although separate reports may be filed if desired.

5. Calculate Releases and Other Waste Management Based on Nitrate Ion for Nitrate Compounds

Once a reporting threshold is met for the water dissociable nitrate compound category, *releases* and other *waste management* estimates are calculated based on the pounds of the nitrate ion in aqueous solution rather than the total weight of the compound. EPA adopted this approach because most monitoring data available measure only the dissociated nitrate ion *released* and not the amount of the total nitrate compounds from which the nitrate ion dissociated. Reporting of the amount of the total water dissociable nitrate compound in wastes would be complicated when more than one substance contributes to the nitrate ion content of the waste and when the nitrate compound is converted to a different substance due to waste treatment or other processes.

DIRECTIVE #6 - PCBs THRESHOLD DETERMINATION AND RELEASE AND OTHER WASTE MANAGEMENT REPORTING

Polychlorinated biphenyls (PCBs) are a listed chemical under Section 313.

1. PCBs in Articles are Exempt

EPA has stated that transformers are *articles* (and thus exempt from threshold determinations), but that the *release* or removal of fluid from the transformer negates the *article* status. The *article* status of only those transformers that have fluids removed (e.g., servicing or retrofilling) or escape is affected. However, the PCBs are still not considered if no new PCB-containing fluid is added, since the threshold determination is based on fluid added, not lost.

EPA has stated that disposal or removal of *articles* does not constitute a *release*. Therefore, disposal on-site or off-site transfer of the whole transformer with fluid content undisturbed, does not negate the *article* status. The transformer is not included in threshold determinations and does not have to be reported as a *release* or an off-site transfer of PCBs for purposes of Section 313 reporting.

When calculating the threshold for "*otherwise use*," a *facility* must consider only the amount of PCBs added to transformers during the reporting year (e.g., "topping off" a transformer), not the amount of working fluid contained in the transformer.

2. Coincidental "Manufacture" of PCBs is Subject to Section 313

Facilities involved in coincidental "*manufacture*" of PCBs and further "*processing*" of *mixtures* containing PCBs (in excess of the 0.1 percent de minimis level) must count the amount "*manufactured*" or "*processed*" toward these thresholds.

3. Treatment or Disposal of PCBs May Require Section 313 Reporting

Facilities in the SIC codes 20-39, as well as the newly *covered SIC codes*, may be subject to Section 313 reporting if they treat or dispose of PCBs. Effective January 1st, 1998, the interpretation of activities considered "*otherwise used*" will include treatment for destruction, disposal, and waste stabilization when the *covered facility* engaged in these activities receives materials containing any chemical (not limited to EPCRA Section 313 listed *toxic chemicals*) from off-site (regardless of whether the generating and receiving *facilities* have common ownership) for purposes of further *waste management*.

“Processing” represents a potentially covered activity. However, *facilities* are not likely to be incorporating PCBs into items distributed in commerce or to be using PCBs as starting or intermediate material for the production of other chemical substances that are distributed in commerce or used on site.

DIRECTIVE #7 - DEFINITION OF "OTHERWISE USE" (Effective Reporting Year 1998)

On May 1, 1997, EPA published a final rule to expand the universe of industry groups subject to EPCRA Section 313 and PPA Section 6607 (62 FR 23834). In this rule, which becomes effective January 1, 1998 (for the 1998 reporting year, Form R reports due by July 1, 1999), EPA finalized a revised definition of the term "*otherwise use*."

1. Current Interpretation of "Otherwise Use"

Until January 1, 1998, the definition of "*otherwise use*" means "any use of a *toxic chemical* that is not covered by the terms "*manufacture*" or "*process*" and includes use of a *toxic chemical* contained in a *mixture* or *trade name product*. Relabeling or redistributing a container of a *toxic chemical* where no repackaging occurs does not constitute "*otherwise use*" or "*processing*" of the *toxic chemical*." EPA has generally interpreted this term to include *toxic chemicals* that are not intentionally incorporated into a product distributed in commerce. This would include any activity involving a listed *toxic chemical* at a *facility* that does not fall under the definitions of "*manufacture*" or "*process*." Some examples of *toxic chemicals* "*otherwise used*" include solvents, catalysts, coolants, lubricants and fuels. **Historically, EPA has instructed facilities that the disposal of a toxic chemical, in and of itself, does not constitute "manufacture," "process," or "otherwise use."**

2. Revised Interpretation of "Otherwise Use"

In the May 1, 1997 final rule, EPA modified its definition of activities considered "*otherwise used*" as it applies to EPCRA Section 313 activity thresholds to *include* on-site treatment for destruction, disposal, and stabilization when the *covered facility* engaged in these activities receives materials containing any chemical (not limited to EPCRA Section 313 listed *toxic chemicals*) from off-site (regardless of whether the generating and receiving *facilities* have common ownership) for the purposes of further *waste management* activities. Specifically, EPA has defined the term "*otherwise use*" to include "any use of a *toxic chemical*" contained in a *mixture* or other *trade name product* or waste, that is not covered by the terms "*manufacture*" or "*process*." "*Otherwise use*" of a *toxic chemical* does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:

- (1) The *toxic chemical* that was disposed, stabilized, or treated for destruction was received from off-site for the purposes of further *waste management*; or
- (2) The *toxic chemical* that was disposed, stabilized, or treated for destruction was "*manufactured*" as a result of *waste management*

activities on materials received from off-site for the purposes of further *waste management* activities. Relabeling or redistributing of the *toxic chemical* where no repackaging occurs does not constitute “*otherwise use*” or “*processing*” of the *toxic chemical*.

3. Examples of the Revised Interpretation of “*Otherwise Use*”

The following are examples of the revised interpretation of “*otherwise use*” as finalized in the May 1, 1997, final rule. These examples assume that the *facility* meets the EPCRA Section 313 employee and SIC code criteria.

Example 1: A *facility* receives a material containing 22,000 pounds of chemical A. Chemical A is an EPCRA Section 313 listed *toxic chemical*. The *facility* treats for destruction chemical A. Included among the various activities covered by EPA’s revised interpretation of “*otherwise use*” is the “treatment for destruction” of a *toxic chemical* received by the *facility* from off-site. Because the *facility* received and treated for destruction chemical A, the amount of chemical A treated for destruction would be included in the calculation of the amount of chemical A “*otherwise used*” at the *facility*. In this case, 22,000 pounds of chemical A would be considered “*otherwise used*.” Thus, because the *facility* “*otherwise used*” chemical A above the 10,000 pound statutory threshold for “*otherwise use*,” the *facility* would be required to report all *releases* of, and other *waste management* activities involving, chemical A.

Example 1A: As in example 1, a *facility* receives a material containing 22,000 pounds of chemical A, and chemical A is an EPCRA Section 313 listed *toxic chemical*. The *facility* stabilizes chemical A. Included among the various activities covered by EPA’s revised interpretation of “*otherwise use*” is “stabilization” of a *toxic chemical* received by the *facility* from off-site. Because the *facility* received and stabilized chemical A, the amount of chemical A stabilized would be included in the calculation of the amount of chemical “*otherwise used*” at the *facility*. In this case, 22,000 pounds of chemical A would be considered “*otherwise used*.” Thus, because the *facility* “*otherwise used*” chemical A above the 10,000 pound statutory threshold for “*otherwise use*,” the *facility* would be required to report all *releases* of, and other *waste management* activities involving, chemical A.

Example 1B: As in the above two examples, a *facility* receives a material containing 18,000 pounds of chemical A, and chemical A is an EPCRA Section 313 listed *toxic chemical*. The *facility* stabilizes 9,000 pounds of chemical A and disposes of the other 9,000 pounds of chemical A. Included among the various activities covered by EPA’s revised interpretation of “*otherwise use*” are “stabilization” and “disposal” of a *toxic chemical* received by a *facility* from off-site. Because the *facility* received the 18,000 pounds of chemical A from off-site, the amount of chemical A that is subsequently “stabilized” or

“disposed” is considered “*otherwise used*,” and would be included in the calculation of the amount of chemical A “*otherwise used*” at the *facility* for the purpose of threshold determination. The *facility* would need to add the amount of chemical A that is involved in all “*otherwise use*” activities to determine whether the “*otherwise use*” threshold of 10,000 has been exceeded. In this case, 18,000 pounds of chemical A would be considered “*otherwise used*.” Thus, because the *facility* “*otherwise used*” chemical A above the 10,000 pound statutory threshold for “*otherwise use*,” the *facility* would be required to report all *releases* of, and other *waste management* activities involving, chemical A.

Example 2: Assume now that the same *facility*, in treating for destruction chemical A, “*manufactures*” 11,000 pounds of chemical B. Chemical B is also an EPCRA Section 313 listed *toxic chemical*. This “*manufacture*” of chemical B is below the “*manufacturing*” reporting threshold. However, the *facility* disposes of chemical B on-site. Included among the various activities covered by EPA’s revised interpretation of “*otherwise use*” is the disposal of a *toxic chemical* that is produced from the management of a waste that is received by the *facility* from off-site. In this example, because the *facility* received from off-site a material containing a chemical that is treated for destruction (i.e., chemical A) and during that treatment produced and subsequently disposed of chemical B, the disposal of chemical B under EPA’s revised interpretation would be considered “*otherwise used*.” Because the *facility* disposed of, or “*otherwise used*,” 11,000 pounds of chemical B, the 10,000 pound statutory threshold for “*otherwise use*” is met. Thus, the *facility* would need to report all *releases* of, and other *waste management* activities involving, chemical B.

Example 2A: Now assume that the situation in Example 2 is the same (and the *facility* is still below the “*manufacturing*” threshold for chemical B,) except the *facility* does not dispose of chemical B on-site, but incorporates the entire 11,000 pounds of chemical B into a product that is sold to another *facility*. The *facility* neither treats for destruction, stabilizes, nor disposes of chemical B and, therefore, does not “*otherwise use*” chemical B. However, in this example, chemical B is also considered “*processed*.” Therefore, the 11,000 pounds of chemical B are counted towards the 25,000 “*process*” threshold for that chemical at the *facility*.

Example 2B: As in the above two examples, 11,000 pounds of chemical B is “*manufactured*” from the treatment of chemical A (and chemical A was received from an off-site *facility*). The *facility* is still below the “*manufacturing*” threshold for chemical B. However, the *facility* disposes of 6,000 pounds of chemical B and uses 5,000 pounds of chemical B in a nonincorporative “*manufacturing*” activity at the *facility*. Both of these activities are considered to be “*otherwise use*” activities. The disposal of chemical B is included among the various activities covered by EPA’s revised interpretation of “*otherwise*

use” described in the proposal to expand the types of *facilities* covered under EPCRA Section 313, and any non-incorporative use of a *toxic chemical* at a *covered facility* that is not otherwise exempt is an “*otherwise use*” activity under the current interpretation. The *facility* would add the amounts of chemical B involved in both “*otherwise use*” activities at the *facility* to determine whether it exceeds the 10,000 “*otherwise use*” threshold. Since the total amount of chemical B that is “*otherwise used*” is 11,000 pounds, the *facility* would need to report all *releases* of, and *waste management* activity involving, chemical “B.”

Example 3: As another example, a *facility* produces on-site a material containing 22,000 pounds of chemical C. Chemical C is not an EPCRA Section 313 listed *toxic chemical*. Also, chemical C was not “*manufactured*” as a result of managing a waste received from off-site. The *facility* treats for destruction chemical C and during treatment “*manufactures*” 11,000 pounds of chemical D. Chemical D is an EPCRA Section 313 listed *toxic chemical*. The *facility* subsequently disposes of chemical D. In this example, although the *facility* disposes of chemical D, the 11,000 pounds of chemical D is not considered “*otherwise used*” under EPA’s revised definition because the material from which chemical D is produced (*i.e.*, the material containing the 22,000 pounds of chemical C) was not received by the *facility* from off-site. Thus, in disposing of chemical D, the *facility* does not exceed the 10,000 pound statutory threshold for “*otherwise use*.” The *facility*, however, must count the amount of chemical D “*manufactured*” toward the “*manufacturing*” threshold.

Example 3A: Assume instead that chemical C (which is not an EPCRA Section 313 listed *toxic chemical*) was received from off-site or was created in *waste management* activities conducted on materials received from off-site, the disposal of chemical D would be considered an “*otherwise use*” activity involving chemical D. Therefore, the disposal of the 11,000 pounds of chemical D would exceed the 10,000 pound statutory threshold for “*otherwise use*,” and the *facility* would need to report all *releases* and *waste management* activities involving chemical D.

Example 3B: As in Example 3, chemical D is an EPCRA Section 313 chemical that is “*manufactured*” from chemical C during a *waste management* activity at the *facility*. (Chemical C is produced on-site and is not an EPCRA Section 313 listed *toxic chemical*.) In this example, however, the *facility* uses the entire 11,000 pounds of chemical D to neutralize a wastestream at the *facility*. Under the current definition of “*otherwise use*,” chemical D is considered “*otherwise used*.” Therefore, the *facility* exceeds the “*otherwise use*” threshold and must report, and the *facility* would need to report all *releases* of, and *waste management* activity involving, chemical D.

Example 4: A *facility* receives 24,000 pounds of chemical E, which is not an EPCRA Section 313 *toxic chemical*. Chemical E undergoes a processing activity at the *facility*. This activity is not a *waste management* activity. During the processing of chemical E, 11,000 pounds of chemical F is “*manufactured*” as a byproduct. Chemical F is an EPCRA Section 313 listed *toxic chemical*. The 11,000 pounds of chemical F is then disposed. According to the current and the revised interpretation of the “*otherwise use*” definition, the *facility* has not “*otherwise used*” chemical F. Since chemical E was not received by the *facility* for the purpose of *waste management*, the subsequent disposal of chemical F is not an “*otherwise use*” activity under the revised interpretation of the “*otherwise use*.” Also, under the current interpretation of “*otherwise use*,” the activity of disposal under these circumstances does not constitute a reportable activity for the purposes of threshold determinations. The *facility*, however, would have to count the amount of chemical F “*manufactured*” toward the “*manufacturing*” threshold.

Example 5: A *facility* “*processes*” 24,000 pounds of chemical E, an EPCRA Section 313 *toxic chemical*. This activity is not a *waste management* activity. During the “*processing*” of chemical E, 11,000 pounds of chemical E exits the “*process*” in the *facility*’s waste. Because chemical E has a high BTU/lb value, the *facility* combusts the wastestream containing chemical E in an energy recovery unit on-site. Under EPA’s current and revised guidance on “*otherwise use*,” an EPCRA Section 313 *toxic chemical* that is a constituent of waste-derived fuel combusted in an energy recovery device is “*otherwise used*” by the *facility*, regardless of the origin of the waste-derived fuel. Therefore, when combusted for energy recovery on-site, chemical E, a constituent of the waste derived fuel, is considered “*otherwise used*” under the current definition of “*otherwise use*.” Because the *facility* combusts 11,000 pounds of the *toxic chemical*, the *facility* has exceeded the “*otherwise use*” activity threshold.

DIRECTIVE #8 - AMMONIA AND AMMONIUM SALTS

Background

On June 30, 1995, EPA finalized four actions in response to a petition to delete ammonium sulfate (solution) from the list of *toxic chemicals* subject to reporting under EPCRA Section 313, 42 U.S.C. 11001: (1) deleting ammonium sulfate (solution) from the EPCRA Section 313 list of *toxic chemicals*; (2) requiring that threshold determinations and *release* and other *waste management* estimates for aqueous ammonia be based on 10 percent of the total aqueous ammonia present in aqueous solutions of ammonia; (3) modifying the ammonia listing by adding the following qualifier: ammonia (includes anhydrous ammonia and aqueous ammonia from water dissociable ammonium salts and other sources; 10 percent of total aqueous ammonia is reportable under this listing); and (4) deleting ammonium nitrate (solution) as a separately listed chemical on the EPCRA Section 313 list of *toxic chemicals*. All actions were effective for the 1994 reporting year for reports due July 1, 1995 and for subsequent years, with the exception of the deletion of ammonium nitrate (solution) as a separately listed chemical, which was effective for the 1995 reporting year for reports due July 1, 1996 and for subsequent years. The ammonia listing is subject to the one percent *de minimis* concentration. Thus, *mixtures* and *trade name products* containing aqueous ammonia at a concentration in excess of one percent should be factored into threshold determinations and *release* and other *waste management* estimates. EPA has developed a guidance document for reporting aqueous ammonia under the ammonia listing which provides detailed information and examples including a list of some water dissociable ammonium salts.

Guidance for Reporting Aqueous Ammonia

"Anhydrous ammonia" is ammonia that is not dissolved in water and "aqueous ammonia" is ammonia that is dissolved in water. Aqueous solutions of ammonia contain both un-ionized ammonia (NH_3) and ionized ammonia (NH_4^+), total aqueous ammonia is the sum of these two forms of ammonia. For the purposes of reporting under the ammonia listing for aqueous ammonia, water dissociable ammonium salts means that the ammonium ion dissociates from its counterion when in solution.

1. Determining Threshold and Release Quantities for Ammonia

If a facility "manufactures," "processes," or "otherwise uses" anhydrous ammonia, the quantity applied towards threshold determinations for the ammonia listing is the total quantity of the anhydrous ammonia "manufactured," "processed," or "otherwise used." The quantity reported when calculating the

amount of ammonia that is *released*, transferred, or otherwise managed as waste is the total quantity of anhydrous ammonia *released*, managed as waste or transferred.

If a facility "*manufactures*," "*processes*," or "*otherwise uses*" aqueous ammonia, the quantity applied toward threshold determinations for the ammonia listing is 10 percent of the total quantity of the aqueous ammonia "*manufactured*," "*processed*," or "*otherwise used*." The quantity reported when calculating the amount of ammonia that is *released*, transferred, or otherwise managed as waste is 10 percent of the total quantity of aqueous ammonia *released*, managed as waste or transferred.

If the facility "*manufactures*," "*processes*," or "*otherwise uses*" anhydrous ammonia in quantities that exceed the appropriate threshold and subsequently dissolves some or all of the anhydrous ammonia in water (i.e., generating aqueous ammonia), then the following applies: 1) threshold determinations are based on 100 percent of the anhydrous; 2) *release*, transfer, and other *waste management* quantities for the aqueous ammonia are calculated as 10 percent of total aqueous ammonia; 3) *release*, transfer, and other *waste management* quantities for the anhydrous ammonia are calculated as 100 percent of the anhydrous ammonia.

If a facility dissolves a water dissociable ammonium salt in water that facility has "*manufactured*" aqueous ammonia and 10 percent of the total aqueous ammonia "*manufactured*" from these salts is to be included in "*manufacturing*" threshold determinations under the ammonia listing.

If aqueous ammonia from water dissociable ammonium salts is "*processed*" or "*otherwise used*," then 10 percent of the total aqueous ammonia is to be included in all "*processing*" and "*otherwise use*" threshold determinations under the ammonia listing.

If anhydrous ammonia evaporates from an aqueous ammonia solution that has been "*manufactured*," "*processed*," or "*otherwise used*," then 100 percent of the anhydrous ammonia that evaporates from such solutions must be included in threshold determinations and *release* and other *waste management* estimates.

Since total aqueous ammonia is the sum of the two forms of ammonia (NH_3 and NH_4^+) present in aqueous solutions, a precise calculation of the weight of total aqueous ammonia would require determining the ratio of the two forms of ammonia present using the pH and temperature of the solution. The weight of total aqueous ammonia can be more easily calculated by assuming that aqueous ammonia is comprised entirely of the NH_4^+ form or the NH_3 form. For the purpose of determining threshold and *release* quantities under EPCRA Section

313, EPA recommends that total aqueous ammonia be calculated in terms of NH_3 equivalents (i.e., for determining weights, assume total ammonia is comprised entirely of the NH_3 form). This method is simpler than using pH and temperature data to determine the ratio of the two forms present and is consistent with the presentation of total ammonia toxicity in a separate EPA document, "Ambient Water Quality Criteria for Ammonia" (EPA document #440/5-85-001, January 1985).

2. Chemical Sources of Aqueous Ammonia

Aqueous ammonia may be generated in solution from a variety of sources that include the *release* of anhydrous ammonia to water and the dissociation of ammonium salts in water. Water dissociable ammonium salts are not reportable in their entirety under the ammonia listing; these salts are reportable to the extent that they dissociate in water, and only 10 percent of the total aqueous ammonia that results when these salts dissociate is reportable. If these salts are not placed in water, they are not reportable.

If ammonium salts are purchased neat (dry) or as solids by a *facility*, then placed in water by that *facility*, the *facility* is "*manufacturing*" aqueous ammonia. If the source of aqueous ammonia is anhydrous ammonia that has been dissolved in water, total aqueous ammonia (calculated in terms of NH_3 equivalents) is equal to the quantity of anhydrous ammonia "*manufactured*," "*processed*," or "*otherwise used*."

3. Reporting Aqueous Ammonia Generated from the Dissociation of Ammonium Salts (Other Than Ammonium Nitrate)

If the source of aqueous ammonia is the dissociation of ammonium salts in water, total aqueous ammonia (calculated in terms of NH_3 equivalents) is calculated from the weight percent (wt%) of the NH_3 equivalents of the ammonium salt. The NH_3 equivalent wt% of an ammonium salt is calculated using the following equation:

$$\text{NH}_3 \text{ equivalent wt\%} = (\text{NH}_3 \text{ equivalent weight}) / (\text{MW ammonium salt}) \times 100.$$

If the source of aqueous ammonia is a monovalent compound (such as ammonium chloride, NH_4Cl , ammonium nitrate, NH_4NO_3 , or ammonium bicarbonate, NH_4HCO_3), the NH_3 equivalent weight is equal to the MW of NH_3 (17.03 kg/kmol). If divalent compounds are involved (such as ammonium carbonate, $(\text{NH}_4)_2\text{CO}_3$), then the NH_3 equivalent weight is equal to the MW of NH_3 multiplied by two. Similarly, if trivalent compounds are involved, then the NH_3 equivalent weight is equal to the MW of NH_3 multiplied by three.

4. Reporting Aqueous Ammonia Generated from the Dissociation of Ammonium Nitrate

Some sources of aqueous ammonia may be reportable under other EPCRA Section 313 category listings. Ammonium nitrate (solution) is relevant to reporting under the ammonia listing to the extent that 10 percent of the total aqueous ammonia that results when ammonium nitrate dissociates is reported when determining thresholds and calculating *releases* and other *waste management* activities. However, under the nitrate compounds category listing, ammonium nitrate (and other mixed salts containing ammonium and nitrate) must be reported in its entirety. When reporting ammonium nitrate under this category listing, the total nitrate compound, including both the nitrate ion portion and the ammonium counterion, is included when determining threshold quantities. However, only the nitrate ion portion is included when determining the amount of ammonium nitrate that is *released*, transferred, or otherwise managed in wastes. The calculations involved in determining threshold and *release* and other *waste management* quantities for reporting under the nitrate compounds category listing are described in a separate directive, "List of Toxic Chemicals within the Water Dissociable Nitrate Compounds Category and Guidance for Reporting" (EPA document #745-R-96-004, Revised May 1996).

DIRECTIVE #9 - SUPPLIER NOTIFICATION REQUIREMENTS

Because manufacturers reporting under Section 313 must know the *toxic chemical* composition of the products they use to be able to calculate *releases* accurately, EPA requires some suppliers of *mixtures* or *trade name products* containing one or more of the listed Section 313 *toxic chemicals* to notify their customers. This requirement has been in effect since January 1, 1989.

1. Who Must Provide Notification

You are covered by supplier notification requirements if you own or operate a *facility* which meets all of the following criteria:

- Your *facility* is in Standard Industrial Classification (SIC) codes 20-39;
- You “*manufacture*” (*import*) or “*process*” a listed *toxic chemical*; and
- You sell or otherwise distribute a *mixture* or *trade name product* containing the *toxic chemical* to either:
 - A *facility* in a *covered SIC code*; or
 - A *facility* that then sells the same *mixture* or *trade name product* to a *facility* in a *covered SIC code*.

You may be covered by the supplier notification rules even if you are not covered by the Section 313 *release* reporting requirements. The EPCRA Section 313 *release* reporting requirements are triggered if a *facility* is in a *covered SIC code*, has ten or more *full-time employees*, and exceeds a chemical activity threshold. However, if you have fewer than 10 *full-time employees* or do not “*manufacture*” or “*process*” any of the *toxic chemicals* in sufficient quantities to trigger the *release* reporting requirements, you may still be required to notify certain customers.

Note that beginning with the 1998 reporting year, seven new industries will be covered by most of the TRI reporting requirements. These new industries will not be required to comply with most of the supplier notification requirements. Industries whose primary SIC code is not within 20-39 are not required to initiate the distribution of notifications for *toxic chemicals* in *mixture* or products that they send to their customers. However, if these *facilities* receive notifications from their suppliers about *toxic chemicals* in *mixtures* or *trade name products*, they should forward the notifications with the *toxic chemicals* they send to other covered users.

2. Who Must Be Notified

For each *mixture* or *trade name product* that contains a listed *toxic chemical*, you will have to notify all customers in a *covered SIC code* or distributors who in turn sell that product to *facilities* in a *covered SIC code*. Unless you know otherwise, you should assume that the chain of distribution includes *facilities* in a *covered SIC code*.

An example would be if you sold a lacquer containing toluene to distributors who then sell the product to other manufacturers. The distributors are not in a *covered SIC code*, but because they sell the product to companies in *covered SIC codes*, they must be notified so that they may pass the notice along to their customers.

The language of the supplier notification requirements covers *mixtures* or *trade name products* that are sold or otherwise distributed. The "otherwise distributes" language applies to intra-company transfers. However, if the company has developed an internal communications procedure that alerts their other *facilities* to the presence and content of covered *toxic chemicals* in their products, then EPA would accept this.

3. Supplier Notification Must Include the Following Information:

- A statement that the *mixture* or *trade name product* contains a *toxic chemical* or *chemicals* subject to the reporting requirements of EPCRA Section 313 (40 CFR 372);
- The name of each *toxic chemical* and the associated Chemical Abstracts Service (CAS) registry number of each chemical if applicable. (CAS numbers are not used for chemical categories, since they can represent several individual *toxic chemicals*.)
- The percentage, by weight, of each *toxic chemical* (or all *toxic chemicals* within a listed category) contained in the *mixture* or *trade name product*.

For example, if a *mixture* contains a chemical (i.e., 12 percent zinc oxide) that is a member of a reportable *toxic chemical* category (i.e., zinc compounds), the notification must indicate that the *mixture* contains a zinc compound at 12 percent by weight. Supplying only the weight percent of the parent metal (zinc) does not fulfill the requirement. The customer must be told the weight percent of the entire compound within a listed *toxic chemical* category present in the *mixture*.

4. How the Notification Must Be Made

The required notification must be provided at least annually in writing. Acceptable forms of notice include letters, product labeling, and product literature distributed to customers. If you are required to prepare and distribute a *Material Safety Data Sheet (MSDS)* for the *mixture* under the Occupational Safety and Health Act (OSHA) Hazard Communication Standard, your supplier notification must be attached to the *MSDS* or the *MSDS* must be modified to include the required information.

You must make it clear to your customers that any copies or redistribution of the *MSDS* or other form of notification must include the supplier notification notice. In other words, your customers should understand that they are to include the supplier notification if they give your *MSDS* to their customers.

5. When Notification Must Be Provided

In general, you must notify each customer receiving a *mixture* or *trade name product* containing a listed *toxic chemical* with the first shipment of each reporting year. You may send the notice with subsequent shipments as well, but it is required that you send it with the first shipment each year. Once customers have been provided with an *MSDS* containing the Section 313 information, you may refer to the *MSDS* by a written letter in subsequent years (as long as the *MSDS* is current).

If EPA adds *toxic chemicals* to the Section 313 list, and your products contain the newly listed *toxic chemicals*, notify your customers with the first shipment made during the next reporting year following EPA's final decision to add the chemical to the list. For example, if EPA adds chemical ABC to the list in September 1997, supplier notification for chemical ABC would have begun with the first shipment in 1998.

You must send a new or revised notice to your customers if you:

- Change a *mixture* or *trade name product* by adding, removing, or changing the percentage by weight of a listed *toxic chemical*.
- Discover that your previous notification did not properly identify the *toxic chemicals* in the *mixture* or correctly indicate the percentage by weight.

If you discover that the prior notification was inaccurate, you must:

- Supply a new or revised notification within 30 days of a change in the product or the discovery of misidentified *toxic chemical(s)* in the *mixture* or incorrect percentages by weight; and
- Identify in the notification the prior shipments of the *mixture* or product in that reporting year to which the new notification applies (e.g., if the revised notification is made on August 12, indicate which shipments were affected during the period January 1 - August 12).

6. When Notifications Are Not Required

Supplier notification is not required for a “pure” *toxic chemical* unless a trade name is used. The identity of the *toxic chemical* will be known based on label information. Also, you are not required to make a “negative declaration.” That is, you are not required to indicate that a product contains no Section 313 *toxic chemicals*.

Supplier notification is also not required if:

- Your *mixture* or *trade name product* contains the *toxic chemical* in percentages by weight of less than the following levels (these are known as de minimis levels):
 - 0.1 percent if the *toxic chemical* is defined as an “OSHA carcinogen;”
 - 1 percent for all other *toxic chemicals*.

De minimis levels for each *toxic chemical* and chemical category are listed in the Form R and Instructions.

- Your *mixture* or trade name product is one of the following:
 - An *article* that does not *release* a listed *toxic chemical* under normal conditions of “*processing*” or “*otherwise use*.”
 - Foods, drugs, cosmetics, pesticides, alcoholic beverages, tobacco, or tobacco products packaged for distribution to the general public.
 - Any consumer product, as the term is defined in the Consumer Product Safety Act, packaged for distribution to the general

public. For example, if you mix or package one-gallon cans of paint designed for use by the general public, notification is not required.

- You are sending a waste off-site for treatment or disposal. The supplier notification requirements only apply to *mixture* and *trade name products*; they do not apply to wastes.
- You are initiating distribution of a *mixture* or *trade name product* containing one or more *toxic chemicals* and your *facility* is in any of the newly covered *SIC codes* including *facilities* whose *SIC code* is within *SIC major group codes* 10 (except 1011, 1081, and 1094), 12 (except 1241); *industry codes* 4911, 4931, or 4939 (limited to *facilities* that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4953 (limited to *facilities* regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. Section 6921 et seq.) or 5169, or 5171, or 7389 (limited to *facilities* primarily engaged in solvent recovery services on a contract or fee basis).

7. Trade Secrets

Chemical suppliers may consider the chemical name or the specific concentration of a Section 313 *toxic chemical* in a *mixture* or *trade name product* to be a trade secret. If you consider the:

- Specific identity of a *toxic chemical* to be a trade secret, the notice must contain a generic chemical name that is descriptive of the structure of that *toxic chemical*. For example, decabromodiphenyl oxide could be described as a halogenated aromatic.
- Specific percentage by weight of a *toxic chemical* in the *mixture* or *trade name product* to be a trade secret, your notice must contain a statement that the *toxic chemical* is present at a concentration that does not exceed a specified upper bound. For example, if a *mixture* contains 12 percent toluene and you consider the percentage a trade secret, the notification may state that the *mixture* contains toluene at no more than 15 percent by weight. The upper bound value chosen must be no larger than necessary to adequately protect the trade secret.

If you claim this information to be trade secret, you must have documentation that provides the basis for your claim.

8: Recordkeeping Requirements

You are required to keep records for three years of the following:

- Notifications sent to recipients of your *mixture* or *trade name product*;
- All supporting materials used to develop the notice;
- If claiming a specific *toxic chemical* identity a trade secret, why the *toxic chemical* identity is considered a trade secret and the appropriateness of the generic chemical name provided in the notification; and
- If claiming a specific concentration a trade secret, explanations of why a specific concentration is considered a trade secret and the basis for the upper bound concentration limit.

This information must be readily available for inspection by EPA.

Sample Notification Letter

Mr. Edward Burke
Furniture Company of North Carolina
1000 Main Street
Anytown, North Carolina 99999

Dear Mr. Burke:

January 2, 1997

The purpose of this letter is to inform you that a product that we sell to you, Furniture Lacquer KXZ-1390, contains 20 percent toluene (Chemical Abstracts Service (CAS) number 108-88-3) and 15 percent zinc compounds. We are required to notify you of the presence of toluene and zinc compounds in the product under EPCRA Section 313. This law requires certain manufacturers to report on annual emissions of specified toxic chemicals and chemical categories.

If you are unsure whether or not you are subject to the reporting requirements of Section 313, or need more information, call EPA's Emergency Planning and Community Right-To-Know Information Hotline at (800) 535-0202. Your other suppliers should also be notifying you if Section 313 toxic chemicals are in the mixtures and trade name products they sell to you.

Please also note that if you repackage or otherwise redistribute this product to industrial customers, a notice similar to this one should be sent to those customers.

Emma Sinclair
Sales Manager
Furniture Products

APPENDIX B. GLOSSARY

AP-42 - *AP-42* refers to the EPA document, "Compilation of Air Pollutant Emission Factors," which contains information on over 200 stationary source categories. This information includes brief descriptions of processes used, potential sources of air emissions from the processes and in many cases common methods used to control these air emissions. Methodology for estimating the quantity of air pollutant emissions are presented in the form of Emission Factors. This document can be obtained by calling the Government Printing Office (GPO) at 202-512-1800 or by visiting the EPA's Technology Transfer web site, <http://www.epa.gov/ttn/chief>.

Article - the term at 40 CFR Section 372.3 is defined as a "manufactured" item: (1) which is formed to a specific shape or design during "manufacture;" (2) which has end use functions dependent in whole or in part upon its shape or design during end use and (3) which does not release a toxic chemical under normal conditions of "processing" or use of that item at the facility or establishments.

Covered Facility - means a facility, as defined in 40 CFR Section 372.3, that has 10 or more full-time employees, is in a covered SIC code (see below), and meets the activity threshold for "manufacturing," "processing," or "otherwise using" a listed toxic chemical (see below).

Covered SIC code - prior to January 1, 1998, means SIC codes 20-39 (manufacturing facilities). Beginning January 1, 1998, a covered SIC code means SIC codes in major group codes 10 (except 1011, 1081, and 1094), 12 (except 1241), or 20-39; industry codes 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce); or 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. section 6921 et seq.) or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis).

Customs Territory - the term customs territory of the United States means the 50 states, the District of Columbia, and Puerto Rico (40 CFR Section 372.3).

Environment - the term environment includes water, air, and land and the interrelationship which exists among and between water, air and land and all living things (EPCRA Section 329(2)).

Establishment - means an economic unit, generally at a single physical location, where business is conducted or where services or industrial operations are performed (40 CFR Section 372.3).

Facility - the term *facility* means all buildings, equipment, structures and other stationary items which are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by or under common control with such person). A *facility* may contain more than one *establishment* (40 CFR Section 372.3).

Full-Time Employee - the term *full-time employee* means 2,000 hours per year of full-time equivalent employment. A *facility* would calculate the number of *full-time employees* by totaling the hours worked during the calendar year by all employees, including contract employees, and dividing the total by 2,000 hours (40 CFR Section 372.3).

Import - the term *import* means to cause a chemical to be *imported* into the customs territory of the United States. For purposes of the definition, to cause means to intend that the chemical be *imported* and to control the identity of the *imported* chemical and the amount of the *imported* chemical (40 CFR Section 372.3).

Manufacture - the term "*manufacture*" means to produce prepare, *import*, or compound a *toxic chemical*. "*Manufacture*" also applies to a *toxic chemical* that is produced coincidentally during the "*manufacture*," "*processing*," use or disposal of another chemical or *mixture* of chemicals, including a *toxic chemical* that is separated from that other chemical or *mixture* of chemicals as a byproduct, and a *toxic chemical* that remains in that other chemical or *mixture* of chemicals as an impurity (40 CFR Section 372.3).

Material Safety Data Sheet (MSDS) - the term *material safety data sheet* means the sheet required to be developed under section 1910.1200(g) of title 29 of the CFR as that section may be amended from time to time (EPCRA Section 329(6)).

Mixture - the term *mixture* means any combination of two or more chemicals, if the combination is not, in whole or in part, the result of a chemical reaction. However, if the combination was produced by a chemical reaction but could have been produced without a chemical reaction, it is also treated as a *mixture*. A *mixture* also includes any combination which consists of a chemical and associated impurities (40 CFR Section 372.3). A waste is not considered a *mixture* for EPCRA Section 313 reporting purposes.

Otherwise Use - the term "*otherwise use*" means any use of a *toxic chemical* that is not covered by the terms "*manufacture*" or "*process*" and includes use of a *toxic chemical* contained in a *mixture* or *trade name product*. Relabeling or redistributing a container of a *toxic chemical* where no repackaging of the *toxic chemical* occurs does not constitute use or "*processing*" of the *toxic chemical*.

Beginning in the 1998 reporting year (as of January 1, 1998), the definition of "otherwise use" will be modified to read:

"*Otherwise use*" means any use of a *toxic chemical*, including a *toxic chemical* contained in a *mixture* or other *trade name product* or waste, that is not covered by the terms "*manufacture*" or "*process*." "*Otherwise use*" of a *toxic chemical* does not include disposal, stabilization (without subsequent distribution in commerce), or treatment for destruction unless:

(1) the *toxic chemical* that was disposed, stabilized or treated for destruction was received from off-site for the purposes of further *waste management*; or

(2) the *toxic chemical* that was disposed, stabilized, or treated for destruction was manufactured as a result of *waste management* activities on materials received from off-site for the purposes of further *waste management* activities. Relabeling or redistributing of the *toxic chemical* where no repackaging of the *toxic chemical* occurs does not constitute "*otherwise use*" or "*processing*" of the *toxic chemical* (40 CFR Section 372.3).

Process - the term "*process*" means the preparation of a *toxic chemical*, after its "*manufacture*" for distribution in commerce: (1) in the same form or physical state as, or in a different form or physical state from, that in which it was received by the person so preparing such substance, or (2) as part of an article containing the *toxic chemical*. "*Process*" also applies to the "*processing*" of a *toxic chemical* contained in a *mixture* or *trade name product* (40 CFR Section 372.3).

Release - the term *release* means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environmental (including the abandonment or discarding of barrels, containers, and other closed receptacles) of any *toxic chemicals* (40 CFR Section 372.3).

Senior Management Official - the term *senior management official* means an official with management responsibility for the person or persons completing the report, or the manager of environmental programs for the *facility* or *establishment*, or for the corporation owning or operating the *facility* or *establishments* responsible for certifying similar reports under other environmental regulatory requirements (40 CFR Section 372.3).

State - the term *state* means any State of the United States the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction (40 CFR Section 372.3).

Total Annual Reportable Amount - a facility's total annual reportable amount is equal to the combined total quantities *released* at the *facility* (including disposal), treated at the *facility* (as represented by amounts destroyed or converted by treatment processes), recovered at the *facility* as a result of recycle operations, combusted for the purpose of energy recovery at the *facility*, and amounts transferred from the *facility* to off-site locations for the purpose of recycle, energy recovery, treatment, and/or disposal (See 40 CFR Section 372.27(a)).

Toxic chemical - the term *toxic chemical* means a chemical or chemical category listed in 40 CFR Section 372.65 (40 CFR Section 372.3).

Trade name product - the term *trade name product* means a chemical or *mixture* of chemicals that is distributed to other persons and that incorporates a *toxic chemical* compound that is not identified by the applicable chemical name or Chemical Abstract Service Registry number list in 40 CFR Section 372.65 (40 CFR Section 372.3).

Tribal Emergency Response Commission or TERC - the commission responsible for carrying out the provisions of EPCRA in the same manner as a State Emergency Response Commissions (SERC) on federally recognized tribal lands.

Waste management - EPA interprets *waste management* to include the following activities: recycling, combustion for energy recovery, treatment for destruction, waste stabilization, and release, including disposal. *Waste management* does not include the storage, container transfer, or tank transfer of no recycling, combustion for energy, treatment for destruction, waste stabilization or release of the chemical that occurs at the *facility* (See 62 FR 23834; 23850; May 1, 1997).

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