

EPCRA Section 313 Questions and Answers

Addendum to the Revised 1998 Version as of December 2004

Addendui



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

Toxic Chemical Release Inventory

This page intentionally left blank.

INTRODUCTION AND DISCLAIMER

In December, 1998, the Environmental Protection Agency (EPA) published a revised <u>Emergency Planning and Community Right-to-Know Act (EPCRA)</u> <u>Section 313 Questions and Answers Document</u> (1998 Q & A Document)(EPA 745-B-98-004). The EPCRA Section 313 program is also referred to as the Toxics Release Inventory or TRI. Under Section 313, certain *facilities* are required to report *releases* and other *waste management* quantities of specific chemicals listed in 40 CFR part 372. *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 employee* equivalents (*i.e.*, a total of 20,000 hours or greater; *see* 40 CFR 372.3);
- the *facility* is included in *Standard Industrial Classification* (SIC) *Codes* 10 (except 1011, 1081, and 1094), 12 (except 1241), 20–39, 4911 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4931 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4939 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4939 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4939 (limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce), 4953 (limited to facilities regulated under RCRA Subtitle C, 42 U.S.C. section 6921 *et seq.*), 5169, 5171, and 7389 (limited to facilities primarily engaged in solvents recovery services on a contract or fee basis), or, under Executive Order 13148, federal facilities regardless of their SIC code; 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.

Under Section 313 the Form R or Form A Certification Statement 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.

Copies of EPA's Form R and Form A and the instructions for completing the Forms, and related guidance documents are available from the TRI Homepage (http://www.epa.gov/tri), or you may call (202) 564-9554 or send an e-mail to TRIDOCS@epa.gov. Additional information may be obtained by accessing EPA's TRI Homepage on the Internet at <u>http://www.epa.gov/tri</u> or calling the EPCRA Call Center (*see* the TRI Homepage for contact information).

Since the 1998 Q & A Document was published, the Agency has promulgated two regulations that affect the TRI program. On October

29, 1999, EPA finalized proposed amendments to 40 C.F.R. part 372 (see 64 Fed. Reg. 58666) that, among other things, lowered reporting thresholds for certain persistent bioaccumlative toxic (PBT) chemicals and added new PBT chemicals to the Section 313 toxic chemical list. (PBT Rule). On January 17, 2001, EPA finalized proposed amendments to 40 C.F.R. part 372 (see 66 Fed. Reg. 4500) that, among other things, lowered the reporting thresholds for lead and lead compounds which are subject to Section 313 reporting requirements. (Lead Rule).

In addition, on April 26, 2000, Executive Order 13148 (E.O. 13148) was published in the Federal Register (65 \underline{FR} 24595). E.O. 13148 supersedes Executive Order 12856, which was published in the Federal Register on August 3, 1993 (58 \underline{FR} 41981).

There has also been a legal decision since 1998 that pertains to the criteria that multi-establishment facilities must use to determine whether the facility is in a SIC Code that is subject to TRI reporting requirements. The decision was issued in <u>In Re: Coast Wood Preserving, Inc.</u>, EPCRA Appeal No. 02-01 (May 6, 2003). Further, in <u>Barrick Goldstrike, Inc. v. Browner</u>, 260 F.Supp.2d 28 (D.D.C. 2003), the court issued a ruling that affects *de minimis* exemption eligibility. Qs & As concerning the mining industry were not addressed in this document in light of the decisions in <u>Barrick</u> and <u>National Mining Association v. U.S. Environmental Protection Agency</u> (Civil No. 97-N-2665; D. Colo.). EPA's analysis of those decisions can be found at <u>http://www.epa.gov/tri</u> under "Featured Topics."

As a result of E.O. 13148, and the regulatory actions and the legal decisions noted above, some of the Qs & As and Directives contained in the 1998 Q & A Document now are inaccurate or may be misleading. EPA has identified such Qs & As and Directives in this <u>Addendum to the 1998 EPCRA Section</u> 313 Questions and Answers Document (Addendum) and has revised them as appropriate so that the guidance reflected therein is accurate and consistent with current legal interpretations and the Executive Order. The Qs & As and Directives contained in this Addendum supersede the corresponding Qs & As and Directives contained in the 1998 Q & A Document. EPA is including a crosswalk document in the Addendum to assist the regulated community and other interested parties in identifying the Qs & As and Directives in the 1998 Q & A Document that have been superseded by this Addendum and to explain the changes made to them.

In most cases, only minor revisions were necessary to ensure that the 1998 Qs & As and Directives are accurate and consistent with current legal interpretations and the Executive Order. For example, many questions and/or answers were revised to clarify that the 10,000 pound *otherwise use* threshold and the 25,000 pound *manufacturing* and *processing* thresholds apply only to non-PBT chemicals. In one case, the 1998 version of Q & A

427 regarding vanadium compounds simply could not be squared with the regulations and therefore, there is no corresponding Q & A in this Addendum and the crosswalk in the Addendum states that this Q & A has been deleted and is no longer valid guidance.

In <u>Coast Wood Preserving</u>, the Environmental Appeals Board (EAB) concluded that EPA did not provide fair notice of its interpretation of 40 C.F.R. § 372.22(b)(3) that, in determining the appropriate SIC code for a multi-establishment *facility*, the value added by each establishment is the appropriate basis for comparing the relative economic contributions of each *establishment* at the *facility*. The revisions that were made to the 1998 Qs & As that are affected by the EAB's decision in <u>Coast Wood Preserving</u> clarify that, under 40 C.F.R. § 372.22(b)(3), *facilities* should use value-added as the basis for comparing the relative economic contributions of each *establishment* in a multi-establishment *facility*. In <u>Barrick</u>, the court concluded that a toxic chemical does not need to be involved in a threshold activity (i.e., *manufacture*, *process*, or *otherwise use*) to be eligible for the *de minimis* exemption. Qs & As and Directives in the 1998 Q & A that indicate that involvement in a threshold activity is a prerequisite to *de minimis* exemption eligibility have been revised accordingly.

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). This document 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) when determining whether a *facility* is subject to EPCRA Section 313 reporting requirements, and how the *facility* should report releases and other waste management quantities of toxic chemicals. If a conflict exists between guidance provided in this document and the statutory or regulatory requirements, the conflict must be resolved in favor of the statute or regulation.

EPA recognizes that activities involving *toxic chemicals* may vary significantly from one *facility* to another. Because it is not possible to address in a guidance document the specific circumstances that exist at each *facility* that may be subject to Section 313 reporting requirements, EPA intends to apply this guidance in a flexible manner. Similarly, individual *facilities* may find that the guidance provided in this document is inapplicable to their processes or circumstances, and that alternative

approaches or information are more accurate and/or more appropriate for meeting the statutory and regulatory requirements of EPCRA Section 313. *Facilities* should therefore use facility-specific information and process knowledge, where available, to meet the requirements of EPCRA Section 313.

There may be instances where the 1998 Q & A Document and this Addendum do not sufficiently address a *facility's* concerns (e.g., an issue with a *facility's* specific *manufacturing* process) with the reporting requirements of EPCRA section 313. In those instances, the *facility* should contact EPA or consult with professional counsel for compliance assistance. *Facilities* are also encouraged to contact the Agency with any additional or clarifying questions about the guidance provided in this document, or if the *facility* believes that EPA has incorrectly characterized a particular process or recommendation.

CROSSWALK TABLE BETWEEN 1998 EPCRA SECTION 313 QUESTIONS AND ANSWERS AND THE ADDENDUM

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
2	1	This Q&A has been modified to reflect that the Form A Certification Statement may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.27, the Form A Certification Statement may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
65	2	These Qs & As clarify EPA's interpretation of 40 CFR section
67	3	372.22(b)(3) that multi-establishment facilities should use "value added" as the basis for comparing the relative values of
68 on pg. 20	4	different establishments when determining the primary SIC code for the entire facility. The concept of "value added" has been
69	5	applied to these Qs & As. (See Toxic Chemical Release
72	6	Reporting final rule (53 <u>FR</u> 4500, 4501, February 16, 1988) and In Re: Coast Wood Preserving, Inc., EPCRA Appeal No. 02-01
73	7	(May 6, 2003)).
80	8	This Q&A has been modified to reflect that EO 12856 has been superseded by EO 13148 (65 <u>FR</u> 24595, April 26, 2000).
89	9	The activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998
96	10	Q&A Document have been modified to account for the lower
97	11	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 FR 58666, October 29, 1000 Jack Markov
107	12	1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
109	13	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
117	14	Activity thresholds are lower for PBT chemicals listed at 40
118	15	CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
120	16	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29,
121	17	1999) and Lead and Lead Compounds final rule (66 FR 4500,
122	18	January 17, 2001)).
126	19	
129	20	
132	21	
145	22	Activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
165	23	Activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
166	24	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
169	25	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

EPCRA Section 313 Questions and Answers Addendum
--

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
170	26	Activity thresholds are lower for PBT chemicals listed at 40
173	27	CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
185	28	thresholds for PBT chemicals. (See Persistent Bioaccumulative
192	29	Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500,
193	30	January 17, 2001)).
197	31	
200	32	
201	33	
220	34	Activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
221	35	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
226	36	These Qs & As clarify EPA's interpretation of 40 CFR section 372.22(b)(3) that multi-establishment facilities should use "value added" as the basis for comparing the relative values of different establishments when determining the primary SIC code
230	37	for the entire facility. The concept of "value added" has been applied to these Qs & As. (<i>See</i> Toxic Chemical Release Reporting final rule (53 <u>FR</u> 4500, 4501, February 16, 1988) and <u>In Re: Coast Wood Preserving, Inc.</u> , EPCRA Appeal No. 02-01 (May 6, 2003)).
274	38	Activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
313	39	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
315	40	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \text{ FR} 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \text{ FR} 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Q&A.
316	41	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
317	42	These Qs & As have been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead
318	43	Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Q&A.
321	44	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
323	45	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \ \underline{FR} 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \ \underline{FR} 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Q&A.
325	46	These Qs & As have been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section
326	47	372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule
327	48	(64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
328	49	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)). In addition, the answer of 200,000 lbs in 1998 Q&A 328 represented a mathematical error and has been changed to 2,000,000 lbs in the Addendum.
329	50	These Qs & As have been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals
330	51	listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule
331	52	(64 \underline{FR} 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 \underline{FR} 4500, January 17, 2001)).

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
334	53	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \text{ FR} 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \text{ FR} 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Q&A.
336	54	These Qs & As have been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section
337	55	372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule
339	56	(64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
340	57	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)). The example of polycyclic aromatic compounds (PACs) category in the 1998 Q&A was changed to arsenic compounds because PACs are classified as a PBT chemical category listed at 40 CFR 372.28 and therefore, are not eligible for the <i>de minimis</i> exemption.

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
354	58	Activity thresholds are lower for PBT chemicals listed at 40
365	59	CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower
375	60	thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29,
376	61	1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
379	62	
398	63	
421	64	
425	65	These Qs & As have been modified to reflect that pursuant to the PBT chemical rulemaking the qualifier for vanadium has changed from "fume or dust" to "except when contained in an
426	66	alloy." In addition, pursuant to the PBT chemical rulemaking the category of vanadium compounds has been added to the list of toxic chemicals at 40 CFR section 372.65, but not as a PBT chemical category. (<i>See</i> Persistent Bioaccumulative Toxic
427	Deleted	(PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999)). 1998 Q&A 427 is no longer valid guidance in light of the regulatory changes.
453	67	This Q&A has been modified to reflect the change from two to three delimited categories based on the addition of dioxin and dioxin-like compounds to the list of toxic chemicals pursuant to the PBT chemical rulemaking. This Q&A has also been modified to reflect the addition of two members to the PACs category pursuant to the PBT chemical rulemaking. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999)).
465	68	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
522	69	Activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28 and therefore, Qs & As throughout the 1998 Q&A Document have been modified to account for the lower thresholds for PBT chemicals. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

EPCRA Section 313 Questions and Answers Addendum

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
531	70	This Q&A has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \ FR \ 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \ FR \ 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility have been removed from this Q&A.
545	71	This Q&A has been modified to reflect that the Form A Certification Statement may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.27, the Form A Certification Statement may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
597	72	Pursuant to the PBT chemical rulemakings, this Q&A has been modified to reflect that PBT chemicals should be reported at a level of precision supported by the accuracy of the underlying data and the estimation techniques on which the estimate is based. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
599	73	These Qs & As have been modified to reflect that the Form A Certification Statement may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR
600	74	section 372.27, the Form A Certification Statement may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 FR 4500, January 17
604	75	and Lead Compounds final rule (66 \underline{FR} 4500, January 17, 2001)). Additional text was added to Q & A # 75 in the Addendum to clarify that more than one toxic chemical can be reported on a single Form A.

EPCRA Section 313 Questions and Answers Addendum
--

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
634	76	This Q&A has been modified to reflect that the qualifier for vanadium has changed from "fume or dust" to "except when contained in an alloy" pursuant to the PBT chemical rulemaking. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999)).
641	77	Pursuant to the PBT chemical rulemakings, these Qs & As have been modified to reflect that PBT chemicals should be reported at a level of precision supported by the accuracy of the underlying data and the estimation techniques on which the estimate is based. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
642	78	
Directive 2	Directive 2	This Directive has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \text{ FR} 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \text{ FR} 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Directive.
Directive 4	Directive 4	This Directive has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule ($64 \text{ FR} 58666$, October 29, 1999) and Lead and Lead Compounds final rule ($66 \text{ FR} 4500$, January 17, 2001)). In addition, reference to the threshold activities as a prerequisite to <i>de minimis</i> exemption eligibility has been removed from this Directive.

EPCRA Section 313 Questions and Answers Addendum

1998 Q&A	Addendum Q&A	Description of Update to 1998 Q&A
Directive 5	Directive 5	This Directive has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)). Additional text was added to section 2 of this Directive to clarify that individually listed glycol ether compounds such as 2-methoxyethanol are not included in the glycol ether compound category for purposes of section 313 reporting.
Directive 6	Directive 6	This Directive has been modified to reflect that the <i>de minimis</i> exemption may only be considered for non-PBT chemicals listed at 40 CFR section 372.65. Pursuant to 40 CFR section 372.38(a), the <i>de minimis</i> exemption may not be considered for the PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).
Directive 7	Directive 7	This Directive has been modified to reflect that the activity thresholds are lower for PBT chemicals listed at 40 CFR section 372.28. (<i>See</i> Persistent Bioaccumulative Toxic (PBT) Chemicals final rule (64 <u>FR</u> 58666, October 29, 1999) and Lead and Lead Compounds final rule (66 <u>FR</u> 4500, January 17, 2001)).

Reporting Criteria, Form R, Form A, Alternate Threshold	1. Is a <i>facility</i> which meets the employee and <i>toxic chemical</i> activity thresholds and is in a <i>covered SIC code</i> required to report if it had no <i>releases</i> of the <i>toxic chemical</i> during the reporting year? Yes, even if it <i>releases</i> no <i>toxic chemicals</i> into the <i>environment</i> and does not conduct any other <i>waste management</i> activities involving the listed <i>toxic chemical</i> , the <i>facility</i> must submit either the Form R or Form A (Alternate Threshold Certification Statement). If the <i>facility</i> meets the employee and chemical activity thresholds and is in a <i>covered SIC code</i> , but its annual reportable amount of a non-PBT chemical does not exceed 500 pounds and the <i>facility</i> has not <i>manufactured, processed,</i> or <i>otherwise used</i> more than one million pounds of the <i>toxic chemical</i> , the <i>facility</i> may submit the Form A (a two-page certification statement) instead of the Form R. However, if the <i>facility</i> 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.)
Primary SIC Code, Multi- establishment	2. What is the definition of primary SIC code? How can there be more than one SIC code for a <i>facility</i> ? A primary SIC code generally represents those goods produced or services performed by an <i>establishment</i> that have the highest value added. Form R and the Alternate Certification Statement (Form A) provide space for more than one SIC code because a <i>facility</i> may be made up of several <i>establishments</i> each of which may have a different primary SIC code.
Multi- establishment, Definition of Facility, Establishment, SIC Code	3. Clarify the application of SIC codes for <i>facility</i> versus <i>establishment</i> ? The SIC code system classifies businesses on the basis of an <i>establishment</i> , which is generally a single business unit at one location. Many Section 313 <i>covered facilities</i> will be equivalent to an <i>establishment</i> . If the <i>facility's</i> SIC code is a <i>covered SIC code</i> , the <i>facility</i> has met the SIC code criterion for reporting under EPCRA Section 313. However, a reporting <i>facility</i> can encompass several <i>establishments</i> located on a single site or on contiguous or adjacent sites owned or operated by the same entity. Therefore, a Section 313 <i>facility</i> can be a <i>multi-establishment</i> complex. To determine if a <i>multi-establishment</i> complex is a <i>covered facility</i> , the owner/operator must determine the complex's primary SIC code based on the relative value added of products and services provided by the various <i>establishments</i> . If the primary SIC code for the <i>facility is a covered SIC code</i> , the <i>facility</i> has met the SIC code criterion.

SIC Code, Multi- establishment	4. Suppose a <i>facility</i> consists of several <i>establishments</i> , some of which have primary SIC codes within the <i>covered SIC codes</i> and some of which have primary SIC codes outside that range. How would this <i>facility</i> determine if it is covered by EPCRA Section 313?
	To determine if a <i>facility</i> is covered by EPCRA Section 313, the <i>facility</i> must determine if it meets the SIC code criterion. To make this determination, the <i>facility</i> must report if those <i>establishments</i> that are in the <i>covered SIC codes</i> have a combined value added of more than 50 percent of the total value added of services provided or products shipped or produced by the whole <i>facility</i> , or if one of those <i>covered SIC code establishments</i> has a value added of services or products shipped or produced that is greater than the value added of any other <i>establishment</i> in the <i>facility</i> (40 CFR Section 372.22(b)(3)). If the <i>facility</i> determines that the <i>establishment</i> s meet this test, the entire <i>facility</i> has met the SIC code criterion. If the entire <i>facility</i> also meets the employee and chemical activity thresholds (based on all <i>establishment</i> s at the <i>facility</i>), then the entire <i>facility</i> would be subject to EPCRA Section 313 reporting.
Primary SIC Code, Multi-activity Facility	5. SIC Code 7389 (business services, not elsewhere classified) contains many diverse activities. How does a <i>facility</i> 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 <i>facility</i> that conducts several uniquely different activities that are within SIC code 7389 should identify the value added of the goods or services that each activity contributes. A <i>facility</i> is considered to be "primarily engaged" in solvent recovery if the goods or services produced by the solvent recovery activity have a value added of more than 50 percent of the total value added of all goods and services produced at the <i>facility</i> , or if the value added of the goods and services produced by the solvent recovery activity of the <i>facility</i> are greater than the value added of the goods and services produced by the goods and services produced by any other activity at the <i>facility</i> .
Primary SIC Code, Multi- establishment	6. A multi- <i>establishment facility</i> grows wheat and mills it into flour. At the agriculture portion of the <i>facility</i> , 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 <i>facility</i> farms and sells more than it mills into flour and sells, is it a <i>covered facility</i> ? What is the primary SIC code of this <i>facility</i> ?
	In order to make the <i>facility</i> coverage determination, the <i>facility</i> must compare the value added of products shipped and/or produced at the two different <i>establishments</i> (<u>i.e.</u> , agriculture versus the flour processing). The

EPCRA Section 313 Questions and Answers Addendum
value added of the product produced at the agricultural <i>establishment</i> (SIC code 0111, not in a <i>covered SIC code</i>) is the market value of all the wheat grain harvested during the reporting year. The value added of the product from the milling/packaging <i>establishment</i> (in SIC code 2041, a <i>covered SIC code</i>) is the value added 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 added of milled flour products is greater than the market value of harvested grain, then the <i>facility's</i> primary SIC code would be within a <i>covered SIC code</i> and the facility would be subject to reporting under EPCRA Section 313.
7. 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 value added 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 added of the services provided by SIC code 70? Yes. In determining the primary SIC code, the facility should consider the value added 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.
8. The definition of <i>facility</i> 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) 13148, the federal agency is making threshold determinations under EPCRA Section 313, must it consider the two GOCOs as part of the same federal <i>facility</i> ? Yes. The two GOCOs are considered to be a single federal <i>facility</i> for the purposes of EPCRA Section 313 threshold determinations and <i>release</i> and other <i>waste management</i> reporting as required by EO 13148. EPA has interpreted "contiguous or adjacent sites" to include sites separated only by a public right-of-way. Therefore, the two GOCOs are considered to occupy sites that are contiguous or adjacent. Each GOCO should provide any

	EPCRA Section 313 Questions and Answers Addendum
	information required by the federal <i>facility</i> in making threshold determinations and reporting <i>releases</i> and other <i>waste management</i> under EPCRA Section 313.
	EO 13148 does not alter any separate obligation(s) a GOCO may have under EPCRA and the Pollution Prevention Act (PPA). Private contractors operating at federal <i>facilities</i> must continue to meet any legal reporting requirements they have under EPCRA and PPA. Thus, a GOCO that operates a <i>covered facility</i> under 40 CFR Section 372.22 must file a Form R or an Alternate Certification Statement (Form A) for each <i>toxic chemical</i> for which the <i>facility</i> exceeds an activity threshold as specified in 40 CFR Section 372.25.
	EO 13148 (65 FR 24595, April 26, 2000) supersedes EO 12856 (August 1993).
Activity Threshold, Storage	9. 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 <i>toxic chemical</i> in the flotation agent considered for threshold determinations in the 1998 reporting year?
	No. Storage in itself of a <i>toxic chemical</i> is not considered a <i>manufacturing</i> , <i>processing</i> , or <i>otherwise use</i> activity and, therefore, is not subject to threshold determinations. However, the <i>facility</i> is required to include any amounts <i>released</i> or otherwise managed as waste that occur during storage of the listed <i>toxic chemical</i> , provided a threshold for the same chemical has been exceeded elsewhere at the <i>facility</i> . When the <i>toxic chemical</i> is used in 1999, the <i>facility</i> will include the amount of <i>toxic chemical</i> used towards the applicable <i>otherwise use</i> or <i>processing</i> threshold, whichever is appropriate.
Manufacture, Import, Threshold Determination	10. If a <i>covered facility manufactures</i> 19,000 pounds, <i>processes</i> 18,000 pounds, and <i>imports</i> 7,000 pounds of <i>toxic chemical</i> X (a non-PBT chemical) during the reporting year, is it required to report for <i>toxic chemical</i> X?
	Yes. For the reporting year, the <i>facility</i> would have to report for <i>toxic chemical</i> X because it would have exceeded the <i>manufacture</i> threshold of 25,000 pounds (19,000 (<i>manufactured</i>) + 7,000 (<i>imported</i>) = 26,000). Note that <i>importing</i> constitutes <i>manufacturing</i> , and therefore, the amounts must be added together for threshold determinations.
Threshold Determination	11. Are the thresholds for <i>manufacture</i> and <i>process</i> considered separately? That is, if a <i>covered facility manufactures</i> 24,000 pounds of <i>toxic chemical</i> A (a non-PBT chemical) and <i>processes</i> 24,000 pounds of <i>toxic chemical</i> A, does the <i>facility</i> need to report for <i>toxic chemical</i> A?

	No. The <i>facility</i> does not have to report because it has not independently exceeded either threshold. Thresholds are considered separately for <i>manufacture</i> , <i>process</i> , and <i>otherwise use</i> of the same <i>toxic chemical</i> . Assuming that no individual threshold is met for chemical A (<u>i.e.</u> , <i>manufacturing</i> , <i>processing</i> , or <i>otherwise use</i>), the <i>facility</i> does not trigger reporting for chemical A.
Threshold Determina- tion, Metal Alloy, Mixture	12. How does a <i>facility</i> determine the threshold for reporting of a listed <i>toxic chemical</i> (such as chromium) in a solid piece of steel which it <i>processes</i> ?
	Since steel is a <i>mixture</i> (and not a compound), the <i>processing</i> threshold determination is made based on the total amount of each <i>toxic chemical</i> present in the steel. If the <i>toxic chemical</i> 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 <i>toxic chemical</i> . The threshold for <i>processing</i> chromium is 25,000 pounds.
Threshold Determina- tion, Metal Alloy, Article Exemption, De Minimis	13. Regarding non-PBT metals in <i>mixtures</i> , such as chromium in an alloy (stainless steel), how are thresholds and <i>releases</i> and other <i>waste management</i> activities accounted for in a foundry type operation where all of the metals are melted down? Could the <u>de minimis</u> and <i>article</i> exemptions be applied?
Exemption	For threshold purposes, if the listed non-PBT chemicals in the metals are <i>processed, otherwise used, manufactured</i> as an impurity (that remains with the product), or <i>imported</i> below the <u>de minimis</u> levels, then the <u>de minimis</u> exemption may be taken for that metal in the alloy. However, the <i>article</i> 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.
Activity Threshold	14. If I <i>manufacture</i> 74,000 pounds of a non-PBT <i>toxic chemical</i> and <i>otherwise use</i> 9,000 pounds, am I covered?
	Yes. The <i>facility</i> has exceeded the <i>manufacturing</i> threshold of 25,000 pounds for the <i>toxic chemical</i> . <i>Releases</i> and other <i>waste management</i> from all activities including the 9,000 lbs <i>otherwise used</i> of the <i>toxic chemical</i> at the <i>facility</i> are reportable.
Reclamation, Processing, Distribution in Commerce	15. Is the reclamation of elemental mercury from mercury retorting (<u>e.g.</u> , recycled fluorescent lamps, contaminated phosphor powder, mercury batteries, and other sources) and the subsequent sale of the recovered mercury (<u>e.g.</u> , for use in thermometers and other equipment) subject to the 10 pound <i>processing</i> threshold?

	EPCRA Section 313 Questions and Answers Addendum
	Yes. Mercury retorted from wastes and subsequently distributed into commerce should be counted towards the 10 pound <i>processing</i> threshold.
Otherwise Use, Off-site Waste	16. A <i>covered facility</i> receives a waste containing 13,000 pounds of a listed, non-PBT chemical. The <i>facility</i> disposes of 5,000 pounds of the <i>toxic chemical</i> and stabilizes the other 8,000 pounds of the chemical. Does the <i>facility</i> meet a Section 313 chemical activity?
	Until January 1, 1998, this <i>facility</i> would not be <i>manufacturing</i> , <i>processing</i> or <i>otherwise using</i> the listed <i>toxic chemical</i> . However, beginning January 1, 1998, the <i>facility</i> would be <i>otherwise using</i> the <i>toxic chemical</i> . Because the <i>facility</i> received the 13,000 pounds of the <i>toxic chemical</i> in wastes received from off-site for the purposes of further <i>waste management</i> , the amount of the <i>toxic chemical</i> that is subsequently <i>stabilized</i> or <i>disposed</i> on-site is considered <i>otherwise used</i> at the <i>facility</i> for the purpose of threshold determinations. The <i>facility</i> would need to add the amount of the <i>toxic chemical</i> that is involved in all <i>otherwise use</i> activities to determine whether the <i>otherwise use</i> threshold of 10,000 pounds of the chemical would be considered <i>otherwise used</i> .
Definition of Otherwise Use, Activity Threshold, Coincidental Manufacture,	17. A <i>covered facility</i> , in treating for destruction listed <i>toxic chemical</i> A (a non-PBT chemical), which it receives from off-site, <i>manufactures</i> 11,000 pounds of chemical B, another listed non-PBT chemical. The <i>facility</i> subsequently disposes of chemical B on-site. Would the <i>facility</i> meet the <i>manufacture</i> or <i>otherwise use</i> threshold for chemical B?
Off-site Waste	This <i>manufacture</i> of chemical B is below the <i>manufacturing</i> activity threshold of 25,000 pounds. However, after January 1, 1998, the <i>facility</i> would also be <i>otherwise using toxic chemicals</i> A and B. Included in activities covered by EPA's revised interpretation of <i>otherwise use</i> is the <i>disposal</i> of a <i>toxic chemical</i> that is produced from the management of a waste that is received by the <i>facility</i> . In this example, because the <i>facility</i> received from off-site a waste containing a chemical that is treated for destruction (<u>i.e.</u> , chemical A) and during that treatment produced and subsequently disposed of chemical B, the <i>disposal</i> of chemical B under EPA's revised interpretation would be considered <i>otherwise used</i> as well as the treatment for destruction of chemical A. Because the <i>facility</i> disposed of, or <i>otherwise used</i> , 11,000 pounds of chemical B, the 10,000 pound statutory threshold for the <i>otherwise use</i> of non-PBT chemicals has been met. Thus, the <i>facility</i> would need to report all <i>releases</i> of, and <i>waste management</i> activities involving chemical B. If the <i>facility</i> treats for destruction more than 10,000 lbs of chemical A, it would also report for this <i>toxic chemical</i> .

Activity Threshold, Otherwise Use	18. A <i>covered facility manufactures</i> 11,000 pounds of chemical A, a listed non-PBT chemical from the treatment of another <i>toxic chemical</i> which was received from off-site. The <i>facility</i> disposes of 6,000 pounds of chemical A and uses 5,000 pounds of chemical A in a non-incorporative, manufacturing activity at the <i>facility</i> . Does this <i>facility</i> meet an activity threshold?
	Prior to January 1, 1998, this <i>facility</i> would not meet the <i>manufacturing</i> threshold of 25,000 pounds for chemical A nor would it have met the <i>otherwise use</i> threshold of 10,000 pounds because it only <i>otherwise used</i> 5,000 pounds. However, after January 1, 1998, the <i>facility</i> would meet the <i>otherwise use</i> threshold for chemical A. Both the on-site <i>disposal</i> and the non-incorporative activities are considered to be <i>otherwise use</i> activities. The on-site <i>disposal</i> of chemical A is included among the various activities covered by EPA's revised interpretation of <i>otherwise use</i> . The <i>facility</i> would add the amounts of chemical A involved in both <i>otherwise use</i> activities at the <i>facility</i> to determine whether they exceed the 10,000 pound <i>otherwise use</i> threshold for non-PBT chemicals. Since the total amount of chemical A that is <i>otherwise used</i> is 11,000 pounds, the <i>facility</i> would need to report on all <i>releases</i> and <i>other waste management</i> activities involving chemical A.
Activity Threshold, Otherwise Use, Neutralization	 19. 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 Use, Treatment for Destruction, Phase	 otherwise used. 20. If a <i>toxic chemical</i> is derived from the phase separation of wastes received from off site and that chemical is subsequently incorporated into a product at the <i>facility</i> and then distributed into commerce, has the toxic chemical been <i>processed</i> or <i>otherwise used</i>?
Separation	If a facility receives materials containing <i>toxic chemicals</i> from off-site for further <i>waste management</i> and the <i>toxic chemicals</i> are <i>treated for destruction</i> , stabilized, or <i>disposed</i> on-site, the <i>facility</i> would be <i>otherwise using</i> the <i>toxic chemicals</i> . However, during phase separation the <i>toxic chemical</i> in the waste is not actually destroyed. Furthermore, the <i>toxic chemical</i> is incorporated into a product at the <i>facility</i> and is further distributed in commerce (<u>e.g.</u> , retorted mercury sold for reuse in thermometers and mercury switches). Thus, as long as the <i>toxic chemical</i> coming from the waste is not stabilized, <i>treated for destruction</i> , or <i>disposed</i> , it would not be <i>otherwise used</i> because it is neither <i>treated for destruction</i> nor <i>disposed</i> on site. Because it is distributed in commerce, it would be <i>processed</i> . Once a <i>facility</i> exceeds a threshold for a particular <i>toxic chemical</i> , amounts of that chemical that are <i>released</i> or otherwise managed as a waste must be calculated for all on-site activities.

Otherwise Use, Threshold	21. Must <i>releases</i> of listed <i>toxic chemicals</i> used as fumigants be reported if the other criteria and thresholds are met?
Determina- tion, Fumigants	Yes. Fumigant use would be subject to the <i>otherwise use</i> threshold.
Activity Threshold, Process, Otherwise Use, Adhesive, Process vs. Otherwise Use	22. A <i>facility</i> covered under EPCRA Section 313 <i>manufactures</i> shoes. During production the <i>facility</i> uses adhesives that contain solvents such as toluene. Due to the inefficiency of the <i>process</i> , 20 percent of the solvent remains behind in the shoes when they are sold in commerce. Would the <i>facility</i> count the amount of solvent remaining in the shoes toward the <i>processing</i> threshold?
	No. The amount of solvent used in the adhesive would count toward the <i>otherwise use</i> threshold. Since the <i>toxic chemical</i> does not function as a component of the shoe, it would not be considered <i>processed</i> . Thus, the <i>facility</i> would file if it meets an <i>otherwise use</i> threshold for the <i>toxic chemical</i> in the adhesive.
Activity Threshold, Otherwise Use, Solvents	23. If a solvent that is a listed <i>toxic chemical</i> 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 <i>otherwise used</i> . It would be subject to reporting if used in quantities exceeding the <i>otherwise use</i> threshold.
Activity Threshold, Otherwise Use	24. A <i>covered facility</i> 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 <i>otherwise used</i> .
Activity Threshold, Process, Repackage	25. Does the placing of a bulk liquid containing a small percentage of a Section 313 <i>toxic chemical</i> into small bottles for consumer sale constitute a reportable/threshold activity of the <i>mixture</i> ?
	Yes, repackaging for distribution in commerce is a type of <i>processing</i> (40 CFR Section 372.3). If the bulk liquid contains a Section 313 listed non-PBT chemical in excess of the <u>de minimis</u> level or a listed PBT chemical at any concentration, the <i>toxic chemical</i> in the liquid would have to be factored into

	calculations in determining whether the <i>processing</i> threshold is exceeded for that <i>toxic chemical</i> .
Repackaging, Processing	26. A <i>covered facility</i> 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 <i>toxic chemical</i> that a <i>covered facility</i> repackages for distribution in commerce must be considered toward the <i>processing</i> threshold.
Activity Threshold, Process, Otherwise Use, Paint	27. Paint containing listed <i>toxic chemicals</i> is applied to a product and becomes part of an <i>article</i> . Does the <i>processing</i> threshold apply? What about the volatile <i>toxic chemicals</i> from the painting operation - are they <i>otherwise used</i> ?
	Yes. This is a case in which different listed <i>toxic chemicals</i> in the same <i>mixture</i> may have different uses and therefore, different thresholds. The listed <i>toxic chemicals</i> that are incorporated as part of the coating are <i>processed</i> , whereas the volatile solvents in the paint are <i>otherwise used</i> because their function is such that they do not become incorporated into the <i>article</i> .
Coincidental Manufacture, Byproduct, Threshold Determina- tion,	28. A listed <i>toxic chemical</i> is <i>manufactured</i> as part of a <i>mixture</i> which is a byproduct. The <i>facility</i> does not know the specific concentration of the listed <i>toxic chemical</i> in this byproduct. For determining the threshold for Section 313, does the <i>facility</i> include this byproduct without knowing the specific concentration of the listed <i>toxic chemical</i> ?
Concentration Information	Because the reporting <i>facility</i> is <i>manufacturing</i> the <i>toxic chemical mixture</i> on-site, the <i>facility</i> is required to calculate the amount of the <i>toxic chemical</i> coincidentally <i>manufactured</i> during the reporting year based upon a reasonable estimate of the percentage of the <i>toxic chemical</i> in the <i>mixture</i> . This quantity is aggregated to determine if the <i>facility</i> exceeds the threshold for <i>manufacturing</i> .
Activity Threshold, Process, Fuel	29. A <i>covered facility</i> 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 <i>facility</i> . 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 <i>facility</i> consider the <i>toxic chemicals</i> present in the fuel when making Section 313 threshold and <i>release</i> and other <i>waste management</i> calculations?

Otherwise Use, Threshold Determination, Refractory Brick

Activity Threshold, Process, Reclamation, Solvents 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 *processing* threshold.

30. Refractory brick containing 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 previous 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 100 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 (<u>i.e.</u>, not yet installed), nor the lead in place, contained in bricks (<u>i.e.</u>, 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.

31. 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 (<u>i.e.</u>, 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 (<u>e.g.</u>, *processing*) during the course of a reporting year.

Process, Intracompany Transfer, Formalde- hyde, Economic Benefit	32. A <i>facility</i> covered under EPCRA Section 313 uses formaldehyde as an ingredient in feedstock. The feedstock is sent for use to another <i>facility</i> under common ownership. The preparing <i>facility</i> does not receive direct compensation for the product, nor is the product distributed to the general public. Does such a transfer of a listed <i>toxic chemical</i> , after its preparation, to another <i>facility</i> 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, <i>process</i> means the preparation of a listed <i>toxic chemical</i> , after its <i>manufacture</i> , 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 <i>toxic chemicals</i> that are shipped from one <i>facility</i> to another <i>facility</i> 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 <i>facility</i> does derive economic benefit by transferring the listed <i>toxic chemical</i> , as both <i>facilities</i> are under common ownership. The amount of listed <i>toxic chemical</i> prepared at the <i>facility</i> must be counted towards the <i>processing</i> threshold.
Process, Intracompany Transfer, Economic Benefit	33. Company A stores oil at their Storage Facility 1. Company A transfers oil from Storage Facility 1 to their Storage Facility 2 (a separate <i>facility</i> 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 <i>processing</i> on the part of Storage Facility 1?
	Yes. Under EPCRA Section 313, <i>processing</i> means the preparation of a listed <i>toxic chemical</i> after its <i>manufacture</i> , 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 <i>toxic chemicals</i> that are shipped from one <i>facility</i> to another <i>facility</i> 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 <i>facility</i> does derive economic benefit by transferring the listed toxic chemical, as both facilities are under common ownership. The amount of listed <i>toxic chemical</i> prepared at the <i>facility</i> must be counted towards the <i>processing</i> threshold.
Import, Purchasing Agent	34. 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 <i>facilities</i> . Did the individual <i>facility</i> cause the <i>importation</i> of

the section 313 chemical thereby requiring it to apply the *manufacturing* threshold to the quantities of this material received by the *facility* in the reporting year?

	If the chemical distribution <i>facility</i> that actually received the product did not have any input regarding the quantity or identity of the <i>toxic chemical</i> , the <i>facility</i> did not cause the <i>importation</i> of the <i>toxic chemical</i> in the product and does not have to apply the listed chemical in the product to its <i>manufacturing</i> threshold. To be considered an <i>importer</i> the <i>facility</i> receiving the material from a foreign source must have <i>imported</i> or "caused the material to be imported." If the ordering <i>facility</i> receives the shipment, then the ordering <i>facility</i> has <i>imported</i> the listed <i>toxic chemicals</i> and must consider these amounts toward their <i>manufacturing</i> thresholds. However, if the ordering <i>facility</i> has no input in deciding whether it will receive the toxic chemical, then the receiving <i>facility</i> has not <i>imported</i> the shipment and the ordering <i>facility</i> has also not <i>imported</i> the shipment for purposes of EPCRA Section 313 because the listed <i>toxic chemicals</i> were not brought on site of the ordering <i>facility</i> .
Import, Broker	35. A <i>facility</i> did not specify a source for a material broker to obtain a listed <i>toxic chemical</i> , but the <i>facility</i> learns that the only U.S. <i>manufacturer</i> of the chemical has gone out of business. Therefore, is the <i>facility importing</i> the chemical, making the <i>facility</i> subject to the <i>manufacturing</i> threshold?
	Yes. The <i>facility</i> knows that it has caused the listed <i>toxic chemical</i> to be <i>imported</i> to the U.S. because there are no U.S. sources. Therefore, the amount of the chemical that is caused to be <i>imported</i> by the <i>facility</i> through a broker must be included within the <i>manufacturing</i> threshold determination for that listed <i>toxic chemical</i> .
Auxiliary Facility, SIC Code	36. An auxiliary wastewater treatment plant, which is not a RCRA Subtitle C <i>facility</i> , has taken on the SIC code of a <i>covered facility</i> because it primarily services a <i>covered facility</i> . Does the <i>facility</i> where the treatment plant is located have to report even if the rest of the <i>establishments</i> at that <i>facility</i> are not in the <i>covered SIC codes</i> ?
	A <i>facility</i> must report only if it meets the employee, SIC code and activity criteria. As long as the SIC code for the wastewater treatment plant is not the primary SIC code for the facility, the SIC code criterion is not met. Therefore, the <i>facility</i> as a whole need not report. The <i>covered facility</i> producing the listed <i>toxic chemical</i> in the waste must report the off-site transfer to the <i>facility</i> containing the wastewater treatment plant.

Auxiliary Facility, SIC Code, Multi- establishment, Laboratory	37. Is my <i>facility</i> covered by EPCRA Section 313 if the value added of laboratory research at my <i>facility</i> is greater than 50 percent of the total value added of goods and services produced at my <i>facility</i> ?
	If the research laboratory is a separate <i>establishment</i> from the other activities at the <i>facility</i> and its SIC code is not in a <i>covered SIC code</i> , then the 50 percent test is used to determine if the whole <i>facility</i> is in the <i>covered SIC codes</i> (40 CFR Section 372.22). In this case, the <i>facility</i> would not be subject to reporting because the primary SIC code is not within the <i>covered SIC codes</i> . However, if the laboratory is within the <i>covered SIC codes</i> because it is an auxiliary <i>establishment</i> providing research to support operations in the <i>covered SIC codes</i> , then the <i>facility</i> would be covered by Section 313.
Structural Component Exemption, Fuel	38. An EPCRA Section 313 <i>covered facility</i> uses a fuel-powered paint sprayer for the sole purpose of painting the <i>facility's</i> structure. The listed <i>toxic chemicals</i> within the paint used to maintain the <i>facility's</i> appearance are exempt from EPCRA Section 313 threshold determination and <i>release</i> and other <i>waste management</i> 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 <i>toxic chemicals</i> reportable under EPCRA Section 313. Must the listed <i>toxic chemicals</i> in the fuel be applied toward the <i>otherwise use</i> threshold?
	No. The listed <i>toxic chemicals</i> are exempt from EPCRA Section 313 threshold determinations and <i>release</i> and other <i>waste management</i> reporting requirements. Although the structural component exemption most commonly applies to <i>toxic chemicals</i> incorporated into a <i>facility's</i> physical structure, the exemption also extends to <i>toxic chemicals</i> whose sole use derives from or is associated with an exempt use. Examples of <i>toxic chemicals</i> exempt in this manner include solvents used to clean paint brushes that were used to paint a <i>facility's</i> structure and fumes generated from the welding of non-process related pipes during installation at a <i>facility</i> . Be aware that the combustion of fuels may coincidentally <i>manufacture</i> Section 313 <i>toxic chemicals</i> . Such coincidental <i>manufacture</i> is not eligible for <u>de minimis</u> limitations (see the directive on <u>de minimis</u>) or the structural component exemption and amounts produced must be compared against the <i>manufacturing</i> threshold. The EPA publication, <u>Toxic Air Pollutant Emission Factor - A Compilation of Selected Air Toxic Compounds and Sources</u> (EPA 45/2-88-006a) contains emission factors for many specific compounds emitted during fuel combustion.
Laboratory Activity Exemption, Process	39. After <i>otherwise using</i> an EPCRA Section 313 <i>toxic chemical</i> in a laboratory setting under the supervision of a technically qualified individual, a <i>covered facility</i> sends the <i>toxic chemical</i> in waste off-site to be recycled. The <i>facility</i> also <i>processes</i> the same chemical elsewhere but below the <i>processing</i> threshold. The <i>facility</i> is eligible for the laboratory activity exemption for the amount of the listed <i>toxic chemical otherwise</i>

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 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 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.

De Minimis Exemption, Trade Name Product

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

The <u>de minimis</u> exemption allows *covered facilities* to disregard certain minimal concentrations of listed non-PBT chemicals in *mixtures* or *trade name products* when making threshold determinations and *release* and other *waste management* determinations. The <u>de minimis</u> 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 <u>de minimis</u> level or is *imported* below <u>de minimis</u> concentrations. The <u>de minimis</u> exemption does not apply to a byproduct *manufactured* coincidentally as a result of *manufacturing, processing, otherwise use,* or any *waste management* activity. The <u>de minimis</u> exemption does not apply to the PBT chemicals listed at 40 CFR section 372.28.

When determining whether the <u>de minimis</u> exemption applies to a listed non-PBT chemical, the owner/operator should consider only the concentration of the listed *toxic chemical* in *mixtures* and *trade name products*. If the listed non-PBT chemical in a *mixture* or *trade name product* is *manufactured* as an impurity or *imported*, *processed*, or *otherwise used* and is below the appropriate <u>de minimis</u> concentration level, then the quantity of the listed *toxic chemical* in that *mixture* or *trade name product* does not have to be applied to threshold determinations nor included in *release* or other *waste management* calculations. If a listed non-PBT chemical in a *mixture* or *trade name product* and other *waste name product* meets the <u>de minimis</u> exemption, all *releases* and other *waste*

management activities associated with the listed *toxic chemical* in that *mixture* or *trade name product* are exempt from EPCRA Section 313 reporting. It is possible to meet an activity (<u>e.g.</u>, *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 *mixture* or *trade name product* because that *mixture* or *trade name product* contains the non-PBT chemical below the <u>de minimis</u> level.

Once a listed *toxic chemical* concentration is above the appropriate <u>de minimis</u> concentration, threshold determinations and *release* and other *waste management* calculations must be made, even if the chemical later falls below the <u>de minimis</u> level in the same process stream. Thus, all *releases* and other quantities managed as waste that occur after the <u>de minimis</u> level has been exceeded are subject to reporting. If a listed *toxic chemical* in a *mixture* or *trade name product* above the <u>de minimis</u> level is brought on-site, the <u>de minimis</u> exemption never applies.

The <u>de minimis</u> concentration level is consistent with the OSHA Hazard Communication Standard requirements for development of *Material Safety Data Sheets* (*MSDS*s). The <u>de minimis</u> level is 1.0 percent except if the listed *toxic chemical* is an OSHA-defined carcinogen. The <u>de minimis</u> 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 <u>de minimis</u> level applies to the aggregate concentration of all such members and not to each individually. The list of *toxic chemicals* in the publication <u>Toxic Chemical Release Inventory</u> <u>Reporting Forms and Instructions</u> for the current reporting year contains the <u>de minimis</u> values for each of the non-PBT chemicals and chemical categories.

This <u>de minimis</u> 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 <u>de minimis</u> exemption cannot be applied to *toxic chemicals* in a waste.

De Minimis Exemption, Otherwise Use

41. 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 <u>de minimis</u> 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 non-PBT chemicals contained in the ash are eligible for the <u>de minimis</u> exemption if they do not exceed the <u>de minimis</u> concentrations.

De Minimis Exemption, Solvent Recovery	42. A <i>covered facility</i> 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 <u>de minimis</u> exemption?
	The recovery <i>facility</i> must consider the amount of the material that it feeds into the recycling operation toward the <i>facility</i> 's <i>processing</i> threshold. The solvent is part of a waste (not usable in the form received) and therefore the amount <i>processed</i> is not eligible for the <u>de minimis</u> exemption until the recovery is complete and the solvent is no longer subject to further <i>waste</i> <i>management</i> activities. Once the recovery is complete, the solvent is no longer a waste and thus the recovery <i>facility</i> may take the <u>de minimis</u> exemption for amounts of non-PBT chemicals subsequently prepared for distribution in commerce. The purchasing <i>facility</i> considers the recovered solvent as a new product and its subsequent use of the solvent may be eligible for the <u>de minimis</u> exemption. However, if the amount of solvent processed prior to the point of which it was eligible for the <u>de minimis</u> exemption was enough to exceed a reporting threshold, the fact that the solvent subsequently became eligible for the <u>de minimis</u> exemption does not remove the reporting requirement.
De Minimis Exemption, Mixture, Impurity, Waste,	 43. Does the <u>de minimis</u> exemption apply regardless of whether a listed non-PBT chemical is present in a <i>mixture</i> as an impurity or separated out as a byproduct? Does it apply to <i>toxic chemicals</i> in waste? The <u>de minimis</u> exemption may be considered for non-PBT chemicals that
Byproduct	are <i>manufactured</i> as impurities that remain in the product for distribution. The <u>de minimis</u> exemption does not apply to listed <i>toxic chemicals</i> that are <i>manufactured</i> as a byproduct regardless of whether the byproduct is a waste.
De Minimis Exemption, Metal	44. Does the <u>de minimis</u> exemption apply to the parent metal component of a compound in a <i>mixture</i> for Section 313 reporting?
Compounds	No. For threshold determinations, the weight percent of the whole compound in the <i>mixture</i> is used. In general, the <u>de minimis</u> value for compounds is one percent, unless the particular compound is itself an OSHA carcinogen and then the <u>de minimis</u> level is 0.1 percent. The <u>de minimis</u> exemption does not apply to the PBT chemicals listed at 40 CFR section 372.28.
De Minimis Exemption	45. We are taking part in an experimental shale oil extraction process. When the shale is extracted, concentrations of a non-PBT chemical are present in trace amounts in the shale far below the <u>de minimis</u> concentration. Does the <u>de minimis</u> exemption apply?

Yes, the <u>de minimis</u> exemption applies to the listed non-PBT chemical present in the shale.

De Minimis Exemption, De Minimis Level, Carcinogen 46. What is the basis for determining that a *toxic chemical* is subject to the 0.1 percent <u>de minimis</u> level rather than the 1.0 percent <u>de minimis</u> level, and when do changes in *toxic chemical* <u>de minimis</u> levels take effect?

In the final rule (53 <u>FR</u> 4500, Feb. 16, 1988) that implements the reporting requirements of EPCRA Section 313, EPA adopts a <u>de minimis</u> exemption which permits *facilities* to disregard <u>de minimis</u> levels of listed non-PBT chemicals for threshold determinations and *release* and other *waste management* calculations. The regulations adopt a 0.1 percent <u>de minimis</u> 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 <u>de minimis</u> concentration, provided that the other criteria for the <u>de minimis</u> 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 <u>de minimis</u> concentration from 1.0 to 0.1 percent), the lower <u>de minimis</u> 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 <u>de minimis</u> level of 0.1 percent applied starting with the 1996 reporting year (<u>i.e.</u>, 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

	EPCRA Section 313 Questions and Answers Addendum
	supplier would notify customers with the first shipment on or after January 1, 1996.
De Minimis Exemption, Release Reporting	47. If a <i>covered facility</i> has process streams with less than 1 percent (or 0.1 percent for carcinogens) of a listed non-PBT chemical, do fugitive <i>releases</i> from these streams have to be included in <i>release</i> calculations?
	The <u>de minimis</u> exemption applies to process streams when a starting material for the process is a <i>mixture</i> containing less than 1 percent (or 0.1 percent) of a listed non-PBT chemical. If the process stream is exempt under <u>de minimis</u> , <i>releases</i> from the stream are not reported on the Form R.
De Minimis Exemption, Concentration Range	48. A <i>covered facility</i> uses a chemical <i>mixture</i> that contains a listed Section 313 non-PBT chemical. The concentration of the listed <i>toxic</i> <i>chemical</i> is given as a range on the <i>Material Safety Data Sheet (MSDS)</i> . If the maximum and minimum concentrations are above and below the <u>de minimis</u> concentration level, how can the <i>facility</i> determine quantities for Section 313 compliance?
	The amount of the listed <i>toxic chemical</i> in the <i>mixture</i> that is at or above the <u>de minimis</u> level, and therefore counts towards the threshold, can be assumed to be proportional to the ratio of the amount at or above <u>de minimis</u> concentration to the amount of the total concentration range. The concentration of the chemical in the <i>mixture</i> that is not exempt is the average of the <u>de minimis</u> level and the maximum concentrations.
	For example, assume that a <i>facility manufactures</i> 10 million pounds of a <i>mixture</i> containing 0.25–1.20 percent of a <i>toxic chemical</i> that is subject to a 1 percent <u>de minimis</u> level. The quantity of the <i>mixture</i> subject to reporting is:
	$\frac{10,000,000 \text{ lbs} \times (1.20 - 0.99)}{(1.20 - 0.25)} = 2,210,526 \text{ lbs}$ Non-exempt <i>mixture</i>
	This 2,210,526 pounds of non-exempt <i>mixture</i> is multiplied by the average concentration above the <u>de minimis</u> , 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	49. A <i>covered facility processes</i> a <i>mixture</i> of chemicals which includes a non-carcinogenic listed non-PBT chemical present between concentrations of 0.5–1.0 percent, as stated on the <i>MSDS</i> provided with the <i>mixture</i> . Is the listed <i>toxic chemical</i> in the <i>mixture</i> eligible for the

	<u>de minimis</u> exemption? If not, how would a <i>facility</i> make a threshold determination for a <i>toxic chemical</i> whose concentration ranges from below the <u>de minimis</u> level to the <u>de minimis</u> level?
	A listed <i>toxic chemical</i> with a concentration range that has an upper bound equal to the <u>de minimis</u> level is not exempt from reporting under EPCRA Section 313. The exception applies only if the chemical concentration is below the <u>de minimis</u> level. The amount of the listed <i>toxic chemical</i> in the <i>mixture</i> that is at or above the <u>de minimis</u> level, and therefore counts towards the threshold, is proportional to the ratio of the amount at or above the <u>de minimis</u> concentration to the amount of the total concentration range. The concentration of the chemical in the <i>mixture</i> that is not exempt is the average of the <u>de minimis</u> level and the maximum concentration, which in this case is the same. The fraction of the listed <i>toxic chemical</i> that is not exempt is the fraction that is at the <u>de minimis</u> level, <u>i.e.</u> , 1 percent. The fraction that is exempt is that below the <u>de minimis</u> level, which is 0.5 percent – 0.9 percent (one significant figure).
	For example, assume that a <i>facility manufactures</i> 10 million pounds of a <i>mixture</i> containing 0.5-1.0 percent of a <i>toxic chemical</i> that is subject to a 1 percent <u>de minimis</u> exemption. The quantity of the <i>mixture</i> subject to reporting is:
	$\frac{10,000,000 \text{ lbs} \times (1.0 - 0.9)}{(1.0 - 0.5)} = 2,000,000 \text{ lbs}$ Non-exempt <i>mixture</i>
De Minimis Exemption, Waste	50. A raw material contains less than the <u>de minimis</u> level of a listed non-PBT chemical. During <i>processing</i> of the listed <i>toxic chemical</i> , its concentration remains below <u>de minimis</u> . However, the concentration of the listed <i>toxic chemical</i> in the wastestream that results from that <i>processing</i> activity is above the <u>de minimis</u> concentration level for that <i>toxic chemical</i> . The wastestream containing that listed <i>toxic chemical</i> is <i>disposed</i> in an on-site landfill. Should the <i>toxic chemical</i> handled in the process line be included in the <i>facility's</i> threshold determination? Do the quantities of the listed <i>toxic chemical</i> in wastestreams that are generated from this process require reporting? What about the listed <i>toxic chemical</i> present in the wastestream that is above the <u>de minimis</u> level?
	No. The <u>de minimis</u> exemption can be applied to the listed non-PBT chemical in the raw material that is <i>processed</i> . Because the <u>de minimis</u> exemption can be taken, the quantities <i>processed</i> do not have to be applied to the <i>processing</i> threshold for that <i>toxic chemical</i> at the <i>facility</i> and quantities of the listed <i>toxic chemical</i> that are <i>released</i> or otherwise managed as waste as a result of this specific <i>processing</i> activity are exempt from <i>release</i> and other <i>waste management</i> calculations. The exemption applies even if the listed <i>toxic chemical</i> is concentrated above the <u>de minimis</u> level in the wastestream resulting from that <i>processing</i> activity.

Ash, De Minimis	51. A <i>covered facility</i> combusts coal in a combustion unit. The coal contains a non-PBT chemical below <u>de minimis</u> amounts. During combustion, chemicals are <i>manufactured</i> . The ash containing the <i>toxic chemicals</i> is generated from the combustion of the coal. The ash is then sold to another <i>facility</i> for direct reuse in the <i>manufacture</i> of concrete blocks. If the <i>toxic chemicals</i> in the ash are below the appropriate <u>de minimis</u> concentration, are they eligible for the <u>de minimis</u> exemption?
	The <i>toxic chemical</i> in the coal being combusted should be considered towards the <i>facility's otherwise use</i> threshold and this activity is eligible for the <u>de minimis</u> exemption. The <i>toxic chemicals</i> that are <i>manufactured</i> as a result of the combustion <i>process</i> are byproducts and therefore not eligible for the <u>de minimis</u> exemption. The chemicals in the ash that is sold for direct reuse off-site are considered <i>processed</i> . After combustion, when the <i>facility</i> is preparing the <i>toxic chemicals</i> in ash for distribution in commerce, the non-PBT chemicals are eligible for the <u>de minimis</u> exemption.
De Minimis Exemption, Byproduct	52. A small quantity of a listed <i>toxic chemical</i> is <i>manufactured</i> in a wastestream. Are <i>facility</i> owners/operators required to include the amount of the listed <i>toxic chemical</i> present in the wastestream as part of the threshold determination if the concentration of the listed <i>toxic chemical</i> in the wastestream is below the <u>de minimis</u> level?
	Yes. This <u>de minimis</u> exemption applies solely to non-PBT chemicals in mixtures. EPA's long-standing interpretation has been that <i>mixture</i> does not include waste. Also, generally, <u>de minimis</u> does not apply to listed <i>toxic chemicals</i> that a <i>facility manufactures</i> . The <u>de minimis</u> exemption cannot be applied to listed <i>toxic chemicals manufactured</i> as a byproduct.
De Minimis Exemption, Waste	53. A covered facility otherwise uses a toxic chemical that is above the <u>de</u> <u>minimis</u> concentration in a <i>mixture</i> . How does the <u>de minimis</u> exemption apply to listed <i>toxic chemical</i> residues from this use contained within used or spent containers that the <i>facility</i> sends off-site for <i>disposal</i> ?
	The <u>de minimis</u> exemption cannot be applied to quantities of the listed <i>toxic chemical</i> in used or spent containers that are sent off-site for <i>disposal</i> because these quantities are being managed as a waste and the <u>de minimis</u> exemption does not apply to wastes. The <u>de minimis</u> exemption can be applied to a listed non-PBT chemical in a <i>mixture</i> or <i>trade name products</i> that is <i>processed, otherwise used, manufactured</i> as an impurity (that remains with the product), or <i>imported</i> , provided that the listed <i>toxic chemical</i> is present in the <i>mixture</i> or <i>trade name products</i> list processed.
	the product), or <i>imported</i> , provided that the listed <i>toxic chemical</i> is presen
De Minimis Exemption, Petroleum Refining	54. In petroleum refining processes, <i>mixtures</i> such as crude oils, petroleum products, and refinery process streams may contain trace amounts of listed <i>toxic chemicals</i> . During the refining process, these <i>mixtures</i> may undergo <i>beneficiation</i> activities which would result in the listed <i>toxic chemicals</i> being concentrated to levels that exceed the <u>de minimis</u> levels. Would the <u>de minimis</u> exemption apply to these processes?
--	--
	The <u>de minimis</u> exemption would apply to the non-PBT chemicals until they are concentrated above the applicable <u>de minimis</u> level. For purposes of threshold determinations and <i>release</i> and other <i>waste management</i> calculations, the <i>facility</i> would account for a listed <i>toxic chemical</i> from the first point in the process in which the concentration of the <i>toxic chemical</i> meets or exceeds the applicable <u>de minimis</u> level for that <i>toxic chemical</i> , in the process <i>mixture</i> .
De Minimis Exemption, Air Releases, Storage Tanks	55. As a petroleum refiner, do we have to estimate air <i>releases</i> of chemicals from storage tanks containing crude oil if the concentration of the chemical is below <u>de minimis</u> 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 <u>de minimis</u> .
	Facilities that receive chemicals into the plant at concentrations below <u>de minimis</u> have to report <i>releases</i> and other <i>waste management</i> activities from that point in the process when the chemical's concentration exceeds <u>de minimis</u> level. This <i>facility</i> would not have to report air emissions from their crude oil tanks for the chemicals present in oil below <u>de minimis</u> . For those above <u>de minimis</u> , they must report <i>releases</i> and other <i>waste management</i> activities. The <u>de minimis</u> exemption does not apply to the PBT chemicals listed at 40 CFR section 372.28.
Ammonia, De Minimis Exemption	56. A <i>covered facility</i> places ammonium chloride in water, and <i>manufactures</i> aqueous ammonia for use on-site. Does the <u>de minimis</u> exemption apply to this activity?
	No. The <i>facility</i> cannot take the <u>de minimis</u> exemption for this activity because the <i>facility manufactured</i> aqueous ammonia. The <u>de minimis</u> exemption does not apply to the <i>manufacture</i> of a non-PBT chemical, unless the <i>toxic chemical</i> is <i>manufactured</i> as an impurity and remains in the product distributed in commerce. Since the <i>facility</i> used the aqueous ammonia on-site and the ammonia is not an impurity that remains in a product distributed in commerce, the <u>de minimis</u> exemption does not apply.

De Minimis Exemption, Compound Category, Delimited Category 57. When determining the <u>de minimis</u> 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 <u>de minimis</u> level. How would a *facility* determine the <u>de minimis</u> level for a *mixture* containing members of a category, such as the arsenic compounds category, where there are different <u>de minimis</u> levels within the category?

For categories in which there are different de minimis levels within the category, 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. The de minimis exemption does not apply to the PBT chemicals listed at 40 CFR section 372.28.

Article Exemption, Process, Batteries

58. 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 *processing* threshold to determine if the *facility* must report.

Article Exemption, Sheet Metal

59. 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 <i>article</i> exemption no longer applies and <i>releases</i> must be reported when listed chemicals in a sheet metal are <i>processed</i> in quantities greater than the <i>processing</i> threshold.
Article Exemption, End Use Function	60. A <i>facility</i> manufactures lead came (<u>i.e.</u> , slender, grooved, lead rods). A lead billet is placed into a press and pushed through a die to produce a unique form. The <i>facility</i> processes 100,000 pounds of lead came. Is this process exempt from reporting under the <i>article</i> exemption?
	The <i>article</i> exemption does not apply. The lead billet does not qualify as an <i>article</i> because it does not have an end use function other than to be of a size and shape convenient to further <i>processing</i> , and the end product is significantly different in shape and dimension from the starting material. Since the <i>facility processes</i> more than 100 pounds of lead, the <i>facility</i> must report for this <i>toxic chemical</i> .
Article Exemption, Recognizable as an Article, Disposal, Process, Lead	61. A covered manufacturing <i>facility</i> produces neon signs by bending leaded glass tubing. The <i>facility</i> uses enough tubing annually to <i>process</i> in excess of 100 pounds of lead, an EPCRA Section 313 <i>toxic chemical</i> . When signs are formed from glass tubing, the diameter of the tubes remains unchanged and lead is not <i>released</i> during the heating or bending <i>process</i> , qualifying the tubes for the <i>article</i> exemption. If a discrete number of glass tubes are broken and discarded during the year, under what circumstances would <i>disposal</i> of the broken tubes constitute a <i>release</i> that negates the <i>article</i> exemption, and how would the <i>facility</i> calculate the amount of lead used in their operation?
	<i>Disposal</i> of the glass does not necessarily constitute a <i>release</i> which automatically negates the <i>article</i> exemption. For the tubing to meet the definition of an <i>article</i> when discarded, the diameter of the tubing must remain intact and unchanged. As a result, shards of glass no longer qualify as <i>articles</i> . If more than 0.5 pounds of lead is <i>released</i> and not recycled, then the <i>article</i> exemption would not apply to this glass tubing.
Article Exemption, PCB Transformers, Ancillary Use	62. A <i>covered facility</i> has a PCB transformer on-site which it uses for energy. The PCBs were removed from the transformer and <i>disposed</i> . Is the amount of PCB removed for <i>disposal</i> counted towards the <i>otherwise use</i> threshold? How is this activity covered under EPCRA Section 313?
	If the <i>facility</i> removes the entire transformer including the PCB-laced oil as an <i>article</i> , the amount of PCB in the <i>article</i> would not be included in Section 313 threshold determinations and <i>release</i> and other <i>waste management</i> calculations. If a <i>toxic chemical</i> is present in an <i>article</i> at a <i>covered facility</i> , the owner/operator is not required to consider the quantity of the <i>toxic</i> <i>chemical</i> present in such <i>article</i> 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 *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 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*.

63. 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 a threshold amount of any of these listed *toxic chemicals*.

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

Coincidental

Manufacture,

Combustion

Byproducts,

Compounds

Hydrochloric Acid, Metal

> 64. A *covered facility processes* both elemental lead and lead compounds. The *facility* exceeds the 100 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

	<i>waste management</i> estimates of lead, the parent metal, from lead compounds only. <i>Releases</i> and other <i>waste management</i> estimates of lead resulting from activities involving elemental lead need not be included in the <i>release</i> and other <i>waste management</i> calculations. Conversely, if the <i>facility</i> were to exceed an activity threshold for only elemental lead, the report would only have to be based on <i>releases</i> and other <i>waste management</i> estimates from activities involving elemental lead only.
Compounds, Chemical Qualifier,	65. There are two chemicals on the list with the qualifier "fume or dust" (zinc and aluminum). What exactly is a "fume" or a "dust?"
Fume or 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,	66. A <i>covered facility processes</i> aluminum and zinc. These two <i>toxic chemicals</i> are listed under Section 313 with the qualifier "fume or dust." Is this <i>processing</i> operation subject to reporting?
Processing	If the <i>processing</i> of these substances generates (<u>i.e.</u> , <i>manufactures</i>) any fume or dust or if the two substances were <i>processed</i> or <i>otherwise used</i> , at any time, as a fume or dust, the activities would be reportable under EPCRA Section 313. The <i>manufacturing</i> , <i>processing</i> , or <i>otherwise use</i> of these substances in fume or dust form would be subject to threshold determinations.
Chemical Category, Threshold Determination, Release Reporting, Delimited Category, PACs	67. The EPCRA Section 313 <i>toxic chemical</i> list contains three 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 <i>release</i> and other <i>waste management</i> calculations for these three delimited chemical categories different than threshold determinations and <i>release</i> and other <i>waste management</i> 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 <i>covered facility manufactures, processes</i> , or <i>otherwise uses</i> 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 three delimited categories are diisocyanates, dioxin and dioxin-like compounds, and polycyclic aromatic compounds (PACs). The diisocyanates category consists of 20 specific members, the dioxin and dioxin-like compounds category consists of 17 specific members, and the PACs category consists of 21 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.

In 1999, (64 FR 58666, October 29, 1999), EPA classified the PACs category as a PBT chemical category and lowered the reporting threshold to 100 pounds. In addition, EPA added two members to this category: benzo(j,k)fluorine (fluoranthene) and 3-methylcholanthrene. EPA has developed guidance to facilitate accurate reporting for PACs entitled Guidance for Reporting Toxic Chemicals: Polycyclic Aromatic Compounds Category, accessible from the TRI web site (www.epa.gov/tri) under the heading "Guidance Documents." The guidance contains a list of Chemical Abstract Service (CAS) numbers for the individual chemicals within the PACs category and a CAS number list of some *mixtures* that might contain chemicals within the PACs category. The dioxin and dioxin-like compounds category was also classified as a PBT chemical category and a reporting threshold of 0.1 gram was established. EPA has also developed guidance to facilitate accurate reporting for dioxin and dioxin-like compounds; Guidance for Reporting Toxic Chemicals with the Dioxin and Dioxin-like Compounds Category is available from the TRI website (www.epa.gov/tri) under "Guidance Documents."

Mixture, Threshold Determination

68. 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 (<u>i.e.</u>, tennis balls). Does the *facility* need to consider the *toxic chemicals* in the rubber it receives?

Yes. Rubber is a *mixture* for reporting purposes. Further, note that the weights of the non-PBT chemicals must be added to the threshold determination if their concentrations are above the <u>de minimis</u> concentration limit (1 percent, or 0.1 percent for OSHA carcinogens) while the weight of any PBT chemical must be added irrespective of concentration. The weight added would be the weight percent of the *toxic chemical* multiplied by the weight of the rubber slab.

Releases, Release Reporting,	69. How would a <i>facility</i> report under Section 313 on a wastestream which is neutralized to a pH above 6 before discharged to a POTW?
Acid Neutraliza- tion, pH	Covered facilities that use Section 313 chemicals for pH adjustments and neutralization must report if they meet the <i>otherwise use</i> threshold, even if these chemicals are consumed and no <i>releases</i> result. The listed <i>toxic</i> <i>chemical</i> 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, Release Reporting, Stockpiles, Storage	70. A manufacturing <i>facility</i> that produces electricity by burning coal stores the coal in an on-site stockpile that is exposed to the outside atmosphere. The <i>facility</i> meets the threshold criteria (40 CFR Section 372.22) for filing a Form R for the <i>toxic chemical</i> 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 <i>release</i> to land on-site?
	No. A <i>facility</i> does not have to report <i>toxic chemicals</i> contained in an on-site stockpile of material that is intended for <i>otherwise use</i> on-site as a <i>release</i> to land on-site. However, any <i>toxic chemical</i> 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 <i>released</i> to the <i>environment</i> on-site. Once a <i>covered facility</i> meets the criteria for filing a Form R under EPCRA Section 313 for a <i>toxic chemical</i> (such as benzene), all <i>releases</i> of that chemical at the <i>facility</i> are to be reported. <i>Releases</i> of non-PBT chemicals from the stock pile will be eligible for the <u>de minimis</u> exemption.
Releases, Release Reporting, RCRA-empty, Off-site Transfer	71. A <i>covered facility</i> sends a 55-gallon drum containing less than one inch of a listed <i>toxic chemical</i> off site for <i>disposal</i> . For purposes of the RCRA hazardous waste regulations, the container is considered an empty container as defined in 40 CFR Section 261.7 (<u>i.e.</u> , RCRA-empty). Must the <i>facility</i> report the listed <i>toxic chemical</i> contained in the RCRA- empty container as an off-site transfer for purposes of <i>disposal</i> on theForm 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 <i>toxic chemical</i> under EPCRA Section 313. The status of a listed <i>toxic chemical</i> 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 a non-PBT chemical not exceeding 500 pounds, it may be eligible for the higher alternate reporting threshold in 40 CFR Section 327.27.

72. 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 non-PBT chemical and the annual aggregate release was less than 0.5 pound, then a *facility* owner/operator should enter zero in Section 8.8. For PBT chemicals, *facilities* should report *releases* and other *waste management* amounts greater than 0.1 pound (and for dioxin and dioxin-like compounds 0.0001 gram), at a level of precision supported by the accuracy of the underlying data and the estimation techniques on which the estimate is based. (*see* (64 <u>FR</u> 58734, October 29, 1999) and <u>Guidance for Reporting Toxic Chemicals with the Dioxin and Dioxin-like Compounds Category</u> (EPA-745-B-00-021, December 2000)). 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.

Form A Criteria

73. EPA published a final rule in the <u>Federal Register</u> on November 30, 1994 (59 <u>FR</u> 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

Waste

Management

Activities, NA

vs. 0, Part II

Section 8.8,

One-Time

Event

Catastrophic

	500 pounds for a listed non-PBT 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 <i>total annual</i> <i>reportable amount</i> includes non-PBT chemicals listed at 40 CFR Section 372.65 which are <i>released</i> (including <i>disposed</i>), treated, recycled, and burned for energy recovery at the <i>facility</i> and amounts transferred from the <i>facility</i> to off-site locations for the purposes of recycling, energy recovery, treatment, and/or <i>disposal</i> . These amounts correspond to column B, Sections 8.1 through 8.7 of the reporting Form R. If a <i>facility</i> 's combined <i>total</i> <i>annual reportable amount</i> does not exceed 500 pounds for a specific non- PBT chemical, the <i>facility</i> can qualify for reduced reporting requirements unless the amount of that non-PBT <i>chemical manufactured</i> , <i>processed</i> , or <i>otherwise used</i> within the reporting year exceeds one million pounds.
	<i>Covered facilities</i> 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 <i>facility</i> must submit an annual certification statement (Form A) indicating that the <i>facility</i> met the requirements for use of the alternate threshold for a specific chemical. The <i>facility</i> must also maintain, and make available upon request, records substantiating the claim. The Form A includes basic information regarding the <i>facility</i> 's identification, the chemical in question, and a statement of accuracy to be signed by a <i>senior management official</i> of the <i>facility</i> .
Form A	74. What is the Form A and who may submit this form?
	The Form A provides certain <i>covered facilities</i> the option of submitting a substantially shorter form with a reduced reporting burden. <i>Facilities</i> which meet the SIC code, employee, and chemical activity thresholds but who do not exceed one million pounds <i>manufactured</i> , <i>processed</i> , or <i>otherwise used</i> and the <i>facility's total annual reportable amount</i> does not exceed 500 pounds for the non-PBT chemical, may submit an annual certification statement (Form A) instead of a Form R for the <i>toxic chemical</i> .
Form A Criteria	substantially shorter form with a reduced reporting burden. <i>Facilities</i> which meet the SIC code, employee, and chemical activity thresholds but who do not exceed one million pounds <i>manufactured</i> , <i>processed</i> , or <i>otherwise used</i> and the <i>facility's total annual reportable amount</i> does not exceed 500 pounds for the non-PBT chemical, may submit an annual certification statement

Form R, Maximum Amount On-site, Fume or Dust, Part II Section 4, Threshold Determination	 76. The list of <i>toxic chemicals</i> under EPCRA Section 313 contains two substances with a "fume or dust" qualifier (aluminum and zinc). For purposes of reporting the maximum amount on-site (Part II, Section 4 of the Form R), should <i>covered facilities</i> 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 (<u>e.g.</u>, fume or dust) is to be considered.
Form R, Significant	77. Please explain the "two significant figures" reporting guideline.
Figures	For non-PBT chemicals, 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. For PBT chemicals, if a <i>facility's release</i> or other management calculations support reporting an amount that is more precise than two significant digits, then the <i>facility</i> should report that more precise amount. (64 <u>FR</u> 58734, October 29, 1999)
Form R, Release Estimate, Significant Figures	78. When reporting <i>release</i> estimates for non-PBT chemicals on the Form R, EPA recommends <i>release</i> estimates be rounded to no more than two significant figures. Should <i>release</i> estimates always be reported in whole numbers, or should decimal places be reported in certain instances?
	When reporting <i>release</i> and other <i>waste management</i> estimates on the Form R for non-PBT chemicals, always report using whole numbers (i.e., round to the nearest pound). For PBT chemicals, <i>facilities</i> should report <i>releases</i> and other <i>waste management</i> amounts greater than 0.1 pound (and for dioxin and dioxin-like compounds 0.0001 gram), at a level of precision supported by the accuracy of the underlying data and the estimation techniques on which the estimate is based. (<i>see</i> (64 <u>FR</u> 58734, October 29, 1999) and <u>Guidance for Reporting Toxic Chemicals with the Dioxin and Dioxin-like Compounds Category</u> (EPA-745-B-00-021, December 2000)).

DIRECTIVE #2 - DE MINIMIS EXEMPTION

The <u>de minimis</u> exemption allows *covered facilities* to disregard certain minimal concentrations of non-PBT chemicals in *mixtures* or *trade name products*. The <u>de minimis</u> exemption does not apply to the *manufacture* of a non-PBT 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 <u>de minimis</u> level. The <u>de minimis</u> 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 non-PBT chemical, the owner/operator should consider only the concentration of the non-PBT chemical in *mixtures* and *trade name products*. If the non-PBT chemical 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* does not have to be applied to threshold determinations nor included in *release* or other waste management calculations. If a non-PBT chemical in a mixture or trade name product is below the appropriate de minimis level, all *releases* and other *waste* management activities associated with the toxic chemical in the mixture or trade name product 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 non-PBT chemical concentration is above the appropriate <u>de minimis</u> level in the *mixture* or *trade name product*, threshold determinations and *release* and other *waste management* calculations must be made, even if the chemical later falls below the <u>de minimis</u> level in the same *mixture* or *trade name product*. Thus, all *releases* and other quantities managed as waste that occur after the <u>de minimis</u> level has been exceeded are subject to reporting. If a non-PBT chemical in a *mixture* or *trade name product* above <u>de minimis</u> is brought on-site, the <u>de minimis</u> exemption never applies.

The 0.1 percent <u>de minimis</u> 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 <u>de minimis</u> concentration provided that the other criteria for the <u>de minimis</u> exemption is met. <u>De minimis</u> 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) <u>de minimis</u> level.

1. De Minimis Application to the Processing or Otherwise Use of a Mixture

The <u>de minimis</u> exemption applies to the *processing* or *otherwise using*, of a listed non-PBT chemical in a mixture. Threshold determinations and *release* and other *waste management* calculations begin at the point where the chemical exceeds <u>de minimis</u>. If a listed non-PBT chemical is present in a *mixture* at a concentration below the <u>de minimis</u> level, this quantity of the substance does not have to be included for threshold determination, *release* and other *waste management* reporting. The exemption will apply as long as the *mixture* containing <u>de minimis</u> amounts of a non-PBT chemical never goes above the <u>de minimis</u> limit. Also, see the two examples below in which a *manufacturing* activity would qualify for the <u>de minimis</u> exemption.

Examples of Process and Otherwise Use Scenarios

There are many cases in which the <u>de minimis</u> 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 <u>Toxic Chemical Release</u> Inventory Reporting Forms and Instructions.

A. Example of Increasing Process Concentration to Above <u>De Minimis</u> Levels

A *manufacturing facility* receives toluene which contains less than the <u>de minimis</u> concentration of chlorobenzene. Through distillation, the chlorobenzene content in process streams is increased over the <u>de minimis</u> 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, <u>i.e.</u>, when below <u>de minimis</u> 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 <u>de minimis</u> level. The process used causes the percentage of toluene in the *mixture* to fluctuate: it rises above the <u>de minimis</u> 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 <u>de minimis</u> limit. Once the <u>de minimis</u> limit has been crossed the exemption cannot be taken.

C. Example of Concentration Levels that Straddle the <u>De minimis</u> Level

A *facility processes* 9,500,000 lbs. of *mixtures* containing 0.25–1.25 percent manganese. Manganese is subject to 1 percent <u>de minimis</u> 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 <u>de minimis</u> is 1.1 percent.

 $2,900,000 \times 0.011$ 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 <u>de minimis</u> 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. <u>De Minimis Application in the Manufacture of the Listed Chemical in a</u> <u>Mixture</u>

The <u>de minimis</u> exemption generally does not apply to the *manufacture* of a non-PBT chemical. The <u>de minimis</u> exemption may apply to *mixtures* and *trade name products* containing non-PBT chemicals that are *imported* into the United States. Another exception applies to non-PBT chemicals that are coincidentally *manufactured* as impurities that remain in the product distributed in commerce at below the <u>de minimis</u> levels. In that case, the amount remaining in the product is exempt from threshold determinations. If the non-PBT 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 <u>de minimis</u> 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) <u>de minimis</u> level. Any amount of chloroform *manufactured* and separated as byproduct must be included in threshold determinations because the <u>de minimis</u> 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 <u>de minimis</u> level can, however, be applied to the chloroform remaining in the carbon tetrachloride is below the <u>de minimis</u> 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 <u>de minimis</u> level in the process stream where it was *manufactured* or in the wastestream which it was separated.

The <u>de minimis</u> exemption also does not apply to situations where the *manufactured* chemical is *released* or transferred to wastestreams and thereby diluted to below the <u>de minimis</u> level.

3. De Minimis Levels Impact Supplier Notification Requirements

If the *toxic chemical* in a *mixture* or *trade name product* is present below the <u>de minimis</u> level for that *toxic chemical*, supplier notification is not required for that chemical regardless of whether or not it is a PBT chemical.

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 <u>not</u> 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 non-PBT chemical present above the <u>de minimis</u> level in all *mixtures*. If a listed non-PBT chemical is present in a *mixture* at or above the <u>de minimis</u> level, or a PBT chemical is present at any concentration, 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. <u>Supplier Notification and Concentration Ranges Provide Information for</u> <u>Reporting</u>

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. <u>All Compounds in a Listed Chemical Category are Aggregated for</u> <u>Threshold Determinations</u>

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 non-PBT compound in a listed chemical category that is present in a *mixture* below the <u>de minimis</u> 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 <u>de minimis</u> concentration in a *mixture*.

2. <u>Make Threshold Determinations for Listed Toxic Chemicals Separately</u> <u>from the Listed Chemical Category</u>

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 glycol ether compound but is not included in the glycol ether compound category for purposes of section 313 reporting. 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. <u>Calculate Releases and Other Waste Management Based on Parent Metal</u> <u>for Metal Compound Categories</u>

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. <u>Optional Form R Submission for Parent Metal and Associated Metal</u> <u>Compound Category</u>

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. <u>Calculate Releases and Other Waste Management Based on Nitrate Ion</u> <u>for Nitrate Compounds</u>

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 (<u>e.g.</u>, "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 must count the amount *manufactured* or *processed* toward these thresholds.

3. <u>Treatment or Disposal of PCBs May Require EPCRA Section 313</u> <u>Reporting</u>

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 <u>FR</u> 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 <u>include</u> 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 non-PBT 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 non-PBT 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 non-PBT 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 non-PBT 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 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 non-PBT chemical. The *facility* subsequently disposes of chemical D. In this example, although the *facility* disposes of chemical D. In this example, although the *facility* disposes of chemical D was produced (<u>i.e.</u>, the material containing the 22,000 pounds of chemical D 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 non-PBT 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 non-PBT 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.

This page intentionally left blank.



(2844T) Washington, DC 20460 **Environmental Protection Agency United States**

Penalty for Private Use \$300 Official Business



