United States
Environmental Protection Agency

Office of Pollution
Prevention and Toxics
Washington, DC 20460

December 1998
EPA 745-B-98-004

EPCRA Section 313 Questions and Answers

Revised 1998 Version

Q&A

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

Toxic Chemical Release Inventory

This page intentionally left blank.

INTRODUCTION

The Environmental Protection Agency (EPA) has prepared this 1998 EPCRA Section 313 Questions and Answers Document to help clarify the 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 Toxics 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 1999 reporting year for reports due July 1, 2000.

This manual is intended solely for guidance and does not alter any statutory or regulatory requirements. The document should be used in conjunction with the statute and regulations but does not supersede them. The guidance provided in this document addresses the very specific circumstances stated in each question. Accordingly, the reader should consult other applicable documents (e.g., the statute, the Code of Federal Regulations (CFR), relevant preamble language, and the current Toxic Chemical Release Inventory Reporting Forms and Instructions).

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* has a primary *Standard Industrial Classification (SIC) code* in any of the groups listed in the table on the following page; and
- the *facility manufactured* (defined to include *imported*), *processed*, or *otherwise used*, in the course of a calendar year, any *toxic chemical* in quantities greater than the set threshold.

Reports under Section 313 (EPA Form R or Form A) must be submitted annually to EPA and to 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. This document supplements the instructions for completing the Form R and the Alternate Threshold Certification Statement (Form A). Terms printed in italics in the text of this document are defined in the glossary in Appendix B to this document.

Copies of EPA's 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 45242-2419. Additional information may be obtained by accessing EPA's TRI Homepage on the Internet at http://www.epa.gov/opptintr/tri or calling the EPCRA Hotline at (800) 424-9346. In the Washington, D.C. area call (703) 412-9810.

The questions and answers in this document are organized in sections as listed in the table of contents on the following pages. 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.

STANDARD INDUSTRIAL CLASSIFICATION (SIC) GROUPS SUBJECT TO EPCRA SECTION 313

SIC	Industry Group
10* (except 1011, 1081, and 1094)	Metal Mining
12* (except 1241)	Coal Mining
20	Manufacturing
21	Tobacco
22	Textiles
23	Apparel
24	Lumber and Wood
25	Furniture
26	Paper
27	Printing and Publishing
28	Chemicals
29	Petroleum and Coal
30	Rubber and Plastics
31	Leather
32	Stone, Clay, and Glass
33	Primary Metals
34	Fabricated Metals
35	Machinery (excluding electrical)
36	Electrical and Electronic Equipment
37	Transportation Equipment
38	Instruments
39	Miscellaneous Manufacturing
4911, 4931, 4939* (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce)	Electric Utilities (electric services), Electric Utilities (electric and other service combined), electric utilities (combination utilities, not elsewhere classified)
4953* (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C, 42 U.S.C. section 6921 et seq.)	Commercial Hazardous Waste Treatment
5169*	Chemical and Allied Products Wholesale
5171*	Petroleum Bulk Terminals and Plants
7389* (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis)	Solvent Recovery Services

*Coverage Started January 1, 1998.

TABLE OF CONTENTS

Page

Section 1. DETERMINING WHETHER OR NOT TO REPORT: FACILITY 1
A. Types of Facilities That Must Report 1
B. Employee Threshold 6
C. Persons Responsible for Reporting 13
D. Multi-Establishment Facilities 19
E. Threshold Determinations 26
F. Manufacturing, Processing, or Otherwise Use 36
G. Importing 65
H. Auxiliary Facilities 69
I. Indian Lands 72

Section 2. EXEMPTIONS 75
A. General, Personal Use, and Intake Water or Air 75
B. Facility Maintenance and Structural Components 81
C. Vehicle Maintenance 89
D. Laboratory Activities 91
E. De Minimis 98
F. Articles 109
G. Coal Mining/Extraction Exemption 122

Section 3. DETERMINING WHETHER OR NOT TO REPORT: LISTED TOXIC CHEMICALS 125
A. General Questions 125
B. Toxic Chemical-Specific Questions 128
Acids 128
Compound and Compound Categories 134
Fume or Dust 138
Miscellaneous 140
C. Mixtures 153

Section 4. COMPLETING THE FORM R: RELEASES AND WASTE MANAGEMENT CALCULATIONS 155
A. Releases of the Toxic Chemical 155
B. Transfers to Off-site Locations for Further Waste Management 181
C. Waste Treatment Methods and Efficiency 187
D. Waste Management 191

Section 5. FORM A AND FORM R SUBMISSIONS 197
A. Form A (Alternate Threshold Reporting) 197
B. Form R Submissions 199
C. Form R Withdrawals 211

Section 6. SUPPLIER NOTIFICATION 217

Section 7. TRADE SECRETS 233

Page

APPENDIX A. SECTION 313 POLICY DIRECTIVES 235
DIRECTIVE #1 – ARTICLE EXEMPTION 236
DIRECTIVE #2 – DE MINIMIS EXEMPTION 238
DIRECTIVE #3 – MOTOR VEHICLE EXEMPTION 243
DIRECTIVE #4 – COMPOUNDS AND MIXTURES 244
DIRECTIVE #5 – TOXIC CHEMICAL CATEGORIES 246
DIRECTIVE #6 – PCBs THRESHOLD DETERMINATION AND RELEASE AND OTHER WASTE MANAGEMENT REPORTING 248
DIRECTIVE #7 – DEFINITION OF OTHERWISE USE 250
DIRECTIVE #8 – AMMONIA AND AMMONIUM SALTS 255
DIRECTIVE #9 – SUPPLIER NOTIFICATION REQUIREMENTS 259

APPENDIX B. GLOSSARY 267

APPENDIX C. INCORRECT GUIDANCE ON EPCRA SECTION 313 273

APPENDIX D. RECENT EPA GUIDANCE 281

INDEX 285

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* 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*, as described in question one, required to report if it had no *releases* of the *toxic chemical* during the reporting year?

Yes, even if it *release*s no *toxic chemicals* into the *environment* and does not conduct any other *waste management* activities involving the listed *toxic chemical*, 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 the Form A (a 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 SIC code, employee, and chemical activity thresholds 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 (all of which belong to 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 the Section 313 regulations. 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 towards the threshold determinations that reporting year. This includes start-up activities.

Definition of Facility, Pipeline

6. A covered petroleum company sends its hazardous waste containing a Section 313 *toxic chemical* to a land treatment unit by underground pipeline. The petroleum company and the land treatment unit are owned and operated by the same individual. The land treatment unit is not adjacent nor contiguous to the petroleum company, but the petroleum company maintains a "right-of-way" of the pipe-line. Are these two *facilities* under EPCRA Section 313?

Since the land treatment unit is not adjacent nor contiguous to the petroleum company and they are connected only by a pipeline, the two 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 either *facility* would be covered.

Definition of Facility, Pipeline

7. Two covered bulk petroleum stations owned by the same parent company, but a considerable distance apart from each other, are connected to each other by a pipeline. The parent company has an easement to access the pipeline but the land on which the pipeline rests is not owned by the parent company. The easement only allows the parent company to conduct repairs on a sporadic basis. The parent company has no other rights to the land and does not exert any other control over the land. For the purposes of reporting on the Form R, are the two stations considered two separate *facilities*?

Yes. Since the two bulk petroleum stations are not contiguous or adjacent properties and are connected only by a pipeline, the two stations are considered two separate *facilities* with the same owner. The parent company has an easement on which the pipeline is located, but does not control, operate, or own the land on which the pipeline rests to an appropriate degree.

Definition of Facility, Contiguous/ Adjacent

8. A company houses all of its operations including 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 owner/operator of the company, therefore, must make threshold determinations and *release* and other *waste management* calculations 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*.

Definition of Facility, Distinction of Owner/ Operator

9. Two distinct SIC code operations that are covered under EPCRA Section 313 (e.g., an electricity generating unit and a cement plant) are located on adjacent properties and are owned by the same parent company. The two operations are operated completely independently of one another (e.g., separate accounting procedures, employees, etc.). Are these two operations considered one *facility* under EPCRA Section 313?

Yes. Under EPCRA Section 313, a *facility* is defined as, "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." Because these two operations are located on adjacent properties and are owned by the same person they are considered one *facility* for EPCRA Section 313 reporting purposes.

SIC Code

10. *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 currently covered by Section 313 reporting requirements if their primary SIC codes are in 5093.

SIC Code, Solvent Recovery

11. Is a mobile solvent recovery unit within the solvent recovery SIC code?

Yes. If the owner or operator of a mobile solvent recovery unit conducts solvent recovery services on a contract or fee basis, it is in SIC code 7389—the solvent recovery SIC code.

SIC Code

12. 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 under EPCRA Section 313.

SIC Code, Activity Restricted to Company

13. Does a *facility* that is subject to RCRA Subtitle C, and just happens to manage waste generated by facilities within the same company, fall within the *covered SIC code* range for EPCRA Section 313 reporting?

Waste treatment facilities are classified in SIC code 4953--Refuse Systems, which includes such activities as hazardous waste treatment and *disposal* sites. Hazardous waste treatment *facilities* that are regulated under the Resource Conservation and Recovery Act, subtitle C, 42 U.S.C. Section 6921 et seq. were added in the final rule published on May 1, 1997 (62 FR 23833). Provided that the *facility* is classified within SIC code 4953 or another covered SIC code and meets the employee requirement, the *facility* would be required to consider its chemical management practices for purposes of EPCRA Section 313 reporting. A *facility's* SIC code classification is not necessarily affected because it limits activities to *facilities* within the same company.

Reporting Criteria, SIC Code

14. 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, Reporting Responsibility

15. Is a *waste management facility* that is classified in SIC code 4953 (Refuse Systems), but is not regulated under Subtitle C of the Resource Conservation and Recovery Act (RCRA), subject to EPCRA Section 313?

No. Facilities in SIC code 4953 are only subject to EPCRA Section 313 if they are also regulated under RCRA Subtitle C. Many types of *waste management* facilities operate within SIC code 4953 that are not regulated under the RCRA Subtitle C programs, such as sanitary landfills, garbage collection, and street refuse systems, which were not added under EPCRA Section 313 by the May 1, 1997, final rule.

SIC Code, Reporting Responsibility

16. The final rule on *facility* expansion created regulatory language in 40 CFR Section 372.22(b) that limits the coverage of electricity generating *facilities* to those that operate in SIC codes 4911, 4931, and 4939 and specifically to those "*facilities* that combust coal and/or oil for the purpose of generating power for distribution in commerce." Based on

this regulatory language, are electricity generating *facilities* that only use coal and/or oil to test backup generators considered *covered facilities* for EPCRA Section 313 reporting?

No. Use of oil or coal for purposes of testing, (e.g., testing safety equipment at nuclear facilities) would not constitute a use of oil or coal for purposes of generating power for distribution in commerce. However, if a *facility* intentionally generates excess power during the testing operations for the purpose of distributing it in commerce, the *facility* would be "covered." In fact, if the *facility* is intentionally generating electricity for distribution in commerce, provided that the *facility* meets the chemical activity and employee thresholds, the *facility* would be considered "covered" even if only a small amount of fuel oil used.

SIC Code, Form R Revisions

17. 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 EPCRA Section 313. 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

18. 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.

Fuel, Electricity Generating Facility, Kerosene, Coal or Oil

19. An electricity generating *facility* (EGF), in SIC code 4911, combusts kerosene for the purpose of generating power for distribution in commerce. Is the *facility* subject to EPCRA Section 313?

Yes. Under the rule that expanded the industry sectors (May 1, 1997; 62 FR 23834) that must report under EPCRA Section 313, electricity generating *facilities* (EGFs) in SIC codes 4911, 4931, or 4939 that combust coal and/or oil for the purpose of generating power for distribution in commerce are

subject to EPCRA Section 313 reporting requirements, provided that the other threshold criteria are met. Pursuant to this expansion, kerosene (as well as petroleum coke) is an oil.

Electricity Generating Facility, Oil-contaminated Debris, Coal or Oil, Fuel

20. A *facility* in SIC code 4939 combusts refuse-derived fuel. During the reporting year, the *facility* combusts small amounts of oil-contaminated debris to produce electricity for distribution into commerce. Is the *facility* covered by EPCRA Section 313?

No. *Facilities* in SIC codes 4911, 4931, or 4939 are only covered by EPCRA Section 313 if they combust coal and/or oil for the purpose of generating power for distribution in commerce. "Coal and/or oil" does not include non-hazardous oil-contaminated debris. Since the *facility* is in SIC code 4939, but does not combust coal or oil, it is not covered by EPCRA Section 313.

B. Employee Threshold

Employee Threshold, Contractor Hours

21. 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 for the *facility* 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

22. 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, Paid Holidays

23. Must paid holidays be included in an owner's employee threshold calculation?

Yes. Paid holidays need to be included in the owner's employee threshold calculation.

Employee Threshold, Part-Time Employee, Full-Time Employee

24. 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. Therefore, if combined, the 13 employees of the *facility* worked 20,000 hours or more, the *facility* has satisfied the employee threshold.

Employee Threshold, Full-Time Employee

25. 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

26. 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

27. 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, Maintenance Staff

28. An electricity generating *facility* has maintenance staff for maintaining the electricity distribution system. Staff are based on-site. When counting the hours of this staff, the electricity generating *facility* is over the 20,000 hours or 10 FTE (*full-time employee*) threshold. Without counting the management staff hours, the electricity generating *facility* falls below the 20,000 hours or 10 FTE threshold. Because these hours are not directly in support of the electricity generating portion of the *facility* (i.e., they are in support of the distribution system), do they count toward the 20,000 hours or 10 FTE threshold?

Yes. Hours worked by employees who support the distribution system must be included in the *facility's* employee determination. All of the hours worked by all employees based at a *covered facility* must be considered toward the *facility's* employee threshold, regardless of whether the activities they perform are associated with covered activities.

Employee Threshold, Truck Drivers

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

Employee Threshold, Truck Drivers

30. A *facility* employs drivers to pick up and deliver its products. Some of the drivers use the *facility*'s trucks, while other drivers use trucks not owned by the *facility*. Should the *facility* count all driver hours towards its employee threshold, regardless of whose trucks the drivers use?

Yes. Hours worked directly for the *facility* by drivers that are employed by the *facility* are counted, regardless of whose truck they use.

Employee Threshold, Off-site Employees

31. Facility A manufactures and sells machinery. Facility A sends employees to customers' sites to repair and service the machinery. These employees are not based at Facility A. For example, some of the employees pick up company vehicles and needed supplies from rented property before going to the client's site. Facility A also has employees who work directly for the *facility*, but work entirely from their homes. Should Facility A consider hours worked by these employees in making the employee threshold determination?

Yes. If an individual is employed by a *covered facility* and works for the *covered facility*, then all hours worked by that individual must be counted towards the 20,000 hour employee limit, regardless of where the employee works (i.e., on-site or off-site).

Employee Threshold

32. 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, Off-site Employees

33. Does Facility A need to include in its employee threshold (10 FTE/ 20,000 hours) determination sales representatives that work for Facility A but are never/rarely physically working at Facility A?

Yes. For purposes of determining the EPCRA Section 313 employee threshold, employee hours for employees that directly support the *facility*, should be included in the employee calculation for the *facility*. Therefore, if the hours spent by sales staff directly support a *facility*, then their hours should be allocated to the *facility* they directly support, regardless of the amount of time those employees are physically at the *facility*.

Employee Threshold, Corporate Employees

34. A *covered facility* that is part of a larger corporate entity has corporate employees located on-site. These employees do not directly support the activities that are conducted at the *facility* where they are located; rather, their time is spent working for that *facility* as well as for other facilities that are part of the same corporate entity. Does the *facility* where these employees are located have to count the hours worked by these employees toward its employee threshold?

Yes. The *facility* where these employees are located should count the hours worked by them toward the *facility*'s employee threshold, unless the *facility*'s time keeping system allows it to track the time worked by these employees according to the actual *facility* for which they are working. If a *facility* can demonstrate through time keeping records that the time worked by these employees was in support of another *facility* within the same corporate entity, then it does not have to count the hours worked by these employees towards its own employee threshold. The *facility* that these employees directly support would have to count the hours toward its employee threshold.

Employee Threshold, Facility Owner

35. 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 Owner, Profit Share

36. 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 EPCRA Section 313 (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

37. 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 Section 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

38. A *facility* employs several contractors for various types of work, on-and off-site. Which contractors should the *facility* consider in its employee threshold determination?

The *facility* must include maintenance contractors, such as those for general building structure maintenance, process equipment maintenance, and lawn care, in its employee threshold determination. Major contractors for services such as tank building/wrecking and tank painting are also included in the employee threshold. The *facility* should not include hours worked by minor on-site intermittent service vendors such as trash haulers, vending machine servicers, and service repair persons for utility-owned equipment that are not employed by the *covered facility*.

Employee Threshold, Contractors

39. An *establishment* leases one acre of land adjacent to the reporting *facility* from a three-acre strawberry farm. The *facility imports* and repackages methyl bromide for sale and distribution. Does the *facility* have to include the strawberry pickers when determining whether the 10 full-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

40. 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 these contract employees worked 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 service vendors.

Employee Threshold, Truck Jobbers

41. A petroleum bulk terminal contracts with truck jobbers who purchase its petroleum products. The terminal has no direct control over the activities of the truck drivers. Are the hours worked by these jobbers and their drivers at the petroleum terminal counted towards the terminal's employee threshold calculation?

No. The hours worked by the truck jobbers do not directly support the terminal. The jobbers purchase the petroleum products and function as customers to the terminal. However, the petroleum bulk terminal must consider these activities toward its *processing* threshold.

Employee Threshold, Contractors, Multi-establishment

42. Should contractors who construct dikes, clean tanks, and perform inventory control activities conducted off-site, and who are all performing process-related activities in support of a *covered facility*, be included in the employee threshold determinations?

Yes. The hours worked on- or off-site by any contract employee for the *facility* must be counted toward the 20,000-hour threshold. *Facilities* should keep records that identify all hours employees or contract employees work in support of *facilities*. EPA describes a contract employee as 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 service vendors such as trash pick-up.

Multi-Establishment, Joint Venture, Facility-Definition of, Electricity Generating Facility

43. Electricity generating unit 1 (EGU 1) is subject to EPCRA Section 313 and is owned by Company A. EGU 2 is also subject to EPCRA and is adjacent to EGU 1. EGU 2 is owned by a joint venture, 80 percent of which is owned by Company A and 20 percent of which is owned by Company B. Are EGF's 1 and 2 two separate *facilities* for the purpose of EPCRA Section 313?

No. Because Company A owns the majority share in the joint venture, Company A owns EGU 2 and therefore owns EGUs 1 and 2. Because EGU 1 and 2 are adjacent to one another and have the same owner, they constitute one *facility*. As one *facility*, the owner or operator should consider the *toxic chemicals* and operations at both *establishments* for threshold determinations and *release* and other *waste management* calculations.

Employee Threshold, Facility Closure

44. A manufacturing *facility* was shut down on January 30. Between January 1 and January 30, 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, 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?

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 necessary correlate directly to the *manufacturing* activities). If, during the 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).

Employee Threshold, Overtime

45. How does a *facility* consider overtime worked by full-time employees?

For purposes of determining the *facility*'s employee threshold, the actual number of hours worked are considered and, therefore, the *facility* should count the overtime hours for any employee that directly supports the *facility*.

C. Persons Responsible for Reporting

Reporting Responsibility, Owner/ Operator

46. Is the owner or the operator of a *covered facility* 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 the Alternative Certification Statement (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

47. Who is obligated to file Form Rs for 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* before the reporting deadline may also be held liable. The reports submitted must cover the full reporting year.

Reporting Responsibility, Employee Threshold, Off-site Support

48. Facility A stores oil at Facility B. Facilities A and B have different owners. Facility A sends personnel to Facility B to load oil onto Facility A's trucks using Facility B's truck rack. Facility A then distributes the oil in commerce. Who *processed* the oil and does Facility B have to count Facility A's hours?

Facility B has *processed* the oil that was taken from Facility B's truck rack located on Facility B's property. Facility A's use of product at Facility B must be considered toward Facility B's threshold, *release* and other *waste management* calculations, where appropriate. The hours spent by Facility A's truck drivers while at Facility B do not directly support Facility B but instead directly support Facility A and should be accounted for by Facility A.

Reporting Responsibility, Change of Ownership

49. 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 and sold through bankruptcy?

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 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

50. Company A owns and operates an electricity generating *facility*. The *facility* consists of a combustion unit and a peaker unit. Company A sells the combustion unit to Company B on June 15 of the reporting year, but retains ownership of the peaker unit. From the time of purchase, Company B owned, controlled, and operated the combustion unit and Company A continued to own and operate the peaker unit. What are the reporting responsibilities of Companies A and B for determining thresholds and filing Form R reports?

From the time of the purchase transaction on June 15, there are two separate facilities with two non-related owners and operators. Thus, Company B is responsible only for reporting for the combustion unit after its purchase. Company A is responsible for the combustion unit and the peaker unit prior to sale, but only the peaker unit after the sale. Thus, for threshold determinations, Company A must combine amounts of *toxic chemicals manufactured*, *processed*, or *otherwise used* at the entire *facility* before the transaction on June 15, with those *manufactured*, *processed*, or *otherwise used* at the peaker unit after the transaction.

Reporting Responsibility, Change of Ownership, Definition of Facility

51. 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 nonrelated owners and separate operators. Therefore, the original owner must report on the three quarters of the *facility* retained after the sale if he *manufactured*, *processed*, or *otherwise used* a *toxic chemical* equal to or in excess of a threshold amount for 1996. The original owner, however, would also include in threshold determinations and *release* and other *waste management* calculations any activities that went on from the beginning of January 1996 up to the time of the purchase transaction (January 15) for that part of the *facility* that was sold. The owner of the quarter of the original *facility* also must report if that new *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 and the *facility* would be assigned a new TRI Identification number.

Reporting Responsibility, Change of Ownership, NON

52. When a *facility* changes ownership after a Form R has been submitted, who is required to respond to a Notice of Noncompliance (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

53. 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

54. 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

55. 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. The 50/50 joint venture operates the treatment unit. 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* 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*.

Parent Company, Wholly Owned Subsidiary

56. Mom and Pop Plastics is a wholly owned subsidiary of a major chemical company which is a wholly owned subsidiary of Big Oil Corporation, located in St. Paul, MN. Which is the parent company?

Big Oil Corporation is the parent company.

Reporting Responsibility, Facility

57. Company A owns a *facility* which manufactures crude oil. It sells the crude oil to Company B, but the oil is kept in tanks located on Company A's *facility* but 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 tanks.

Facility-Definition of, Facility-Facility Reporting, Reporting Responsibility

58. A RCRA-permitted subtitle C *facility* shares a common fence line with a RCRA subtitle D *facility* that landfills municipal solid waste and non-hazardous special wastes. Each of these operations has its own *waste management* permits and are considered distinct entities. They are both operated by the same company and owned by the same parent company. Are both operations subject to EPCRA section 313?

Two adjacent *establishments*, owned or operated by the same corporation constitute one *facility* under section 313. As such, the *facility* must consider their combined activities for threshold determinations and *release* and other *waste management* calculations.

Reporting Responsibility, Multiple Owners/ Operators

59. A piece of contiguous property consists of three covered sites with various buildings, structures and equipment. The three sites are owned by two different companies - Company A and Company B. All three sites operate completely independently of each other and have separate personnel, finances, and environmental reporting systems. Site 1 and its buildings and structures are owned and operated by Company A and site 3 and its buildings and structures are owned and operated by Company B. The middle site, site 2 and its buildings and structures, are owned by Company A and operated by Company B (see diagram). Are all three sites and their buildings and structures considered separate *facilities* under EPCRA Section 313? Who is responsible for reporting for each?

Site 1 Owned and operated by A	**Site 2** Owned by A and operated by B	**Site 3** Owned and operated by B

Under 40 CFR Section 372.3 a *facility* is defined as; "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." Because all buildings and structures located on sites 1 and 2 are located on contiguous property and are owned by the same person, they are considered one *facility*. Because all buildings and structures located on sites 2 and 3 are located on contiguous property and are operated by the same person, they are also considered one *facility*. Therefore, for purposes of determining thresholds, the *toxic chemicals manufactured*, *processed*, and *otherwise used* at site 2 must be counted toward both Facility A's and Facility B's threshold determinations. Because the operator is primarily responsible for reporting, estimating and reporting *releases* and other *waste management* calculations for sites 2 and 3 are the primary responsibility of Company B and the *release* and other *waste management* reporting for site 1 is the primary responsibility of Company A. EPA allows the *release* and other *waste management* reporting to be done in this manner to avoid "double counting" *releases* and *waste management* activities at site 2. However, provided thresholds have been exceeded, if no reports are received from a *covered facility* both the owner and the operator are liable for penalties.

Definition of Facility, Reporting Responsibility, Waste Disposal, Waste Management Activities

60. A recycling and disposal *facility* encompasses several RCRA subtitle C hazardous waste and subtitle D municipal solid waste management units. Is this *facility* subject to EPCRA Section 313?

Yes. This *facility* is subject to EPCRA Section 313. Because at least one unit at this *facility* is regulated by RCRA subtitle C and the *facility's* operations are classified in SIC code 4953, for the purposes of EPCRA Section 313, this *facility* is considered to be in SIC code 4953 (regulated under RCRA subtitle C). As such, this *facility* must consider all non-exempted activities at the entire *facility* for threshold determinations and release and other waste management reporting. The owner or operator should be sure to include any information the *facility* may have concerning toxic chemicals at the solid waste units of the *facility* as well as at the hazardous waste units.

Definition of Facility, Reporting Responsibility, Waste Disposal, Waste Management Activities

61. A RCRA subtitle C hazardous waste landfill *facility* in SIC code 4953 is planning to construct a RCRA subtitle D *disposal* cell on-site. Is this *facility* subject to EPCRA Section 313?

Yes. This *facility* is subject to EPCRA Section 313. Because at least one unit at this *facility* is regulated by RCRA subtitle C and the *facility's* operations are classified in SIC code 4953, for the purposes of EPCRA Section 313, this *facility* is considered to be in SIC code 4953 (regulated under RCRA subtitle C). As such, this *facility* must consider all non-exempted activities at the entire *facility* for threshold determinations and *release* and other *waste management* reporting. The owner or operator should be sure to include any

information the *facility* may have concerning toxic chemicals at the solid waste units of the *facility* as well as at the hazardous waste units.

Facility, Business Interest, Multi-establishment

62. 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. In this instance, the owner 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/ Adjacent

63. 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 unit 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*.

SIC Code 4953, Hazardous Waste Facility, Definition of Facility

64. Are all processes occurring at a single hazardous waste *facility* potentially covered by EPCRA Section 313 if only some of the activities are regulated by RCRA subtitle C?

If all of the activities occurring at a site are occurring on the same contiguous or adjacent piece of land and are owned or operated by the same organization, the entire area is considered one *facility*. If the *facility* is a hazardous waste *facility* with primary SIC code of 4953 and any portion of the facility is regulated under RCRA subtitle C, the *facility* meets the SIC code criterion and must thus determine thresholds and calculate *releases* and other *waste management* amounts for all activities at the *facility*, even those not regulated under RCRA subtitle C.

D. Multi-Establishment Facilities

Primary SIC Code, Multi-establishment

65. 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 *facility*. Form R and the Alternate Certification Statement (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.

SIC Code, Multi-Activity Facility, Petroleum Bulk Stations

66. Many bulk petroleum stations operating in some midwestern *states* sell their petroleum products directly to end users. These plants typically sell to farmers and construction companies, as well as *state* and local governments. Generally, quantities are transferred to the customer in quantities of 500 gallons or less. For these *facilities*, distribution to retail facilities may make up approximately 5 percent of their overall customer business. Are these *facilities* considered bulk wholesale distributors of petroleum products, or are they more appropriately classified in retail trade and therefore not covered under EPCRA Section 313?

Based on the facts provided in the question, these *facilities* are properly classified in SIC code 5171 (bulk petroleum stations and terminals), which are included in the list of *facilities* covered under EPCRA Section 313. According to the SIC code Manual (1987 edition) "...*establishments* or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, construction contractors, or professional business users; or other wholesalers; or acting as agents or brokers in buying or selling merchandise to such persons or companies" are properly classified in Division F, Wholesale Trade, and are therefore covered under EPCRA Section 313, beginning with the reporting year 1998. EPA believes that the *facilities* described in the above question are appropriately classified in the Wholesale Division as defined in the SIC code manual.

Multi-establishment, Definition of Facility, Establishment, SIC Code

67. 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*. If the *facility's* SIC code is a *covered SIC code*, the *facility* has met the SIC code criterion for reporting under EPCRA Section 313. However, a reporting *facility* can encompass several *establishments* located on a single site or on contiguous or adjacent sites owned or operated by the same entity. Therefore, a Section 313 *facility* can be a multi-*establishment* complex. To determine if a multi-

establishment complex is a *covered facility*, the owner/operator must determine the complex's primary SIC code based on the relative value of products and services provided by the various *establishments*. If the primary SIC code for the *facility* is a *covered SIC code*, the *facility* has met the SIC code criterion.

SIC Code, Multi-establishment

68. 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 is covered by EPCRA Section 313?

To determine if a *facility* is covered by EPCRA Section 313, the *facility* must determine if it meets the SIC code criterion. To make this determination, 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)). If the *facility* determines that the *establishment*s meet this test, the entire *facility* has met the SIC code criterion. If the entire *facility* also meets the employee and chemical activity thresholds (based on all *establishment*s at the *facility*), then the entire *facility* would be subject to EPCRA Section 313 reporting.

Primary SIC Code, Multi-activity Facility

69. SIC Code 7389 (business services, not elsewhere classified) contains many diverse activities. How does a *facility* that conducts more than one activity in SIC 7389 determine if it is primarily engaged in solvent recovery, and therefore, covered under EPCRA Section 313?

A *facility* that conducts several uniquely different activities that are within SIC code 7389 should identify the value of the goods or services that each activity contributes. A *facility* is considered to be "primarily engaged" in solvent recovery if the goods or services produced by the solvent recovery activity has a value of more than 50 percent of the total value of all goods and services produced at the *facility*, or if the goods and services produced by the solvent recovery activity of the *facility* are greater than those produced by any other activity at the *facility*.

Multi-establishment, Activity Threshold

70. A *covered 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 a Form R?

The *covered facility*, not the *establishments*, must report if the *facility* meets all of the reporting criteria. The threshold determination for *manufacture*,

process, 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*.

Facility, Multi-establishment

71. If a company has a plant in New Jersey, which *processes* 15,000 pounds of methanol, and a plant in Texas, 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

72. 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 of this *facility*?

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 the 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 the 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 the facility would be subject to reporting under EPCRA Section 313.

Primary SIC Code, Multi-establishment, Off-site Services

73. A *facility* has two *establishments*, one in SIC code 35 (a *covered SIC code*), and one in SIC code 70 (not a *covered SIC code*). In determining the *facility*'s primary SIC code, the *facility* must determine the sum of the services provided and/or products shipped from or produced by each *establishment*. Some of the employees who support the *establishment* in SIC code 70 work entirely off-site, either at home or at clients' sites. Should the *facility* consider this off-site work when determining the value of the services provided by SIC code 70?

Yes. In determining the primary SIC code, the *facility* should consider the value of services provided by each *establishment*, including services provided by employees who work for that *establishment* at home or who service that *establishment*'s products at clients' sites.

Multi-establishment, Reporting Criteria, Product Value

74. A *facility* consists of several different *establishments*. In terms of the SIC Code determination, how is product value defined? Where do state and federal taxes fit into the calculation of value? Is pre-tax or after tax value counted? Over what period of time is value calculated?

Product value should be based on the total sales before taxes, not profits. Total product value includes the value of services provided, products shipped, and/or products produced. This includes a fair market value for inter-company transfers, including a reasonable proportion of overhead and profits. If the *facility* transports the products itself, the value of the transportation services should be part of the calculation of the total value of all production, shipments, and/or service. Taxes collected from customers and forwarded to local, state, or federal taxing authorities should be excluded from the calculation of product value. Taxes that are paid by manufacturers, wholesalers, or retailers upstream of the *facility* and passed on to the *facility* in the price of goods and services it purchases should be included in the calculation of product value. The time period for calculating product value should be the reporting year in question.

Multi-establishment, Zero Releases

75. A *covered facility* with three *establishments* exceeds an activity threshold for a listed toxic chemical. The *facility* has the option to file one form to cover the activities at the entire *facility* or they may file forms for each of the *establishment*s as long as the threshold determinations and *release* and other *waste management* calculations are based on all of the activities at the entire *facility*. The *facility* chooses to file separate Form R reports for each *establishment*. All three of the *establishment*s conduct a threshold activity with the listed toxic chemical. However, one *establishment* does not *release* or perform any *waste management* activities with the listed toxic chemical. Must this *establishment* also file a Form R or can the *facility* submit only two Form R reports?

If individual *establishment*s or groups of *establishment*s report separately for one listed toxic chemical, they must report separately all covered activities, *releases*, and other quantities of the *toxic chemical* managed as waste. Therefore, if each *establishment* conducts a threshold activity with the toxic chemical, each *establishment* is also required to report separately for the *toxic chemical* even if the *establishment* had no *releases* or other *waste management* activities with the *toxic chemical*. Such *establishment*s should make certain that they file a complete Form R including reporting the chemical activity information on Part I, Section 3 of the Form.

Multi-establishment, Off-site Transfer, Form R Submissions

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

Multi-establishment, Part II Section 3

77. 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 pounds 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 should the operator of *establishment* 2 fill out the Form R? Specifically, how should *establishment* 2 address Part II Section 3 for activities and uses at the facility? How should *establishment* 2 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, EPA recommends that *establishment* 2 check the block 3.3(c) 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 other *establishments*.

Multi-establishment, Separate Form Rs

78. Establishments A, B, and C are all part of a *facility* and the *facility* elects to file Form Rs by *establishment* for chemicals that exceeded a threshold based on combined activities. The *facility* exceeds the reporting threshold for benzene, but only establishments A and B use any benzene. Is establishment C required to file a Form R report for benzene?

Provided that establishment C has no amounts of the *toxic chemical* involved in threshold or *release* and other *waste management* calculations, establishment C is not required to submit a report for that chemical.

Definition of Facility, Right-of-Way

79. A single company owns two divisions that operate separately. Both divisions are within a *covered SIC code*. The two divisions are located on contiguous/adjacent property that is divided by a public right-of-way. The entrance and exit between the two operations are not at a cross-roads (i.e., access between the two operations can only be gained by going along the public right-of-way, not simply crossing the public right-of-way). Are the two divisions considered two separate *facilities* under EPCRA Section 313?

No. Because the two divisions are owned by the same person and are physically contiguous/adjacent to one another, except for a public right-of-way, they are considered one *facility* for Section 313 reporting purposes. A *facility* may consist of more than one *establishment*. The entrances to each *establishment* within a multi-*establishment facility* do not have to be located at a crossroads in order to meet the definition of *facility*. EPCRA Section 313 defines a *facility* as "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" (40 CFR Section 372.3).

GOCOs, Definition of Facility, Right-of-Way

80. The definition of *facility* under EPCRA Section 329(4) 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)." Two Government-Owned, Contractor-Operated (GOCO) sites are separated by a street. The GOCOs are owned by the same federal agency, but operated by different contractors. When, as required by Executive Order (EO) 12856, the federal agency is making threshold determinations under EPCRA Section 313, must it consider the two GOCOs as part of the same federal *facility*?

Yes. The two GOCOs are considered to be a single federal *facility* for the purposes of EPCRA Section 313 threshold determinations and *release* and other *waste management* reporting as required by EO 12856. EPA has interpreted "contiguous or adjacent sites" to include sites separated only by a public right-of-way. Further, Sections 2-201 and 2-202 of EO 12856 expanded the definition of "person" under EPCRA Section 329(7) to include federal agencies, as defined in 5 U.S.C. Sections 102 and 105. Therefore, the two GOCOs are considered to occupy sites that are contiguous or adjacent and which are owned by the same person. Each GOCO should provide any information required by the federal *facility* in making threshold determinations and reporting *releases* and other *waste management* under EPCRA Section 313.

EO 12856 does not alter any separate obligation(s) a GOCO may have under EPCRA and the Pollution Prevention Act (PPA) (EO 12856 Section 1-103). Private contractors operating at federal *facilities* must continue to meet any legal reporting requirements they have under EPCRA and PPA. Thus, a GOCO that operates a *covered facility* under 40 CFR Section 372.22 must file a Form R or an Alternate Certification Statement (Form A) for each *toxic chemical* for which the *facility* exceeds an activity threshold as specified in 40 CFR Section 372.25.

Multi-establishment, Facility, Right-of-Way

81. 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* quantities *processed*, *manufactured*, or *otherwise used* at both *establishments*.

Multi-establishment, Facility, Pipeline

82. 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 *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, Preparation for Otherwise Use

83. 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.

Threshold Determination, Process, Preparation for Distribution

84. 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 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 a *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.

Process, Preparation for Distribution

85. If ore is extracted for ultimate distribution in commerce, are *toxic chemicals* in ore that are not actually distributed during the reporting year considered to be *processed* for threshold determination purposes, since they were prepared for distribution during the reporting year?

Yes. The total amounts of the listed *toxic chemicals* contained in the ore are considered toward the *facility*'s *processing* threshold in the year that the amounts undergo a *processing* step. For purposes of the EPCRA Section 313 threshold determination, extraction is considered a *processing* step and all amounts extracted for preparation of a product to be distributed in commerce are considered *processed* in the year they are extracted.

Process, Limited Distribution, Samples

86. Electricity generating *facilities* supply companies with ash for off-site market testing (e.g., the receiving company may test the ash to see if it can be used in a topsoil). Is this *processing*?

Amounts of listed *toxic chemicals* contained in material or products that are sent off-site for sample testing are considered *processed* and these amounts

must be considered toward threshold and *release* and other *waste management* calculations.

Threshold Determination, Activity Threshold, Storage, Maximum Amount On-site

87. 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. 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

88. 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.

Activity Threshold, Storage

89. A coal mine receives a flotation agent containing a Section 313 chemical in December of 1998, but does not use it until January of 1999. Is the amount of *toxic chemical* in the flotation agent considered for threshold determinations in the 1998 reporting year?

No. Storage in itself of a *toxic chemical* is not considered a *manufacturing*, *processing*, or *otherwise use* activity and, therefore, is not subject to threshold determinations. However, the *facility* is required to include any amounts *released* or otherwise managed as waste that occur during storage of the listed *toxic chemical*, provided a threshold for the same chemical has been exceeded elsewhere at the *facility*. When the *toxic chemical* is used in 1999, the *facility* will include the amount of *toxic chemical* used towards the 10,000 pound *otherwise use* threshold, or the 25,000 pound threshold for *processing*, whichever is appropriate.

Reuse System, Threshold Determination

90. 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.

Threshold Determination, Reuse System, Closed-loop, Otherwise Use

91. Many *facilities* maintain reuse operations such as closed-loop refrigeration systems. If a *facility* uses 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. 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.

Recycle, Reuse System, Threshold Determination

92. 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 towards the threshold determination unless it is replaced.

Threshold Determination, Equipment Efficiency

93. A *covered facility* feeds 50,000 pounds of solvent containing 90 percent MIBK (i.e., 45,000 pounds) into a recycling process that is 85 percent efficient. The *facility* distributes the recovered MIBK in commerce. Should the *facility* count 45,000 pounds of MIBK (i.e., the entire amount that was inserted into the process) towards the *processing* threshold?

Yes. The *facility* considers the entire amount (45,000 pounds of MIBK) entering the recovery system toward the *processing* threshold regardless of the recovery efficiency of the process.

Threshold Determination, Remediation

94. 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

95. A *covered 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 quantities of *toxic chemicals* in the remediation wastes that are sent off-site for *waste management* are reported in Part II, Section 8.8. The intake water exemption does not apply since the *toxic chemicals* are not being used in a process activity and because the *toxic chemicals* in groundwater are not at background levels.

Manufacture, Import, Threshold Determination

96. 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 (*manufactured*) + 7,000 (*imported*) = 26,000). Note that *importing* constitutes *manufacturing*, and therefore, the amounts must be added together for threshold determinations.

Threshold Determination

97. Are the thresholds for *manufacture* and *process* considered separately? That is, if a *covered facility* *manufactures* 24,000 pounds of *toxic chemical* 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.

Manufacture, Process

98. A chemical manufacturing *facility* *manufactures* 20,000 pounds of benzene on-site for distribution and sale. The same *facility* purchases and then repackages and sells a cleaning *mixture* that contains benzene. Over the calendar year the *facility* repackages and sells (i.e., *processes*) 10,000 pounds of benzene in the cleaning *mixture* and sells the 20,000 pounds of benzene that is *manufactured* on-site. How many pounds of benzene should the *facility* count toward its *processing* threshold?

The *facility* should consider 30,000 pounds of benzene (the 10,000 pounds in the cleaning solution plus the 20,000 pounds of benzene *manufactured* and sold) toward the *facility*'s *processing* threshold. When determining if a *facility* meets a chemical use threshold, owners and operators of *covered facilities* must consider each chemical use activity separately to determine if any one threshold has been met. For the purposes of EPCRA Section 313, *process* means "the preparation of a toxic chemical, after its *manufacture*, for distribution in commerce..." (40 CFR Section 372.3) A *facility* that creates a listed *toxic chemical* and then prepares it for distribution in commerce is both *manufacturing* and *processing* the listed *toxic chemical* and must consider the amount of the *toxic chemical manufactured* and *processed* towards both thresholds.

Threshold Determination, Warehouse

99. How are warehouses affected by Section 313?

A warehouse located within the physical boundary of a *covered facility* is part of the *facility*. *Toxic chemicals manufactured*, *processed*, or *otherwise used* at the warehouse are included in making threshold determinations and *release* and other *waste management* calculations 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

100. Are *releases* of asbestos from the demolition of an old plant reportable?

Maybe. If friable asbestos is not being *manufactured*, *processed*, or *otherwise used*, no *releases* or other *waste management* 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.

Threshold Determination, Concentration Range, Upper Bound

101. If a *covered 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. For the combination of three *toxic chemicals*, the owner/operator of the *facility* should split the upper bound among the three *toxic chemicals* based on the knowledge that it has, so the total equals 10 percent. If a range is available, using the midpoint or average is reasonable. In this case, if there is a range of 1 to 10 percent of a *mixture* of three *toxic chemicals*, the *facility* would divide the midpoint (5 percent) by three. Therefore, the *facility* would assume 1.33 percent of each of the *toxic chemicals* in the *mixture*. The owner/operator of the *facility* does not have to assume 10 percent maximum for each *toxic chemical*.

Threshold Determination, Concentration Range, Mixture

102. A *covered facility* uses a *mixture* in its processing operations and knows only that the *mixture* contains less than 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 physically 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.

Threshold Determination, Concentration Range

103. A *covered 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.

Threshold Determination, Concentration Range, Lower Bound

104. 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.

Threshold Determination, Concentration Range, Upper Bound, Mixture

105. 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* and has no other information about the concentration of the other components of the *mixture*, it should use this upper bound (i.e., 56 percent) for threshold determinations.

Threshold Determination, Facility Construction

106. A covered 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 determinations and *release* and other *waste management* calculations 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 *covered 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 Alloy, Mixture

107. 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

108. 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* calculations 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.

Threshold Determination, Metal Alloy, Article Exemption, De Minimis Exemption

109. 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

110. If a *covered 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 the threshold determination.

Threshold Determination, Process, Electroplating

111. 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. The *facility* is also *processing* the elemental nickel. If the *facility* exceeds thresholds for both chemicals independently, they may file one Form R for nickel and nickel compounds.

Threshold Determination, Metal Compounds, Mixture, Metal Silicates

112. A *covered 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 whole weight of the glass) must be included in the *manufacturing* threshold calculations.

Threshold Determination, Manufacture, Fuel, Natural Gas

113. 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, processing* or *otherwise use*. *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* or if the chemicals are combusted for energy recovery, 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

114. The Toxic Substance Control Act (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 *covered 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.

PCB, Transformers, Disposal, Threshold Determination

115. A covered manufacturing *facility* removes PCB-laced oil that was contained in its on-site transformers. Would this activity be considered *processing* 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 *processing* 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 Threshold, Process, Otherwise Use, Incorporation

116. What is the difference between *process* and *otherwise use* for the purposes of EPCRA Section 313 threshold determinations?

Process implies incorporation; the function or intent of the *toxic chemical* is dependent upon becoming a part of a product. *Otherwise use* implies non-incorporation; the function of the *toxic chemical* is not dependent upon becoming a 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*. *Otherwise use* will also include the on site *disposal*, treatment for destruction, or stabilization of *toxic chemicals* produced from the management of wastes received from off-site.

Activity Threshold

117. If I *manufacture* 74,000 pounds of a *toxic 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.

Reclamation, Processing, Distribution in Commerce

118. Is the reclamation of elemental mercury from mercury retorting (e.g., recycled fluorescent lamps, contaminated phosphor powder, mercury batteries, and other sources) and the subsequent sale of the recovered mercury (e.g., for use in thermometers and other equipment) subject to the 25,000 pound *processing* threshold?

Yes. Mercury retorted from wastes and subsequently distributed into commerce should be counted towards the 25,000 *processing* threshold.

Activity Threshold, Recordkeeping

119. A *covered facility* exceeds a threshold for *manufacturing* copper compounds and keeps documentation to justify its *manufacturing* threshold determination. The *facility* frequently *otherwise uses* various *mixtures* containing copper compounds during the year. Must the *facility* track their *otherwise use* of copper compounds and document that usage?

Yes, the *facility* must track its *otherwise use* of the copper compounds. However, because the *facility* has already exceeded the threshold for manufacturing, the *facility* does not have to track the copper compounds for the purpose of determining if the *otherwise use* threshold has been exceeded, but instead must track its *otherwise use* of the copper compounds to properly

fill out all applicable sections of the reporting form. In short, if a *facility* exceeds an activity threshold it must report on all activities at the *facility* involving the chemical, except for those activities that qualify for an exemption provided for in 40 CFR Section 372.38. (40 CFR section 372.25(c)) And because the *facility* must report the *otherwise uses*, the *facility* must satisfy the recordkeeping requirements of 40 CFR section 372.10.

Otherwise Use, Off-site Waste

120. 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

121. 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 toxic chemicals* A and B. 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* as well as the treatment for destruction of chemical A. 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. If the *facility* treats for destruction more than 10,000 lbs of chemical A, it would also report for this *toxic chemical*.

Activity Threshold, Otherwise Use

122. 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?

Prior to January 1, 1998, this *facility* would not meet the *manufacturing* threshold of 25,000 pounds for chemical A nor would it have met the *otherwise use* threshold of 10,000 pounds because it only *otherwise used* 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* and *other waste management* activities involving chemical A.

Hazardous Waste, Waste Management Activities, Otherwise Use

123. Is the transfer of hazardous waste containing a Section 313 *toxic chemical* from one container or tank considered *waste management* for the purposes of the definition of *otherwise use*?

No. On-site container and on-site tank transfers do not constitute a *waste management* activity as described in the preamble to the May 1, 1997 final rule (62 FR 23834). Such transfer activities are not considered *manufacturing*, *processing*, or *otherwise using* activities in themselves. However, if the *facility* elsewhere exceeds a threshold because of other activities, any *releases* and other *waste management* associated with the transfer operations must be reported appropriately in Sections 5 and 8 of the Form R.

Otherwise Use, Treatment for Destruction

124. A *covered facility* has a commercial wastewater treatment operation and receives wastewater containing *toxic chemicals* from off-site. During treatment, most of the *toxic chemicals* are destroyed on-site. The remainder is sent off-site for incineration. Should the *facility* count the entire amount of the *toxic chemical* received from off-site towards its *otherwise use* threshold?

No. The *facility* should count only the amount of the *toxic chemical* that is treated for destruction on-site. The amount of the *toxic chemical* sent off-site for incineration would not be applied towards the *facility*'s threshold determination. However, if the *facility* exceeds a threshold for that chemical, it must report the amount treated for destruction on-site in Part II, Section 8.6, and the amount sent off-site for incineration in Part II, Sections 6.2 and 8.7.

Otherwise Use

125. A *facility* receives waste containing a *toxic chemical* from off-site, and disposes of the waste on-site. Should the *facility* count the *toxic chemicals* in the waste towards the *otherwise use* threshold upon receipt of the waste shipment (e.g., signing the hazardous waste manifest), or upon actual *disposal*?

The *facility* must count the amount of the *toxic chemical* towards its *otherwise use* threshold upon actual *disposal* of the waste. *Toxic chemicals* are applied toward the *otherwise use* threshold upon the performance of that activity. The *facility* does not *otherwise use* the *toxic chemical* in the waste received from off-site until the *facility* disposes of the waste on site.

Activity Threshold, Otherwise Use, Neutralization

126. A *covered 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.

Process vs. Otherwise Use, Activity Threshold, Wastewater Treatment

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

Because its function (to treat wastewater) is such that it is not intended to be incorporated into a product distributed in commerce, the *toxic chemical* would be *otherwise used.*

Otherwise Use, Landfill Leachate

128. A *facility* captures leachate from a landfill, treats the leachate with a *toxic chemical* and then uses the treated leachate as on-site irrigation water. Assuming the *facility* exceeds the *otherwise use* threshold for the *toxic chemical*, is the *otherwise use* of treated leachate (containing the *toxic chemical*) as irrigation water reported as a release to land in Part II, Section 5.5.4 (Other Disposal)?

Yes. Use of a leachate and chemicals contained in the leachate for irrigation purposes is considered an *otherwise use* and amounts of listed *toxic chemicals* contained in the leachate must be counted toward the *otherwise use* threshold. Any listed *toxic chemicals* *manufactured* during the treatment of the leachate would also need to be considered toward the *manufacturing* threshold. The leachate, and listed *toxic chemicals* contained in the leachate, are also considered a waste and any *otherwise use* of listed *toxic chemicals* contained in the leachate are not eligible for the de minimis exemption. This is the case even though the listed *toxic chemical* in the leachate must be counted toward the *otherwise use* threshold. Also, the *otherwise use* of these chemicals for irrigation constitutes a release to land and would be reportable in Part II, Section 5.5.4 (Other Disposal) and Section 8.1.

Otherwise Use, Treatment for Destruction, Phase Separation

129. If a *toxic chemical* is derived from the phase separation of wastes received from off site and that chemical is subsequently incorporated into a product at the *facility* and then distributed into commerce, has the toxic chemical been *processed* or *otherwise used*?

If a facility receives materials containing *toxic chemicals* from off-site for further *waste management* and the *toxic chemicals* are *treated for destruction*, stabilized, or *disposed* on-site, the *facility* would be *otherwise using* the *toxic chemical*. However, during phase separation the *toxic chemical* in the waste is not actually destroyed. Furthermore, the *toxic chemical* is incorporated into a product at the *facility* and is further distributed in commerce (e.g., retorted mercury sold for reuse in thermometers and mercury switches). Thus, as long as the *toxic chemical* coming from the waste is not stabilized, *treated for destruction*, or *disposed*, it would not be *otherwise used* because it is neither *treated for destruction* nor *disposed* on site. Because it is distributed in commerce, it would be *processed* and therefore subject to the 25,000 pound threshold. Once a *facility* exceeds a threshold for a particular *toxic chemical*, amounts of that chemical that are *released* or otherwise managed as a waste must be calculated for all on-site activities.

Facility-Facility Reporting, Multi-Establishment, Stormwater, Wastewater, Otherwise Use

130. Three separately owned companies are located within a single industrial park. These companies are separate *facilities* under EPCRA Section 313. *Facility* A discharges wastewater through a pipeline to an outfall on *Facility* B's property. *Facility* B runs the discharge permit for another outfall through which stormwater from *Facility* C passes. Both the wastewater and stormwater contain several *toxic chemicals*, which pass through the outfalls untreated (within permitted levels) to a nearby waterway. *Facility* A and *Facility* C exceed activity thresholds for these *toxic chemicals* in their manufacturing processes. *Facility* B does not use the chemicals in any manufacturing operations on-site. However, more than 10,000 pounds of each *toxic chemical* contained in the wastewater and stormwater annually flow through *Facility* B's piping and outfalls. Must *Facility* A and C report the discharges as off-site transfers in Part II Section 6.2 of the Form R, or in Section 5.3, as a discharge to a stream as well as a *release* in Section 8.1? Must *Facility* B consider these *toxic chemicals* towards the *otherwise use* threshold even though the *toxic chemicals* are not *treated for destruction*, stabilized or *disposed* on-site?

In this situation, *Facility* A and *Facility* C would report the *toxic chemicals* transferred to *Facility* B, as an off-site transfer in Part II, Section 6.2 using treatment code M90, other off-site management and in Section 8.1 as *released*. *Facility* B would not consider these *toxic chemicals* towards their *otherwise use* threshold because *Facility* B does not receive *toxic chemicals* in waste from off-site for *disposal* on-site under EPCRA Section 313. If, however, *Facility* B meets an activity threshold for these chemicals elsewhere

at the *facility*, it would report the *release* of the chemicals in the wastewater received from *Facility* A and the stormwater from *Facility* C in Part II, Section 5.3 and 8.1 of the Form R.

Otherwise Use, Definition of, Treatment for Destruction, Waste Management Activities

131. A *covered facility* receives an organic waste stream from off-site for the purposes of further *waste management*. The *facility* treats the organic *toxic chemicals* for destruction. This waste contains a small fraction of Section 313 metal compounds. The metal fraction of this waste is either stabilized and *disposed* on-site or sent off-site for *disposal* without stabilization. Should these Section 313 metals be considered towards the *facility's otherwise use* threshold?

The chemicals in the organic fraction of the waste received from off-site that undergo *treatment for destruction* are counted towards the *otherwise use* threshold. Additionally, the metals that are stabilized and *disposed* on site are counted towards the *otherwise use* threshold. Any of the *toxic chemicals* in wastes received from off-site that are not *treated for destruction*, stabilized or *disposed* of on-site do not meet the definition of *otherwise use* and are not counted towards this threshold. Therefore, the metals fraction of the waste stream that is sent off-site for *disposal* is not counted towards this threshold. If, however, a threshold is exceeded for these metals elsewhere in the *facility*, the transfer off-site for further *waste management* of the parent metal should be reported in Part II, section 6.2 and 8 of the Form R. Additionally, the possibility exists for new chemicals to be created during on-site treatment, *disposal*, or stabilization. If a new section 313 chemical is created, it must be considered towards the *facility's manufacturing* threshold.

Otherwise Use, Threshold Determination, Fumigants

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

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

Coincidental Manufacture, Activity Threshold, Process, Ammonia, Waste

133. A *covered facility* renders byproduct animal parts and blood into protein for use as animal feed. The byproduct animal parts and blood may contain nitrogen compounds, which when they decompose generate ammonia. The ammonia is therefore incorporated into the protein product that is distributed in commerce. Is the ammonia subject to Section 313 reporting?

Yes. The ammonia is being coincidentally *manufactured* as a result of the decomposition of the byproduct animal parts. The ammonia is also being *processed* since it is incorporated into the end-product. Therefore, the ammonia in the byproducts is subject to both the *manufacturing* and *processing* thresholds under EPCRA Section 313.

Relabel, Threshold Determination

134. 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. *Covered 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.

Repackaging, Container Size

135. Does it matter for purposes of determining the *processing* threshold if amounts that are received in smaller containers are removed from the smaller containers and repackaged into a larger container prior to their distribution in commerce?

No. The act of transferring any amount from one unit container to another prior to distributing the material in commerce constitutes the act of *processing*. The size of the container does not matter.

Lab Packs, Processing, Repackaging

136. Lab packs and hazardous waste in general tend to move progressively from smaller containers to larger containers. Is this repackaging activity covered by the *processing* threshold?

Repackaging *toxic chemicals* in hazardous waste may be covered by the *processing* threshold. For an activity to be considered *processing* under EPCRA Section 313, the *toxic chemical* must be prepared for distribution in commerce. If the listed *toxic chemical* is not removed or taken from the smallest unit, but is simply placed in a larger container while the contents remain in the smaller container, then the listed *toxic chemical* is not considered to be repackaged. If the listed *toxic chemical* is taken out of the smallest unit container and is transferred to another container, it is considered repackaged. However, if, after the *toxic chemical* has been repackaged, it is not distributed in commerce (e.g., instead of being distributed in commerce, it is sent off-site for *disposal* or treatment) the activity is not a covered *processing* activity under EPCRA Section 313. It would only be considered *processed* if the *toxic chemicals* in the lab packs, after being repackaged, are sent off-site for recycling or for further use or reuse.

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

137. 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 oxidation 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 ($CuSO_4$) is 40 percent 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:

	Manufacture	*Process*
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 Threshold, Process, Otherwise Use, Metal Compounds, Electroplating

138. A covered 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.

Multiple Activity Threshold, Manufacturing

139. At a mining *facility*, sulfuric acid aerosol is sprayed onto a copper ore pile to leach copper sulfate for further *processing*. How should the *facility* make threshold determinations for sulfuric acid?

Sulfuric acid is reportable only in aerosol form. Therefore, the *facility* *manufactures* sulfuric acid (acid aerosol) each time the acid passes through the spray mechanism. In this particular example, the acid converts to copper sulfate, which is subsequently reacted to generate sulfuric acid and is applied to the ore pile. Because the *facility* generates another listed *toxic chemical* (copper sulfate), the *facility* must count the amount of sulfuric acid (acid aerosol) *manufactured* each time it passes through the spray mechanism, and apply this amount to the *manufacturing* threshold of 25,000 pounds for sulfuric acid (acid aerosol), in addition to considering amounts of copper sulfate that are also *manufactured*. Because all the sulfuric acid (acid aerosol) *manufactured* is subsequently *otherwise used*, the *facility* must apply this same amount towards the *otherwise use* threshold of 10,000 pounds. Facilities are also directed to refer to the Guidance for Reporting Sulfuric Acid (EPA-745-R-97-007; November 1997) for further assistance.

Multiple Activity Thresholds

140. At a covered mining *facility*, hydrochloric acid aerosol is sprayed onto an ore pile to leach minerals for further *processing*. According to Guidance for Reporting Sulfuric Acid, the total volume of acid should be

counted towards the manufacturing threshold of 25,000 pounds. Should this quantity also count towards the *otherwise use* threshold?

Yes, because the *facility* is *otherwise using* the hydrochloric acid (acid aerosol) as a leaching agent to enable minerals leached to then be *processed*.

Multiple Activity Thresholds, Cyanide Compound, Gold Leaching Operations

141. A covered metal mine uses cyanide compounds in a gold leaching operation to extract gold from ore. The cyanide compound reacts with gold to form gold cyanide. The gold cyanide is then reacted to generate gold metal and sodium cyanide. The sodium cyanide is used to leach more gold from the ore pile. How should the covered metal mine consider these cyanide compounds for EPCRA Section 313 threshold purposes?

In the gold leaching operation, the covered mine is *otherwise using*, *processing*, and *manufacturing* cyanide compounds. The cyanide compounds that react with the gold in the ore (e.g., sodium cyanide) are *otherwise used*. The gold cyanide *manufactured* in this reaction are considered towards the *facility*'s *manufacturing* threshold for cyanide compounds. The gold cyanide compound is also *processed* as a reactant because the gold from the compound is distributed in commerce.

Multiple Activity Thresholds, Mining Disposal, Injection, Leaching System, Sulfuric Acid

142. Sulfuric acid is injected into a Class II well for the purpose of in-situ leaching, not for the purpose of waste *disposal*. The in-situ leaching is a recirculating system and as sulfuric acid is injected into the well, low concentrations of metals are solubilized, brought to the surface, and the metals are subsequently separated from the sulfuric acid solution and distributed in commerce. Some of the metal compounds that are solubilized remain with the sulfuric acid solution and are reinjected into the in-situ recirculating leaching system. Would the amount of metal injected back into the Class II well be reported in Part II, Section 5.4 if an activity threshold is exceeded?

There are several activities that are taking place in the above scenario that the *facility* needs to consider in terms of EPCRA Section 313 reporting. The injection of sulfuric acid solution to extract certain metals is likely to result in the formation or *manufacturing* of listed *toxic chemicals* such as metal sulfate compounds. The amounts of listed *toxic chemicals manufactured* must be considered toward the *facility*'s *manufacturing* threshold. The metal compounds are also being recovered for subsequent distribution in commerce, and these amounts must be considered toward the *processing* threshold. Metal compounds that are being reinjected are being *released*, but for purposes of EPCRA Section 313 reporting, amounts of listed *toxic chemicals* reinjected and recirculated are not reportable as *released* provided that these amounts continue to be circulated. Any amounts known to escape the "recirculating/leaching system" and remain in the leaching zone or otherwise escape within the reporting year would be considered a *release*.

Multiple Activity Thresholds

143. A *facility manufactures* an aluminum dust that is captured in a bag house, the dust is put into a smelter, and then put back into the process where it is recast into ingots, and sold. How is the dust considered for purposes of determining thresholds and estimating *releases* and *waste management* activities?

The *facility* must count the amount of aluminum dust that is *manufactured* toward the *manufacturing* threshold. The amount of aluminum dust that is collected and recast into ingots and sold is incorporated into a product that is distributed in commerce. These amounts are considered to be *processed* and must be counted toward that *processing* threshold. The aluminum dust that is captured from the pollution control device and put back into the process is reported in Part II, Section 8.6 (Quantity Treated On-Site) because the aluminum dust is converted to a non-listed form of the chemical.

Activity Threshold, Blending

144. A TSD *facility* receives naphthalene from off site. The naphthalene is reacted with sodium to produce sodium naphthalene. The sodium naphthalene is reacted with PCB-contaminated oil to remove the PCB contaminants. The resulting oil, now containing naphthalene, is sent off site for further distribution in commerce. Is the naphthalene considered to be *manufactured*, *processed*, and/or *otherwise used*?

Yes. The naphthalene has been *manufactured*, *processed* and *otherwise used* by the TSD *facility*. When the TSD *facility* reacted the naphthalene with the sodium to produce a compound capable of removing the PCB contaminants, the *facility otherwise used* the naphthalene. The reaction of the sodium naphthalene with the PCB-contaminated oil *manufactured* naphthalene as a component of the oil. Finally, the distribution of the naphthalene in the oil in commerce constitutes *processing*. Accordingly, the *facility* would have to consider all three activity thresholds; *manufacturing*, *processing*, and *otherwise use*.

Activity Threshold, Process, Otherwise Use, Adhesive, Process vs. Otherwise Use

145. A *facility* covered under EPCRA Section 313 *manufactures* shoes. During production the *facility* uses adhesives that contain solvents such as 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 *toxic chemical* does not function as a component of the shoe, 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.

Process vs. Otherwise Use, Purpose Behind Incorporation, Flotation Agent, Process, Otherwise Use

146. A covered coal mine uses a flotation agent containing listed *toxic chemicals* to clean coal. Some of the flotation agent remains on the coal, which is then distributed into commerce. The *facility* chooses the flotation agent for the purpose of cleaning the coal and not to add value to the coal product. Has the *facility processed* the amount of the listed *toxic chemical* that adheres to the coal from the flotation agent?

No. In this example the *facility* is *otherwise using* the listed *toxic chemicals* that are components of the flotation agent. Amounts of listed *toxic chemicals* contained in the flotation agent must be considered toward the *facility*'s *otherwise use* threshold. The *facility* is using these listed *toxic chemicals* for the purpose of cleaning the coal and not for the purpose of adding value to the coal product.

Activity Threshold, Process, Impurity, Process vs. Otherwise Use

147. 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*.

Process, Solvents

148. A *facility* feeds 50,000 pounds of solvent containing 50 percent MIBK and 50 percent glycol ether into a recycling *process*. The *facility*'s intent is to recover as much of the organics as possible and distribute the organics into commerce. The *facility* is primarily concerned with the recovery of MIBK. The product specification of the resulting solvent requires a specific concentration range for MIBK, but the amount of glycol ether in the final product does not matter. How does the *facility* consider amounts of glycol ether?

Given that the *facility* knows that glycol ether is recovered with the desirable MIBK, the *facility* should count all amounts of glycol ether that enter the recovery system toward the *facility*'s *processing* threshold.

Process, Impurity

149. Are trace metals in ore that remain in the product and are in the same form as extracted considered *processed*? What if the trace metals that were extracted do not remain in the product?

Amounts of listed *toxic chemicals* that remain with the product (metal concentrate) that are distributed in commerce are considered *processed* and these amounts must be factored into the *facility*'s *processing* threshold. Amounts of listed *toxic chemicals* in *mixtures* and *trade name products* that are *processed* are eligible for the de minimis exemption. Any trace metal or

other listed *toxic chemical* that is completely removed from the *facility*'s product prior to distribution and disposed, would not count toward the *facility*'s *processing* threshold, but would need to be considered in *release* and other *waste management* calculations if the *facility* has exceeded thresholds for the listed *toxic chemical* elsewhere.

Coal Mine, Ethylene Glycol, Process vs. Otherwise Use

150. A covered coal mine applies ethylene glycol to coal to prevent freezing during on-site activities. The ethylene glycol remains on the coal that is sold. However, the purchaser does not request ethylene glycol, and the ethylene glycol does not add any value to the coal. Is the ethylene glycol *processed* or *otherwise used*?

The ethylene glycol is *otherwise used*. The *facility* is using the ethylene glycol solely for the purpose of preventing the coal from freezing at the *facility*. However, if the *facility* adds the ethylene glycol to the coal to protect it from freezing during transfer, the *facility* has intentionally incorporated the *toxic chemical* into its product for distribution in commerce and, therefore, is *processing* the *toxic chemical*.

Activity Threshold, Coincidental Manufacture

151. 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 Threshold, Coincidental Manufacture, Wastewater Treatment

152. 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 they must be included in *activity threshold* determination and their *release* or other *waste management* must be considered.

Activity Threshold, Coincidental Manufacture, Adhesive, Neutralization

153. A *covered 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*.

Coincidental Manufacture, Metal Compounds

154. Do *covered facilities* need to consider the inadvertent conversion of one metal compound to another as *manufacturing*? For example, a pulp and paper mill inadvertently converts metal carbonates and oxides in wood to metal sulfides during pulping. Is this a covered *manufacturing* activity?

Yes. *Manufacturing* is not limited to intentional *manufacturing*; it also includes coincidental *manufacture* or, inadvertent *manufacture*. In general, anytime one metal compound has been converted to another metal compound, the *facility* must count the new metal compound towards the *manufacturing* threshold. The fact that the parent metal is the same in both compounds does not negate the fact that a new metal compound has been *manufactured*.

Activity Threshold, Process

155. 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

156. 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 its function is such that it does not 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, in either case (manufacturing aid or processing aid), incorporation of the *toxic chemical* into the final product is not required for the chemical to perform its function, *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, Fumigants, Aluminum

157. A *covered facility* has 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 *manufacture* threshold for the reporting year.

Fume or Dust, Activity Threshold, Process

158. A *covered facility manufactures* a part from stainless steel bar which it then distributed in commerce. 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 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.

Fume or Dust, Process, Activity Threshold, Ingots

159. A *facility* melts aluminum ingots, reshapes them, and injects them into die to form parts which it then distributes in commerce. 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 Threshold, Lead Deposits

160. A remanufacturer of auto engines cleans the engine parts and thereby produces a lead-containing waste (from gasoline lead deposits) which it sends off-site for *disposal*. Does the *facility manufacture, process,* or *otherwise use* 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 a threshold determination. The *facility* does not *manufacture*, *process*, or *otherwise use* lead compounds.

Fume or Dust, Mixture, Process, Threshold Determination

161. 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, bars, 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 Threshold, Chromium, Refractory Brick, Metal Compounds

162. 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. However, for this *processing* step, the de minimis exemption may be taken. 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 Threshold, Process, Repackage

163. A multi-*establishment facility*, with a primary SIC code of 2911 operates a petroleum bulk plant, with SIC code 5171. The bulk plant 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.

Repackaging via Pipeline

164. A petroleum bulk plant receives petroleum via pipeline. The petroleum goes from the pipe into a storage tank and exits the *facility* again through the pipeline. It is then sent to another petroleum bulk plant within the same company but located on non-contiguous and non-adjacent property, which distributes the petroleum into commerce (i.e., their customers). Did the first plant repackage and therefore *process* the petroleum?

Yes. The petroleum received via pipeline, stored and subsequently transferred to another *facility* has been repackaged and the listed *toxic*

chemicals have been distributed in commerce. Amounts of listed *toxic chemicals* contained in the amount repackaged must be considered toward the *processing* threshold.

Activity Threshold, Otherwise Use, Solvents

165. If a solvent that is a listed *toxic chemical* is used to clean an apparatus but does not become part of the final product, is the chemical covered for reporting purposes under EPCRA Section 313?

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 Threshold, Otherwise Use

166. A *covered facility* uses paint thinners in its operations. 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

167. 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 Threshold, Process, Otherwise Use

168. A *covered 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 Threshold, Process, Repackage

169. 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, repackaging for distribution in commerce 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*.

Repackaging, Processing

170. A *covered facility* receives a chemical in bulk and repackages it into smaller containers that are sent to consumers. Are amounts repackaged considered toward an activity threshold?

Amounts of the *toxic chemical* that a *covered facility* repackages for distribution in commerce must be considered toward the *processing* threshold amount of 25,000 pounds per listed *toxic chemical*.

Repackaging

171. A *covered facility* receives a chemical in bulk, repackages the chemical into reusable containers that are sent to customers, who then return the containers to be refilled. How does the *facility* consider residual amounts of the product returned to the *facility* in used containers, which are then subsequently refilled and redistributed in commerce?

When the *facility* originally places the *toxic chemical* into the reusable containers, the *facility* is *processing toxic chemicals*. Because the residual amounts that are returned to the *facility* in the reusable containers are not transferred to other containers or packages, the residual amounts have not been repackaged. Therefore, the listed chemicals in the residual amounts do not have to be considered toward the *facility*'s *processing* threshold again.

Repackage, Recycle

172. After an EPCRA Section 313 *toxic chemical* is spent, a *covered facility* removes waste containing the *toxic chemical* from the production *process* and places it into drums. The *facility* sends these drums containing 30,000 pounds of the *toxic chemical* off-site to be recycled. The *facility* exceeds the 25,000 pound *processing* threshold for this *toxic chemical* and is required to file a Form R for the listed toxic chemical. What is the appropriate box to check in Part I, Section 3.2 of the Form R?

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 act of repackaging an EPCRA Section 313 *toxic chemical* and then transferring it off-site for recycling is considered *processing*. As such, facilities sending *toxic chemicals* in wastes off-site for recycling should check "repackaging" in Part I, Section 3.2 of the Form R.

Activity Threshold, Process, Otherwise Use, Paint

173. 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 different 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 their function is such that they do not become incorporated into the *article*.

Activity Threshold, Otherwise Use

174. 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 evaporated 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, Treatment, Release Reporting, Fertilizer

175. 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 the 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 as a release to land, regardless of whether it is a purchased product or a waste.

Fertilizer, Land Treatment/ Application Farming

176. If a manufacturing *facility* that has a farming area applies a *toxic chemical* in waste generated on-site to land on-site, for use as a fertilizer, must the *facility* report the amount of the *toxic chemical* on the Form R? Should the *facility* also report any volatilization of the *toxic chemical* that occurs during land application, on the Form R?

Yes. Chemicals applied to land during use for farming are *released* to the *environment* and are to be reported as such. In addition, the chemicals are being *otherwise used*. Whether or not the *facility* intends the use during farming to be a *disposal* method, the *facility* must report the quantity of the *toxic chemical* in waste *released* to land in Section 5.5.2 (Land Treatment/ Application Farming) of the Form R.

The *facility* must report that portion of the *toxic chemical* that volatilizes from the land application unit during the same reporting year in Section 5.1 (Fugitive Air Releases) of the Form R. This quantity would not be included in the *releases* reported to land in Part II, Section 5.5.2. The sum of the amounts *released* to land and to air must be included in Section 8.1 of the Form R.

Process, Repackage, Article Component

177. 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" in Part II, Section 3.2(e) of the Form R?

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 Threshold, Process, Chlorine

178. 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?

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* or other *waste management* of chlorine must be reported.

Activity Threshold, Process, Otherwise Use, Methylenebis (Phenyliso-cyanate), Mold

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

Activity Threshold, Process, Toll Processor, Pesticides

180. 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, these activities constitute *processing*. 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*. Assuming that the primary SIC code of the agri-chemical manufacturer is a *covered SIC code* (e.g., 2875 and not 0711), and they meet the employee criterion, the agri-chemical manufacturer must make threshold determinations based on the amount of any listed *toxic chemical* it *processes* as well as any other *manufacture* or *otherwise use* activities that occur at its *facility*.

Coincidental Manufacture, Ammonia

181. 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 Threshold, Otherwise Use, Ammonia, Manufacture

182. 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 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 *manufacture* threshold.

Activity Threshold, Process, Redistribute, Storage

183. 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 Threshold, Process, Waste, Recycle

184. 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 to recycle. Must the *facility* report for the listed *toxic chemicals* in waste? Is it *processing* these chemicals under Section 313

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. The quantity of the *toxic chemical* sent off for recycling should be reported in Part II, Sections 6.2 and 8.5. If the *toxic chemicals* in the waste were not distributed into commerce (e.g., if the *toxic chemicals* were sent off-site for disposal), the *facility* would not be *manufacturing*, *processing*, or *otherwise using* the *toxic chemical*.

Coincidental Manufacture, Byproduct, Threshold Determination, Concentration Information

185. 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 a reasonable 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 Threshold, Process, Otherwise Use, MDI

186. 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*. Is the *facility processing* or *otherwise using* the MDI?

The MDI would be subject to the *processing* threshold, since it is incorporated into a product that is further distributed in commerce.

Activity Threshold, Otherwise Use, Methanol, Packing Medium

187. 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 methanol, in this instance, is being *otherwise used*. The owner/operator must consider the methanol used to cool material X in its threshold determinations and *release* and other *waste management* calculations

Activity Threshold, Otherwise Use, Xylene

188. A *facility* uses 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, nor is it distributed into commerce.

Activity Threshold, Otherwise Use, Ammonia

189. An engineering company performs reduction processes. In a NOx 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* or other *waste management* of ammonia.

Activity Threshold, Process, Ammonia, Chemical Conversion, Otherwise Use

190. 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 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, Ammonia

191. 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?

Because aluminum has a fume or dust qualifier, aluminum would be reportable under EPCRA Section 313 if a fume or dust were generated (i.e., *manufactured)* during welding, diecasting, buffing, grinding, or other operations above 25,000 lbs. If the aluminum is incorporated into a product in a fume or dust form, the *processing* threshold must also be considered.

Activity Threshold, Process, Fuel

192. A *covered facility* 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 EPCRA Section 313 threshold determinations and *release* and other *waste management* calculations, the listed *toxic chemicals* present in the fuel are considered to be *processed* because they are being repackaged and 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

193. 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 pound threshold is exceeded, then all *releases* and other *waste management* of lead would be reported from both the newly added bricks and those installed in previous years. Neither the lead contained in the refractory bricks in the inventory (i.e., not yet installed), nor the lead in place, 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.

Activity Threshold, Process, Repackage

194. A *covered 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 that toxic chemical into another container. Simply repackaging one container (that contains a *toxic chemical*) into another container does not constitute *processing* of that listed *toxic chemical* under EPCRA Section 313. The nesting of containers is not repackaging for EPCRA Section 313 purposes.

Repackaging, Breaking the Seal

195. Does breaking the integrity of the package that contains the *toxic chemical* constitute repackaging?

No. The listed *toxic chemical* must be transferred from one package to another in order for the listed *toxic chemical* to be considered repackaged.

Repackaging, Breaking the Seal

196. A *facility* receives a waste from off-site, samples the waste, and then sends the remaining waste off-site to be recycled without changing the packaging. Has the *facility processed* the listed *toxic chemical* in the waste?

No. Provided that the listed *toxic chemical* transferred to the off-site *facility* remains in the packaging in which it was received, it has not been repackaged. The *facility* has simply opened the original package for sampling and transferred the listed *toxic chemical* to another *facility*. Because no repackaging has occurred, no *processing* has taken place.

Activity Threshold, Process, Reclamation, Solvents

197. 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 (i.e., the reclaimed *toxic chemical*). Therefore, the reclamation *facility* is *processing* the *toxic chemical* in the waste solvent it receives. Assuming the reclamation *facility* is a *covered facility*, 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

198. 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.

Definition of Commerce, Distribution Restricted to One Facility

199. An electricity generating *facility* produces power using coal and/or oil. All of the power generated at the *facility* is used to support one other *facility* within the same company that operates off-site from the electricity generating *facility*. Is the electric power produced by the electricity generating *facility* considered to be distributed in commerce for purposes of determining if the *facility* is covered by EPCRA Section 313?

Yes. The electricity generating *facility* is classified within the SIC codes of 4911, 4931, or 4939 and combusts coal and/or oil for purposes of generating power for distribution in commerce. Supplying electricity to a *facility* off-site is considered generating power for distribution in commerce. For purposes of EPCRA Section 313 reporting, it does not matter that the sole user of the electricity produced by the electricity generating *facility* is part of the same company.

Process, Intracompany Transfer, Formalde-hyde, Economic Benefit

200. 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, Intracompany Transfer, Economic Benefit

201. Company A stores oil at their Storage Facility 1 . Company A transfers oil from Storage Facility 1 to their Storage Facility 2 (a separate *facility* for EPCRA Section 313 purposes). From Storage Facility 2, the oil is distributed to customers. Does the transfer from Storage Facility 1 to Storage Facility 2 constitute *processing* on the part of Storage Facility 1?

Yes. Under EPCRA Section 313, *processing* 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, Intracompany Transfer, Economic Benefit

202. A mine sends a metal concentrate for smelting to another *covered facility* owned by the same company. Has the mine distributed *toxic chemicals* in the concentrate into commerce, and therefore, *processed* them?

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.

Process, Steps Taken by Different Facilities

203. Facility 1 receives a spent solvent, repackages it, and sends it off-site to a recycling *facility* (Facility 2). Facility 2 recovers the solvent and returns it to Facility 1 who then repackages it to be distributed into commerce. Does Facility 1 count the *toxic chemical* in the solvent twice toward the *processing* threshold (i.e., when it is distributed off-site for recycling and when they distribute the recovered solvent into commerce)?

Yes. Amounts of listed *toxic chemicals* that are transferred off-site for recycling are considered *processed* and Facility 1 *processed* the listed *toxic chemical* when it was sent off-site for recycling. Facility 2 who recovers the listed *toxic chemical* also *processed* amounts recovered, which were subsequently distributed back to Facility 1. Facility 1 then receives amounts of the listed *toxic chemical* recovered by Facility 2 and Facility 1 repackages the listed *toxic chemical* and further distributes it in commerce. Therefore, Facility 1 must, once again, include these amounts toward their *processing* threshold. While this may seem to be a double counting of the same amounts of the listed toxic chemical, the activities are completed at each interval and are clearly taking place at multiple locations. Each activity is independently performed and there is no double counting within the same activity step.

Process, Double Counting, Multiple Process Steps

204. 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, Multiple Process Steps

205. How does a *facility* consider multiple activities within the same threshold activity, such as multiple repackaging steps, or blending followed by repackaging?

Amounts of a listed *toxic chemical* undergoing multiple activities on-site within a single threshold activity are counted only once during the activity sequence. For example, if a *facility* receives a bulk quantity of a chemical that it then places in a storage container from which amounts are subsequently blended and placed in smaller containers that are sold, the *facility* has prepared for distribution in commerce the entire amount of the chemical, and therefore, the *facility* has *processed* the entire amount of the listed *toxic chemical*.

Process, Metal Compounds, Chemical Conversion

206. The preamble to the May 1, 1997, Final rule (62 FR 23834) says that extraction of ore containing *toxic chemicals* for subsequent distribution in commerce constitutes the *processing* of those listed chemicals. Does this mean that metal compounds in extracted ore are *processed*, even if they are later converted to different compounds prior to their actual distribution in commerce (i.e., the extracted compound is considered a *process* intermediate)?

Yes. Amounts of materials that undergo a processing step (extraction) as part of the *facility*'s preparation of a material for distribution in commerce are considered *processed* and must be considered toward the facility's *processing* threshold because a part of the original metal compound is incorporated into the product which is ultimately distributed in commerce.

Process, Repackage

207. A *covered 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 of a listed *toxic chemical* transferred from the rail cars to the tank trucks in its *processing* threshold for that chemical.

Activity Threshold, Manufacture, Compounds, Compounding, Process

208. The EPCRA 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 Threshold, Otherwise Use, Formaldehyde

209. 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*.

Metal Mining, Overburden, Waste Rock, Otherwise Use, Regrading

210. A covered metal mining *facility* is required by other environmental laws to regrade (i.e., recontour) their *overburden* and/or waste rock piles. Is the *covered facility* required to consider the amounts of listed *toxic chemicals* in the pile toward their *otherwise use* threshold?

Provided that materials remain within the same *disposal* unit, the *facility* is not conducting a threshold activity, nor is the *facility releasing* materials that would have to be considered for reporting. If the *facility* regrades the material outside of the *disposal* unit, for use as road building material for example, then the *facility* is *otherwise using* the previously disposed material and would have to consider amounts of listed *toxic chemicals* contained in these materials for threshold determinations and *release* and other *waste management* calculations.

G. Importing

Import, Broker

211. 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, then your *facility* "*imported*" the *toxic chemical*. You are considered to have *imported* a toxic chemical if you have 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

212. Should the amounts of a chemical created and *imported* be added together to count towards the *manufacturing* threshold?

Yes. Because EPCRA Section 313 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, Customs Territory of U.S.

213. For purposes of considering listed *toxic chemicals* to be *imported* under EPCRA Section 313, are the U.S. Virgin Islands within the *customs territory* of the United States?

No. The U.S. Virgin Islands are not within the *customs territory* of the United States. The *customs territory* of the United States is comprised of the 50 States, the District of Columbia, and Puerto Rico. The 50 States do not include Guam, American Samoa, the U.S. Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction. Therefore, listed *toxic chemicals* that come from the U.S. Virgin Islands into the U.S. *customs territory* would be considered *imported* under EPCRA Section 313.

Import, Foreign Trade Zone

214. 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 or the Alternate Certification Statement (Form A). The only exception would be if the chemical were *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 the intention of

distribution into the U.S., then the chemicals that were used for the portion entering U.S. commerce are counted toward the activity threshold. Please remember, there are other EPA *importing* requirements under other environmental statutes.

Otherwise Use, Manufacture, Importing Waste

215. A *facility imports* a *toxic chemical* in waste from outside the U.S. and treats the entire amount of the *toxic chemical* for destruction. Has the *facility manufactured* or *otherwise used* the toxic chemical?

Both. The *facility* must apply the amount of the *toxic chemical* toward both the *manufacture* and *otherwise use* activity thresholds. The *facility* caused the *toxic chemical* to be *imported*, and therefore *manufactured* the toxic chemical. The *facility* then treated the toxic chemical, which was received in waste from off-site, for destruction. Thus, the *facility* also *otherwise used* the *toxic chemical*.

Import, Toll Processor, Threshold Determination

216. 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 *manufacture* threshold for that *toxic chemical*?

The toll processor has not caused the listed *toxic chemical* to be *imported*. Therefore, the toll processor is not subject to the *manufacturing* threshold. However, if the toll processor repackages the *toxic chemical* before distributing it to Facility A, they are subject to the *processing* threshold for that listed *toxic chemical*. 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, the facility is still subject to reporting because the act of *importation* is considered *manufacturing*.

Import, Warehouse

217. A *facility imports* a listed chemical, but it is *imported* directly to stand-alone warehouses (not owned by the *facility*). 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 independently 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, Actual Receipt

218. A TSDF regulated under RCRA Subtitle C imports a waste that contains a listed EPCRA Section 313 chemical. The waste is received by a transfer *facility*, and the transfer *facility* sends it to a final TSDF. This final TSDF did not initiate the *importation*. Who has *imported* the waste?

For purposes of EPCRA Section 313 reporting, the *importing facility* never takes physical possession of the waste, therefore, no *facility* in this scenario would count amounts of listed *toxic chemicals* in the waste toward their *manufacturing* threshold based on *importation*. To be considered an *importer* the *facility* receiving the material from a source outside the *customs territory* must have *imported* or "caused the material to be *imported*." If the ordering *facility* receives the shipment, then the ordering *facility* has *imported* the listed *toxic chemicals* in the waste shipment and must consider these amounts toward their *manufacturing* thresholds. However, if the ordering *facility* directs another *facility* to receive the shipment, then the receiving *facility* has not *imported* the shipment, and neither has the ordering *facility* for purposes of EPCRA Section 313 because the listed *toxic chemicals* were not brought on-site of the ordering *facility*. Regardless, the receiving *facility* would need to consider amounts received for the purpose of further *waste management* toward their *otherwise use* threshold if they *treat for destruction, stabilize*, or *dispose* the *toxic chemical*.

Import, Broker

219. A TSDF regulated under RCRA Subtitle C requests certain types and quantities of waste containing *toxic chemicals* from an import/export broker. The broker then forwards the waste to the TSDF for *waste management*. Who caused the *toxic chemical* to be *imported*?

The TSDF caused the *toxic chemical* to be *imported* into the *customs territory* of the United States and must count the amount *imported* towards its *manufacturing* threshold. By ordering the waste containing listed *toxic chemicals*, the TSDF "caused it to be imported," even though it used an *import* brokerage firm as an agent to obtain the *toxic chemicals*. This TSDF would also need to consider amounts received for the purpose of further *waste management* toward their *otherwise use* threshold if they *treat for destruction*, *stabilize*, or *dispose* the listed *toxic chemical*.

Import, Purchasing Agent

220. The corporate office for a chemical distribution company directly purchases products which will be shipped to several of its chemical distribution facilities. The corporate purchasing department purchases one of these products, which contains a section 313 chemical, from a foreign source. The product is shipped directly to one of its chemical distribution *facilities*. Did the individual *facility* cause the *importation* of the section 313 chemical thereby requiring it to apply the 25,000 pound *manufacturing* threshold to the quantities of this material received by the *facility* in the reporting year?

If the chemical distribution *facility* that actually received the product did not have any input regarding the quantity or identity of the *toxic chemical*, the *facility* did not cause the *importation* of the *toxic chemical* in the product and does not have to apply the listed chemical in the product to its *manufacturing* threshold. To be considered an *importer* the *facility* receiving the material from a foreign source must have *imported* or "caused the material to be imported." If the ordering *facility* receives the shipment, then the ordering *facility* has *imported* the listed *toxic chemicals* and must consider these amounts toward their *manufacturing* thresholds. However, if the ordering *facility*, on its own initiative, directs another *facility* to receive the shipment, and that other *facility* has no input in deciding whether it will receive the toxic chemical, then the receiving *facility* has not *imported* the shipment and the ordering *facility* has also not *imported* the shipment for purposes of EPCRA Section 313 because the listed *toxic chemicals* were not brought on site of the ordering *facility*.

Import, Broker

221. A *facility* did not specify a source for a material broker to obtain a listed *toxic chemical*, but the *facility* learns that the only U.S. *manufacturer* of the chemical has gone out of business. Therefore, is the *facility* *importing* the chemical, making the *facility* 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*.

Import, Purchasing Agent

222. A chemical distributor arranges the *importation* of a material containing a *toxic chemical* by specific request from a customer. The material goes directly to the customer. The material never enters the boundaries of the chemical distributor's *facility*. Who should count the amount of *toxic chemical* towards the *manufacturing* threshold?

The customer has caused the *toxic chemical* to be *imported* into the *customs territory* of the United States. If the customer is a *covered facility*, the

customer must count the amount of the listed *toxic chemical imported* that enters their *facility* toward the *manufacturing* threshold. The chemical distributor acted as an agent for the customer, and therefore, did not *import* the toxic chemical.

Import, Contractual Relationship

223. U.S. law requires that wastes produced in Mexico by an American owned company be sent back to the U.S. for further *waste management* (Maquiladora waste). When the *facility* operating within the U.S. receives the wastes, has it *manufactured* the *toxic chemicals* contained in the waste? Because this law requires that these wastes be returned to the U.S. for further *waste management*, did the U.S. *facility* receiving these wastes cause the wastes to be *imported*?

Yes. The receiving *facility* either has a contract or agreement in place to receive *imported* waste and is functioning as the *importing facility*. Amounts of listed *toxic chemicals* received in waste must be counted toward the *manufacturing* threshold. The receiving *facility* would also need to consider amounts received for the purpose of further *waste management* toward their *otherwise use* threshold, if they *treat for destruction*, *stabilize*, or *dispose* the *toxic chemical* on-site.

H. Auxiliary Facilities

Auxiliary Facility, Reporting Criteria

224. 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 located on *multi-establishment facilities* should be included in *facility* threshold determinations and *release* and other *waste management* calculations. For example, a spill of a *toxic chemical* from the on-site warehouse would be included in the *covered facility's release* quantities.

Definition of Auxiliary Facility

225. A retail gas station sells only products supplied by one covered bulk petroleum station. Is the retail gas station considered an auxiliary *facility* and therefore does it take on the *covered SIC code* of the bulk petroleum station?

No. While the retail gas station sells only products supplied by the covered bulk petroleum station it is not an auxiliary *facility* because it does not support the operation of the bulk petroleum station (i.e., the retail sale of gasoline and other petroleum products is a distinctly separate activity that benefits the gas station as opposed to benefitting the bulk petroleum station).

An auxiliary *facility* is one that supports another *facility's* activities. An auxiliary *facility* can assume the SIC code of another *covered facility* if its primary function is to serve that other *covered facility*'s operations.

Auxiliary Facility, SIC Code

226. 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 Responsibility

227. A chemical distribution *facility* has an off-site chemical bulk storage unit on a non-contiguous property that is typically unmanned. When filling orders for customers, the *facility* sends trucks to the off-site bulk storage unit, "drums-off" a specified amount and delivers the order to the customer. What reporting is required for the chemicals that are *processed* at this off-site location?

The off-site location may itself be classified as a chemical distribution *facility* and be covered in terms of its SIC code designation. The off-site bulk storage *facility* may also assume the SIC code of the covered chemical distributor that it supports and also be considered covered. In terms of determining if the off-site *facility* meets the employee threshold, potentially requiring it to report, the *facility* should consider all of the hours spent servicing the units such as product delivery, tank clean-out, and construction in making that determination. If these hours add up to 20,000 hours over the course of the reporting year, the *facility* would meet the employee threshold and would be required to consider its chemical activities. It is possible that the type of employee hours associated with the off-site bulk storage *facility* would potentially exceed thresholds in one year and not in another.

Auxiliary Facility, SIC Code

228. A *covered facility* consists of three *establishments*. If a warehouse located on a non-contiguous/adjacent site 20 miles away solely supports one of the *covered facility*'s *establishment*s that is not within a *covered SIC code*, is that warehouse considered a *covered facility* because of its status as an auxiliary *facility*?

No. An auxiliary *facility* may assume the SIC code of the specific *establishment* or *establishment*s it supports. Because the auxiliary *facility* assumes a non-*covered SIC code*, it is not a *covered facility*.

Reporting Responsibility, Auxiliary Facility, SIC Code Determination

229. An electricity generating *facility* in SIC code 4939 combusts coal for generating power for distribution in commerce. A warehouse is located several miles away and stores materials for the electricity generating *facility*. While the warehouse serves as support to a *covered facility* and is considered an auxiliary *facility*, the warehouse does not combust coal or oil. Is the warehouse subject to EPCRA Section 313?

No. Although the warehouse is an auxiliary *facility*, and therefore assumes SIC code 4939 from the electricity generating *facility*, facilities in SIC code 4939 are only covered by EPCRA Section 313 if they also combust coal or oil for purposes of generating electricity for distribution into commerce. Since the warehouse does not combust coal or oil, it is not subject to reporting under Section 313.

Auxiliary Facility, SIC Code, Multi-establishment, Laboratory

230. 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* (40 CFR Section 372.22). In this case, the *facility* would not be subject to reporting because the primary SIC code is not within the *covered SIC code*s. However, if the laboratory is within the *covered SIC code*s because it is an auxiliary *establishment* providing research to support operations in the *covered SIC code*s, then the *facility* would be covered by Section 313.

Electricity Generating Facility, Auxiliary Facility, SIC Code Determination

231. An electricity generating *facility* in SIC code 4911 uses a separate *facility* (Facility A) for ash disposal. Facility A's primary function is to *dispose* ash generated at the electricity generating *facility*. Facility A does not produce electricity. Is Facility A, which is not contiguous or adjacent to the electricity generating *facility*, subject to EPCRA Section 313?

No. Although Facility A is an auxiliary *facility* and, therefore, assumes the electricity generating *facility*'s SIC code (4911), facilities in SIC code 4911 are only covered by EPCRA Section 313 if they also combust coal or oil for purposes of generating electricity for distribution into commerce. Since Facility A does not combust coal or oil for distribution into commerce, it is not subject to reporting under Section 313.

Auxiliary Facility

232. 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 unrelated *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* or enterprise. 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*.

Auxiliary Facility, Reporting Requirements

233. A reclamation center collects and sorts scrap metal received from many different *facilities* owned by the same corporate entity. This corporate entity also performs the reclamation center's payroll. Is this reclamation center considered an auxiliary *facility* and therefore subject to EPCRA Section 313 reporting requirements?

No. For the purposes of EPCRA Section 313, auxiliary *facilities* are primarily engaged in performing support services for another *facility*, or *establishment* of a primary company. In general, the company performs the auxiliary *facility*'s basic administrative services (e.g, filing paperwork, performing payroll activities, or employing the auxiliary *facility's* administrative staff). In addition, auxiliary *facilities* perform an integral role in the primary company's activities. Both of these factors must be present to establish an auxiliary *facility*. Because reclamation is not integral to the primary company's activities, the reclamation center does not play an integral role in the primary company's operations and it would not be considered an auxiliary *facility*.

I. Indian Lands

Indian Lands, EPCRA Reporting

234. 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. *TERC*s establish emergency planning districts and can appoint Local Emergency Planning Committees (LEPCs) or act as *TERC*s/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 *TERC*s maintain a broad-based representation, 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 *TERC*s 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 (MSDS*s) for hazardous chemicals under OSHA, and have hazardous chemicals or EHSs present above applicable threshold levels, to submit these *MSDS*s, or lists of such chemicals to *TERC*s, 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 *TERC*s, LEPCs, and local fire departments. It is the responsibility of *TERC*s 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*. *TERC*s 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 *TERC*s 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* and other *waste management* of *toxic chemicals* and prevent chemical accidents. EPA recognizes that resources are often limited on Indian lands, and EPA is committed to helping Indian tribes comply with EPCRA. EPA provides technical assistance, guidance, and training tailored to the needs of Indian tribes. EPA's Office of Chemical Emergency Preparedness and Prevention (CEPPO) can provide *TERC*s 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 *state*s, 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 *TERC*s 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 *TERC*s 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

235. Can the exempted uses of a *toxic chemical* remain exempted 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

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

No. EPCRA 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

237. Do office supply type products require coverage under EPCRA 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 exempted by the regulation, EPA interprets such *mixtures* or products to be equivalent to personal use items or materials present in a *facility*'s cafeteria, store, or infirmary (40 CFR Section 372.38(c)(3)).

Personal Use Exemption, Office Supplies

238. 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 exemption. The *release* of 1,1,1, trichloroethane in "white-out" is exempt.

Personal Use Exemption, Employee Comfort

239. 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 as "personal" use, by employees or other persons at the *facility*, the use of 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 (40 CFR Section 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.

Personal Use Exemption, Office Supplies

240. A *covered facility* uses ammonia in gas cylinders in their blueprint machines. A total of 12,000 pounds of reportable ammonia is used per year in this operation and the *facility* 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

241. A *covered 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

242. 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 exempt from EPCRA Section 313 reporting.

Personal Use Exemption, Air Conditioning

243. Are the listed *toxic chemicals* used in cooling equipment for air conditioning process control rooms eligible for the personal use exemption?

No. As provided in 40 CFR Section 372.38, the personal use exemption applies to the use of listed *toxic chemicals* limited to: personal use, by employees or other persons at the *facility*, of 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. This exemption is limited and does not include chemicals used in process related activities.

Personal Use Exemption, Process Related, Air Conditioning

244. Would a *facility* be required to report on the Section 313 chemicals in an air conditioning unit that cools a mine's process operation or production room in which employees must work? In other words, because the air conditioning unit is being used in a production process, could the personal use exemption for employee comfort still apply for these activities?

No. The "use exemption for personal uses by employees or other persons" was intended to apply to such incidental uses of *toxic chemicals* that may take place at a *facility* simply because of personal needs. The types of incidental chemical uses intended to be eligible for this exemption include 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. The use of chemicals to promote process related activities, including employee access to such process-related areas that would not otherwise be possible, is not incidental to the process, and therefore, must be considered toward threshold and *release* and other *waste management* calculations.

Personal Use Exemption, Administrative Setting

245. Is the use of *toxic chemicals* for employee comfort only applicable in an administrative setting for the personal use exemption?

The personal use exemption is limited to chemicals used in non-process related activities, which may include administrative activities. Amounts of listed *toxic chemicals* used for administrative purposes are eligible for the personal use exemption and do not have to be considered toward threshold or *release* and other *waste management* calculations.

Personal Use Exemption, Ammonia, Sewage

246. 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 ammonia that is emitted in the sewage?

Yes. The ammonia present in the sewage is being coincidentally *manufactured* as a result of the waste decomposition. Quantities of the *toxic*

chemical that are coincidentally *manufactured* are not eligible for the personal use exemption. This exemption only covers the *otherwise use* of *toxic chemicals*, not their *manufacture*. The *facility* should report that it has *manufactured* ammonia as a by product in Part II, Section 3.1(e). In addition, to the extent that the *facility* has knowledge concerning the quantity of the ammonia manufactured from the waste decomposition, they should report the quantity as transferred a POTW in Part II, Section 6.1, and as sent off-site for treatment in Part II, Section 8.7.

Personal Use Exemption, Sewage, Nitrate Compounds

247. A *facility* is treating sanitary waste and, as a result of the treatment, nitrate compounds and/or ammonia are coincidentally *manufactured*. Are the *manufactured* Section 313 chemicals considered exempt under the personal use exemption?

No. Exemptions provided in 40 CFR Section 372.38 apply to the use of listed *toxic chemicals*. These exemptions do not include *manufacturing* or *processing* of listed *toxic chemicals*, even if this results from an activity where the use is exempt. If a listed toxic chemical is coincidentally *manufactured* during an activity where the use of a listed *toxic chemical* is exempt, the chemical *manufactured* is not exempt and amounts *manufactured* must be considered toward threshold and *release* and other *waste management* calculations.

Intake Water Exemption

248. 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 eligible for 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.

Otherwise Use Exemption, Manufacturing During Use

249. Are *facilities* required to consider in threshold determinations and *release* and other *waste management* calculations, amounts of Section 313 chemicals *manufactured* from combustion during exempt *otherwise use* activities (e.g., from motor vehicles, personal use, routine maintenance, intake water, and structural component).

The exemptions defined at 40 CFR Section 372.38(c) are intended for *toxic chemicals otherwise used*. Amounts of *toxic chemicals manufactured* or *processed* during these "exempt" activities are not exempt.

Intake Water Exemption, Wastewater

250. If a *facility* uses process wastewater containing a listed *toxic chemical* on-site, are *toxic chemicals* in the wastewater exempt under the intake water exemption?

No. Since the listed *toxic chemicals* are not drawn from the *environment*, the *facility* must count the amount of the listed *toxic chemicals* toward threshold determinations and *release* and other *waste management* calculations.

Intake Water Exemption, Stormwater

251. A *covered facility otherwise uses*, as process water, wastewater or storm water that contains a *toxic chemical*. Is the *facility* required to count the amount of the *toxic chemicals* toward threshold determinations and *release* and other *waste management* calculations or would the section 313 chemicals be exempt under the intake water exemption?

The intake water exemption is specifically limited to *otherwise use* of *toxic chemicals* present in process water or non-contact cooling water that are drawn from the *environment* or from municipal sources. The above *facility otherwise uses* water in its process sequence and would not be required to account for amounts of listed chemicals contained in stormwater that is drawn from the *environment*. The *facility*, however, would have to account for amounts of listed chemicals acquired by the storm water after the storm water has run onto and off of equipment and buildings. Likewise, wastewater is not drawn from the *environment* and amounts of listed *toxic chemicals* in wastewater which are *otherwise used* are ineligible for the exemption and any information on amounts of listed *toxic chemicals* from wastewater would have to be considered toward threshold determinations and *release* and other *waste management* calculations.

Intake Water Exemption, Compressed Air

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

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 it would remain exempt. 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, Disposal of Intake Water, Underground Mine

253. A *facility* dewaters its underground mine and places the water in a surface impoundment. Are *toxic chemicals* in the water eligible for the intake water exemption and are they exempt from *release* and other *waste management* reporting?

No, because the *facility* is not *otherwise using* the water drawn from the underground mine the intake water exemption does not apply. In this scenario, the *facility* is simply disposing of the water containing these chemicals drawn from materials on site, and therefore, the *facility* is not

manufacturing, *processing*, or *otherwise using* chemicals and amounts of these *toxic chemicals* would not count toward thresholds. However, the *facility* is disposing of these chemicals and if a threshold is exceeded elsewhere at the *facility* for one of the same chemicals, then the *facility* would be required to report the amounts *released* to the surface impoundment.

Intake Water Exemption, Disposal of Intake Water, Underground Mine

254. A *facility* dewaters its underground mine and injects the water into a well on-site. Are the amounts of listed *toxic chemicals* injected considered a *release* to land, or are these amounts exempt under the "use of *toxic chemicals* present in process water and non-contact cooling water as drawn from the *environment*?" The water is not used, nor is it considered process water or non-contact cooling water.

No. The exemption for *toxic chemicals* contained in water drawn from the *environment* or from municipal sources is provided for the use of water containing these chemicals in *processes* and for non-contact cooling purposes. The *facility* is not *otherwise using* the water drawn from the underground mine, and therefore, the intake water exemption does not apply. The *facility* is simply disposing of the water containing listed *toxic chemicals* as drawn from on-site, and therefore, the *facility* is not *manufacturing*, *processing*, or *otherwise using* these chemicals. These amounts would not count toward thresholds. However, the *facility* is *disposing* of these chemicals and if a threshold is exceeded elsewhere at the *facility* for one of the same chemicals, then the *facility* would be required to count amounts injected as *released*.

Storm Run-off, Intake Water Exemption, Wastewater

255. A *covered facility* collects run-off from ore piles, natural topography, waste rock piles, and other on-site features in an on-site pit. The *facility* precipitates metals from the collected water by adding hydroxides to the pit. Is the resulting sludge, and any discharges from the pit, exempt from *release* and other *waste management* reporting under the intake water exemption?

The intake water exemption is specifically limited to *otherwise use* of *toxic chemicals* present "in process water and non-contact cooling water as drawn from the *environment* or from municipal sources". (40 CFR Section 372.38(c)(5)) In the scenario described above, the *facility* is actively using hydroxides to precipitate out metals. The *facility* is using storm water run-off as part of its process sequence to extract desirable materials. Amounts of listed *toxic chemicals* contained in storm water run-off are exempt from *otherwise use* threshold calculations, but any new listed *toxic chemicals* which are *manufactured* from the *facility's* use of the storm water must be counted toward the *facility's manufacturing* threshold. Likewise, any *toxic chemicals* that are recovered and distributed in commerce must be considered toward the *facility's processing* threshold. The *facility* would also have to

account for amounts of listed chemicals acquired by the storm water after the storm water has run onto and off of equipment and buildings.

Intake Water Exemption, Personal Use Exemption, Employee Comfort

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

You are not required to account for amounts of a listed *toxic chemical* present in water that you draw into your *facility* from the *environment* or municipal sources (40 CFR Section 372.38(c)(5)). 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 under the personal use exemption from threshold and *release* and other *waste management* calculations (40 CFR Section 372.38(c)(3)).

Intake Water Exemption

257. 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 the personal use exemption if the water is for the employees consumptive use on-site (40 CFR Section 372.38(c)(3)).

Intake Water Exemption, Processing of Intake Water

258. A *covered facility* dewaters its underground mine and sells the water which contains reportable *toxic chemicals* to other *facilities*. Are *toxic chemicals* in the water exempt from threshold determinations?

No. If a *facility* sells water that it extracts from its underground mine, it is *processing* the water and any listed *toxic chemicals* contained in the water must be considered toward threshold determinations and *release* and other *waste management* calculations.

B. Facility Maintenance and Structural Components

Facility Maintenance Exemption, Process Equipment Maintenance

259. 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

260. 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

261. 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, Similar in Type or Concentration, Manufacture

262. An EPCRA Section 313 *covered facility* uses 55-gallon drums of paint containing a listed *toxic chemical* to paint lines on the roads. 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 in type and concentration to consumer products, the listed *toxic chemicals* in the paint would be exempt from EPCRA Section 313 reporting requirements. However, if the paint is used for process-related roads or equipment, such as airstrips at federal *facilities*, the exemption would not apply.

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

263. A *covered 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. However, the *facility* owner/operator should also be aware that the 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

264. 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, *toxic chemicals* used for routine janitorial or *facility* grounds maintenance are exempt.

Facility Maintenance Exemption, Otherwise Use

265. A *covered facility* uses a contact cleaner to clean relays 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 a janitorial use and does not relate to *facility* grounds maintenance. The use is integral to the production processes of the *facility*. Therefore, the amounts of the listed *toxic chemicals* in the cleaner must be included in the calculation of *otherwise use* for the *facility*.

Facility Maintenance Exemption, Otherwise Use, Cooling Towers

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

No, such pesticides would not all fall under the routine maintenance exemption. The *otherwise use* threshold would apply.

Facility Maintenance Exemption, Pesticides

267. 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* grounds 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 determinations. If the *otherwise use* threshold is exceeded, the *facility* should report the application of pesticides in Section 5.5.4 (Other Disposal).

Facility Maintenance Exemption, Dust Suppressant, Ancillary Uses

268. Does a listed toxic chemical that is applied to a road as a dust suppressant qualify for the routine *facility* grounds maintenance exemption (40 CFR Section 372.38(c))?

The application of a dust suppressant that contains listed *toxic chemicals* to land surfaces at the *facility* is beyond the scope of the "*facility* grounds maintenance" exemption. Listed *toxic chemicals* contained in *mixtures* used as dust suppressants are not eligible for the "*facility* grounds maintenance" exemption. The original intent of the *facility* grounds maintenance exemption was to provide facilities relief from tracking such ancillary uses of chemicals involved with such routine activities as janitorial cleaning supplies, fertilizers, and pesticides that are similar in type and concentration to consumer products. Dust suppressants are not products that are generally considered similar to consumer products. The large scale use of dust suppressants likely to occur at a mining extraction *facility* is considered integral to the *facility*'s process operations and of such a magnitude that amounts of listed *toxic chemicals* used for dust suppression are not eligible for the "*facility* grounds maintenance" exemption.

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

269. Would the structural component exemption apply to welding rods used to maintain process equipment? Would the structural component exemption apply to welding rods used to maintain non-process related equipment (40 CFR Section 372.38(c)(1))?

No, welding rods used to maintain process equipment are not exempt. However, if the same rods are used solely to maintain the *facility* (such as in the repair of a door frame) then the *facility* maintenance exemption would apply.

Structural Component Exemption, Paint, Solvents

270. 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

271. A *covered facility* 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 determinations 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 determinations and *release* and other *waste management* calculations.

Structural Component Exemption, Paint, Pipes

272. Is the painting of process equipment to meet OSHA standards exempt from Form R threshold determinations and *release* and other *waste management* calculations 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, Paint, Pipes

273. Are listed *toxic chemicals* contained in paint that is used to paint processing equipment subject to threshold determination and *release* and other *waste management* reporting?

Yes. Paint used on process related equipment would not qualify for the structural component exemption. Amounts of listed *toxic chemicals* used to paint process related equipment must be considered toward threshold determinations and *release* and other *waste management* calculations.

Structural Component Exemption, Fuel

274. 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 determinations 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 were used to paint a *facility's* structure and fumes generated from the welding of non-process related pipes during installation at a *facility*. Be aware that the 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) or the structural component 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.

Structural Component Exemption, Pipes

275. Are the listed *toxic chemicals* contained in process related equipment, such as piping, eligible for the structural component exemption?

No. If pipes are process related, the structural component exemption does not apply and the *facility* may have to consider toward the *facility*'s threshold determination, amounts of listed *toxic chemicals* contained in process related pipes that are put into use during the reporting year. And the facility would have to include *release* and other *waste management* amounts in calculations where applicable.

Structural Component Exemption, Pipes

276. 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 determinations and *release* or other *waste management* calculations. 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 *releases* and other *waste management* of the listed *toxic chemical* should be reported.

Threshold Determination, Aluminum Oxide, Structural Component Exemption

277. A foundry uses aluminum oxide in grinding wheels as well as in the refractory brick that 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

278. 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 determinations and *release* and other *waste management* calculations and also from the maximum quantity on site.

Structural Component Exemption, Active/Passive Degradation

279. 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 EPCRA 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, such as pipes for potable water not related to the *facility's* process. The abrasion/corrosion includes normal or natural degradation, such as occurs in pipes, but not active degradation, such as occurs in a grinding wheel.

Article Exemption, Structural Component Exemption, Cement Kiln Equipment

280. Can some equipment used in the production processes of cement kiln manufacturers (e.g., grinding balls, hammers, kiln chains, mill liners and lining bars, and cooler grates and side wall liners) qualify for the structural component exemption or the *article* exemption?

The structural exemption does not apply to these uses of *toxic chemicals*. EPA believes that grinding balls, hammers, kiln chains, mill liners and lining bars, and cooler grates and side wall liners are all integral components of the process activities at the *facility*. Therefore, these items would not be eligible for the structural component exemption.

The *article* exemption may apply to these items. The *article* exemption is meant for the *processing* or *otherwise use* of manufactured items that: are formed to a specific shape or design during manufacture; have end use functions dependent in whole or in part upon its shape or design and do not *release* a toxic chemical under normal conditions of *processing* or use of that item at the *facility* (February 16, 1988; 53 FR 4507). The grinding balls, hammers, kiln chains, mill liners and lifting bars, and cooler grates and side

wall liners are being *otherwise used* by the *facility*. Therefore, if these pieces of equipment meet the three criteria above throughout their use during the calendar year, the exemption may be taken.

Structural Component Exemption, Article Exemption

281. If a *covered 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 EPCRA Section 313?

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, the structural component exemption does not apply. However, if there are less than 0.5 lbs of *releases* of the *toxic chemical* over the course of the year, it may qualify for the *article* exemption. (See also Appendix A: Section 313 Policy Directive #1 - Article Exemption.)

Structural Component Exemption, Degreasers, Otherwise Use

282. 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 towards the *facility's otherwise use* threshold.

Structural Component Exemption, Active Degradation, Electroplating

283. 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 like 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

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

The removal for *disposal* of friable asbestos insulation is not considered to be 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 in Part II, Sections 6.2 and 8.1.

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

Motor Vehicle Exemption, Gasoline, Anti-freeze

285. 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 antifreeze 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*. The exemption only applies to the *otherwise use* of the *toxic chemical*. It does not apply to *processing* or *manufacturing* of *toxic chemicals*. 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. Another example of a nonexempt activity would be the manufacture of combustion byproducts from motor vehicles. The motor vehicle exemption does apply to components of gasoline (e.g., benzene); lubricants and oils; and antifreeze used to maintain and operate a motor vehicle employed at the *facility*.

Motor Vehicle Exemption, Mining Vehicles

286. Are *toxic chemicals* used to maintain fleets of large earth-moving vehicles at mining *facilities* exempt from threshold determinations and *release* or other *waste management* reporting?

Yes. Listed *toxic chemicals* used to maintain motor vehicles owned and operated by the *facility* are eligible for the motor vehicle exemption.

Motor Vehicle Exemption

287. 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 off-site 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 the vehicles are operated by different *facilities*?

The motor vehicle exemption only applies to the *otherwise use* of *toxic chemicals* in motor vehicles that are stationed at the *facility* that holds the gasoline. Since the *facility* with the gasoline storage unit is incorporating

toxic chemicals into trucks which are then sent back to another *facility*, the *facility* storing the gasoline is *processing* the *toxic chemicals*. Therefore, the gasoline used to fuel off-site trucks would not be exempt from reporting pursuant to 40 CFR Section 372.38(c)(4). Instead, the *facility* should consider the *toxic chemicals* in the gasoline towards their *processing* threshold. The *facilities* that have their trucks fueled at another station may be eligible for the motor vehicle exemption for the *toxic chemical* in the gasoline *otherwise used* on-site.

Motor Vehicle Exemption, Non-Motorized Barge

288. Are chemicals used to maintain a non-motorized barge stationed at a *facility* eligible for the motor vehicle maintenance exemption?

Listed *toxic chemicals* used to maintain a non-motorized barge are not eligible for the motor vehicle maintenance exemption because the barge is not a motor vehicle. *Toxic chemicals* used to maintain the non-motorized barge must be factored into threshold determinations and *release* or other *waste management* calculations. Additionally, listed *toxic chemicals* used to operate machinery positioned on the barge, such as dredging equipment or cranes, are similarly not eligible for the motor vehicle exemption.

Motor Vehicle Exemption, Railcars, Tractor Trailers

289. Does the motor vehicle exemption apply to railcars, which contain no motors; e.g., maintenance of railcars or tractor trailers?

Chemicals such as paint and lubricants used to maintain railcars are not eligible for the motor vehicle maintenance exemption. Tractor trailers or railcars are not themselves motor vehicles and listed *toxic chemicals* contained in *mixtures* used to maintain them are not eligible for the motor vehicle maintenance exemption.

Motor Vehicle Exemption, Jet Fuel

290. An airplane manufacturer uses JP4, a jet fuel, to move the planes around 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 thresholds 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 the listed chemicals in the fuel are subject to threshold determinations and *release* and other *waste management* calculations.

Motor Vehicle Exemption, Used Motor Oil

291. How does a *facility* that collects a quantity of used motor oil from motor vehicles owned and operated by the *facility* consider amounts of the used oil that are sent off-site for recycling?

Amounts of *releases* (including *disposal*) or other *waste management* practices associated with an exempt *otherwise use* of listed *toxic chemicals*

are also exempt from *release* or other *waste management* calculations, provided the *facility* does not conduct a subsequent non-exempt activity involving the chemical.

D. Laboratory Activities

Laboratory Activity Exemption, QA/QC Activities

292. Does EPCRA 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 determinations and *release* and other *waste management* calculations. This exemption includes laboratories performing quality control activities including those located in *covered facilities* (40 CFR Section 372.38(d)).

Laboratory Activity Exemption, Technically Qualified Individual, TSCA

293. 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 does this reference for technically qualified individuals include?

Section 720.3(ee) is found in the Toxic Substances Control Act (TSCA) regulations (40 CFR Section 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

294. If a *facility* has covered activities and exempted laboratory activities on the same site, does the site have to include the exempted laboratory activities in the threshold determinations?

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

Laboratory Activity Exemption

295. 40 CFR Section 372.38(d) states that if an EPCRA Section 313 toxic chemical is *manufactured*, *processed*, or *otherwise used* in a laboratory at an EPCRA Section 313 *covered facility*, the chemical does not have to be counted for threshold determinations and *release* and other *waste management* calculations. Must the threshold activity or *release* and other *waste management* activities take place in a laboratory or laboratory setting in order to be eligible for the laboratory activity exemption?

For *toxic chemicals* to be exempted from reporting under the laboratory activities exemption, the activities must take place inside the laboratory. (40 CFR Section 372.38(d)(3)).

SIC Code, Pilot Plant, Laboratory Activity Exemption

296. 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, Speciality Chemical Production

297. What is meant by "speciality 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

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

There is no specific "quality control lab" exemption. Rather, the exemption applies to activities in a laboratory in which a 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, Quality Control, Samples

299. If a *covered facility* takes a sample from its process stream to be tested in a laboratory for quality control purposes, are *releases* of an EPCRA Section 313 chemical from the testing of the sample in the laboratory exempt under the laboratory activities exemption?

Yes, provided that the laboratory at the *covered facility* is under the direct supervision of a technically qualified individual as provided in 40 CFR Section 372.38(d). The laboratory exemption applies to the *manufacture*, *process*, or *otherwise use* of listed *toxic chemicals* and any associated *release* or other *waste management* amounts that take place in a qualified laboratory.

Laboratory Activity Exemption, QA/QC Activities

300. A *facility* sends materials that are sampled from processing operations to a laboratory off-site 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, The laboratory exemption applies to *toxic chemicals* that are *manufactured*, *processed*, or *otherwise used* in an on-site laboratory under the direction of a technically qualified individual. Amounts of *toxic chemicals*

sent to off-site laboratories are not eligible for this exemption and these amounts must be considered toward the *facility's* threshold determination.

Laboratory Activity Exemption, Quality Control, Samples

301. A TSD *facility* regulated under RCRA Subtitle C takes a sample from a process stream (i.e., wastestream), that has already undergone treatment, to be tested in a laboratory for quality control purposes. The waste is tested in a laboratory under the supervision of a technically qualified individual. The TSDF then places the sample back into the treated wastestream before being sent off-site for *disposal*. Provided the TSDF exceeds an activity threshold for the *toxic chemical*, is the TSDF required to report the off-site transfer of the sample in Part II, Section 6.2 of the Form R?

No. The portion of the waste *released* (including *disposed*) that is *manufactured*, *processed*, or *otherwise used* in a laboratory under the supervision of a technically qualified individual is eligible for the laboratory activities exemption (40 CFR Section 372.38). Amounts sampled by the on-site laboratory do not have to be included in the *facility*'s off-site transfer figures provided that the waste sample does not undergo any further non-exempt *otherwise use* or *processing* activity before leaving the *facility*.

Laboratory Activity Exemption, Quality Control, Samples

302. A TSD *facility* regulated under RCRA Subtitle C takes a sample from a process stream (i.e., wastestream) to be tested in a laboratory for quality control purposes. The waste is tested in a laboratory under the supervision of a technically qualified individual. The TSD *facility* then places the sample back into the process stream where it undergoes further treatment and is destroyed. Provided the TSD *facility* exceeds an activity threshold for the *toxic chemical*, is the TSD *facility* required to consider the amount of the *toxic chemical* *treated for destruction* as part of the *facility*'s *otherwise use* of the listed toxic chemical, as well as report any amount in Part II, Sections 5 and B of the Form R as appropriate?

Yes. Despite the fact that the *toxic chemical* may have been eligible for the laboratory exemption, amounts of the listed *toxic chemicals* were returned to a process stream and subject to subsequent *manufacture*, *process*, or *otherwise use* activities. Activities performed involving listed *toxic chemicals* subsequent to an exempted activity must be considered toward threshold determinations and *release* and other *waste management* calculations. Since the sample was placed back into the process stream and subsequently *otherwise used* (i.e., destroyed), amounts of the listed toxic chemical must be considered toward threshold determinations and *release* and other *waste management* calculations.

Laboratory Activity Exemption, Pilot Plant

303. If a pilot plant is contained within a laboratory, assuming the rest of the laboratory 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, assuming the remainder of the laboratory is under the supervision of a technically qualified individual.

Laboratory Activity Exemption, Research and Development Activities

304. 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 *manufactured*, *processed*, or *otherwise used* in a laboratory at a *covered facility* under the supervision of a technically qualified individual, then they are exempt from threshold determinations and *release* and other *waste management* reporting.

Laboratory Activity Exemption, QA/QC Activities, Product Testing

305. 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 eligible for the laboratory activity exemption as long as listed *toxic chemicals* are *manufactured*, *processed*, or *otherwise used* in a laboratory at a *covered facility* under the supervision of a technically qualified individual.

Product Testing, Laboratory Activity Exemption

306. 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?

While all of the noted operations are considered "product testing" and as such are potential candidates for the laboratory exemption, only those listed *toxic chemicals* that are *manufactured, processed*, or *otherwise used* in a laboratory at a *covered facility* under the supervision of a technically qualified individual (40 CFR Section 372.38(d)) are exempt. Therefore, if these conditions are met, the testing of production engines intended for sale in specialized engine test cells and testing engines for research and development purposes in specialized engine test cells would be eligible for the exemption. However, the testing and research in open water bodies would not qualify because these activities are not being performed in a laboratory.

Laboratory Activity Exemption, Testing Required for Permit

307. Are trial burns conducted in an incinerator for permitting purposes at TSD *facilities* exempt under the laboratory activity exemption, if conducted under the supervision of a technically qualified individual?

No. The listed chemicals associated with trial-burns required for permitting purposes at TSD *facilities* are not conducted in laboratories. For activities to be exempt from threshold determinations and *release* and other *waste management* calculations under the laboratory activity exemption, the *toxic chemicals* must be *manufactured*, *processed*, or *otherwise used* in a laboratory at a *covered facility* under the supervision of a technically qualified individual (40 CFR Section 372.38(d)).

Laboratory Activity Exemption, Laboratory Support Activity

308. 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 therefore these activities are not exempt from reporting under EPCRA Section 313.

Laboratory Activity Exemption, Samples

309. A *covered 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 determinations and *release* and other *waste management* calculations under the laboratory activities exemption (40 CFR Section 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 determinations and *release* and other *waste management* calculations under the laboratory activities exemption.

Laboratory Activity Exemption, Threshold, Manufacture

310. 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

311. A *covered facility* operates several on-site laboratories and shops (e.g., machine shops, glass blowing shops) that support the laboratory 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* calculations? 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* in a laboratory 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."

Activity Threshold, Otherwise Use, Laboratory Activity Exemption

312. 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) 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.

Laboratory Activity Exemption, Process

313. After *otherwise using* an EPCRA Section 313 toxic chemical in a laboratory setting under the supervision of a technically qualified individual, a *covered facility* sends the *toxic chemical* in waste off-site to be recycled. The *facility* also *processes* the same chemical elsewhere but below the 25,000 pound threshold (e.g., 20,000 pounds). The *facility* is eligible for the laboratory activity exemption for the amount of the listed *toxic chemical otherwise used, processed,* and *manufactured* in the laboratory and amounts of the listed *toxic chemical released* from the laboratory. (40 CFR Section 372.38(d)) Is the *facility* required to count the amount of the listed *toxic chemical* sent off-site for recycling (e.g., 8,000 pounds) from the laboratory toward the *processing* threshold?

Covered facilities manufacturing, processing or *otherwise using* a *toxic chemical* in a laboratory setting under the supervision of a technically qualified individual, need not consider those quantities of the *toxic chemical* when determining EPCRA Section 313 chemical activity thresholds and calculating *releases* and other *waste management* amounts. The *facility* is eligible for the laboratory activity exemption for the amount of listed toxic chemical *otherwise used, processed,* and *manufactured* in the laboratory and amounts of the listed toxic chemical *released* or otherwise managed as waste from the laboratory. The *covered facility* is not required to count the amount of listed toxic chemical laboratory waste sent off-site for recycling (e.g., 8,000 pounds) toward the *processing* threshold. Any other non-exempt quantities of the toxic chemical *manufactured, processed* or *otherwise used* on-site, however, should be considered towards the appropriate threshold to see if the *facility* triggers reporting for that *toxic chemical*.

Laboratory Activity Exemption

314. A *covered facility* produces copper panels (e.g., circuit boards). A high percentage of these copper panels are produced as prototypes for *facility* research and development. The remainder of the copper panels are incorporated into products distributed in commerce. During production, all the copper panels are produced identically, in the same process, in the same *facility*, under the direct supervision of technically qualified individuals. Is the quantity of copper compounds *manufactured* and *otherwise used* for research and development eligible for the laboratory activity exemption and therefore excluded from threshold determinations?

All copper compounds and any other *toxic chemicals* created or *otherwise used* during the production of the copper panels are considered towards the *manufacturing* or *otherwise use* thresholds. At this point in the panel

production, the *toxic chemicals manufactured* or *otherwise used* in the entire panel production process are not eligible for the laboratory activities exemption. Those *toxic chemicals* in the panels distributed in commerce should also be considered towards the *processing* threshold. The *toxic chemicals* in the panels tested for research and development purposes become eligible for the laboratory activities exemption while the panels are being tested on-site under the supervision of a technically qualified individual in a laboratory setting.

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

De Minimis Exemption, Trade Name Product

315. 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 *covered 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* 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* calculations. 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* calculations 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 listed *toxic chemical* in a *mixture* or *trade name product* above the de minimis level 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 Forms 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* and other *trade name products*. 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, Otherwise Use

316. A metal mining *facility* receives ash that it directly incorporates in concrete which it then uses on-site to form cement blocks. Is this direct use of ash eligible for the de minimis exemption?

The use of ash as a component of a *mixture* (concrete) that is *otherwise used* on-site to construct cement blocks constitutes an *otherwise use* of a material containing listed *toxic chemicals* and such amounts must be counted toward the *facility*'s *otherwise use* of those chemicals. In this case, the ash is not considered a waste because it is not managed as a waste. Thus, the listed *toxic chemicals* contained in the ash are eligible for the de minimis exemption if they do not exceed the de minimis concentrations.

De Minimis Exemption, Solvent Recovery

317. A *covered facility* receives a spent solvent, recovers the solvent and sells the recovered solvent in commerce. Is the recovered solvent considered a waste, and if not, is the reusable solvent considered a product? At what point might the solvent be eligible for the de minimis exemption?

The recovery *facility* must consider the amount of the material that it feeds into the recycling operation toward the *facility*'s *processing* threshold. The

solvent is part of a waste (not usable in the form received) and therefore the amount *processed* is not eligible for the de minimis exemption until the recovery is complete and the solvent is no longer subject to further *waste management* activities. Once the recovery is complete, the solvent is no longer a waste and thus the recovery *facility* may take the de minimis exemption for amounts subsequently prepared for distribution in commerce. The purchasing *facility* considers the recovered solvent as a new product and its subsequent *processing* or *otherwise use* of the solvent may be eligible for the de minimis exemption.

De Minimis Exemption, Mixture, Impurity, Waste, Byproduct

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

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

De Minimis Exemption, Coincidental Manufacture, Impurity

319. A *facility* adds a chemical to water for pH control that results in the coincidental *manufacture* of another *toxic chemical*. This chemical is then applied to coal that is further distributed in commerce. Is the generated chemical considered an impurity and eligible for the de minimis exemption?

No, under EPCRA Section 313, an impurity refers to a chemical that is coincidentally *manufactured* as a result of the *manufacture*, *process*, or *otherwise use* of another chemical, but is not separated from that chemical and remains primarily with the product or *mixture*. Because the listed toxic chemical is *manufactured* during the treatment of water and not during the *processing* of the primary product or *mixture*, it is not considered an impurity. In this case, the *facility* should consider amounts of chemicals *manufactured* toward the *manufacturing* threshold, to the extent that the *facility* has information on the amount of a *toxic chemical* that is *manufactured*. In addition, to the extent that the water and the *toxic chemicals* that are applied to the coal are intended to be incorporated into the coal product, the chemical *manufactured* in the water treatment process may also be *processed*.

Coincidental Manufacture, Chemical Category, De Minimis Exemption

320. A *covered facility* produces a non-listed inorganic heavy metal oxide. The ores used as raw materials for the production of the metal oxide contain EPCRA Section 313 *toxic chemicals* in small concentrations. During production, these impurities are chemically converted from oxides to sulfates or chlorides, separated from the main product stream, and discharged in wastes. At no point in the process

does the concentration of an EPCRA Section 313 toxic chemical (i.e., the sum of the concentrations of compounds falling into any listed chemical category) ever exceed the appropriate de minimis concentration. Can the de minimis exemption apply to these activities? Because the *toxic chemicals* being coincidentally *manufactured* are in the same EPCRA Section 313 category, is the conversion considered *manufacturing*?

The de minimis exemption does not apply in this instance. The de minimis exemption does not apply to chemical byproducts *manufactured* under Section 313. Additionally, any EPCRA Section 313 *toxic chemicals manufactured* during the *facility*'s production process, even if the *toxic chemicals* are created from *toxic chemicals* in the same EPCRA Section 313 category, must be considered towards the *facility*'s *manufacturing* threshold. Therefore, the *facility* must consider all the EPCRA Section 313 listed metal sulfates and chlorides created as a result of its production process for threshold determinations and *release* and other *waste management* reporting.

De Minimis Exemption, Metal Compounds

321. 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

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

Yes. To determine the de minimis for xylene (mixed isomers), the one percent would be applied to the aggregated isomer's weight percent in the *mixture*. For example, a *mixture* contains 30 pounds each of the three isomers, and 9,910 pounds of Chemical Z. The total xylene would be 90 pounds. That 90 pounds would constitute less than one percent of the total weight of 10,000 pounds, and would therefore, be exempt.

De Minimis Exemption

323. 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 Exemption, De Minimis Level

324. 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), the 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. *Toxic chemicals* listed as carcinogens or potential carcinogens under NTP (classified as a known or probable carcinogens), IARC (classified as 1, 2A or 2B), or 29 CFR Part 1910, Subpart Z, have a 0.1 percent 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 Forms 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 (http://www.epa.gov/opptintr/tri). Although not required to do so, EPA prepares this list as a courtesy to the reporting public

De Minimis Exemption, De Minimis Level, Carcinogen

325. 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 determinations and *release* and other *waste management* calculations. The regulations adopt a 0.1 percent de minimis level for chemicals that are carcinogens, as defined in 29 CFR Section 1910.1200(d)(4),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 percent de minimis concentration, provided that the other criteria for the de minimis exemption are 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 percent), 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 level of 0.1 percent 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 to reporting. 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

326. If a *covered 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* calculations?

The de minimis exemption applies 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

327. A *covered facility* 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 percent of a *toxic chemical* that is subject to a 1 percent de minimis level. The quantity of the *mixture* subject to reporting is:

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

2,210,526 lbs Non-exempt *mixture*

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

$$\frac{1.20 + 0.99}{2} = 0.011$$

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

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

De Minimis Exemption, Concentration Range

328. A *covered facility processes* a *mixture* of chemicals which includes a non-carcinogenic listed *toxic chemical* present between concentrations of 0.5–1.0 percent, 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 percent. The fraction that is exempt is that below the de minimis level, which is 0.5 percent – 0.9 percent (one significant figure).

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

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

Non-exempt *mixture*

De Minimis Exemption, Waste

329. 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 about the listed *toxic chemical* present in the wastestream that is 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, the quantities *processed* do not have to be applied to the *processing* threshold for that *toxic chemical* at the *facility* and 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* calculations. The exemption applies even if the listed *toxic chemical* is concentrated above the de minimis level in the wastestream resulting from that *processing* activity.

Ash, De Minimis

330. A *covered facility* combusts coal in a combustion unit. The coal contains a toxic chemical below de minimis amounts. During combustion, *toxic chemicals* are *manufactured*. The ash containing the *toxic chemical* is generated from the combustion of the coal. The ash is then sold to another *facility* for direct reuse in the *manufacture* of concrete blocks. If the *toxic chemicals* in the ash are below the appropriate de minimis concentration, are they eligible for the de minimis exemption?

The *toxic chemicals* in the coal being combusted should be considered towards the *facility*'s *otherwise use* threshold and this activity is eligible for the de minimis exemption. The *toxic chemicals* that are *manufactured* as a result of the combustion *process* are byproducts and therefore not eligible for the de minimis exemption. The *toxic chemicals* in the ash that is sold for direct reuse off-site are considered *processed*. After combustion, when the *facility* is preparing the *toxic chemicals* in ash for distribution in commerce, they are eligible for the de minimis exemption.

De Minimis Exemption, Byproduct

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

Threshold Determination, De Minimis Exemption, Manufacture, Wastewater Treatment

332. 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 determinations and *release* and other *waste management* calculations?

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 determinations and *release* and other *waste management* calculations.

De Minimis Exemption

333. A *covered 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* activity should be reported regardless of the concentration of the chlorine in the wastestream.

De Minimis Exemption, Waste

334. A *covered facility otherwise uses* a *toxic chemical* that is above the de minimis concentration in a *mixture*. How does the de minimis exemption apply to listed *toxic chemical* residues from this use contained within used or spent containers that the *facility* sends 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* because

these quantities are being managed as a waste and the de minimis exemption does not apply to wastes. The de minimis exemption can only be applied to a listed *toxic chemical* in a *mixture* or *trade name products* 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, Wastestream, Sewage, Otherwise Use

335. A covered metal mining *facility* receives sewage sludge from off-site for use in soil reclamation. Is the application of sewage sludge to land considered an *otherwise use*? Are the *toxic chemicals* used in the soil reclamation activity eligible for the de minimis exemption, and if so, how are amounts reported (e.g., *released* to land)?

The metal mine is *otherwise using* the listed *toxic chemicals* contained in the sewage sludge as a soil building material. However, because the listed *toxic chemicals* contained in the sludge are being applied to land, the *facility* is managing the sewage sludge as a waste. Therefore, in this example, amounts of listed *toxic chemicals* being *otherwise used* are not eligible for the de minimis exemption. Amounts of listed *toxic chemicals* are reported as a *release* to land. The *otherwise use* of listed *toxic chemicals*, such as nitrate compounds for farming, is to be reported as a release to land in Section 5.5 of the Form R.

De Minimis Exemption, Petroleum Refining

336. In petroleum refining processes, *mixtures* such as crude oils, petroleum products, 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?

The de minimis exemption would apply to these *toxic chemicals* until they are concentrated above the applicable de minimis level. For purposes of threshold determinations and *release* and other *waste management* calculations, 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

337. 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, after storage, 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 that point in the process when the chemical's concentration exceeds de minimis level. 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, Treatment Processes, Wastewater Treatment

338. 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.

Ammonia, De Minimis Exemption

339. A *covered facility* places ammonium chloride in water, and *manufactures* aqueous ammonia for use on-site. Does the de minimis exemption apply to this activity?

No. The *facility* cannot take the de minimis exemption for this activity because the *facility manufactured* aqueous ammonia. The de minimis exemption does not apply to the *manufacture* of a *toxic chemical*, unless the *toxic chemical* is *manufactured* as an impurity and remains in the product distributed in commerce. Since the *facility* used the aqueous ammonia on-site and the ammonia is not an impurity that remains in a product distributed in commerce, the de minimis exemption does not apply.

De Minimis Exemption, Compound Category, Delimited Category

340. 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 percent de minimis is determined and compared to the 0.1 percent de minimis level. Second, the weight of all members of the category in the *mixture* (both those with 0.1 percent and 1.0 percent de minimis) is determined and compared to the 1.0 percent de minimis. If only the first de minimis calculation is exceeded then only those chemicals with the 0.1 percent de minimis must be included in threshold and *release* and other *waste management* determinations. Therefore, category members with the 1.0 percent 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 determinations and *release* and other *waste management* calculations.

Overburden, Waste Rock, Process, De Minimis

341. How should *covered facilities* consider consolidated rock that overlies an ore body and unconsolidated/consolidated materials that do not overlie an ore body but do not meet the classification as waste rock? Are these materials considered waste rock (i.e., de minimis exemption does not apply) for threshold determinations and *release* and other *waste management* calculations or, are they considered *processed* materials eligible for the de minimis exemption?

For covered metal mining facilities, unconsolidated material that overlies a deposit of useful materials or ores is eligible for the "*overburden* exemption" and does not have to be considered toward threshold determinations, or *release* and other *waste management* calculations. This exemption does not apply to consolidated material or unconsolidated/consolidated materials that do not overlie a deposit of useful material and which may be displaced or otherwise managed during extraction. Similar to waste rock that is separated from the useful more mineralized material at the point of extraction, amounts of these materials are not considered toward any threshold activities. However, these materials are not exempt from *release* and other *waste management* reporting and must be included if thresholds are exceeded elsewhere at the *facility* for the same listed *toxic chemicals*.

F. Articles

Article Exemption, Threshold Determination

342. 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; 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* or management of a waste containing a listed *toxic chemical* from an *article*, and thus, does not negate the *article* status.

Article Exemption, Threshold Determination

343. Are metal *articles* exempt from threshold determinations under normal *processing* or *otherwise use*?

The fact that an item is metal is irrelevant because 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* calculations.

Threshold Determination, Article Exemption, Recycle

344. A *covered 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 and *release* and other *waste management* calculations. The *toxic chemicals* therein must be applied to the appropriate thresholds.

Article Exemption, Article Releases, Half Pound Policy

345. 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 over the entire reporting year. 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 it status as an *article*.

Article Exemption, Manufacturing Article

346. Does the *article* exemption in the Section 313 rule apply to preparation (i.e., manufacture) 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, the manufacture 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* calculations.

Article Exemption, Manufacturing Article

347. A *covered 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 pounds 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 *manufacture* 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, Components of Product

348. A *covered facility* has a condenser that consists of many individual copper tubes. These copper tubes must be replaced periodically and are often replaced individually. Can each of the copper tubes be considered an *article* under Section 313?

Each tube may be considered an *article*. However, for amounts of listed *toxic chemicals* to be exempt from threshold determinations and *release* and other *waste management* calculations under the *article* exemption, releases of all listed *toxic chemicals* for all "like" *article*s must not exceed 0.5 pounds (see Toxic Release Inventory Forms and Instructions current version). In this example, releases from all the replaced copper tubes must not exceed 0.5 pounds for the reporting year for the amounts not to be considered. If the tubes are ineligible for the exemption, then amounts of listed *toxic chemicals* contained in the tubes replaced (put in service) during the reporting year must be counted towards thresholds.

Article Exemption, Article Releases, Welding Rods

349. 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 Section 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

350. A *facility* generates metal dust when it processes sheet 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 metal 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 metal dust particles, which contain aluminum in the dust form, a listed *toxic chemical*. Therefore, that weight percentage of the metal dust which is aluminum would be subject to threshold determinations and *release* and other *waste management* reporting as aluminum dust.

Article Exemption

351. A *covered 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 in a reporting year, 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, Change in Diameter/ Thickness

352. A mine's electrorefining operation uses an anode containing a *toxic chemical*. The anode is meant to degrade, and the thickness changes over the entire anode. Is this anode eligible for the *article* exemption?

No. Since the item did not retain its original thickness in whole or in part, the anode is not considered an *article*.

Article Exemption, Fume or Dust Qualifier

353. 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.

Article Exemption, Process, Batteries

354. 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

355. I am a power tool manufacturer and we use copper, a listed *toxic chemical*. We receive copper plates and shave the rough edges off them. All of 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

356. 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

357. A *covered 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*?

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

358. A *covered 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, Processing Determination

359. A *covered 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. Specifically, more than 0.5 lbs is released from all like items during the reporting year, and therefore, 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 shavings or 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, Compounds

360. 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 EPCRA Section 313 reporting. Determine the form of the copper in the wire first. If it is pure copper wire, the entire weight of the entire wire must be used. If it is an alloy, the weight percent of the *toxic chemical* times the entire wire weight must be used. If there are multiple copper compounds, the entire weight of each copper compound must be used for the *processing* threshold determination.

Article Exemption, Wire

361. 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* (or less than 0.5 lbs for all like items over the entire reporting year) 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 determinations and *releases* and other *waste management* calculations.

Article Exemption, Wire

362. 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 Section 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

363. 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 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.

Article Exemption, Sheet Metal, Article Releases

364. A *covered facility processes* metal sheets containing nickel in a four-step *process*: (1) sheets are cut with a laser saw (releasing nickel fumes); (2) pieces are further ground to their final shape (releasing grindings); (3) ground pieces are sent off-site for heat treatment; and (4) heat treated pieces are returned to a *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 for the entire reporting year, then the metal sheets could be exempt as *articles.*

Article Exemption, Sheet Metal

365. 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 the items retain the 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 and which exceeds 0.5 pounds for the reporting year (for example, from operations such as heating, grinding, or welding), the *article* exemption no longer applies and releases must be reported when listed chemicals in a sheet metal are *processed* in quantities greater than 25,000 pounds.

Article Exemption, Article Releases

366. A metals working plant machines, cuts, forms, and joins plate, cylinder, and other purchased metal alloy parts. Alloys of nickel and chromium, 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 greater than 0.5 lbs/yr of the chemicals contained in *mixtures*, including alloys, during fabrication operations disqualifies the item *processed* from the *article* exemption. Releases include the chemical component of fumes, dust, grindings, and turnings generated from metal fabrication activities. However, 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 management* calculations.

Article Exemption, Bar Stock

367. 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 from the bar stock, the bar stock would not be an *article*.

Article Exemption, Bar Stock

368. Can *covered 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*. Also, in the above example the thickness or diameter of the entire item has been altered.

Article Exemption, Manufacturing Article, Plastic Bottles

369. 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 a 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

370. A ship building *facility* incorporates lead bricks as ballast into the ships it distributes in commerce. The lead bricks remain permanently with the ship. They 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* 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, Steel Plates

371. 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 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 steel plates may be exempt as *articles*. If the listed *toxic chemical* that is released exceeds 0.5 pounds over a calender 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, Batteries

372. 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 uses on site? What if the *facility* manufactures the batteries?

An already 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* calculations. The *article* exemption does not apply to the manufacture of an item. However, the use of the battery elsewhere in the *facility* may not have to be counted. *Disposal* of the battery after its use does not constitute a release.

Article Exemption, Catalyst

373. 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 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

374. A *covered 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

375. 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 *facility processes* more than 25,000 pounds of lead, the *facility* must report for this *toxic chemical*.

Article Exemption, Recognizable as an Article, Disposal, Process, Lead

376. A covered 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 glass tubing.

Article Exemption, Light Bulbs

377. 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*. There is a lead "button" in each light bulb stem which is *disposed*. 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 determinations and *release* and other *waste management* calculations. 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 or other *waste management* elsewhere at the *facility*.

Article Exemption, PCB Transformers

378. A *covered 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* and other *Waste Management* Reporting.)

Article Exemption, PCB Transformers, Ancillary Use

379. A *covered facility* has a PCB transformer on-site which it uses for energy. The PCBs were removed from the transformer and *disposed*. 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 determinations and *release* and other *waste management* calculations. If a *toxic chemical* is present in an *article* at a *covered facility*, the owner/operator 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* must count the amount of the chemical added to the recycle/reuse operation during the reporting year (40 CFR Section 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 l0,000 pound *otherwise use* threshold. The *facility*, therefore, would not be required to report *releases* and other *waste management* 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, Article Releases

380. 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 pounds per year, the *facility* cannot take the *article* exemption for the pipe and all formaldehyde incorporated into the pipe should be counted toward the *processing* threshold. The *facility* should report if the *processing* threshold is exceeded. If the quantity of formaldehyde released during *processing* of the pipes is 0.5 pounds or less per year, the *facility* would not have to report because it is part of an *article*.

Article Exemption, Article Releases, Polyurethane Foam

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

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

Article Exemption, Facility-Facility Reporting, Metals, SIC Code

382. Are there recommended methods for determining if the 0.5 lb *release* limit is exceeded from a metal stamping operation?

EPA recommends that *facilities* use one or more of the following for performing *release* and other *waste management* calculations of EPCRA Section 313 chemicals: monitoring data, mass balance, emission factors, and engineering calculations. If all wastes generated from stamping operations (including fume, dust, sludge and scrap pieces) are recycled or reused and the *facility's* total *releases* will be equal to or less than 0.5 lb limit for each *toxic chemical* per year, the *article* exemption may apply. If *releases* (including *disposal*) of a *toxic chemical* are more than 0.5 lb, the *article* exemption is negated for that chemical and all quantities of that chemical in the metal sheets should be included in threshold determinations and *release* and other *waste management* calculations.

G. Coal Mining/Extraction Exemption

Coal Mining, Surface Mining, Extraction Exemption

383. A covered coal mine uses material containing listed *toxic chemicals* (waste rock, ash, etc.) in its surface mining operation to replace excavated land. Is this activity considered extraction and; therefore, eligible for the coal mining extraction exemption (40 CFR Section 372.3)?

No. The *otherwise use* of waste rock, ash, or other material in surface mining to replace excavated land is a reclamation activity. The *otherwise use* of these materials for reclamation is not considered part of extraction, and amounts of listed *toxic chemicals* contained in these materials must be considered toward threshold determinations and *release* and other *waste management* calculations.

Metal Mining, Overburden Exemption

384. Are listed *toxic chemicals* in *overburden* displaced at a covered metal mine subject to reporting under EPCRA Section 313? What about *toxic chemicals* used in removing *overburden*?

No. Listed *toxic chemicals* that are constituents of *overburden*, as defined in the May 1, 1997, final rule (62 FR 23833), which are *manufactured*, *processed*, or *otherwise used* are not subject to threshold determinations or reporting for *releases* and other *waste management* activities (40 CFR

Section 372.38(h)). However, listed *toxic chemicals* used in removing *overburden* during metal mining activities are not eligible for the *overburden* exemption.

Coal Mining, Extraction Exemption

385. In the final rule (62 FR 23833; May 1, 1997), EPA provided an exemption for *coal extraction* activities. Can a coal mining *facility* assume that all activities prior to *beneficiation*, or in other words all activities that take place before the coal enters a processing plant, are exempt under the extraction exemption?

No. In the final rule (62 FR 23833), EPA specifically exempted coal mining extraction activities. EPA defines *coal extraction* (for purposes of determining which activities are eligible for the extraction exemption), to mean the physical removal or exposure of ore, coal, minerals, waste rock, or *overburden* prior to *beneficiation*, and to encompass all extraction-related activities prior to *beneficiation*. EPA defines *beneficiation* as the preparation of ores to regulate size (including crushing and grinding) of the product, to remove unwanted constituents, or to improve the quality, purity, or grade of a desired product. Based on these definitions, certain *beneficiation* activities, such as crushing or grinding, may occur before coal enters a processing plant, and these activities are not exempt under the extraction exemption.

Coal Mining, Extraction Exemption

386. Which of the following coal mining activities included in the coal mining extraction exemption under 40 CFR Section 372:

a. Crushing for transport only.
b. Land *disposal* or discharge of oily water pumped from underground (e.g., the oil that comes from the conveyor belt carrying the coal to the surface and ultimately to the coal preparation plant).
c. Screening of coal to remove waste rock that has fallen into the coal product. (This screening occurs at the surface before transportation.)
d. Coal mine reclamation activities:
  - **Ash received from off-site for use as roadfill, or structural support underground;**
  - **Waste *overburden* and non-waste fertilizer for land application; and**
  - **Waste rock used during reclamation.**

In terms of identifying which activities are considered part of the coal extraction exemption, EPA has made the following determinations: listed *toxic chemicals* involved in the transportation of coal, and reclamation of the extraction site are not considered "extraction-related" activities. While these activities may involve listed *toxic chemicals*, existing exemptions should greatly reduce and simplify the type and amount of reporting required by *covered facilities* that conduct these activities. Crushing and grinding are

beneficiation steps as provided in 40 CFR Section 261.4(b)(7), which was referenced in the final rule. The following items specifically address the activities raised in the above question:

a) Crushing for transportation is not considered part of extraction and amounts of listed *toxic chemicals* involved in these activities must be considered toward threshold determinations and *release* or other *waste management* calculations.

b) Land *disposal* of materials including waste rock, ore, and oily water from underground *coal extraction* activities are considered part of extraction activities and would therefore not be subject to threshold determinations and *release* and other *waste management* calculations.

c) Coal product screening activities involve grading of coal after it has been crushed, both of which are considered *beneficiation* steps, and; therefore, would not be considered part of extraction.

d) Ash or other materials used for structural support during extraction activities would be considered part of extraction and would be eligible for the extraction exemption. *Otherwise use* of ash, *overburden*, waste rock or fertilizer for reclamation are not considered part of extraction, and amounts of listed *toxic chemicals* contained in these materials must be considered toward threshold determinations and *release* and other *waste management* calculations.

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

387. 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 instruction 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

388. 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 (EPA 550-B-98-017) document identifies *toxic chemicals* that are specifically listed and must be reported under various Sections of EPCRA.

Chemical Name, Trade Name

389. 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 Chemical Abstract Service Registry numbers (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, Mixture

390. 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 *covered 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 *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.

Chemical Category, Activity Threshold, Metal Compounds, Release Reporting

391. How are *toxic chemical* categories handled under Section 313 threshold determinations and *release* and other *waste management* calculations?

All *toxic chemicals* in the category that are *manufactured, processed*, or *otherwise used* at a *covered 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 Category, Category Code, CAS Number

392. 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 the Form R. The individual chemical members of a listed category are not required to be, and should not be, identified in the report.

Chemical Category, Health Effects

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

The EPCRA 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 does not meet the listing criteria.

Threshold Determination, Chemical Conversion

394. 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

395. 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* calculations.

Chemical Deletion, Effective Date

396. 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 that 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 in 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 that 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 *covered 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

Acids, pH, Neutralization, Release Reporting

397. 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

398. A *covered 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*.

Coincidental Manufacturing, Coal Combustion, Incomplete Combustion

399. A *covered facility* heats coal to approximately 2,000°F to drive off the volatiles from the coal to produce an activated carbon product. Is this activity considered coal combustion such that Section 313 metal compounds are *manufactured* in this operation?

Generally, activation of carbon or other organic material involves a two-step process. The first step consists of carbonizing the organic material, which is generally carried out by subjecting the material to temperatures in the range of 500 to 700°C (approximately 930 to 1,300°F). The second step, the activation process, may be chemically performed or it may also be conducted using temperatures typically in the 750 to 1,000°C range (approximately 1,380 to 1,850°F). Both activities occur at temperatures that are below the temperature posed in the question. In any case, while these are high temperatures, these ranges are not equivalent to the temperatures that take place during combustion. Based on available information, the temperature described in the question is not high enough to cause coal combustion. For

example, furnaces may operate at temperatures above 1,400°C (approximately 2,550°F). The temperature described in the question may not result in many of the chemical conversions, such as the transformation of metal compounds, which are expected to occur during combustion. However, these temperatures may result in some conversions and the *facility* would need to determine what takes place based on their best available information and report as necessary.

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

400. 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 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.

Aluminum, Combustion Byproducts, Treatment for Destruction

401. At a *covered facility*, vapor is generated from molten aluminum. Upon exposure to the air at the temperatures present in the furnace, the aluminum vapor partially oxidizes and condenses to form aluminum fume. All stack emissions from the furnace are *released* as non-fibrous aluminum oxide. Should the *release* from this melting furnace be counted as aluminum fume or should the amount *released* be reported as zero since it is no longer a reportable *toxic chemical*?

The *facility* is *manufacturing* aluminum fume, a listed EPCRA Section 313 *toxic chemical*. In the furnace, the fume is then passively converted to non-fibrous aluminum oxide, a non-listed chemical. The *facility* is not actively destroying the aluminum fume. Therefore, the *facility* is not treating the toxic chemical for destruction. If the *covered facility* generates more than 25,000 pounds of aluminum fume during the course of the year, it would meet the *manufacturing* threshold for this chemical and would be subject to EPCRA Section 313 reporting. Since there are no *releases* of the reportable chemical, the *facility* should report zero for *release* and other *waste management* activities for aluminum fume.

Acid Aerosol, Acid Reuse System

402. 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 as the *manufacturing* of 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. This 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 *covered 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 *covered 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.

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.

Reuse System, Activity Threshold

403. In 1999, a *covered facility's* sulfuric acid reuse system starts the year with 4,000 pounds of sulfuric acid, and the *facility* adds 8,000 pounds to the system. How should the *facility* make threshold determinations for sulfuric acid (acid aerosol)?

The method for estimating amounts of sulfuric acid (acid aerosol) and hydrochloric acid (acid aerosol) for threshold purposes is unique as compared to other listed *toxic chemicals*. In the above question, the *facility* should apply 12,000 pounds towards the *manufacturing* and *otherwise use* thresholds. To determine the amount *manufactured* in an acid reuse system, the *facility* should calculate the total volume of acid in the system. The total volume of acid is the sum of the reporting year's starting amount and the amount added during the reporting year. Because all the sulfuric acid aerosol *manufactured* is subsequently *otherwise used*, the 12,000 pounds are also applied to the *otherwise use* threshold of 10,000 pounds. Therefore, the *facility* exceeds the *otherwise use* threshold and must file a Form R or Form A. Facilities are also directed to refer to the Guidance for Reporting Sulfuric Acid (EPA-745-R-97-007; November 1997).

Acid Aerosol, Sulfuric Acid, Aerosol Form

404. Would a sulfuric acid drip system that is in contact with an ore leach pile (described as analogous to a gardener's drip hose) be manufacturing sulfuric acid in an aerosol form?

No, the sulfuric acid does not become airborne; so it is not an aerosol form of sulfuric acid and, therefore, not a reportable *toxic chemical* under EPCRA Section 313.

Acid Aerosol, Sulfuric Acid, Acid Reuse System

405. A *covered facility* subject to EPCRA Section 313 generates aerosol sulfuric acid in excess of 25,000 pounds in a calendar year. The aerosol sulfuric acid passes through a scrubber that removes and condenses the aerosol sulfuric acid. The resulting liquid sulfuric acid then undergoes chemical conversion in an on-site treatment unit. How must the owner or operator account for these activities in Part II, Sections 7 and 8 of the Form R?

When a scrubber is used to remove sulfuric acid aerosols prior to entering or in a stack, the acid aerosols are usually converted to the non-aerosol form.

The non-aerosol forms of sulfuric acid are not reportable under EPCRA Section 313 because the qualifier to the sulfuric acid listing includes only acid aerosol forms (40 CFR Section 372.65). Sulfuric acid is not actually being destroyed by the scrubber, but the form of sulfuric acid that is reportable under EPCRA Section 313 is being destroyed. Therefore, since sulfuric acid aerosols removed by scrubbers are converted to a non-reportable form, the quantity removed by the scrubber can be reported as having been *treated for destruction* under Part II, Section 7 and should be included in Section 8.6, (Quantity Treated On-Site). Since the condensed sulfuric acid (i.e., the liquid sulfuric acid) is a non-aerosol form, it is not reportable under EPCRA Section 313 and no reporting of other *waste management* activities for these non-aerosol forms is required.

Fuming Sulfuric Acid, Sulfuric Acid, Oleum

406. A *covered 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.

Threshold Determination, Coincidental Manufacture, Combustion Byproducts, Sulfuric Acid, Hydrochloric Acid, Chemical Conversion

407. A utility *boiler*, located at a *covered facility*, burns residual oil. As a result of the burning operation, the *facility* emits sulfur dioxide (SO_2), sulfur trioxide (SO_3), 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. If the threshold is exceeded, the *facility* owner/operator must report all *releases* and other *waste management* estimates of sulfuric acid aerosols from the *facility*.

Coincidental Manufacture, Hydrochloric Acid

408. 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

409. 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 steam 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 that 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 (lb/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) in which 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 lb/gal) × (1 gal/3.78 L) × (453,000 mg/lb)

= 6.2 mg/L of HNO_3 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.

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 Part II, Section 7A, the On-Site Waste Treatment Methods and Efficiency section of the Form.

Chemical Qualifier, Hydrochloric Acid, Acid Aerosol, Coincidental Manufacture

410. Hydrochloric acid, also known as hydrogen chloride (CAS number 7647-01-0), is a *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.

Concentration, Nitric Acid

411. 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 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

Compounds, Metal Compounds, Metals, Threshold Determination

412. 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?

No. 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 percent nickel contained in the compounds) must be used in the threshold determination for nickel compounds.

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

Compounds, Chemical Qualifier, Cyanide Compound

413. 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.

Compounds, Metal Compounds, Compound Category, Electroplating, Concentration Range, pH, Waste Treatment

414. A *covered 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 included in the *manufacturing* threshold for chromium compounds.

Metal Compounds, Manufacturing

415. Is the conversion from one metal compound to another metal compound within the same metal compound category considered *manufacturing* for purposes of threshold determinations and *release*, and other *waste management* calculations?

Yes. The conversion of one metal compound to another metal compound within the same metal compound category is considered the *manufacture* of a metal compound, which must be considered toward threshold determinations. This is identical to how threshold calculations are derived for listed *toxic chemicals* in non-metal compound categories. The unique aspect for metal compounds, as compared to non-metal compounds within a listed compound category, is how amounts *released* and otherwise managed as waste are reported. As stated in the final rule (62 FR 23850; May 1, 1997), "if a metal is converted to a metal compound or if a metal compound is converted to another metal compound,..., a metal compound has been *manufactured* as defined under EPCRA Section 313." However, provided that thresholds are exceeded, *covered facilities* are instructed to report only the amount of the parent metal contained in the metal compound for amounts *released* or otherwise managed as waste. If thresholds for both the elemental metal and its metal compounds have been exceeded, *covered facilities* have the option to submit one Form R that includes on their report the amounts of the elemental metal from the parent metal along with amounts of the metal portion from the metal compounds.

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

416. 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. The metal compounds are *processed,* and 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.

Compounds, Metal Compounds, Threshold Determination, Copper Compounds

417. 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 threshold determinations should be made separately. Copper compounds are a listed category and will include the aggregate of all copper compounds (other than the free metal). For copper compounds, 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. If a *facility* exceeds thresholds for both the parent metal and compounds of the same metal, EPA allows the *facility* to file a combined report (e.g., one report for copper compounds and copper metal).

Compounds, Compound Category, Threshold Determination, Release Reporting, Multiple Chemical Category

418. How would a compound that falls into two reporting categories be reported (e.g., $PbCrO_3$) 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 $PbCrO_3$ must be included in determining the threshold for both lead compounds and in determining the threshold for chromium compounds. In reporting the *releases* and other *waste management* of lead, only the stoichiometric weight of the lead in $PbCrO_3$ *released* or otherwise managed as waste would be included. Likewise, only the chromium in $PbCrO_3$ that is *released* and otherwise managed as a waste would be included on the Form R.

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

419. For Section 313 reporting requirements and threshold determinations, if a *covered facility* uses lead, lead chromate, and other chromium compounds, 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.

Compounds, Metal Compounds, Chromium Compounds

420. Are chromium compounds (e.g., chromic acid CAS number 11115-74-5 or chromic acetate CAS number 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. However, *release* and other *waste management* amounts should be for the chromium metal portion only.

Compounds, Metal Compounds, Release Reporting, Lead Compounds, Lead

421. A *covered facility processes* both elemental lead 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.

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

422. A *covered 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 Form R (e.g., one report for both 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.

Compounds, Threshold Determination, Metal Compounds

423. 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.

Mining, Fertilizer, Nitrate Compounds, Ammonia, Chemical Conversion

424. A mining *facility* applies a commercial fertilizer that contains dry ammonium nitrate to the land as part of a mine reclamation project. Is the *facility* required to count the ammonium nitrate toward the *manufacturing* threshold for the ammonia listing and nitrate compounds listing when it rains on the fertilizer?

No. Ammonium nitrate is only converted to reportable chemicals when in solution and in this case the solutions are not created until after the chemical has been *released* into the *environment*. Therefore, the *facility* would not have to report for this activity since facilities are not required to report on conversions that take place in the *environment*.

Fume or Dust

Compounds, Chemical Qualifier, Fume or Dust

425. 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.

Compounds, Coincidental Manufacture, Fume or Dust, Processing

426. A *covered 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.

Compounds, Fume or Dust, Vanadium Pentoxide

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

Compounds, Chemical Qualifier, Fume or Dust, Metal Vapors, Aluminum

428. A *covered 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 that 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.

Compounds, Chemical Qualifier, Aluminum, Fume or Dust, Coincidental Manufacture

429. A *covered 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 *covered facility* meets the activity threshold for aluminum fume or dust, the amount of the aluminum dust particles that escape the *facility*'s collector system should be reported as *released*.

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

430. 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 that 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

Mixture, Xylene (Mixed Isomers), De Minimis Exemption, Threshold Determination

431. 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) that 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). Therefore, if a *covered facility otherwise uses* a *mixture* containing 8,000 pounds of ortho-xylene, 4,000 pounds of meta-xylene, and 2,000 pounds of para-xylene, the *facility* would report as xylene (mixed isomers) because it exceeded the 10,000 pound *otherwise use* threshold for xylenes (mixed isomers).

Mixture, Xylene (Mixed Isomers), Concentration

432. A *covered 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) that 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 in which 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, 30,000 pounds of para-xylene, 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

433. Although the category of glycol ethers requires reporting under Section 313, does diethylene glycol require 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, or 3, R = alkyl C7 or less, or phenyl or alkyl substituted phenyl, and R′ = H 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 nor 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

434. Are dipropylene glycol ethers having a $R'OC_3H_6OC_3H_6OR$ structure considered a glycol ether for Section 313 *toxic chemical* reporting?

Dipropylene glycol ethers are 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

435. 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.

$R - (OCH_2CH_2)_n - OR'$

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

Mixture, Polyethylene

436. Is polyethylene considered a *mixture* of ethylene and its polymer, 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. 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*. Thus, since polythylene is the result of chemical reaction, it is not a *mixture* under EPCRA Section 313. Any EPCRA Section 313 listed *toxic chemicals* used in the *manufacture* of polyethylene should be evaluated against the proper Section 313 activity threshold.

Mixture Mineral Oil

437. A *covered facility* uses hydraulic fluid which is 95 percent mineral oil and 5 percent other unspecified components. Does the *facility* have any Section 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

438. 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 included in threshold determinations and *release* and other *waste management* calculations.

Monomer, Co-polymer, ABS

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

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

DEHP, MSDS, DOP

440. A *covered facility* uses a *toxic chemical* known to them as DOP, which they think is n-dioctyl phthalate. N-dioctyl phthalate has the CAS number 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 number 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-dioctyl phthalate (DNOP). DOP is also listed as a synonym for DEHP in the Section 313 Common Synonyms document. However, as the supplier provided the acronym DEHP and the CAS number is 117-81-7, the *facility* has sufficient information to distinguish between DNOP and DEHP and thus should report for DEHP.

Asbestos, CAS Number

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

The Section 313 listing for asbestos (CAS number 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

442. A *facility* was advised by one supplier that aluminum oxide, CAS number 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 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

443. 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 number, 1302-74-5, and is not reportable.

Chemical Qualifier, Aluminum Oxide, Fibrous Forms

444. 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.

Mixture, Zeolite, Aluminum Oxide

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

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

Formaldehyde, Paraformalde-hyde

446. Is paraformaldehyde, CAS number 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.

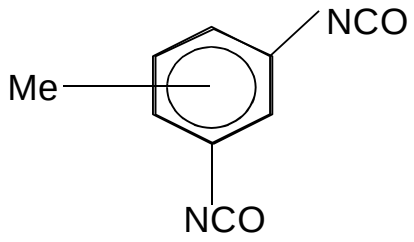
Mixture, Toluene Diisocyanate, De Minimis, Threshold Determination

447. 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 quantity 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 quantity 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).

Toluene Diisocyanate, Mixture, Threshold Determination

448. According to the Chemical Abstract Service (CAS), the Chemical Abstracts Registry name for CAS number 26471-62-5 is "benzene, 1,3-diisocyanatomethyl-." The structural formula that describes this CAS number is as follows:



This name and structure imply only that the isocyanate groups must be one/three with respect to one another and that the position of the methyl group is not known. It should be noted that neither the name nor the structure imply that there is necessarily a *mixture* of chemicals. The EPCRA Section 313 list of *toxic chemicals* (40 CFR Section 372.65) includes CAS number 26471-62-5 with the name "toluene diisocyanate (mixed isomers)." This name implies no positional relationship of the isocyanate groups with respect to each other or to the methyl group. In addition, the name seems to imply that there must necessarily be a *mixture* of compounds for this listing to apply. For the purposes of EPCRA Section 313 reporting, what compounds are reportable under the CAS number 26471-62-5?

The chemical name "benzene, 1,3-diisocyanatomethyl-" is listed as a synonym for "toluene diisocyanate (mixed isomers)" under CAS number 26471-62-5 in EPA's document Common Synonyms For Chemicals Listed Under Section 313 of the Emergency Planning and Community Right-To-

Know Act, EPA 745-R-95-008, March 1995. For purposes of reporting under EPCRA Section 313, "toluene diisocyanate (mixed isomers)" includes any possible *mixture* of any toluene diisocyanates in which the isocyanate groups are separated by one carbon in the ring (i.e., are one/three to each other). This listing includes the 2,4-, 2,6-, and 3,5- isomers of toluene diisocyanate (TDI). TDI is commonly *manufactured* as a *mixture* of isomers (e.g., an 80:20 *mixture* of 2,4- and 2,6-TDI). Even if the *mixture* is made up of the specifically listed isomers (i.e., 2,4- and 2,6-TDI), the listing "toluene diisocyanate (mixed isomers)" still applies. The "mixed isomer" listing is meant to include any *mixture* that contains two or more of the toluene diisocyanate isomers (i.e., 2,4-, 2,6-, or 3,5-TDI). The specifically listed 2,4- and 2,6- TDI isomers should be reported individually if not present as a *mixture* of TDI isomers. If, however, the individual thresholds for the pure TDI isomers are exceeded, the *covered facility* may file a single report for TDI (mixed isomers) and include the total quantity *released* or otherwise managed as waste.

Chemical Qualifier, Activity Threshold, Ammonia, Aqueous, Anhydrous, Release Reporting

449. A *covered facility 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. 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* calculations. 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

450. 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 also 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 determinations and *release* and other *waste management* calculations for the two forms of ammonia?

The term "anhydrous" means "lacking water," whereas "aqueous" means "dissolved in water." Anhydrous ammonia (in either the gas or compressed 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 or 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 the *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 *manufacture* 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 Qualifier, Ammonia, Ammonium Hydroxide

451. An EPCRA Section 313 *covered facility* maintains a *Material Safety Data Sheet (MSDS)* for ammonium hydroxide (CAS number 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 34172).

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 mentioned 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.

Ammonium Salts, Ammonium Chloride

452. Do ammonium salts such as ammonium chloride need to be reported under EPCRA Section?

Water dissociable ammonia salts, such as ammonium chloride, are reportable if they are placed in water. When ammonium salts are placed in water, reportable aqueous ammonia is *manufactured*. Ammonia (not ammonium salts) is on the list of *toxic chemicals* 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." As indicated in this qualifier, all aqueous ammonia solutions from water dissociable ammonium salts are covered by the ammonia listing. For example, ammonium chloride is a water dissociable ammonium salt. Reportable aqueous ammonia will be *manufactured* when it is placed in water. Ten percent of the total ammonia present in an aqueous solution containing ammonium chloride must be included in threshold determinations and *release* and other *waste management* calculations.

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

453. 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 determinations and *release* and other *waste management* calculations for these two delimited chemical categories different than threshold determinations and *release* and other *waste management* calculations for other EPCRA Section 313 listed chemical categories?

Threshold determinations are made in the same manner for both delimited and nondelimited categories. If a *covered 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 applicable activity threshold (40 CFR Section 372.27(d)). If an activity threshold is exceeded, the owner or 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 on 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

454. 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. As such, Cobalt-60 is not reportable under EPCRA Section 313. The listed *toxic chemical* is cobalt with CAS number 7440-48-4.

CAS Numbers

455. The Chemical Abstract Service (CAS) maintains a computerized filing system that contains two main index files. The chemical abstract file provides bibliographic information referencing chemicals appearing in over 9,000 journals, papers, and symposiums from 1967 to the present. The chemical abstract 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 (EPA 550-B-98-017)?

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, 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 Category, Waste Treatment, Off-site Transfer, Barium Sulfate, Barium Chloride

456. 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 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 received the barium chloride from offsite for purposes of *waste management* and the facility 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* of this toxic chemical.

Threshold Determination, Mixture

457. A covered 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

458. 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 that 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

459. 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, since polyethylene is a reaction product, it is not a *mixture* for EPCRA Section 313 purposes and is not subject to reporting. Steel fabricated into its solid form is considered a *mixture* because the individual metals retain their chemical identity.

Mixture, Compound, Release Reporting

460. 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, Best Available Information

461. When a company has a *mixture* on site that does not have its own CAS number, what CAS number should be used?

The company should use the best readily 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, Mixture Name, Part II Section 1

462. When should the "*mixture* component identity" field on the 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).

Mixture, TDI (Mixed Isomers), Threshold Determination

463. 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 thresholds 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 Alloy, Mixture

464. 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

465. A *covered facility* brings in natural and synthetic rubber in slab form. It then adds chemicals to the rubber to change it to what they are making (i.e., tennis balls). Does the *facility* need to consider the *toxic chemicals* in the rubber it receives?

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

Releases

466. 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* (including the abandonment or discarding of barrels, containers, and other closed receptacles)." Under Section 313, *covered facilities* are required to take into account in their reports all *toxic chemicals* entering each environmental medium (e.g., "routine" and "accidental" *releases*.)

Releases, Accidental Releases, EPCRA Section 304

467. 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 the *toxic chemicals*, 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.

Releases, Monitoring

468. Is it true that *covered 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 (EPCRA Section 313(g)(2)). 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 its best readily available data.

Releases, Reasonable Estimates

469. Section 313(g)(2) of EPCRA states that the owner or 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 the best readily available information if available data (including monitoring data) is known to be non-representative.

Reasonable Estimates, Readily Available

470. If a *covered facility* has analytical data that will take extensive time and money to calculate emissions, can that *facility* use the maximum emission level specified in their permit to calculate their emissions?

EPCRA allows facilities to use its best readily available data to provide information required under Section 313. When data are not readily available, EPCRA allows facilities to use "reasonable estimates" of the amounts involved. An owner/operator *facility* must use his/her best judgment to determine whether analytical data are readily available. If they are not, the *facility*'s use of maximum emissions levels, as specified in its permits, may be a reasonable basis from which to form its estimates. In any event, the owner/operator should carefully document the reason for its decision making.

Reasonable Estimates, Ozone

471. Ozone is *manufactured* as a result of the generation and transmission of electric power. Must the electricity generating *facility* report the amount of ozone *manufactured*?

Yes. Amounts of ozone (a *toxic chemical*) *manufactured* at a *covered facility* must be considered toward the *facility*'s *manufacturing* threshold for ozone. If the *facility* knows that ozone is being *manufactured*, then the *facility* must use its best readily available information to provide reasonable estimates in making threshold and *release* and other *waste management* calculations.

Reasonable Estimates, Detection Limit

472. If a *covered facility* has analytical data indicating the concentration of a Section 313 chemical is below the limits of detection and the *facility* has no information on the probability of the chemical being present in that wastestream (e.g., Superfund waste), should the *facility* use half the detection limit? What documentation will EPA require if the *facility* asserts that it had no basis for expecting the Section 313 chemical to be present?

If the *facility* has no information to indicate that the chemical exists in the wastestream, it may assume that the concentration is zero. If the *facility* has reason to believe that the listed *toxic chemical* is present, it may use half of the detection limit. The *facility* should document that it looked at all readily available data in making this determination.

Basis of Estimate, Reasonable Standard

473. Is it appropriate for a covered TSDF to develop an average concentration for a Section 313 chemical contained in thousands of different wastestreams managed by the *facility*, and then use that average as a basis for threshold determinations? If so, does EPA have a recommended approach for developing such as average?

EPCRA allows *covered facilities* to use the best readily available data to provide information required under EPCRA Section 313. When data are not readily available, EPCRA allows *facilities* to use reasonable estimates of the

amounts involved. A *facility* must use its best judgment to determine whether data are readily available. Thus, with regard to use of average concentration levels, a *facility* must use its best judgment to decide whether the raw data from which it might base any average concentration level are readily available. In any event, a *facility* should carefully document its decision making. For example, if a *facility* decides to use average concentration levels, it should document why the raw data from which the averages are based are not readily available, how it arrived at any average concentration level used, and why the average concentration level is a reasonable estimate of the amount of the *toxic chemical* in the wastestream. EPA does not have a recommended approach for determining average concentration levels.

Reasonable Estimates, Chromium

474. A covered treatment, storage, and disposal (TSD) *facility* receives a waste from off site that contains chromium. The waste profile indicates only that the wastestream contains chromium. The waste profile does not indicate if the waste contains elemental chromium or a chromium compound. Can the TSD make threshold determinations based on the assumption that the chromium contained in the wastestream is present as elemental chromium?

A *facility* must use the best readily available information to determine which listed chemicals or compounds are being *manufactured*, *processed* or *otherwise used*. If the waste profile is incomplete or inaccurate, the *facility* should look to other sources of information that it believes are more representative of the needed information. *Facilities* should document assumptions and calculations used in making their determinations.

Releases, Reporting Deadline, Best Available Information

475. 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 readily available data. 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.

Reporting Requirements, Photocopying

476. A *covered facility* handles the same amount of chemicals each year, with the same emissions quantities. Is it allowable to simply change the date on the previous year's Form R, photocopy it, and send the altered document in, if no information but the date has changed?

EPA allows facilities to photocopy certain portions of a prior year's reporting form. However, EPA requires original signatures on each year's report. Prior year reports can and should be used as a basis or gauge for current year reporting, but should not be used as a substitute for current year reporting.

Releases, Disposal

477. 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*.

Releases, Loading Emissions

478. 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, as long as the *toxic chemicals* are not under active shipping papers and 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.

Releases, Fugitive Air Emissions, Lab Hoods

479. 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 the Form R, if the *facility* exceeds an appropriate threshold. (See also Section 2D on the Laboratory Exemption.)

Releases, Emission Factors, Best Available Information

480. A paint manufacturer needs to estimate emissions of Section 313 chemicals. How can the owner or 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 readily available information. Emission factors are available in Compilation of Air Pollutant Emission Factors (*AP-42*) for estimating total VOC emissions from paint manufacturing.

Estimating Releases

481. How should a *facility* estimate sulfuric acid drifting (aerosol) out of a cooling tower? There is no accepted procedure/guidance for how to best estimate this sulfuric acid drift. Is this reportable?

Amounts of sulfuric or hydrochloric acid aerosols that drift from process steps are considered a *release* and are reportable provided the *facility* has exceeded thresholds. *Facilities* must use their best readily available information in developing estimates. This information may come from a variety of sources, and to assist facilities in determining what is reportable for sulfuric acid aerosols, EPA has published a guidance document entitled,

EPCRA Section 313 Guidance for Reporting Sulfuric Acid (EPA-745-R-97-007; November 1997). *Facilities* may also find equipment operating specification information useful in developing threshold determinations and *release* and other *waste management* calculations.

Releases, Landfill, Migration

482. Do we need to report leaking, abandoned landfills? What if we don't know if it is leaking?

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. The facility is not required to estimate migration from the landfill for years other than the reporting year.

Releases, Groundwater, Migration

483. 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.

Threshold Determination, Outdoor Storage Pile

484. A mining *facility* stores coal or ore outside. One or more listed *toxic chemicals* are contained within the storage piles. Due to exposure and weathering influences, other listed *toxic chemicals* are *manufactured* in the storage piles and may subsequently run-off onto land or surface water. How should the *facility* consider the *manufacturing* of listed *toxic chemicals* within a storage pile?

Amounts of listed *toxic chemicals* known to be *manufactured* on-site from the storage of raw materials, *mixtures*, or *trade name products* must be considered toward the *manufacturing* threshold for those chemicals. The term *manufacture* means "to produce, prepare, *import*, or compound a toxic chemical." If the mining *facility* has knowledge that a listed toxic chemical is *manufactured* on-site, the *facility* should count the amount of the listed *toxic chemical manufactured* toward the *manufacturing* threshold.

Release Reporting, Storage, Stockpiles

485. A mining *facility* leaches metals from an outdoor ore pile and collects the leachate for further *processing*. Should the *toxic chemicals* in the pile be reported as a *release* to land on the Form R?

During the leaching, the ore pile is considered part of the *facility*'s process, and *toxic chemicals* in the pile should not be reported as a *release* to land. Once the leaching process is complete, and the ore pile is "closed," the *facility* will report the *toxic chemicals* remaining in the pile as a *release* to

land in Part II, Section 5.5.4 (Other Disposal) of the Form R. However, amounts of listed *toxic chemicals* that escape the pile during the *facility*'s leaching process and are either *released* to land or surface water, for example, must be considered toward *release* calculations if a threshold has been exceeded.

Releases, Disposal, Ultimate Disposition, Recycle

486. A *covered 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 disposition 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."

Releases, Definition of Facility

487. A *covered 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*.

Releases, Chemical Conversion, Chlorine

488. 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?

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.

Releases, Acids, Release Reporting, Release to Land, Chemical Conversion

489. 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 migrates 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*.

Releases, Point Source Air Emissions, Fugitive Air Emissions

490. 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. Are *releases* from the vent to the outside of the building over the painting room considered "*releases* from building ventilation systems" and therefore reported as fugitive emissions?

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 the Form R.

Emission Factors, Pulp and Paper Mills

491. Many pulp and paper mills burn wood for on-site electricity and may trigger *manufacturing* thresholds when one naturally occurring compound changes to another (e.g., copper or manganese compounds change to copper or manganese oxides). Does EPA publish emission factors for metals *manufactured* from the burning of trees?

Emission factors provided in Section 1.6 "Wood Waste Combustion in Boilers of EPA's document *AP-42*, Compilation of Air Pollutant Emission Factors can be used to calculate emissions for metal *manufactured* from the burning of trees. However, if a *facility* has better readily available information that would enable the *facility* to more accurately calculate the emissions generated, the *facility* should use that information.

Releases, Pipes, Release Reporting

492. Where does one report routine leaks from pipes? Would these be reported as *disposed* 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 the 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.

Releases, Combustion Unit Efficiency, Release Calculation

493. In calculating *releases* from incinerators, *boilers*, *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. *Facilities* must use the best readily available information. For example, the 99.99 percent efficiency of an incinerator may not refer to the destruction and removal of the chemical being reported on the Form R. If that is the case, the efficiency may have no relation to the *release* quantity of the chemical being reported. Even if the surrogate waste is the chemical being reported, the 99.99 percent 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 percent efficiency calculation. As a result, *release* calculations based solely on the efficiency of the unit might 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.

Releases, Combustion Unit Efficiency, Metals, Treatment for Destruction

494. Why does EPA not allow *covered facilities* to 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.

Releases, Asbestos, Definition of Friable

495. A covered 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 *releases* or other *waste management* of only the friable form of asbestos. 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* calculations.

Releases, Byproduct, Chemical Identity, Chemical Conversion, Release Reporting

496. 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.

Releases, Monitoring, Detection Limit

497. 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 readily available information. 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 the facility should also rely on its knowledge of specific conditions at the plant.

Releases, Emission Factors, Basis of Estimate

498. 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*.

Releases, Basis of Estimate

499. 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.

Releases, Emission Factors

500. Are SOCMI (Synthetic Organic Chemicals Manufacturing Industry) emission factors applicable to the petroleum refining industry as well as to organic chemical manufacturers?

RELEASE/WASTE MANAGEMENT

Yes, SOCMI 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 SOCMI factors are based upon pure substances being *released*.

Basis of Estimate, Emission Factors

501. Are emission factors published by other than EPA sources reported as an "E" or an "O"?

Published emission factors by sources other than EPA that contain chemical specific emission rates may be reported as "E". Published emission factors that are not chemical specific are indicated as "O".

Releases, Basis of Estimate, Emission Factors

502. EPA's fugitive emission factors for equipment leaks for the Synthetic Organic Chemicals Manufacturing Industry (SOCMI) 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.

Estimating Releases, Section 8

503. A *covered facility* has estimated fugitive emissions to be 52 pounds and, based on their lack of precision in this estimate, have reported it as range code B (11–499 pounds) in Section 5 of the Form R. When reporting the quantity *released* in Section 8.1, what quantity should they use to represent their fugitive emissions when adding up all *releases*: 52 (the calculated result) or 255 (the midpoint of the range)?

The air emissions reported in Section 8.1 should be 52 pounds unless the *facility* has better information about their emissions. *Facilities* are not

allowed to use range codes in Section 8 of the Form R. In this instance, the owner or operator seems to have estimated their fugitive emissions from data relevant to the listed toxic chemical and the activities occurring at their *facility*.

Releases, Fugitive Air Emissions, Emission Factors

504. 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 over 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

505. 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 equipment, concrete pads, etc. as a portion of the total *facility release* to surface water.

NA vs. 0, VOC, Spill, Zero Releases

506. If a *covered facility* which exceeds a threshold for a volatile *toxic chemical* spills ten pounds of it (e.g., dichloromethane), should the *facility* report NA or zero for *releases* to the land?

The *facility* should not report NA for the *releases* to the land, if the *facility* spills a toxic chemical on the ground. If the *facility* spills ten pounds of a relatively volatile chemical such as dichloromethane (CAS number 75-09-2) with a high vapor pressure (435 mm Hg) and low adsorption coefficient (K_{oc} = 28), virtually all ten pounds would be expected to volatilize to air. In this case, the ten pounds would be reported in Section 5.1 and zero pounds under section 5.5. NA should only be used in this section to indicate that there have been no *releases* to land. Although one may expect all of the volatile chemical to volatilize, the zero in Section 5.5 indicates that there was an opportunity for the toxic chemical to remain on the land.

Releases, Air Emissions, Storage Tanks

507. How does one use the storage tank equations in Appendix C of EPA's technical guidance entitled Estimating Releases and Waste Treatment Efficiencies (1999 version) 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 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.

Releases, Fugitive Air Emissions, Storage Drums

508. How does a *facility* owner or 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 (1999 version) for the Form R.

Releases, Emission Factors, Estimating Emissions, Unknown Composition

509. 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.

Releases, Off-site Transfer, Point Source Air Emissions

510. A covered manufacturing *facility* sends a *toxic chemical* in a waste to an off-site RCRA regulated treatment, storage, and *disposal facility* (TSD) for recycling. Are emissions discharged by the off-site TSD included as point source emissions on the manufacturing *facility's* Form R or are they not reported?

The owner or 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 or operator is only responsible for reporting *toxic chemical releases* and other *waste management* activities from his/her own *facility*. If the TSD that recycles the manufacturer's waste is subject to EPCRA Section 313 reporting, the TSD owner or operator would report *releases* resulting from the recycling activity.

Releases, ppm

511. 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 the mass of the wastewater?

Parts per million (ppm) of a *toxic chemical* in wastewater indicates the concentration of a *toxic chemical*, *not* the actual total mass of the *toxic chemical*.

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*.

Releases, Air Emissions, Toluene, Partial Vapor Pressure

512. 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 of paint mixtures 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, of Estimating Releases and Waste Treatment Efficiencies (1999 version).

Releases, Air Emissions, Horizontal Storage Tanks

513. How should a *covered 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)(area of liquid surface)}/π. H is the same as for vertical tanks.

Releases, Estimating Releases, Chlorine, Water Treatment, Waste Treatment

514. How can one estimate emissions of chlorine from use in cooling water treatment? We have tried to estimate the emissions 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. Multiplying measured residual chlorine by recirculation rate by 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 EPCRA Section 313 Reporting Guidance for Food Processors (EPA 745-R-98-011; August 1998).

Releases, Waste Treatment, Release to Land, Absorbent, Water Treatment

515. 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 the 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 Part II, Sections 8.1 and 5.5.

Releases, Basis of Estimate, Zero Releases, NA vs. 0

516. For *releases* and other *waste management* activities 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?

If you report NA, leave the basis of estimate box blank or enter NA. If you report zero *releases* then you need to provide a basis of estimate.

Releases, Release to Water

517. A *covered 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.

Releases, Release Reporting, Release to Land, Disposal, Containment Area

518. If a *covered 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 the Form R?

If the *facility* does not have specific measures for land filling, land farming, or land *disposal*, then for the purposes of the 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.

Releases, Release Reporting, Containment Area

519. If a *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., there are fugitive air emissions or transfers off-site) must be reported in the appropriate sections on the Form R.

Releases, Release Reporting, Landfill, Remediation

520. For *release* reporting under Section 313, would a *covered 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 the 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* and other off-site *waste management* associated with remedial actions are also reportable in Part II, Section 8.8 of the Form R.

Releases, Estimating Releases, Reporting Acids, pH

521. 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).

Releases, Release Reporting, Acid Neutraliza-tion, pH

522. How would a *facility* report under Section 313 on a wastestream which is neutralized to a pH above 6 before discharged to a POTW?

Covered 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 discharged to the POTW in Section 6.1 (Discharges to Publicly Owned Treatment Works) and the entire amount neutralized is reported in Section 8.6 (Treated On-Site). The neutralization process is reported under Section 7A of the Form R (On-Site Waste Treatment Methods and Efficiency).

Releases, pH, Acid Neutraliza-tion, Mineral Acids, NA vs. 0

523. In Part II, Section 6.1 of the 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 discharge of the particular *toxic chemical* to the POTW, the discharges to the POTW on Part II, Section 6.1 of the Form R would be reported as zero rather than NA.

Releases, POTW, Part II Section 6.1

524. A *covered facility* uses a *mixture* containing a *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?

The quantity of toxic chemical washed down the drain would need to be reported as a transfer to a POTW in Section 6.1, regardless of the existence of a discharge permit.

Releases, Release to Land, Ultimate Disposition

525. 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 from the on-site lagoon was transferred to an on-site landfill. During both the original placement in the lagoon and the subsequent transfer to the landfill, benzene was *released* to air. For the purpose of reporting under EPCRA Section 313, does the owner or operator need to report *releases* to an on-site landfill and/or fugitive air emissions of benzene on the Form R?

The *facility* should not have reported all of the benzene which was placed in 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 would evaporate during that reporting year. It should have reported this amount as a fugitive air emission. The balance should have been reported as a *release* to land. Both the amount reported as a fugitive air emission and the amount reported as a *release* to land should have been reported for 1995, the year when the wastes containing the benzene were placed in the on-site lagoon. 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 emissions of benzene that occurred as a result of transferring the sludge from the on-site lagoon to the on-site landfill if the *facility* met the threshold for benzene.

Release Reporting, Ultimate Disposition

526. If a *facility* in one of the newly added industries, which begins reporting for activities conducted in 1998, has information on the amount of seepage from a landfill in 1998, do they report this amount as a *release* to land, since they were not required to report the initial *disposal* to land in the previous year?

No. Facilities are required to report only the amounts that are *disposed* during the reporting year in which they are *disposed*, provided certain thresholds

have been met and the *facility* does not conduct any further activities involving amounts previously *disposed*. Amounts that move within the same media, such as seepage from a landfill to surrounding soils, do not have to be included in *release* estimates in subsequent years. EPA requires reporting of the amount of toxic chemical placed in an on-site landfill during the year. EPA does not require the facility to estimate migration from the landfill in subsequent years, provided the *facility* does not conduct activities that further involve the listed toxic chemical *disposed*.

Release Reporting, Ultimate Disposition

527. In 1999, a *facility disposes* of a waste containing benzene in an on-site landfill, but does not exceed an activity threshold for benzene. The *facility* does not report the amount of benzene *released* to the landfill in 1999. In 2000, the *facility* exceeds a threshold for benzene. If some of the benzene released to land in 1999 seeps from the landfill to groundwater (i.e., migration of previously disposed materials), does the *facility* report the amount of benzene that seeped into groundwater during 1999?

No. EPA requires reporting of the amount of a toxic chemical placed in an on-site landfill during the reporting year in which these amounts are *disposed*. Amounts *disposed* in previous years are not reportable in subsequent submissions provided no additional activity is performed with these amounts.

Joint Venture, Off-site Transfer, Storage, Ultimate Disposition

528. Company A owns and operates a *covered facility*. Company B, a 50-50 joint venture between Company A and Company C, is located within the same site but is owned and operated by a separate person. Company B transfers drums containing *toxic chemicals* to storage pads at Company A for storage and preparation for off-site transfer. Company B's wastes are manifested separately from Company A's wastes and Company B knows the ultimate off-site destination and handling method. Should Company B report the *toxic chemicals* transferred to Company A as an off-site transfer to Company A or to the ultimate destination?

If Company B is a 50-50 joint venture between Companies A&C, it is not owned, operated or controlled by Company A and therefore is a separate *facility* from Company A. Since Company B knows the ultimate disposition of the *toxic chemical*, Company B should report the off-site location as Company A in Part II, Sections 6.2 but should report the type of *waste management* activity that will ultimately be performed in Part II, Sections 6.2 and 8 on the Form R. If Company B had not known the ultimate disposition of the waste, it would report the *toxic chemicals* in waste as an off-site transfer for storage only, using *waste management* code M10 in Part II, Section 6.2 and report the *toxic chemical* as *released* in Section 8.1 of the Form R.

Release Reporting, Waste Reuse

529. If waste rock placed in a pile at the end of one reporting year is considered a *release* to land, and is *processed* in subsequent years, should the tailings/closed dump resulting from the subsequent *processing* be reported again as a *release* to land?

Yes. *Covered facilities* must consider amounts *manufactured*, *processed*, or *otherwise used* toward threshold determinations each year. Provided these amounts are not associated with exempt activities and reporting thresholds have been exceeded, amounts *released*, including *disposed*, are reportable during the year in which the releases occur. If an amount of a listed toxic chemical previously *disposed* of is *manufactured*, *processed*, or *otherwise used* in a subsequent year then the *facility* should consider these amounts as it would new materials brought on-site, and report any *waste management* activities that are associated with *toxic chemicals* for which thresholds have been exceeded.

Release Reporting, Temporary Storage

530. Is ash placed on-site in a pile waiting to be sold during construction season considered a *release* to land for the reporting year prior to its transfer?

Amounts of listed *toxic chemicals* placed on land are considered *released* under EPCRA Section 313. However, for reporting purposes, material that is placed on-site during a reporting year does not have to be reported as a *release* to land on-site if the pile was only used for temporary storage during the reporting year. EPA will consider the pile used for temporary storage if: (1) the *facility* routinely made off-site transfers of material from the pile during that reporting year; or (2) the *facility* had a contract in place to transfer the material before the end of the reporting year and transferred the material containing listed *toxic chemicals* off-site before that year's report was submitted or by July 1, whichever comes first. However, quantities of the toxic chemical that volitalize or leach into the ground as a result of the on-site temporary storage must be counted as *released* on the Form R.

Releases, Release Reporting, Stockpiles, Storage

531. 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 *otherwise use* on-site 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 *covered 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, in this instance, storage is associated with the *otherwise use* of the coal, *releases* from the stock pile will be eligible for the de minimis exemption.

Releases, Storage Tanks, Point Source Air Emissions, Fugitive Air Emissions

532. 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 *covered 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.

Releases, Release Reporting, Transportation Exemption, RQ, EPCRA Section 304

533. A *covered 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 under active shipping until the shipping papers are signed at the loading dock. Section 327 of EPCRA states that "(e)xcept 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 under Section 313. This *release*, however, would be reportable under 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 occurred at the facility for that reporting year.

Releases, Release Reporting, Vessels, Facility, Barge Terminal

534. A *covered facility* 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)).

Releases, Release Reporting, Release to Land, Disposal, Storage

535. A *facility* has an on-site concrete basin used as a collection pond for 80 percent of the *facility*'s wastewater. 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 Part II, 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.

Releases, Release Reporting, Underground Injection, Waste Disposal, Otherwise Use

536. A *covered 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, even prior to RY 1998, if the manufacturing *facility manufactures*, *processes*, or *otherwise uses* the same listed *toxic chemical* above the threshold amount, the *disposal* of other *facilities*' wastes containing this listed *toxic chemical* would be reported as a *release* on the Form R even though the amount of the listed *toxic chemical* in these wastes was not included in the threshold determination.

Releases, Ultimate Disposition, Air Emissions

537. A *covered facility processes* items containing *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 the 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 the 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 Part II, Section 5.5.4 of the Form R as a *release* to land on-site.

Releases, Ultimate Disposition, Asbestos, Double Counting, Release Reporting

538. A *toxic chemical* (e.g., friable asbestos) is emitted as an air particulate which deposits on the *facility* roof, such that it will be washed into a NPDES permitted pond or swept into a solid waste pit or landfill. Will the *release* be reported as a *release* to land or water, but not air? This would prevent a *toxic chemical* 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, Particulates, Air Releases

539. A *covered facility* emits particulate containing a listed toxic chemical from a stack on-site. Some of the particulate lands on-site and some of the particulate lands on an off-site property. Should the *covered facility* report the emitted particulate in Sections 5.5.4 (Other *Disposal*) and 6.2 (Transfer Off-site for *Disposal*) or in Section 5.2 (Stack or Point Source Air Emissions)?

If the *facility* has reasonable estimates about what percent of stack particulate emission lands on-site, this quantity of toxic chemical would be reported in Part II, Section 5.5.4 (Other *Disposal*) and the remaining amount of *toxic chemical* (including the amount deposited on an off-site property) would be reported in Part II, Section 5.2 (Stack or Point Source Air Emissions).

Releases, Release to Land, Disposal, Remediation, Part II Section 8.8

540. A *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 Part II, Section 5.5.1, and that the lead in the on-site remediation waste gets reported in Part II, Section 8.8. But would the lead in the remediation waste brought in from off-site also be reported in Part II, 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 Part II, Section 5.5.1 and Section 8.1, but 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. In addition, beginning with reporting year 1998, the *covered facility* would also consider this quantity towards its *otherwise use* threshold.

Releases, Releases to Land, Disposal, Off-site Transfer, Release Reporting, Waste Pile

541. A *covered facility* continually places material containing a *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 is 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 *toxic chemical* off-site before that year's report is submitted or by 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, 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).

Temporary Storage, Documentation

542. A metal mine stockpiles waste rock during the reporting year and has plans to leach this waste rock in the following year. What type of documentation (if any) would EPA accept from the mine to show that the waste rock will be *processed,* and therefore not have to be reported as a *release* to land during the reporting year? For example, the *facility* may have drawn plans for the leaching pad, have contracts with a supplier for materials used to construct the pad, or have a permit modification for the leach pad but the start date is in March of the following year.

Waste rock containing *toxic chemicals* that is added to stockpiles during a reporting year does not have to be reported for that reporting year, as a reportable *release* to land on-site, if the stockpile was only used for temporary storage. EPA will consider the pile used for temporary storage if the *facility* routinely made off-site transfers or *processed* on-site waste rock from the stockpile during the reporting year, has good documentation of the transfers or amounts *processed*, or has contracts in place to transfer the materials prior to that year's reporting deadline, and removes or *processes* all of the listed *toxic chemicals* from the stockpile before that year's report is submitted or by July 1, whichever comes first. Listed *toxic chemicals* placed in piles during the previous year that remain after the July 1 reporting deadline must be considered toward the facility's *release* and other *waste management* calculations, provided that thresholds for those chemicals have been exceeded.

Waste Ash, Release to Land, Release Reporting

543. In January of a reporting year, *a covered facility* places ash containing 11,000 pounds of an EPCRA Section 313 listed *toxic chemical* into a landfill that already contains 3,000 pounds of a previously *disposed toxic chemical* for a total of 14,000 pounds in the landfill. In August of the same reporting year, the *facility* removes waste ash from the landfill which contains 5,000 pounds of the *toxic chemical* added in January and 3,000 pounds of the toxic chemical added during a previous reporting year. The removed waste ash (8,000 pounds of toxic chemical) is distributed in commerce for a beneficial reuse (e.g., they sell the waste ash, including the toxic chemical, for direct incorporation into concrete). How should the *facility* report *releases* of the toxic chemical for the reporting year?

Provided that the *facility* exceeded a threshold for the *toxic chemicals*, the *facility* should report a *release* of 6,000 pounds of the toxic chemical as landfilled on-site in Part II, Section 5.5.1B (*Disposal* to Land On-site) and as *release* in Section 8.1 (Quantity *Released*). Eight thousand pounds of the toxic chemical (i.e., 5,000 pounds deposited in January and the 3,000 pounds deposited in a prior reporting year) were *processed* and should be counted towards the *processing* threshold for the *facility* for the reporting year. EPA recognizes that by placing the toxic chemical into the landfill, the *facility* has

released the toxic chemical. Nevertheless, EPA will allow facilities to consider quantities that are temporarily stored in a landfill and removed during the same reporting year to not be reported as *release* in Part II, Sections 5 and 8.

Releases, Off-site Transfer, Direct Reuse

544. 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. One common use is for roadbed material under railroad tracks. Is the reuse as cement material reportable on the Form R as an off-site transfer?

The listed *toxic chemical* in the slag that is sent off-site for further use as cement material is not reported as an off-site transfer in Part II, Section 6.2 of the Form R. However, the facility must consider the quantities of *toxic chemical* repackaged and shipped off-site for reuse toward the facility's *processing* threshold.

Releases, Release Reporting, RCRA-empty, Off-site Transfer

545. A *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 federal RCRA regulations, it is still considered a *toxic chemical* under EPCRA Section 313. 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 Part II, 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* 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.

Releases, Otherwise Use, Release to Land, Land Treatment, Nitrate Compounds

546. Are *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 chemical* used for farming at a *covered facility* must also to be applied towards the *otherwise use* reporting threshold.

Releases, Off-site Transfer

547. A *covered 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 transfer to a waste broker (recycling) (M93)?

When reporting off-site transfers of waste in Part II, Section 6.2 of the Form R, it is acceptable to enter M93 in Section 6.2.C only 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 the Form R.

Releases, Point Source Air Emissions, De Minimis Exemption

548. If a *covered 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 the reporting threshold is met, the *facility* is required to report under EPCRA Section 313 for chromium.

Releases, Article Exemption, Release Reporting

549. A *covered 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 *toxic chemical*. How are estimates of *toxic chemical releases* to be made?

If *releases* of the *toxic chemical* from the steel plate *processing* are recycled or reused or if the total amount released is 0.5 pound or less for the reporting year, then the *releases* are exempt from reporting under the *article* exemption.

If the *article* exemption does not apply, the *covered facility* must include *releases* from the welding operation if thresholds are exceeded. 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 (1998 version).

Releases, Point Source Air Emissions, Recycle, Phosphoric Acid

550. 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 *toxic chemical* escapes the recirculation system and enters the *environment*, then it would be necessary to report such *releases* of the chemical.

Releases, Release Reporting, Underground Injection, Permits, UIC

551. Should only underground injections that are covered by Underground Injection Control Wells (UIC) permits be reported?

Covered facilities must report all underground injection of *toxic chemicals* regardless of permit status.

Releases, Release Reporting, Reuse

552. A *covered 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 calender year and must file a Form R for toluene. How would the *facility* report the above activity on the Form R?

The amount of the *toxic chemical manufactured* would be considered toward the *facility's* chemical activity threshold. However, in this situation, the listed *toxic chemical* does not undergo any recovery steps, it merely changes physical *state* and is directly reused. Processes that directly reuse a listed *toxic chemical* on-site are not reported on the Form R as recycled in Part II, Section 8.6.

Releases, Air Emissions, Storage, Mixture

553. 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?

Covered facilities should 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 vapor 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 (1999 version)

B. Transfers to Off-site Locations for Further Waste Management

Off-site Transfer, Waste Broker, Recycle

554. How should a *covered facility* report a transfer in which it sends wastes containing a *toxic chemical* off-site to a waste broker who in turn sends the wastes to a recycling *facility*?

Covered facilities are required to report information on off-site transfers for purposes of recycling in both Sections 6 and 8 of the Form R. In Section 6, the *facility* should report the final disposition of which it has knowledge of the *toxic chemical* in the waste. When a *facility* knows that a *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 *toxic chemical* is known, the recycler is considered the final destination, and the transfer should be reported as recycling with the appropriate code. 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

555. 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 Part II, 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.

Fertilizer, Off-site Disposal, Land Treatment

556. If Facility A transfers a *toxic chemical* in waste off-site to another *facility* who applies the waste to land for treatment, must Facility A report the amount sent off-site on the Form R? Should Facility A also report volatilization of the toxic chemical, that occurs off-site during application to land, as a fugitive air release, in Part II, Section 5.1?

Facility A must report the amount of *toxic chemical* in waste sent off-site for *disposal* as an off-site transfer for *disposal*. The *facility* should report this amount in Part II, Section 6.2, using *disposal* code M73, and in Section 8.1. The *facility* should not report the amount *released* to air during off-site application to land, since this activity did not occur on-site. In Part II, Section 5.1, *facilities* should only report amounts of *toxic chemicals* that are *released* on-site.

Off-site Transfer, Ultimate Disposition, Residue, Recycle

557. 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 *toxic chemical* is managed, the *toxic chemical* should be reported as an unknown *disposal*, code M99 (Unknown *Disposal*) in Part II, Section 6.2.C and quantity *released* in Section 8.1.

Off-site Transfer, Residue

558. A *covered 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* or otherwise managed as waste, it must be counted as an off-site transfer for *disposal*.

Off-site Transfer, Recycle

559. 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*.

Fertilizer, Product, Direct Reuse

560. Facility A produces a byproduct containing a *toxic chemical*. The *facility* gives some of the byproduct away, and sells some of the byproduct. In both cases, the off-site *facility* uses the byproduct as fertilizer for farming. Should Facility A report the amount of toxic chemical in the byproduct given away or sold, on the Form R?

If the toxic chemical in the byproduct is sent off-site to be directly reused as a fertilizer, then the transfer would not be considered a transfer off-site for *waste management* purposes, and Facility A would not report, as a transfer off-site for *waste management*, the amount sold/given away. However, because the *facility* distributed the toxic chemical into commerce, the *facility* must consider the quantity of toxic chemical shipped off-site for direct reuse (i.e., both the amounts given away and sold) as fertilizer as *processed* for threshold determinations.

Off-site Transfer, POTW, Release to Water

561. A *covered 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 the 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 *covered facility* knows that 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 Part II, Section 8.1 (Quantity Released).

Off-site Transfer, Threshold Determination, Recycle

562. How should a *covered facility* treat a toxic chemical in a solvent sent off-site for distillation and returned to the *facility* for reuse?

The amount of a *toxic chemical* in the 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 the 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.

Activity Threshold, Off-site Transfer, Energy Recovery

563. A TSD *facility* receives waste from off site containing a listed *toxic chemical*, blends the waste with a fuel to increase its heat value, repackages the blended fuel in different container(s), and then transfers the waste off site to a cement kiln that burns the waste. Is this *facility manufacturing*, *processing*, or *otherwise using* the *toxic chemical* contained in this waste received from off site for the purposes of further *waste management*?

No. The repackaging and subsequent transfer off-site of EPCRA Section 313 *toxic chemicals* in waste fuel for burning for energy recovery is not, in itself, a covered *manufacturing*, *processing*, or *otherwise use* threshold activity as those terms are defined in the EPCRA Section 313 regulations (40 CFR Part 372). Therefore, *covered facilities* are not required to consider the repackaging and subsequent transfer off-site of *toxic chemicals* for energy recovery to any type of *boiler* or *industrial furnace* (as defined in 40 CFR Section 372.3) toward threshold calculations. Similarly, *toxic chemicals* in waste that are repackaged and sent off-site for *disposal* or for *treatment for destruction* would likewise not be considered toward a *facility*'s *manufacturing*, *processing*, or *otherwise use* threshold determination. *Covered facilities* should keep in mind, however, that if they exceed an activity threshold elsewhere at the *facility* for the listed chemical contained in the waste fuel, the *facility* should report the quantity of the *toxic chemical* in the waste fuel sent off-site for energy recovery in Part II, Section 6.2 and Section 8 of the Form R.

Off-site Transfer

564. A covered 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 M90 (Other Off-site Management) or M99 (Unknown Disposal) in Part II, Section 6.2.C of the Form R if it does not know the final disposition of the *toxic chemical* in the rags.

Off-site Transfer, Part II Section 6.2, Waste Broker, RCRA ID Number

565. A *covered 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 identification 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.

Off-site Transfer, RCRA ID Number, Landfill

566. What RCRA identification 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 identification number, the *facility* would enter "NA" in the space provided. If the *facility* does have such a RCRA identification number, it must list the number, if known, even though the waste being transferred may not be a regulated RCRA hazardous waste.

Off-site Transfer, Release Reporting, Part II Section 6.2

567. A *covered facility* produces 200,000 pounds of a listed *toxic chemical* in waste annually. Of that amount, the *facility* treats 100,000 pounds on-site and sends 100,000 pounds to an off-site treatment plant that has a 99.9 percent efficiency. Can the *facility* factor in the efficiency when it reports the off-site transfer amount in Part II, Section 6.2 of the Form R?

Section 6.2 of the 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. The 100,000 pounds of the *toxic chemical* that are treated on-site should be reported in Part II, Section 7A and in Section 8.

Off-site Transfer, Fuel Blending, Heat Value, Energy Recovery, Metals, Ultimate Disposition

568. A *covered facility* sends a *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 *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 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 *toxic chemical* must be reported as an off-site transfer for purposes of energy recovery on the Form R. However, other reportable *toxic chemicals* in the waste (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 recycled.

Energy Recovery, Electricity Generating Facility, Coal Tar

569. Do EGFs that burn coal tar with their coal/oil report this amount in Part II, Section 8 of the Form R as energy recovery?

No. While coal tar is a by-product of destructive distillation in the production of coke, it is not a waste. Therefore, EPA would not interpret its combustion to be a *waste management* activity and it would not be reportable in Section 8 of the Form R

Off-site Transfer, Facility

570. A petrochemical company generates a wastestream which contains a *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. 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 transferring the sludge to a landfill). The treatment plant has a NPDES permit and the remaining waste is discharged to a receiving stream. (ln 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 7A (Waste Treatment Methods and Efficiencies) of the 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 *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.

Reporting Criteria, Threshold Determination

571. Who is responsible for EPCRA Section 313 reporting if a covered solvent recovery service arrives at a *covered facility* and either recycles ethylene glycol antifreeze on-site with a mobile recovery unit or removes the ethylene glycol antifreeze for off-site recycling?

All *covered facilities* are responsible for EPCRA Section 313 reporting obligations of the *toxic chemical* while the *toxic chemical* is at a *facility*, including while the chemical is in an on-site mobile recovery unit. Although this *facility* may not directly operate the mobile solvent recovery unit, the *facility* controls the unit's operations while on-site because it has contracted or paid a fee for the unit's services. Therefore, if the mobile unit recovers *toxic chemicals* from the solvents on-site the *facility* would include those *toxic chemicals* in its *facility*-wide *release* and other *waste management* calculations.

If the mobile solvent recovery unit removes *toxic chemicals* from the *facility* for off-site recycling, the *facility* would report the amount of the chemicals sent off-site as an off-site transfer for recycling. However, the *facility* must account for any *releases* of the toxic chemical from the unit while it remains on site. Finally, those *toxic chemicals* that are transferred off-site are considered *processed* and therefore, must be applied toward the *facility*'s *processing* threshold.

pH, Off-site Transfer, Neutralization, Off-site Landfill, Acids

572. A *covered facility* generates a wastestream in the form of a filter press cake that contains nitric acid, a *toxic chemical*. 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 of the nitric acid must be reported in Part II, 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

573. 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 the 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

574. Where multiple sources are combined for waste treatment, should each source be listed in the Part II, Section 7 of the 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.

Waste Treatment, Sequential Process, Influent Concentration, Part II Section 7A

575. A *covered 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 R?

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.

Waste Treatment, Sequential Process, Part II Section 7A

576. 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.

Waste Treatment, Acids, pH, Complete Neutralization

577. 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 the 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 neutralization, so this step does not need to be included in Part II, Section 7A of the Form R for the mineral acid. However, any coincidental *manufacture* of *toxic chemicals* during this process should be considered towards the *manufacturing* threshold determination.

Waste Treatment, Treatment for Destruction, Incineration, Treatment Efficiency

578. A *covered facility* has a liquid wastestream containing a *toxic chemical* which is incinerated. The incineration destroys 99.9 percent 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 the Form R?

If the threshold is met, the *facility* must report this liquid wastestream as *treated for destruction* in Part II, Section 7 of the 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 the Form R. The amount of the listed *toxic chemical* destroyed is also reported in Part II, Section 8.6 of the Form R, and the stack or point source air emissions are also reported in Part II, Section 8.1 of the Form R.

Waste Treatment, Treatment for Destruction, Facility Maintenance Exemption, Composting, Landfill Cover

579. 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 Part II, 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 in 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, Recycle, Chemical Conversion

580. Are *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 recirculated back into the *environment*? Can a *covered 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 *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*.

Waste Treatment, Acids, Neutralization

581. 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 *toxic chemicals*? When does a *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.

Waste Treatment, Acids, Neutralization

582. If a covered acid, such as 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 were 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 Part II, Sections 5 and 8 on the Form R. If the spill were *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 would be reported in Part II, 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 Part II, Section 8.8 of the Form R.

Waste Treatment, Release Reporting, Auxiliary Scrubber

583. 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.

Waste Treatment, Release Reporting, Metal Compounds, Influent Concentration, Metals

584. In Part II, Section 7A of the Form R, should *covered facilities* report the influent concentration to a treatment system for metal compounds in a wastestream 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 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.

Waste Treatment, Part II Section 7A, Treatment Efficiency, Best Available Information

585. 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 or operator report the glycol ether as being treated and, if so, what waste treatment efficiency estimate is reported?

Any *releases* of a *toxic chemical*, even during treatment, must be estimated and reported in Part II, Section 5 of the Form R. Part II, Section 7 of the 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 or operator should use the best readily available information 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 Tanks, Air Emissions, Part II Section 7A

586. A *covered facility* owner or 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 the 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 Threshold, Waste Management Activities

587. If a *covered facility* counts the amount of a listed *toxic chemical* towards an activity threshold, is it 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 or 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 or operator would also report the method and amount of energy recovery in Part II, Sections 7 and 8 on the Form R

Waste Management Activities, Recycle, Reuse, Metals

588. If a *covered facility* sends metal scraps containing chromium off-site to be remelted and subsequently reused, does it report the amount of *toxic chemical* in the metal as recycled off-site?

Assuming no contaminants are removed during the melting process, the chromium in the metal scraps is not actually being recovered but merely melted and reused. Therefore, the amount of the *toxic chemical* in the metal scraps would not be reportable in Part II, Sections 6.2 or 8 of the Form R. However, because the *facility* is repackaging and distributing the *toxic chemicals* in commerce, it should consider these amounts of the *toxic chemical* towards the *facility*'s *processing* threshold. If the *covered facility* exceeds a chemical activity threshold, it is required to file a TRI Report for that chemical.

PACs, Energy Recovery

589. EPCRA Section 313 listed polyaromatic compounds (PACs) are used as binders for coke in carbon anodes. The anodes are baked in a ring furnace and the PACs are combusted. The heating value of the PACs allow for a reduction in the use of natural gas. Should the amount of PACs combusted be reported as burned for energy recovery on the Form R?

In this scenario, EPCRA Section 313 chemicals are being burned in the process, not in a *waste management* activity. *Toxic chemicals* reported as *released* or otherwise managed as waste on the Form R, including quantities reported for energy recovery, should not include chemicals consumed during processing activities. Therefore, the PACs combusted as part of the process in a ring furnace, should not be included as combusted for energy recovery under EPCRA Section 313. These quantities should, however, be considered when making the *facility's otherwise use* threshold.

Waste Management Activities, Release Reporting, Waste Treatment, POTW, Metals, Part II Section 8

590. 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 of the Form R?

Because metals cannot be destroyed, they should not be reported as treated in Part II, 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 *released* and report the ten pounds sent to a POTW in Part II, Section 8.1 on the Form R.

Waste Management Activities, Waste Treatment, Source Reduction, Part II Section 8.10

591. Would RCRA permitted incineration of a listed *toxic chemical* count as a source reduction activity under Part II, Section 8.10 of the Form R?

Section 8.10 of the Form R is for reporting actions or techniques that prevent a *toxic chemical* from becoming a waste to be disposed, treated, combusted for energy recovery, or recycled. Incineration is considered waste treatment (assuming there is no energy recovery) and is reportable under Part II, Sections 6.2.C or 7A, as well as Section 8.6 or 8.7, depending on whether it is performed on- or off-site. It should not, however, be reported as a source reduction activity in Part II, Section 8.10.

Waste Management Activities, Release Reporting, Remediation, Part II Section 8.8

592. Is dredging a lagoon (or surface impoundment) containing a *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* and other *waste management* quantities of the *toxic chemical* 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.

Waste Management Activities, Production Ratio, Activity Index, Batch Processor, Part II Section 8.9

593. For the purposes of reporting in Part II, 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, combusted for energy recovery, treated, or *released* (including *disposed*). 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 *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.

Production Ratio, Activity Index, Part II Section 8.9

594. Can a *covered facility* within the seven newly added industry sectors report "NA" in Part II, Section 8.9 (Production Ratio or Activity Index) of the Form R, for reporting year 1998?

For reporting year 1998 only, *facilities* in the seven newly added industries may use "NA" in Part II, Section 8.9 (Production Ratio or Activity Index) of the Form R. In future years, these newly added *facilities* may only use "NA" in this section if the reported toxic chemical was not *manufactured, processed* or *otherwise used* in the year prior to the reporting year. All other *facilities* covered by EPCRA Section 313 may only use "NA" for the 1998 reporting year, and all future years, if the reported toxic chemical was not *manufactured, processed* or *otherwise used* in the year prior to the reporting year.

NA, Part II Section 8A

595. Are *covered facilities* in one of the seven newly added industry sectors required to provide an estimate in column A, Section 8 (Prior Year Estimate) of the Form R in reporting year 1998?

No. For reporting year 1998 only, *covered facilities* in one of the seven newly added industry sectors are not required to provide an estimate for the prior year in column A, Section 8 of the Form R. However, if the *facility* has information to develop an estimate, then reporting the estimate may provide valuable information that may clarify the *facility's* yearly estimates.

Waste Management Activities, Source Reduction, Economic Reasons

596. If a *covered 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.

Waste Management Activities, NA vs. 0, Part II Section 8.8, Catastrophic One-Time Event

597. On the Form R, a *covered facility* owner/operator must provide information about routine and non-routine *releases* for each reported *toxic chemical*. Specifically, in Part II, Section 8.8, an owner/operator must report the quantity of any *release* of a *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 NA" in Section 8.8?

While either notation, NA or zero, may be entered in Part II, 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.

Release Reporting, Catastrophic One-Time Event, Part II Section 8.8

598. Are *releases* due to a pipe rupture that was caused by premature failure of the pipe (no direct cause known) considered a catastrophic *release* and reportable in Part II, Section 8.8?

Releases reported in Part II, Section 8.8 of the Form R should be the result of a remedial action, a catastrophic event or a one time release not associated with normal or routine production processes. In general, pipes have an expected lifespan. If a pipe ruptures during its expected lifespan for no known reason, the *release* should be considered a one-time *release* not associated with normal or routine production processes and should be reported in Section 8.8. However, if the pipe bursts because it was in use after its expected lifespan, it should not be considered a one-time *release* because it should have been replaced.

This page intentionally left blank.

Section 5. FORM A AND FORM R SUBMISSIONS

A. Form A (Alternate Threshold Reporting)

Form A Criteria

599. 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 *disposed*), 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

600. What is the Form A and who may submit this form?

The Form A provides certain *covered 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 who do not exceed one million pounds *manufactured, processed*, or *otherwise used* and the *facility's total annual reportable amount* does not exceed 500 pounds for the *toxic chemical*, may submit an annual certification statement (Form A) instead of a Form R for the *toxic chemical*.

Form A, Release Reporting, RQ

601. What is the *total annual reportable amount* and is it the same as an RQ (Reportable Quantity)?

No, they are not the same. 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 *release* (including *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

602. If I qualify and file a Form A, must I submit any other documentation to EPA and the *state* or tribal authority?

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* or tribal authority. However, the *facility* must maintain all documentation supporting their Form A submission.

Form A, Effective Date

603. 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

604. 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 the 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

Form R, Deadline Extension

605. Are there any extensions that a *facility* can get for filing the 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 is published in the Federal Register.

Form R, Electronic Form R

606. 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 EPCRA Information Hotline for more information ((800) 424-9346 or (703) 412-9810).

Form R, Reporting Deadline, Weekends

607. 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 a 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).

Form R, Signature, Certification

608. 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 to 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.

Form R, Certification Statement, Senior Management Official

609. 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 with management responsibility for the manager of environmental programs for the *facility* or *establishments*, or with management responsibility 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

610. Can a plant manager of a *covered 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.

Form R, Senior Management Official, Certification

611. If a *covered 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.

Form R, Mailing Address, Part I Section 4.1

612. 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 EPA of address changes in advance.

Form R, Facility, Facility Reporting, Location Change, Reporting Requirements

613. 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*, at Company Y's facility, 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 code*.

Form R, Facility, Facility Name Change, Parent Company Name

614. The owner/operator of a *covered 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.)

Form R, TRI Facility Identification Number, Change of Ownership

615. 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.

Form R, TRI Facility Identification Number, Change of Ownership

616. A portion of a *covered facility* 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 Section 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.

Form R, Public Contact, Part I Section 4.4

617. 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, Section 4.4 does not have to be located at the *covered facility*.

Form R, Public Contact, Technical Contact, Part I Section 4.4

618. 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.

Form R, Technical Contact

619. 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.

Form R, SIC Code, Multi-establishment, Part I Section 4.5

620. 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 I, 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 I, 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.

Form R, Dun & Bradstreet Number, Part I Section 4.7

621. If a *covered 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.

Form R, Multi-establishment Dun & Bradstreet Number

622. 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 at the same *facility* usually do not have separate Dun & Bradstreet numbers.

Form R, Latitude/ Longitude

623. 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.

Form R, NPDES Permit, Part I Section 4.9

624. If a *covered 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 the Form R and is intended for use in obtaining other information about the *facility*.

Parent Company, Multiple Owners, Part I Section 5.1

625. An electricity generating *facility* (EGF) is comprised of multiple independent owners. Each individual owner runs his/her own separate operation, but each has a financial interest in the operation of the entire *facility*. What name should be entered as the parent company in Part I, Section 5.1 of the Form R? Should the *facility* report under one holding company name?

The electricity generating *facility* should enter in Part I, Section 5.1 of the Form R the name of the holding or parent company, consortium, joint venture, or other entity that owns, operates, or controls the *facility*.

Part I, Section 5.1, Parent Company Name

626. A *covered facility* sells one of its *establishments* to a new owner. The operator of the newly sold *establishment*, however, does not change. The same operator operates the newly sold *establishment* and the rest of the *facility*. Although the *facility* makes its threshold determinations based on the activities at the entire *facility* (including the newly sold *establishment*), the *facility* chooses to report separately for the different *establishments*. What parent name should the newly sold *establishment* use, the parent name of the owner or the parent name of the operator (i.e., the same as the rest of the *facility*)?

All *establishments* of a *covered facility* must report the parent name of the *facility*. Therefore, in the instance described above, the newly sold *establishment* should use the parent name of the *facility* operator (i.e., the same parent name the rest of the *facility* is using.)

Form R, NPDES Permit, Releases to Receiving Stream, Part I Section 4.9

627. If a *covered facility* enters an NPDES permit number on the 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.

Form R, Maximum Amount On-site, Threshold Determination

628. In determining the maximum amount on-site and thresholds, do *covered facilities* 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 and in making threshold determinations.

Form R Submissions, Part II Section 3

629. A metal mining *facility manufactures*, *processes*, and *otherwise uses* cyanide compounds, but only exceeds the *otherwise use* threshold. How should this *facility* complete Part II, Section 3 of the Form R?

Even though the *covered facility* only exceeds the *otherwise use* threshold, it is required to identify all *manufacturing*, *processing*, and *otherwise use* activities and check at least one box in Part II, Sections 3.1, 3.2, and 3.3. The Forms and Instructions document directs *facilities* to check all the boxes in Section 3 that apply. Note that once a threshold has been exceeded for a listed *toxic chemical*, the *facility* must report *releases* and other *waste management* activities associated with all nonexempt activities at the *facility*, and not just those associated with *otherwise use* activities.

Form R, Maximum Amount On-site, Part II Section 4, Threshold Determination

630. For Part II, Section 4 of the Form R, a *covered 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.

Form R, Maximum Amount On-site, Previous On-site Disposal

631. How do *covered facilities* that operate landfills report maximum amount of a chemical on site? Does this data element take into account amounts of a chemical that have been *disposed* of in prior years?

To comply with EPCRA's maximum amount on site requirement, *facilities* should report in data element 4.1, Part II, of the Form R, the maximum quantity of the toxic chemical present at the *facility* during the reporting year. *Facilities* should include amounts of the chemical in storage tanks, process vessels, on site shipping containers, and any other amount of the chemical at the *facility*. However, *facilities* do not have to count amounts of the toxic chemical that it disposed of in on site landfills in previous years.

Form R, Maximum Amount On-site, Part II Section 4, Threshold Determination

632. 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, *covered facilities* must aggregate all nonexempt quantities of the *toxic chemical*. Does this amount include concentrations of the *toxic chemical* present in products?

Yes. *Covered 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 Part II, Section 4.1 of the Form R.

Form R, Maximum Amount On-site, Part II Section 4

633. How should *facilities* estimate the maximum quantity on-site for hydrochloric acid (aerosol), *manufactured* as a by-product of the combustion process and vented directly to a stack?

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., aerosol) is to be

considered. The quantity of the hydrochloric acid (aerosol) could be estimated by determining the volume of the air stream that could contain hydrochloric acid (aerosol), as well as the concentration of the acid in the air stream. In this case, the volume would be the interior volume of the equipment from where it is *manufactured* (e.g., *boiler*) to where it is *released* (e.g., stack). Keep in mind that the range codes used for the maximum quantity on-site are quite broad, and therefore, a precise calculation may not always be required. *Facilities* are also directed to refer to the Guidance for Reporting Sulfuric Acid (EPA-745-R-97-007; November 1997).

Form R, Maximum Amount On-site, Fume or Dust, Part II Section 4, Threshold Determination

634. 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 *covered 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.

Form R, Maximum Amount On-site, Part II Section 4, Multi-establishment, Threshold Determination

635. In Part II, Section 4.1 of the Form R, *covered 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 a *toxic chemical* on-site should be reflective of the *establishment* or group of *establishments*, and not of the entire *facility*.

Form R, Releases to Receiving Streams, Part II Section 5.3

636. How should a *facility* go about designating the name of a receiving stream?

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 the receiving waters 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.

Form R, Releases to Receiving Streams, Part II Section 5.3

637. A *covered facility* determines that it can estimate stormwater *releases* of a *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* are 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 into the computerized database of Section 313 data.

Form R, Releases to Receiving Streams, Part II Section 5.3.1

638. A *covered 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 the Form R?

Since Grove Creek is the first named receiving stream, it should be listed in Part II, Section 5.3.1 even though the waste is not directly discharged into it.

Form R, Blank Data Elements: NA

639. In some sections of the 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.

Form R Submissions, NA

640. A *covered facility* is required to file a Form R for benzene. The *facility* did not have any known accidental spills or *releases* to land of benzene during the calendar year. Is it appropriate for the *facility* to report "NA" in Part II, Section 5.5.4, (Other *Disposal*)?

No. It is only appropriate to report "NA" when there is no possibility that a *release* could have occurred to a specific media or off-site location. In Part II, Section 5.5.4, the *facility* is required to report any amount of a listed *toxic chemical released* to land that does not fit the categories of landfills, land treatment, or surface impoundments. This includes any spills or leaks of the listed *toxic chemical* to land. While there were no known spills or leaks to land of benzene, the possibility did exist that a *release* could have occurred. In this situation, the *facility* should report 0 in Section 5.5.4 and provide a basis of estimate (see the current Toxic Chemical Release Inventory Reporting Forms and Instructions).

Form R, Significant Figures

641. Please explain the "two significant figures" reporting guideline.

Estimates are not required to be reported to a greater accuracy than two significant figures (e.g., 4224 may be entered as 4200). The number of significant figures is the number of non-zero digits. One significant digit may be reported if the estimation techniques used do not support two digit accuracy.

Form R, Release Estimate, Significant Figures

642. When reporting *release* estimates on the 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 the Form R, always report using whole numbers (i.e., round to the nearest pound).

Reporting Requirements, Recordkeeping

643. What are the EPCRA Section 313 recordkeeping requirements for *facilities* that do not exceed thresholds?

If a *facility* does not exceed an activity threshold for any listed toxic chemical, or is not in a *covered SIC code*, or does not have ten or more full time employees, it is not required under EPCRA Section 313 to maintain any records associated with its uses, *releases*, or other *waste management* activities involving listed *toxic chemicals*. Such facilities, however, may want to keep records of the amounts of listed *toxic chemicals* they *manufacture*, *process*, or *otherwise use* in order to defend against any claim that they failed to report.

Form R, Audit Provisions

644. Are specific audit provisions in the regulations? What about resolving differences of opinion, (i.e., does the auditor have final judgment)?

Specific audit provisions are not in the EPCRA Section 313 regulations. The Agency, however, has the responsibility to assure that the data submitted are based on reasonable estimates. Audit results will be used to identify problems with calculating *releases* and other *waste management* quantities. In resolving differences of opinion, we expect that a final judgment 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.

Form R, Enforcement

645. The enforcement requirements of EPCRA (Section 325), state that the civil and administrative penalties for Section 313 noncompliance shall not exceed $25,000 for each violation. Is a noncompliance 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 account 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 submitted incorrectly, and the penalty can be assessed on a per day basis. EPA accesses penalties on a per *toxic chemical* per *facility* basis which may include per day penalties, depending on the circumstances of the violation. An Enforcement Response Policy (ERP) is available for EPCRA Section 313 and it describes the types of violations and associated penalties (current version). 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).

Form R, Signature, NOTE

646. 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 completed Form R with an original signature, and this new form should be attached to the NOTE and returned to EPA and to the facility's *state* contact.

Form R, Form R Submissions

647. Can a *facility* submit one original copy 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 noncompliance. The final rule clearly requires that each completed submission contains all parts of the Form R (including Part II).

Form R, Reporting Requirements, Negative Declaration

648. If a *facility* is not required to report under EPCRA Section 313, is there any form that is available to report that EPCRA Section 313 does not pertain to this *facility*?

There is no negative declaration form available to facilities not covered by EPCRA Section 313.

Form R, Form R Submissions

649. 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. Postal Service "Return Receipt Request" mail service. The Agency will not respond to cover letters requesting acknowledgment.

Recordkeeping, Electronic Data

650. A covered RCRA Subtitle C hazardous waste *facility* uses data from hard copies of manifests, waste profiles, purchasing orders, inventory orders, etc. to determine thresholds and calculate *releases* and other *waste management* activities. The *covered facility* transfers all of the data from the paper sources into its computer system, and then discards the hard copies. The *facility* keeps the computerized data for three years from the date of submission of its Form R. Can electronic data be used (in conjunction with other data) to satisfy the recordkeeping requirements at 40 CFR Section 372.10, or must the *facility* maintain copies of the original documentation?

Insofar as 40 CFR Section 372.10 is concerned, some electronic data that has been scanned may be used to satisfy recordkeeping requirements. *Facilities* should employ adequate safeguards to prevent changes to the data after the data have been scanned and the documents stored electronically should capture all of the information required by 40 CFR Section 372.10. For example, this section of the regulations states, in part, that "Each person subject to the reporting requirements . . . must retain the following records for a period of 3 years from the date of the submission of a report . . .[3][vi] receipts or manifests associated with the transfer of each toxic chemical in waste to off-site locations." While the scanning and electronic storage of the entire receipt or manifest would satisfy the recordkeeping requirements of 40 CFR Section 372.10, the data entry of portions of the receipts or manifests into spreadsheets or databases might result in the loss, or erroneous entry, of pertinent information that is required by 40 CFR Section 372.10.

Form R, Source Reduction, Data Sources

651. Where can *facilities* obtain source reduction figures from previous years?

Facilities should use the best readily available information they have. For example, they may use inventory data, reuse data, engineering reports on process modification, and product development studies.

Information Access

652. 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 that make requests to the EPCRA Reporting Center. This protects the anonymity of the requestor.

C. Form R Withdrawals

Withdrawal

653. 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.

Form A, Form R, Withdrawal

654. What is the procedure for requesting a withdrawal of a Form R or Form A submission?

In order to have a submission removed from the Toxics Release Inventory (TRI) database, a *facility* must send a letter to both the EPCRA Reporting Center and the appropriate *state* agency requesting that the submission be withdrawn from the EPA database. The letter should be marked "Attention: Withdrawal Request" and should explain the reason for the request (e.g., the *toxic chemical* was below threshold, or the *facility* qualifies for an exemption). The withdrawal request should also include the following information: the reporting year, chemical name, a technical contact name and phone number, and the name and phone number of the requester if it is not the same as the technical contact. It is only necessary to submit a withdrawal request letter. A copy of the Form R or Form A should NOT be included. The request should be sent to the EPCRA Reporting Center (at the address found in the most recent version of the Toxic Chemical Release Inventory Reporting Forms and Instructions) and the appropriate *state* agency.

Withdrawal

655. 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 when it 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

656. 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 the Agency considers, is the information contained in the withdrawal request and/or the Form R that was submitted.

Withdrawal, EPA Contact

657. 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 on the request for withdrawal of the Form R.

Withdrawal, Validity

658. In approving a 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

659. Is EPA's approval of a request to withdraw a 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 grants 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, Withdrawal Requirements

660. A *covered facility* mistakenly determined a *toxic chemical* to be *otherwise used*, rather than *processed*, at their *facility*. As a result, the *facility* reported the listed *toxic chemical* on the 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.

Withdrawal, Form R Revisions

661. If a *covered 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?

As soon as the errors are discovered, the *facility* should resubmit the form 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 data elements that are different from the initial report should be made and circled in dark ink. The original, incorrect elements should be crossed out.

Form R, Form A, Form R Revisions

662. What is the procedure for voluntarily revising previously submitted Forms R or Form A reports?

Voluntary revisions (as opposed to revisions required to correct errors that prohibit further Form R/Form A processing) must be submitted to the EPCRA Reporting Center and the appropriate *state* agency. Although hard copy (i.e., paper) revisions are acceptable, EPA encourages *covered facilities* to submit all revisions on a diskette, by using EPA's Automated Toxic Chemical Release Inventory Reporting Software (ATRS) package, even if the original submission was on hard copy. A cover letter with *facility* information (e.g., reporting year, chemical name, document control number if known, original date of submission) and an explanation of the reason for the revision is helpful, but is not required. Standard revisions (i.e., revising a Form R with another Form R, or revising a Form A with another Form A) may be completed in one of two ways:

(1) The *facility* may submit the Form R or Form A revision on a diskette by entering an "X" in the field named "Enter 'X' here if this is a revision." If the original was submitted on hard copy, the *facility* should complete an electronic version of the entire Form R that reflects the revisions. If the original was submitted on a diskette, the *facility* should simply modify the appropriate fields of the original ATRS submission. The diskette should include ONLY those Forms R or Forms A that have been revised, not the original form. The owner/operator or *senior management official* must sign and date the ATRS certification cover letter.

(2) The *facility* may submit the Form R or Form A revision on hard copy by entering an X in the space marked "Enter 'X' here if this is a revision" and enter the corrected information next to the original information. Corrections should be made in blue or black ink only, NEVER in red ink. The owner/operator or *senior management official* must re-sign and re-date the certification on page one.

Form R Revisions, Receipt of New Information

663. A covered treatment, storage, and *disposal* (TSD) *facility* receives a corrected waste profile in September for a type of waste that the *facility* has been receiving since January 1. The corrected waste profile indicates that a listed *toxic chemical* is in the wastestream at a higher concentration than was indicated on previous waste profiles. Must the TSD *facility* revise its threshold determinations and *release* and other *waste management* calculations back to the beginning of the reporting year or only from the date (September) that the corrected information was received?

The *facility* must revise its threshold determinations and *release* and other *waste management* calculations back to the beginning of the year, if the *facility* receives information that they believe is more accurate in depicting amounts of *toxic chemicals* that they manage. *Covered facilities* are required to use their best readily available information as provided by EPCRA Section 313(g)(2). If facilities obtain information that they believe is better than the information that they applied for previous report submissions, the *facility* may submit a revision for prior periods provided that they document the basis for the revision.

Form R, Form A, Form R Revisions

664. What is the procedure for replacing a Form A with a Form R and vice versa?

A Form R submitted after a Form A for the same chemical and reporting year is considered to be a late submission of a Form R and a request for a withdrawal of the previously filed Form A. Although hard copy submissions are acceptable, EPA encourages *facilities* to submit all submissions on a diskette by using EPA's ATRS software package, even if the original submission was on hard copy.

A Form A submitted to replace a previously filed Form R is treated as both a withdrawal request and a replacement for the original Form R, and is subject to EPA review and approval. EPA encourages *facilities* to submit all Forms A on a diskette by using EPA's ATRS software package, even if the original Form R submission was on hard copy. A cover letter with *facility* information (e.g., reporting year, chemical name, document control number if known, original date of submission) and an explanation of the reason for the replacement is helpful, but is not required. Submitters who wish to submit a replacement Form A should use the following procedure:

(1) Send a completed diskette or hard copy version of the Form A to the EPCRA Reporting Center and the appropriate *state* agency. Please do not include a copy of the original Form R.

(2) Do NOT mark the revision box on the first page of the Form A, since submitting a withdrawal request and replacement Form A is not considered to be a voluntary revision. Rather, they are withdrawal requests and replacements of the previously filed Form R subject to EPA review and approval. EPA will evaluate whether or not to accept the revision (i.e., replacement Form A). The owner/operator or *senior management official* must re-sign and re-date the ATRS certification cover letter (in the case of an ATRS diskette submission) or the certification on page one (in the case of hard copy submission).

Form R, Form R Revisions

665. By what date must withdrawals and revisions be completed?

There is no deadline for withdrawals and submissions. However, voluntary revisions and withdrawal requests must be submitted by October 15th of the same year as the reporting deadline in order for the revised or withdrawn data to be reflected in the corresponding TRI public data release.

Withdrawal, Chemical Deletion

666. 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, and the final action is effective upon publication in the Federal Register, thereby relieving *covered facilities* from 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?

Covered 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 R reports 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

667. A *covered 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.

Section 6. SUPPLIER NOTIFICATION (See Appendix A: Section 313 Policy Directive #9 Supplier Notification)

Supplier Notification, Notification Date

668. 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, De minimis Exemption

669. 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 through 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

670. Does a supplier have to tell a customer that a *toxic chemical* is present below the de minimis level (1.0 percent; or 0.1 percent for OSHA carcinogens)?

No. This information is not required.

Supplier Notification, SIC Code

671. 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 through 39 is responsible for providing supplier notification to all *facilities* in *covered SIC codes* (including the newly added industries) 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 SIC code* but not in SIC codes 20 through 39, however, are not required to initiate supplier notification.

Supplier Notification, Mixture, Chemical Conversion

672. Are some *mixtures* of *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 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 *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.

Mixture, Supplier Notifications

673. 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

674. 40 CFR Section 372.45(b)(l) 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

675. 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

676. 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

677. Is supplier notification required for distributors in SIC codes other than 20 through 39 which do not *manufacture* or *process* listed *toxic chemicals* or *mixtures* containing *toxic chemicals*?

Distributors in SIC codes outside of 20 through 39 who do not *manufacture* or *process toxic chemicals* are not required to prepare notices 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

678. 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 the shipments to covered *facilities*?

No, if the secondary supplier does not receive the information, he/she cannot develop a notice.

Supplier Notification, Negative Declaration

679. A manufacturer lists *toxic chemicals* on Section II of the *MSDS* under hazardous ingredients. It is possible that none of the 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 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 his/her own initiative.

Supplier Notification, Distributors

680. 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?

The *facility* should use the best readily available information. 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.

Supplier Notification, Reasonable Estimates

681. What burden must the *covered facility* undertake to verify the accuracy/completeness of information provided to it under the requirements of supplier notification?

A *facility* must use the best readily available information in making threshold determinations and *release* and other *waste management* calculations. If the *facility* has an indication that information provided by the supplier is unreasonable, they should look to other sources of information that they believe are more representative of any listed *toxic chemicals* and their

concentrations contained in *mixtures* or *trade name products* received from their suppliers. *Facilities* must document assumptions and calculations used in making threshold determinations and *release* and other *waste management* calculations.

Supplier Notification, Distributors

682. 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 transhipping, 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 Facility

683. 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

684. 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 through 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 appears 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 through 39 but instead, is a *covered facility* in a newly added industry 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*.

Supplier Notification, Trade Name, Generic Name, Part II Section 1

685. *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 the 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

686. 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).

Supplier Notification, MSDS

687. 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 readily available information, 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 readily available information and the *facility* must use it.

Supplier Notification, MSDS

688. A *covered 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 be included with the *MSDS* for those non-consumer products. The *MSDS*, however, does not have to be distributed as the primary vehicle of notification.

Supplier Notification, MSDS

689. 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

690. EPCRA Section 313 supplier notifications 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

691. Would an annual notification by letter to customers satisfy 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, Pesticides

692. 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, Mixture, Chemical Category

693. 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* and other *waste management*. The customer must be told the weight percent of the entire compound for threshold determinations.

Supplier Notification, Pure Chemical, Trade Name

694. Do the supplier notification requirements under 40 CFR Section 372.45 require notification for a shipment of a pure (i.e., 100 percent) *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

695. 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

696. A *covered 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, Intracompany Transfer

697. Do transfers of products or materials from one of our company's *facilities* to another *facility* require supplier notification?

Yes. The language of the regulations covers 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

698. 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

699. 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*?

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 through 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 Threshold

700. 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 through 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 through 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 it 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

701. 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

702. A chemical manufacturing *facility* 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 use 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, Electroplating

703. 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?

No, if the metal parts can be considered *articles*. In that case, the manufacturing company is not considered to be a supplier to the electroplator and does not need to meet the requirements for supplier notification.

Supplier Notification, Article Exemption

704. 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

705. 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

706. 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

707. 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* calculations.

Supplier Notification, Corporate Headquarters

708. 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

709. 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

710. 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 concentrations 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 *toxic chemical*.

Supplier Notification, Concentration

711. 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, Trade Secret

712. A *facility* is required to provide the supplier notification (40 CFR Section 372.45) for some of its products that contain *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

713. 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

714. 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 regulations 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

715. 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 through 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.

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* that 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

SUPPLIER NOTIFICATION

716. 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)(l), 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

717. 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 l, 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 l 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

718. 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 could occur between the mass mailing and the actual first shipment.

This page intentionally left blank.

Section 7. TRADE SECRETS

Trade Secret, Chemical Identity

719. 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 the 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

720. 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

721. For claiming trade secrets under EPCRA Section 313, would disclosure, without a confidentially 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 a federal, *state* or local government officer or employee, or to 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 Government

722. A company with both domestic and foreign operations wishes to claim on a Form R that the identity of a *toxic 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 *toxic 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 a 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 EPCRA 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 determinations 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 EPCRA Section 313 coordinator or call the Emergency Planning and Community Right-to-Know Information Hotline at (800) 424-9346 or (703) 412-9810.

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* calculations. 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*, *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 for those non-exempted quantities (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; 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 *covered 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* calculations. 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* calculations. 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* calculations 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 percent 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 potential carcinogen, the reporting *facility* may disregard levels of the chemical below the 0.1 percent 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*. All other listed *toxic chemicals* have a one percent (1.0 percent) de minimis level.

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 determinations and *release* and other *waste management* 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 the two examples below 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 Forms 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* calculations. 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 percent manganese. Manganese is subject to 1 percent de minimis concentration exemption. The amount of *mixture* subject to reporting is:

9,500,000 × (1.2 – 0.99)/(1.2 – 0.25) = 2,000,000 lbs. non-exempt *mixture*

The average concentration above de minimis is 1.1 percent.

2,900,000 × 0.011 manganese = 22,000 lbs manganese (below threshold)

In this example, because the *facility*'s information pertaining to the *toxic chemical* is available to two digits past the decimal point, 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 digit past the decimal point, 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 *manufacture* of a *toxic chemical*. The de minimis exemption may apply to *mixture*s 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. In that case, 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* calculations. Any amount of a *toxic chemical* that is *manufactured* in a wastestream must be accounted for on the 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 percent) remaining in the carbon tetrachloride. The separated chloroform at 90 percent concentration is sold as a byproduct. Chloroform is subject to a 0.1 percent (1,000 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 byproduct. *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* calculations even if the formaldehyde is present below the de minimis level in the process stream where it was *manufactured* or in the wastestream 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 *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 Vehicle Use Exemption Applies Only to Otherwise Use of Chemical

The exemption applies only to the *otherwise use* of these chemicals, not their *manufacturing* 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 the automobiles 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 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 the 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.

DIRECTIVE #4 – COMPOUNDS AND MIXTURES

1. 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* calculations 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* calculations.

4. Supplier Notification and Concentration Ranges Provide Information for Reporting

The supplier notification requirements under 40 CFR Section 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 determinations and *release* and other *waste management* calculations. 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 EPCRA Section 313 require a different approach when making threshold determinations and *release* and other *waste management* calculations. 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 are also 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* and other *waste management* of compounds are calculated based on the pounds of the parent metal *released* or otherwise managed as waste 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 only measure the dissociated nitrate ion *released* and not the amount of the total nitrate compounds from which the nitrate ion dissociated. Reporting the amount of 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 have fluids escape are 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 EPCRA 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 EPCRA Section 313 Reporting

Facilities in the SIC codes 20 through 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 1, 1998, the interpretation of activities considered *otherwise used* includes *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; May 1, 1997). In this rule, which became effective January 1, 1998 (for the 1998 reporting year, Form R reports due by July 1, 1999), EPA finalized a revised interpretation 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 chemical A for destruction. 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 chemical A for destruction, the treated amount of chemical A 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* and other *waste management* activities involving chemical A.

Example 1A: 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. Stabilization is included among the various activities covered by EPA's revised interpretation of *otherwise use* of a *toxic chemical* received by the *facility* from off-site. Because the *facility* received and stabilized chemical A, the amount of stabilized chemical A 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* and other *waste management* activities involving chemical A.

Example 1B: 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* and other *waste management* activities involving chemical A.

Example 2: Assume now that the same *facility*, in treating chemical A for destruction, *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 *manufacture* 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 an off-site 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* 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 pound *process* threshold for that chemical at the *facility*.

Example 2B: As in the above two examples, 11,000 pounds of chemical B are *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. 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* and *waste management* activity involving chemical B.

Example 3: 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 chemical C for destruction 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 was 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. In this situation, 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: 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, 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 the *facility* would report all *releases* 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 *otherwise use*. 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 counter ion when in solution.

1. Determining Threshold and Release Quantities for Ammonia

If a *covered 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* or otherwise managed as waste is the total quantity of anhydrous ammonia *released* or managed as waste.

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* or managed as waste.

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* and other *waste management* quantities for the aqueous ammonia are calculated as 10 percent of total aqueous ammonia; and (3) *release* 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 *manufacture* 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* calculations.

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* and other *waste*

management 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 percent) of the NH_3 equivalents of the ammonium salt. The NH_3 equivalent wt percent of an ammonium salt is calculated using the following equation:

NH_3 equivalent wt percent = (NH_3 equivalent weight)/(MW ammonium salt) × 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 ($(NH_4)_2CO_3$)), 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 counter ion, 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 be aware of the *toxic chemical* composition of the products they use to be able to calculate *releases* and other *waste management* 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 may sell 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* and other *waste management* reporting requirements, you may still be required to notify your 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 through 39 are not required to initiate the distribution of notifications for *toxic chemicals* in *mixtures* or trade name 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 must notify all customers in a *covered SIC code* or distributors who in turn may 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 may 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 Section 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 begin 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 Toxic Chemical Release Inventory Reporting Forms 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* (see 40 CFR Section 372.3).
  - Foods, drugs, cosmetics, 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 further *waste management*. 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 (40 CFR Section 350.5).

8. Recordkeeping Requirements

The following records are required to be kept for three years:

- 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 (40 CFR Section 350.5); 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 (40 CFR Section 350.5).

This information must be readily available for inspection by EPA.

Sample Notification Letter

January 2, 1998

Mr. Edward Burke
Furniture Company of North Carolina
1000 Main Street
Anytown, North Carolina 99999

Dear Mr. Burke:

This letter is to inform you that a product that we sell to you, Furniture Lacquer KXZ-1390, contains one or more chemicals subject to Section 313 of the Emergency Planning and Community Right to Know Act (EPCRA). We are required to notify you of the presence of these chemicals in the product under EPCRA Section 313. This law requires certain manufacturers to report on annual emissions and other waste management of specified toxic chemicals and chemical categories. Our product contains:

- Toluene, Chemical Abstract Service (CAS) number 108-88-3, 20 percent; and

- Zinc compounds, 15 percent.

If you are unsure whether you are subject to the reporting requirements of EPCRA Section 313, or need more information, call EPA's EPCRA Hotline at (800) 424-9346 or (703) 412-9810. Your other suppliers should also be notifying you about EPCRA Section 313 toxic chemicals in the mixtures and trade name products they sell to you.

Finally, please note that if you repackage or otherwise redistribute this product to industrial customers, a notice similar to this one must be sent to those customers.

Emma Sinclair
Sales Manager
Furniture Products

SAMPLE

This page intentionally left blank.

APPENDIX B. GLOSSARY

AP-42 - is 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 as 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 in 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 shape or design; and (3) which does not *release* a *toxic chemical* under normal conditions of *processing* or use of that item at the facility or *establishments*.

Beneficiation - the preparation of ores to regulate the size (including crushing and grinding) of the product, to remove unwanted constituents, or to improve the quality, purity, or grade of a desired product (40 CFR Section 372.3).

Boiler - an enclosed device using controlled flame combustion and having the following characteristics:

(1)(i) The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

(ii) The unit's combustion chamber and primary energy recovery sections(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

(iii) While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

(iv) The unit must export and utilize at least 75 percent of the recovered energy, calculated on an annual basis. In this calculation, no credit shall be

given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

(2) The unit is one which the Regional Administrator has determined, on a case-by-case basis, to be a boiler, after considering the standards in 40 CFR Section 260.32 of this chapter (40 CFR Section 372.3).

Coal Extraction - the physical removal or exposure of ore, coal, minerals, waste rock, or overburden prior to beneficiation, and encompasses all extraction-related activities prior to beneficiation. Extraction does not include beneficiation (including coal preparation), mineral *processing*, in situ leaching or any further activities (40 CFR Section 372.3).

Covered Facility - 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 through 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 50 states, the District of Columbia, and Puerto Rico (40 CFR Section 372.3).

Disposal - any underground injection, placement in landfills/surface impoundments, land treatment, or other intentional land disposal (40 CFR Section 372.3).

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 - 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 - 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 - a person who works 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 CER Section 372.3).

Import - 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).

Industrial Furnace - any of the following enclosed devices that are integral components of manufacturing *processes* and that use thermal treatment to accomplish recovery of materials or energy:

(1) Cement kilns.

(2) Lime kilns.

(3) Aggregate kilns.

(4) Phosphate kilns.

(5) Coke ovens.

(6) Blast furnaces.

(7) Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machine, roasters, and foundry furnaces).

(8) Titanium dioxide chloride process oxidation reactors.

(9) Methane reforming furnaces.

(10) Pulping liquor recovery furnaces.

(11) Combustion devices used in the recovery of sulfur values from spent sulfuric acid.

(12) Halogen acid furnaces (HAFs) for the production of acid from halogenated hazardous waste generated by chemical production *facilities* where the furnace is located on the site of a chemical production *facility*, the acid product has a halogen acid content of at least 3 percent, the acid product is used in a manufacturing *process*, and, except for hazardous waste burned as fuel, hazardous waste fed to the furnace has a minimum halogen content of 20 percent as-generated.

(13) Such other devices as the Administrator may, after notice and comment, add to this list on the basis of one or more of the following factors:

(i) The design and use of the device primarily to accomplish recovery of material products;

(ii) The use of the device to burn or reduce raw materials to make a material product;

(iii) The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in *processes* using raw materials as principal feedstocks;

(iv) The use of the device to burn or reduce secondary materials as ingredients in an industrial *process* to make a material product;

(v) The use of the device in common industrial practice to produce a material product; and

(vi) Other factors, as appropriate (40 CFR Section 372.3).

Manufacture - 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 form required to be developed under 29 CFR Section 1910.1200(g), as that section may be amended from time to time (EPCRA Section 329(6)).

Mixture - 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 - 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 *mixtures* 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* was modified to read:

Otherwise use - 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).

Overburden - the unconsolidated material that overlies a deposit of useful materials or ores. It does not include any portion of ore or waste rock (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).

RCRA approved test method - includes Test Method 9095 (Paint Filter Liquids Test) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846, Third Edition, September 1986, as amended by Update I, November 15, 1992 (40 CFR Section 372.3).

Release - 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 chemicals* (40 CFR Section 372.3).

Senior Management Official -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 - 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 recycling, energy recovery, treatment, and/or disposal (See 40 CFR Section 372.27(a)).

Toxic chemical - a chemical or chemical category listed in 40 CFR Section 372.65 (40 CFR Section 372.3).

Trade name product - 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).

Treatment for destruction - the destruction of a *toxic chemical* in waste such that the substance is no longer the *toxic chemical* subject to reporting under EPCRA Section 313. *Treatment for destruction* does not include the destruction of a *toxic chemical* in waste where the *toxic chemical* has a heat value greater than 5,000 British thermal units and is combusted in any device that is an industrial furnace or boiler (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 Commission (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 if no recycling, combustion for energy, treatment for destruction, waste stabilization, or *release* of the chemical occurs at the *facility* (See 62 FR 23834; 23850; May 1, 1997).

Waste stabilization - any physical or chemical *process* used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquid as determined by a RCRA approved test method for evaluating solid waste as defined in this section. A *waste stabilization process* includes mixing the hazardous waste with binders or other materials, and curing the resulting hazardous waste and binder *mixture*. Other synonymous terms used to refer to this *process* are "stabilization," "waste fixation," or "waste solidification" (40 CFR Section 372.3).

APPENDIX C. INCORRECT GUIDANCE ON EPCRA SECTION 313

The following EPA letters are incorrect and should not be used for reporting under EPCRA Section 313. Please do not refer to these documents when making threshold determinations and *release* and other *waste management* calculations.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

June 14, 1991

MEMORANDUM

SUBJECT: Clarification of the Article Exemption

FROM: Sam Sasnett, Director
Toxic Release Inventory Management Staff
(TS—779)

TO: Robert W. Hicklin
Section 313 Enforcement Coordinator
USEPA Region 6 (6T-PT)

This correspondence is in response to your memo (received 5/31/91) related to issues involving the article exemption under the Emergency Planning and Community Right-to—Know Act (EPCRA; 40 CFR 372.38(b)). In response to some of the many issues you raised, I have the following comments:

- **Recycling Efficiency -** For the toxic chemicals in like items to remain exempt from threshold and release calculations, the processing and use of these like items at a facility during a calendar year must result in a release of less than 0.5 pounds for any given toxic chemical. (The 0.5 value is chosen as the cut off value since, according to our guidelines, less than this amount may be rounded to 0 or no release.) However, if all the released material is collected for recycling or reuse, either on- or off—site, the article exemption is not negated.

  As you point out in your memo, recycling strategies are not (for a variety of reasons) likely to be 100% efficient. Nevertheless, the important aspect to consider when deciding whether or not to count a particular release towards the 0.5 pound cut-off value is the comprehensiveness and aggressiveness of the owner/operator in attempting to recycle/recover as much released material as possible. If the owner/operator has instituted a comprehensive and aggressive program for the recycle/recovery of all released material, then small amounts of toxic chemical that are not, in fact, recycled/recovered due to the imperfect efficiency of virtually any recycling/recovery system should not count towards the 0.5 pound cut-off value.

INCORRECT GUIDANCE
UNDER SECTION 313

For example, a metal fabricator has instituted a comprehensive and aggressive recycling/recovery program to collect dust, fumes, chips, etc. from processing of like items for purposes of recycling/recovery. However, a small amount of released material clings to the workers' clothes and leaves the facility by this route every day of the year (this is not known to the owner/operator). Even though the additive amount of a given toxic chemical leaving the facility on clothing may be greater than or equal to 0.5 pounds in a particular year, the article exemption for the like items is not negated because the owner/operator has instituted a comprehensive and aggressive recycling/recovery program and should not be penalized because of the inability of the system to capture l00% of the releases. The applicability of the article exemption would, on the other hand, be called into question if, say, the larger chips were collected and recycled/recovered while dust was simply swept up and placed in a dumpster.

Thus, a distinction must be made between a manufacturer who has instituted a comprehensive and aggressive recycling/recovery program but still has minor releases due to the inability of virtually any recycling/recovery system to capture all releases and a manufacturer who has releases for which no comprehensive and aggressive recycling/recovery attempt is clearly being made.

- **Distribution in Commerce as Release** — In your memo you state that "Judge Greene is saying that any material released into commerce is a release of the constituent compounds to the environment". I do not read this in the Order that accompanied your memo. Material that is processed to make a product is not considered released to the environment once it is distributed in commerce. Likewise, the disposal of an article does not constitute a release to the environment.

Again, let me reiterate that to determine whether the article exemption holds for a given situation, one must determine (in addition to the other criteria outlined for the exemption) whether the release of a toxic chemical from the like items has occurred. In making this determination, one must consider whether an aggressive and comprehensive recycling/recovery program is being pursued by a facility to recycle/recover all releases. Where such a program is not in place, the releases are counted towards the 0.5 pound cut-off value. Should this value be reached, the like items are not articles and the toxic

INCORRECT GUIDANCE ON EPCRA SECTION 313

chemicals contained in the items are subject to threshold and release determinations. Finally, we consider the article exemption and the guidance issued on this subject to be valid. As such, the Regions should continue to allow the article exemption.

I hope this has cleared up any questions you may have had. If you have any further questions related to this matter, please call me at FTS 382—3821.

cc: Regional EPCRA § 313 Coordinators

INCORRECT GUIDANCE ON EPCRA SECTION 313

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
PESTICIDES AND TOXIC
July 1, 1992 SUBSTANCES

Ms. Brenda J. Boykin
Shaw, Pittman, Potts, & Trowbridge
2300 N Street, N. W.
Washington, D.C. 20037

Dear Ms. Boykin:

This letter is in response to your written request dated June 11, 1992 concerning the applicability of the article exemption for Toxic Release Inventory (TRI) reporting for a facility that manufactures bronze gears. The bronze contains copper, a listed TRI chemical.

As I understand from your letter and our conversation of May 6 and meeting of June 24, 1992, the facility in question receives bronze blanks about 3" in diameter by 1.5" thick in the middle which slope to about 1" diameter at each end. Teeth are cut into the middle edge about 0.25" deep and a keyhole is cut into the center hole of each blank. No dust or fumes are created during the cutting, but small chips are created which are collected and then sent off-site for recycling. As the blanks are being cut, the chips fall into a round open collection bin which surrounds the cutting machine.

One criterion of the article definition is that the item's end use function is dependent in whole or in part upon its shape or design during end use. Because the thickness and end diameters of the blank do not change during processing and the only size change is small cuts to the middle edge of the blank, EPA agrees that the processing of the blanks meets this criterion and that the end use function of the gears are dependent, in part, upon the shape and initial size of the blank before processing.

Another criterion of the exemption is that the item does not release a toxic chemical under normal circumstances of processing or use of the item at the facility. In a directive (page A-2) in the 1990 TRI Reporting Package, EPA has further clarified that if all waste material from the processing or use of the item is recycled, the article status is maintained. That is, the article exemption will apply if the facility has an aggressive and comprehensive recycling program for the toxic chemical waste produced during the processing or use of the items. The facility

INCORRECT GUIDANCE ON EPCRA SECTION 313

should carefully document its rationale for claiming the article exemption including measures undertaken to recycle as much as possible of the processing and use wastes as possible. It appears from your description and photographs of the recycling process that the facility does have an aggressive and comprehensive recycling program in place. However, be aware that this determination is subject to review by the EPA Regional Office in the event of an inspection.

The facility should also consider whether air releases occur from any subsequent operations such as grinding or polishing, if such operations take place at all. If there is not a recovery program in place for these emissions, then the article exemption may not apply.

Please call me at (202) 260-2250 if you have any further questions.

Sincerely,

Kathleen Franklin
Chemical Engineering Branch
Economics and Technology Division
(TS-779)

INCORRECT GUIDANCE ON EPCRA SECTION 313

cc: Sam Sasnett (TS-779)
Tami McNamara (TS-779)
Ken Mitchell (TS-779)
Section 313 Regional Coordinators on attached list
EPCRA Hotline

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 24, 1991

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

Russell H. Jones
Kerr-McGee Chemical Corporation
P.O. Box 25861 (MT-1601)
Oklahoma City, OK 73125

Dear Mr. Jones:

This letter is in response to your request of June 6, 1991 for written confirmation on various reporting issues related to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA).

You are correct in your understanding that concentrations of listed toxic chemicals below de minimis levels in ore imported into the United States are not reportable if the chemicals simply pass through the process and are discharged in the waste or tailings stream. Reporting is not required in this case because the chemicals would not meet the definitions of manufacture, process, or otherwise use. However, if beneficiation is applied to recover a listed toxic chemical from the ore and the manufacturing threshold is exceeded reporting would be required.

Concentrations of listed toxic chemicals above the de minimis levels in ore imported into the United States are not reportable if the chemicals simply pass through the process and are discharged in the waste or tailings stream for the same reasons stated above. However, if the waste material is subsequently sold, releases of toxic chemicals associated with the quantity sold would be reportable if they met the applicable processing threshold. This reporting requirement would also apply to wastes derived from materials that are not imported.

Supplier notification may be required for the waste material sold or the product if the material contains a toxic chemical above the de minimis level. The supplier notification requirements (40 CFR 372.45) apply if you distribute to other facilities within SIC codes 20–39 or to a company that sells to a covered facility.

INCORRECT GUIDANCE
ON EPCRA SECTION 313

I hope this letter provides the confirmation you requested. Please feel free to contact me at 202—382-3821 or Tami McNamara of my staff at 202-382-5997 if you have any further questions regarding this matter.

Sincerely,

Sam Sasnett, Director
Toxic Chemical Release Inventory
Management Staff

INCORRECT GUIDANCE ON EPCRA SECTION 313

APPENDIX D. RECENT EPA GUIDANCE

In addition to the questions and answers included in this document, the following EPA interpretive guidance letter may be used when making threshold determinations and *release* and other *waste management* calculations under EPCRA Section 313.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Sept. 23, 1998

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

Richard G. Stoll
Freedman, Levy, Kroll & Simonds
1050 Connecticut Ave., NW
Washington, DC 20036

Dear Mr Stoll:

This letter fulfills, in part, EPA's commitment regarding resolution of the Cement Kiln Recycling Coalition (CKRC) case against EPA (Cement Kiln Recycling Coalition v. EPA, (D.D.C., No 1-98CV00171)) challenging portions of the Emergency Planning and Community Right-to-Know Act (EPCRA) section 313 facility expansion rule (62 FR 23834; May 1, 1997) and guidance. This letter pertains to claim number III of that case. Specifically this response addresses whether the act of transferring toxic chemicals in waste fuels off-site to be burned at cement kilns for energy recovery constitutes a covered threshold activity under EPCRA section 313.

For your information, the repackaging and subsequent transfer off-site of EPCRA section 313 toxic chemicals in waste fuel for burning for energy recovery is not, in itself, a covered "manufacturing," "processing," or "otherwise use" threshold activity as those terms are defined in the EPCRA section 313 regulations (40 CFR part 372). Therefore, EPA is clarifying that EPCRA section 313 covered facilities are not required to consider the repackaging and subsequent transfer off-site of toxic chemicals for energy recovery to any type of boiler or industrial furnace (as defined in 40 CFR section 372.3) toward threshold calculations. Similarly toxic chemicals in waste that are repackaged and sent off-site for disposal or for treatment for destruction would likewise not be considered toward a facility's "manufacturing," "processing," or "otherwise use" threshold determination. Covered facilities should keep in mind, however, that if they exceed an activity threshold elsewhere at the facility for the listed chemical contained in the waste fuel, the facility should report the quantity of the toxic chemical in the waste fuel sent off-site for energy recovery in the appropriate sections of 6.2 and 8 of the Form R.

Although the simple repackaging and transfer off-site of a toxic chemical in waste for the purposes of energy recovery does not constitute a covered threshold activity, other closely related activities may need to be considered toward thresholds. For example, if a covered facility burns a waste-fuel *on-site*, this activity would constitute an "otherwise use" of each listed toxic chemical in the waste-fuel. Thus, these listed toxic chemicals would be subject to the "otherwise use" threshold determinations. In addition, toxic chemicals that are coincidentally manufactured as a result of repackaging must be considered toward the facility's 25,000 pound "manufacturing"

threshold. Also as of January 1, 1998, if a covered facility receives a toxic chemical from off-site for the purposes of waste management and subsequently disposes, stabilizes or treats the toxic chemical for destruction on-site, the covered facility must consider this quantity of the toxic chemical toward the "otherwise use" threshold.

This letter supersedes any previous EPA guidance on this topic. I hope this information clarifies how facilities should consider toxic chemicals in waste fuels for threshold determinations and release and other waste management calculations for section 313 of EPCRA. If you have any other questions, or desire further information, please call me at 202-260-9592.

Sincerely,

Maria J. Doa, Ph.D., Chief
Toxics Release Inventory Branch

cc. Amber Aranda
Sara Hisel McCoy

This page intentionally left blank.

A

ABS 439
Absorbent 515
Accidental Releases 467
Acid Aerosol 400, 402, 404, 405, 410
Acid Neutralization 522, 523
Acid Reuse System 402, 405
Acids 397, 489, 572, 577, 581, 582
  Acid Aerosol 400, 402, 404, 405, 410
  Acid Reuse System 402, 405
  Chemical Qualifier 410
  Complete Neutralization 577
  Concentration 411
  Concentration Range 409
  Mineral Acids 523
  Neutralization 126, 153, 397, 572, 581
  pH 397, 409, 521, 522, 523, 572, 577
  Release Reporting 397, 489
  Reporting Acids 521
  Waste Treatment 409
Active Degradation 283
Active/Passive Degradation 279
Activity Index 593, 594
Activity Restricted to Company 13
Activity Threshold 70, 87, 89, 116, 117, 119, 121, 122, 126, 127, 133, 138, 144, 145, 147, 151, 152, 153, 155, 158, 159, 160, 162, 163, 165, 166, 168, 169, 173, 174, 178, 179, 180, 182, 183, 184, 186, 187, 188, 189, 190, 192, 194, 197, 208, 209, 312, 391, 403, 449, 563, 587, 700
Actual Receipt 218
Adhesive 145, 153
Administrative Setting 245
Aerosol Form 404
Air Conditioning 242, 243, 244
  Process Related 244
Air Emissions 507, 512, 513, 537, 553, 586
  Horizontal Storage Tank 513
  Mixtures 553
  Partial Vapor Pressure 512
  Storage 553
  Storage Tanks 337, 507, 532, 586
  Toluene 512
Air Releases 337, 539
Alternate Threshold 2
Aluminum 157, 192, 401, 428, 429
Aluminum Oxide 277, 442, 443, 444, 445
  Fibrous Forms 442, 443, 444
Ammonia 133, 181, 182, 189, 190, 191, 246, 339, 424, 449, 450, 451
  Anhydrous 449, 450
  Aqueous 449, 450
  Personal Use Exemption 245, 246, 247
  Sewage 246
Ammonium Chloride 452
Ammonium Hydroxide 451
Ammonium Salts 452
Ancillary Use 268, 379
Anhydrous 449, 450
Anti-freeze 285
Applicability 703
Aqueous 449, 450
Article Component 177
Article Exemption 109, 280, 281, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 549, 702, 703, 704
  Ancillary Use 379
  Article Releases 345, 349, 357, 358, 364, 366, 371, 380, 381
  Bar Stock 367, 368
  Batteries 354, 372
  Catalyst 373
  Change in Diameter/Thickness 352
  Components of Product 348
  Disposal 376
  End Use Function 375
  Fume or Dust Qualifier 350, 353

Glass 356
Half Pound Policy 345
Lead 376
Lead Bricks 370
Light Bulbs 377
Manufacturing Article 346, 347, 369
PCB Transformers 378, 379
Plastic Bottles 369
Polyurethane Foam 381
Process 354, 376
Processing Determination 359
Recycle 344
Reportable Release 355
Sheet Metal 359, 363, 364, 365
Steel Plates 371
Supplier Notification 358, 668, 702, 703
Threshold Determination 342, 343, 344, 359
Welding Rods 349
Wire 360, 361, 362
Article Releases 345, 349, 357, 358, 364, 366, 371, 380, 381
Asbestos 100, 284, 441, 495, 538
Definition of Friable 495
Structural Component Exemption 284
Ash 330
Audit Provisions 644
Auxiliary Facility 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 683
Definition of 225
Reporting Requirements 233
Supplier Notification 683
Auxiliary Scrubber 583

B

Bar Stock 367, 368
Barge Terminal 534
Barium Chloride 456
Barium Sulfate 456
Basis of Estimate 473, 498, 499, 501, 502, 516
Releases 516
Batch Processor 593
Batteries 354, 372
Best Available Information 461, 475, 480, 585
Blank Data Elements: NA 639
Blending 144
Breaking the Seal 195, 196
Broker 211, 219, 221
Business Interest 53, 62
Byproduct 185, 318, 331, 496
De Minimis Exemption 318, 331

C

Cafeteria Refrigerants 241
Carcinogen 325
CAS Number 390, 392, 441, 454, 455, 458, 461, 686
Catalyst 373
Catastrophic One-Time Event 597, 598
Category Code 392
Cement Kiln Equipment 280
Certification 608, 610, 611
Senior Management Official 609, 611
Certification Statement 609
Certification, Signature 610
Change in Diameter/Thickness 352
Change of Ownership 47, 49, 50, 51, 52, 615, 616
Chemical Category 320, 391, 392, 393, 453, 456, 693
Health Effects 393
Supplier Notification 693
Chemical Compounds 709
Chemical Conversion 137, 190, 206, 394, 407, 424, 488, 489, 496, 580, 672
Supplier Notification 671
Chemical Deletion 396, 666
Chemical Identity 496, 719
Chemical Name 389, 390
Chemical Qualifier 157, 191, 410, 413, 425, 428, 429, 442, 443, 444, 449, 450, 451
Chlorine 178, 488, 514
Chromium 162, 474
Chromium Compounds 419, 420
Closed-loop 91
Co-polymer 439
Coal Combustion 399
Coal Mine 150
Coal Mining 383, 385, 386

Coal or Oil 19, 20
Coal Tar 569
Coincidental Manufacture 121, 133, 151, 152, 153, 154, 157, 181, 185, 263, 319, 320, 398, 407, 408, 410, 426, 429
Coincidental Manufacturing 399
Combustion Byproducts 398, 401, 407
Combustion Unit Efficiency 493, 494
Commerce
  Definition of 199
Complete Neutralization 577
Components of Product 348
Composting 579
Compound 459, 460
Compound Category 340, 414, 418
Compounding 208
Compounds 208, 360, 412, 413, 414, 416, 417, 418, 419, 420, 421, 422, 423, 425, 426, 427, 428, 429, 430
Compressed Air 252
Concentration 411, 432, 451, 701, 707, 710, 711
  Supplier Notification 358, 471, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 682, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 696, 697, 698, 699, 700, 701, 702, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718
Concentration Information 185
Concentration Range 101, 102, 103, 104, 105, 327, 328, 409, 414
  Lower Bound 104
  Upper Bound 101, 105
Confidentiality Agreement 721, 722
Consumer Product Exemption 676, 706, 714
Container Size 135
Containment Area 518, 519
Contiguous/ Adjacent 8, 63
Contractor Hours 21
Contractors 38, 39, 40, 42
Contractual Relationship 223
Cooling Towers 266
Copper 137
Copper Compounds 417
Corporate Employees 34
Corporate Headquarters 708
Customs Territory of U.S. 213
Cyanide Compound 141, 413, 416

D

Data Sources 651
De Minimis 330, 341, 447
De Minimis Exemption 109, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 431, 548, 669, 670, 709
  Air Releases 337, 539
  Ammonia 339
  Ash 330
  Byproduct 318, 331, 496
  Carcinogen 325
  Chemical Category 320
  Coincidental Manufacture 319, 320
  Compound Category 340, 414
  Concentration Range 327, 328
  De Minimis Level 324, 325
  Delimited Category 340
  Impurity 318, 319
  Manufacture 332
  Metal Compounds 321
  Mixed Isomer 322
  Overburden 341
  Petroleum Refining 336
  Process 341
  Release Reporting 326
  Solvent Recovery 317
  Storage Tanks 337
  Supplier Notification 669, 670, 709
  Threshold Determination 332
  Trade Name Product 315
  Treatment Processes 338
  Waste 318, 329, 334
  Waste Rock 341
  Wastestream 335

Wastewater Treatment 332, 338
Xylene 322
De Minimis Level 324, 325
Deadline Extension 605
Definition of Auxiliary Facility 225
Definition of Commerce 199
Definition of Facility 4, 5, 6, 7, 8, 9, 51, 55, 60, 61, 63, 67, 79, 80, 487
Definition of Friable 495
Definition of Otherwise Use 121
Degreasers 282
DEHP 440
Deleted Chemicals 716
Delimited Category 340, 453
Detection Limit 472, 497
Determination 100
Diethylene Glycol 433
Dipropylene Glycol 434
Direct Reuse 544, 560
Disposal 115, 376, 477, 486, 518, 535, 540, 541
Disposal of Intake Water 253, 254
Distribution in Commerce 118
Distribution Restricted to One Facility 199
Distributors 677, 678, 680, 682
Documentation 542, 602
DOP 440
Double Counting 204, 538
Dun & Bradstreet Number 621, 622
Dust Suppressant 268

E

Economic Benefit 200, 201, 202
Economic Reasons 596
Effective Date 396, 397, 603, 717
EGF 19, 20, 231, 569
Electricity Generating Facility 19, 20, 43, 231, 569
Electronic Data 650
Electronic Form R 606
Electroplating 111, 137, 138, 283, 414, 416, 703
Emission Factors 480, 491, 498, 500, 501, 502, 504, 509
Basis of Estimate 473, 498, 499, 501, 502, 516
Best Available Information 475, 480
Estimating Emissions 509
Employee Comfort 239, 242, 256
Employee Threshold 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 48
Contractor Hours 21
Contractors 38, 39, 40, 42
Corporate Employees 34
Employee Comfort 239, 242, 256
Facility Closure 44
Facility Owner 35, 36
Full-Time Employee 24
Limited Distribution 86
Maintenance Staff 28
Off-site Employees 31, 33
Off-site Support 48
Overtime 45
Paid Holidays 23
Part-Time Employee 24
Permanent Disability 37
Profit Share 36
Sales Staff 27
Sick Leave 22
Truck Drivers 29, 30
Truck Jobbers 41
Vacation Hours 22
End Use Function 375
Energy Recovery 563, 568, 569, 589
Enforcement 645
EPA Approval 659
EPA Contact 657
EPA Review 656
EPCRA Reporting 234
EPCRA Section 304 467, 533
Equipment Efficiency 93
Establishment 67
Estimating Releases 481, 503, 514, 521
Ethylene Glycol 150, 435
Exemption Retention 235
Extraction Exemption 383, 385, 386

F

Facility 57, 62, 71, 81, 82, 130, 534, 570, 613, 614

Business Interest 53, 62
Definition of 4, 5, 6, 7, 8, 9, 43, 51, 55, 58, 63, 64, 67, 79, 80, 487
Facility Construction 5, 106
Facility Name Change 614
Facility Reporting 58, 613
Multi-Activity Facility 66
Facility Closure 3, 44
Facility Construction 5, 106
Facility Maintenance Exemption 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 579
Composting 579
Cooling Towers 266
Dust Suppressant 268
Pesticides 267
Process Equipment Maintenance 259, 260
Recreational Use 261
Similar in Type or Concentration 262, 263
Swimming Pool 261
Facility Name Change 614
Facility Owner 35, 36
Facility Reporting 130, 382, 613
FDA 236
Fertilizer 175, 176, 424, 556, 560
Fibrous Forms 442, 443, 444
Flotation Agent 146
Foreign Government 722
Foreign Trade Zone 214
Form A 2, 599, 600, 601, 602, 603, 604, 654, 662, 664
Criteria 599, 604
Documentation 602
Effective Date 603
RQ 601
Form R 2, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 627, 628, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 641, 642, 644, 645, 646, 647, 648, 649, 651, 654, 662, 664, 665
Audit Provisions 644
Blank Data Elements: NA 639
Certification 610
Change of Ownership 615, 616
Deadline Extension 605
Dun & Bradstreet Number 621, 622
Electronic 606
Enforcement 645
Facility Name Change 614
Facility Reporting 613
Form R Revisions 17, 661, 662, 663, 664, 665
Form R Submissions 76, 422, 629, 640, 647, 649
Information Access 652
Mailing Address 612
Maximum Amount On-site 628, 630, 631, 632, 633, 634, 635
Parent Company Name 614
Part I Section 2.1 720
Part I Section 4.1 612
Part I Section 4.4 618
Part I Section 4.7 621
Part II Section 1 462, 685
Part II Section 3 77, 629
Part II Section 4 630, 632, 633, 634, 635
Part II Section 5.3 636, 637
Part II Section 5.3.1 638
Part II Section 6.2 565, 567
Part II Section 7A 573, 574, 575, 576, 585, 586
Part II Section 8 590
Part II Section 8A 595
Part II Section 8.8 540, 592, 597
Part II Section 8.9 593, 594
Part II Section 8.10 591
Previous On-site Disposal 631
Public Contact 617, 618
Release Estimate 642
Reporting Deadline 475, 607
Reporting Requirements 613, 648
Section 8 503
Senior Management Official 609, 611
Separate Form Rs 78

Signature 608, 646
Significant Figures 641, 642
Technical Contact 618, 619
TRI Facility Identification Number 615, 616
Weekends 607
Form R Revisions 17
Form R Submissions 76, 422, 629, 640, 647, 649
Form R: Part II Section 6.2 567
Formaldehyde 200, 209, 446
Friable
Definition of 495
Fuel 19, 20, 113, 192, 274
Fuel Blending 568
Fugitive Air Emissions 479, 490, 504, 508, 532
Storage Drums 508
Full-time Employee 24, 25, 26
Fume or Dust 157, 158, 159, 161, 191, 425, 426, 427, 428, 429, 430, 634
Fume or Dust Qualifier 350, 353
Fumigants 132, 157
Fuming Sulfuric Acid 406

G

Gasoline 285
Generic Name 685
Glass 356
Glycol Ethers Category 433, 434, 435
GOCOs 80
Gold Leaching Operations 141
Groundwater 483

H

Half Pound Policy 345
Hazardous Waste 123
Hazardous Waste Facility 64
Health Effects 393
Heat Value 568
Horizontal Storage Tanks 513
Hydrochloric Acid 398, 400, 407, 408, 410

I

Import 96, 211, 212, 213, 214, 216, 217, 218, 219, 220, 221, 222, 223, 695
Broker 211
Supplier Notification 695
Importing Waste 215
Impurity 147, 149, 318, 319
De Minimis Exemption 318, 319
Inappropriate 667
Incineration 578
Incomplete Combustion 399
Incorporation 116
Indian Lands 234
Influent Concentration 575, 584
Information Access 652
Ingots 159
Injection 142
Intake Water Exemption 95, 248, 250, 251, 252, 253, 254, 255, 256, 257, 258
Disposal of Intake Water 253, 254
Processing of Intake Water 258
Intracompany Transfer 200, 201, 202, 697

J

Janitorial Products 705
Jet Fuel 290
Joint Venture 43, 54, 55, 528

K

Kerosene 19

L

Lab Hoods 479
Lab Packs 136
Laboratory 230
Laboratory Activity Exemption 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314
Laboratory Support Activity 308, 311
Pilot Plant 296, 303
Product Testing 305, 306
QA/QC Activities 292, 298, 300, 305
Quality Control 299
Samples 309
SIC Code 296
Speciality Chemical Production 297
Technically Qualified Individual 293
Testing Required for Permit 307
Laboratory Support Activity 311
Lab Packs 136

Land Treatment 546, 556
Land Treatment/Application Farming 176
Landfill 482, 520, 566
Landfill Cover 579
Landfill Leachate 128
Latitude/Longitude 623
Leaching System 142
Lead 376, 419, 421, 422
  Bricks 370
Lead Compounds 419, 421, 422
Lead Deposits 160
Light Bulbs 377
Limited Distribution 86
Loading Emissions 478
Location Change 613
Lower Bound 104

M

Mailing Address 612
Maintenance Staff 28
Manufacture 96, 98, 113, 157, 182, 208, 212, 215, 262, 310, 332, 699
  Manufacturing During Use 249
Manufacturing 139
Manufacturing Aid 156
Manufacturing Article 346, 347, 369
Mass Mailing 718
Maximum Amount On-site 87, 628, 630, 631, 632, 633, 634, 635
MDI 186, 458
Metal Alloy 107, 109, 464
Metal Compounds 108, 112, 137, 138, 154, 162, 206, 321, 391, 395, 398, 412, 414, 415, 416, 417, 419, 420, 421, 422, 423, 584
Metal Compounds Solution 110
Metal Mining 210, 384
Metal Silicates 112
Metal Vapors 428
Metals 137, 382, 412, 422, 494, 568, 584, 588, 590
  Metal Alloy 107, 109, 464
  Metal Compounds 108, 112, 137, 138, 154, 162, 206, 321, 395, 398, 412, 414, 415, 416, 417, 419, 420, 421, 422, 423, 584
  Metal Compounds Solution 110
  Metal Silicates 112
  Metal Vapors 428
Methanol 187
Methylenebis (Phenylisocyanate) 179
Migration 482, 483
Mineral Acids 523
Mineral Oil 437
Mining 424
Mining Disposal 142
Mining Vehicles 286
Mixed Isomer 322
Mixture 102, 105, 107, 112, 161, 318, 390, 430, 431, 432, 436, 437, 445, 447, 448, 457, 459, 460, 461, 462, 463, 464, 465, 553, 672, 673, 693
  De Minimis Exemption 315, 316, 317, 318, 319, 321, 672
  Part II Section 1 462
  Supplier Notification 673, 674, 693
  Threshold Determination 457
Mixture Name 462
Mobile Equipment 269
Mold 157, 179
Monitoring 468, 497
Mono Butyl Ether 435
Monomer 439
Motor Vehicle Exemption 285, 286, 287, 288, 289, 290, 291
  Anti-freeze 285
  Gasoline 285
  Jet Fuel 290
  Mining Vehicles 286
  Non-Motorized Barge 288
  Railcars 289
  Tractor Trailers 289
  Used Motor Oil 291
MSDS 440, 687, 688, 689, 690
  Supplier Notification 687, 688, 689, 690
Multi-activity Facility 69
Multi-establishment 42, 43, 62, 65, 67, 68, 70, 71, 72, 73, 74, 75, 76, 77, 78, 81, 82, 130, 230, 620, 622, 635, 698

Multiple Activity Thresholds 139, 140, 141, 142, 143
Multiple Chemical Category 418
Multiple Owners 625
Multiple Owners/Operators 59
Multiple Process Steps 204, 205

N

NA 595, 640
NA vs. 0 506, 516, 523, 597
NAICS 18
Natural Gas 113
Naturally Occurring Chemical 198
Negative Declaration 648, 679
  Supplier Notification 679
Neutralization 126, 153, 397, 572, 581, 582
  Complete Neutralization 577
New Chemicals 717
Nicotine 198
Nitrate Compounds 247, 424, 546, 580
Nitric Acid 411
NON 52
Non-isolated Intermediates 114
Non-Motorized Barge 288
NOTE 646
Notification Date 668
Notification Letter 691
NPDES Permit 624, 627

O

Off-site Disposal 556
Off-site Employees 31, 33
Off-site Landfill 572
Off-site Services 73
Off-site Transfer 76, 456, 510, 528, 541, 544, 545, 547, 554, 555, 557, 558, 559, 561, 562, 563, 564, 565, 566, 567, 568, 570, 572
Off-site Waste 120, 121
Office Supplies 237, 238, 240
Oil-contaminated Debris 20
Oleum 406
Otherwise Use 83, 91, 116, 120, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 138, 145, 146, 147, 150, 156, 165, 166, 168, 173, 174, 179, 182, 186, 187, 188, 189, 190, 193, 209, 210, 215, 249, 265, 266, 282, 312, 316, 335, 536, 546
  Definition of 121
Outdoor Storage Pile 484
Overburden 210, 341
Overburden Exemption 384
Overtime 45
Owner/Operator 46, 53
  Business Interest 62
  Change of Ownership 47, 49, 50, 51, 52, 615, 616
  Distinction of 9
  Multiple 59
Ozone 471

P

Packing Medium 187
PACs 453, 589
Paid Holidays 23
Paint 173, 270, 271, 272, 273, 705
  Structural Component Exemption 269, 270, 271, 272, 273, 274, 275
  Supplier Notification 705
Paraformaldehyde 446
Parent Company 54, 56, 625, 626
  Joint Venture 55
  Parent Company Name 614
  Wholly Owned Subsidiary 56
Part I Section 2.1 720
Part I Section 4.1 612
Part I Section 4.4 617, 618
Part I Section 4.5 620
Part I Section 4.7 621
Part I Section 4.9 624, 627
Part I Section 5.1 625, 626

Part II Section 1 462, 685
Part II Section 3 77, 629
Part II Section 4 630, 632, 633, 634, 635
Part II Section 5.3 636, 637
Part II Section 5.3.1 638
Part II Section 6.1 524
Part II Section 6.2 565
Part II Section 7A 573, 574, 575, 576, 585, 586
Part II Section 8 590
Part II Section 8A 595
Part II Section 8.8 540, 592, 597, 598
Part II Section 8.9 593, 594
Part II Section 8.10 591
Part-Time Employee 24
Partial Vapor Pressure 512
Particles 430
Particulates 539
PCB 115
PCB Transformers 378, 379
Permanent Disability 37
Permits 551
Personal Use Exemption 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 256
  Administrative Setting 245
  Air Conditioning 242, 243
  Ammonia 246
  Cafeteria Refrigerants 241
  Employee Comfort 239, 242, 256
  Nitrate Compounds 247
  Office Supplies 237, 238, 240
  Sewage 246, 247
Pesticides 180, 267, 692
  Facility Maintenance Exemption 267
  Supplier Notification 692
Petroleum Bulk Stations 66
Petroleum Refining 336
pH 397, 409, 414, 521, 522, 523, 572, 577
Phase Separation 129
Phosphoric Acid 550
Photocopying 476
Pilot Plant 296, 303
  Release Calculation 311
Pipeline 6, 7, 82
Pipes 272, 273, 275, 276, 492
Plastic Bottles 369
Point Source Air Emissions 490, 510, 532, 548, 550
Polyethylene 436
Polyurethane Foam 381
Polyvinyl Chloride 438
POTW 524, 561, 590
ppm 511
Preparation for Distribution 84, 85
Preparation for Otherwise Use 83
Previous On-site Disposal 631
Primary SIC Code 65, 69, 72, 73
Process 84, 85, 86, 98, 111, 116, 133, 138, 145, 146, 147, 148, 149, 155, 158, 159, 161, 163, 167, 168, 169, 173, 177, 178, 179, 180, 183, 184, 186, 190, 192, 194, 197, 198, 200, 201, 202, 203, 204, 205, 206, 207, 208, 313, 341, 354, 376, 416
Process Equipment Maintenance 259, 260
Process Related 244
Process vs. Otherwise Use 127, 145, 146, 147, 150
Processing 118, 136, 170, 426
Processing Aid 156
Processing Determination 359
Processing of Intake Water 258
Product 560
Product Testing 305, 306
Product Value 74
Production Ratio 593, 594
Profit Share 36
Public Contact 617, 618
Public Disclosure 721, 722
Pulp and Paper Mills 491
Purchasing Agent 220, 222
Pure Chemical 694, 701
Purpose Behind Incorporation 146

Q

QA/QC Activities 292, 298, 300, 305
Quality Control 299, 301, 302

R

Radioactive Cobalt 454
Railcars 289
RCRA ID Number 565, 566
  Landfill 566
RCRA-empty 545
Readily Available 470
Reasonable Estimates 469, 470, 471, 472, 474, 681
Reasonable Standard 473
Receipt of New Information 663
Reclamation 118, 197
Recognizable as an Article 376
Recordkeeping 119, 643, 650
Recreational Use 261
Recycle 92, 172, 184, 344, 486, 550, 554, 557, 559, 562, 580, 588
Redistribute 183
Refractory Brick 162, 193
Regrading 210
Relabel 134
Release Calculation 311, 493
Release Estimate 642
Release Reporting 95, 175, 326, 391, 418, 421, 449, 450, 453, 460, 485, 489, 492, 496, 518, 519, 520, 522, 526, 527, 529, 530, 531, 533, 534, 535, 536, 538, 541, 543, 545, 549, 551, 552, 567, 583, 584, 590, 592, 598, 601
  Waste Reuse 529
Release to Land 175, 489, 515, 518, 525, 535, 540, 541, 543, 546, 580
Release to Water 517, 561
Releases 466, 467, 468, 469, 475, 477, 478, 479, 480, 482, 483, 486, 487, 488, 489, 490, 492, 493, 494, 495, 496, 497, 498, 499, 500, 502, 504, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553
Absorbent 515
Accidental Releases 467
Acid 523
Acids 489
Air Emissions 512, 513, 537, 553
Asbestos 495, 538
Basis of Estimate 498, 499, 502, 516
Best Available Information 475, 480
Chlorine 514
Combustion Unit Efficiency 493, 494
Containment Area 518, 519
Detection Limit 497
Disposal 477, 486, 518, 540, 541
Emission Factors 480, 498, 500, 502, 504, 509
Estimating Releases 514, 521
Fugitive Air Emissions 479, 490, 504, 508, 532
Groundwater 483
Horizontal Storage Tanks 513
Lab Hoods 479
Landfill 482, 520
Loading Emissions 478
Metals 494
Migration 482, 483
Monitoring 468, 497
NA vs. 0 516, 523
Partial Vapor Pressure 512
Particulates 539
Pipes 492
Point Source Air Emissions 510, 532, 548
ppm 511
Recycle 486
Release Calculation 493
Release Estimate 642
Release Reporting 95, 175, 326, 391, 397, 418, 421, 449, 450, 453, 460, 485, 492, 496, 518, 519, 520, 522, 526, 527, 529, 530, 531, 533, 534, 535, 536, 538, 541, 543, 545, 549, 551, 552, 567, 583, 584, 590, 592, 598
Release to Land 175, 489, 515, 518, 525, 535, 540, 543, 546, 580

Release to Water 517, 561
Releases to Land 541
Reporting Acids 521
Reporting Deadline 475
Spill 506
Stockpiles 485, 531
Storage 531, 535, 553
Storage Drums 508
Storage Tanks 507, 532
Temporary Storage 530, 542
Toluene 512
Transportation Exemption 533
Unknown Composition 509
Vessels 534
VOC 506
Waste Reuse 529
Zero Releases 516
Releases to Receiving Stream 627
Releases to Receiving Streams 636, 637, 638
Remediation 94, 95, 520, 540, 592
Repackage 163, 169, 172, 177, 194, 207
Repackaging 135, 170, 171, 195, 196, 684
Supplier Notification 684
Repackaging via Pipeline 164
Reportable Release 355
Reporting Acids 521
Reporting Criteria 1, 2, 3, 14, 74, 224, 571
Reporting Deadline 475, 607
Reporting Requirements 233, 476, 613, 643, 648
Reporting Responsibility 15, 16, 46, 47, 48, 49, 50, 51, 52, 53, 57, 58, 59, 60, 61, 227, 229
Research and Development Activities 304
Residue 557, 558
Reuse 552, 588
Direct Reuse 544, 560
Reuse System 90, 91, 92, 403
Acid Reuse System 402, 405
Right-of-Way 79, 80, 81
RQ 533, 601

S

Sales Samples 675
Sales Staff 27
Samples 86, 299, 301, 302, 309
Laboratory Activity Exemption 299, 301, 302, 309
Supplier Notification 675
Section 8 503
Senior Management Official 609, 611
Separate Form Rs 78
Sequential Process 575, 576
Sewage 246, 247, 335
Sheet Metal 359, 363, 364, 365
SIC Code 4, 10, 11, 12, 13, 14, 15, 16, 17, 18, 66, 67, 68, 226, 228, 230, 296, 382, 620, 671, 698
SIC Code 4953 64
SIC Code Determination 229, 231
Sick Leave 22
Signature 608, 610, 646
Significant Figures 641, 642
Solvent Recovery 11, 317
Solvents 148, 165, 197, 270
Source Reduction 591, 596, 651
Data Sources 651
Economic Reasons 596
Speciality Chemical Production 297
Spill 506
Stationary Equipment 269
Steel Plates 371
Steps Taken by Different Facilities 203
Stockpiles 485, 531
Storage 87, 88, 89, 183, 485, 528, 531, 535, 553
Outdoor Pile 484
Temporary 530
Storage Drums 508
Storage Tanks 337, 507, 532, 586
De Minimis Exemption 337
Horizontal Storage Tanks 513
Storm Run-off 255
Stormwater 130, 251
Structural Component Exemption 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284
Active Degradation 283

Active/Passive Degradation 279
Asbestos 284
Cement Kiln Equipment 280
Degreasers 282
Electroplating 283
Fuel 274
Mobile Equipment 269
Paint 270, 271, 272, 273
Pipes 272, 273, 275, 276
Solvents 270
Stationary Equipment 269
Welding Rods 269
Sulfuric Acid 142, 400, 404, 405, 406, 407
Fuming Sulfuric Acid 406
Supplier Notification 358, 471, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718
Applicability 703
Article Exemption 358, 702, 703, 704
Auxiliary Facility 683
CAS Number 686
Chemical Category 693
Chemical Compounds 709
Concentration 701, 707, 710, 711
Consumer Product Exemption 676, 706, 714
Corporate Headquarters 708
De minimis Exemption 669, 670, 709
Deleted Chemicals 716
Distributors 677, 678, 682
Electroplating 703
Generic Name 685
Import 695
Intracompany Transfer 697
Manufacture 699
Mixture 672, 673, 693
MSDS 687, 688, 689, 690
Multi-establishment 698
Negative Declaration 679
Notification Date 668
Paint 705
Pesticides 692
Pure Chemical 694
Reasonable Estimates 681
SIC Code 671
Trade Name 685, 694
Trade Secret 712, 713
Support Off-site 48
Surface Mining 383
Swimming Pool 261

T

TDI (Mixed Isomers) 463
Technical Contact 618, 619
Technically Qualified Individual 293
Temporary Storage 542
Testing Required for Permit 307
Threshold Determination 83, 84, 87, 88, 90, 91, 92, 93, 94, 95, 96, 97, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 132, 134, 137, 161, 175, 185, 193, 216, 277, 311, 332, 342, 343, 344, 359, 394, 395, 407, 412, 416, 417, 418, 419, 423, 430, 431, 447, 448, 450, 451, 453, 454, 457, 463, 465, 484, 562, 571, 628, 630, 632, 634, 635
Thresholds 310
Toll Processor 180, 216
Toluene 512
Toluene Diisocyanate 447, 448
Toxic Chemical List 387, 388
Tractor Trailers 289
Trade Name 389, 685, 694
Trade Name Product 315
Trade Secret 712, 713, 719, 720, 721, 722
Chemical Identity 719
Confidentiality Agreement 721, 722
Part I Section 2.1 720
Public Disclosure 721
Supplier Notification 712, 713
Transformers 115, 378
PCB 115, 378, 379
Transportation Exemption 533

Treatment 175
Treatment Efficiency 578, 585
Treatment for Destruction 124, 129, 131, 400, 401, 494, 578, 579
Treatment Processes 338
TRI Facility Identification Number 615
Truck Drivers 29, 30
Truck Jobbers 41
TSCA 114, 293

U

UIC (See Underground Injection) 551
Ultimate Disposition 486, 525, 526, 527, 528, 537, 538, 557, 568
Underground Injection 536, 551
Underground Mine 253, 254
Unknown Composition 509
Upper Bound 101, 105
Used Motor Oil 291

V

Vacation Hours 22
Validity 658
Vanadium Pentoxide 427
Vessels 4, 534
Vinyl Chloride 438
VOC 506

W

Warehouse 99, 217
Waste 133, 184, 318, 329, 334, 696
Waste Ash 543
Waste Broker 554, 565
Waste Disposal 60, 61, 536
Waste Management Activities 60, 61, 123, 131, 587, 588, 590, 591, 592, 593, 596, 597
Waste Pile 541
Waste Reuse 529
Waste Rock 210, 341
Waste Treatment 409, 414, 456, 514, 515, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 590, 591
Wastestream 335
Wastewater 130, 250, 255
Wastewater Treatment 127, 152, 332, 338
Water Treatment 514, 515
Weekends 607
Welding Rods 269, 349
Wholly Owned Subsidiary 56
Wire 360, 361, 362
Withdrawal 653, 654, 655, 656, 657, 658, 659, 660, 661, 666, 667
    Chemical Deletion 666
    EPA Approval 659
    EPA Contact 657
    EPA Review 656
    Validity 658
    Withdrawal Requirements 660
Withdrawal Requirements 660

X

Xylene 188, 322, 431, 432
    Mixed Isomers 431, 432

Z

Zeolite 445
Zero Releases 75, 506, 516
Zinc 430

This page intentionally left blank.

United States
Environmental Protection Agency
(7408)
Washington, DC 20460

Official Business
Penalty for Private Use
$300

REPORTING CRITERIA
EXEMPTIONS
TOXIC CHEMICALS
RELEASE/WASTE MANAGEMENT
FORM A/FORM R SUBMISSIONS
SUPPLIER NOTIFICATION
TRADE SECRETS
APPENDICES