

# **Instructions for Reporting 2020 TSCA Chemical Data Reporting**

U.S. Environmental Protection Agency  
Office of Pollution Prevention and Toxics  
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## HIGHLIGHTS OF TSCA CHEMICAL DATA REPORTING (CDR)

- The determination of the need to report is based on production volume during *any* calendar year since the last principal reporting year.
- Information on the reportable chemical substance must be reported during the CDR submission period (40 CFR 711.20).
- All reporting companies must report CDR data electronically, using e-CDRweb, the CDR web-based reporting tool, and EPA's Central Data Exchange (CDX) system. Prior to submitting data, submitters must register with CDX. Ensure that your pop-up blocker is disabled before you begin to use e-CDRweb to complete your Form U.
- Reporting is required for all chemical substances listed on the TSCA Inventory, other than polymers, microorganisms, naturally occurring chemical substances, water, and certain forms of natural gas (40 CFR 711.5 and 711.6) when manufacture (including import) of those chemical substances meets the other reporting requirements. Chemical substances that are the subject of any of certain listed TSCA actions may not be eligible for partial or full exemptions (40 CFR 711.6).
- The reporting threshold is 2,500 lb (1,134 kg) for any person who manufactured a chemical substance that is the subject of a rule proposed or promulgated under TSCA sections 5(a)(2), 5(b)(4) or 6; an order issued under TSCA sections 5(e) or 5(f); or relief that has been granted under a civil action under TSCA sections 5 or 7. The effects of these TSCA actions on CDR reporting are assessed based on the status of the chemical substance as of the beginning of the submission period (40 CFR 711.8(b) and 40 CFR 711.15).
- New small manufacturer and small government size standards are in effect for this reporting period. Small manufacturers meeting the revised definition at 40 CFR 704.3 are exempt from CDR requirements unless they manufacture (including import) 2,500 lb or more of a chemical substance that is the subject of a rule proposed or promulgated under sections 4, 5(b)(4), or 6 of TSCA, or is the subject of an order in effect under sections 4 or 5(e) of TSCA, or is the subject of relief that has been granted under a civil action under sections 5 or 7 of TSCA (40 CFR 711.9 and TSCA section 8(a)(3)(A)(ii)).
- Information submitted under CDR may be claimed as confidential; however, such claims must be made at the time of submission and substantiated in accordance with TSCA and the CDR rule. Submitters must provide upfront substantiation of all confidentiality claims except for claims made for domestic manufacture, import, yearly production volume information, and certain joint submission information. Certain processing and use data elements, a blank response, or a response that is designated as "not known or reasonably ascertainable" may not be claimed as confidential (40 CFR 711.30).
- Visit the CDR website ([www.epa.gov/cdr](http://www.epa.gov/cdr)) for program updates and announcements, other guidance materials, and contact information for technical assistance.

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## PREFACE

The primary goal of this document is to help the regulated community comply with the requirements of the CDR rule. This document does not substitute for that rule, nor is it a rule itself. It does not impose legally binding requirements on the regulated community or on the U.S. Environmental Protection Agency (EPA).

Manufacturers (including importers) are required by the CDR rule to report to EPA information concerning the manufacturing, processing, and use of certain chemical substances listed on the [TSCA Chemical Substance Inventory](#). Manufacturers (including importers) are subject to the reporting requirements based on manufacturing (including importing) activities conducted since the last principal reporting year (e.g., for 2020, the last principal reporting year is 2015 and therefore 2020 reporting would cover calendar years 2016-2019).

CDR submissions are due by the close of the submission period, as defined by 40 CFR 711.20, and must be submitted using e-CDRweb via EPA's Central Data Exchange (CDX). e-CDRweb is a web-based reporting tool that allows manufacturers (including importers) to file a paperless CDR Form U submission and receive instant receipt confirmation of their submissions. A user guide on how to register for CDX and access e-CDRweb is available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

This instructions document contains the following chapters and appendices:

- Chapter 1 - Introduction to the CDR and changes made for the 2020 reporting cycle.
- Chapter 2 - Reporting requirements to determine which chemical substances are reportable, who must report, and what information must be reported.
- Chapter 3 - When you must report.
- Chapter 4 - Instructions for completing Form U.
- Chapter 5 - How to obtain copies of documents cited in this Instructions document.
- Appendix A - Glossary.
- Appendix B - Chemical substances that are the subject of certain TSCA orders, proposed or final TSCA rules, relief granted under civil actions, or consent agreements.
- Appendix C - Chemicals substances partially exempt from reporting in 2020.
- Appendix D - Descriptions of codes for reporting *Processing or Use Operations, Industrial Sectors, Industrial Function Categories, and Consumer and Commercial Product and Function Categories*.

# 1. Introduction

## 1.1 Background and Statutory Authority

In 1977, the U.S. Environmental Protection Agency (EPA) promulgated a rule under the Toxic Substances Control Act (TSCA) section 8(a), 15 U.S.C. 2607(a), to compile and keep current an inventory of chemical substances in commerce in the United States. This inventory is called the TSCA Chemical Substance Inventory (TSCA Inventory). In 1986, EPA promulgated the Inventory Update Reporting (IUR) rule, also under TSCA section 8(a), to facilitate the periodic updating of the TSCA Inventory and to support activities associated with implementing TSCA. The IUR rule is now called the Chemical Data Reporting (CDR) rule and has been amended several times since 1986.

This document provides detailed information and examples to assist manufacturers (including importers) in reporting under the CDR rule. This document also makes reference to a getting started user guide for e-CDRweb, which provides information for getting started with the reporting tool and includes representative screenshots. The e-CDRweb Getting Started Guide is available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr). Appendix A of this document provides a glossary of CDR terms, which may help you to understand the reporting requirements, including recent updates.

**This document is not a substitute for the CDR rule in 40 CFR Part 711.** To the extent that any inconsistencies exist between the CDR rule and this document, the requirements as promulgated in the rule should be followed. You should carefully review 40 CFR Part 711 to determine whether you are required to report information under the CDR rule.

To comply with the CDR rule, it is important to have a thorough understanding of the TSCA Inventory and the procedures available to determine whether a chemical substance is listed on the TSCA Inventory. Chapter 5 of this document explains how you can obtain copies of TSCA rules, including the CDR rule, and access the non-confidential TSCA Inventory.

## 1.2 Changes to CDR Requirements

In 2020, EPA updated the requirements for reporting under CDR by promulgating the CDR Revisions rule. This section summarizes those updates. More specific information is in the relevant chapters of this instruction manual.

### *Reporting of Co-manufactured Chemicals*

EPA updated the reporting procedures for co-manufactured chemicals by implementing a multi-reporter chemical report process where the contracting company is the initiating submitter and the producing company is the completing submitter. EPA also updated the procedure where the producing company is the reporter, as per a written agreement with the contracting company. These changes are further explained in Sections 4.4.1.2 and 4.9.



### ***Site NAICS Code***

EPA now requires submitters to report the 6-digit North American Industry Classification System (NAICS) code that best describes the activities conducted at the reporting site. This change is further explained in Section 4.4.5.

### ***Parent Company Identity***

EPA made three updates associated with parent company reporting under CDR: (1) added the requirement to report the highest-level foreign parent company in addition to reporting the highest-level U.S. parent company when the ultimate parent company is located outside of the United States; (2) replaced the definition of U.S. parent company from 40 CFR 711.3 with a new definition for parent company; and (3) added a requirement for reporters to report legal name(s) and to follow a naming convention for providing the parent company name(s), the details of which are in Section 4.3.

### ***Indication that Substance was Removed from the Waste Stream and Recycled***

EPA modified the data element related to removing substances from the waste stream in order to clarify the reporting requirement. EPA removed the terms “remanufactured, reprocessed, reused” from the data element description, changing the term to “recycled or otherwise used for a commercial purpose instead of being disposed of as a waste or included in a waste stream.” It is EPA’s intention that this data element identify the chemicals that would otherwise be disposed of as a waste and are, instead, retained in commerce. This change is further explained in Section 4.7.2.10.

### ***Processing and Use Codes***

EPA replaced the industrial function and commercial/consumer product use codes with codes based on the OECD Internationally Harmonized Functional, Product, and Article Use Categories<sup>1,2</sup>. For reporting during the 2020 submission period, submitters are required to use the OECD-based codes for the chemical substances designated by EPA as a high priority for risk evaluation and, for all other chemical substances, may use either the OECD-based codes or the CDR codes. For reporting during the 2024 and future submission periods, submitters are required to use the OECD-based codes for all chemical substances for which the submitter is reporting processing and use information. Additionally, EPA added a requirement to report the function of the chemical in commercial/consumer product categories. These changes are further explained in Section 4.8 and the Categories are in Appendix D.

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<sup>1</sup> Organisation for Economic Co-operation and Development. “Internationally Harmonised Functional, Product and Article Use Categories.” 2017. [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=env/jm/mono\(2017\)14&doclanguage=en](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=env/jm/mono(2017)14&doclanguage=en). Accessed May 18, 2018.

<sup>2</sup> EPA. “Technical Support Document: Harmonizing CDR Functional and Product Codes with OECD Functional, Product, and Article Codes” February 2019. <https://www.regulations.gov/document?D=EPA-HQ-OPPT-2018-0321-0012>. Accessed December 17, 2019.

### ***Joint Submission Chemical Function Codes***

Joint submissions are most typically used when a mixture is imported, and the supplier does not provide the importer with the specific chemical identity of the chemicals that comprise the mixture or of the mixture formulation. The importer reports use information associated with the overall mixture but not the individual chemicals that comprise the mixture. EPA now requires that the secondary submitter of a joint submission report the chemical-specific function when reporting the chemical composition of the product. This change is further explained in Sections 4.8.4 and 4.10.

### ***Information Claimed as Confidential***

EPA made changes to requirements related to claiming CDR information as confidential to be consistent with new statutory requirements from amendments to TSCA enacted in 2016 under the Lautenberg Act.

Changes to confidentiality claims included the addition of substantiation exemptions consistent with the Lautenberg Act, changes to the substantiation questions, specification of data elements that are not eligible for confidentiality claims, and the development of joint submitter confidentiality considerations. These changes are further explained throughout Section 4 and in sections 4.9.4 and 4.10.4.

### ***Byproduct Provisions Including Two Reporting Exemptions***

EPA added a new voluntary data element for reporting of the percent total production volume for a chemical that is a byproduct. This change is further explained in Section 4.7.2.9.

EPA added two new reporting exemptions for byproducts: (1) an exemption for specific site-limited recycled byproducts and (2) an exemption for byproducts generated by specific non-integral processes. These changes are further explained in Section 2.1.1.3.

### ***Small Manufacturer Definition Update and Addition of Small Government Definition***

EPA has finalized an update to the small manufacturer definition and the addition of a definition for small governments at 40 CFR 704.3. Small manufacturers, including small governments, are exempted from the need to report, unless the manufactured chemical is the subject of certain TSCA actions. These changes are further explained in Section 2.2.3.

### 1.3 Changes to CDR Form U Structure

EPA revised the e-CDRweb reporting tool for 2020 CDR to provide a more user-friendly experience. These changes resulted in some reorganization to the CDR Form U. Table 1-1 provides a cross-walk table identifying the relationships between the 2016 CDR Form U and the 2020 CDR Form U.

**Table 1-1. 2016 – 2020 CDR Form U Crosswalk**

| Section  | 2016 Form U Reporting Tool Printout             | 2020 Form U Reporting Tool Printout   |
|--|---|---|
| <b>PRIMARY FORM</b>  |   |   |
| Parent Company Information                                 | Part I, Section A                               | Part I, Section A   |
| Site Information   | Part I Section B                                | Part I Section B  |
| Technical Contact information                              | Part I, Section C                               | Part II, Section B  |
| Chemical Identification                                    | Part II, Section A                              | Part II, Section A  |
| Manufacturing Information                                  | Part II, Section B                              | Part II, Section C<br>Section C.1 Manufacturing Company<br>Section C.2 Contracting Company<br>Section C.3 Producing Company |
| Process and Use Information                                | Part III, Processing and Use                    | Part II, Section D<br>Section D.1 Industrial Processing and Use<br>Section D.2 Consumer and Commercial Use                  |
| Confidential Business Information Substantiation           | Parts II, and III, All Sections                 | Part III  |
| <b>SECONDARY FORM</b>                                      |   |   |
| Joint Submission   | Part IV, Joint Submission, Secondary Submission | Secondary Form  |
| Secondary Company Information                              | Part IV, Section A                              | Secondary Form, Part I  |
| Secondary Technical Contact Information                    | Part IV, Section B                              | Secondary Form, Part II   |
| Trade Product Identification Information                   | Part IV, Section D                              | Secondary Form, Part II   |
| Secondary Confidential Business Information Substantiation | Not Applicable                                  | Secondary Form, Part III  |

## 2. Reporting Requirements

CDR reporting requirements apply to manufacturers (including importers) of chemical substances. The term ‘chemical substance’ is defined in Appendix A.

For reporting to CDR, manufacturers (including importers) are required to use e-CDRweb, the CDR reporting tool, and EPA’s CDX to create an electronic version of the Form U and to submit information in response to the requirements of the CDR rule (40 CFR Part 711). You must register with CDX to submit online, and you must register the name of the company on whose behalf you are submitting a Form U. EPA does not accept paper submissions or electronic media (diskette, CD-Rom, etc.) for any CDR submission (40 CFR 711.35). See the e-CDRweb Getting Started Guide for more information.

If you reported previously under the CDR, you should review the reporting requirements because they have changed.

You should consider the following three steps to determine whether you are required to report for each chemical substance that you domestically manufacture (including import) into the United States **during each year since the last principal reporting year** (e.g., for the 2020 submission period consider calendar years 2016, 2017, 2018, and 2019):

- Step I: Is your chemical substance subject to the CDR rule?
- Step II: Are you a manufacturer (including importer) who is required to report?
- Step III: What information must you report?

This chapter discusses each of these steps and the associated reporting requirements in more detail.

### 2.1 Step I: Is Your Chemical Substance Subject to the CDR Rule?

Under the CDR rule, reporting is generally required for a chemical substance that is manufactured (including imported), is on the TSCA Inventory as of the start of the submission period, and is not specifically exempted by 40 CFR 711.6(a). The term “CDR reportable chemical substance” will be used throughout this document to refer to a chemical substance that fulfills these requirements. Figure 2-1 presents a decision logic diagram to assist you in determining whether you manufacture a CDR reportable chemical substance. The following subsections explain each question in greater detail.

**A CDR reportable chemical substance** is a chemical substance that is domestically manufactured or imported into the United States, is listed in the TSCA Inventory, and is not specifically exempted by 40 CFR 711.6(a).

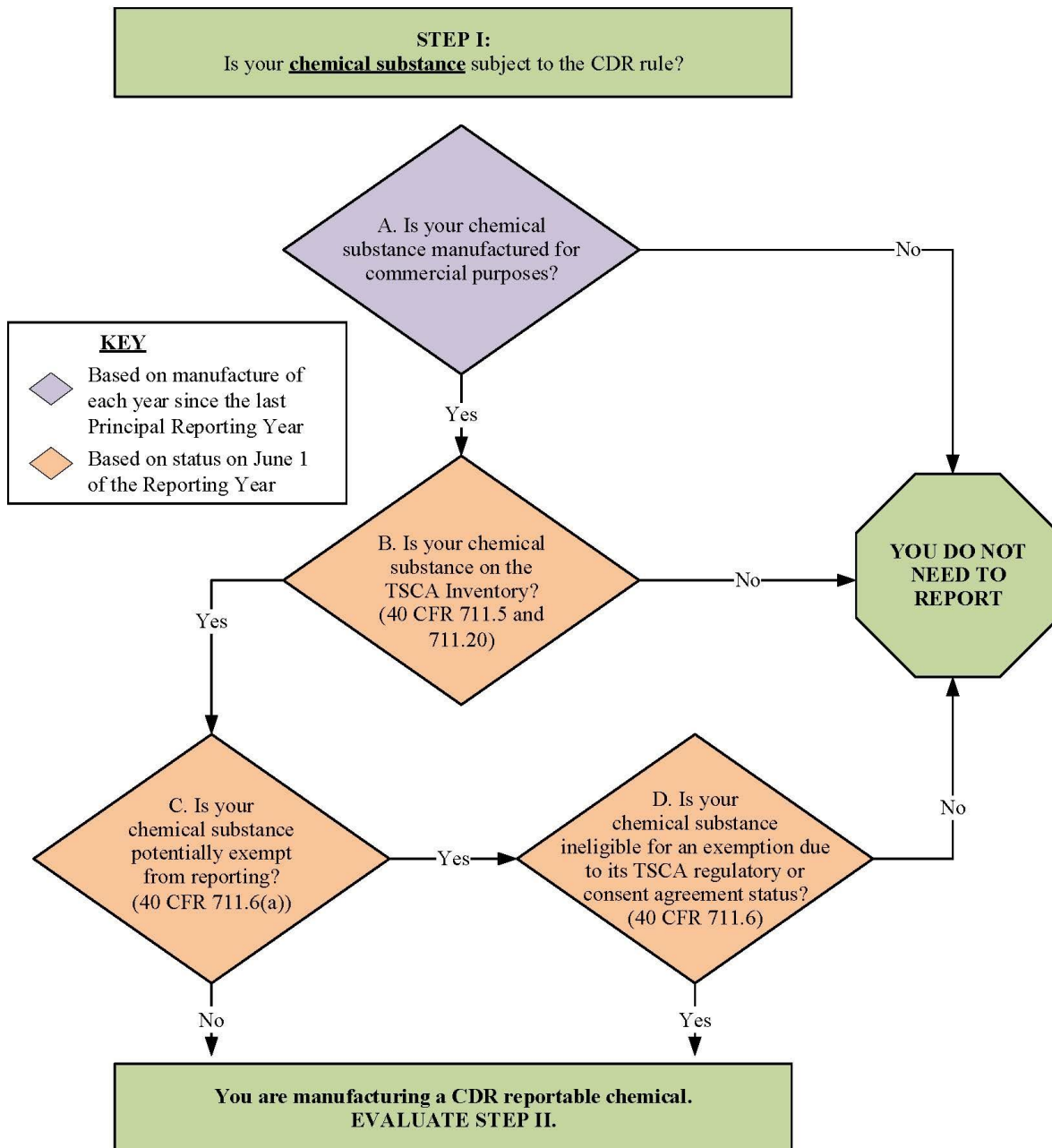


Figure 2-1. Decision Logic Diagram for Evaluating Step I

### 2.1.1 Is Your Chemical Substance Manufactured for Commercial Purposes? (Question A)

The first step in determining your reporting requirements is to determine whether you meet the definition of manufacture or manufacturer. The following manufacturing-related terms are defined below:

- **Manufacture** – To manufacture, produce, or import, for commercial purposes. Manufacture includes the extraction, for commercial purposes, of a component chemical substance from a previously existing chemical substance or complex combination of chemical substances. A chemical substance is co-manufactured by the person who physically performs the manufacturing and the person contracting for such production when that chemical substance, manufactured other than by import, is:
  - (1) produced exclusively for another person who contracts for such production, and
  - (2) that other person dictates the specific chemical identity of the chemical substance and controls the total amount produced and the basic technology for the manufacturing process (40 CFR 711.3).
- **Manufacture for commercial purposes** – (1) To import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer, and includes among other things, such “manufacture” of any amount of a chemical substance or mixture:
  - (i) For commercial distribution, including for test marketing.
  - (ii) For use by the manufacturer, including use for product research and development, or as an intermediate.

(2) Manufacture for commercial purposes also applies to chemical substances that are produced coincidentally during the manufacture, processing, use, or disposal of another chemical substance or mixture, including both byproducts that are separated from that other substance or mixture and impurities that remain in that chemical substance or mixture. Such byproducts and impurities may, or may not, in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose (40 CFR 704.3).
- **Manufacturer** – A person who manufactures a chemical substance (40 CFR 711.3).

For purposes of the CDR rule, a chemical substance is manufactured (including imported) only if it is domestically manufactured or imported for commercial purposes. See TSCA section 8(f), TSCA section 3(9), and 40 CFR 704.3, which includes a parallel definition of “Import for commercial purposes.” As identified above, the term *manufacture for commercial purposes* means that the chemical substance is produced for the purpose of obtaining a commercial advantage. Manufacture for commercial purposes also applies to chemical substances that are produced coincidentally during the manufacture, processing, use, or disposal of another chemical substance or mixture, including both byproducts that are separated and impurities that remain in a chemical substance or mixture (40 CFR 704.3).

### **2.1.1.1 Chemical Substances Manufactured by Contract**

The person who contracts with another person to manufacture a chemical substance is considered to be a co-manufacturer, along with the person that physically manufactures the chemical substance.

As specified in the definition for *manufacture*, manufacturing by contract is a situation where the contracted person manufactures or produces the chemical substance exclusively for the contracting person, and where the contracting person dictates the specific chemical identity of the chemical substance and controls the total amount produced and the basic technology for the manufacturing process. Additional information, including specific co-manufacturing reporting scenarios, is provided in *Fact Sheet: Co-Manufactured Chemical Substances*. For consistency, the two parties involved in the co-manufacturing situation are called the contracting company (who is controlling the manufacture of the chemical substance) and the producing company (who is physically manufacturing the chemical substance).

### **2.1.1.2 Changes to Company Ownership or Legal Identity**

Under 40 CFR 711.8(a), the reporting obligation falls to the “person who manufactured.” EPA recognizes that in some cases, business transactions occurring during the submission period have led to questions about who is now the “person who manufactured.” The scenarios in *Fact Sheet: Reporting After Changes to Company Ownership or Legal Identity* are intended to serve as a general aid in appropriately resolving these questions, but they will not necessarily account for all the relevant circumstances of a particular transaction. It is ultimately the manufacturer’s responsibility to report appropriately under CDR, notwithstanding the complexity of its own business transactions.

### **2.1.1.3 Byproducts**

Byproducts are chemical substances that are produced without a separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance(s) or mixture(s) (40 CFR 704.3). If the byproduct is manufactured (including imported) in a volume of 25,000 lb (or 2,500 lb if it is the subject of certain TSCA actions) or more at a single site during any calendar year since the last principal reporting year (*e.g.*, since 2015 for the 2020 submission period), then its manufacture (including import) is potentially subject to CDR requirements. Figure 2-2 presents a decision logic diagram to assist you in determining whether you manufacture a byproduct that is a CDR reportable chemical substance.

Byproducts may or may not, in themselves, have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage because they are part of the manufacture of a chemical product for a commercial purpose. Thus, chemical substances that are the byproducts of the manufacture, processing, use, or disposal of another chemical substance or mixture, like any other manufactured chemical substance, are subject to CDR reporting if they are listed on the TSCA Inventory, are not otherwise excluded from reporting, and their manufacturers are not specifically exempted from CDR requirements.

It is important to recognize that an overproduction of the primary manufactured substance does not meet the definition of byproduct, and would therefore not be considered a byproduct.

There are, however, conditions under which byproducts are not required to be reported. See 40 (CFR 711.10(c) and (d)). As a general rule, if, after it is manufactured, your byproduct chemical substance is not put to use for a separate commercial purpose (see 40 CFR 711.10(c)), you do not need to report it.

For byproduct chemical substances that are put to use for a separate commercial purpose, there are three categories of exemptions:

- If your byproduct’s only separate commercial purpose “is for use by public or private organizations that (1) burn it as a fuel, (2) dispose of it as a waste, including in a landfill or for enriching soil, or (3) extract component chemical substances from it for commercial purposes” (see 40 CFR 711.10(c)), then that byproduct is excluded from CDR reporting. This exclusion applies only to the byproduct; it does not apply to the component chemical substances extracted from the byproduct.
- If a byproduct substance listed in 40 CFR 711.10(d)(1)(i) is produced as part of the listed manufacturing processes and meets these circumstances: (1) is site-limited, (2) is recycled or otherwise used within a physically enclosed system that is part of the same overall manufacturing process from which the byproduct substance was produced, and (3) when the site is reporting a different chemical substance that was manufactured from the recycled byproduct or manufactured in the same overall manufacturing process, that byproduct is not required to be reported (40 CFR 711.10(d)(1)).

As of March 2020, the processes and related byproduct substances listed are:

- Portland Cement Manufacturing:
  - CASRN 68475-76-3, Flue dust, portland cement (commonly referred to as cement kiln dust or CKD)
- Kraft Pulping Process:
  - CASRN 66071-92-9, Sulfite liquors and cooking liquors, spent (often comprised of what is referred to as black liquor)
  - CASRN 68514-09-0, Sulfite liquors and Cooking liquors, spent, oxidized (often comprised of what is referred to as oxidized black liquor)
  - CASRN 471-34-1, Carbonic acid calcium salt (1:1) (commonly referred to as calcium carbonate or lime mud)

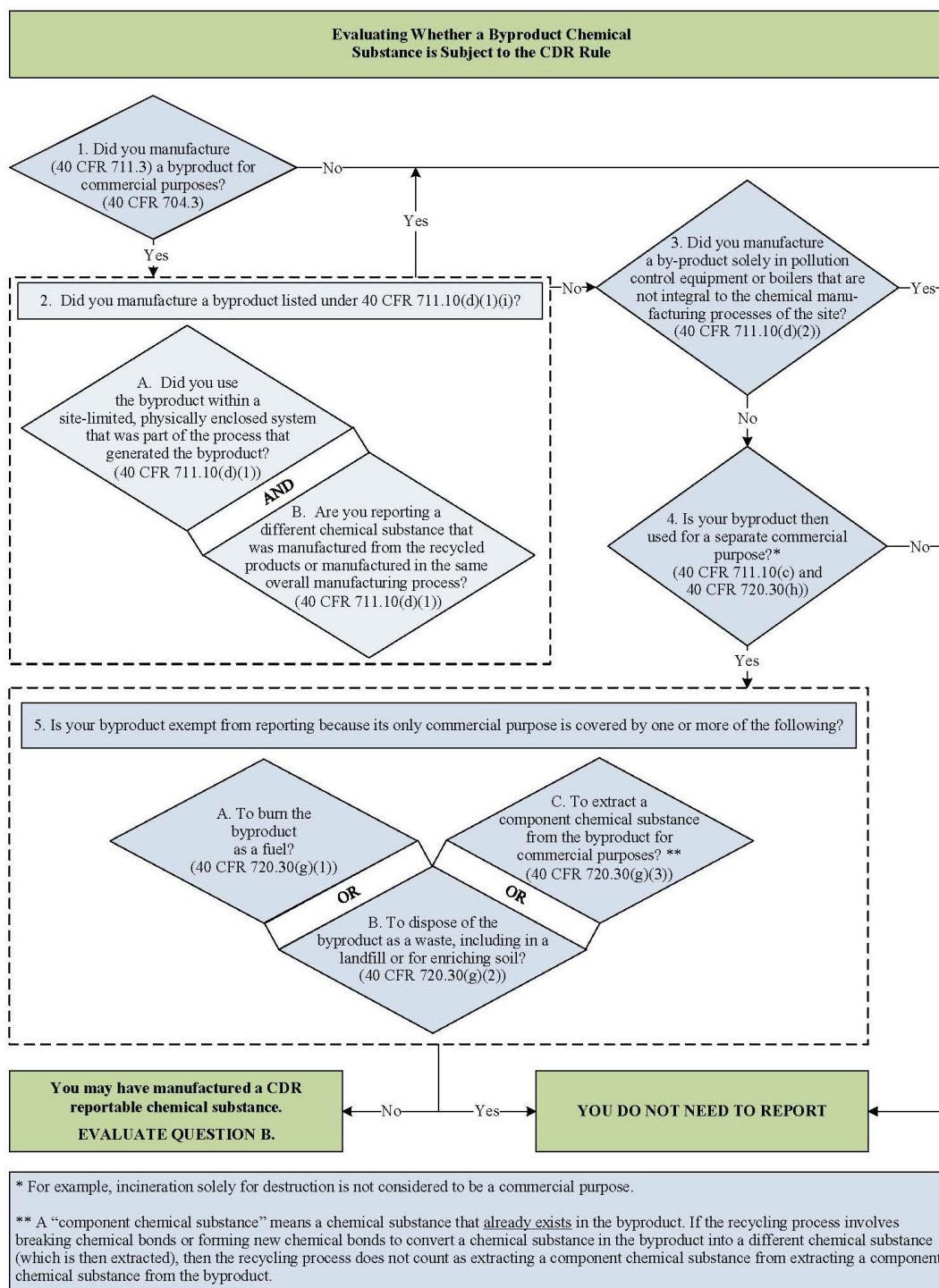
Note that this exclusion only applies to the amount of the byproduct that is recycled in physically enclosed equipment; it does not apply to amounts that are not recycled or that are recycled, but not in physically enclosed equipment.

***Can a byproduct be manufactured if the main product is an article?***

Yes, potentially. You need to consider whether you are manufacturing a chemical substance as a byproduct when you are manufacturing an article. For example, if your use or processing of a chemical substance (chemical A) to manufacture an article coincidentally produces a different chemical substance (chemical B), apart from the article you intended to manufacture, then you have manufactured a byproduct chemical substance. This situation may occur, for example, when you are stripping a chemical substance off of a part of the article, and the stripping process results in the formation of a different chemical substance (possibly resulting in a “used” stripping solution).



- If the byproduct substance is manufactured solely in the specifically listed equipment when it is not integral to the chemical manufacturing processes of the site, that byproduct is not required to be reported (40 CFR 711.10(d)(2)). The specifically listed equipment are:
  - Pollution control equipment, and
  - Boilers used to generate heat or electricity for that site.



**Figure 2-2. Decision Logic Diagram for Evaluating Whether a Byproduct Chemical Substance is Subject to the CDR Rule**

**Interpreting 40 CFR 720.30(g), referenced by 40 CFR 711.10(c)**

In interpreting 40 CFR 720.30(g), you should consider the following important points:

- Regarding 40 CFR 720.30(g)(1), note that where that same quantity of a byproduct is burned as a fuel, and is also being burned for other non-exempt commercial purposes (e.g., if the combustion residue is used as a process input), then the exemption under 40 CFR 720.30(g)(1) would not apply. To provide a specific example: in a paper pulping process, black liquor is burned to generate power, and it then undergoes a chemical change to become manufactured smelt. The smelt is then used as a process input in the manufacture of white liquor which is then returned to the pulping process. In this example, the exemption under 40 CFR 720.30(g)(1) would not apply to the manufacture of the black liquor because the black liquor's post-combustion commercial purposes includes non-exempt commercial purposes.<sup>3</sup> Alternately, if a certain amount of the black liquor was instead burned solely to generate power (and, for example, the resulting smelt was disposed of as a waste) and a separate amount of the black liquor was used for a non-exempt commercial purpose, the exemption under 40 CFR 720.30(g)(1) would have applied only to the amount burned solely to generate power. If the black liquor was instead incinerated solely for destruction, the exemption under 40 CFR 720.30(h)(2) would have applied.
- Regarding 40 CFR 720.30(g)(2), although the manufacture of a byproduct is not reportable if the byproduct is subsequently disposed of as a waste for purposes of enriching the soil (e.g., to change the soil properties in a desirable way, such as by serving as a filler to make the soil less dense or enhancing moisture retention), a substance used as a fertilizer is not necessarily an excluded byproduct. For instance, if the substance's ordinary manner of use is as a fertilizer, then the substance is not a byproduct in the first place, and the provisions at 40 CFR 720.30(g) are inapplicable.
- Regarding 40 CFR 720.30(g)(3), individual component chemical substances extracted from a byproduct are reportable substances if they are extracted for a commercial purpose, even if the manufacture of the byproduct itself is not reportable pursuant to 720.30(g).

***Is there a distinction for CDR byproduct reporting when a byproduct is burned for fuel or incinerated as a waste?***

Any distinction between burning a byproduct as a fuel or incinerating it as a waste is generally not relevant under the CDR. This is because the CDR exempts both byproducts whose "only commercial purpose" is for burning as a fuel (40 CFR 720.30(g)(1)), and byproducts that are "not used for commercial purposes" (40 CFR 720.30(h)(2)). This latter category would include incineration, solely for destruction.

<sup>3</sup> The need to report the black liquor is also impacted by the exemption in 40 CFR 711.10(d)(1).

A “component chemical substance” means a chemical substance that already exists in the byproduct. If the recycling process involves breaking chemical bonds or forming new chemical bonds to convert a chemical substance in the byproduct into a different chemical substance (which is then extracted), then the recycling process does not count as extracting a component chemical substance of the byproduct. Note: In circumstances where other substances in the byproduct are chemically reacted in order to facilitate the separation of a desired component chemical substance, such that the component chemical substance itself is not chemically changed before being extracted, then the process does constitute an extraction of the unchanged component chemical substance.

### **Interpreting 40 CFR 711.10(d)(1)**

In interpreting section 40 CFR 711.10(d)(1), you should consider the following important points:

- Manufacturers are exempted from the need to report the listed byproduct substances *only* for the volumes of the byproduct substance that are:
  - recycled or otherwise used to manufacture another chemical substance within an enclosed system, within the same overall manufacturing process, and on the same site as that byproduct was originally manufactured and
  - when the site is reporting under CDR a different chemical substance that was manufactured from the byproduct or manufactured in the same overall manufacturing process.

Volumes that are used for a commercial purpose distinct from their manufacture as a byproduct, such as when directly incorporated into already manufactured Portland Cement or removed for some use outside of the Kraft pulping process, remain reportable. Also, volumes that are removed from the enclosed systems, such as those that are stored in an open tank or pit, or stored in any non-connected tank or vessel, are excluded from this exemption and remain reportable.

- For the purposes of CDR, EPA considers an enclosed system to be a system of equipment directly connected to the production process that is designed, constructed, and operated in a manner which prevents emissions, hence exposures to workers, or the release of any chemical substance into the facility or environment during the production process. For such systems, exposure and release could only occur due to loss of integrity or failure of the manufacturing process equipment or control systems.

***What is reported if only part of my byproduct meets the byproduct exemption?***

The volume of cement kiln dust (CKD) that is manufactured as a byproduct may be recycled in a manner that meets the exemption in 40 CFR 711.10(d)(1) **and** used for a separate commercial purpose, for example as an additive to Portland Cement. In this situation, the volume that meets the exemption would not be reported under CDR but the volume that is used as an additive to Portland Cement would be reported (as long as it meets other requirements, such as production volume).

Any equipment that the byproduct is present in at any point during the process sequence, such as tanks, reaction vessels, reactors, processing units (e.g., a drum filter), and/or connecting lines, must: (a) be of high structural integrity and contained on all sides, (b) pose no foreseeable potential for escape of constituents to the facility or environment during normal use, and (c) be connected directly by pipeline or similarly enclosed device to a production process. Also, any transfers or holding steps occurring in this system must be necessary to the recycle process and must take place within physically enclosed equipment that meet the aforementioned criteria. For example, hard piping or completely sealed (i.e. welded) equipment would meet these criteria if connected directly to other enclosed equipment, preventing potential releases including fugitive emissions.

### **Interpreting 40 CFR 711.10(d)(2)**

In interpreting section 40 CFR 711.10(d)(2), you should consider the following important points:

- *Integral processes:* An integral process is the portion of the manufacturing process that is chemically necessary or provides primary operational support for the production of the intended product.
  - Byproducts manufactured in equipment that is integral to the production processes remain subject to reporting under CDR, unless otherwise exempted.
  - Examples of equipment that is likely to be integral:
    - Utilities that produce electricity as a product may be using boilers as part of their production of electricity and, therefore, those boilers are considered equipment integral to the production process. Thus, byproducts produced by these electric utility boilers would continue to be subject to reporting.
    - Reverberatory furnaces, which may function similarly to some boilers, can have a chemical processing function such as smelting. This and similar equipment, when used in such scenarios, would be considered integral to the main production process and any resultant manufactured byproduct substances would continue to be subject to reporting.
- *Non-integral processes:* For the purposes of this exemption, certain associated processes that are not chemically required to produce the intended product would be considered non-integral. For example, such processes could include ones required due to other regulations.
  - Byproducts manufactured due to the use of pollution control equipment and boilers that generate heat or electricity on-site, when such equipment is not part of the main production process, are exempted from reporting under CDR.
  - Examples of equipment that is likely to be non-integral:
    - Boilers that are used to produce heat or electricity for their building but do not produce the heat or electricity as a product.
    - Pollution control equipment including flue gas desulfurization (FGD) and selective catalytic reduction (SCR) systems.
    - Equipment used to treat wastewater resulting from cleaning production line tanks.

- Under this exemption, the byproduct remains exempt from reporting even if the byproduct is used for a commercial purpose and subsequent manufactured substances are subject to reporting. For example:
  - if the exempted byproduct is used to manufacture a different chemical substance, the different chemical substance may be subject to reporting under CDR but the reporting status of the byproduct itself does not change.
  - If the exempted byproduct substance is used for a separate commercial purpose subsequent to its manufacture, the reporting status of the byproduct does not change.

### **General discussion about byproducts**

You should note that your byproduct may have a separate commercial purpose even if you do not intentionally commercialize it. You may be sending the byproduct, which you consider a waste, to another person or site. If that other person or site uses your byproduct in such a manner that it has a commercial purpose; for example, if the byproduct is added to a different product to enhance desired properties, then you are required to report the byproduct for purposes of CDR (assuming you meet other reporting requirements such as production volume and the chemical substance is not otherwise exempted from reporting).

It is important to properly identify your byproduct chemical substance. Byproducts are formed by a reaction and, generally, EPA considers each combination of substances resulting from a reaction to be either:

1. A mixture, composed of a definite number of well-defined chemical substances to be named and listed separately; or
2. A reaction product, or combination of chemicals from a reaction, to be listed as a single chemical substance, using one name that collectively describes the chemical products or, if this is not feasible, the reactants used to make the products. This type of byproduct is typically complex.

Complex byproducts can be identified as a single chemical substance, which may represent a chemical process stream. Complex chemical substances are listed on the TSCA Inventory as chemical substances of Unknown or Variable composition, Complex reaction products and Biological materials (“UVCB” chemical substances). In such cases, you should not determine the volumes of the individual chemical components or species that comprise the UVCB chemical substance; rather, a single UVCB chemical substance name is proper for the chemical and the volume of the UVCB substance as a whole entity should be used. Further information on UVCB chemical substances is available on the EPA website at [www.epa.gov/tsca-inventory/chemical-substances-unknown-or-variable-composition-complex-reaction-products-and](http://www.epa.gov/tsca-inventory/chemical-substances-unknown-or-variable-composition-complex-reaction-products-and) .

Although complex byproducts may be named as a single UVCB chemical substance, in certain circumstances it may be appropriate for CDR purposes to treat a product combination as a mixture of chemical substances or even just a single well-defined chemical substance, even though there are uncharacterized components to the mixture. Specifically, where the submitter has a factual basis to reasonably conclude that the uncharacterized components are exempt from CDR irrespective of their chemical identity, a lack of information about the chemical identity of

those exempt components is not an obstacle to treating the remainder of the product combination as a mixture for CDR purposes. Thus, for example, where a submitter reasonably concludes (after considering all the facts known and reasonably ascertainable) that the uncharacterized components of a byproduct will not be used for commercial purposes after they are manufactured (or if the only commercial purpose is for one of the uses listed in 40 CFR 720.30(g), for CDR purposes the submitter may treat the byproduct as the remaining component, or as a mixture of the remaining components. The submitter then considers the need to report for the remaining component(s).

By contrast, where a submitter has not characterized certain components of a byproduct combination or byproduct stream and lacks the factual basis to conclude that those components are necessarily exempt from CDR, it is not appropriate to treat that byproduct combination or byproduct stream as a mixture. For example, if a submitter cannot reasonably assess whether an uncharacterized fraction or component of its byproduct will be subsequently used for a commercial purpose, it is likely that the submitter will need to treat that byproduct combination/set of components as a single UVCB chemical substance for CDR purposes.

Below are a few examples describing byproduct reporting. Additional information about byproduct reporting under CDR is provided on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

**Example 2-1.** For example, a manufacturing process involving the use of solvent A results in spent solvent A. Depending upon the specific manufacturing scenario, there are two different ways that the manufacturer could characterize spent solvent A. How the reclaimed solvent A is treated with respect to CDR reportability is dependent upon the manufacturer's characterization for TSCA.

1. Spent solvent A is characterized as a mixture of individual chemical substances: In this case, separating *solvent A* from the mixture is not considered manufacturing, and the manufacturer does not report for CDR purposes the recycled *solvent A*. Note that, depending upon what is done with the remaining portion of the mixture, any components of the mixture that were manufactured may need to be individually reported.
2. Spent solvent A is characterized as a manufactured UVCB chemical substance: In this case, the *solvent A* extracted from the *spent solvent A* is also considered to be manufactured, and therefore is reportable for purposes of CDR. In this situation, the UVCB chemical substance itself may be exempt for purposes of CDR (40 CFR 720.30(g)(3)).

A byproduct that is considered manufactured for a commercial purpose<sup>4</sup> and, after manufacture, is used for a separate commercial purpose, may be excluded from reporting under CDR by 40 CFR 720.30(g). For example, 40 CFR 720.30(g)(2) states that if the byproduct's only commercial purpose is for use by public or private organizations that dispose of it as a waste, including in a landfill or for enriching soil, the byproduct is exempt from being reported under CDR.

<sup>4</sup> For the most part, byproducts are considered to be manufactured for commercial purposes because the byproduct results from a manufacturing process used to produce an intended commercial substance or product. See the definition of "manufacture for commercial purposes" in Appendix A.

Examples 2-2 and 2-3 describe manufacturers that may or may not be subject to RCRA requirements and how the 720.30(g)(2) byproduct exemption applies in these circumstances.

**Example 2-2.** Company ABC manufactures a byproduct. The byproduct does not qualify as a RCRA hazardous waste and does not meet the requirements of any exemption in 40 CFR 261.4. The manufacturer wishes to dispose of the byproduct, which can be used to enrich soil (e.g., to change the soil properties in a desirable way to make the soil less dense or enhancing moisture retention). Company ABC provides this byproduct to another person who then disposes of it as a waste by spreading it on land to enrich the soil. If this disposal of the byproduct is the byproduct's sole commercial use, the byproduct qualifies for the CDR reporting exemption under 40 CFR 720.30(g)(2). Company ABC is not subject to reporting under the CDR, respecting the manufacture of its byproduct.

**Example 2-3.** Company ABC manufactures Byproduct X, which is not considered a RCRA solid waste because it serves as a feedstock to produce a zinc fertilizer and meets the requirements of 40 CFR 261.4(a)(20) (i.e., it is a hazardous secondary material used to make zinc fertilizers). The zinc fertilizer that is produced meets the requirements of 40 CFR 261.4(a)(21). Byproduct X is not being disposed of as a waste and therefore does not meet the CDR byproduct exemption at 40 CFR 720.30(g)(2). Company ABC is subject to reporting under the CDR, with respect to the manufacture of its byproduct.

If your byproduct is manufactured (including imported) for commercial purposes, and it is subsequently put to use for a commercial purpose other than those listed in 40 CFR 720.30(g), you may be required to report this chemical substance and should evaluate Question B on Figure 2-1 (see also Section 2.1.2).

#### **2.1.1.4 Impurities**

An impurity is a chemical substance which is unintentionally present with another chemical substance (40 CFR 704.3). Although impurities may be produced for the purpose of obtaining a commercial advantage because they are part of the manufacture of a chemical product for a commercial purpose, they are not manufactured for distribution in commerce as chemical substances per se and have no commercial purpose separate from the chemical substance, mixture, or article of which they are a part. Thus, a chemical substance that is manufactured or imported solely as an impurity is not subject to the CDR reporting requirements. See 40 CFR 720.30(h)(1), referenced by 40 CFR 711.10(c).

### **2.1.2 Is Your Chemical Substance on the TSCA Inventory? (Question B)**

The following subsections provide information to help you determine whether your chemical substance is listed on the TSCA Inventory.



### **2.1.2.1 What is the TSCA Inventory?**

Authorized by section 8(b) of TSCA, the TSCA Inventory is a list of chemical substances manufactured (including imported) for commercial purposes in the United States. The TSCA Inventory was compiled originally in the late 1970s; chemical substances have been added continually through EPA's New Chemicals Program. During 2017 and 2018, EPA worked with companies, using the [TSCA Inventory Notification \(Active-Inactive\) rule](#), to divide the Inventory into "active" and "inactive" lists. EPA keeps a Master Inventory File, which is the authoritative list of all the chemical substances reported to EPA for inclusion on the TSCA Inventory, and which includes the active and inactive designations.

Information on how to access the non-confidential portion of the TSCA Inventory file, commonly referred to as the "public TSCA Inventory," is available at [www.epa.gov/tscainventory](http://www.epa.gov/tscainventory). The public TSCA Inventory contains chemical substances for which the identity is not considered confidential and the generic identification of chemical substances for which the specific identity has been claimed as TSCA Confidential Business Information (CBI). The TSCA Inventory status of chemical substances can also be determined from EPA's Substance Registry Services (SRS), available at [www.epa.gov/srs](http://www.epa.gov/srs). See Section 2.1.3 for information about chemical substances that may be potentially exempt from reporting.

### **2.1.2.2 How Do You Determine Whether a Chemical Substance is Listed on the TSCA Chemical Substance Inventory?**

The following methods may help you determine whether your chemical substance is listed on the TSCA Inventory:

- Locate the chemical substance on the public section of the TSCA Inventory (see Chapter 5 for information on obtaining the TSCA Inventory);
- Search SRS for information on the TSCA Inventory listing status (note that you can search the SRS directly by accessing the website at [www.epa.gov/srs](http://www.epa.gov/srs) or by using the CDR reporting tool);
- Search company records to determine whether the chemical substance was previously reported to EPA under CDR;
- Search company records for a commenced PMN or other communication with EPA that confirmed the chemical substance was on the TSCA Inventory;
- Search company records for a Notice of Commencement of manufacture or import for a PMN substance that was submitted to EPA; and
- Search company records for a Notice of Activity submitted to EPA to move a chemical from the inactive to the active portions of the TSCA Inventory.

Searching for previous CDR, PMN, and NOC submissions may be particularly helpful if your chemical substance is listed on the confidential portion of the TSCA Inventory.



Several commercial databases have incorporated the public section of the TSCA Inventory (which excludes chemical substances with confidential identities) and can indicate whether a given chemical substance is listed on that portion of the TSCA Inventory. Because these databases are not generated or reviewed by EPA, the Agency cannot guarantee the accuracy of the information. If you use a commercial database that fails to include all reportable chemical substances and, as a result, you fail to report information for these chemical substances, you may be in violation of TSCA (40 CFR 711.1(c)).

The CDR reporting related to mixtures and UVCB substances (chemical substances that are of Unknown or Variable composition, Complex reaction products, or Biological materials) requires careful consideration by submitters. Whenever a submitter has manufactured or imported a combination of several chemicals, the submitter must first determine whether for TSCA purposes it is a mixture or a single UVCB or other indefinitely described (Class 2) chemical substance. A mixture is any combination of chemicals that meets the statutory definition of “mixture” at TSCA section 3(10) (See Appendix A). Mixtures are not reported to CDR – rather the mixture’s component chemical substances, the chemical substances that make it up, are potentially subject to reporting, as described below. A UVCB substance is an indefinite combination of chemicals, that does not meet the statutory definition of “mixture” at TSCA section 3(10), whose number and individual identities and/or composition are not precisely or completely known. A UVCB combination of chemicals is subject to reporting under CDR and is considered a single chemical substance. Generally, the determination of whether a combination of chemicals is a mixture or a UVCB substance is made by the time that substance has been commercialized and, as such, would be clear early in the CDR process. The following discussion is presented with this generality in mind.

**Hydrates** are mixtures of the corresponding non-hydrated chemical substance and water and, therefore, are not listed on the TSCA Inventory. Note that you may be required to report the corresponding **non-hydrated** component chemical substance. Adjust the reported production volume to exclude water.

- If you imported a mixture, you will need to report the individual chemical components of the mixture to the extent that your total volume for the individual chemical substance triggers reporting (i.e., generally, to the extent that such volume reaches the reporting threshold, 25,000 lb or 2,500 lb if the subject of certain TSCA actions).
- If you domestically manufactured a mixture, you will need to determine whether any chemical substances were formed from a chemical reaction that occurred as part of manufacturing the mixture. If a chemical reaction has occurred, a chemical substance formed from the chemical reaction may be subject to reporting, based on its production volume or the applicability of other exemptions. If a chemical reaction has not occurred, you have not manufactured any reportable chemical substances in the production of the mixture. In such a case, the production of the mixture has not triggered any CDR reporting requirement.
- Domestic manufacturers and importers should also consider whether the combination of the chemicals they have domestically manufactured or imported (respectively) should be chemically identified for TSCA purposes as a single UVCB chemical substance instead of a mixture.

EPA has developed two Inventory nomenclature guidance documents related to the mixture-UVCB determination:

- *Toxic Substances Control Act Inventory Representation for Chemical Substances of Unknown or Variable Composition, Complex Reaction Products and Biological Materials: UVCB Substances*. Available online at: [www.epa.gov/sites/production/files/2015-05/documents/uvcb.pdf](http://www.epa.gov/sites/production/files/2015-05/documents/uvcb.pdf);
- *Toxic Substances Control Act Inventory Representation for Combinations of Two or More Substances: Complex Reaction Products*. Available on-line at: [www.epa.gov/sites/production/files/2015-05/documents/rxnprods.pdf](http://www.epa.gov/sites/production/files/2015-05/documents/rxnprods.pdf)

**Example 2-4.** Company X manufactures 100,000 lb of magnesium sulfate heptahydrate, which is considered under TSCA to be a mixture of magnesium sulfate and water. The non-hydrous portion of the magnesium sulfate heptahydrate mixture, magnesium sulfate, constitutes 48,838 lb, which exceeds the 25,000 lb threshold. Therefore, Company X is required to report 48,838 lb of magnesium sulfate under the CDR rule.

**In the event that you are not able to find your chemical substance on the TSCA Inventory, contact the TSCA Hotline at (202) 554-1404 for assistance to determine whether reporting is required.** If your chemical substance is on the TSCA Inventory, you should review Question C on Figure 2-1 (Section 2.1.3) to determine whether you qualify for any other reporting exemptions.

### 2.1.3 Is Your Chemical Substance Potentially Exempt from Reporting? (Question C)

Five groups or categories of chemical substances, though included on the TSCA Inventory, are largely exempt from reporting under the CDR rule. These groups are polymers, microorganisms, naturally occurring chemical substances, water, and certain forms of natural gas. Sections 2.1.3.1 through 2.1.3.5 provide more details for each group of chemical substances. You may also refer to 40 CFR 711.6(a) for precise definitions of these groups. Note, however, that these exempted chemical substances (except for chemical substances that are exempted because they are naturally occurring) become subject to reporting again if they are the subject of any of certain TSCA actions. Section 2.1.4 provides details for when the exemption does not apply. Note that the act of importing does not change the identity of a chemical substance or group. For example, a naturally occurring chemical substance remains naturally occurring when it is imported.

**Polymers, microorganisms, water, and certain forms of natural gas** are not exempted from reporting when they are the subject of any certain TSCA actions. See Section 2.1.4 for more details.

To help identify chemical substances that are exempt from reporting under the CDR rule, EPA has labeled most of these chemical substances on the TSCA Inventory with the letters “XU.” In the SRS, most of these chemical substances are identified as being “TSCA CDR Exempt” under the Statutes/Regulations heading. This and other flags are embedded into the Substance Registry Services (SRS) chemical lookup within the current edition of e-CDRweb

reporting tool and have been updated to reflect the current reporting requirements. When the chemical lookup function is used, and the selected chemical has been assigned a special flag, the reporting tool will display a notice on the screen indicating the exemption status of the chemical. Please note that you are advised to use the flags only as a guide; you are responsible for verifying whether a chemical substance listed on the TSCA Inventory is exempt from reporting.

If your chemical substance is not in one of the following five categories of chemical substances, it is a CDR reportable chemical substance and you should review Step II of the reporting requirements (Section 2.2, Figure 2-3). If your chemical substance is in one of the five categories, you should review Question D (Section 2.1.4).

### 2.1.3.1 Polymers

Polymers are in most cases exempt from CDR reporting. The CDR definition of polymer is sufficiently broad to include virtually all those chemical substances that are generally considered polymers. The definition also includes siloxanes and silicones, silsesquioxanes, rubber, lignin, polysaccharides (such as starch and gums), proteins (such as gelatin and hemoglobin), and enzymes. However, for chemical substances that result from hydrolysis, depolymerization, or chemical modification of polymers, regardless of the extent of these processes, if the final products are no longer polymeric (e.g., a mixture of amino acids that is the result of hydrolysis of a polypeptide), the chemical substances are not considered to be polymers and must be reported if not otherwise excluded (40 CFR 711.6(a)(1)). See Appendix A or 40 CFR 711.6(a)(1) for the specific definition of polymers for purposes of the CDR rule.

### 2.1.3.2 Microorganisms

Microorganisms are exempt from CDR reporting. A microorganism is any combination of chemical substances that is a living organism and that meets the definition of “microorganism” at 40 CFR 725.3. Any chemical substance produced from a living microorganism is reportable unless otherwise excluded (40 CFR 711.6(a)(2)).

### 2.1.3.3 Certain Forms of Natural Gas

Table 2-1 identifies certain forms of natural gas that are exempt from CDR reporting (see 40 CFR 711.6(a)(4)).

**Table 2-1. Chemical Substances Covered by the Exemption for Certain Forms of Natural Gas**

| Form of Natural Gas                     | CAS Registry Number |
|---|---------------------|
| Natural gas (petroleum), raw liquid mix | 64741-48-6          |
| Natural gas condensates                 | 68919-39-1          |
| Gasoline natural                        | 8006-61-9           |
| Gasoline (natural gas), natural         | 68425-31-0          |
| Natural gas                             | 8006-14-2           |
| Natural gas, dried                      | 68410-63-9          |

### 2.1.3.4 Naturally Occurring Substances

Chemical substances that are described in 40 CFR 710.4(b) of the TSCA Inventory Reporting Regulations are considered “naturally occurring.” Such chemical substances are not reportable under CDR if the chemical substance is produced solely by means described in section 710.4(b). Examples of chemical substances that are typically naturally occurring materials are raw agricultural commodities, water, air, crude oil, rocks, ores, and minerals. However, because the section 710.4(b) exemption is process-specific rather than chemical-specific, if you manufacture any chemical substance in a manner other than just as described in section 710.4(b), you are required to report it unless it is otherwise exempted (40 CFR 711.6(a)(3)). For this reason, minerals and certain agricultural products are sometimes considered not to be naturally occurring because of the means by which they are produced or isolated. Whether a chemical substance is considered “naturally occurring” depends on the manner in which it is produced and isolated. Table 2-2 presents some examples of evaluating chemical substances for the naturally occurring chemical substance exemption.

**Table 2-2. Examples of Evaluating Chemical Substances for the Naturally Occurring Exemption (40 CFR 711.6(a)(3))**

|   |   |
|---|---|
| ● | Calcined clays formed by heating naturally occurring clay typically must be reported because such heating is generally not done solely to remove water; a chemical change is primarily intended.  |
| ● | Chemical substances that are removed/isolated from nature by physical or natural means are typically considered to be “naturally occurring.” Using water to extract a chemical substance from a naturally occurring chemical substance is considered a natural means of removal. However, using any other solvent is not considered a natural means of removal and would result in the extracted chemical substance being potentially subject to reporting. |
| ● | In an electrostatic separation, small particles are removed from a liquid or gas stream. The process is essentially analogous to gravitational separation. Chemical substances that are processed by this means are considered to be “naturally occurring.”   |
| ● | Mined coal is typically included in the naturally occurring chemical substances category.   |
| ● | Ammonia and nitric acid are generally produced by chemical synthesis and are, therefore, generally not considered to be “naturally occurring.”  |

### 2.1.3.5 Water

Water, including both naturally occurring water and manufactured water (CASRN 7732-18-5), is exempt from CDR reporting.

### 2.1.4 Is your Chemical Substance Ineligible for an Exemption Because it is the Subject of Certain TSCA Actions? (Question D)

With the exception of naturally occurring chemical substances, chemical substances must be reported if they are the subject of any of the following (even if the chemical substance is otherwise exempt, (40 CFR 711.6)):

- A rule proposed or promulgated under TSCA sections 4, 5(a)(2),5(b)(4), or 6;
- An order issued under TSCA sections 4, 5(e) or 5(f);
- Relief that has been granted under a civil action under TSCA sections 5 or 7; or
- An enforceable consent agreement (ECA) under 40 CFR Part 790.

See Appendix B for an overall chart that describes the effects on CDR requirements of the different TSCA actions.

**Example 2-5.** Company A manufactured 35,000 lb of Chemical X, a polymer, in 2018. Chemical X is part of an enforceable consent agreement (ECA) between EPA and Company A, in which Company A is performing additional testing on Chemical X. Although Chemical X is a polymer that normally would be exempt from CDR reporting, it is part of an ECA and, thus, Company A is required to report Chemical X for the 2020 CDR. Additionally, Company B manufactures 40,000 lb of Chemical X in 2019. Although Company B is not a party to the ECA, Company B is also required to report Chemical X for the 2020 CDR.

Special flags are used throughout the TSCA Inventory to identify those substances on the Inventory that are the subject of an EPA rule or order promulgated under TSCA, as well as to indicate the types of full or partial exemptions from TSCA reporting requirements. These flags are embedded into the Substance Registry Services (SRS) chemical lookup within the current edition of e-CDRweb reporting tool and have been updated to reflect the current reporting requirements. When the chemical lookup function is used, and the selected chemical has been assigned a special flag, the reporting tool will display a notice on the screen indicating the TSCA action or exemption status of the chemical. Please note that you are advised to use the flags only as a guide; you are responsible for verifying whether a chemical substance listed on the TSCA Inventory is exempt from reporting or ineligible for exemption from reporting. If you have determined that your chemical substance is a CDR reportable chemical substance, evaluate Step II on Figure 2-3 to determine whether you are a manufacturer (including importer) who is required to report.

## 2.2 Step II: Are You a Manufacturer Who Is Required to Report?

If you determined from Step I that you manufacture (including import) a CDR reportable chemical substance, Figure 2-3 presents a decision logic diagram that may help you determine whether you are a manufacturer (including importer) who must then report. The following subsections explain each question in greater detail.

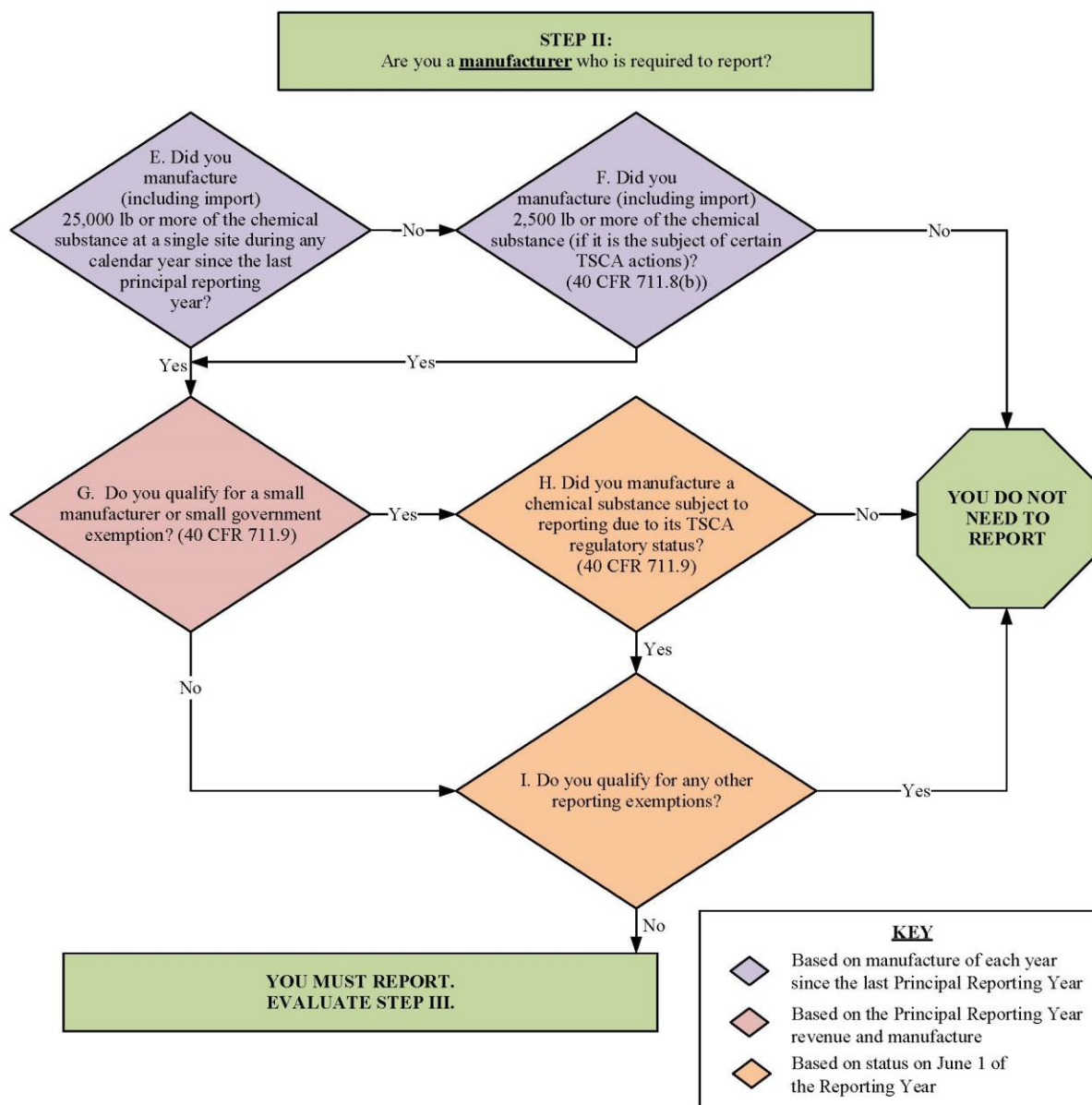


Figure 2-3. Decision Logic Diagram for Evaluating Step II

### 2.2.1 Did You Manufacture (Including Import) 25,000 lb or More of the Chemical Substance at a Single Site During any of the Calendar Years since the Last Principal Reporting Year? (Question E)

You are subject to CDR reporting if you manufactured (including imported) a chemical substance in production volumes of 25,000 lb or greater at any single site you owned or controlled during any calendar year since the last CDR principal reporting year. (A reduced reporting threshold of 2,500 lb applies to chemical substances subject to certain TSCA actions – see Section 2.2.2.) As an example, for the 2020 CDR, the last principal reporting year would be 2015. Therefore, reporters for 2020 need to consider production for calendar years 2016, 2017, 2018, and 2019.

If you both domestically manufacture and import the same chemical substance, add the domestically manufactured and imported volumes at each site for a calendar year to determine whether the amount of the chemical substance meets or exceeds the 25,000 lb threshold during that calendar year. Do not subtract the volume of chemical substance directly exported. The site at which a chemical substance is imported is described in 40 CFR 711.3 and Section 4.4.1 of this document.

Information about determining production volumes for mixtures is provided at the end of Section 2.2.2.

### 2.2.2 Did You Manufacture (Including Import) 2,500 lb or More of the Chemical Substance (if it is the Subject of Certain TSCA Actions)? (Question F)

Under 40 CFR 711.8(b) and 40 CFR 711.15, the reporting threshold is 2,500 lb (1,134 kg) for any person who manufactured a chemical substance that is the subject of any of the following TSCA actions:

- A rule proposed or promulgated under TSCA sections 5(a)(2), 5(b)(4) or 6
- An order issued under TSCA sections 4, 5(e) or 5(f)
- Relief that has been granted under a civil action under TSCA sections 5 or 7

See Appendix B for assistance in determining whether your chemical substance is the subject of certain TSCA actions.

You are subject to CDR reporting if you manufactured (including imported) a chemical substance which is subject to a TSCA action listed above in production volumes of 2,500 lb or greater at any single site you owned or

#### **Substances that have undergone a change in TSCA regulatory status between submission periods:**

- The effects of TSCA actions on CDR reporting are assessed based on the status of the chemical substance as of the beginning of the submission period, when the reporting obligation becomes current. For reporting obligations that depend on whether a chemical substance “is the subject of” a listed action, consider the status of a chemical substance as of the start of the submission period.
- A change in TSCA regulatory status does not mean that submitters should apply different reporting thresholds to manufacture occurring before and after the effective date of the action. Only one reporting threshold applies to a chemical substance for CDR. The correct reporting threshold is determined based on the chemical substance’s status as the start of the submission period.

controlled during any calendar year since the last CDR principal reporting year. As an example, for the 2020 CDR, the last principal reporting year would be 2015. Therefore, reports to the 2020 CDR would need to consider production for calendar years 2016, 2017, 2018, and 2019.

If you both domestically manufacture and import the same chemical substance, add the domestically manufactured and imported volumes at each site for a calendar year to determine whether the amount of the chemical substance meets or exceeds the 2,500 lb threshold during that year. Do not subtract the volume of chemical substance directly exported. The site at which a chemical substance is imported is described in 40 CFR 711.3 and Section 4.4.1 of this document.

Table 2-3 provides examples of how the production volume threshold applies, using 2020 CDR as an example.

**Table 2-3. Production Volume Threshold (Examples using 2020 CDR Reporting)**

| Description   | Reporting Requirement  |
|---|--|
| Company A, which has only one manufacturing site, manufactured 26,000 lb of Chemical X, which is not exempt from reporting, at its site in 2017.  | Company A must report for Chemical X because it manufactured 25,000 lb or more of Chemical X at its sole manufacturing site in 2017.   |
| Company B, which has only one manufacturing site, manufactured 26,000 lb of Chemical X at its site in 2016 and 20,000 lb of Chemical X in 2018.   | Company B is required to report for Chemical X because it manufactured more than 25,000 lb of Chemical X in 2016.  |
| Company C has two manufacturing sites for Chemical X. In 2016 through 2019, Site 1 manufactured 13,000 lb per year of Chemical X and Site 2 manufactured 15,000 lb per year. Chemical X is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b).                | The 25,000 lb threshold is applicable for Chemical X. Company C is not required to report for Chemical X at either site because production was less than 25,000 lb at each site during all the years in the reporting period.  |
| Company D has two manufacturing sites for Chemical X. In 2016 through 2019, Site 1 manufactured 10,000 lb per year of Chemical X and Site 2 manufactured 150,000 lb per year of Chemical X. Chemical X is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b). | The 25,000 lb threshold is applicable for Chemical X. Company D must report for Chemical X at Site 2 because at this location production was 25,000 lb or more. Company D is not required to report for Chemical X for Site 1 because production was less than 25,000 lb during all the years in the reporting period. |
| Company E has one site where it imports and manufactures Chemical X. Company E manufactured 21,000 lb of Chemical X and imported 5,000 lb of Chemical X in 2019.  | Company E must report for Chemical X because the aggregate volume manufactured at and imported by its site in 2019 was 25,000 lb or more.  |
| Company F has one site where it manufactured 30,000 lb of Chemical X in 2016. The company directly exported 25,000 lb of Chemical X and sold the remaining 5,000 lb in the United States.   | Company F must report for Chemical X because it manufactured over 25,000 lb in 2016. The amount directly exported does not affect the determination of the need to report.   |
| Company G manufactured 5,000 lb of Chemical Z per year during 2016 through 2019. Chemical Z is subject to a TSCA section 4 test rule with a sunset date of June 30, 2020. Chemical Z is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b).                   | Company G is not required to report for Chemical Z. Chemical Z is subject to the 25,000 lb reporting threshold, because a TSCA section 4 test rule is not a TSCA action which triggers use of the reduced reporting threshold (i.e., it is not one of the actions listed in 40 CFR 711.8(b)).                          |



| Description  | Reporting Requirement  |
|--|--|
| A TSCA section 5(a)(2) significant new use rule (SNUR) is issued for Chemical Y in 2017. The annual production volumes for Chemical Y by Company H are 1,000 lb in 2016, 10,000 lb in 2017, 5,000 lb in 2018, and 2,000 lb in 2019.  | As of the beginning of the submission period (June 1, 2020), Chemical Y is a chemical substance that is the subject of a TSCA section 5(a)(2) SNUR; therefore, a reduced reporting threshold of 2,500 lb would apply. Because the 2,500 lb reporting threshold was exceeded at least once from 2016 to 2019, Company H must report for Chemical Y.   |
| A TSCA section 5(a)(2) SNUR was issued for Chemical Y in 2017 and revoked in February 2020. Chemical Y is not currently the subject of any of the TSCA actions listed in 40 CFR 711.8(b). The annual production volumes for Chemical Y by Company H are 1,000 lb in 2016, 10,000 lb in 2017, 5,000 lb in 2018, and 2,000 lb in 2019.   | As of the beginning of the submission period, the SNUR is no longer in effect. Therefore, the reporting threshold for Chemical Y is 25,000 lb. Because the production volume did not meet or exceed 25,000 lb in at least one year from 2016 to 2019, Company H is not required to report for Chemical Y.  |
| A proposed TSCA section 5(a)(2) SNUR for Chemical P is published in the Federal Register in 2020 but after the start of the submission period. Chemical P is not currently the subject of any of the other TSCA actions listed in 40 CFR 711.8(b). The annual production volumes for Chemical P by Company J are 2,000 lb in 2016, 20,000 lb in 2017, 2,500 lb in 2018, and 12,000 lb in 2019. | As of the beginning of the 2020 submission period, Chemical P is not the subject of a proposed or promulgated SNUR. Therefore, the 2020 CDR reporting threshold for Chemical P is 25,000 lb. Publication of the SNUR after June 1, 2020 would not cause the 2020 CDR reporting threshold to change during the 2020 submission period. Because the production volume did not meet or exceed 25,000 lb in at least one year from 2016 to 2019, Company J is not required to report for Chemical P. |

### *Meeting the Reporting Threshold for Chemical Substances in Mixtures*

In many cases, reportable chemical substances are components of a mixture. Although mixtures themselves are not reportable, the 25,000 lb (or 2,500 lb threshold if the subject of certain TSCA actions) is applicable for each CDR reportable chemical substance comprising a mixture; therefore, the chemical substances making up a mixture may individually be reportable. If you manufacture chemical substances as part of a mixture, you would determine your CDR reporting requirements by following Questions A-F (Sections 2.1.1 through 2.2.2) for each chemical substance in the mixture. As described in Section 2.1.2.2, hydrates are mixtures of the corresponding non-hydrated chemical substance and water.

**UVCB Chemical Substances:** Note that, under TSCA, a complex combination of chemical substances is in most cases considered to be a single UVCB chemical substance. In such cases, reporting is triggered based on the volume of the UVCB chemical substance manufactured (that is, the whole entity), and not based on the volume of individual chemical components which may be present in the UVCB chemical substance. See Section 2.1.1.3 for further discussion of UVCB chemical substances.

**Imported Mixtures:** As an importer (see 40 CFR 704.3) of a mixture of chemical substances listed on the TSCA Inventory, you must determine whether the individual component chemical substances of a mixture are reportable. To do so, you would determine whether the annual aggregated volume of a particular reportable chemical substance was 25,000 lb or 2,500 lb or more at the site that controls the importation. The threshold volume is applicable for each

CDR reportable chemical substance in a mixture. You can determine the production volume for each chemical substance in the mixture that you imported during a particular calendar year by using the weight and percent composition of the chemical substance in the mixture. For each imported chemical substance, you would aggregate the volume of the chemical substance in all annual imports associated with the reporting site as defined in 40 CFR 711.3 and add the amount of the chemical substance domestically manufactured at the same site, if any, to determine whether the total volume of the chemical manufactured (including imported) meets the 25,000 lb or 2,500 lb threshold. Note that a chemical substance that is imported solely in small quantities for research and development, as an impurity, or as part of an article or in a manner described in 40 CFR 711.10(c)(1) through (4) is not subject to the CDR reporting requirements (40 CFR 711.10).

If you have determined that you are manufacturing a CDR reportable chemical substance and meet the applicable reporting threshold of 25,000 lb (or 2,500 lb if subject to certain TSCA actions), evaluate Question G to determine whether you qualify for a small manufacturer exemption.

### **2.2.3 Do You Qualify for a Small Manufacturer or Small Government Exemption? (Question G)**

*Small manufacturer* (the same standard will be used for all manufacturers, except for small governments) (40 CFR 704.3):

- (1) First standard. A manufacturer (including importer) of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than \$120 million. However, if the annual production or importation volume of a particular substance at any individual site owned or controlled by the manufacturer or importer is greater than 45,400 kilograms (100,000 lbs), the manufacturer (including importer) will not qualify as small for purposes of reporting on the production or importation of that substance at that site, unless the manufacturer (including importer) qualifies as small under standard (2) of this definition.
- (2) Second standard. A manufacturer (including importer) of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than \$12 million, regardless of the quantity of substances produced or imported by that manufacturer (including importer).

*Small government* means the government of a city, county, town, township, village, school district, or special district with a population of less than 50,000.

For purposes of the definition of a small manufacturer, total annual sales include all sales of the company, not just the total sales of a given chemical substance.

If you have determined that you are a small manufacturer that is manufacturing a CDR reportable chemical substance, evaluate Question H (described in the next section) to determine whether you are exempt from any reporting.

If you do not qualify for a small manufacturer or small government exemption, evaluate Question I in Figure 2-3 (further described in Section 2.2.5) to determine whether you qualify for any other reporting exemptions.

## 2.2.4 Did You Manufacture a Chemical Substance that is the Subject of Certain TSCA Actions? (Question H)

Small manufacturers are exempt from CDR requirements unless they manufacture (including import) a chemical substance that is the subject of a rule proposed or promulgated under sections 4, 5(b)(4), or 6 of TSCA, or is the subject of an order in effect under sections 4 or 5(e) of TSCA, or is the subject of relief that has been granted under a civil action under sections 5 or 7 of TSCA (40 CFR 711.9 and TSCA section 8(a)(3)(A)(ii)). The SRS provides information regarding which chemical substances fall into these groups. Table 2-4 provides examples of how the small manufacturing exemption applies.

**Table 2-4. Small Manufacturer or Small Government Exemption  
(Examples using 2020 CDR Reporting)**

| Description  | Reporting Requirement   |
|--|---|
| Site 1, which is one of several sites owned by Company A, had a production volume of 120,000 lb of Chemical X in 2017. The total annual sales of Company A (all sites combined) were \$3.25 million in 2019.   | Site 1 is not required to report for Chemical X because combined sales in 2019 did not exceed \$12 million.   |
| Site 2, which is one of several sites owned by Company B, had a production volume of 90,000 lb of Chemical X in 2016, 75,000 lb in 2017, 82,000 in 2018, and 95,000 in 2019. The total annual sales of Company B (all sites combined) were \$90 million in 2019. None of the other sites produce Chemical X.   | Site 2 is not required to report for Chemical X because annual production volume of that chemical substance did not exceed 100,000 lb at any of Company B's sites during 2016-2019, and Company B had total annual sales of less than \$120 million.  |
| Site 3, which is one of several sites owned by Company C, had a production volume of 200,000 lb per year of Chemical X in 2016 through 2019. Site 4, another site owned by Company C, had a production volume of 75,000 lb per year of Chemical X in 2016 through 2019. The total annual sales of Company C (all sites combined) were \$119 million in 2019. | Company C must report for Chemical X at Site 3 because annual production volume at Site 3 exceeded 100,000 lb in at least one year from 2016 to 2019. Company C is not required to report for Chemical X at Site 4 because annual production volume at site 4 did not exceed 100,000 lb and total annual sales was less than \$120 million. |
| Site 5, which is one of several sites owned by Company D, had a production volume of 50,000 lb of Chemical X in 2018. The total annual sales of Company D (all sites combined) were \$125 million in 2019  | Company D must report for Chemical X at Site 5 because total annual sales in 2019 exceeded \$120 million and the production volume of Chemical X at Site 5 exceeded 25,000 lb in at least one year from 2016 to 2019.   |
| Site 6, which is one of several sites owned by Company E, had a production volume of 120,000 lb of Chemical X in 2016. The total annual sales of Company E (all sites combined) were \$9.25 million in 2019. Chemical X is subject to a section 4 test rule.   | Site 6 is required to report for Chemical X. Even though combined sales are less than \$12 million, this chemical substance is subject to a test rule and therefore must be reported.   |

| Description  | Reporting Requirement  |
|--|--|
| <p>Site 7, owned by Company F, whose total annual sales is \$30 million in the principal reporting year (2019), manufactures Chemical X, which is the subject of a TSCA section 5(e) consent order and a TSCA section 5(a)(2) SNUR. The annual production volume of Chemical X ranges between 3,000 and 5,000 lb from 2016-2019.</p>   | <p>Site 7 is required to report for Chemical X. Based on the sales of less than \$120 million and production volume below 100,000 lb, Company F would seem to qualify as a small manufacturer. However, because Chemical X is the subject of a 5(e) consent order, the small manufacturer exemption does not apply. Both the SNUR and the 5(e) consent order trigger the reduced reporting threshold of 2,500 lb. Therefore, because Chemical X is the subject of a SNUR and a section 5(e) consent order and because Company F has produced Chemical X in amounts above 2,500 lb in at least one year from 2016 to 2019 (in this case all four years), Company F would be required to report.</p> |
| <p>Site 8 is owned by Company G and manufactured 25,000 lb of Chemical X in 2016 and 20,000 lb in 2017. Chemical X was the subject of a TSCA section 4 test rule promulgated in 2019. Company G's total annual income was the following: \$1 million in 2016, \$2 million in 2017, \$9 million in 2018, and \$12 million in 2019.</p>  | <p>Site 8 is required to report for Chemical X. On June 1, 2020, Chemical X is subject to a TSCA section 4 test rule, which means that Company G cannot apply the small manufacturer exemption to its manufacture of this substance.</p> <p>Because annual production volume of Chemical G was 25,000 lb or greater in at least one year from 2016 to 2019 (in this case in 2016), Company G must report for Chemical X.</p>   |
| <p>Site 9 is owned by Company H and manufactures Chemical X. Chemical X has been subject for several years to a TSCA section 4 test rule which sunsets on May 1, 2020. Company H, whose total annual sales were \$3 million in 2019, has manufactured Chemical X in annual amounts above 25,000 lb from 2016-2019. June 1, 2020 was the start of the 2020 submission period.</p> | <p>Company H is not required to report for Chemical X. Although Chemical X <i>was</i> the subject of a TSCA section 4 test rule (which could have eliminated the ability to apply the small manufacturer exemption to manufacture of Chemical X), June 1, 2020 is after the sunset date. As of June 1, 2020, Chemical X is no longer the subject of a TSCA section 4 test rule. Therefore, Company H, with total annual sales less than \$12 million in 2019, would be eligible to apply the small manufacturer exemption to its manufacture of Chemical X.</p>  |

### 2.2.5 Do You Qualify for Any Other Reporting Exemptions? (Question I)

If you manufacture a reportable chemical substance under the following circumstances, you are not required to report for those chemical substances under the CDR rule if:

- The chemical substance is manufactured solely in small quantities for research and development (40 CFR 711.10(a)).

Chemicals that are routinely used in a laboratory are not considered to be chemicals used for research and development for purposes of this exemption. For example, a manufacturer of a solvent that supplies testing labs for the routine use of testing samples of other materials is not conducting research and development.

- The chemical substance is imported as part of an article (40 CFR 711.10(b)). An *article* is defined in 40 CFR 704.3 as “a manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end-use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes resulting in composition which have no commercial purpose separate from that of the article, and that result from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles; except that fluids and particles are not considered articles regardless of shape or design.”

EPA considers imported items articles if they are manufactured in a specific shape or design for a particular end-use application and this design is maintained as an essential feature in the finished product. Thus, EPA views materials such as metal or plastic sheets, wire, coated fabric, rolled carpet, sheets of plywood, and other similar materials as articles, even if, for example, subsequent to import they are rolled or drawn thinner, cut, printed, laminated, or thermoformed, provided they meet the above definition. Chemical substances that are part of such articles are not subject to reporting under the CDR rule. If the shape of an item does not serve a function with respect to the item’s end use (e.g., it is imported in a particular shape for the sake of shipping convenience) then it would not be considered an article. Thus, chemical substances that are part of items not considered by EPA as articles, such as metal ingots, billets, and blooms, are subject to reporting under the CDR rule.

For additional information, see [Fact Sheet: Imported Articles](#).

- The chemical substance is manufactured as an impurity, a non-isolated intermediate, or under any of the other circumstances identified in 40 CFR 711.10(c), referencing 40 CFR 720.30(g) and (h), and 40 CFR 711.10 (d).
- If, within one year prior to the start of the submission period, (*i.e.*, for 2020 CDR, this would be June 1, 2019 to May 31, 2020), you submitted all of the information required by the CDR rule in response to another rule promulgated under section 8(a) of TSCA (such as the Preliminary Assessment Information Reporting (PAIR) rule at 40 CFR Part 717, Subpart B), you are not required to report the same information under CDR for the same chemical substance during 2020 (40 CFR 711.22(a)).

Table 2-5 presents examples of the manufacturing/importing activities listed above.

If you manufacture a CDR reportable chemical substance in quantities greater than 25,000 lb (or 2,500 lb if the subject of certain TSCA actions), and do not qualify for any reporting exemptions, you should evaluate Step III, described in the following section, to determine what information you must report for your chemical substance.

**Table 2-5. Examples of Manufacturing/Importing Activities under Circumstances which do/do not Require Reporting**

| Description  | Reporting Requirement  |
|--|--|
| Company A manufactures 400,000 lb of a chemical intermediate called Chemical X during the production of a polymer. Chemical X is manufactured in Reactor 1 and is subsequently entirely consumed when reacted with other chemicals. Chemical X never leaves Reactor 1, except for sampling purposes.   | Company A does not need to report Chemical X because it is considered to be a non-isolated intermediate and is therefore fully exempt.   |
| Company B manufactures 400,000 lb of a chemical intermediate called Chemical Y during the production of a polymer. Chemical Y is manufactured in Reactor 1 and transferred to a storage tank until needed. Chemical Y is then transferred to Reactor 2 where it is mixed with other reactants to form the desired polymer, at which point Chemical Y is destroyed. Chemical Y never leaves this production site. | Company B is required to report Chemical Y. When Chemical Y was transferred to the storage tank, it was isolated, and, thus, does not meet the definition for “non-isolated intermediate.” |
| Company C imports 10 million lb of Chemical Z in the form of thin sheets. Company C cuts these sheets into the desired size and shape, which are sold to consumers.  | Company C is not required to report Chemical Z because it is considered to be an article and therefore exempt from reporting.  |
| Company D imports 10 million lb of Chemical W in the form of pellets. Company D subsequently melts and molds Chemical W into the desired shape, which is sold directly to consumers.   | Company D is required to report Chemical W because it imported pellets whose shape or design when imported was not related to their end use.   |
| Company D domestically manufactures 10 million lb of Chemical W. Company D subsequently sells Chemical W to Company E in the form of pellets. Company E melts and molds the pellets.   | Company D is required to report as the manufacturer of Chemical W. Company E is not required to report because it is neither manufacturing nor importing Chemical W.                       |

### 2.3 Step III: What Information Must You Report?

Once you determine from Steps I and II that you are a manufacturer (including importer) of a CDR reportable chemical substance and are required to report, this section will help you determine what information you must report.

You are required to report the information described in 40 CFR 711.15(b) in Parts I, II (Sections A – C), and III and, unless you qualify for a partial exemption, also Part II – Section D of the Form U.

**The reporting threshold for processing and use activities is the same as that for manufacturing information.**

You must use the same reporting threshold for reporting processing and use information as you use for reporting all manufacturing information (i.e., either 25,000 lb or 2,500 lb).

Basic company and site identification information, (submitted on Part I of the Form U) is required by 40 CFR 711.15(b)(1) and (b)(2). Chemical identification and information pertaining to the manufacture (including import) of chemical substances (submitted on Part II – Sections A – C of the Form U) is required by 40 CFR 711.15(b)(3). Note that the basic company and site information is reported once per site, while the manufacturing information is reported separately

for each reportable chemical substance at the site. Industrial processing and use, and consumer and commercial uses of the chemical substance (submitted on Part II – Section D of the Form U) is required by 40 CFR 711.15(b)(4). Certain manufacturing information and all processing and use information are only reported for the principal reporting year.

Manufacturers (including importers) of partially exempt chemical substances listed in 40 CFR 711.6(b)(1) and 711.6(b)(2) are not required to report processing and use information described in 40 CFR 711.15(b)(4) for those chemical substances, but are otherwise required to report the information requested on basic identity and manufacturing information described in 40 CFR 711.15(b)(2) and (3) for those chemical substances. Note that this partial exemption is negated if the chemical substance is the subject of certain TSCA actions (see Table B-2 in the appendix).

Figure 2-4 presents a decision logic diagram to assist you in determining the CDR information you must report. The following subsections explain each question in greater detail.

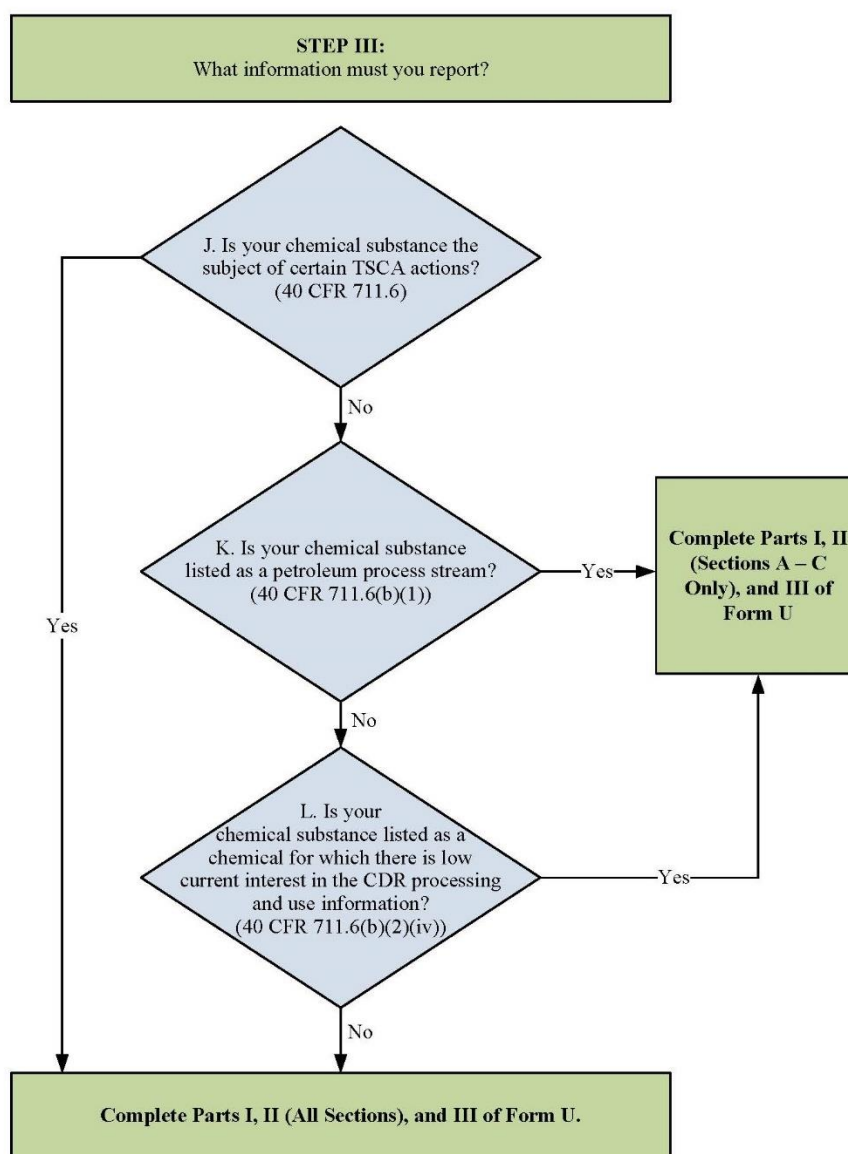


Figure 2-4. Decision Logic Diagram for Evaluating Step III

### **2.3.1 Is Your Chemical Substance Subject to Full Reporting due to Its TSCA Regulatory or Consent Agreement Status? (Question J)**

Chemical substances that are the subject of certain TSCA regulatory actions (40 CFR 711.6). See Section 2.1.4 for a more detailed description of the chemical substances that meet these criteria. If you manufacture (including import) these chemical substances at quantities at or above the applicable reporting threshold (i.e., either 25,000 or 2,500 lb if the subject of certain TSCA actions), you must report all CDR information (i.e., manufacturing, processing, and use information) regardless of any exemptions for which the chemical substance would otherwise qualify. The SRS provides information on TSCA regulatory status of chemical substances.

If your chemical substance is not part of a TSCA regulatory action or consent agreement, continue to evaluate Questions K and L as seen on Figure 2-4 and described in the following sections to determine whether your chemical substance is partially exempt.

### **2.3.2 Is Your Chemical Substance Listed as a Petroleum Process Stream? (Question K)**

Manufacturers (including importers) of certain petroleum process streams, regardless of the production volume, do not need to complete Part II – Section D of the Form U for these chemical substances. The chemical substances termed “petroleum process streams” for purposes of CDR that are partially exempt from CDR requirements are those listed by CAS Registry Number at 40 CFR 711.6(b)(1).

### **2.3.3 Is Your Chemical Substance Listed as a Chemical for which There is Low Current Interest in the CDR Processing and Use Information? (Question L)**

EPA created a partial exemption for certain chemical substances for which EPA has identified a low current interest in their processing and use information. The specific chemical substances are listed at 40 CFR 711.6(b)(2)(iv). The most recent additions to the partially exempt chemicals list can be found on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

If your CDR reportable chemical substance manufactured (including imported) in quantities at or above the applicable reporting threshold (i.e., either 25,000 or 2,500 lb if the chemical substance is the subject of certain TSCA actions) is partially exempt, you are required to report Parts I, II (only Sections A – C), and III of the reporting form. Otherwise, you are required to report Parts I, II (Sections A – D), and III of the reporting form, covering manufacturing, processing, and use information for your CDR reportable chemical substance. Chapter 3 provides information about when you must report this information to EPA.



**Example 2-6.** Company ABC produces Chemical Q, which is not the subject of any of the TSCA actions listed in 40 CFR 711.6 or 711.8(b), nor is it listed as a petroleum process stream or identified as low current interest for EPA. At the site, Chemical Q was produced in amounts of 30,000 lb in 2016, 10,000 lb in 2017, 50,000 lb in 2018, and 5,000 lb in 2019.

Because Chemical Q is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b), the 25,000 lb threshold would be applicable for Chemical Q. Since the 25,000 lb threshold was exceeded at least once from 2016 to 2019 (in this case, in 2016 and 2018), Company ABC would be subject to reporting for CDR 2020. Chemical Q is not the subject of any of the TSCA actions listed in 711.6, is not listed as a petroleum process stream or identified as low current interest for EPA, so it is not partially exempt. Therefore, for the principal reporting year of 2019 for CDR 2020, Company ABC would report additional manufacturing information and the processing and use data based on the 5,000 lb it produced that year.

**Example 2-7.** Company DEF begins producing Chemical Z in 2017. Chemical Z is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b). The production volumes at the site are 2,000 lb in 2017, 25,000 lb in 2018, and no production for 2019.

Chemical Z is not the subject of any of the TSCA actions listed in 40 CFR 711.8(b); therefore, the 25,000 lb threshold would be applicable for Chemical Z. Since the 25,000 lb threshold was met in 2018, Company DEF would be subject to reporting. However, since there was no production in 2019, the principal reporting year for CDR 2020, the production volume would be reported as zero, the manufacturing information needed to be reported would be limited to the company and plant site information (40 CFR 711.15(b)(2)) and the chemical specific information on identity as well as the production volume for 2017 and 2018 (40 CFR 711.15(b)(3)).

### 3. When You Must Report

You are required to report information pertaining to the calendar years since the last principal reporting year during the CDR submission period, as specified in 40 CFR 711.20. As an example, for the 2020 reporting cycle, you are required to report information pertaining to calendar years 2016, 2017, 2018, and 2019, because the previous principal reporting year was 2015. You are required to report this information during the 2020 submission period beginning June 1, 2020 and ending September 30, 2020.

Your report must be submitted to EPA, using e-CDRweb (the electronic reporting tool) via EPA's Central Data Exchange (CDX) no later than the close of the submission period. You should note that registration with CDX is required prior to accessing e-CDRweb to submit your CDR information (40 CFR 711.35). To get you started, two guides are available on the CDR website ([www.epa.gov/cdr](http://www.epa.gov/cdr)):

- CSPP CDX Registration Guide, which covers the specifics of CDX registration and accessing the e-CDRweb reporting tool.
- e-CDRweb Getting Started Guide, which provides information for getting started with the reporting tool and includes representative screenshots.

If you are required to report, failure to file your report during this period is a violation of TSCA sections 8(a) and 15 and may subject you to penalties (40 CFR 711.1(c)).

## 4. Instructions for Completing CDR Form U

This chapter will help you complete the CDR Form U. Section 4.1 describes how to certify your submission. Section 4.2 discusses the reporting standard – the effort required to comply with the CDR rule. Sections 4.3 through 4.10 provide information to help you complete each required section of the Form U.

You are required to use the CDR reporting tool, e-CDRweb, to complete and submit the CDR Form U for each CDR reportable chemical substance. If you are reporting information for more than one chemical substance at your site, you must report information for all reportable chemical substances on one Form U. If you are reporting for multiple sites, you must submit a separate Form U for each site.

The Form U (also referred to as the Primary Form U) is comprised of a certification statement and three parts, as follows:

- The certification statement and Part I of the Form U are completed once per reporting site. Part I contains company, site, and contact information.
- Part II – Sections A – C is completed for each reportable chemical substance at the site and contains information associated with the identity, manufacture, and properties of the chemical substance.
- Part II – Section D is completed for each reportable chemical substance at the site and contains information associated with the processing and use of the chemical substance.
- Part III is completed for each reportable chemical substance at the site for which confidentiality claims are made for one or more data elements, when substantiations of the confidentiality claims are required at the time of data submission.

The Secondary Form U is reserved for the special case of a joint submission and is completed by the secondary submitter.

**Note:** Items such as the validation page and the SRS search page will appear in separate windows. As described in the e-CDRweb Getting Started Guide, ensure that your pop-up blocker is disabled before you begin to complete the Form U.

### 4.1 Certification

Your CDR submission must be certified, indicating that your submitted information has been completed in compliance with the CDR requirements and that any information required to substantiate a confidentiality claim is true and correct. To certify, the certification statement must be electronically signed and dated by an authorized official at your company. The authorized official typically is a senior official with management responsibility for the person (or persons) completing the form. You must include the printed name, title, and email address for the person signing the certification. See the user guide including CDX Registration for information on how to complete an electronic signature agreement.

This certification statement applies to all the information supplied on the form. The certification statements appear when the submission process has been initiated, at which time the submitter must either certify or cancel the submission process. Note that knowingly providing false or misleading information or concealing required information may be punishable by fine or imprisonment or both under TSCA section 16(b).

## 4.2 Reporting Standard

Submitters are required to exercise certain levels of due diligence in gathering the information required by the CDR rule. You must report your information to the extent that the information is **known to or reasonably ascertainable** by you and your company.

The term “known to or reasonably ascertainable by” is defined in 40 CFR 704.3, meaning all information in a person’s possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know.

Under TSCA section 8(a), EPA may collect information associated with chemical substances to the extent that it is known to or reasonably ascertainable by the submitter. This includes, but is not limited to, information that may be possessed by employees or other agents of the company reporting under the CDR rule, including persons involved in the research, development, manufacturing, or marketing of a chemical substance and includes knowledge gained through discussions, symposia, and technical publications. For purposes of CDR, the known to or reasonably ascertainable by standard applies to all the information required by the rule.

Examples of types of information that are considered to be in a person’s possession or control, or that a reasonable person similarly situated might be expected to possess, control, or know include:

- Files maintained by the submitter, such as marketing studies, sales reports, or customer surveys;
- Information contained in standard references, such as a material safety data sheet (MSDS) or safety data sheet (SDS), that contain use information or concentrations of chemical substances in mixtures; and
- Information from the Chemical Abstracts Service (CAS) and from Dun & Bradstreet D-U-N S®.

The hypothetical examples in Table 4-1 illustrate the anticipated application of the “known to or reasonably ascertainable” reporting standard, in the specific context of the collection of processing and use data under the CDR. Because the standard applies on a case-by-case basis, however, these examples cannot substitute for a complete analysis of a submitter’s particular circumstances.

**Table 4-1. Examples of the Application of the “Known to or Reasonably Ascertainable” Reporting Standard for Processing and Use Data.**

| Scenarios, Actions, and Outcomes   |                         |
|--|-------------------------|
| <p><b>Scenario:</b> Company XYZ discovers that it has no knowledge of how a particular reportable chemical substance (chemical substance #1) is processed or used by its customers. Company XYZ usually maintains marketing data documenting customers’ use of its chemicals, in line with the reasonable business practices typical of comparable manufacturers, but it irrevocably lost these data for chemical substance #1 due to an inadvertent computer malfunction. Company XYZ has many customers, but it expects that it could substantially reconstruct this missing information by briefly contacting its largest customer and asking that customer what chemical substance #1 is generally used for.</p> |                         |
| <b>Application of KRA Reporting Standard:</b>  |                         |
| <b>If:</b>   | <b>Then:</b>            |
| Company XYZ contacts its largest customer and reports on the basis of the processing and use data that the customer was willing to provide.  | Duties Likely Fulfilled |
| Company XYZ did not endeavor to supplement the information it already knew.  | Duties Not Fulfilled    |
| <p><b>Scenario:</b> Company XYZ has never maintained information on how a particular reportable chemical substance (chemical substance #2) is processed or used by its customers. However, it is typical for comparable manufacturers to collect such information as part of their reasonable business practices. Company XYZ has many customers but it expects that it could substantially fill this data gap by reviewing the public website of its largest customer.</p>  |                         |
| <b>Application of KRA Reporting Standard:</b>  |                         |
| <b>If:</b>   | <b>Then:</b>            |
| Company XYZ reviews its largest customer’s website, and reports on the basis of the information contained in the website.  | Duties Likely Fulfilled |
| Company XYZ did not endeavor to supplement the information it already knew.  | Duties Not Fulfilled    |
| <p><b>Scenario:</b> Company ABC maintains seasonal marketing data on changes in use patterns for a particular chemical substance (chemical substance #3). Comparable manufacturers typically only maintain such data on an annual basis, in line with reasonable business practices. Company ABC irrevocably loses its summer marketing data for chemical substance #3, due to an inadvertent computer malfunction. Company ABC expects that it could substantially reconstruct the missing summer marketing data by contacting its largest customer and asking the customer what it used or processed chemical substance #3 for in the past summer.</p>   |                         |
| <b>Application of KRA Reporting Standard:</b>  |                         |
| <b>If:</b>   | <b>Then:</b>            |
| Instead of attempting to reconstruct the summer data by contacting its largest customer, Company ABC reports on the basis of the processing and use data that it already knows (regarding the winter, spring, and fall of the year).   | Duties Likely Fulfilled |
| Company ABC designated the information as “not known or reasonably ascertainable” simply because one of the seasonal marketing reports was missing.  | Duties Not Fulfilled    |

| Scenarios, Actions, and Outcomes  |                         |
|---|-------------------------|
| <p><b>Scenario:</b> Company ABC has never maintained information on how a particular reportable chemical substance (chemical substance #4) is processed or used by its customers. However, it is typical for comparable manufacturers to collect such information as part of their reasonable business practices. Company ABC has one major customer and ten minor customers.</p>   |                         |
| <p><b>Application of KRA Reporting Standard:</b></p>  |                         |
| <b>If:</b>  | <b>Then:</b>            |
| Company ABC asks its major customer to supply information about how chemical substance #4 is processed and used, but that customer is unwilling to supply this information. Company ABC reasonably expects that the only remaining way to substantially fill this data gap would be to send a survey to its ten minor customers. Company ABC reports that the information is “not known or reasonably ascertainable” to it. | Duties Likely Fulfilled |
| Company ABC did not endeavor to obtain processing and use information from its customers and designated the information as “not known or reasonably ascertainable.”   | Duties Not Fulfilled    |

### 4.3 Part I - Section A. Parent Company Information<sup>5</sup>

You must provide information about your parent company. For purposes of CDR, a parent company is the highest-level company of your site’s ownership hierarchy as of the start of the submission period according to the definitions of *parent company* and *highest-level parent company* at 40 CFR 711.3. Report your highest-level parent company located in the United States and, if one exists, the highest-level foreign-based parent company (40 CFR 711.15(b)(2)(i)). For each parent company, provide the company name, address, and D&B number following the instructions, including the naming conventions, provided below. Table 4-2 contains examples of how to identify the parent company(ies) in different situations.

| Table 4-2. Applying Highest-level Parent Company Definition in Different Situations  |   |
|--|---|
| <i>Site Ownership</i>  | <i>U.S. and/or Foreign Parent Company</i>   |
| (1) If the site is entirely owned by a single U.S. company that is not owned by another company  | then that single company is the U.S. parent company and there is no foreign parent company.   |
| (2) If the site is entirely owned by a single U.S. company that is, itself, owned by another U.S.-based company (e.g., it is a division or subsidiary of a higher-level company) | the highest-level domestic company in the ownership hierarchy is the U.S. parent company. If there is a higher-level parent company that is outside of the United States, the highest-level foreign company in the ownership hierarchy is the foreign parent company. |

<sup>5</sup> See Sec 4.7.1 for information concerning CBI claims for Parent Company Information.

| <b>Table 4-2. Applying Highest-level Parent Company Definition in Different Situations</b>  |   |
|---|---|
| <b>Site Ownership</b>   | <b>U.S. and/or Foreign Parent Company</b>   |
| (3) If the site is owned by more than one company (e.g., company A owns 40 percent, company B owns 35 percent, and company C owns 25 percent of the site) | <p>the company with the largest ownership interest in the site is the parent company. Under this scenario, this would be either company A itself (if it doesn't have a U.S.-based parent company), company A's parent, or, if it exists, a single parent company that owns both company B and company C, in which case that single parent company would have the largest ownership interest (e.g., corporation X owns companies B and C, for a total ownership of 60 percent for the site).</p> <p>If the parent company is a U.S. company owned by another U.S. company, then the highest-level domestic company in the ownership hierarchy is the U.S. parent company. If the U.S. parent company has a higher-level foreign company in the ownership hierarchy, then the highest-level foreign company in the ownership hierarchy is the foreign parent company.</p> <p>If the parent company is a foreign company, then the site is its own U.S. parent company and the foreign parent company is the highest-level foreign company in the ownership hierarchy.</p> |
| (4) If the site is ultimately owned by a 50:50 joint venture or a cooperative   | the joint venture or cooperative is its own U.S. parent company.  |
|   | If the site is owned by a U.S. joint venture or cooperative, the highest level of the joint venture or cooperative is the U.S. parent company.  |
|   | If the site is owned by a joint venture or cooperative outside the United States, the highest level of the joint venture or cooperative outside the United States is the foreign parent company.  |
| (5) If the site is entirely owned by a foreign company (i.e., without a U.S.-based subsidiary within the facility's ownership hierarchy)                  | the site is the U.S. parent company and the highest-level foreign parent company is the foreign parent company.   |
| (6) If the site is a federally owned facility   | the highest-level federal agency or department is the U.S. parent company.  |
| (7) If the site is owned by a non-federal public entity   | that entity (such as a municipality, State, or tribe) is the U.S. parent company.   |

### 4.3.1 U.S. and Foreign Parent Company Name(s)

All sites must enter the full name of the U.S. parent company, and, if applicable, the full name of the foreign parent company.

EPA requires that parent companies be referenced consistently by the same name so that CDR site-level information can be aggregated to the associated parent company (40 CFR 711.15(b)(2)(i)). This can be challenging because filers within the same parent company often submit names with small variations (e.g., Exopack vs. Exopack Holdings Corp). When reporting your parent company name, eliminate all periods, commas, and all leading, trailing, and duplicate spaces. Replace commonly used acronyms and corporate terms according to Table 4-3:

| <b>Table 4-3. Parent Company Name Standardization Rules</b> |                 |  |                 |                           |
|---|-----------------|--|-----------------|---------------------------|
| <i>Use This</i>   | <i>Not This</i> |  | <i>Use This</i> | <i>Not This</i>           |
| &   | AND             |  | LP              | LIMITED PARTNERSHIP       |
| CORP  | CORPORATION     |  | LTD             | LIMITED                   |
| ASSOC   | ASSOCIATION     |  | LLC             | LIMITED LIABILITY COMPANY |
| CO  | COMPANY         |  |                 | LIMITED LIABILITY CO.     |
| COS   | COMPANIES       |  | PTNR            | PARTNERSHIP               |
| DIV   | DIVISION        |  | USA             | U.S.A.                    |
| INC   | INCORP          |  |                 | U.S.A                     |
|   | INCORP.         |  |                 | U S A                     |
|   | INCORPORATED    |  |                 | UNITED STATES OF AMERICA  |
|   | INCORPERATED    |  |                 | UNITED STATES             |

### 4.3.2 Parent Company Dun & Bradstreet D-U-N-S® Number

Enter the 9-digit Dun & Bradstreet D-U-N-S® number (D&B number) associated with each parent company name. The number may be obtained from the treasurer or financial officer of the company.

D&B assigns separate numbers to subsidiaries and parent companies; you should make sure that the number you provide EPA belongs to your U.S. or foreign parent company. To verify the accuracy of your site and parent company D&B number and name, go to [www.dnb.com/product/dlw/form\\_cc4.htm](http://www.dnb.com/product/dlw/form_cc4.htm) or call 1-800-234-3867. Callers to the toll-free phone number should understand that the D&B support representatives will need to verify that callers requesting the D&B number are an agent of the business. D&B recommends knowing basic information such as when the business originated, officer names, and the name, address, and phone number for the facility.

You must obtain a D&B number for your parent company if none exists. If your parent company does not have a D&B number, you can request one from your local office of D&B. There is no charge for this service and you are not required to disclose sensitive financial information to get a number. For more information on obtaining a D&B number, see [www.dnb.com](http://www.dnb.com). If you are already listed with D&B, but do not know your number, you can call 1-800-234-3867 for assistance.



### 4.3.3 Parent Company Address

Enter the mailing address of each parent company, including the appropriate county or parish, using standard addressing techniques as established by the U.S. or international postal services. Post office box numbers should be accompanied by a street address. If a post office box is listed, it must be entered after the street address. Standardized conventions for listing a street address should be used to account for common formatting discrepancies, such as punctuation (by eliminating all periods, commas, and all leading, trailing, and duplicate spaces), capitalization, and abbreviations in order to increase the reliability and usability of the data. Replace commonly used acronyms and street abbreviations according to Table 4-4:

| <b>Table 4-4. Parent Company Street Address Standardization Rules</b> |                 |                 |                 |
|---|-----------------|-----------------|-----------------|
| <i>Use This</i>   | <i>Not This</i> | <i>Use This</i> | <i>Not This</i> |
| AVE   | AVENUE          | LN              | LANE            |
|   | AVE.            |                 | LN.             |
| BLVD  | BOULEVARD       | PL              | PLACE           |
|   | BLVD.           |                 | PL.             |
| DR  | DRIVE           | PO BOX          | P.O. BOX        |
|   | DR.             | RD              | ROAD            |
| HWY   | HIGHWAY         |                 | RD.             |
|   | HWY.            | RTE             | ROUTE           |
| JCT   | JUNCTION        | ST              | STREET          |
|   | JCT.            |                 | ST.             |

## 4.4 Part I - Section B. Site Information<sup>6</sup>

EPA requires the following information to be reported for each plant site at which a reportable chemical substance is manufactured: the site name, site D&B number, street address, city, county (or parish), state, and zip code.

### 4.4.1 Special Provisions for Certain Sites

The definition of site at 40 CFR 711.3 has special provisions for the following situations: importation, manufacturing by contract (i.e., co-manufacturing), and portable manufacturing units sent out from a single distribution center. In some situations, these provisions have a direct bearing on the site which must be identified in Part I, Section B of the Form U.

#### 4.4.1.1 Special Provisions for Importers

The site where you import a chemical substance is considered the site of the operating unit within your organization that is directly responsible for importing the chemical substance and that controls the import transaction. For CDR, all importers must provide a U.S. address for the controlling site; this site may be your company's headquarters in the United States. If there is

<sup>6</sup> See Sec 4.8.1 for information concerning CBI claims for Site Information.

no such operating unit or headquarters in the United States, the site address for the importer is the U.S. address of an agent acting on the importer's behalf who is authorized to accept service of process for the importer (40 CFR 711.3). In the event that more than one person may meet the definition of "importer" (40 CFR 704.3), only one person should report. See 40 CFR 711.22(b).

**Example 4-1.** The headquarters of your company is located in New Town. Your company owns a plant site located in Old Town, which is in a different state. A headquarters employee purchases and arranges to have 500,000 lb of Chemical X imported from Japan to the Old Town plant site. The headquarters site in New Town controls the import transaction and is the site reported on the Form U.

**Example 4-2.** The headquarters of your company is located in New Town. Your company owns three manufacturing sites, Sites 1, 2, and 3, all located in different states. An employee based at headquarters purchases and arranges to have 500,000 lb of Chemical X imported from Japan. The chemical is distributed as follows: 20,000 lb is delivered to Site 1; 180,000 lb is delivered to Site 2; and 300,000 lb is delivered to Site 3. The headquarters in New Town controls the import transaction for all three sites, and therefore is responsible for reporting all 500,000 lb of Chemical X. The site reported on the Form U is New Town.

#### **4.4.1.2 Special Provisions for Manufacturing by Contract**

For chemical substances manufactured under contract, i.e., a co-manufactured chemical, the site is the location where the chemical substance is physically manufactured (definition of *site*, 40 CFR 711.3). When a company contracts with a producing company to manufacture a chemical substance and each party meets the definition of *manufacturer* as set forth in 40 CFR 711.3, there are two procedures available for the reporting of the co-manufactured chemical. Use the same procedure selected when identifying the subject chemical substance. See Section 4.9 for additional information.

#### **4.4.1.3 Special Provisions for Portable Manufacturing Units**

Two examples of portable manufacturing units are tanks used to manufacture calcium hydroxide slurry for use in building construction and road and highway projects, and tanks used to mix anhydrous ammonia and water to manufacture ammonium hydroxide prior to application on agricultural lands. EPA is interested in including chemical substance manufacturing that is, for instance, performed by road crews or is occurring at construction sites at which chemical substances are mixed on site to create a different chemical substance. Because the site of physical manufacturing could change on a frequent basis, the distribution center shall be considered the site for portable manufacturing units sent to different locations from a single distribution center. Manufacturers would report the aggregated production volume for all of the portable manufacturing units sent out to different locations from a single distribution center whose address would be reported as the site location.

#### 4.4.2 Site Name

Enter the full name of the site. You should include any additional identifying terms such as Inc, Ltd, LLC, etc. Standardized conventions for the naming of a site should be used to address common formatting discrepancies, such as punctuation, capitalization, and abbreviations (e.g., “CORP” for “Corporation”) and to increase the reliability and usability of the data. See Table 4-3 in Section 4.3.1. Note that the e-CDRweb reporting tool may automatically populate the site name from the site used for CDX registration. In that case, you do not need to change the populated site name to conform with Table 4-3.

#### 4.4.3 Site Dun & Bradstreet Number D-U-N-S®

D&B assigns separate numbers to subsidiaries and parent companies; make sure that the number you provide EPA belongs to the individual site for which you are reporting. You must obtain a D&B number for the site, if none exists. If the site does not have a D&B number, you can request one from your local office of D&B. Please refer to Section 4.3.2 for information on obtaining a D&B number.

#### 4.4.4 Site Street Address

Enter your site mailing address, including the appropriate county or parish (or other jurisdictional indicator), using standard addressing techniques as established by the U.S. Postal Service. Post Office box numbers should be accompanied by a street address. If a Post Office box is listed, it should be listed after the street address. Standardized conventions for listing a street address will be used to account for common formatting discrepancies, such as punctuation (by eliminating all periods, commas, and all leading, trailing, and duplicate spaces), capitalization, and abbreviations in order to increase the reliability and usability of the data. See Table 4-4 in Section 4.3.3. Note that the e-CDRweb reporting tool may automatically populate the site address from the site used for CDX registration. In that case, you do not need to change the populated site address to conform with Table 4-4.

#### 4.4.5 NAICS code

Enter the appropriate six-digit North American Industry Classification System (NAICS) code or choose the correct code for each site reported. The NAICS code is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. Information about NAICS codes can be obtained from the U.S. Census website at [www.census.gov/eos/www/naics/](http://www.census.gov/eos/www/naics/).

In some circumstances it may be challenging to identify a single NAICS code for the site. In those circumstances, you may report up to three NAICS codes to more appropriately describe your site. Entering more than one NAICS code is expected to be an unusual situation. For example, headquarter sites that import for other sites may have difficulty identifying a single NAICS code.

## 4.5 Part II - Section A. Chemical Substance Identification

You must use the Agency's Substance Registry Services (SRS) to report the chemical substance identification information consisting of the currently correct Chemical Abstracts (CA) Index Name and the correct corresponding Chemical Abstracts Service (CAS) Registry Number (CASRN), as described in Sections 4.5.2 and 4.5.4. The SRS is EPA's central system for information about chemical substances that are tracked or regulated by EPA or other sources. It is the authoritative resource for basic information about chemicals, biological organisms, and other chemical substances of interest to EPA and its state and tribal partners.

The correct CA Index Name and CASRN must be reported separately for each CDR reportable chemical substance at your site. If you wish to report a chemical substance listed on the confidential portion of the TSCA Inventory, you will need to report the chemical substance using a TSCA Accession Number (the generic name corresponding to the Accession Number will automatically be incorporated into your form). See Section 4.5.1 for details on how to report confidential chemical substances.

You will be able to connect directly to the SRS database from the reporting tool to report the correct CA Index Names and CASRNs for all of your non-confidential chemical substances on the TSCA Inventory. TSCA Accession Numbers and generic chemical names will be listed instead of CA Index Names and CASRNs for chemical substances on the confidential portion of the TSCA Inventory. The use of the SRS to obtain the identities for all CDR reportable chemical substances is a convenient way to meet the chemical nomenclature requirement and will help to prevent errors in the reporting of chemical identification information for the CDR. Furthermore, after choosing a chemical substance, a message will describe whether the chemical substance is on the lists of full or partial exemption chemical substances, as well as show any regulations that affect the reporting volume threshold, full or partial exemption eligibility, and/or small manufacturer (or small government) exemption eligibility.

### 4.5.1 Confidentiality of Chemical Substance Information

If you wish to report a chemical substance listed on the confidential portion of the TSCA Inventory, you will need to report the chemical substance using a TSCA Accession Number. The generic chemical name corresponding to the TSCA Accession Number will also be automatically incorporated into your report.

The identities of chemical substances listed on the public version of the TSCA Inventory are already publicly known. Therefore, claims for confidential treatment of the identity of a chemical substance which is listed on the public section of the TSCA Inventory are not valid and will not be allowed (40 CFR 711.30(a)(2)(i)).

You may claim as confidential the identity of a chemical substance that is already listed as confidential on the TSCA Inventory (40 CFR 711.30(c)). To do so, you must check the appropriate CBI box in Part II, Section A and submit detailed written answers to the substantiation questions listed in Table 4-5. The confidentiality claim is only applicable to the information as it is listed on the confidential portion of the TSCA Inventory; the corresponding accession number and generic name listed on the public portion of the TSCA Inventory is already public and cannot be claimed as confidential.

CBI claims for chemical identity will be accepted only when accompanied by a separate written substantiation for the chemical substances claimed as CBI. Clicking the checkbox next to “CBI for Chemical Identification” triggers the substantiation questions to appear. If you fail to substantiate the claim for confidentiality of the chemical identity in accordance with applicable rules, EPA may make the information available to the public without further notice to you. Note that checking this box does not protect the link between your company and the chemical substance; it only asserts a CBI claim for the specific identity of the chemical substance as listed on the confidential portion of the TSCA Inventory. Additional information about making and substantiating confidentiality claims is available on EPA’s website, at [www.epa.gov/tsca-cbi](http://www.epa.gov/tsca-cbi).

**Table 4-5. Substantiation Questions to be Answered when Asserting Chemical Identity CBI Claims (40 CFR 711.30(b) and (c))**

| No. | Question  |
|-----|---|
| 1.  | Will disclosure of the information claimed as confidential likely cause substantial harm to your business’s competitive position? If you answered yes, describe the substantial harmful effects that would likely result to your competitive position if the information is disclosed, including but not limited to how a competitor could use such information and the causal relationship between the disclosure and the harmful effects.   |
| 2.  | To the extent your business has disclosed the information to others (both internally and externally), has your business taken precautions to protect the confidentiality of the disclosed information? If yes, please explain and identify the specific measures, including but not limited to internal controls, that your business has taken to protect the information claimed as confidential.  |
| 3.  | (A) Is any of the information claimed as confidential required to be publicly disclosed under any other Federal law? If yes, please explain.<br>(B) Does any of the information claimed as confidential otherwise appear in any public documents, including (but not limited to) safety data sheets; advertising or promotional material; professional or trade publications; state, local, or Federal agency files; or any other media or publications available to the general public? If yes, please explain why the information should be treated as confidential.<br>(C) Does any of the information claimed as confidential appear in one or more patents or patent applications? If yes, please provide the associated patent number or patent application number (or numbers) and explain why the information should be treated as confidential.  |
| 4.  | Does any of the information that you are claiming as confidential constitute a trade secret? If yes, please explain how the information you are claiming as confidential constitutes a trade secret.  |
| 5.  | Is the claim of confidentiality intended to last less than 10 years (see TSCA section 14(e)(1)(B))? If yes, please indicate the number of years (between 1–10 years) or the specific date after which the claim is withdrawn.   |
| 6.  | Has EPA, another federal agency, or court made any confidentiality determination regarding information associated with this chemical substance? If yes, please provide the circumstances associated with the prior determination, whether the information was found to be entitled to confidential treatment, the entity that made the decision, and the date of the determination.   |
| 7.  | Is this chemical substance publicly known (including by your competitors) to be in U.S. commerce? If yes, please explain why the specific chemical identity should still be afforded confidential status ( <i>e.g.</i> , the chemical substance is publicly known only as being distributed in commerce for research and development purposes, but no other information about the current commercial distribution of the chemical substance in the United States is publicly available). If no, please complete the certification statement:<br><br>I certify that on the date referenced, I searched the internet for the chemical substance identity ( <i>i.e.</i> , by both chemical substance name and CASRN). I did not find a reference to this chemical substance that would indicate that the chemical is being manufactured or imported by anyone for a commercial purpose in the United States. [provide date]. |

| No. | Question  |
|-----|---|
| 8.  | Does this particular chemical substance leave the site of manufacture (including import) in any form, <i>e.g.</i> , as a product, effluent, emission? If yes, please explain what measures have been taken to guard against the discovery of its identity.  |
| 9.  | If the chemical substance leaves the site in a form that is available to the public or your competitors, can the chemical identity be readily discovered by analysis of the substance ( <i>e.g.</i> , product, effluent, emission), in light of existing technologies and any costs, difficulties, or limitations associated with such technologies? Please explain why or why not. |
| 10. | Would disclosure of the specific chemical name release confidential process information? If yes, please explain.  |

#### 4.5.2 Chemical Substance Identifying Number

Every chemical substance reported in accordance with CDR must be accompanied by its correct CASRN, corresponding to the chemical substance's specific chemical name as described in 4.5.4. (40 CFR 711.15(b)(3)(i)). You may enter either a CASRN or the specific name of the chemical substance to select the appropriate CASRN/Chemical Abstracts (CA) Index Name combination from the SRS database.

Report the correct CASRN for your chemical substance if it is listed on the non-confidential portion of the TSCA Inventory. If your chemical substance is listed on the confidential portion of the TSCA Inventory, report the EPA-designated TSCA Accession Number. Each TSCA Inventory chemical substance has at least one of these types of numbers.

In the case of a chemical substance listed on the confidential portion of the TSCA Inventory, report the TSCA Accession Number as the chemical identifying number. Note that the SRS contains a cross-reference list that displays the Accession Number, generic chemical name, and PMN case number (or for an initial TSCA Inventory substance, the TSCA Inventory reporting form number) for any chemical substance listed on the confidential portion of the TSCA Inventory.

There are certain circumstances where you occasionally may not be sure of the particular PMN case number and Accession Number the Agency has assigned to one of its confidential chemical substances, such that you would not be able to definitely determine this solely from searching the SRS. This could happen, for example, if the chemical substance were originally reported as part of a consolidated PMN and you did not learn from EPA which particular case number in the consolidated PMN number sequence corresponds to which of the several reported confidential chemical substances. This also could happen if a certain PMN represented a mixture of two or more confidential chemical substances, such that multiple Accession Numbers were assigned to the different chemical substances reported in that single PMN, and you didn't already request the particular Accession Numbers from EPA for the individual chemical substances comprising that multi-component type of PMN. In such circumstances, you should contact EPA well before initiating CDR reporting to obtain the required Accession Numbers from the Agency.

Submitters who are not able to identify the Accession Number by searching the SRS should contact EPA, in writing on company letterhead, well before initiating CDR reporting to obtain the Accession Number assigned when the Notice of Commencement (NOC) was

submitted to the Agency. Individuals are urged to submit a complete and accurate TSCA Inventory Correspondence at least one month before the submission deadline. Note that incomplete and/or inaccurate requests may be rejected. The Agency will respond to such inquiries in as timely a manner as possible. It is the responsibility of the submitter to contact the Agency for such information in sufficient time to allow for the Agency to respond.

Please send requests for a TSCA Accession Number as soon as possible to:

**By U.S. Postal Service:**

U.S. Environmental Protection Agency  
Office of Pollution Prevention and Toxics  
1200 Pennsylvania Ave NW (7407M)  
Room 6428  
Washington, DC 20460  
Attention: Industrial Chemistry Branch

**By Hand Delivery or Courier:**

U.S. Environmental Protection Agency  
Office of Pollution Prevention and Toxics  
Confidential Business Information Center  
EPA East Building, Room 6428  
1201 Constitution Ave NW,  
Washington, DC 20004  
202-564-8930; 202-564-8940

### 4.5.3 ID Code

The code corresponding to the type of identifying number you selected in the SRS will be entered. See codes in Table 4-6.

**Table 4-6. ID Code for Chemical Identifying Numbers**

| If the Number You are Reporting is a(n) | This Code Will be Entered |
|---|---------------------------|
| TSCA Accession Number                   | A                         |
| CAS Registry Number                     | C                         |

### 4.5.4 Chemical Name

Report your chemical substance using the CA Index Name currently used to list the chemical substance on the TSCA Inventory. You can identify the CA Index name by searching SRS using a CASRN, the specific name of the chemical substance, or related acronyms. In the event that an acronym is used for multiple chemical substances, you should take care to select the correct substance.

In cases where a chemical substance is listed on the confidential portion of the TSCA Inventory, the generic name will automatically be incorporated into your report when you select the Accession Number.

In order to continue to protect the confidentiality of the underlying specific chemical identification information (i.e., the CASRN and specific chemical name as listed on the confidential portion of the inventory), you must claim the chemical identity as confidential and complete the upfront substantiation. The Accession Number and generic chemical name will remain non-confidential. Failure to identify the chemical identity as confidential and complete the upfront substantiation waives any confidentiality claim for the chemical identity and will result in the transfer of the chemical substance from the confidential portion of the TSCA Inventory to the non-confidential, publicly releasable, portion of the TSCA Inventory.

#### 4.5.5 Special Provisions for Joint Submitters of Unknown Chemical Substances

You may report an alternate chemical name, and in the case of importers, a trade name, in those instances where your supplier will not disclose to you the specific chemical name of the imported TSCA Inventory chemical substance or a reactant used to manufacture the TSCA Inventory chemical substance because the information is claimed confidential. In these cases, you and the supplier may report the information required in a joint submission, which is further discussed in Section 4.10 of this chapter. If you, as the importer, cannot provide the chemical name, supply a trade name or other designation to identify the proprietary chemical substance and provide the supplier's (secondary submitter's) company information. Complete as much of the Form U as is known to or reasonably ascertainable by you. In addition, you must use e-CDRweb to ask the supplier (secondary submitter) of the confidential chemical substance to directly provide EPA with the correct chemical identity (as described in Section 4.5.2), in a joint submission with you. Your request to the supplier must include instructions for submitting chemical identity information electronically, using e-CDRweb and CDX (see 40 CFR 711.35), and for clearly referencing your submission. Contact information for the supplier, a trade name or other designation for the chemical substance or mixture, and a copy of the request to the supplier must be included with your submission for the chemical substance. If your connection to your supplier's name and other contact information, including the trade name, is confidential, you must indicate so by checking the CBI box. Failing to check the CBI box may result in EPA making the information publicly available without further notice to you, the submitter. Substantiation of this confidentiality claim is not required at the time of submission.

Similarly, in the event that you as the manufacturer cannot provide the complete chemical identity because you manufacture the reportable chemical substance using a reactant that has a specific chemical identity claimed as confidential by its supplier, supply a trade name or other designation to identify the proprietary chemical substance and provide the supplier's (secondary submitter's) company information. Complete as much of the Form U as you can. In addition, you must use e-CDRweb to ask the supplier to directly provide to EPA the correct chemical identity of the confidential reactant in a joint submission. Such request must include instructions for submitting chemical identity information electronically using e-CDRweb and CDX (see 40 CFR 711.35), and for clearly referencing your submission. Contact information for the supplier, a trade name or other designation for the chemical substance, and a copy of the request to the supplier must be included with your submission referencing the chemical substance. If your connection to your supplier's name and other contact information, including the trade name, is confidential, you must indicate so by checking the CBI box. Failing to check the CBI box may result in EPA making the information publicly available without further notice to you, the submitter. Substantiation of this confidentiality claim is not required at the time of the CDR submission.

In both cases, when the secondary submitter responds to the primary submitter's request, the secondary submitter would use e-CDRweb to identify the chemical substance in question, the associated percent composition (4.D.2.d) and the chemical-specific function (4.D.2.e) of each component chemical substance of the trade name product or mixture. If this information is considered confidential, the secondary (or tertiary, as appropriate) submitter must indicate so by checking the CBI box and, in the case of the chemical identity as listed on the confidential portion of the TSCA Inventory, completing the required substantiation questions (as listed in section 4.5.1 of this document). The chemical-specific function cannot be claimed as confidential



(see section 4.8 of this document for more information). Failing to check the CBI box may result in EPA making the information publicly available without further notice to the submitter.

These special provisions only apply in cases where the supplier will not reveal the pertinent chemical identity to you because it is claimed confidential. In the event that you actually know the chemical identity of a chemical substance subject to CDR reporting, you must provide that information irrespective of a supplier's confidentiality claims.

EPA will only accept joint submissions that are submitted electronically using e-CDRweb and CDX (see 40 CFR 711.35) and that clearly reference the Form U submission to which they refer. See Section 4.10 in this chapter for more information on preparing joint submissions.

## **4.6 Part II – Section B. Technical Contact Information<sup>7</sup>**

This section requests information about the person whom EPA may contact for clarification of the information in your CDR submission. The technical contact should be a person who can answer questions about the reported chemical substance(s). Typically, a person located at the manufacturing site is best able to answer such questions. However, companies may use their discretion in selecting a technical contact or multiple technical contacts, as provided by the e-CDRweb tool. In selecting the technical contact, submitters should consider that EPA may have follow-up questions about a CDR submission years after the submission date. The technical contact need not be the person who signed the certification statement.

### **4.6.1 Technical Contact Name and Company Name**

Enter the name of the person whom EPA may contact for clarification of information submitted on the Form U. Enter the name of the company employing the technical contact. You may use the same technical contact for all chemicals on your submission or you may use a different technical contact for each chemical.

### **4.6.2 Technical Contact Telephone Number and Email Address**

Enter the technical contact's telephone number, including the area code, and the contact's email address. If the technical contact is outside of the United States, include the country code.

### **4.6.3 Technical Contact Mailing Address**

Enter the technical contact's full mailing address, using standard addressing techniques as established by the U.S. or international postal services, as applicable. Post Office box numbers should be accompanied by a street address. If a Post Office box is used as a mailing address, the street address should be given followed by the Post Office box number. Standardized conventions for listing a mailing address will be used to account for common formatting discrepancies, such as punctuation (by eliminating all periods, commas, and all leading, trailing, and duplicate spaces), capitalization, and abbreviations in order to increase the reliability and usability of the data. See Table 4-4 in Section 4.3.3.

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<sup>7</sup> See Sec 4.8.1 for information concerning CBI claims for Technical Contact Information.

## 4.7 Part II – Section C. Manufacturing Information

The following subsections describe the manufacturing information required to be reported for each chemical substance.

### **Summary of substantiation requirements for claims of confidentiality:**

All claims of confidentiality, except for information exempt from substantiation under TSCA section 14(c)(2) such as production volume information (including domestic manufacture and import), and certain information in joint submissions, must be substantiated at the time of submission as required by TSCA section 14(c)(3).

When using e-CDRweb, the CDR electronic reporting application, you will be alerted when CBI substantiations are required.

For additional information about how to answer substantiation questions, visit [www.epa.gov/tsca-cbi](http://www.epa.gov/tsca-cbi) on the EPA website.

For information on EPA's policy of reviewing CBI claims, visit [EPA Review and Determination of CBI Claims under TSCA](#) on the EPA website.

### 4.7.1 Confidentiality of Manufacturing Information

Information reported in the manufacturing section of the CDR reporting form can be claimed as confidential. For most of the data elements, upfront substantiation of the claim is required. Specifically, upfront substantiation:

- IS NOT required for the annual production volumes, imported volume, or domestically manufactured volume.
- IS required for all other data elements.

#### 4.7.1.1 Confidentiality of Company, Site, and Technical Contact Information

Check the appropriate CBI box in this block and complete the substantiation questions to assert a confidentiality claim for the link between the chemical substance and the company or site identity reported in Part I or the technical contact identity reported in Part II – Section B. Checking the CBI box automatically triggers the substantiation questions. See Table 4-7 for substantiation questions related to these data elements. If you fail to substantiate your CBI claims in accordance with the statute and applicable rules, EPA may make the information available to the public without further notice to you. For additional information about how to answer substantiation questions, visit [www.epa.gov/tsca-cbi](http://www.epa.gov/tsca-cbi) on the EPA website.

You may assert a claim of confidentiality for a site, company, or technical contact identity to protect the link between that information and the reported chemical substance. Such claim may only be asserted where the linkage of that information to a reportable chemical substance is confidential and not publicly available. You may claim the connection between

chemical substance and company, site, or technical contact as confidential for some chemical substances for which you are reporting, while not making the claim for others (each chemical substance is reported separately in the Form U). Any confidentiality claims need to be made on a chemical-by-chemical basis. For example, if you claimed as confidential the link between chemical A and your company information and do not claim the link as confidential for chemical B, EPA may make the link between your company and chemical B public without notice.

EPA also has observed that submitters sometimes claim only their company identity, but not their site identity, as confidential. EPA will not impute the existence of a CBI claim for site identity from a CBI claim for company identity, even if the company name appears within the site identity information. In other words, if your intent is to claim company name as confidential you must claim all data elements that reference or allude to company name as CBI. The failure to do this will likely result in a denial of a CBI claim for company name.

#### **4.7.1.2 Confidentiality of Production Volume Information**

Check the appropriate CBI box in this block to assert a confidentiality claim for the associated production volume information being submitted. If you fail to assert your CBI claims in accordance with the statute and applicable rules, EPA may make the information available to the public without further notice to you.

#### **4.7.1.3 Confidentiality of all Other Manufacturing Information**

Check the appropriate CBI box in this block and complete the substantiation questions to assert a confidentiality claim for the associated information being submitted. Checking the CBI box automatically triggers the substantiation questions. See Table 4-7 for substantiation questions related to these data elements. If you fail to substantiate your CBI claims in accordance with the statute and applicable rules, EPA may make the information available to the public without further notice to you. For additional information about how to answer substantiation questions, visit [www.epa.gov/tsca-cbi](http://www.epa.gov/tsca-cbi) on the EPA website.

**Table 4-7. Substantiation Questions to be Answered when Asserting Manufacturing, Processing, and Use-Related Confidentiality Claims (40 CFR 711.30(b))**

| No. | Question   |
|-----|--|
| 1.  | Will disclosure of the information claimed as confidential likely cause substantial harm to your business's competitive position? If you answered yes, describe the substantial harmful effects that would likely result to your competitive position if the information is disclosed, including but not limited to how a competitor could use such information and the causal relationship between the disclosure and the harmful effects.  |
| 2.  | To the extent your business has disclosed the information to others (both internally and externally), has your business taken precautions to protect the confidentiality of the disclosed information? If yes, please explain and identify the specific measures, including but not limited to, internal controls that your business has taken to protect the information claimed as confidential.   |
| 3.  | (A) Is any of the information claimed as confidential required to be publicly disclosed under any other Federal law? If yes, please explain.<br><br>(B) Does any of the information claimed as confidential otherwise appear in any public documents, including (but not limited to) safety data sheets; advertising or promotional material; professional or trade publications; state, local, or Federal agency files; or any other media or publications available to the general public? |

| No. | Question  |
|-----|---|
|     | public? If yes, please explain why the information should be treated as confidential.<br>(C) Does any of the information claimed as confidential appear in one or more patents or patent applications? If yes, please provide the associated patent number or patent application number (or numbers) and explain why the information should be treated as confidential.             |
| 4.  | Does any of the information that you are claiming as confidential constitute a trade secret? If yes, please explain how the information you are claiming as confidential constitutes a trade secret.  |
| 5.  | Is the claim of confidentiality intended to last less than 10 years (see TSCA section 14(e)(1)(B))? If yes, please indicate the number of years (between 1–10 years) or the specific date after which the claim is withdrawn.   |
| 6.  | Has EPA, another federal agency, or court made any confidentiality determination regarding information associated with this chemical substance? If yes, please provide the circumstances associated with the prior determination, whether the information was found to be entitled to confidential treatment, the entity that made the decision, and the date of the determination. |

#### 4.7.2 Reporting Manufacturing Information for the Principal Reporting Year

This section of the CDR describes the manufacturing data elements that should be reported for your CDR reportable chemical substance for the principal reporting year. As an example, for the 2020 submission period the principal reporting year is 2019. If any information is not known or reasonably ascertainable by you (including your company), enter or select “NKRA” for “not known or reasonably ascertainable” in the box corresponding to that data element. You may also check the CBI box next to each data element to claim data as confidential. However, keep in mind that you **cannot** claim an “NKRA” designation as confidential.

##### 4.7.2.1 Activity (Domestically Manufacture and/or Import)

Identify whether the chemical substance is manufactured, imported, or both manufactured and imported.

##### 4.7.2.2 Domestically Manufactured Production Volume

Report the volume of the chemical substance domestically manufactured at your site, in pounds. Report the quantity to at least two significant figures; it should be accurate to the extent known to or reasonably ascertainable by you. Production volumes should be reported in numeric format, without commas (e.g., 6352000). For example, “2 million” or “2 E6” are not acceptable, nor are production volumes with decimals or abbreviations such as M (e.g., 12,000,000 = 12M) or K (e.g., 50,000 = 50K). See Table 4-8 for examples.

##### 4.7.2.3 Imported Production Volume

Report the volume of the chemical substance imported by your site, in pounds. Report the quantity to at least two significant figures; it should be accurate to the extent known to or reasonably ascertainable by you. You should use the same numeric format as described for the domestically manufactured production volume. Imported and domestically manufactured production volumes are reported separately for each chemical substance at each site.

Note that if you import various mixtures containing reportable chemical substances, you should add all import volumes associated with each chemical substance. For instance, if you import three mixtures and each mixture contains Chemical A, then you would determine the volume of Chemical A in each mixture and report the aggregated amount. See Table 4-8 for examples.

#### **4.7.2.4 For Imported Chemical Substances, Is the Chemical Never Physically at Site?**

Report whether or not your imported chemical substance is physically at the reporting site. Report one of the following choices:

- Yes, the imported chemical substance **is never** physically at the reporting site (e.g., if you ship the chemical substance from a foreign country directly to another location such as a warehouse, a processing or use site, or a customer's site),
- No, the imported chemical substance **is** physically present at the reporting site.
- NKRA, it is not known to or reasonably ascertainable by you whether the imported chemical substance is physically present at the reporting site.

#### **4.7.2.5 Volume Used On-Site**

Report the total volume of the domestically manufactured and imported chemical substance used at the reporting site, in pounds. The number represents the volume of the chemical substance that does not leave the manufacturing site and is used, consumed, or chemically reacted on-site. Do not include volumes that are only stored on-site or mixed with other chemical substances, without reaction, and then stored on-site or moved off-site.

The volume used on-site should not exceed the sum of the domestically manufactured and imported volumes minus the volume exported. Note that if you report that the imported chemical substance is never physically present at the reporting site (for example because you ship it directly from a foreign supplier to your client's warehouse), that volume is not used at your site and would not be included in the amount reported as volume used on-site. Report the quantity to at least two significant figures; it should be accurate to the extent known to or reasonably ascertainable by you. You should use the same numeric format as described for the domestically manufactured production volume (see section 4.7.2.2). e-CDRweb has built-in validation systems that provide automated chemical identity/threshold checks. See Table 4-8 for examples.

#### **4.7.2.6 Volume Exported**

Report the volume directly exported and not domestically processed or used, in pounds. The volume exported should not exceed the sum of the domestically manufactured and imported volumes minus volume used on site. Note that direct exporting includes sending a chemical substance to a distributor who then exports it without repackaging it, even if it is relabeled. Direct exporting does not include sending a chemical substance to a distributor who repackages and relabels it. The latter case would be considered a processing and use activity potentially reportable under Part II – Section D of the Form U. Report the quantity to at least two significant figures; it should be accurate to the extent known to or reasonably ascertainable by

you. You should use the same numeric format as described for domestically manufactured production volume (see section 4.7.2.2). See Table 4-8 for examples.

**Table 4-8. Examples of Reporting Volumes for Part II – Section C. Manufacturing Information**

| Description   | Reporting Requirement   |
|---|---|
| Site 1 domestically manufactures 30,000 lb of Chemical X.   | Site 1 should report 30,000 lb as domestically manufactured for Chemical X. The total production volume (i.e., the domestically manufactured volume) should be used to report the remaining CDR information.  |
| Site 2 domestically manufactures 15,000 lb of Chemical X and directly imports 15,000 lb of Chemical X.  | Site 2 should report 15,000 lb as domestically manufactured. Because Site 2 controls the import transaction, Site 2 should also report 15,000 lb as imported for Chemical X. The total production volume (i.e., sum of the domestically manufactured and import volumes) should be used to report the remaining CDR information.  |
| Site 3 domestically manufactures 30,000 lb of Chemical X. Of the 30,000 lb manufactured, Site 3 directly exports 10,000 lb to a foreign customer.   | Site 3 should report 30,000 lb as domestically manufactured and 10,000 lb as exported for Chemical X. The volume not directly exported should be used to report the remaining CDR information.  |
| Site 4 domestically manufactures 70,000 lb and imports 30,000 lb of Chemical X. Site 4 uses 20,000 lb of Chemical X on site.  | Site 4 should report 70,000 lb as domestically manufactured, 30,000 lb as imported and 20,000 lb as used on site. The total production volume (i.e., sum of the domestically manufactured and import volumes) should be used to report the remaining CDR information.   |
| Company B coordinates the import of 100,000 lb of Chemical X, which is imported directly to three different sites owned by Company B. Site 5 receives 40,000 lb and Sites 6 and 7 each receive 30,000 lb of Chemical X. | Company B should report 100,000 lb as imported for Chemical X. The total production volume (i.e., the imported volume) should be used to report the remaining CDR information. Because the three sites controlled by Company B did not control the import transaction, the sites are not required to report the imported volumes. |
| Site 6 domestically manufactures 10,000 lb of Chemical X, which is not the subject of any of the certain TSCA actions.  | Site 6 is not required to report because production was less than 25,000 lb. Note that if Chemical X were the subject of one of the listed TSCA actions, reporting would be required because the production volume exceeds the 2,500 lb threshold.  |
| Site 7 domestically manufactures 70,000 lb, imports 20,000 lb, and exports 10,000 lb of Chemical X.   | Site 7 should report an amount that does not exceed 80,000 lb as volume used at site for Chemical X, as the volume used at site should not be greater than the sum of the domestically manufactured and imported volumes minus the volume exported (70,000 lb + 20,000 lb – 10,000 lb).   |
| Site 8 domestically manufactures 25,000 lb, imports 15,000 lb, and uses at site 5,000 lb of Chemical X.   | Site 8 should report an amount that does not exceed 3,500 lb as volume exported for Chemical X, as the volume exported should not exceed the sum of the domestically manufactured and imported volumes minus volume used on site (25,000 lb + 15,000 lb – 5,000 lb).  |

#### 4.7.2.7 Number of Workers

Report the total number of workers reasonably likely to be exposed to each reportable chemical substance at each site (40 CFR 711.15(b)(3)(viii)). Select the code corresponding to the appropriate range for the number of workers reasonably likely to be exposed to a reportable chemical substance during manufacture. Table 4-9 lists the codes and ranges.

**Table 4-9. Codes for Reporting Number of Workers Reasonably Likely to be Exposed**

| Code | Range of Workers Reasonably Likely to be Exposed |
|------|--|
| W1   | Fewer than 10 workers                            |
| W2   | At least 10 but fewer than 25 workers            |
| W3   | At least 25 but fewer than 50 workers            |
| W4   | At least 50 but fewer than 100 workers           |
| W5   | At least 100 but fewer than 500 workers          |
| W6   | At least 500 but fewer than 1,000 workers        |
| W7   | At least 1,000 but fewer than 10,000 workers     |
| W8   | At least 10,000 workers                          |

“Reasonably likely to be exposed” means “an exposure to a chemical substance which, under foreseeable conditions of manufacture, processing, distribution in commerce, or use of the chemical substance, is more likely to occur than not to occur. Such exposures would normally include, but would not be limited to, activities such as charging reactor vessels, drumming, bulk loading, cleaning equipment, maintenance operations, materials handling and transfers, and analytical operations. Covered exposures include exposures through any route of entry (inhalation, ingestion, skin contact, absorption, etc.), but excludes accidental or theoretical exposures” (40 CFR 711.3).

Persons reasonably likely to be exposed to a chemical substance include workers whose employment requires them to pass through areas where chemical substances are manufactured, processed, or used (e.g., production workers and foremen, process engineers, and plant managers). Workers employed to drive vehicles which transport the chemical substance should be included in the number of workers reasonably likely to be exposed to the chemical substance if they come into contact with the chemical substance during loading or unloading. For example, workers engaged in the connection or disengagement of hoses used to load or unload the chemical substance should be included. However, workers involved solely with transporting chemical substances in sealed containers that are totally enclosed with no potential for exposure should not be included.

In addition, when a site employs temporary, seasonal, or contract workers in the manufacture of a reportable chemical substance, these workers should be included in the number of workers reasonably likely to be exposed to a chemical substance if they work in areas where the chemical substance is manufactured. The term does not include those employees whose jobs are not associated with potential exposures to a chemical substance or mixture (e.g., administrative staff who never enter areas where the chemical substance is manufactured) and who are unlikely to be exposed to a chemical substance for even a brief period of time. No allowance is made for personal protective equipment or for engineering controls that reduce but do not preclude exposure to a chemical substance; however, if contact between a worker and a chemical substance is highly improbable, the worker should not be included among those persons reasonably likely to be exposed to the chemical substance.

When there is no potential exposure to a chemical substance, the code W1 corresponding to fewer than 10 workers would be reported. This would be the case, for instance, when a chemical substance is imported in sealed containers and resold without repackaging or is shipped from a foreign source directly to a customer.

#### 4.7.2.8 Maximum Concentration

Report the maximum concentration, measured by percentage of weight, of your reportable chemical substance at the time it is reacted on-site to produce a different chemical substance (site-limited) or as it leaves the site (40 CFR 711.15(b)(3)(ix)). The concentration must be accurate to the extent that information is known to or reasonably ascertainable by you. In your determination of the maximum concentration, do not include concentrations of the product sent off-site for non-commercial purposes (40 CFR 710.1(a)).

For each chemical substance, report the code which corresponds to the appropriate maximum concentration range of the chemical substance. Table 4-10 shows the codes and concentration ranges. Report the maximum concentration regardless of the various physical forms in which the chemical substance may be sent off-site or reacted on-site to produce a different chemical substance.

**Table 4-10. Codes for Reporting Maximum Concentration**

| Code | Concentration Range (weight percent)    |
|------|---|
| M1   | Less than 1% by weight                  |
| M2   | At least 1 but less than 30% by weight  |
| M3   | At least 30 but less than 60% by weight |
| M4   | At least 60 but less than 90% by weight |
| M5   | At least 90% by weight                  |

#### 4.7.2.9 What Percentage of this Chemical Substance is Being Manufactured as a Byproduct?

This data element may be reported voluntarily, but is not required. If you choose to report this element, estimate the percentage of total principal reporting year production volume that is being manufactured as a byproduct. The percentage should be accurate to the extent that it is known to or reasonably ascertainable by you. For each chemical substance at each site, select the percent production volume of the non-exempt portion of the byproduct chemical substance from among the ranges listed in Table 4-11 and report the corresponding code (i.e., B1 through B4) (40 CFR 711.15(b)(3)(vi)). Table 4-12 provides examples of reporting percentages of manufacturing as a byproduct.

There are situations where the same chemical substance is manufactured both as a primary chemical substance and a byproduct. While this is rare, it is a known occurrence. If the chemical that is manufactured as a byproduct is used for a reportable commercial purpose, its volume would be reported along with the volume of the chemical that is separately manufactured at the same site and its volume would be counted as the byproduct portion when calculating the percent manufactured as a byproduct.



Because an overproduction of the primary manufactured substance does not meet the definition of byproduct, do not count overproduction as a byproduct portion when calculating the percent manufactured as a byproduct.

If you do not know or cannot reasonably ascertain information about how much of your production volume is manufactured as a byproduct, you may use the response NKRA in lieu of an estimated percentage.

**How to determine your percent production volume that is a byproduct:**

1. Determine the production volume of the chemical substance that is manufactured as a byproduct for the principal reporting year.
2. Determine your total production volume for the chemical substance.
  - a. Add together the volume domestically manufactured and the volume imported.
  - b. DO NOT subtract the volume used on-site or the volume exported.
3. Divide the volume determined in step 1 by the volume determined in step 2 and multiply by 100.

**Table 4-11. Codes for Reporting Percent Byproduct**

| Code | Percent by Weight                                 |
|------|---|
| B1   | 0 percent by weight                               |
| B2   | Greater than 0 but less than 50 percent by weight |
| B3   | At least 50 but less than 100 percent by weight   |
| B4   | 100 percent by weight                             |

**4.7.2.10 Is the Chemical Substance Being Recycled?**

Report whether all or a portion of your manufactured chemical substance, which otherwise would be disposed of as a waste, is being removed from the waste stream and is being used for a commercial purpose (40 CFR 711.15(b)(3)(vii)). Report one of the following choices:

- Yes, the manufactured chemical substance, such as a byproduct, is to be recycled or otherwise used for a commercial purpose instead of being disposed of as a waste or included in a waste stream.
- No, the manufactured chemical substance, such as a byproduct, is not to be recycled or otherwise used for a commercial purpose instead of being disposed of as a waste or included in a waste stream.
- NKRA, it is not known to or reasonably ascertainable by you whether the manufactured chemical substance, such as a byproduct, is to be recycled or otherwise used for a commercial purpose instead of being disposed of as a waste or included in a waste stream.

Table 4-12 provides examples of reporting recycling activities.

**Table 4-12. Examples of Reporting Byproduct Percentages and Recycling**

| Description  | Reporting Requirement   |
|--|---|
| Site 1 manufactures 2,721,400,000 lb of Chemical T, none of which is manufactured as a byproduct or recycled instead of being disposed of as a waste.  | <p><i>Byproduct:</i> Enter code B1 (0 percent) for the amount of production volume that is a byproduct.</p> <p><i>Recycled:</i> Enter N as no portion of the chemical is being recycled.</p>  |
| Site 2 manufactures 500,000 lb of Chemical U, 165,000 lb of which (or 33%) is manufactured as a byproduct and then recycled instead of being disposed of as a waste.   | <p><i>Byproduct:</i> Enter code B2 (greater than 0 but less than 50 percent) for the amount of production volume that is a byproduct.</p> <p><i>Recycled:</i> Enter Y as some portion of the chemical is being recycled.</p>  |
| Site 3 manufactures 500,000 lb of Chemical V, 3% (15,000 lb) of which is manufactured as a byproduct. That 15,000 lb is then directly recycled and the other 485,000 lb is sold into commerce.   | <p><i>Byproduct:</i> Enter code B2 (greater than 0 but less than 50 percent) because 3% of the production volume is manufactured as a byproduct.</p> <p><i>Recycled:</i> Enter Y as some portion of the chemical is being recycled.</p>   |
| Site 4 manufactures a chemical substance, WonderChem. The process to manufacture WonderChem results in the production of a byproduct, Chemical S. Some portion of Chemical S stays with WonderChem but does not contribute to WonderChem's properties. The remaining portion of Chemical S is 500,000 lb. Initially site 4 disposed of Chemical S as a waste, but partway through the year discovered a use for Chemical S and diverted the remaining portion from the waste stream. The full volume of WonderChem is intended for commercial use. | <p><i>Byproduct:</i> For Chemical S, enter code B4 because 100% of the production volume is manufactured as a byproduct.</p> <p><i>Recycled:</i> Enter Y as a portion of Chemical S is being recycled instead of being disposed of as a waste.</p> <p><i>Byproduct:</i> For WonderChem, enter code B1 because none of the production volume is manufactured as a byproduct.</p> <p><i>Recycled:</i> Enter N because WonderChem is produced for commercial use and no quantity is intended to be disposed of as a waste or recycled.</p> |
| Site 5 manufactures 12,000,000 lb of Chemical X for processing by incorporation into a mixture. Of the production volume, 92% (11,040,000 lb) is processed for incorporation and 8% (960,000 lb) is shipped to a waste management facility that also recycles certain materials. The manufacturer cannot reasonably ascertain whether this portion of Chemical X is being recycled or disposed of as a waste.  | <p><i>Byproduct:</i> Enter code B1 (0 percent by weight) for the production volume that is a byproduct.</p> <p><i>Recycled:</i> Enter NKRA as the manufacturer does not know and cannot reasonably ascertain whether Chemical X is being recycled or disposed of as a waste.</p>  |
| Site 6 manufactures 200,000,000 lb of Chemical Y, 85% (1,700,000 lb) of which is manufactured as a byproduct. That 1,700,000 lb is then sold into commerce, but no part of the volume produced of Chemical Y is recycled.  | <p><i>Byproduct:</i> Enter code B3 (at least 50 but less than 100 percent) because 85% of the production volume is manufactured as a byproduct.</p> <p><i>Recycled:</i> Enter N as no portion of the chemical is being recycled.</p>  |
| Site 7 manufactures 100% of Chemical Z (150,000,000 lb) as a byproduct. That 150,000,000 lb is then sold directly to a recycler.   | <p><i>Byproduct:</i> Enter code B4 (100 percent) because all of the production volume is manufactured as a byproduct.</p> <p><i>Recycled:</i> Enter Y as Chemical Z is known to be recycled rather than disposed of as a waste.</p>   |

### 4.7.2.11 Physical Form and Percentage of Production Volume

Report all physical forms of the chemical substance at the time it is reacted or as it leaves your site and the percentage of production volume (including both domestically manufactured and imported volumes) for each physical form (40 CFR 711.15(b)(3)(x)). For each chemical substance at each site, the submitter must report as many physical forms as applicable from the following six physical forms:

- Dry Powder
- Pellets or Large Crystals
- Water- or Solvent-Wet Solid
- Other Solid
- Gas or Vapor
- Liquid

You can select “Not Known or Reasonably Ascertainable (NKRA)” if the physical form of the chemical substance is not known to or reasonably ascertainable by you.

Report the percentage of the total production volume of the chemical substance for each physical form reacted onsite or sent off-site rounded off to the closest 10 percent (40 CFR 711.15(b)(3)(ix)). If the chemical substance is sent off-site in more than one physical form, report all the physical forms in which it is sent off-site. These percentages may total more or less than 100% due to rounding.

#### **Example 4-3. Determining Percentage of Production Volume**

Company A domestically manufactures 75,000 lb and imports 25,000 lb of Chemical X, for a total production volume of 100,000 lb. Forty-eight percent (48,000 lb) of the production volume is produced as dry powder, 24 percent (24,000 lb) is produced as pellets, 24 percent (24,000 lb) as a liquid solution, and 4 percent (4,000 lb) as a water-wet solid. Company A would report the following:

|                             |     |
|-----------------------------|-----|
| Dry Powder                  | 50% |
| Pellets or Large Crystals   | 20% |
| Water- or Solvent-Wet Solid | 0%  |
| Other Solid                 | 0%  |
| Gas or Vapor                | 0%  |
| Liquid                      | 20% |

### 4.7.3 Reporting Past Production Volume

Report in pounds the total volume of the chemical substance manufactured at your site (includes domestically manufactured and imported volumes) during the calendar years between the last principal reporting year and the current principal reporting year. Report the production volume to at least two significant figures; it should be accurate to the extent known to or reasonably ascertainable by you. Production volumes should be reported in numeric format, with or without commas (*i.e.*, 58,000 or 6352000). For example, unacceptable submissions are: “2 million,” “2 E6,” production volumes with decimals, or production volumes with abbreviations such as M (*e.g.*, 12,000,000 = 12M) or K (*e.g.*, 50,000 = 50K).

## 4.8 Part II – Section D. Processing and Use Information

In addition to completing Part I and Sections A – C of Part II, you must also complete Section D of Part II of the Form U for reportable chemical substances manufactured (including imported), unless the chemical substance is partially exempt. See Sections 2.3.2 and 2.3.3 to determine whether you qualify for a partial exemption. You should report the processing and use activities for the total principal reporting year production volume reported (both domestically manufactured and imported).

Information regarding processing or use activities must be reported to the extent that it is known to or reasonably ascertainable by the submitter (40 CFR 711.15(b)(4)).

The processing or use information should be reported to the extent that it is known to or reasonably ascertainable by you (40 CFR 711.15). Under the “known to or reasonably ascertainable by” standard, a submitter would therefore prepare its report about the processing and use of a chemical substance it manufactures (including imports), without confining its inquiry solely to what is known to managerial and supervisory employees, but would also be expected to review information which the manufacturer (including importer) may have in their possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know. The inquiry would be as extensive as a reasonable person, similarly situated, might be expected to perform within the organization. Information derived from customer surveys or other customer contacts, like any other information, would be “known to” the submitter if it is available after a reasonable inquiry within the organization. The standard does not necessarily require that the manufacturer conduct an exhaustive survey of all employees.

For further clarity, submitters are not required to conduct a new or additional customer survey (i.e., to pose a comprehensive set of identical questions to multiple customers) under this standard. If particular information cannot be derived or reasonably estimated from the information available to the company without conducting further customer surveys, it is not “known to or reasonably ascertainable” to the submitter for purposes of the CDR. However, to the extent that customer surveys are already in the submitter’s possession or control, and to the extent that reasonable efforts to analyze or derive information from already-available customer surveys may inform processing and use information that is reported, the information is generally “known to or reasonably ascertainable.” Section 4.2 contains additional information on the “known to or reasonably ascertainable by” reporting standard.

If any information is not known or reasonably ascertainable by you (including your company), enter or select “NKRA” for “not known or reasonably ascertainable” in the box corresponding to that data element.

### 4.8.1 Confidentiality of Processing and Use Information

You may check the CBI box next to each data element to claim data as confidential. However, you may not claim the following data elements as confidential:

- *Certain Industrial processing and use data elements.* These data elements are a general description of how the chemical is used or processed and cannot be claimed as confidential (Form U Part II – Section D.1):
  - type of process or use (§ 711.15(b)(4)(i)(A));
  - industrial sector (§ 711.15(b)(4)(i)(B)); and
  - function code (§ 711.15(b)(4)(i)(C)).
  
- *Certain Consumer and Commercial use data elements.* These data elements are a general description of how the chemical is used and cannot be claimed as confidential (Form U Part II – Section D.2):
  - product category (§ 711.15(b)(4)(ii)(A));
  - function of the chemical in the consumer or commercial product (§ 711.15(b)(4)(ii)(B));
  - whether the chemical is used in commercial or consumer products (§ 711.15(b)(4)(ii)(C)); and
  - whether the chemical predictably is used in children’s products (§ 711.15(b)(4)(ii)(D)).

You may assert a claim of confidentiality for each data element required by § 711.15(b)(4)(i)(D), (E) and (F) (i.e., percentage of production volume, number of industrial sites, and number of industrial workers that are reasonably likely to be exposed) and § 711.15(b)(4)(ii)(E), (F), and (G) (i.e., percentage of production volume, maximum concentration, and number of commercial workers that are reasonably likely to be exposed) to protect the link between that information and the reported chemical substance. Such claim may only be asserted where the linkage of that information to a reportable chemical substance is confidential and not publicly available. With regard to any use and processing data elements which may be claimed as CBI, keep in mind that you **cannot** claim an “NKRA” designation as confidential. Checking a CBI box associated with a specific processing and use data element automatically triggers substantiation questions. See Table 4-7 for substantiation questions to be answered when asserting CBI claims for processing and use information.

### 4.8.2 Part II – Section D.1. Industrial Processing and Use Data

For purposes of CDR reporting, an industrial use means use at a site at which one or more chemical substances or mixtures are manufactured (including imported) or processed (40 CFR 711.3).

For each CDR chemical substance manufactured (including imported), report up to ten unique combinations of the following data elements: the Type of Process or Use Operation (TPU) (described in Section 4.8.2.1), the Industrial Sector (IS) (described in Section 4.8.2.2), and the Function Category (FC) (described in Section 4.8.2.3) (40 CFR 711.15(b)(4)(i)). A combination of these three data elements defines a potential exposure scenario for risk-screening and priority-setting purposes. For each of these unique combinations, you are also required to

report the percentage of production volume (described in Section 4.8.2.4), the number of sites (described in Section 4.8.2.5), and the number of workers (described in Section 4.8.2.6) (40 CFR 711.15(b)(4)(i)). If more than ten unique combinations apply to a chemical substance, you need only report the ten combinations for the chemical substance that cumulatively represent the largest percentage of production volume, measured by weight (40 CFR 711.15(b)(4)(i)(C)). The reporting tool will allow you to enter more than ten combinations if you choose to do so.

#### 4.8.2.1 Type of Processing or Use Operation

To the extent that it is known to or reasonably ascertainable by you, report the code which corresponds to the appropriate Type of Processing or Use Operation (TPU) for the particular combination of IS and FC codes. Table 4-13 shows the codes and TPUs. Note that if a chemical substance is fully reacted (i.e., reporting “PC” for the processing code), then the chemical substance is wholly consumed and further processing and use information for that chemical substance will not exist. In such a situation, there is no further downstream processing and use information to be reported for that particular type of processing or use operation under 40 CFR 711.15(b)(4). A processing or use code may be reported more than once if more than one IS and/or FC code applies to the same processing or use operation. Definitions for each code are provided in Appendix D, which may assist you in determining which code to report.

**Table 4-13. Codes for Reporting Type of Industrial Processing or Use Operations**

| Code | Operation   |
|------|---|
| PC   | Processing as a reactant  |
| PF   | Processing—incorporation into formulation, mixture, or reaction product |
| PA   | Processing—incorporation into article                                   |
| PK   | Processing—repackaging  |
| U    | Use—non-incorporative activities  |

#### 4.8.2.2 Industrial Sectors

Report the code which corresponds to the appropriate Industrial Sector (IS) for all sites that receive a reportable chemical substance from you either directly or indirectly (including through a broker/distributor, from a customer of yours, etc.) and that process and use of the reportable chemical substance to the extent that this information is known to or reasonably ascertainable by you (40 CFR 711.15(b)(4)(i)(B)). Table 4-14 shows the codes and sectors. Because an industrial sector may apply to more than one processing and use scenario for a chemical substance, the same IS code may be reported with different combinations of FC and TPU codes.

A listing identifying the correspondence between NAICS codes and IS codes is provided in Appendix D. Additional, more detailed information can be found on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

When you chose the IS “Other,” you also need to provide a written description of the use of the chemical substance. The written description should be used to provide a description at a comparable level of specificity as found with the current codes. It should not be used to add additional, more specific detail. Your description may include the NAICS code.

**Table 4-14. Industrial Sectors (IS)**

| <b>Code</b> | <b>Sector Description</b>  |
|-------------|--|
| IS1         | Agriculture, forestry, fishing and hunting   |
| IS2         | Oil and gas drilling, extraction, and support activities   |
| IS3         | Mining (except oil and gas) and support activities   |
| IS4         | Utilities  |
| IS5         | Construction   |
| IS6         | Food, beverage, and tobacco product manufacturing  |
| IS7         | Textiles, apparel, and leather manufacturing   |
| IS8         | Wood product manufacturing   |
| IS9         | Paper manufacturing  |
| IS10        | Printing and related support activities  |
| IS11        | Petroleum refineries   |
| IS12        | Asphalt paving, roofing, and coating materials manufacturing   |
| IS13        | Petroleum lubricating oil and grease manufacturing   |
| IS14        | All other petroleum and coal products manufacturing  |
| IS15        | Petrochemical manufacturing  |
| IS16        | Industrial gas manufacturing   |
| IS17        | Synthetic dye and pigment manufacturing  |
| IS18        | Carbon black manufacturing   |
| IS19        | All other basic inorganic chemical manufacturing   |
| IS20        | Cyclic crude and intermediate manufacturing  |
| IS21        | All other basic organic chemical manufacturing   |
| IS22        | Plastic material and resin manufacturing   |
| IS23        | Synthetic rubber manufacturing   |
| IS24        | Organic fiber manufacturing  |
| IS25        | Pesticide, fertilizer, and other agricultural chemical manufacturing   |
| IS26        | Pharmaceutical and medicine manufacturing  |
| IS27        | Paint and coating manufacturing  |
| IS28        | Adhesive manufacturing   |
| IS29        | Soap, cleaning compound, and toilet preparation manufacturing  |
| IS30        | Printing ink manufacturing   |
| IS31        | Explosives manufacturing   |
| IS32        | Custom compounding of purchased resin  |
| IS33        | Photographic film paper, plate, and chemical manufacturing   |
| IS34        | All other chemical product and preparation manufacturing   |
| IS35        | Plastics product manufacturing   |
| IS36        | Rubber product manufacturing   |
| IS37        | Nonmetallic mineral product manufacturing (includes clay, glass, cement, concrete, lime, gypsum, and other nonmetallic mineral product manufacturing). |
| IS38        | Primary metal manufacturing  |

| Code | Sector Description   |
|------|--|
| IS39 | Fabricated metal product manufacturing                       |
| IS40 | Machinery manufacturing                                      |
| IS41 | Computer and electronic product manufacturing                |
| IS42 | Electrical equipment, appliance, and component manufacturing |
| IS43 | Transportation equipment manufacturing                       |
| IS44 | Furniture and related product manufacturing                  |
| IS45 | Miscellaneous manufacturing                                  |
| IS46 | Wholesale and retail trade                                   |
| IS47 | Services   |
| IS48 | Other (requires additional information)                      |

### 4.8.2.3 Function Category

Report the code that corresponds to the appropriate Industrial Function Category (FC) for each particular combination of TPU and IS that you report (40 CFR 711.15(b)(4)(i)(C)). For reporting during the 2020 submission period, submitters are required to use the OECD-based codes for the chemical substances designated by EPA as a high priority for risk evaluation and, for all other chemical substances, may use either the OECD-based codes or the CDR codes. The chemical substances designated by EPA as a high priority for risk evaluation are listed in 40 CFR 711.15(b)(4)(i)(C), Table 7. For reporting during the 2024 and future submission periods, submitters are required to use the OECD-based codes for all chemical substances for which the submitter is reporting processing and use information. Table 4-15 shows the codes and FCs as a crosswalk of the OECD-based codes and the CDR codes. Descriptions for each FC are provided in Appendix D. If you select U999 or F999 (Other), you must provide a description of the function of the chemical substance. The written description should be used to provide a description at a comparable level of specificity as found with the current codes. It should not be used to add additional, more specific detail.

Function codes are based on the intended physical or chemical characteristic for when a chemical substance or mixture is consumed as a reactant; incorporated into a formulation, mixture, reaction product, or article; repackaged; or used (e.g., as an abrasive, a catalyst, or an elasticizer). However, the functional use categories cover the life cycle and describe the specific function that a chemical provides when used in the formulation of a product or article, or when used within an industrial process. While the function of a chemical may be the same across its life cycle, certain functions may only be appropriate for consideration in an industrial setting, while others may be relevant for a consumer or commercial setting. For more information on reporting consumer and commercial use data, see Section 4.8.3 (Part II – Section D.2 of the Form U) below.



**Table 4-15. Codes for Reporting Function Categories (FCs)**

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |  |          |   |
|--|--|----------|---|
| Column A   |  | Column B |   |
| Code   | Category                               | Code     | Category                                    |
| F001   | Abrasives                              | U001     | Abrasives                                   |
| F002   | Etching agent                          |          |   |
| F003   | Adhesion/cohesion promoter             | U002     | Adhesives and Sealant Chemicals             |
| F004   | Binder                                 |          |   |
| F005   | Flux agent                             |          |   |
| F006   | Sealant (barrier)                      |          |   |
| F007   | Absorbent                              | U003     | Adsorbents and Absorbents                   |
| F008   | Adsorbent                              |          |   |
| F009   | Dehydrating agent (desiccant)          |          |   |
| F010   | Drier                                  |          |   |
| F011   | Humectant                              | U004     | Agricultural Chemicals (non-pesticidal)     |
| F012   | Soil amendments (fertilizers)          |          |   |
| F013   | Anti-adhesive/cohesive                 | U005     | Anti-Adhesive Agents                        |
| F014   | Dusting agent                          |          |   |
| F015   | Bleaching agent                        | U006     | Bleaching Agents                            |
| F016   | Brightener                             |          |   |
| F017   | Anti-scaling agent                     | U007     | Corrosion inhibitors and antiscaling agents |
| F018   | Corrosion inhibitor                    |          |   |
| F019   | Dye                                    | U008     | Dyes  |
| F020   | Fixing agent (mordant)                 |          |   |
| F021   | Hardener                               | U009     | Fillers                                     |
| F022   | Filler                                 |          |   |
| F023   | Anti-static agent                      | U010     | Finishing agents                            |
| F024   | Softener and conditioner               |          |   |
| F025   | Swelling agent                         |          |   |
| F026   | Tanning agents not otherwise specified |          |   |
| F027   | Waterproofing agent                    |          |   |
| F028   | Wrinkle resisting agent                |          |   |
| F029   | Flame retardant                        | U011     | Flame retardants                            |
| F030   | Fuel agents                            | U012     | Fuels and fuel additives                    |
| F031   | Fuel                                   |          |   |
| F032   | Heat transferring agent                | U013     | Functional fluids (closed systems)          |
| F033   | Hydraulic fluids                       |          |   |
| F034   | Insulators                             |          |   |
| F035   | Refrigerants                           |          |   |
| F036   | Anti-freeze agent                      | U014     | Functional fluids (open systems)            |
| F037   | Intermediate                           | U015     | Intermediates                               |
| F038   | Monomers                               |          |   |
| F039   | Ion exchange agent                     | U016     | Ion exchange agents                         |
| F040   | Anti-slip agent                        | U017     | Lubricants and lubricant additives          |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |  |          |  |
|--|--|----------|--|
| Column A   |  | Column B |  |
| Code   | Category   | Code     | Category   |
| F041   | Lubricating agent  | U017     | Lubricants and lubricant additives                             |
| F042   | Deodorizer   | U018     | Odor agents  |
| F043   | Fragrance  |          |  |
| F044   | Oxidizing agent  | U019     | Oxidizing/reducing agents                                      |
| F045   | Reducing agent   |          |  |
| F046   | Photosensitive agent   | U020     | Photosensitive chemicals                                       |
| F047   | Photosensitizers   |          |  |
| F048   | Semiconductor and photovoltaic agent                             |          |  |
| F049   | UV stabilizer  |          |  |
| F050   | Opacifer   | U021     | Pigments   |
| F051   | Pigment  |          |  |
| F052   | Plasticizer  | U022     | Plasticizers   |
| F053   | Plating agent  | U023     | Plating agents and surface treating agents                     |
| F054   | Catalyst   | U024     | Process regulators   |
| F055   | Chain transfer agent   |          |  |
| F056   | Chemical reaction regulator                                      |          |  |
| F057   | Crystal growth modifiers (nucleating agents)                     |          |  |
| F058   | Polymerization promoter  |          |  |
| F059   | Terminator/Blocker   |          |  |
| F060   | Processing aids, specific to petroleum production                | U025     | Processing aids, specific to petroleum production              |
| F061   | Antioxidant  | U026     | Processing aids, not otherwise listed                          |
| F062   | Chelating agent  |          |  |
| F063   | Defoamer   |          |  |
| F064   | pH regulating agent  |          |  |
| F065   | Processing aids not otherwise specified                          |          |  |
| F066   | Energy Releasers (explosives, motive propellant)                 | U027     | Propellants and blowing agents                                 |
| F067   | Foamant  |          |  |
| F068   | Propellants, non-motive (blowing agents)                         |          |  |
| F069   | Cloud-point depressant   | U028     | Solids separation agents                                       |
| F070   | Flocculating agent   |          |  |
| F071   | Flotation agent  |          |  |
| F072   | Solids separation (precipitating) agent, not otherwise specified |          |  |
| F073   | Cleaning agent   | U029     | Solvents (for cleaning or degreasing)                          |
| F074   | Diluent  | U030     | Solvents (which become part of product formulation or mixture) |
| F075   | Solvent  |          |  |
| F076   | Surfactant (surface active agent)                                | U031     | Surface active agents  |
| F077   | Emulsifier   |          |  |
| F078   | Thickening agent   | U032     | Viscosity adjustors  |
| F079   | Viscosity modifiers  |          |  |
| F080   | Laboratory chemicals   | U033     | Laboratory chemicals   |
| F081   | Dispersing agent   | U034     | Paint additives and coating additives not described            |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |                                |          |                 |
|--|--------------------------------|----------|-----------------|
| Column A   |                                | Column B |                 |
| Code   | Category                       | Code     | Category        |
| F082   | Freeze-thaw additive           |          | by other codes  |
| F083   | Surface modifier               |          |                 |
| F084   | Wetting agent (non-aqueous)    |          |                 |
| F085   | Aerating and deaerating agents |          | Other (specify) |
| F086   | Explosion inhibitor            |          |                 |
| F087   | Fire extinguishing agent       |          |                 |
| F088   | Flavoring and nutrient         |          |                 |
| F089   | Anti-redeposition agent        |          |                 |
| F090   | Anti-stain agent               |          |                 |
| F091   | Anti-streaking agent           |          |                 |
| F092   | Conductive agent               |          |                 |
| F093   | Incandescent agent             |          |                 |
| F094   | Magnetic element               |          |                 |
| F095   | Anti-condensation agent        |          |                 |
| F096   | Coalescing agent               |          |                 |
| F097   | Film former                    |          |                 |
| F098   | Demulsifier                    |          |                 |
| F099   | Stabilizing agent              |          |                 |
| F100   | Alloying element               |          |                 |
| F101   | Density modifier               | U999     |                 |
| F102   | Elasticizer                    |          |                 |
| F103   | Flow promoter                  |          |                 |
| F104   | Sizing agent                   |          |                 |
| F105   | Solubility enhancer            |          |                 |
| F106   | Vapor pressure modifiers       |          |                 |
| F107   | Embalming agent                |          |                 |
| F108   | Heat stabilizer                |          |                 |
| F109   | Preservative                   |          |                 |
| F110   | Anti-caking agent              |          |                 |
| F111   | Deflocculant                   |          |                 |
| F112   | Dust suppressant               |          |                 |
| F113   | Impregnation agent             |          |                 |
| F114   | Leaching agent                 |          |                 |
| F115   | Tracer                         |          |                 |
| F116   | X-ray absorber                 |          |                 |
| F999   | Other (specify)                |          |                 |
| NOTE:  |                                |          |                 |
| <ul style="list-style-type: none"> <li>For codes F085 – F116, no comparable crosswalk code existed in 2016 and prior; F999 is the proper crosswalk code</li> </ul>   |                                |          |                 |

#### 4.8.2.4 Percentage of Production Volume

Estimate the percentage of total principal reporting year production volume that is

attributable to each unique combination of TPU, IS, and FC. The percentage should be accurate to the extent that it is known to or reasonably ascertainable by you. Round your estimates to the nearest 10 percent of production volume (40 CFR 711.15(b)(4)(i)(D)). If you would like to provide more specific percentages, please do so. Do not round a particular combination that accounts for less than five percent of the total production volume to zero percent if the production volume attributable to that combination is greater than or equal to 25,000 lb. In such cases, you must report the percentage of production volume attributable to that combination to the nearest one percent of production volume (40 CFR 711.15(b)(4)(i)(D)).

The total percentage of production volumes associated with the TPU, IS, and FC combinations may add up to more than 100 percent, given that you are reporting on distribution of a chemical substance to sites in your control as well as downstream sites, some of which are not immediate purchasers from your original manufacturing site. Additionally, the total percentage of production volume may add up to less than 100 percent if, for example:

- You do not know or cannot reasonably ascertain information about how all of your production volume is processed or used;
- More than 10 combinations of codes are applicable to your chemical substance; or
- You export a portion of the production volume.

**How to determine your percent production volume:**

1. Determine the production volume that is attributable to each unique combination of TPU, IS, and FC.
2. Determine your total production volume for the current principal reporting year.
  - a. Add together the volume domestically manufactured and the volume imported.
  - b. DO NOT subtract the volume used on-site or the volume exported
2. Divide the volume determined in step 1 by the volume determined in step 2 and multiply by 100.

Table 4-16 provides examples of reporting industrial processing and use data.

**Table 4-16. Examples of Reporting Industrial Processing and Use Information**

| Description   | Reporting Requirement   |
|---|---|
| Site 1 manufactures 500,000 lb of Chemical X for processing for incorporation into a mixture. All of the production is for use in industrial sector IS17 (Synthetic Dye and Pigment Manufacturing). Of the production volume, 67% (335,000 lb) is used as a dye and 33% (165,000 lb) is used as a pigment.  | On line 3.A.1 of the Form U, enter PF for type of process or use, IS17 for industrial sector, F019 for FC, and 70% for production volume. On line 3.A.2 of the Form U, enter PF for type of process or use, IS17 for industrial sector, F051 for FC, and 30% for production volume.   |
| Site 1 manufactures 500,000 lb of Chemical X for processing for incorporation into a mixture. All of the production is for use under industrial sector IS17 (Synthetic Dye and Pigment Manufacturing). Of the production volume, 97% (485,000 lb) is used as a coloring agent for dyes and 3% (15,000 lb) is used as a coloring agent for pigments. | On line 3.A.1 of the Form U, enter PF for type of process or use, IS17 for industrial sector, F019 for FC, and 100% for production volume. On line 3.A.2 of the Form U, enter PF for type of process or use, IS14 for industrial sector, and F051 for FC. Because less than 25,000 lb is used for pigments, enter 0% for production volume. |
| Site 1 manufactures 12,000,000 lb of Chemical X for processing for incorporation into a mixture. All of the production is for use under industrial sector IS17 (Synthetic Dye and Pigment Manufacturing). Of the  | On line 3.A.1 of the Form U, enter PF for type of process or use, IS17 for industrial sector, F019 for IFC, and 100% for production volume. Because the use in pigments, FC F051, accounts for 100,000 lb or more,  |

| Description   | Reporting Requirement  |
|---|--|
| production volume, 97% (11,640,000 lb) is used as a coloring agent for dyes and 3% (360,000 lb) is used as a coloring agent for pigments. | on line 3.A.2 of the Form U, enter PF for type of process or use, IS17 for industrial sector, F051 for FC, and 3% for production volume. |

#### 4.8.2.5 Number of Sites Code

For each unique combination of Type of Process or Use Operation, Industrial Sector, and Function Category, report the code which corresponds to the appropriate number range for the total number of industrial sites, including those not under your control, that process or use each reported chemical substance to the extent that such information is known or reasonable ascertainable by you (40 CFR 711.15(b)(4)(i)I). In the event you both manufacture (including import) and process or use the same reportable chemical substance at the reporting plant site, your site would be counted as both a manufacturing site in Part II.C of the Form U and a processing or use site reported in Part II.D of the Form U (40 CFR 711.15(b)(4)). Table 4-17 shows the codes and site number ranges.

**Table 4-17. Codes for Reporting Numbers of Sites**

| Code | Range                                      |
|------|--|
| S1   | Fewer than 10 sites                        |
| S2   | At least 10 but fewer than 25 sites        |
| S3   | At least 25 but fewer than 100 sites       |
| S4   | At least 100 but fewer than 250 sites      |
| S5   | At least 250 but fewer than 1,000 sites    |
| S6   | At least 1,000 but fewer than 10,000 sites |
| S7   | At least 10,000 sites                      |

#### 4.8.2.6 Number of Workers Code

For each unique combination of Type of Process or Use Operation, Industrial Sector, and Function Category, estimate the total number of workers that are reasonably likely to be exposed to the chemical substance at sites that process or use the chemical substance (40 CFR 711.15(b)(4)(i)(F)). Include workers at sites that are not under your control as well as those sites you control. For each chemical substance, report the code that corresponds to the estimated range of the number of workers reasonably likely to be exposed. To claim this information as confidential, check the box adjacent to the reported information. Table 4-18 shows the codes and worker ranges. See Section 4.7.2.7 for a discussion of “reasonably likely to be exposed.”

**Table 4-18. Codes for Reporting Number of Workers Reasonably Likely to be Exposed During Processing and Use**

| Code | Range of Workers Reasonably Likely to be Exposed |
|------|--|
| W1   | Fewer than 10 workers                            |
| W2   | At least 10 but fewer than 25 workers            |
| W3   | At least 25 but fewer than 50 workers            |
| W4   | At least 50 but fewer than 100 workers           |
| W5   | At least 100 but fewer than 500 workers          |
| W6   | At least 500 but fewer than 1,000 workers        |
| W7   | At least 1,000 but fewer than 10,000 workers     |
| W8   | At least 10,000 workers                          |

### 4.8.3 Part II – Section D.2. Consumer and Commercial Use Data

For purposes of CDR reporting, a commercial use means the use of a chemical substance or a mixture (including as part of an article) in a commercial enterprise providing saleable goods or a service (40 CFR 711.3). A consumer use, on the other hand, means the use of a chemical substance or a mixture (including as part of an article) when sold to or made available to consumers for their use (40 CFR 711.3).

For each CDR chemical substance manufactured (including imported), report up to ten unique combinations of the following data elements: the Product Category (PC) (described in Section 4.8.3.1), the Function Category (FC) (described in Section 4.8.3.2), whether the use is consumer and/or commercial (described in Section 4.8.3.3), and whether the use is in products intended for use by children (described in Section 4.8.3.4) (40 CFR 711.15(b)(4)(ii)). A combination of these four data elements defines a potential exposure scenario for risk-screening and priority-setting purposes. For each of these unique combinations, you are also required to report the percentage of production volume (described in Section 4.8.3.5), the maximum concentration (described in Section 4.8.3.6), and, for commercial uses, the number of commercial workers (described in Section 4.8.3.7) (40 CFR 711.15(b)(4)(ii)). If more than ten unique combinations apply to a chemical substance, you need only report the ten combinations for the chemical substance that cumulatively represent the largest percentage of production volume, measured by weight (40 CFR 711.15(b)(4)(ii)(A)). The reporting tool will allow you to enter more than ten combinations if you choose to do so.

You are required to report information that is known to or reasonably ascertainable by you concerning the consumer and commercial end uses of each chemical substance manufactured (including imported) at sites you control and at sites controlled by people to whom you have either directly or indirectly (including through a broker/distributor, from a customer, etc.) distributed the reportable chemical substance (40 CFR 711.15(b)(4)).

### 4.8.3.1 Product Category

You must designate up to ten product categories which correspond to the actual use of the chemical substance by reporting the codes which correspond to the appropriate product categories (40 CFR 711.15(b)(4)(ii)(A)). The reporting tool will allow you to enter more than ten categories if you choose to do so. For reporting during the 2020 submission period, submitters are required to use the OECD-based codes for the chemical substances designated by EPA as a high priority for risk evaluation and, for all other chemical substances, may use either the OECD-based codes or the CDR codes. The chemical substances designated by EPA as a high priority for risk evaluation are listed in 40 CFR 711.15(b)(4)(i)(C), Table 7. For reporting during the 2024 and future submission periods, submitters are required to use the OECD-based codes for all chemical substances for which the submitter is reporting processing and use information. Table 4-19 shows the codes and product categories as a crosswalk of the OECD-based codes and the CDR codes.

If you select C909 or CC980 (Other), you must provide a description of the product category. The written description should be used to provide a description at a comparable level of specificity as found with the current codes. It should not be used to add additional, more specific detail. If more than ten codes apply, you need report only the ten codes for the chemical substance that cumulatively represent the largest percentage of production volume, measured by weight (40 CFR 711.15(b)(4)(ii)(A)).

**Table 4-19. Product Category Codes**

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 9. For the 2024 and future submission periods, use only column A.</b> |   |                 |   |
|---|---|-----------------|---|
| <b>Column A</b>   |   | <b>Column B</b> |   |
| <b>Code</b>   | <b>Category</b>   | <b>Code</b>     | <b>Category</b>   |
| <b><u>Chemical Substances in Furnishing, Cleaning, Treatment Care Products</u></b>  |   |                 |   |
| CC101   | Construction and building materials covering large surface areas including stone, plaster, cement, glass and ceramic articles; fabrics, textiles, and apparel | C101            | Floor coverings   |
| CC102   | Furniture & furnishings including plastic articles (soft); leather articles   | C102            | Foam seating and bedding products                           |
| CC103   | Furniture & furnishings including stone, plaster, cement, glass and ceramic articles; metal articles; or rubber articles                                      | C103            | Furniture and furnishings not covered elsewhere             |
| CC104   | Leather conditioner   | C104            | Fabric, textile, and leather products not covered elsewhere |
| CC105   | Leather tanning, dye, finishing, impregnation and care products   |                 |   |
| CC106   | Textile (fabric) dyes   |                 |   |
| CC107   | Textile finishing and impregnating/surface treatment products   |                 |   |
| CC108   | All-purpose foam spray cleaner  | C105            | Cleaning and furnishing care products                       |
| CC109   | All-purpose liquid cleaner/polish   |                 |   |
| CC110   | All-purpose liquid spray cleaner  |                 |   |
| CC111   | All-purpose waxes and polishes  |                 |   |
| CC112   | Appliance cleaners  |                 |   |
| CC113   | Drain and toilet cleaners (liquid)  |                 |   |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 9. For the 2024 and future submission periods, use only column A. |   |          |                                       |
|--|---|----------|---------------------------------------|
| Column A   |   | Column B |                                       |
| Code   | Category  | Code     | Category                              |
| CC114  | Powder cleaners (floors)  | C105     | Cleaning and furnishing care products |
| CC115  | Powder cleaners (porcelain)                                       |          |                                       |
| CC116  | Dishwashing detergent (liquid/gel)                                | C106     | Laundry and dishwashing products      |
| CC117  | Dishwashing detergent (unit dose/granule)                         |          |                                       |
| CC118  | Dishwashing detergent liquid (hand-wash)                          |          |                                       |
| CC119  | Dry cleaning and associated products                              |          |                                       |
| CC120  | Fabric enhancers  |          |                                       |
| CC121  | Laundry detergent (unit-dose/granule)                             |          |                                       |
| CC122  | Laundry detergent (liquid)  |          |                                       |
| CC123  | Stain removers  |          |                                       |
| CC124  | Ion exchangers  | C107     | Water treatment products              |
| CC125  | Liquid water treatment products                                   |          |                                       |
| CC126  | Solid/Powder water treatment products                             |          |                                       |
| CC127  | Liquid body soap  | C108     | Personal care products                |
| CC128  | Liquid hand soap  |          |                                       |
| CC129  | Solid bar soap  |          |                                       |
| CC130  | Air fresheners for motor vehicles                                 | C109     | Air care products                     |
| CC131  | Continuous action air fresheners                                  |          |                                       |
| CC132  | Instant action air fresheners                                     |          |                                       |
| CC133  | Anti-static spray   | C110     | Apparel and footwear care products    |
| CC134  | Apparel finishing, and impregnating/surface treatment products    |          |                                       |
| CC135  | Insect repellent treatment  |          |                                       |
| CC136  | Pre-market waxes, stains, and polishes applied to footwear        |          |                                       |
| CC137  | Post-market waxes, and polishes applied to footwear (shoe polish) |          |                                       |
| CC138  | Waterproofing and water-resistant sprays                          |          |                                       |
| <b>Chemical Substances in Construction, Paint, Electrical, and Metal Products</b>  |   |          |                                       |
| CC201  | Fillers and putties   | C201     | Adhesives and sealants                |
| CC202  | Hot-melt adhesives  |          |                                       |
| CC203  | One-component caulks  |          |                                       |
| CC204  | Solder  |          |                                       |
| CC205  | Single-component glues and adhesives                              |          |                                       |
| CC206  | Two-component caulks  |          |                                       |
| CC207  | Two-component glues and adhesives                                 |          |                                       |
| CC208  | Adhesive/Caulk removers   | C202     | Paints and coatings                   |
| CC209  | Aerosol spray paints  |          |                                       |
| CC210  | Lacquers, stains, varnishes and floor finishes                    |          |                                       |



| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 9. For the 2024 and future submission periods, use only column A. |  |          |  |
|--|--|----------|--|
| Column A   |  | Column B |  |
| Code   | Category   | Code     | Category   |
| CC211  | Paint strippers/removers   | C202     | Paints and coatings  |
| CC212  | Powder coatings  |          |  |
| CC213  | Radiation curable coatings   |          |  |
| CC214  | Solvent-based paint  |          |  |
| CC215  | Thinners   |          |  |
| CC216  | Water-based paint  |          |  |
| CC217  | Construction and building materials covering large surface areas, including wood articles  | C203     | Building/ construction materials - wood and engineered wood products |
| CC218  | Construction and building materials covering large surface areas, including paper articles; metal articles; stone, plaster, cement, glass and ceramic articles | C204     | Building/ construction materials not covered elsewhere               |
| CC219  | Machinery, mechanical appliances, electrical/electronic articles   | C205     | Electrical and electronic products                                   |
| CC220  | Other machinery, mechanical appliances, electronic/electronic articles   |          |  |
| CC221  | Construction and building materials covering large surface areas, including metal articles   | C206     | Metal products not covered elsewhere                                 |
| CC222  | Electrical batteries and accumulators  | C207     | Batteries  |
| <b>Chemical Substances in Packaging, Paper, Plastic, Toys, Hobby Products</b>  |  |          |  |
| CC990  | Non-TSCA use   | C301     | Food packaging   |
| CC301  | Packaging (excluding food packaging), including paper articles   | C302     | Paper products   |
| CC302  | Other articles with routine direct contact during normal use, including paper articles   |          |  |
| CC303  | Packaging (excluding food packaging), including rubber articles; plastic articles (hard); plastic articles (soft)  | C303     | Plastic and rubber products not covered elsewhere                    |
| CC304  | Other articles with routine direct contact during normal use including rubber articles; plastic articles (hard)  |          |  |
| CC305  | Toys intended for children's use (and child dedicated articles), including fabrics, textiles, and apparel; or plastic articles (hard)                          | C304     | Toys, playground, and sporting equipment                             |
| CC306  | Adhesives applied at elevated temperatures   | C305     | Arts, crafts, and hobby materials                                    |
| CC307  | Cement/concrete  |          |  |
| CC308  | Crafting glue  |          |  |
| CC309  | Crafting paint (applied to body)   |          |  |
| CC310  | Crafting paint (applied to craft)  |          |  |
| CC311  | Fixatives and finishing spray coatings   |          |  |
| CC312  | Modelling clay   |          |  |
| CC313  | Correction fluid/tape  | C306     | Ink, toner, and colorant products                                    |
| CC314  | Inks in writing equipment (liquid)   |          |  |
| CC315  | Inks used for stamps   |          |  |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 9. For the 2024 and future submission periods, use only column A. |  |          |   |
|--|--|----------|---|
| Column A   |  | Column B |   |
| Code   | Category                                   | Code     | Category  |
| CC316  | Toner/Printer cartridge                    | C306     | Ink, toner, and colorant products               |
| CC317  | Liquid photographic processing solutions   | C307     | Photographic supplies, film, and photochemicals |
| <b>Chemical Substances in Automotive, Fuel, Agriculture, Outdoor Use Products</b>  |  |          |   |
| CC401  | Exterior car washes and soaps              | C401     | Automotive care products                        |
| CC402  | Exterior car waxes, polishes, and coatings |          |   |
| CC403  | Interior car care                          |          |   |
| CC404  | Touch up auto paint                        |          |   |
| CC405  | Degreasers                                 | C402     | Lubricants and greases                          |
| CC406  | Liquid lubricants and greases              |          |   |
| CC407  | Paste lubricants and greases               |          |   |
| CC408  | Spray lubricants and greases               |          |   |
| CC409  | Anti-freeze liquids                        | C403     | Anti-freeze and de-icing products               |
| CC410  | De-icing liquids                           |          |   |
| CC411  | De-icing solids                            |          |   |
| CC412  | Lock de-icers/releasers                    |          |   |
| CC413  | Cooking and heating fuels                  | C404     | Fuels and related products                      |
| CC414  | Fuel additives                             |          |   |
| CC415  | Vehicular or appliance fuels               |          |   |
| CC416  | Explosive materials                        | C405     | Explosive materials                             |
| CC417  | Agricultural non-pesticidal products       | C406     | Agricultural products (non-pesticidal)          |
| CC418  | Lawn and garden care products              | C407     | Lawn and garden care products                   |
| <b>Chemical Substances in Products not Described by Other Codes</b>  |  |          |   |
| CC980  | Other (specify)                            | C909     | Other (specify)                                 |
| CC990  | Non-TSCA use                               | C980     | Non-TSCA use                                    |

#### 4.8.3.2 Functional Use for Consumer and/or Commercial Products

For each consumer and/or commercial product category reported, report the code(s) that designates the function category(ies) that best represents the specific manner in which the chemical substance is used (40 CFR 711.(b)(4)(ii)(B)). For reporting during the 2020 submission period, submitters are required to use the OECD-based codes for the chemical substances designated by EPA as a high priority for risk evaluation and, for all other chemical substances, may use either the OECD-based codes or the CDR codes. The chemical substances designated by EPA as a high priority for risk evaluation are listed in 40 CFR 711.15(b)(4)(i)(C), Table 7. For reporting during the 2024 and future submission periods, submitters are required to use the OECD-based codes for all chemical substances for which the submitter is reporting processing

and use information. These codes are the same as those used above in Table 4-15 to report the appropriate Function Category for industrial processing and use. A particular function category may need to be reported more than once, to the extent that a submitter reports more than one consumer or commercial product category that applies to a given function category under this paragraph.

For the special situation where the chemical substance has multiple functions within the same product, you can report in one of two ways:

- 1) If one function is predominant, simply report the primary function; or
- 2) If all functions represent a substantial portion of the product, report each on a separate line and either estimate the portions individually or bifurcate the percent Production Volume (%PV) equally across the functions (so as not to double or triple-count the %PV for the one product).

For example, Citric acid (CASRN 77-92-9) may be reported by one site as:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• <u>Product Category</u> – CC116-Dishwashing detergent (liquid/gel)</li> <li><u>Functional Uses and (%PV)</u> <ul style="list-style-type: none"> <li>○ F073-Cleaning agent (25%)</li> <li>○ F043-Fragrance (15%)</li> <li>○ F065-Processing aids not otherwise specified (15%)</li> <li>○ F079-Viscosity modifiers (10%)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• <u>Product Category</u> – CC109-All-purpose liquid cleaner/polish</li> <li><u>Functional Uses and (%PV)</u> <ul style="list-style-type: none"> <li>○ F073-Cleaning agent (12%)</li> <li>○ F064-pH regulating agent (10%)</li> <li>○ F065-Processing aids not otherwise specified (8%)</li> <li>○ F043-Fragrance (5%)</li> </ul> </li> </ul> |
|---|--|

If none of the listed function categories accurately describes a use of a chemical substance, the category “Other” may be used, and must include a description of the use. The written description should be used to provide a description at a comparable level of specificity as found with the current codes. It should not be used to add additional, more specific detail.

#### **4.8.3.3 Consumer and/or Commercial Use**

For each Product Category reported, report whether the use is a consumer use or a commercial use (40 CFR 711.15b)(4)(ii)(C). If the product has both consumer and commercial uses, report both.

#### **4.8.3.4 Use in Product(s) Intended for Use by Children**

Within each consumer product category reported, you must determine whether any amount of each reportable chemical substance manufactured (including imported) by you is present in or on any consumer product(s) intended for use by children age 14 or younger, regardless of the concentration of the chemical substance remaining in or on the product (40 CFR 711.15(b)(4)(ii)(D)). If you determine that your chemical substance or mixture is used in a consumer product intended for use by children, report “Yes” in the “Used in Product(s) Intended for Children” column in Part II.D.2 of the Form U. If you determine that your chemical substance or mixture is not used in a consumer product intended for use by children, report “No.” If information as to whether the chemical substance is used in or on any consumer products intended for use by children is not known to or reasonably ascertainable by you, report “NKRA.”

EPA defines “intended for use by children” to mean the chemical substance or mixture is used in or on a product that is specifically intended for use by children age 14 or younger (40 CFR 711.3). Your chemical substance or mixture is intended for use by children if you answer “yes” to at least one of the following questions about the product into which your chemical substance or mixture is incorporated:

- Is the product commonly recognized (i.e., by a reasonable person) as being intended for use by children age 14 or younger?
- Does the manufacturer of the product state through product labeling or other written materials that the product is intended or will be used by children age 14 or younger?
- Is the advertising, promotion, or marketing of the product aimed at children age 14 or younger?

Table 4-20 illustrates some (non-exhaustive) examples of “Use in Product(s) Intended for Use by Children.” For example, certain products (e.g., crayons, coloring books, diapers, and toy cars) are typically used by children age 14 or younger. If you determine that your chemical substance or mixture is used in crayons, for example, you would report “Y” for children’s use for CC305.

Certain products, such as household cleaning products, automotive supplies, and lubricants, typically are not intended to be used by children age 14 or younger. As such, if you determine that your chemical substance or mixture is used in automotive care products and lubricants, for example, you would report “no” for children’s use for categories CC401 and CC402.

**Table 4-20. Examples of Products Intended for Use by Children**

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |  |                 |   |  |
|---|--|-----------------|---|--|
| <b>Column A</b>   |  | <b>Column B</b> |   | <b>Examples</b>  |
| <b>Codes</b>  | <b>Category</b>  | <b>Code</b>     | <b>Category</b>   |  |
| <b><u>Chemical Substances in Furnishings, Cleanings, Treatment Care Products</u></b>  |  |                 |   |  |
| CC102   | Furniture & furnishings including Plastic articles (soft); Leather articles  | C102            | Foam seating and bedding products                           | Child’s car seat, children’s sheets                      |
| CC103   | Furniture & furnishings including Stone, plaster, cement, glass and ceramic articles; Metal articles; or Rubber articles | C103            | Furniture and furnishings not covered elsewhere             | Baby cribs, changing tables                              |
| CC106   | Textile (fabric) dyes  | C104            | Fabric, textile, and leather products not covered elsewhere | Children’s clothing                                      |
| CC107   | Textile finishing and impregnating/surface treatment products  |                 |   | Children’s clothing, children’s sheets, child’s car seat |
| CC127   | Liquid body soap   | C108            | Personal care products                                      | Baby shampoo, children’s bubble bath                     |

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |   |                 |  |  |
|---|---|-----------------|--|--|
| <b>Column A</b>   |   | <b>Column B</b> |  | <b>Examples</b>  |
| <b>Codes</b>  | <b>Category</b>   | <b>Code</b>     | <b>Category</b>                          |  |
| <b><u>Chemical Substances in Construction, Paint, Electrical and Metal Products</u></b>   |   |                 |  |  |
| CC219   | Machinery, mechanical appliances, electrical/electronic articles  | C205            | Electrical and electronic products       | Electronic games, remote control cars  |
| CC222   | Electrical batteries and accumulators   | C207            | Batteries                                | Batteries used in toys   |
| <b><u>Chemical Substances in Packaging, Paper, Plastic, Hobby Products</u></b>  |   |                 |  |  |
| CC302   | Other articles with routine direct contact during normal use, including paper articles  | C302            | Paper products                           | Diapers, baby wipes, coloring books  |
| CC305   | Toys intended for children's use (and child dedicated articles), including Fabrics, textiles, and apparel; or Plastic articles (hard) | C304            | Toys, playground, and sporting equipment | Pacifiers, toy trucks, dolls, toy cars, wagons, action figures, balls, swing sets, slides, skates, baseball gloves, kid's rake |
| CC306   | Adhesives applied at elevated temperatures  | C305            | Arts, crafts, and hobby materials        | Craft glue for a hot glue gun  |
| CC308   | Crafting glue   |                 |  | Craft glue   |
| CC309   | Crafting Paint (applied to body)  |                 |  | Chemicals used to add color to body paint, finger paints   |

#### **4.8.3.5 Percentage of Production Volume**

Estimate the percentage of your production volume that is attributable to each specific consumer and commercial end use carried out at sites under your control, as well as at sites that receive a reportable chemical substance from you either directly or indirectly (including through a broker/distributor, from a customer, etc.), to the extent that such information is known to or reasonably ascertainable to you (40 CFR 711.15(b)(4)(ii)(E)). You should round estimates to the nearest ten percent of production volume (40 CFR 711.15(b)(4)(ii)(E)). If you would like to provide more specific percentages, please do so. However, you may not round a consumer and commercial product category that accounts for five percent or less of the total production volume attributable to that consumer and commercial product category is greater than or equal to 25,000 lb (40 CFR 711.15(b)(4)(ii)(E)). In such cases, you must report the percentage of production volume attributable to that consumer and commercial product category to the nearest one percent of the production volume (40 CFR 711.15(b)(4)(ii)(E)).

Note that the total percentage of production volumes reported may add up to more or less than 100 percent due to rounding. Additionally, the total percentage of production volume may add up to less than 100 percent if, for example:

- You do not know or cannot reasonably ascertain information about how all your production volume is used in consumer and commercial products;
- More than ten commercial or consumer product categories are applicable to your chemical substance; or
- A portion of your production is consumed in industrial uses or exported.

**How to determine your percent production volume:**

1. Determine the production volume that is attributable to each consumer and commercial end use.
2. Determine your total production volume for the current principal reporting year.
  - a. Add together the volume domestically manufactured and the volume imported.
  - b. DO NOT subtract the volume used on-site or the volume exported
3. Divide the volume determined in step 1 by the volume determined in step 2 and multiply by 100.

**4.8.3.6 Maximum Concentration Code**

When the chemical substance you manufacture (including import) is used in commercial or consumer products, you are required to report the estimated typical maximum concentration (measured by weight) of each chemical substance in each commercial or consumer product category reported in Part II.D.2 of the Form U (40 CFR 711.15(b)(4)(ii)(F)). For each chemical substance used in a reported commercial or consumer product, report the code that corresponds to the appropriate concentration range. Table 4-10 shows the codes and concentration ranges.

**4.8.3.7 Number of Commercial Workers Code**

Report the total number of commercial workers, including those at sites not under your control that are reasonably likely to be exposed while using the reportable chemical substance, with respect to each commercial use (40 CFR 711.15(B)(4)(II)(G)). For each chemical substance with a commercial use reported in Part II.D.2, report the code which corresponds to the appropriate range of commercial workers reasonably likely to be exposed. Table 4-18 shows the code and worker ranges. See Section 4.7.2.7 for a discussion of “reasonably likely to be exposed.”

**4.8.4 Special Provisions for Joint Submitters of Unknown Chemical Substances**

In the situation where a primary submitter (such as an importer) has sent a request to a secondary submitter (such as a foreign supplier) to provide the chemical composition of an imported product or mixture, the secondary submitter must also provide the chemical-specific function of each constituent substance along with information on chemical composition of the imported product or mixture. See Section 4.8.2.3 for additional information about reporting the function of a chemical substance.

## 4.9 Manufacturing by Contract: Co-manufacture Report

### 4.9.1 Determining the Need for a Co-manufacture Report when Manufacturing by Contract

A manufacturing by contract (co-manufacturing) relationship occurs when a chemical substance, manufactured other than by import, is produced exclusively for another person who contracts for such production. To be considered a co-manufacture situation, the producing company produces the chemical substance exclusively for another person (the contracting company) under contract for that production. If the chemical substance is produced for other purposes, then the situation fails this first test of “co-manufacturing.” In addition, the other person contracting the manufacture (i.e., the contracting company) specifies the identity of the chemical substance, the total amount produced, and the basic technology for the plant process. This is the second test of “co-manufacturing.” To be considered co-manufacturers, both of these tests must be met. See Appendix A for the definition of “manufacture” (40 CFR 711.3).

Companies that are co-manufacturing a chemical substance each contribute to completing the required CDR report for that chemical substance, choosing one of two procedures to report the information to EPA. Note that, in all cases, both the producing company and the contracting company are liable if no report is made. See 40 CFR 711.22(c).

### 4.9.2 Reporting Procedure 1 – the Contracting Company Initiates the Chemical Report

In this type of multi-reporter submission, the contracting company is the initiating submitter and the producing company is the completing submitter. As the initiating submitter, the contracting company is responsible for initiating a co-manufacture report that prompts the reporting requirements for the producing company (as the completing submitter).

This reporting process helps to protect the confidentiality of both the producing company and contracting company by ensuring that the contracting company would not require any potentially confidential information from the producing company. This method also eliminates confusion between the two involved parties by designating the contracting company as the initiating submitter responsible for initiating the reporting process. As with past reporting under CDR, both parties are liable for reporting the co-manufactured chemical under CDR.

#### 4.9.2.1 The Initial Report is Completed by the Contracting Company

The contracting company, as the initiating submitter, is responsible for initiating the co-manufacture report, uses e-CDRweb to notify the producing company of its need to complete a portion of the co-manufacture report, and completes a portion of the manufacturing-related section (Form U Part II.A – C) (40 CFR 711.15(b)(3)) and the processing and use-related section (Form U Part II.D) (40 CFR 711.15(b)(4)). The contracting company completes the chemical identity fields described in Sections 4.5.1 to 4.5.4 of this document and may provide a trade name or other alternate identifier for communicating with the producing company.

#### *Identifying the manufacturing site for the co-manufactured chemical substance*

In its portion of the co-manufacture chemical report, the initiating submitter identifies the site of manufacture of the co-manufactured chemical substance, which is always the producing company’s

site. The site's overall Form U includes both the contracting company's site information (as the site submitting the contracting site's report) (reported in Form U Part I) and the producing company's site information (reported within the co-manufactured chemical report) (reported in Form U Part II.C). See Section 4.4 for additional information about reporting site information in general.

#### *Notifying the producing company about the co-manufacture report*

Using the e-CDRweb reporting tool, the contracting company enters the email address of the producing company, and any necessary instruction for the producing company to complete its part of the co-manufacture report, into a system generated email. Also contained within the email is the unique identifier. The initiating submitter may send the email before it has completed its part of the co-manufacture report.

#### *Finishing the initial portion of the co-manufacture report*

The contracting company is responsible for completing portions of Part II.C (manufacturing-related) and all of Part II.D (processing- and use-related) of the Form U. Specifically, the contracting company provides the chemical identity and the volume manufactured. See Sections 4.5 and 4.7 of this document for additional information about Parts II.A and II.C and Section 4.8 for additional information about Part II.D specifically.

The contracting company completes any other chemical reports as part of its overall Form U submission and submits one Form U, including any co-manufacture reports, for its site. For specific instructions on how to report using the e-CDRweb reporting tool, see the e-CDRweb Getting Started User Guide, available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

### **4.9.2.2 The Completion Report is Completed by the Producing Company**

The producing company, as the completing submitter, is responsible for identifying that it is providing information for the co-manufacture report using the information (e.g., unique identification number) provided by the initiating submitter and completes the completion portion of the manufacturing-related section (Form U Part II.C.3) (40 CFR 711.15(b)(3)).

#### *Receiving notification from the contract company about the co-manufacture report*

The producing company receives an email from the contractor identifying that a co-manufacture report has been initiated and providing a unique identification number needed for the producing company to complete its part of the co-manufacture report.

#### *Identifying the manufacturing site for the co-manufactured chemical substance*

In its portion of the co-manufacture report, the completing submitter confirms that its site is the site of manufacture of the co-manufactured chemical substance. The producing company's site is reported in Part I of the Form U; the contracting site is not reported on the completion form.

#### *Finishing the completion portion of the co-manufacture report*

The producing company is responsible for completing portions of Part II (manufacturing-related) of the Form U that were not provided by the contracting company. Specifically, in Part II.C.3 the producing company provides the volume manufactured and the rest of the Part II information



except for the chemical identification, which is reported by the contracting company. See Sections 4.5 and 4.7 of this document for additional information about Part II.

The producing company completes any other chemical reports as part of its overall Form U submission and submits one Form U, including any co-manufacture reports, for its site. For specific instructions on how to report using the e-CDRweb reporting tool, see the e-CDRweb Getting Started User Guide, available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

### **4.9.3 Reporting Procedure 2 – The Producing Company Reports**

Upon written agreement between the contracting company and the producing company, the producing company completes the full chemical report for the co-manufactured chemical. The contracting company supplies the information not otherwise known to or reasonably ascertainable by the producing company (40 CFR 711.22(c)(2)). The producing company (instead of the contracting company) initiates and completes the co-manufactured chemical report using e-CDRweb. The producing company provides the exposure-related information from the manufacturing site and coordinates with the contracting company to obtain the additional information needed to complete the submission. The only site that is reported is the producing company site. Any use of the co-manufactured chemical by the contracting company would be captured in the processing and use section of the chemical report.

For example, in a co-manufacturing situation, the producing company is not likely to know the processing and use information associated with the co-manufactured chemical and therefore works with the contracting company to complete Part II.D of the CDR Form U. Therefore, any “not known or reasonably ascertainable” (NKRA) responses in Part II.D would refer to the knowledge of the contracting company and not the knowledge of the producing company. This coordination of information between the two parties must be done outside of e-CDRweb. Although the producing company submits the report, both parties are responsible for the report. Therefore, if no report is filed, both the contracting company and the producing company may be held liable. This reporting mechanism is most appropriate in a scenario in which the producing company has the majority of the information regarding the production of a specific chemical.

### **4.9.4 Confidentiality of Information on a Co-manufacture Report**

All of the confidentiality requirements discussed earlier in these Instructions apply to information submitted jointly. However, under reporting procedure 1, multi-reporter submissions include information required to connect the two reports and their related data. For example, a manufacturing by contract co-manufacture report requires that the initiating submitter provide their producing company identity. As the initiating submitter you are required to report your producing company’s identity, which you may claim as confidential without providing substantiation at the time your claim is made, because your producing company is considered your supplier (40 CFR 711.30(a)(3)(ii)).

Because, under reporting procedure 1, signatures are required by each party of a multi-reporter submission, each party must register with CDX and complete their own sections of the overall Form U report. The reporting tool will match the two portions of a multi-reporter

chemical report based upon the unique ID number sent by the contracting company to notify the producing company of the partial CDR submission. Producing companies do not have access to any of the information submitted to EPA by the contracting company. Likewise, contracting companies cannot see the information that the producing company reports to EPA. This way, the confidentiality of information for all submitters is protected. The information provided by both submitters will be combined and processed as one co-manufacture report once they are received by EPA.

Under reporting procedure 2, only the producing company is providing the information to EPA, identifying and substantiating confidential information, and signing the certification statement.

## **4.10 Joint Submissions using the Secondary Form – Unknown Chemical Identity**

### **4.10.1 Determining the Need for a Joint Submission using the Secondary Form**

Joint submissions are allowed in those instances where a supplier will not disclose to the manufacturer (including importer) the specific chemical name of the imported chemical substance or of a reactant used to manufacture a chemical substance, because the supplier claims the specific chemical name is confidential.

This may happen, for instance, when a company is importing a mixture under a trade name, and the foreign manufacturer refuses to reveal the chemical identity of a confidential component of the mixture. In this case, the importer and the supplier can jointly report the information through a joint submission. The importer must ask the supplier of the confidential chemical substance to directly provide EPA with the correct chemical identity in the Secondary Form U (see 40 CFR 711.15(b)(3)(i)(A)).

This may also happen in the event a manufacturer cannot provide the entire chemical identity of a chemical substance it manufactures because the chemical substance is manufactured using a reactant having a specific chemical identity that the reactant supplier claims as confidential and will not reveal to the manufacturer. In this case, the manufacturer and the supplier of the reactant can jointly report the information through a joint submission. The manufacturer must submit a report directly to EPA containing all information it knows or can reasonably ascertain about the chemical identity, including the chemical-specific function along with information on chemical composition. Furthermore, the manufacturer must also ask the reactant supplier to directly provide to EPA the correct chemical identity of the confidential reactant in the Secondary Form U (see 40 CFR 711.15(b)(3)(i)(B)). More detailed instructions for completing a joint submission can be found in the e-CDRweb user guide.

A manufacturer (including importer) can identify, on a chemical-by-chemical basis, the supplier for a chemical substance. A site may have different suppliers for different chemical substances in its overall Form U submission. The e-CDRweb tool will generate a unique ID number for each chemical substance (identified by a trade name). Therefore, a supplier may receive multiple ID numbers from a manufacturer (including importer). A supplier may also

report multiple chemical substances under one ID number in the case that the ID number refers to a mixture. In that situation, the supplier will be identifying the chemical substances that comprise the mixture.

It is the responsibility of the primary submitter to ask its supplier, or secondary submitter, to complete the Secondary Form U and send the information to EPA by the end of the submission period. The e-CDRweb electronic reporting tool leads the primary submitter through this notification process.

If the secondary submitter decides to provide the required trade name product information directly to you, you should change your submission type and submit a single submission.

#### **4.10.2 The Primary Submission is Completed by the Importer or Reactant User**

The primary submitter for a joint submission is either an importer or a manufacturer using a reactant of unknown chemical identity. For ease of presentation, both types of primary submitters will be referred to as “importer.” The importer, as the primary submitter, is responsible for initiating the joint submission, uses e-CDRweb to notify its supplier of the need to complete the secondary portion of the joint submission, and completes the manufacturing-related section (Form U Part II.A – C) (40 CFR 711.15(b)(3)) and the processing and use-related section (Form U Part II.D) (40 CFR 711.15(b)(4)) for the imported substance.

##### *Identifying the chemical identity of the unknown chemical substance and its supplier*

In its portion of the joint submission, the primary submitter identifies the proprietary substance or mixture using the trade name or another name, additional information as needed to help the supplier correctly identify the substance, and the identity and contact information for the supplier. See Sections 4.4.1.1 and 4.5.5 for additional information.

##### *Notifying the supplier about the joint submission*

Using the e-CDRweb reporting tool, the importer enters the email address of the supplier, and any necessary instruction for the supplier to complete its part of the joint submission, into a system generated email. Also contained within the email is the unique identifier. The primary submitter may send the email before it has completed its part of the joint submission.

##### *Completing the primary portion of the joint submission*

The importer is responsible for completing the rest of Part II (manufacturing-related) and Part II.D (processing- and use-related) of the Form U as it relates to the proprietary substance or mixture. See Sections 4.7 and 4.8 of this document for additional information about completing Part II.

The importer completes any other chemical reports as part of its overall Form U submission and submits one Form U, including any joint submission, for its site. For specific instructions on how to report using the e-CDRweb reporting tool, see the e-CDRweb Getting Started User Guide, available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

### 4.10.3 The Secondary Submission is Completed by the Supplier (Foreign or Reactant)

The supplier, as the secondary submitter, is responsible for identifying that it is providing information for the joint submission using the information (e.g., identification number) provided by the primary submitter and completing the Secondary Form U.

#### *Receiving notification from the importer about the joint submission*

The supplier receives an email from the importer identifying that a joint submission has been initiated and providing unique identification number needed for the supplier to complete its part of the joint submission.

#### *Completing the Secondary Form U, the secondary portion of the joint submission*

The supplier is responsible for completing the Secondary Form of the joint submission, which includes its company identity, a technical contact, identification of its customer (e.g., the primary submitter), the product trade name, and the unique identifier supplied by the primary submitter. The supplier then provides the chemical identity and composition of the product and the function of each chemical in the product. Additional information is provided elsewhere in this document. Specifically, see Section 4.5 for information about chemical identity and 4.8.4 for information about chemical function.

For specific instructions on how to report using the e-CDRweb reporting tool, see the e-CDRweb Getting Started User Guide, available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

#### *When the supplier doesn't know the identity*

There may be instances where a foreign supplier purchases a mixture, under a trade name, from another company (tertiary company) and does not know the chemical components of the mixture. The foreign supplier can ask the company manufacturing the trade secret mixture or chemical substance to directly provide EPA with the correct chemical identity in the Secondary Form U. In this case, the tertiary company would register with CDX and use the Unique Identifier for Joint Submissions, sent to the foreign supplier by the manufacturer (including importer), to complete the Secondary Form U.

Under this scenario, the foreign supplier does not have access to any of the information submitted to EPA by the tertiary company. Likewise, the tertiary company cannot see the information the foreign supplier reports to EPA. This way, the confidentiality of information for both the foreign supplier and tertiary company is protected.

### 4.10.4 Confidentiality of Information Jointly Submitted

All of the confidentiality requirements discussed earlier in these Instructions apply to information submitted jointly. However, joint submissions include information required to connect the two reports and their related data. For example, a joint submission requires that the primary submitter provide its trade name and supplier identity. A secondary submitter would provide the composition of its product.

These data elements specific to joint submissions require that any claims of confidentiality be

asserted at the time of submission, but do not require upfront substantiation:

- Joint submission information from the primary submitter consisting of trade name and supplier identification required pursuant to § 711.15(b)(3)(i)(A) and (B).
- Joint submission information from the secondary submitter consisting of the percentage of formulation required pursuant to § 711.15(b)(3)(i)(A) and (B) (40 CFR 711.30(a)(3)).

Because signatures are required by each party of a joint submission, each party must register with CDX and complete their own sections of the same Form U report. The reporting tool will match both submissions based upon the unique ID number sent by the manufacturer (including importer) to notify the supplier of the partial CDR submission. Suppliers do not have access to any of the information submitted to EPA by the manufacturer. Likewise, manufacturers cannot see the information that the supplier reports to EPA. This way, the confidentiality of information for all submitters is protected. The information provided by both submitters will be combined and processed as one joint submission once they are received by EPA.

**NOTE: In the event that a manufacturer (including importer) actually knows or can reasonably ascertain the chemical identity (e.g., the CASRN or Accession Number) of a chemical substance subject to CDR reporting, the manufacturer (including importer) must provide that information irrespective of a supplier's confidentiality claims. If such a primary submitter wishes to claim the chemical identity as confidential, to do so they must check the CBI box and provide upfront substantiation as described in 4.5.1 of this chapter.**

## **5. How to Obtain Copies of Documents Cited in This Instructions Document**

### **5.1 Obtaining Copies of the TSCA Rules**

The CDR rule, [40 CFR Part 711](#), is available on the U.S. Government Publishing Office website, [www.ecfr.gov](http://www.ecfr.gov).

You may also contact the TSCA Hotline by telephone at (202) 554-1404 or by email [tsc hotline@epa.gov](mailto:tsc hotline@epa.gov) for assistance.

### **5.2 Obtaining Copies of the Public Portion of the TSCA Inventory**

Information on how to access the non-confidential version of the TSCA Inventory and help using the files is available on EPA's website at [www.epa.gov/tsc a-inventory](http://www.epa.gov/tsc a-inventory).

### **5.3 Obtaining Copies of Other Information Materials for the CDR**

EPA has developed documents to provide additional information on submitting information for CDR. All materials are available on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

Reporting Electronically: *[note: these documents have not yet been updated, but will be prior to the start of the 2020 submission period]*

- Instructions on CDX registration
- e-CDRweb getting started user guide
- Schemas and Schema guides

#### [Chemical Data Reporting Frequent Questions](#)

Fact Sheets are available at [How To Report Under Chemical Data Reporting](#)

Webinars and Training:

- CDR Reporting Requirements Presentations

# Appendix A

## Glossary

The definitions and descriptions of terms used in CDR reporting provided below are taken from 40 CFR Part 711 unless otherwise noted.

**Act** means the Toxic Substances Control Act, as amended, 15 U.S.C. 2601 *et seq.*

**Administrator** means the Administrator of the Environmental Protection Agency. (See TSCA 3(1))

**Article** means a manufactured item (1) which is formed to a specific shape or design during manufacture, (2) which has end-use function(s) dependent in whole or in part upon its shape or design during end use, and (3) which has either no change of chemical composition during its end use or only those changes of composition which have no commercial purpose separate from that of the article, and that result from a chemical reaction that occurs upon end use of other chemical substances, mixtures, or articles; except that fluids and particles are not considered articles regardless of shape or design. (40 CFR 704.3)

**Byproduct** means a chemical substance produced without separate commercial intent during the manufacture, processing, use, or disposal of another chemical substance(s) or mixture(s). (40 CFR 704.3)

**Central Data Exchange (CDX)** means EPA's centralized electronic document receiving system, or its successors, including associated instructions for registering to submit electronic documents.

**Chemical substance** means any organic or inorganic substance of a particular molecular identity, including any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and any element or uncombined radical.

“Chemical substance” does *not* include:

- (1) Any mixture;
- (2) Any pesticide (as defined in the Federal Insecticide, Fungicide, and Rodenticide Act) when manufactured, processed, or distributed in commerce for use as a pesticide;
- (3) Tobacco or any tobacco product;
- (4) Any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 [42 U.S.C. 2011 *et seq.*] and the regulations issued under such Act);
- (5) Any article the sale of which is the subject to the tax imposed by section 4181 of the Internal Revenue Code of 1986 [26 U.S.C. 4181] (determined without regard to any exemptions from such tax provided by section 4182 or 4221 or any other provision of such Code) and any component of such an article (limited to shot shells, cartridges, and components of shot shells and cartridges); and
- (6) Any food, food additive, drug, cosmetic, or device (as such terms are defined in section 201 of the Federal Food, Drug, and Cosmetic Act [21 U.S.C. 321]) when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic, or device. (See TSCA 3(2))

**Commerce** means trade, traffic, transportation, or other commerce: (A) between a place in a State and any place outside of such State, or (B) which affects trade, traffic, transportation, or commerce described in clause (A). (TSCA 3(3))

**Commercial use** means the use of a chemical substance or a mixture containing a chemical substance (including as part of an article) in a commercial enterprise providing saleable goods or services.

**Consumer use** means the use of a chemical substance or a mixture containing a chemical substance (including as part of an article) when sold to or made available to consumers for their use.

**Customs territory of the United States**, as referenced in TSCA section 3 and defined in general note 2 of the Harmonized Tariff Schedule of the United States, includes only the States, the District of Columbia, and Puerto Rico.

**Distribute in commerce and distribution in commerce**, when used to describe an action taken with respect to a chemical substance or mixture or article containing a substance or mixture mean to sell, or the sale of, the substance, mixture, or article in commerce; to introduce or deliver for introduction into commerce, or the introduction or delivery for introduction into commerce of, the substance, mixture, or article; or to hold, or the holding of, the substance, mixture, or article after its introduction into commerce. (TSCA 3(5))

**e-CDRweb** means the electronic, web-based tool provided by EPA for the completion of Form U and submission of the CDR data.

**EPA** means the United States Environmental Protection Agency. (40 CFR 704.3)

**Highest-level Parent Company** means the highest-level company of the site's ownership hierarchy as of the start of the submission period during which data are being reported according to the following instructions. The highest-level U.S. parent company is located within the United States while the highest-level foreign parent company is located outside the United States. The following rules govern how to identify the highest-level U.S. parent company and highest-level foreign parent company (if applicable):

- (1) If the site is entirely owned by a single U.S. company that is not owned by another company, that single company is the U.S. parent company.
- (2) If the site is entirely owned by a single U.S. company that is, itself, owned by another U.S.-based company (e.g., it is a division or subsidiary of a higher-level company), the highest-level domestic company in the ownership hierarchy is the United States parent company. If there is a higher-level parent company that is outside of the United States, the highest-level foreign company in the ownership hierarchy is the foreign parent company.
- (3) If the site is owned by more than one company (e.g., company A owns 40 percent, company B owns 35 percent, and company C owns 25 percent), the company with the largest ownership interest in the site is the parent company. If a higher-level company in the ownership hierarchy owns more than one ownership company, then determine the entity with the largest ownership by considering the lower-level ownerships in combination (e.g., corporation X owns companies B and C, for a total ownership of 60



percent for the site).

(i) If the parent company is a U.S. company owned by another U.S. company, then the highest-level domestic company in the ownership hierarchy is the U.S. parent company. If the U.S. parent company has a higher-level foreign company in the ownership hierarchy, then the highest-level foreign company in the ownership hierarchy is the foreign parent company.

(ii) If the parent company is a foreign company, then the site is its own U.S. parent company and the foreign parent company is the highest-level foreign company in the ownership hierarchy.

(4) If the site is owned by a 50:50 joint venture or a cooperative, the joint venture or cooperative is its own parent company. If the site is owned by a U.S. joint venture or cooperative, the highest level of the joint venture or cooperative is the U.S. parent company. If the site is owned by a joint venture or cooperative outside the United States, the highest level of the joint venture or cooperative outside the United States is the foreign parent company.

(5) If the site is entirely owned by a foreign company (i.e., without a U.S.-based subsidiary within the site's ownership hierarchy), the highest-level foreign parent company is the facility's foreign parent company.

(6) If the site is federally owned, the highest-level federal agency or department is the U.S. parent company.

(7) If the site is owned by a non-federal public entity, that entity (such as a municipality, State, or tribe) is the U.S. parent company.

**Importer** means

(1) any person who imports any chemical substance or any chemical substance as part of a mixture or article into the customs territory of the United States, and includes:

- (i) the person primarily liable for the payment of any duties on the merchandise, or
- (ii) an authorized agent acting on his/her behalf.

(2) Importer also includes, as appropriate:

- (i) The consignee.
- (ii) The importer of record.
- (iii) The actual owner if an actual owner's declaration and superseding bond have been filed in accordance with 19 CFR 141.20.
- (iv) The transferee, if the right to draw merchandise in a bonded warehouse has been transferred in accordance with subpart C of 19 CFR part 144.

(3) For the purposes of this definition, the customs territory of the United States consists of the 50 States, Puerto Rico, and the District of Columbia. (40 CFR 704.3)

**Impurity** means a chemical substance which is unintentionally present with another chemical substance. (40 CFR 704.3)

**Industrial function** means the intended physical or chemical characteristic for which a chemical substance or mixture is consumed as a reactant; incorporated into a formulation, mixture, reaction product, or article; repackaged; or used.

**Industrial use** means use at a site at which one or more chemical substances or mixtures are manufactured (including imported) or processed.

**Intended for use by children** means the chemical substance or mixture is used in a product that is specifically intended for use by children age 14 or younger. A chemical substance or mixture is intended for use by children when the submitter answers “yes” to at least one of the following questions for the product into which the submitter’s chemical substance or mixture is incorporated:

- (1) Is the product commonly recognized (i.e., by a reasonable person) as being intended for children age 14 or younger?
- (2) Does the manufacturer of the product state through product labeling or other written materials that the product is intended or will be used by children age 14 or younger?
- (3) Is the advertising, promotion, or marketing of the product aimed at children age 14 or younger?

**Intermediate** means any chemical substance that is consumed, in whole or in part, in chemical reactions used for the intentional manufacture of other chemical substances or mixtures, or that is intentionally present for the purpose of altering the rates of such chemical reactions. (40 CFR 704.3)

**Known to or reasonably ascertainable by** means all information in a person’s possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know. (40 CFR 704.3)

**Manufacture** means to manufacture, produce, or import, for commercial purposes. Manufacture includes the extraction, for commercial purposes, of a component chemical substance from a previously existing chemical substance or complex combination of substances. A chemical substance is co-manufactured by the person who physically performs the manufacturing and the person contracting for such production when that chemical substance, manufactured other than by import, is: (1) produced exclusively for another person who contracts for such production, and (2) that other person dictates the specific identity of the chemical substance and controls the total amount produced and the basic technology for the manufacturing process.

**Manufacturer** means a person who manufactures a chemical substance.

**Manufacture for commercial purposes** means: (1) to import, produce, or manufacture with the purpose of obtaining an immediate or eventual commercial advantage for the manufacturer, and includes among other things, such “manufacture” of any amount of a chemical substance or mixture:

- (i) For commercial distribution, including for test marketing.
- (ii) For use by the manufacturer, including use for product research and development, or as an intermediate.

(2) Manufacture for commercial purposes also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including both byproducts that are separated from that other substance or mixture and impurities that remain in that substance or mixture. Such byproducts and impurities may, or may not, in themselves have commercial value. They are nonetheless produced for the purpose of obtaining a commercial advantage since they are part of the manufacture of a chemical product for a commercial purpose. (40 CFR 704.3)

**Master Inventory File** means EPA's comprehensive list of chemical substances which

constitute the Chemical Substances Inventory compiled under section 8(b) of the Act. It includes substances reported under 40 CFR Part 710 and substances reported under Part 720 for which a Notice of Commencement of Manufacture or Import has been received under § 720.120.

**Microorganism** means any combination of chemical substances that is a living organism and that meets the definition of microorganism at 40 CFR 725.3. Any chemical substance produced from a living microorganism is reportable under the CDR regulation unless otherwise excluded.

**Mixture** means any combination of two or more chemical substances if the combination does not occur in nature and is not, in whole or in part, the result of a chemical reaction; except that such term does include any combination which occurs, in whole or in part, as a result of a chemical reaction if none of the chemical substances comprising the combination is a new chemical substance and if the combination could have been manufactured for commercial purposes without a chemical reaction at the time the chemical substances comprising the combination were combined. (TSCA 3(10))

**Naturally occurring substance** is any chemical substance which is naturally occurring and: (1) which is (i) unprocessed or (ii) processed only by manual, mechanical, or gravitational means, by dissolution in water, by flotation, or by heating solely to remove water; or (2) which is extracted from air by any means. (40 CFR 710.4(b))

**Non-isolated intermediate** means any intermediate that is not intentionally removed from the equipment in which it is manufactured, including the reaction vessel in which it is manufactured, equipment which is ancillary to the reaction vessel, and any equipment through which the substance passes during a continuous flow process, but not including tanks or other vessels in which the substance is stored after its manufacture. (40 CFR 704.3)

**Parent Company** is a company that owns or controls another company. (40 CFR 704.3)

**Person** means any individual, firm, company, corporation, joint venture, partnership, sole proprietorship, association, or any other business entity; any State or political subdivision thereof, or any municipality; any interstate body; and any department, agency, or instrumentality of the Federal government. (40 CFR 704.3)

**Polymer** means any chemical substance described with the word fragments “\*polym\*”, “\*alkyd”, or “oxylated” in the Chemical Abstracts (CA) Index Name in the Master Inventory File, where the asterisk (\*) in the listed word fragments indicates that any sets of characters may precede, or follow, the character string defined. Polymers also include any chemical substance which is identified in the Master Inventory File as siloxane(s) and silicone(s), silsesquioxane(s), a protein (albumin, casein, gelatin, gluten, hemoglobin), an enzyme, a polysaccharide (starch, cellulose, or gum), rubber, or lignin. The polymer exclusion does not apply to a polymeric substance that has been hydrolyzed, depolymerized, or otherwise chemically modified, except in cases where the intended product of this reaction is totally polymeric in structure.

**Principal reporting year** means the latest complete calendar year preceding the submission period.

**Process** means to process for commercial purposes. (40 CFR 704.3)

**Process for commercial purposes** means the preparation of a chemical substance or mixture after its manufacture for distribution in commerce with the purpose of obtaining an immediate or eventual commercial advantage for the processor. Processing of any amount of a chemical substance or mixture is included in this definition. If a chemical substance or mixture containing impurities is processed for commercial purposes, then the impurities also are processed for commercial purposes. (40 CFR 704.3)

**Processor** means any person who processes a chemical substance or mixture. (40 CFR 704.3)

**Reasonably likely to be exposed** means an exposure to a chemical substance which, under foreseeable conditions of manufacture (including import), processing, distribution in commerce, or use of the chemical substance, is more likely to occur than not to occur. Such exposures would normally include, but would not be limited to, activities such as charging reactor vessels, drumming, bulk loading, cleaning equipment, maintenance operations, materials handling and transfers, and analytical operations. Covered exposures include exposures through any route of entry (inhalation, ingestion, skin contact, absorption, etc.), but excludes accidental or theoretical exposures.

**Repackaging** means the physical transfer of a chemical substance or mixture, as is, from one container to another container or containers in preparation for distribution of the chemical substance or mixture in commerce.

**Reportable chemical substance** means a chemical substance described in § 711.5.

**Site** means a contiguous property unit. Property divided only by a public right-of-way shall be considered one site. More than one plant may be located on a single site.

(a) For chemical substances manufactured under contract, i.e., by a co-manufacturer, the site is the location where the chemical substance is physically manufactured.

(b) The site for an importer who imports a chemical substance described in § 711.5 is the U.S. site of the operating unit within the person's organization that is directly responsible for importing the substance. The import site, in some instances, may be the organization's headquarters in the United States. If there is no such operating unit or headquarters in the United States, the site address for the importer is the United States address of an agent acting on behalf of the importer who is authorized to accept service of process for the importer.

(c) For portable manufacturing units sent out to different locations from a single distribution center, the distribution center shall be considered the site.

**Site-limited** means a chemical substance is manufactured and processed only within a site and is not distributed for commercial purposes as a substance or as part of a mixture or article outside the site. Imported substances are never site-limited. Although a site-limited chemical substance is not distributed for commercial purposes outside the site at which it is manufactured and processed, the substance is considered to have been manufactured and

processed for commercial purposes.

**Small government** means the government of a city, county, town, township, village, school district, or special district with a population of less than 50,000. (40 CFR 704.3)

**Small manufacturer** means a manufacturer (including importer) that meets either of the following standards:

(1) *First standard.* A manufacturer (including importer) of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than \$120 million. However, if the annual production or importation volume of a particular substance at any individual site owned or controlled by the manufacturer or importer is greater than 45,400 kilograms (100,000 lbs), the manufacturer (including importer) will not qualify as small for purposes of reporting on the production or importation of that substance at that site, unless the manufacturer (including importer) qualifies as small under standard (2) of this definition.

(2) *Second standard.* A manufacturer (including importer) of a substance is small if its total annual sales, when combined with those of its parent company (if any), are less than \$12 million, regardless of the quantity of substances produced or imported by that manufacturer (including importer). (40 CFR 704.3)

**Small quantities solely for research and development** (or “small quantities solely for purposes of scientific experimentation or analysis or chemical research on, or analysis of, such substance or another substance, including such research or analysis for the development of a product”) means quantities of a chemical substance manufactured, imported, or processed or proposed to be manufactured, imported, or processed solely for research and development that are no greater than reasonably necessary for such purposes. (40 CFR 704.3)

**State** means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, the Canal Zone, American Samoa, the Northern Mariana Islands, or any other territory or possession of the United States. (TSCA 3(16))

**Submission period** means the period in which manufacturing, processing, and use data are submitted to EPA.

**Test marketing** means the distribution in commerce of no more than a predetermined amount of chemical substance, mixture, or article containing that chemical substance or mixture, or a mixture containing that substance, by a manufacturer or processor, to no more than a defined number of potential customers to explore market capability in a competitive situation during a predetermined testing period prior to the broader distribution of that chemical substance, mixture, or article in commerce. (40 CFR 704.3)

**United States**, when used in the geographic sense, means all of the States. (TSCA 3(17))

**Use** means any utilization of a chemical substance or mixture that is not otherwise covered by the terms *manufacture* or *process*. Relabeling or redistributing a container holding a chemical substance or mixture where no repackaging of the chemical substance or mixture occurs does not constitute use or processing of the chemical substance or mixture.

# Appendix B

## Chemical Substances That Are the Subject of Certain TSCA Actions

This appendix provides assistance in determining whether your chemical substance is the subject of certain TSCA actions that affect your ability to use the exemptions allowed for in the CDR rule. Certain chemical substances, such as polymers, microorganisms, naturally occurring substances, certain natural gases, and water, generally are exempted from reporting under CDR (see 40 CFR 711.6). Small manufactures and small governments, as described in 40 CFR 711.9, also generally are exempted from reporting under CDR. Table B-1 provides a brief description of these two provisions. If, however, a chemical substance is the subject of certain TSCA actions, the exemption may no longer be applicable. Table B-2 provides a comparison of the effects of TSCA actions on different CDR requirements or exemptions. See Sections 2.1.4 and 2.2.4 for further discussion.

You can access a list of the chemical substances using EPA's Substance Registry Services (SRS) at [www.epa.gov/srs](http://www.epa.gov/srs). In SRS, you can search for either a specific chemical or you can search for a complete list of chemicals related to a type of regulation or other characteristic that affects the status of a chemical related to CDR. Note that CDR submitters are ultimately responsible for adhering to a chemical's reporting requirements that are based upon the status of the chemical in SRS on June 1, 2020, which is the first day of the CDR submission period.

To search for a specific chemical, visit the SRS "Search and Retrieve" webpage, type in a substance name in the "Synonym" field or a CASRN in the "Substance Identifier" field, and select "Search". Link to the chemical result that most closely meets your search needs. Select "Program and Regulatory Information." You can see the "Statutes/Regulations" and other characteristics that apply to the chemical.

To search for a list of chemicals that are related to a regulation or other CDR-related characteristic, visit the SRS "Search and Retrieve" webpage and select "Search by List". Select the chemical list that you would like to view and select "Search." You can search for lists specific to CDR submission periods. For example, to see only 2020 CDR-specific lists, type "2020 CDR" in the "Filter" box and select "Filter."

For more detailed instructions, view [How to Search for Chemicals that are the Subject of Certain TSCA Actions](#) on the CDR website at [www.epa.gov/cdr](http://www.epa.gov/cdr).

**Table B-1. Explanation of Reporting Requirements**

| <b>40 CFR 711</b> | <b>Reporting Requirements</b>  | <b>Explanation of Reporting Requirements</b>   |
|-------------------|--|--|
| <b>§ 711.6</b>    | Some groups or categories of chemical substances are exempted from some or all of the reporting requirements of this part, with the following exception: A chemical substance described in paragraph (a)(1), (a)(2), or (a)(4), or (b) of this section is not exempted from any of the reporting requirements of this part if that chemical substance is the subject of a rule proposed or promulgated under TSCA section 4, 5(a)(2), 5(b)(4), or 6, or is the subject of a consent agreement developed under the procedures of 40 CFR part 790, or is the subject of an order issued under TSCA section 4, 5(e), or 5(f), or is the subject of relief that has been granted under a civil action under TSCA section 5 or 7. | Information must be reported for chemical substances that would otherwise be wholly or partially exempted from CDR requirements because they are the subject of certain TSCA actions.  |
| <b>§ 711.8</b>    | Any person who manufactured (including imported) for commercial purposes any chemical substance that is the subject of a rule proposed or promulgated under TSCA section 5(a)(2), 5(b)(4), or 6, or is the subject of an order in effect under TSCA section 4, 5(e) or 5(f), or is the subject of relief that has been granted under a civil action under TSCA section 5 or 7 is subject to reporting as described in § 711.8(a), except that the applicable production volume threshold is 2,500 lb (1,134 kg).   | Chemical substances that are the subject of certain TSCA actions are to be reported based on a lower threshold of 2,500 lb.  |
| <b>§ 711.9</b>    | A person described in § 711.8 is not subject to the requirements of this part if that person qualifies as a small manufacturer or small government as that term is defined in 40 CFR 704.3. Notwithstanding this exclusion, a person who qualifies as a small manufacturer or small government is subject to this part with respect to any chemical substance that is the subject of a rule proposed or promulgated under TSCA section 4, 5(b)(4), or 6, or is the subject of an order in effect under TSCA section 4 or 5(e), or is the subject of relief that has been granted under a civil action under TSCA section 5 or 7.   | The exemption for small businesses and small governments does not apply to persons who manufacture (including import) a chemical substance that is the subject of certain TSCA actions. Even in such circumstances, however, the volume thresholds for reporting found in § 711.8 still apply. |

**Table B-2. Comparison of the effects of TSCA actions on different CDR requirements or exemptions**

| TSCA action  | CDR requirement                         |  |   |
|--|---|--|---|
|  | Subject to 2,500 lb reporting threshold | Not eligible for certain full or partial exemptions from reporting | Not eligible for small manufacturer or government exemption |
| TSCA section 4 rules (proposed or promulgated)       |   | ✓  | ✓   |
| TSCA section 4 orders                                | ✓                                       | ✓  | ✓   |
| Enforceable Consent Agreements (ECAs)                |   | ✓  |   |
| TSCA section 5(a)(2) SNURs (proposed or promulgated) | ✓                                       | ✓  |   |
| TSCA section 5(b)(4) rules (proposed or promulgated) | ✓                                       | ✓  | ✓   |
| TSCA section 6 rules (proposed or promulgated)       | ✓                                       | ✓  | ✓   |
| TSCA section 5(e) orders                             | ✓                                       | ✓  | ✓   |
| TSCA section 5(f) orders                             | ✓                                       | ✓  |   |
| TSCA section 5 civil actions                         | ✓                                       | ✓  | ✓   |
| TSCA section 7 civil actions                         | ✓                                       | ✓  | ✓   |



# Appendix C

## Chemical Substances Partially Exempt from Reporting

Chemical substances that are partially exempt from reporting requirements under the CDR rule are listed in 40 CFR 711.6(b)(1) and 711.6(b)(2); these lists are included below.

**IMPORTANT:** This document is intended to be an information resource. While EPA has attempted to provide an accurate list of chemical substances, the list may contain errors and omissions. This list should not be relied upon in lieu of the *Code of Federal Rules*. In the event of a conflict between this list and the *Code of Federal Rules*, this list will not be considered controlling.

**Table C-1. Partially Exempt Chemical Substances Termed “Petroleum Process Streams” Under 40 CFR 711.6(b)(1)**

| CAS Registry Number | Product   |
|---------------------|---|
| 8002-05-9           | Petroleum   |
| 8002-74-2           | Paraffin waxes and hydrocarbon waxes              |
| 8006-20-0           | Fuel gases, low and medium B.T.U.                 |
| 8008-20-6           | Kerosine (petroleum)                              |
| 8009-03-8           | Petrolatum  |
| 8012-95-1           | Paraffin oils                                     |
| 8030-30-6           | Naphtha   |
| 8032-32-4           | Ligroine  |
| 8042-47-5           | White mineral oil (petroleum)                     |
| 8052-41-3           | Stoddard solvent                                  |
| 8052-42-4           | Asphalt   |
| 61789-60-4          | Pitch   |
| 63231-60-7          | Paraffin waxes and hydrocarbon waxes, microcryst. |
| 64741-41-9          | Naphtha (petroleum), heavy straight-run           |
| 64741-42-0          | Naphtha (petroleum), full-range straight-run      |
| 64741-43-1          | Gas oils (petroleum), straight-run                |
| 64741-44-2          | Distillates (petroleum), straight-run middle      |
| 64741-45-3          | Residues (petroleum), atm. Tower                  |
| 64741-46-4          | Naphtha (petroleum), light straight-run           |
| 64741-47-5          | Natural gas condensates (petroleum)               |
| 64741-49-7          | Condensates (petroleum), vacuum tower             |
| 64741-50-0          | Distillates (petroleum), light paraffinic         |

| CAS Registry Number | Product   |
|---------------------|---|
| 64741-51-1          | Distillates (petroleum), heavy paraffinic                 |
| 64741-52-2          | Distillates (petroleum), light naphthenic                 |
| 64741-53-3          | Distillates (petroleum), heavy naphthenic                 |
| 64741-54-4          | Naphtha (petroleum), heavy catalytic cracked              |
| 64741-55-5          | Naphtha (petroleum), light catalytic cracked              |
| 64741-56-6          | Residues (petroleum), vacuum                              |
| 64741-57-7          | Gas oils (petroleum), heavy vacuum                        |
| 64741-58-8          | Gas oils (petroleum), light vacuum                        |
| 64741-59-9          | Distillates (petroleum), light catalytic cracked          |
| 64741-60-2          | Distillates (petroleum), intermediate catalytic cracked   |
| 64741-61-3          | Distillates (petroleum), heavy catalytic cracked          |
| 64741-62-4          | Clarified oils (petroleum), catalytic cracked             |
| 64741-63-5          | Naphtha (petroleum), light catalytic reformed             |
| 64741-64-6          | Naphtha (petroleum), full-range alkylate                  |
| 64741-65-7          | Naphtha (petroleum), heavy alkylate                       |
| 64741-66-8          | Naphtha (petroleum), light alkylate                       |
| 64741-67-9          | Residues (petroleum), catalytic reformer fractionator     |
| 64741-68-0          | Naphtha (petroleum), heavy catalytic reformed             |
| 64741-69-1          | Naphtha (petroleum), light hydrocracked                   |
| 64741-70-4          | Naphtha (petroleum), isomerization                        |
| 64741-73-7          | Distillates (petroleum), alkylate                         |
| 64741-74-8          | Naphtha (petroleum), light thermal cracked                |
| 64741-75-9          | Residues (petroleum), hydrocracked                        |
| 64741-76-0          | Distillates (petroleum), heavy hydrocracked               |
| 64741-77-1          | Distillates (petroleum), light hydrocracked               |
| 64741-78-2          | Naphtha (petroleum), heavy hydrocracked                   |
| 64741-79-3          | Coke (petroleum)  |
| 64741-80-6          | Residues (petroleum), thermal cracked                     |
| 64741-81-7          | Distillates (petroleum), heavy thermal cracked            |
| 64741-82-8          | Distillates (petroleum), light thermal cracked            |
| 64741-83-9          | Naphtha (petroleum), heavy thermal cracked                |
| 64741-84-0          | Naphtha (petroleum), solvent-refined light                |
| 64741-85-1          | Raffinates (petroleum), sorption process                  |
| 64741-86-2          | Distillates (petroleum), sweetened middle                 |
| 64741-87-3          | Naphtha (petroleum), sweetened                            |
| 64741-88-4          | Distillates (petroleum), solvent-refined heavy paraffinic |
| 64741-89-5          | Distillates (petroleum), solvent-refined light paraffinic |
| 64741-90-8          | Gas oils (petroleum), solvent-refined                     |

| CAS Registry Number | Product   |
|---------------------|---|
| 64741-91-9          | Distillates (petroleum), solvent-refined middle                     |
| 64741-92-0          | Naphtha (petroleum), solvent-refined heavy                          |
| 64741-95-3          | Residual oils (petroleum), solvent deasphalted                      |
| 64741-96-4          | Distillates (petroleum), solvent-refined heavy naphthenic           |
| 64741-97-5          | Distillates (petroleum), solvent-refined light naphthenic           |
| 64741-98-6          | Extracts (petroleum), heavy naphtha solvent                         |
| 64741-99-7          | Extracts (petroleum), light naphtha solvent                         |
| 64742-01-4          | Residual oils (petroleum), solvent-refined                          |
| 64742-03-6          | Extracts (petroleum), light naphthenic distillate solvent           |
| 64742-04-7          | Extracts (petroleum), heavy paraffinic distillate solvent           |
| 64742-05-8          | Extracts (petroleum), light paraffinic distillate solvent           |
| 64742-06-9          | Extracts (petroleum), middle distillate solvent                     |
| 64742-07-0          | Raffinates (petroleum), residual oil decarbonization                |
| 64742-08-1          | Raffinates (petroleum), heavy naphthenic distillate decarbonization |
| 64742-09-2          | Raffinates (petroleum), heavy paraffinic distillate decarbonization |
| 64742-10-5          | Extracts (petroleum), residual oil solvent                          |
| 64742-11-6          | Extracts (petroleum), heavy naphthenic distillate solvent           |
| 64742-12-7          | Gas oils (petroleum), acid-treated                                  |
| 64742-13-8          | Distillates (petroleum), acid-treated middle                        |
| 64742-14-9          | Distillates (petroleum), acid-treated light                         |
| 64742-15-0          | Naphtha (petroleum), acid-treated                                   |
| 64742-16-1          | Petroleum resins  |
| 64742-18-3          | Distillates (petroleum), acid-treated heavy naphthenic              |
| 64742-19-4          | Distillates (petroleum), acid-treated light naphthenic              |
| 64742-20-7          | Distillates (petroleum), acid-treated heavy paraffinic              |
| 64742-21-8          | Distillates (petroleum), acid-treated light paraffinic              |
| 64742-22-9          | Naphtha (petroleum), chemically neutralized heavy                   |
| 64742-23-0          | Naphtha (petroleum), chemically neutralized light                   |
| 64742-24-1          | Sludges (petroleum), acid   |
| 64742-25-2          | Lubricating oils (petroleum), acid-treated spent                    |
| 64742-26-3          | Hydrocarbon waxes (petroleum), acid-treated                         |
| 64742-27-4          | Distillates (petroleum), chemically neutralized heavy paraffinic    |
| 64742-28-5          | Distillates (petroleum), chemically neutralized light paraffinic    |
| 64742-29-6          | Gas oils (petroleum), chemically neutralized                        |
| 64742-30-9          | Distillates (petroleum), chemically neutralized middle              |
| 64742-31-0          | Distillates (petroleum), chemically neutralized light               |
| 64742-32-1          | Lubricating oils (petroleum), chemically neutralized spent          |
| 64742-33-2          | Hydrocarbon waxes (petroleum), chemically neutralized               |

| CAS Registry Number | Product  |
|---------------------|--|
| 64742-34-3          | Distillates (petroleum), chemically neutralized heavy naphthenic |
| 64742-35-4          | Distillates (petroleum), chemically neutralized light naphthenic |
| 64742-36-5          | Distillates (petroleum), clay-treated heavy paraffinic           |
| 64742-37-6          | Distillates (petroleum), clay-treated light paraffinic           |
| 64742-38-7          | Distillates (petroleum), clay-treated middle                     |
| 64742-39-8          | Neutralizing agents (petroleum), spent sodium carbonate          |
| 64742-40-1          | Neutralizing agents (petroleum), spent sodium hydroxide          |
| 64742-41-2          | Residual oils (petroleum), clay-treated                          |
| 64742-42-3          | Hydrocarbon waxes (petroleum), clay-treated microcryst.          |
| 64742-43-4          | Paraffin waxes (petroleum), clay-treated                         |
| 64742-44-5          | Distillates (petroleum), clay-treated heavy naphthenic           |
| 64742-45-6          | Distillates (petroleum), clay-treated light naphthenic           |
| 64742-46-7          | Distillates (petroleum), hydrotreated middle                     |
| 64742-47-8          | Distillates (petroleum), hydrotreated light                      |
| 64742-48-9          | Naphtha (petroleum), hydrotreated heavy                          |
| 64742-49-0          | Naphtha (petroleum), hydrotreated light                          |
| 64742-50-3          | Lubricating oils (petroleum), clay-treated spent                 |
| 64742-51-4          | Paraffin waxes (petroleum), hydrotreated                         |
| 64742-52-5          | Distillates (petroleum), hydrotreated heavy naphthenic           |
| 64742-53-6          | Distillates (petroleum), hydrotreated light naphthenic           |
| 64742-54-7          | Distillates (petroleum), hydrotreated heavy paraffinic           |
| 64742-55-8          | Distillates (petroleum), hydrotreated light paraffinic           |
| 64742-56-9          | Distillates (petroleum), solvent-dewaxed light paraffinic        |
| 64742-57-0          | Residual oils (petroleum), hydrotreated                          |
| 64742-58-1          | Lubricating oils (petroleum), hydrotreated spent                 |
| 64742-59-2          | Gas oils (petroleum), hydrotreated vacuum                        |
| 64742-60-5          | Hydrocarbon waxes (petroleum), hydrotreated microcryst.          |
| 64742-61-6          | Slack wax (petroleum)  |
| 64742-62-7          | Residual oils (petroleum), solvent-dewaxed                       |
| 64742-63-8          | Distillates (petroleum), solvent-dewaxed heavy naphthenic        |
| 64742-64-9          | Distillates (petroleum), solvent-dewaxed light naphthenic        |
| 64742-65-0          | Distillates (petroleum), solvent-dewaxed heavy paraffinic        |
| 64742-67-2          | Foots oil (petroleum)  |
| 64742-68-3          | Naphthenic oils (petroleum), catalytic dewaxed heavy             |
| 64742-69-4          | Naphthenic oils (petroleum), catalytic dewaxed light             |
| 64742-70-7          | Paraffin oils (petroleum), catalytic dewaxed heavy               |
| 64742-71-8          | Paraffin oils (petroleum), catalytic dewaxed light               |
| 64742-72-9          | Distillates (petroleum), catalytic dewaxed middle                |

| CAS Registry Number | Product   |
|---------------------|---|
| 64742-73-0          | Naphtha (petroleum), hydrodesulfurized light                        |
| 64742-75-2          | Naphthenic oils (petroleum), complex dewaxed heavy                  |
| 64742-76-3          | Naphthenic oils (petroleum), complex dewaxed light                  |
| 64742-78-5          | Residues (petroleum), hydrodesulfurized atmospheric tower           |
| 64742-79-6          | Gas oils (petroleum), hydrodesulfurized                             |
| 64742-80-9          | Distillates (petroleum), hydrodesulfurized middle                   |
| 64742-81-0          | Kerosine (petroleum), hydrodesulfurized                             |
| 64742-82-1          | Naphtha (petroleum), hydrodesulfurized heavy                        |
| 64742-83-2          | Naphtha (petroleum), light steam-cracked                            |
| 64742-85-4          | Residues (petroleum), hydrodesulfurized vacuum                      |
| 64742-86-5          | Gas oils (petroleum), hydrodesulfurized heavy vacuum                |
| 64742-87-6          | Gas oils (petroleum), hydrodesulfurized light vacuum                |
| 64742-88-7          | Solvent naphtha (petroleum), medium aliph.                          |
| 64742-89-8          | Solvent naphtha (petroleum), light aliph.                           |
| 64742-90-1          | Residues (petroleum), steam-cracked                                 |
| 64742-91-2          | Distillates (petroleum), steam-cracked                              |
| 64742-92-3          | Petroleum resins, oxidized  |
| 64742-93-4          | Asphalt, oxidized   |
| 64742-94-5          | Solvent naphtha (petroleum), heavy arom.                            |
| 64742-95-6          | Solvent naphtha (petroleum), light arom.                            |
| 64742-96-7          | Solvent naphtha (petroleum), heavy aliph.                           |
| 64742-97-8          | Distillates (petroleum), oxidized heavy                             |
| 64742-98-9          | Distillates (petroleum), oxidized light                             |
| 64742-99-0          | Residual oils (petroleum), oxidized                                 |
| 64743-00-6          | Hydrocarbon waxes (petroleum), oxidized                             |
| 64743-01-7          | Petrolatum (petroleum), oxidized                                    |
| 64743-02-8          | Alkenes, C>10 .alpha.-  |
| 64743-03-9          | Phenols (petroleum)   |
| 64743-04-0          | Coke (petroleum), recovery  |
| 64743-05-1          | Coke (petroleum), calcined  |
| 64743-06-2          | Extracts (petroleum), gas oil solvent                               |
| 64743-07-3          | Sludges (petroleum), chemically neutralized                         |
| 64754-89-8          | Naphthenic acids (petroleum), crude                                 |
| 64771-71-7          | Paraffins (petroleum), normal C>10                                  |
| 64771-72-8          | Paraffins (petroleum), normal C5-20                                 |
| 67254-74-4          | Naphthenic oils   |
| 67674-12-8          | Residual oils (petroleum), oxidized, compounds with triethanolamine |
| 67674-13-9          | Petrolatum (petroleum), oxidized, partially deacidified             |

| CAS Registry Number | Product  |
|---------------------|--|
| 67674-15-1          | Petrolatum (petroleum), oxidized, Me ester   |
| 67674-16-2          | Hydrocarbon waxes (petroleum), oxidized, partially deacidified   |
| 67674-17-3          | Distillates (petroleum), oxidized light, compounds with triethanolamine                                  |
| 67674-18-4          | Distillates (petroleum), oxidized light, Bu esters   |
| 67891-79-6          | Distillates (petroleum), heavy arom.   |
| 67891-80-9          | Distillates (petroleum), light arom.   |
| 67891-81-0          | Distillates (petroleum), oxidized light, potassium salts   |
| 67891-82-1          | Hydrocarbon waxes (petroleum), oxidized, compounds with ethanolamine                                     |
| 67891-83-2          | Hydrocarbon waxes (petroleum), oxidized, compounds with isopropanolamine                                 |
| 67891-85-4          | Hydrocarbon waxes (petroleum), oxidized, compounds with triisopropanolamine                              |
| 67891-86-5          | Hydrocarbon waxes (petroleum), oxidized, compounds with diisopropanolamine                               |
| 68131-05-5          | Hydrocarbon oils, process blends   |
| 68131-49-7          | Aromatic hydrocarbons, C6-10, acid-treated, neutralized  |
| 68131-75-9          | Gases (petroleum), C3-4  |
| 68153-22-0          | Paraffin waxes and Hydrocarbon waxes, oxidized   |
| 68187-57-5          | Pitch, coal tar-petroleum  |
| 68187-58-6          | Pitch, petroleum, arom.  |
| 68187-60-0          | Hydrocarbons, C4, ethane-propane-cracked   |
| 68307-98-2          | Tail gas (petroleum), catalytic cracked distillate and catalytic cracked naphtha fractionation absorber  |
| 68307-99-3          | Tail gas (petroleum), catalytic polymn. naphtha fractionation stabilizer                                 |
| 68308-00-9          | Tail gas (petroleum), catalytic reformed naphtha fractionation stabilizer, hydrogen sulfide-free         |
| 68308-01-0          | Tail gas (petroleum), cracked distillate hydrotreater stripper   |
| 68308-02-1          | Tail gas (petroleum), distn., hydrogen sulfide-free  |
| 68308-03-2          | Tail gas (petroleum), gas oil catalytic cracking absorber  |
| 68308-04-3          | Tail gas (petroleum), gas recovery plant   |
| 68308-05-4          | Tail gas (petroleum), gas recovery plant deethanizer   |
| 68308-06-5          | Tail gas (petroleum), hydrodesulfurized distillate and hydrodesulfurized naphtha fractionator, acid-free |
| 68308-07-6          | Tail gas (petroleum), hydrodesulfurized vacuum gas oil stripper, hydrogen sulfide-free                   |
| 68308-08-7          | Tail gas (petroleum), isomerized naphtha fractionation stabilizer  |
| 68308-09-8          | Tail gas (petroleum), light straight-run naphtha stabilizer, hydrogen sulfide-free                       |
| 68308-10-1          | Tail gas (petroleum), straight-run distillate hydrodesulfurizer, hydrogen sulfide-free                   |
| 68308-11-2          | Tail gas (petroleum), propane-propylene alkylation feed prep deethanizer                                 |
| 68308-12-3          | Tail gas (petroleum), vacuum gas oil hydrodesulfurizer, hydrogen sulfide-free                            |
| 68308-27-0          | Fuel gases, refinery   |
| 68333-22-2          | Residues (petroleum), atmospheric  |
| 68333-23-3          | Naphtha (petroleum), heavy coker   |

| CAS Registry Number | Product  |
|---------------------|--|
| 68333-24-4          | Hydrocarbon waxes (petroleum), oxidized, compds. with triethanolamine  |
| 68333-25-5          | Distillates (petroleum), hydrodesulfurized light catalytic cracked   |
| 68333-26-6          | Clarified oils (petroleum), hydrodesulfurized catalytic cracked  |
| 68333-27-7          | Distillates (petroleum), hydrodesulfurized intermediate catalytic cracked  |
| 68333-28-8          | Distillates (petroleum), hydrodesulfurized heavy catalytic cracked   |
| 68333-29-9          | Residues (petroleum), light naphtha solvent extracts   |
| 68333-30-2          | Distillates (petroleum), oxidized heavy thermal cracked  |
| 68333-81-3          | Alkanes, C4-12   |
| 68333-88-0          | Aromatic hydrocarbons, C9-17   |
| 68334-30-5          | Fuels, diesel  |
| 68409-99-4          | Gases (petroleum), catalytic cracked overheads   |
| 68410-00-4          | Distillates (petroleum), crude oil   |
| 68410-05-9          | Distillates (petroleum), straight-run light  |
| 68410-12-8          | Distillates (petroleum), steam-cracked, C5-10 fraction, high-temp. stripping products with light steamcracked petroleum naphtha C5 fraction polymers |
| 68410-71-9          | Raffinates (petroleum), catalytic reformer ethylene glycol-water countercurrent exts.  |
| 68410-96-8          | Distillates (petroleum), hydrotreated middle, intermediate boiling   |
| 68410-97-9          | Distillates (petroleum), light distillate hydrotreating process, low-boiling   |
| 68410-98-0          | Distillates (petroleum), hydrotreated heavy naphtha, deisohexanizer overheads  |
| 68411-00-7          | Alkenes, C>8   |
| 68425-29-6          | Distillates (petroleum), naphtha-raffinate pyrolyzate-derived, gasoline-blending   |
| 68425-33-2          | Petrolatum (petroleum), oxidized, barium salt  |
| 68425-34-3          | Petrolatum (petroleum), oxidized, calcium salt   |
| 68425-35-4          | Raffinates (petroleum), reformer, Lurgi unit-sepd.   |
| 68425-39-8          | Alkenes, C>10 .alpha.-, oxidized   |
| 68441-09-8          | Hydrocarbon waxes (petroleum), clay-treated microcryst, contg. polyethylene, oxidized  |
| 68459-78-9          | Alkenes, C18-24 .alpha.-, dimers   |
| 68475-57-0          | Alkanes, C1-2  |
| 68475-58-1          | Alkanes, C2-3  |
| 68475-59-2          | Alkanes, C3-4  |
| 68475-60-5          | Alkanes, C4-5  |
| 68475-61-6          | Alkenes, C5, naphtha-raffinate pyrolyzate-derived  |
| 68475-70-7          | Aromatic hydrocarbons, C6-8, naphtha-raffinate pyrolyzate-derived  |
| 68475-79-6          | Distillates (petroleum), catalytic reformed depentanizer   |
| 68475-80-9          | Distillates (petroleum), light steam-cracked naphtha   |
| 68476-26-6          | Fuel gases   |
| 68476-27-7          | Fuel gases, amine system residues  |
| 68476-28-8          | Fuel gases, C6-8 catalytic reformer  |

| CAS Registry Number | Product  |
|---------------------|--|
| 68476-29-9          | Fuel gases, crude oil distillates  |
| 68476-30-2          | Fuel oil, no. 2  |
| 68476-31-3          | Fuel oil, no. 4  |
| 68476-32-4          | Fuel oil, residues-straight-run gas oils, high-sulfur  |
| 68476-33-5          | Fuel oil, residual   |
| 68476-34-6          | Fuels, diesel, no. 2   |
| 68476-39-1          | Hydrocarbons, aliph.-arom.-C4-5-olefinic   |
| 68476-40-4          | Hydrocarbons, C3-4   |
| 68476-42-6          | Hydrocarbons, C4-5   |
| 68476-43-7          | Hydrocarbons, C4-6, C5-rich  |
| 68476-44-8          | Hydrocarbons, C>3  |
| 68476-45-9          | Hydrocarbons, C5-10 arom. conc., ethylene-manuf.-by-product                                    |
| 68476-46-0          | Hydrocarbons, C3-11, catalytic cracker distillates   |
| 68476-47-1          | Hydrocarbons, C2-6, C6-8 catalytic reformer  |
| 68476-49-3          | Hydrocarbons, C2-4, C3-rich  |
| 68476-50-6          | Hydrocarbons, C>5, C5-6-rich   |
| 68476-52-8          | Hydrocarbons, C4, ethylene-manuf.-by-product   |
| 68476-53-9          | Hydrocarbons, C>20, petroleum wastes   |
| 68476-54-0          | Hydrocarbons, C3-5, polymn. unit feed  |
| 68476-55-1          | Hydrocarbons, C5-rich  |
| 68476-56-2          | Hydrocarbons, cyclic C5 and C6   |
| 68476-77-7          | Lubricating oils, refined used   |
| 68476-81-3          | Paraffin waxes and Hydrocarbon waxes, oxidized, calcium salts                                  |
| 68476-84-6          | Petroleum products, gases, inorg.  |
| 68476-85-7          | Petroleum gases, liquefied   |
| 68476-86-8          | Petroleum gases, liquefied, sweetened  |
| 68477-25-8          | Waste gases, vent gas, C1-6  |
| 68477-26-9          | Wastes, petroleum  |
| 68477-29-2          | Distillates (petroleum), catalytic reformer fractionator residue, high-boiling                 |
| 68477-30-5          | Distillates (petroleum), catalytic reformer fractionator residue, intermediate-boiling         |
| 68477-31-6          | Distillates (petroleum), catalytic reformer fractionator residue, low-boiling                  |
| 68477-33-8          | Gases (petroleum), C3-4, isobutane-rich  |
| 68477-34-9          | Distillates (petroleum), C3-5, 2-methyl-2-butene-rich  |
| 68477-35-0          | Distillates (petroleum), C3-6, piperylene-rich   |
| 68477-36-1          | Distillates (petroleum), cracked steam-cracked, C5-18 fraction                                 |
| 68477-38-3          | Distillates (petroleum), cracked steam-cracked petroleum distillates                           |
| 68477-39-4          | Distillates (petroleum), cracked stripped steam-cracked petroleum distillates, C8-10 fraction  |
| 68477-40-7          | Distillates (petroleum), cracked stripped steam-cracked petroleum distillates, C10-12 fraction |



| CAS Registry Number | Product  |
|---------------------|--|
| 68477-41-8          | Gases (petroleum), extractive, C3-5, butadiene-butene-rich   |
| 68477-42-9          | Gases (petroleum), extractive, C3-5, butene-isobutylene-rich   |
| 68477-44-1          | Distillates (petroleum), heavy naphthenic, mixed with steam-cracked petroleum distillates C5-12 fraction             |
| 68477-47-4          | Distillates (petroleum), mixed heavy olefin vacuum, heart-cut  |
| 68477-48-5          | Distillates (petroleum), mixed heavy olefin vacuum, low-boiling  |
| 68477-53-2          | Distillates (petroleum), steam-cracked, C5-12 fraction   |
| 68477-54-3          | Distillates (petroleum), steam-cracked, C8-12 fraction   |
| 68477-55-4          | Distillates (petroleum), steam-cracked, C5-10 fraction, mixed with light steam-cracked petroleum naphtha C5 fraction |
| 68477-58-7          | Distillates (petroleum), steam-cracked petroleum distillates, C5-18 fraction   |
| 68477-59-8          | Distillates (petroleum), steam-cracked petroleum distillates cyclopentadiene conc.                                   |
| 68477-60-1          | Extracts (petroleum), cold-acid  |
| 68477-61-2          | Extracts (petroleum), cold-acid, C4-6  |
| 68477-62-3          | Extracts (petroleum), cold-acid, C3-5, butene-rich   |
| 68477-63-4          | Extracts (petroleum), reformer recycle   |
| 68477-64-5          | Gases (petroleum), acetylene manuf. off  |
| 68477-65-6          | Gases (petroleum), amine system feed   |
| 68477-66-7          | Gases (petroleum), benzene unit hydrodesulfurizer off  |
| 68477-67-8          | Gases (petroleum), benzene unit recycle, hydrogen-rich   |
| 68477-68-9          | Gases (petroleum), blend oil, hydrogen-nitrogen-rich   |
| 68477-69-0          | Gases (petroleum), butane splitter overheads   |
| 68477-70-3          | Gases (petroleum), C2-3  |
| 68477-71-4          | Gases (petroleum), catalytic-cracked gas oil depropanizer bottoms, C4-rich acid-free                                 |
| 68477-72-5          | Gases (petroleum), catalytic-cracked naphtha debutanizer bottoms, C3-5-rich  |
| 68477-73-6          | Gases (petroleum), catalytic cracked naphtha depropanizer overhead, C3-rich acid-free                                |
| 68477-74-7          | Gases (petroleum), catalytic cracker   |
| 68477-75-8          | Gases (petroleum), catalytic cracker, C1-5-rich  |
| 68477-76-9          | Gases (petroleum), catalytic polymd. naphtha stabilizer overhead, C2-4-rich  |
| 68477-77-0          | Gases (petroleum), catalytic reformed naphtha stripper overheads   |
| 68477-79-2          | Gases (petroleum), catalytic reformer, C1-4-rich   |
| 68477-80-5          | Gases (petroleum), C6-8 catalytic reformer recycle   |
| 68477-81-6          | Gases (petroleum), C6-8 catalytic reformer   |
| 68477-82-7          | Gases (petroleum), C6-8 catalytic reformer recycle, hydrogen-rich  |
| 68477-83-8          | Gases (petroleum), C3-5 olefinic-paraffinic alkylation feed  |
| 68477-84-9          | Gases (petroleum), C2-return stream  |
| 68477-85-0          | Gases (petroleum), C4-rich   |
| 68477-86-1          | Gases (petroleum), deethanizer overheads   |
| 68477-87-2          | Gases (petroleum), deisobutanizer tower overheads  |

| CAS Registry Number | Product  |
|---------------------|--|
| 68477-88-3          | Gases (petroleum), deethanizer overheads, C3-rich  |
| 68477-89-4          | Distillates (petroleum), depentanizer overheads  |
| 68477-90-7          | Gases (petroleum), depropanizer dry, propene-rich  |
| 68477-91-8          | Gases (petroleum), depropanizer overheads  |
| 68477-92-9          | Gases (petroleum), dry sour, gas-concn.-unit-off   |
| 68477-93-0          | Gases (petroleum), gas concn. reabsorber distn.  |
| 68477-94-1          | Gases (petroleum), gas recovery plant depropanizer overheads   |
| 68477-95-2          | Gases (petroleum), Girbatol unit feed  |
| 68477-96-3          | Gases (petroleum), hydrogen absorber off   |
| 68477-97-4          | Gases (petroleum), hydrogen-rich   |
| 68477-98-5          | Gases (petroleum), hydrotreater blend oil recycle, hydrogen-nitrogen rich                                |
| 68477-99-6          | Gases (petroleum), isomerized naphtha fractionater, C4-rich, hydrogen sulfide-free                       |
| 68478-00-2          | Gases (petroleum), recycle, hydrogen-rich  |
| 68478-01-3          | Gases (petroleum), reformer make-up, hydrogen-rich   |
| 68478-02-4          | Gases (petroleum), reforming hydrotreater  |
| 68478-03-5          | Gases (petroleum), reforming hydrotreater, hydrogen-methane-rich   |
| 68478-04-6          | Gases (petroleum), reforming hydrotreater make-up, hydrogen-rich   |
| 68478-05-7          | Gases (petroleum), thermal cracking distn.   |
| 68478-08-0          | Naphtha (petroleum), light steam-cracked, C5-fraction, oligomer conc.                                    |
| 68478-10-4          | Naphtha (petroleum), light steam-cracked, debenzenized, C8-16-cycloalkadiene conc.                       |
| 68478-12-6          | Residues (petroleum), butane splitter bottoms  |
| 68478-13-7          | Residues (petroleum), catalytic reformer fractionator residue distn.                                     |
| 68478-15-9          | Residues (petroleum), C6-8 catalytic reformer  |
| 68478-16-0          | Residual oils (petroleum), deisobutanizer tower  |
| 68478-17-1          | Residues (petroleum), heavy coker gas oil and vacuum gas oil   |
| 68478-18-2          | Residues (petroleum), heavy olefin vacuum  |
| 68478-19-3          | Residual oils (petroleum), propene purifn. splitter  |
| 68478-20-6          | Residues (petroleum), steam-cracked petroleum distillates cyclopentadiene conc., C4 cyclopentadiene free |
| 68478-22-8          | Tail gas (petroleum), catalytic cracked naphtha stabilization absorber                                   |
| 68478-24-0          | Tail gas (petroleum), catalytic cracker, catalytic reformer and hydrodesulfurizer combined fractionater  |
| 68478-25-1          | Tail gas (petroleum), catalytic cracker refractionation absorber   |
| 68478-26-2          | Tail gas (petroleum), catalytic reformed naphtha fractionation stabilizer                                |
| 68478-27-3          | Tail gas (petroleum), catalytic reformed naphtha separator   |
| 68478-28-4          | Tail gas (petroleum), catalytic reformed naphtha stabilizer  |
| 68478-29-5          | Tail gas (petroleum), cracked distillate hydrotreater separator  |
| 68478-30-8          | Tail gas (petroleum), hydrodesulfurized straight-run naphtha separator                                   |
| 68478-31-9          | Tail gas (petroleum), isomerized naphtha fractionates, hydrogen sulfide-free                             |

| CAS Registry Number | Product   |
|---------------------|---|
| 68478-32-0          | Tail gas (petroleum), saturate gas plant mixed stream, C4-rich                  |
| 68478-33-1          | Tail gas (petroleum), saturate gas recovery plant, C1-2-rich                    |
| 68478-34-2          | Tail gas (petroleum), vacuum residues thermal cracker                           |
| 68512-61-8          | Residues (petroleum), heavy coker and light vacuum                              |
| 68512-62-9          | Residues (petroleum), light vacuum  |
| 68512-78-7          | Solvent naphtha (petroleum), light arom., hydrotreated                          |
| 68512-91-4          | Hydrocarbons, C3-4-rich, petroleum distillates                                  |
| 68513-02-0          | Naphtha (petroleum), full-range coker   |
| 68513-03-1          | Naphtha (petroleum), light catalytic reformed, aromatic-free                    |
| 68513-11-1          | Fuel gases, hydrotreater fractionation, scrubbed                                |
| 68513-12-2          | Fuel gases, saturate gas unit fractionater-absorber overheads                   |
| 68513-13-3          | Fuel gases, thermal cracked catalytic cracking residue                          |
| 68513-14-4          | Gases (petroleum), catalytic reformed straight-run naphtha stabilizer overheads |
| 68513-15-5          | Gases (petroleum), full-range straight-run naphtha dehexanizer off              |
| 68513-16-6          | Gases (petroleum), hydrocracking depropanizer off, hydrocarbon-rich             |
| 68513-17-7          | Gases (petroleum), light straight-run naphtha stabilizer off                    |
| 68513-18-8          | Gases (petroleum), reformer effluent high-pressure flash drum off               |
| 68513-19-9          | Gases (petroleum), reformer effluent low-pressure flash drum off                |
| 68513-62-2          | Disulfides, C5-12-alkyl   |
| 68513-63-3          | Distillates (petroleum), catalytic reformed straight-run naphtha overheads      |
| 68513-65-5          | Butane, branched and linear   |
| 68513-66-6          | Residues (petroleum), alkylation splitter, C4-rich                              |
| 68513-67-7          | Residues (petroleum), cyclooctadiene bottoms                                    |
| 68513-68-8          | Residues (petroleum), deethanizer tower   |
| 68513-69-9          | Residues (petroleum), steam-cracked light                                       |
| 68513-74-6          | Waste gases, ethylene oxide absorber-reactor                                    |
| 68514-15-8          | Gasoline, vapor-recovery  |
| 68514-29-4          | Hydrocarbons, amylene feed debutanizer overheads nonextractable raffinates      |
| 68514-31-8          | Hydrocarbons, C1-4  |
| 68514-32-9          | Hydrocarbons, C10 and C12, olefin-rich  |
| 68514-33-0          | Hydrocarbons, C12 and C14, olefin-rich  |
| 68514-34-1          | Hydrocarbons, C9-14, ethylene-manuf.-by-product                                 |
| 68514-35-2          | Hydrocarbons, C14-30, olefin-rich   |
| 68514-36-3          | Hydrocarbons, C1-4, sweetened   |
| 68514-37-4          | Hydrocarbons, C4-5-unsatd.  |
| 68514-38-5          | Hydrocarbons, C4-10-unsatd.   |
| 68514-39-6          | Naphtha (petroleum), light steam-cracked, isoprene-rich                         |
| 68514-79-4          | Petroleum products, hydrofiner-powerformer reformates                           |

| CAS Registry Number | Product   |
|---------------------|---|
| 68515-25-3          | Benzene, C1-9-alkyl derivs.   |
| 68515-26-4          | Benzene, di-C12-14-alkyl derivs.  |
| 68515-27-5          | Benzene, di-C10-14-alkyl derivs., fractionation overheads, heavy ends     |
| 68515-28-6          | Benzene, di-C10-14-alkyl derivs., fractionation overheads, light ends     |
| 68515-29-7          | Benzene, di-C10-14-alkyl derivs., fractionation overheads, middle cut     |
| 68515-30-0          | Benzene, mono-C20-48-alkyl derivs.  |
| 68515-32-2          | Benzene, mono-C12-14-alkyl derivs., fractionation bottoms                 |
| 68515-33-3          | Benzene, mono-C10-12-alkyl derivs., fractionation bottoms, heavy ends     |
| 68515-34-4          | Benzene, mono-C12-14-alkyl derivs., fractionation bottoms, heavy ends     |
| 68515-35-5          | Benzene, mono-C10-12-alkyl derivs., fractionation bottoms, light ends     |
| 68515-36-6          | Benzene, mono-C12-14-alkyl derivs., fractionation bottoms, light ends     |
| 68516-20-1          | Naphtha (petroleum), steam-cracked middle arom.                           |
| 68526-52-3          | Alkenes, C6   |
| 68526-53-4          | Alkenes, C6-8, C7-rich  |
| 68526-54-5          | Alkenes, C7-9, C8-rich  |
| 68526-55-6          | Alkenes, C8-10, C9-rich   |
| 68526-56-7          | Alkenes, C9-11, C10-rich  |
| 68526-57-8          | Alkenes, C10-12, C11-rich   |
| 68526-58-9          | Alkenes, C11-13, C12-rich   |
| 68526-77-2          | Aromatic hydrocarbons, ethane cracking scrubber effluent and flare drum   |
| 68526-99-8          | Alkenes, C6-9 .alpha.-  |
| 68527-00-4          | Alkenes, C8-9 .alpha.-  |
| 68527-11-7          | Alkenes, C5   |
| 68527-13-9          | Gases (petroleum), acid, ethanolamine scrubber                            |
| 68527-14-0          | Gases (petroleum), methane-rich off                                       |
| 68527-15-1          | Gases (petroleum), oil refinery gas distn. off                            |
| 68527-16-2          | Hydrocarbons, C1-3  |
| 68527-18-4          | Gas oils (petroleum), steam-cracked                                       |
| 68527-19-5          | Hydrocarbons, C1-4, debutanizer fraction                                  |
| 68527-21-9          | Naphtha (petroleum), clay-treated full-range straight-run                 |
| 68527-22-0          | Naphtha (petroleum), clay-treated light straight-run                      |
| 68527-23-1          | Naphtha (petroleum), light steam-cracked arom.                            |
| 68527-26-4          | Naphtha (petroleum), light steam-cracked, debenzenized                    |
| 68527-27-5          | Naphtha (petroleum), full-range alkylate, butane-contg.                   |
| 68553-00-4          | Fuel oil, no. 6   |
| 68553-14-0          | Hydrocarbons, C8-11   |
| 68602-79-9          | Distillates (petroleum), benzene unit hydrotreater dipentanizer overheads |
| 68602-81-3          | Distillates, hydrocarbon resin prodn. higher boiling                      |

| CAS Registry Number | Product   |
|---------------------|---|
| 68602-82-4          | Gases (petroleum), benzene unit hydrotreater depentenizer overheads                           |
| 68602-83-5          | Gases (petroleum), C1-5, wet  |
| 68602-84-6          | Gases (petroleum), secondary absorber off, fluidized catalytic cracker overheads fractionater |
| 68602-96-0          | Distillates (petroleum), oxidized light, strong acid components, compds. with diethanolamine  |
| 68602-97-1          | Distillates (petroleum), oxidized light, strong acid components, sodium salts                 |
| 68602-98-2          | Distillates (petroleum), oxidized light, strong acid components                               |
| 68602-99-3          | Distillates (petroleum), oxidized light, strong acid-free                                     |
| 68603-00-9          | Distillates (petroleum), thermal cracked naphtha and gas oil                                  |
| 68603-01-0          | Distillates (petroleum), thermal cracked naphtha and gas oil, C5-dimer-contg.                 |
| 68603-02-1          | Distillates (petroleum), thermal cracked naphtha and gas oil, dimerized                       |
| 68603-03-2          | Distillates (petroleum), thermal cracked naphtha and gas oil, extractive                      |
| 68603-08-7          | Naphtha (petroleum), arom.-contg.   |
| 68603-09-8          | Hydrocarbon waxes (petroleum), oxidized, calcium salts  |
| 68603-10-1          | Hydrocarbon waxes (petroleum), oxidized, Me esters, barium salts                              |
| 68603-11-2          | Hydrocarbon waxes (petroleum), oxidized, Me esters, calcium salts                             |
| 68603-12-3          | Hydrocarbon waxes (petroleum), oxidized, Me esters, sodium salts                              |
| 68603-13-4          | Petrolatum (petroleum), oxidized, ester with sorbitol   |
| 68603-14-5          | Residual oils (petroleum), oxidized, calcium salts  |
| 68603-31-6          | Alkenes, C10, tert-amylene concentrator by-product  |
| 68603-32-7          | Alkenes, C15-20 .alpha.-, isomerized  |
| 68606-09-7          | Fuel gases, expander off  |
| 68606-10-0          | Gasoline, pyrolysis, debutanizer bottoms  |
| 68606-11-1          | Gasoline, straight-run, topping-plant   |
| 68606-24-6          | Hydrocarbons, C4, butene concentrator by-product  |
| 68606-25-7          | Hydrocarbons, C2-4  |
| 68606-26-8          | Hydrocarbons, C3  |
| 68606-27-9          | Gases (petroleum), alkylation feed  |
| 68606-28-0          | Hydrocarbons, C5 and C10-aliph. and C6-8-arom.  |
| 68606-31-5          | Hydrocarbons, C3-5, butadiene purifn. by-product  |
| 68606-34-8          | Gases (petroleum), depropanizer bottoms fractionation off                                     |
| 68606-36-0          | Hydrocarbons, C5-unsatd. rich, isoprene purifn. by-product                                    |
| 68607-11-4          | Petroleum products, refinery gases  |
| 68607-30-7          | Residues (petroleum), topping plant, low-sulfur   |
| 68608-56-0          | Waste gases, from carbon black manuf.   |
| 68647-60-9          | Hydrocarbons, C>4   |
| 68647-61-0          | Hydrocarbons, C4-5, tert-amylene concentrator by-product                                      |
| 68647-62-1          | Hydrocarbons, C4-5, butene concentrator by-product, sour                                      |
| 68650-36-2          | Aromatic hydrocarbons, C8, o-xylene-lean  |

| CAS Registry Number | Product   |
|---------------------|---|
| 68650-37-3          | Paraffin waxes (petroleum), oxidized, sodium salts                                    |
| 68782-97-8          | Distillates (petroleum), hydrofined lubricating-oil                                   |
| 68782-98-9          | Extracts (petroleum), clarified oil solvent, condensed-ring-arom.-contg.              |
| 68782-99-0          | Extracts (petroleum), heavy clarified oil solvent, condensed-ring-arom.-contg.        |
| 68783-00-6          | Extracts (petroleum), heavy naphthenic distillate solvent, arom. conc.                |
| 68783-01-7          | Extracts (petroleum), heavy naphthenic distillate solvent, paraffinic conc.           |
| 68783-02-8          | Extracts (petroleum), intermediate clarified oil solvent, condensed-ring-arom.-contg. |
| 68783-04-0          | Extracts (petroleum), solvent-refined heavy paraffinic distillate solvent             |
| 68783-05-1          | Gases (petroleum), ammonia-hydrogen sulfide, water-satd.                              |
| 68783-06-2          | Gases (petroleum), hydrocracking low-pressure separator                               |
| 68783-07-3          | Gases (petroleum), refinery blend   |
| 68783-08-4          | Gas oils (petroleum), heavy atmospheric   |
| 68783-09-5          | Naphtha (petroleum), catalytic cracked light distd.                                   |
| 68783-12-0          | Naphtha (petroleum), unsweetened  |
| 68783-13-1          | Residues (petroleum), coker scrubber, condensed-ring-arom.-contg.                     |
| 68783-15-3          | Alkenes, C6-7 .alpha.-  |
| 68783-61-9          | Fuel gases, refinery, sweetened   |
| 68783-62-0          | Fuel gases, refinery, unsweetened   |
| 68783-64-2          | Gases (petroleum), catalytic cracking   |
| 68783-65-3          | Gases (petroleum), C2-4, sweetened  |
| 68783-66-4          | Naphtha (petroleum), light, sweetened   |
| 68814-47-1          | Waste gases, refinery vent  |
| 68814-67-5          | Gases (petroleum), refinery   |
| 68814-89-1          | Extracts (petroleum), heavy paraffinic distillates, solvent-deasphalted               |
| 68814-87-9          | Distillates (petroleum), full-range straight-run middle                               |
| 68814-90-4          | Gases (petroleum), platformer products separator off                                  |
| 68814-91-5          | Alkenes, C5-9 .alpha.-  |
| 68855-57-2          | Alkenes, C6-12 .alpha.-   |
| 68855-58-3          | Alkenes, C10-16 .alpha.-  |
| 68855-59-4          | Alkenes, C14-18 .alpha.-  |
| 68855-60-7          | Alkenes, C14-20 .alpha.-  |
| 68911-58-0          | Gases (petroleum), hydrotreated sour kerosine depentanizer stabilizer off             |
| 68911-59-1          | Gases (petroleum), hydrotreated sour kerosine flash drum                              |
| 68915-96-8          | Distillates (petroleum), heavy straight-run   |
| 68915-97-9          | Gas oils (petroleum), straight-run, high-boiling                                      |
| 68918-69-4          | Petrolatum (petroleum), oxidized, zinc salt   |
| 68918-73-0          | Residues (petroleum), clay-treating filter wash                                       |
| 68918-93-4          | Paraffin waxes and Hydrocarbon waxes, oxidized, alkali metal salts                    |

| CAS Registry Number | Product  |
|---------------------|--|
| 68918-98-9          | Fuel gases, refinery, hydrogen sulfide-free  |
| 68918-99-0          | Gases (petroleum), crude oil fractionation off   |
| 68919-00-6          | Gases (petroleum), dehexanizer off   |
| 68919-01-7          | Gases (petroleum), distillate unfiner desulfurization stripper off   |
| 68919-02-8          | Gases (petroleum), fluidized catalytic cracker fractionation off   |
| 68919-03-9          | Gases (petroleum), fluidized catalytic cracker scrubbing secondary absorber off                              |
| 68919-04-0          | Gases (petroleum), heavy distillate hydrotreater desulfurization stripper off                                |
| 68919-05-1          | Gases (petroleum), light straight run gasoline fractionation stabilizer off                                  |
| 68919-06-2          | Gases (petroleum), naphtha unfiner desulfurization stripper off  |
| 68919-07-3          | Gases (petroleum), platformer stabilizer off, light ends fractionation                                       |
| 68919-08-4          | Gases (petroleum), preflash tower off, crude distn.  |
| 68919-09-5          | Gases (petroleum), straight-run naphtha catalytic reforming off  |
| 68919-10-8          | Gases (petroleum), straight-run stabilizer off   |
| 68919-11-9          | Gases (petroleum), tar stripper off  |
| 68919-12-0          | Gases (petroleum), unfiner stripper off  |
| 68919-15-3          | Hydrocarbons, C6-12, benzene-recovery  |
| 68919-16-4          | Hydrocarbons, catalytic alkylation, by-products, C3-6  |
| 68919-17-5          | Hydrocarbons, C12-20, catalytic alkylation by-products   |
| 68919-19-7          | Gases (petroleum), fluidized catalytic cracker splitter residues   |
| 68919-20-0          | Gases (petroleum), fluidized catalytic cracker splitter overheads  |
| 68919-37-9          | Naphtha (petroleum), full-range reformed   |
| 68920-06-9          | Hydrocarbons, C7-9   |
| 68920-07-0          | Hydrocarbons, C<10-linear  |
| 68920-64-9          | Disulfides, di-C1-2-alkyl  |
| 68921-07-3          | Distillates (petroleum), hydrotreated light catalytic cracked  |
| 68921-09-5          | Distillates (petroleum), naphtha unfiner stripper  |
| 68921-08-4          | Distillates (petroleum), light straight-run gasoline fractionation stabilizer overheads                      |
| 68921-67-5          | Hydrocarbons, ethylene-manuf.-by-product distn. residues   |
| 68952-76-1          | Gases (petroleum), catalytic cracked naphtha debutanizer   |
| 68952-77-2          | Tail gas (petroleum), catalytic cracked distillate and naphtha stabilizer                                    |
| 68952-78-3          | Tail gas (petroleum), catalytic hydrodesulfurized distillate fractionation stabilizer, hydrogen sulfide-free |
| 68952-79-4          | Tail gas (petroleum), catalytic hydrodesulfurized naphtha separator  |
| 68952-80-7          | Tail gas (petroleum), straight-run naphtha hydrodesulfurizer   |
| 68952-81-8          | Tail gas (petroleum), thermal-cracked distillate, gas oil and naphtha absorber                               |
| 68952-82-9          | Tail gas (petroleum), thermal cracked hydrocarbon fractionation stabilizer, petroleum coking                 |
| 68953-80-0          | Benzene, mixed with toluene, dealkylation product  |
| 68955-27-1          | Distillates (petroleum), petroleum residues vacuum   |

| CAS Registry Number | Product   |
|---------------------|---|
| 68955-28-2          | Gases (petroleum), light steam-cracked, butadiene conc.   |
| 68955-31-7          | Gases (petroleum), butadiene process, inorg.  |
| 68955-32-8          | Natural gas, substitute, steam-reformed desulfurized naphtha  |
| 68955-33-9          | Gases (petroleum), sponge absorber off, fluidized catalytic cracker and gas oil desulfurizer overhead fractionation |
| 68955-34-0          | Gases (petroleum), straight-run naphtha catalytic reformer stabilizer overhead                                      |
| 68955-35-1          | Naphtha (petroleum), catalytic reformed   |
| 68955-36-2          | Residues (petroleum), steam-cracked, resinous   |
| 68955-76-0          | Aromatic hydrocarbons, C9-16, biphenyl deriv.-rich  |
| 68955-96-4          | Disulfides, dialkyl and di-Ph, naphtha sweetening   |
| 68956-47-8          | Fuel oil, isoprene reject absorption  |
| 68956-48-9          | Fuel oil, residual, wastewater skimmings  |
| 68956-52-5          | Hydrocarbons, C4-8  |
| 68956-54-7          | Hydrocarbons, C4-unsatd.  |
| 68956-55-8          | Hydrocarbons, C5-unsatd.  |
| 68956-70-7          | Petroleum products, C5-12, reclaimed, wastewater treatment  |
| 68988-79-4          | Benzene, C10-12-alkyl derivs., distn. residues  |
| 68988-99-8          | Phenols, sodium salts, mixed with sulfur compounds, gasoline alk. scrubber residues                                 |
| 68989-88-8          | Gases (petroleum), crude distn. and catalytic cracking  |
| 68990-35-2          | Distillates (petroleum), arom., hydrotreated, dicyclopentadiene-rich  |
| 68991-49-1          | Alkanes, C10-13, arom.-free desulfurized  |
| 68991-50-4          | Alkanes, C14-17, arom.-free desulfurized  |
| 68991-51-5          | Alkanes, C10-13, desulfurized   |
| 68991-52-6          | Alkenes, C10-16   |
| 69013-21-4          | Fuel oil, pyrolysis   |
| 69029-75-0          | Oils, reclaimed   |
| 69430-33-7          | Hydrocarbons, C6-30   |
| 70024-88-3          | Ethene, thermal cracking products   |
| 70528-71-1          | Distillates (petroleum), heavy distillate solvent ext. heart-cut  |
| 70528-72-2          | Distillates (petroleum), heavy distillate solvent ext. vacuum overheads   |
| 70528-73-3          | Residues (petroleum), heavy distillate solvent ext. vacuum  |
| 70592-76-6          | Distillates (petroleum), intermediate vacuum  |
| 70592-77-7          | Distillates (petroleum), light vacuum   |
| 70592-78-8          | Distillates (petroleum), vacuum   |
| 70592-79-9          | Residues (petroleum), atm. tower, light   |
| 70693-00-4          | Hydrocarbon waxes (petroleum), oxidized, sodium salts   |
| 70693-06-0          | Aromatic hydrocarbons, C9-11  |
| 70913-85-8          | Residues (petroleum), solvent-extd. vacuum distilled atm. residuum  |



| CAS Registry Number | Product   |
|---------------------|---|
| 70913-86-9          | Alkanes, C18-70   |
| 70955-08-7          | Alkanes, C4-6   |
| 70955-09-8          | Alkenes, C13-14 .alpha.-  |
| 70955-10-1          | Alkenes, C15-18 .alpha.-  |
| 70955-17-8          | Aromatic hydrocarbons, C12-20   |
| 71243-66-8          | Hydrocarbon waxes (petroleum), clay-treated, microcryst., oxidized, potassium salts                           |
| 71302-82-4          | Hydrocarbons, C5-8, Houdry butadiene manuf. by-product  |
| 71329-37-8          | Residues (petroleum), catalytic cracking depropanizer, C4-rich  |
| 71808-30-5          | Tail gas (petroleum), thermal cracking absorber   |
| 72230-71-8          | Distillates (petroleum), cracked steam-cracked, C5-17 fraction  |
| 72623-83-7          | Lubricating oils (petroleum), C>25, hydrotreated bright stock-based   |
| 72623-84-8          | Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based, contg. solvent deasphalted residual oil |
| 72623-85-9          | Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity                          |
| 72623-86-0          | Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based  |
| 72623-87-1          | Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based  |
| 73138-65-5          | Hydrocarbon waxes (petroleum), oxidized, magnesium salts  |
| 92045-43-7          | Lubricating oils (petroleum) hydrocracked nonaromatic solvent deparaffined                                    |
| 92045-58-4          | Naphtha (petroleum), isomerization, C6-fraction   |
| 92062-09-4          | Slack wax (petroleum), hydrotreated   |
| 93762-80-2          | Alkenes, C15-18   |
| 98859-55-3          | Distillates (petroleum), oxidized heavy, compounds with diethanolamine  |
| 98859-56-4          | Distillates (petroleum), oxidized heavy, sodium salts   |
| 101316-73-8         | Lubricating oils (petroleum), used, noncatalytically refined  |
| 164907-78-2         | Extracts (petroleum), asphaltene-low vacuum residue solvent   |
| 164907-79-3         | Residues (petroleum), vacuum, asphaltene-low  |
| 178603-63-9         | Gas oils (petroleum), vacuum, hydrocracked, hydroisomerized, hydrogenated, C10-25                             |
| 178603-64-0         | Gas oils (petroleum), vacuum, hydrocracked, hydroisomerized, hydrogenated, C15-30, branched and cyclic        |
| 178603-65-1         | Gas oils (petroleum), vacuum, hydrocracked, hydroisomerized, hydrogenated, C20-40, branched and cyclic        |
| 178603-66-2         | Gas oils (petroleum), vacuum, hydrocracked, hydroisomerized, hydrogenated, C25-55, branched and cyclic        |
| 212210-93-0         | Solvent naphtha (petroleum), heavy aromatic, distillation residues  |
| 221120-39-4         | Distillates (petroleum), cracked steam-cracked, C5-12 fraction  |
| 445411-73-4         | Gas oils (petroleum), vacuum, hydrocracked, hydroisomerized, hydrogenated, C10-25, branched and cyclic        |

**Table C-2. Partially Exempt Chemical Substances Under 40 CFR 711.6(b)(2)**

| CAS Registry Number | Chemical Name  |
|---------------------|--|
| 50-70-4             | <i>D</i> -glucitol.  |
| 50-81-7             | <i>L</i> -ascorbic acid.   |
| 50-99-7             | <i>D</i> -glucose.   |
| 56-81-5             | 1,2,3-Propanetriol.  |
| 56-87-1             | <i>L</i> -lysine.  |
| 57-48-7             | D-fructose.  |
| 57-50-1             | .alpha.- <i>D</i> -Glucopyranoside, .beta.- <i>D</i> -fructofuranosyl.                                       |
| 58-95-7             | 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-, acetate, (2R)-. |
| 59-02-9             | 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,5,7,8-tetramethyl-2-[(4R,8R)-4,8,12-trimethyltridecyl]-, (2R)-.          |
| 59-51-8             | Methionine.  |
| 68-04-2             | 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, sodium salt (1:3).  |
| 69-65-8             | <i>D</i> -mannitol.  |
| 77-92-9             | 1,2,3-Propanetricarboxylic acid, 2-hydroxy-.   |
| 87-79-6             | <i>L</i> -sorbose.   |
| 87-99-0             | Xylitol.   |
| 96-10-6             | Aluminum, chlorodiethyl-.  |
| 97-93-8             | Aluminum, triethyl-.   |
| 100-99-2            | Aluminum, tris(2-methylpropyl)-.   |
| 123-94-4            | Octadecanoic acid, 2,3-dihydroxypropyl ester.  |
| 124-38-9            | Carbon dioxide.  |
| 137-08-6            | .beta.-Alanine, N-[(2R)-2,4-dihydroxy-3,3-dimethyl-1-oxobutyl]-, calcium salt (2:1).                         |
| 142-47-2            | <i>L</i> -glutamic acid, monosodium salt.  |
| 150-30-1            | Phenylalanine.   |
| 504-63-2            | 1,3-Propanediol.   |
| 563-43-9            | Aluminum, dichloroethyl-.  |
| 866-84-2            | 1,2,3-Propanetricarboxylic acid, 2-hydroxy-, potassium salt (1:3).   |
| 1070-00-4           | Aluminum, trioctyl-.   |
| 1116-70-7           | Aluminum, tributyl-.   |
| 1116-73-0           | Aluminum, trihexyl-.   |
| 1191-15-7           | Aluminum, hydrobis(2-methylpropyl)-.   |
| 1317-65-3           | Limestone.   |
| 1333-74-0           | Hydrogen.  |
| 1592-23-0           | Octadecanoic acid, calcium salt.   |
| 7440-37-1           | Argon.   |
| 7440-44-0           | Carbon.  |
| 7727-37-9           | Nitrogen.  |
| 7782-42-5           | Graphite.  |
| 7782-44-7           | Oxygen.  |
| 8001-21-6           | Sunflower oil.   |

| CAS Registry Number | Chemical Name  |
|---------------------|--|
| 8001-22-7           | Soybean oil.   |
| 8001-23-8           | Safflower oil.   |
| 8001-26-1           | Linseed oil.   |
| 8001-29-4           | Cottonseed oil.  |
| 8001-30-7           | Corn oil.  |
| 8001-31-8           | Coconut oil.   |
| 8001-78-3           | Castor oil, hydrogenated.                                  |
| 8001-79-4           | Castor oil.  |
| 8002-03-7           | Peanut oil.  |
| 8002-13-9           | Rape oil.  |
| 8002-43-5           | Lecithins.   |
| 8002-75-3           | Palm oil.  |
| 8006-54-0           | Lanolin.   |
| 8013-07-8           | Soybean oil, epoxidized.                                   |
| 8016-28-2           | Lard, oil.   |
| 8016-70-4           | Soybean oil, hydrogenated.                                 |
| 8021-99-6           | Charcoal, bone.  |
| 8023-79-8           | Oils, palm kernel.   |
| 8029-43-4           | Syrups, hydrolyzed starch.                                 |
| 11103-57-4          | Vitamin A.   |
| 12075-68-2          | Aluminum, di-.mu.-chlorochlorotriethyl-di-.                |
| 12542-85-7          | Aluminum, trichlorotrimethyl-di-.                          |
| 16291-96-6          | Charcoal.  |
| 26836-47-5          | D-glucitol, monooctadecanoate.                             |
| 61788-61-2          | Fatty acids, tallow, methyl esters.                        |
| 61789-44-4          | Fatty acids, castor-oil.                                   |
| 61789-97-7          | Tallow.  |
| 61789-99-9          | Lard.  |
| 64147-40-6          | Castor oil, dehydrated.                                    |
| 64755-01-7          | Fatty acids, tallow, calcium salts.                        |
| 65996-63-6          | Starch, acid-hydrolyzed.                                   |
| 65996-64-7          | Starch, enzyme-hydrolyzed.                                 |
| 66071-94-1          | Corn, steep liquor.  |
| 67701-01-3          | Fatty acids, C12-18.                                       |
| 67762-26-9          | Fatty acids, C14-18 and C16-18 unsaturated, methyl esters. |
| 67762-38-3          | Fatty acids, C16-18 and C-18 unsaturated, methyl esters.   |
| 67784-80-9          | Soybean oil, methyl esters.                                |
| 68002-85-7          | Fatty acids, C14-22 and C16-22-unsatd.                     |
| 68131-37-3          | Syrups, hydrolyzed starch, dehydrated.                     |
| 68188-81-8          | Grease, poultry.   |
| 68308-36-1          | Soybean meal.  |
| 68308-54-3          | Glycerides, tallow mono-, di- and tri-, hydrogenated.      |

| CAS Registry Number | Chemical Name                                      |
|---------------------|--|
| 68334-00-9          | Cottonseed oil, hydrogenated.                      |
| 68334-28-1          | Fats and glyceridic oils, vegetable, hydrogenated. |
| 68409-76-7          | Bone meal, steamed.                                |
| 68424-45-3          | Fatty acids, linseed-oil.                          |
| 68424-61-3          | Glycerides, C16-18 and C18-unsatd. mono- and di-.  |
| 68425-17-2          | Syrups, hydrolyzed starch, hydrogenated            |
| 68439-86-1          | Bone, ash.   |
| 68442-69-3          | Benzene, mono-C10-14-alkyl derivs.                 |
| 68476-78-8          | Molasses.  |
| 68514-27-2          | Grease, catch basin.                               |
| 68514-74-9          | Palm oil, hydrogenated.                            |
| 68525-87-1          | Corn oil, hydrogenated.                            |
| 68648-87-3          | Benzene, C10-16-alkyl derivs.                      |
| 68918-42-3          | Soaps, stocks, soya.                               |
| 68952-94-3          | Soaps, stocks, vegetable-oil.                      |
| 68956-68-3          | Fats and glyceridic oils, vegetable.               |
| 68989-98-0          | Fats and glyceridic oils, vegetable, residues.     |
| 70131-50-9          | Bentonite, acid-leached.                           |
| 73138-67-7          | Lard, hydrogenated.                                |
| 120962-03-0         | Canola oil.  |
| 129813-58-7         | Benzene, mono-C10-13-alkyl derivs.                 |
| 129813-59-8         | Benzene, mono-C12-14-alkyl derivs.                 |
| 129813-60-1         | Benzene, mono-C14-16-alkyl derivs.                 |
| 129828-16-6         | Fatty acids, canola oil, methyl esters.            |
| 515152-40-6         | Fatty acids, corn oil, methyl esters.              |

# Appendix D

## Descriptions of Codes for Reporting *Processing or Use Operations, Industrial Sectors, Function Categories, and Consumer and Commercial Product Categories*

The following descriptions were developed by EPA to assist persons submitting information in response to 40 CFR 711.15(b)(4) and reported in Part II.D of the CDR Form U. For more information, see the Technical Support Document: “Harmonizing CDR Functional and Product codes with OECD Functional, Product, and Article Codes,” located in the rulemaking record (EPA-HQ-OPPT-2018-0321).

**Table D-1. Type of Processing or Use Operation and Descriptions**

| Code | Type of Operation   | Description   |
|------|---|---|
| PC   | Processing as a reactant  | Chemical substance is used in chemical reactions for the manufacturing of another chemical substance or product.  |
| PF   | Processing—incorporation into formulation, mixture, or reaction product | Chemical substance is added to a product (or product mixture) prior to further distribution of the product.   |
| PA   | Processing—incorporation into article                                   | Chemical substance becomes an integral component of an article distributed for industrial, trade, or consumer use.  |
| PK   | Processing—repackaging  | Preparation of a chemical substance for distribution in commerce in a different form, state, or quantity. This includes transferring the chemical substance from a bulk container into smaller containers. This definition does not apply to sites that only relabel or redistribute the reportable chemical substance without removing the chemical substance from the container in which it is received or purchased. |
| U    | Use—non-incorporative activities  | Chemical substance is otherwise used (e.g., as a chemical processing or manufacturing aid).   |

**Table D-2. Industrial Sector (IS) Code Descriptions with NAICS Crosswalk**

| NAICS | IS Code | IS Title   |
|-------|---------|--|
| 11    | IS1     | Agriculture, Forestry, Fishing and Hunting               |
| 211   | IS2     | Oil and Gas Drilling, Extraction, and Support Activities |
| 213   |         |  |
| 212   | IS3     | Mining (except Oil and Gas) and Support Activities       |
| 22    | IS4     | Utilities  |
| 23    | IS5     | Construction   |
| 311   | IS6     | Food, beverage, and tobacco product manufacturing        |
| 312   |         |  |
| 313   | IS7     | Textiles, apparel, and leather manufacturing             |
| 314   |         |  |
| 315   |         |  |
| 316   |         |  |

| NAICS  | IS Code | IS Title  |
|--------|---------|---|
| 321    | IS8     | Wood Product Manufacturing  |
| 322    | IS9     | Paper Manufacturing   |
| 323    | IS10    | Printing and Related Support Activities   |
| 32411  | IS11    | Petroleum Refineries  |
| 32412  | IS12    | Asphalt Paving, Roofing, and Coating Materials Manufacturing  |
| 324191 | IS13    | Petroleum Lubricating Oil and Grease Manufacturing  |
| 324199 | IS14    | All Other Petroleum and Coal Products Manufacturing   |
| 32511  | IS15    | Petrochemical Manufacturing   |
| 32512  | IS16    | Industrial Gas Manufacturing  |
| 32513  | IS17    | Synthetic Dye and Pigment Manufacturing   |
| 325182 | IS18    | Carbon Black Manufacturing  |
| 32518  | IS19    | All Other Basic Inorganic Chemical Manufacturing  |
| 325192 | IS20    | Cyclic Crude and Intermediate Manufacturing   |
| 32519  | IS21    | All Other Basic Organic Chemical Manufacturing  |
| 325211 | IS22    | Plastic Material and Resin Manufacturing  |
| 325212 | IS23    | Synthetic Rubber Manufacturing  |
| 32522  | IS24    | Organic Fiber Manufacturing   |
| 3253   | IS25    | Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing  |
| 3254   | IS26    | Pharmaceutical and Medicine Manufacturing   |
| 32551  | IS27    | Paint and Coating Manufacturing   |
| 32552  | IS28    | Adhesive Manufacturing  |
| 3256   | IS29    | Soap, Cleaning Compound, and Toilet Preparation Manufacturing   |
| 32591  | IS30    | Printing Ink Manufacturing  |
| 32592  | IS31    | Explosives Manufacturing  |
| 325991 | IS32    | Custom Compounding of Purchased Resin   |
| 325992 | IS33    | Photographic Film Paper, Plate, and Chemical Manufacturing  |
| 325998 | IS34    | All Other Chemical Product and Preparation Manufacturing  |
| 3261   | IS35    | Plastics Product Manufacturing  |
| 3262   | IS36    | Rubber Product Manufacturing  |
| 327    | IS37    | Nonmetallic Mineral Product Manufacturing (includes clay, glass, cement, concrete, lime, gypsum, and other nonmetallic mineral product manufacturing) |

| NAICS | IS Code | IS Title   |
|-------|---------|--|
| 331   | IS38    | Primary Metal Manufacturing                                  |
| 332   | IS39    | Fabricated Metal Product Manufacturing                       |
| 333   | IS40    | Machinery Manufacturing                                      |
| 334   | IS41    | Computer and Electronic Product Manufacturing                |
| 335   | IS42    | Electrical Equipment, Appliance, and Component Manufacturing |
| 336   | IS43    | Transportation Equipment Manufacturing                       |
| 337   | IS44    | Furniture and Related Product Manufacturing                  |
| 339   | IS45    | Miscellaneous Manufacturing                                  |
| 42    | IS46    | Wholesale and Retail Trade                                   |
| 44    |         |  |
| 45    |         |  |
| 48    |         |  |
| 49    |         |  |
| 51    | IS47    | Services   |
| 52    |         |  |
| 53    |         |  |
| 54    |         |  |
| 55    |         |  |
| 56    |         |  |
| 61    |         |  |
| 62    |         |  |
| 71    |         |  |
| 72    |         |  |
| 81    |         |  |
| 92    |         |  |
|       | IS48    | Other (requires additional information)                      |

**Table D-3. Function Category Descriptions and Crosswalk: 2016 CDR and 2020+ CDR**

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |  |                 |   |
|---|--|-----------------|---|
| <b>Column A</b>   |  | <b>Column B</b> |   |
| <b>Code</b>   | <b>Description</b>                     | <b>Code</b>     | <b>Description</b>                          |
| F001  | Abrasives                              | U001            | Abrasives                                   |
| F002  | Etching agent                          |                 |   |
| F003  | Adhesion/cohesion promoter             | U002            | Adhesives and Sealant Chemicals             |
| F004  | Binder                                 |                 |   |
| F005  | Flux agent                             |                 |   |
| F006  | Sealant (barrier)                      |                 |   |
| F007  | Absorbent                              | U003            | Adsorbents and Absorbents                   |
| F008  | Adsorbent                              |                 |   |
| F009  | Dehydrating agent (desiccant)          |                 |   |
| F010  | Drier                                  |                 |   |
| F011  | Humectant                              |                 |   |
| F012  | Soil amendments (fertilizers)          | U004            | Agricultural Chemicals (non-pesticidal)     |
| F013  | Anti-adhesive/cohesive                 | U005            | Anti-Adhesive Agents                        |
| F014  | Dusting agent                          |                 |   |
| F015  | Bleaching agent                        | U006            | Bleaching Agents                            |
| F016  | Brightener                             |                 |   |
| F017  | Anti-scaling agent                     | U007            | Corrosion inhibitors and antiscaling agents |
| F018  | Corrosion inhibitor                    |                 |   |
| F019  | Dye                                    | U008            | Dyes  |
| F020  | Fixing agent (mordant)                 |                 |   |
| F021  | Hardener                               | U009            | Fillers                                     |
| F022  | Filler                                 |                 |   |
| F023  | Anti-static agent                      | U010            | Finishing agents                            |
| F024  | Softener and conditioner               |                 |   |
| F025  | Swelling agent                         |                 |   |
| F026  | Tanning agents not otherwise specified |                 |   |
| F027  | Waterproofing agent                    |                 |   |
| F028  | Wrinkle resisting agent                |                 |   |
| F029  | Flame retardant                        | U011            | Flame retardants                            |
| F030  | Fuel agents                            | U012            | Fuels and fuel additives                    |
| F031  | Fuel                                   |                 |   |
| F032  | Heat transferring agent                | U013            | Functional fluids (closed systems)          |
| F033  | Hydraulic fluids                       |                 |   |
| F034  | Insulators                             |                 |   |



| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |   |                 |   |
|---|---|-----------------|---|
| <b>Column A</b>   |   | <b>Column B</b> |   |
| <b>Code</b>   | <b>Description</b>                                | <b>Code</b>     | <b>Description</b>                                |
| F035  | Refrigerants                                      | U013            | Functional fluids (closed systems)                |
| F036  | Anti-freeze agent                                 | U014            | Functional fluids (open systems)                  |
| F037  | Intermediate                                      | U015            | Intermediates                                     |
| F038  | Monomers  |                 |   |
| F039  | Ion exchange agent                                | U016            | Ion exchange agents                               |
| F040  | Anti-slip agent                                   | U017            | Lubricants and lubricant additives                |
| F041  | Lubricating agent                                 |                 |   |
| F042  | Deodorizer  | U018            | Odor agents                                       |
| F043  | Fragrance   |                 |   |
| F044  | Oxidizing agent                                   | U019            | Oxidizing/reducing agents                         |
| F045  | Reducing agent                                    |                 |   |
| F046  | Photosensitive agent                              | U020            | Photosensitive chemicals                          |
| F047  | Photosensitizers                                  |                 |   |
| F048  | Semiconductor and photovoltaic agent              |                 |   |
| F049  | UV stabilizer                                     |                 |   |
| F050  | Opacifer  | U021            | Pigments  |
| F051  | Pigment   |                 |   |
| F052  | Plasticizer                                       | U022            | Plasticizers                                      |
| F053  | Plating agent                                     | U023            | Plating agents and surface treating agents        |
| F054  | Catalyst  | U024            | Process regulators                                |
| F055  | Chain transfer agent                              |                 |   |
| F056  | Chemical reaction regulator                       |                 |   |
| F057  | Crystal growth modifiers (nucleating agents)      |                 |   |
| F058  | Polymerization promoter                           |                 |   |
| F059  | Terminator/Blocker                                |                 |   |
| F060  | Processing aids, specific to petroleum production | U025            | Processing aids, specific to petroleum production |
| F061  | Antioxidant                                       | U026            | Processing aids, not otherwise listed             |
| F062  | Chelating agent                                   |                 |   |
| F063  | Defoamer  |                 |   |
| F064  | pH regulating agent                               |                 |   |
| F065  | Processing aids not otherwise specified           |                 |   |
| F066  | Energy Releasers (explosives, motive propellant)  | U027            | Propellants and blowing agents                    |
| F067  | Foamant   |                 |   |
| F068  | Propellants, non-motive (blowing agents)          |                 |   |
| F069  | Cloud-point depressant                            | U028            | Solids separation agents                          |
| F070  | Flocculating agent                                |                 |   |

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |  |                 |  |
|---|--|-----------------|--|
| <b>Column A</b>   |  | <b>Column B</b> |  |
| <b>Code</b>   | <b>Description</b>   | <b>Code</b>     | <b>Description</b>   |
| F071  | Flotation agent  |                 |  |
| F072  | Solids separation (precipitating) agent, not otherwise specified |                 |  |
| F073  | Cleaning agent   | U029            | Solvents (for cleaning or degreasing)                              |
| F074  | Diluent  | U030            | Solvents (which become part of product formulation or mixture)     |
| F075  | Solvent  |                 |  |
| F076  | Surfactant (surface active agent)                                | U031            | Surface active agents  |
| F077  | Emulsifier   |                 |  |
| F078  | Thickening agent   | U032            | Viscosity adjustors  |
| F079  | Viscosity modifiers  |                 |  |
| F080  | Laboratory chemicals   | U033            | Laboratory chemicals   |
| F081  | Dispersing agent   | U034            | Paint additives and coating additives not described by other codes |
| F082  | Freeze-thaw additive   |                 |  |
| F083  | Surface modifier   |                 |  |
| F084  | Wetting agent (non-aqueous)                                      |                 |  |
| F085  | Aerating and deaerating agents                                   | U999            | Other (specify)  |
| F086  | Explosion inhibitor  |                 |  |
| F087  | Fire extinguishing agent   |                 |  |
| F088  | Flavoring and nutrient   |                 |  |
| F089  | Anti-redeposition agent  |                 |  |
| F090  | Anti-stain agent   |                 |  |
| F091  | Anti-streaking agent   |                 |  |
| F092  | Conductive agent   |                 |  |
| F093  | Incandescent agent   |                 |  |
| F094  | Magnetic element   |                 |  |
| F095  | Anti-condensation agent  |                 |  |
| F096  | Coalescing agent   |                 |  |
| F097  | Film former  |                 |  |
| F098  | Demulsifier  |                 |  |
| F099  | Stabilizing agent  |                 |  |
| F100  | Alloys   |                 |  |
| F101  | Density modifier   |                 |  |
| F102  | Elasticizer  |                 |  |
| F103  | Flow promoter  |                 |  |
| F104  | Sizing agent   |                 |  |
| F105  | Solubility enhancer  |                 |  |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |                          |          |                 |
|--|--------------------------|----------|-----------------|
| Column A   |                          | Column B |                 |
| Code   | Description              | Code     | Description     |
| F106   | Vapor pressure modifiers | U999     | Other (specify) |
| F107   | Embalming agent          |          |                 |
| F108   | Heat stabilizer          |          |                 |
| F109   | Preservative             |          |                 |
| F110   | Anti-caking agent        |          |                 |
| F111   | Deflocculant             |          |                 |
| F112   | Dust suppressant         |          |                 |
| F113   | Impregnation agent       |          |                 |
| F114   | Leaching agent           |          |                 |
| F115   | Tracer                   |          |                 |
| F116   | X-ray absorber           |          |                 |
| F999   | Other (specify)          |          |                 |
| NOTE:  |                          |          |                 |
| <ul style="list-style-type: none"> <li>For codes F085 – F116, no comparable crosswalk code existed in 2016 and prior; F999 is the proper crosswalk code</li> </ul>   |                          |          |                 |

**Table D-4. Consumer and Commercial Product Category Descriptions and Crosswalk**

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |   |   |          |   |
|--|---|---|----------|---|
| Column A   |   |   | Column B |   |
| Code   | Name  | Description   | Code     | Name  |
| <b>Chemical Substances in Furnishing, Cleaning, Treatment Care Products</b>  |   |   |          |   |
| CC101  | Construction and building materials covering large surface areas including stone, plaster, cement, glass and ceramic articles; fabrics, textiles, and apparel | Cement flooring, stone tile, mirrors, flooring or wall materials, carpets, rugs, tapestries   | C101     | Floor coverings   |
| CC102  | Furniture & furnishings including plastic articles (soft); leather articles   | Foam armchair, couch/sofa, mattress (adult), mattress (infant), mattress (child), sleeping bag, beanbag chair   | C102     | Foam seating and bedding products                           |
| CC103  | Furniture & furnishings including stone, plaster, cement, glass and ceramic articles; metal articles; or rubber articles                                      | Tables, chairs, benches, outdoor furniture, or furniture feet   | C103     | Furniture and furnishings not covered elsewhere             |
| CC104  | Leather conditioner   | Products applied to leather surfaces to preserve and/or restore strength, appearance, and flexibility.  | C104     | Fabric, textile, and leather products not covered elsewhere |
| CC105  | Leather tanning, dye, finishing, impregnation and care products   | Products applied to the surfaces of leather articles to impart desirable properties.  |          |   |
| CC106  | Textile (fabric) dyes   | Products applied to impart color(s) to textiles.  |          |   |
| CC107  | Textile finishing and impregnating/surface treatment products   | Products applied to the surfaces of textiles to impart water or stain resistances, flame resistance, but not dyes.  |          |   |
| CC108  | All-purpose foam spray cleaner  | Foams that are spray applied to surfaces such as countertops, tables, windows, and surfaces of appliances.  | C105     | Cleaning and furnishing care products                       |
| CC109  | All-purpose liquid cleaner/polish   | Liquids that are not spray applied and are applied to surfaces of furniture, silverware, sinks, tubs, carpeted floors, and hard-surface floors. Note: distinguish between “neat” and “dilute” products. |          |   |
| CC110  | All-purpose liquid spray cleaner  | Liquids that are spray applied to surfaces such as countertops, tables, windows, and surfaces of appliances.  |          |   |
| CC111  | All-purpose waxes and polishes  | Waxes and other semi-solids that are not spray applied and are applied to the surfaces of furniture (generally wooden furniture) to improve shine and/or impart stain resistance.                       |          |   |
| CC112  | Appliance cleaners  | Cleaners that are applied to the interior of appliances such as dishwashers, washing machines, electronic appliances, disposals, and ovens).  |          |   |

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |   |  |                 |                                       |
|---|---|--|-----------------|---------------------------------------|
| <b>Column A</b>   |   |  | <b>Column B</b> |                                       |
| <b>Code</b>   | <b>Name</b>                               | <b>Description</b>   | <b>Code</b>     | <b>Name</b>                           |
| CC113   | Drain and toilet cleaners (liquid)        | Liquids applied to toilets and/or drains that may remain in the sewer line for a time but ultimately go down the drain.  | C105            | Cleaning and furnishing care products |
| CC114   | Powder cleaners (floors)                  | Powders that are applied to carpets and rugs to clean or deodorize.  |                 |                                       |
| CC115   | Powder cleaners (porcelain)               | Powders applied to sinks, showers, and tubs to remove dirt, soap scum, and mold.   |                 |                                       |
| CC116   | Dishwashing detergent (liquid/gel)        | Liquid cleaners added to dishwashing machines to remove food residue from dishes.  | C106            | Laundry and dishwashing products      |
| CC117   | Dishwashing detergent (unit dose/granule) | Powder or powder/liquid tablet cleaners added to washing machines to remove dirt from clothing and other textiles.   |                 |                                       |
| CC118   | Dishwashing detergent liquid (hand-wash)  | Liquid cleaners added to sinks and combined with water to remove food residue from dishes.   |                 |                                       |
| CC119   | Dry cleaning and associated products      | Products used to remove dirt from clothing and other textiles in non-aqueous cleaning processes.   |                 |                                       |
| CC120   | Fabric enhancers                          | Products which enhance fabrics. Examples include liquid products added to washing machines or sheets added to driers, bleach, film, lime and rust removers.                                      |                 |                                       |
| CC121   | Laundry detergent (unit-dose/granule)     | Powder or powder/liquid tablet cleaners added to washing machines to remove dirt from clothing and other textiles.   |                 |                                       |
| CC122   | Laundry detergent (liquid)                | Liquid cleaners added to washing machines to remove dirt from clothing and other textiles.   |                 |                                       |
| CC123   | Stain removers                            | Applied to clothing before addition to laundry machine to remove stains (can be gels, liquids, or spray applications).   | C107            | Water treatment products              |
| CC124   | Ion exchangers                            | Point of use filters which may be used by consumers in homes (e.g., refrigerator filters or pitcher filters) or in commercial and industrial settings to treat water for use in these processes. |                 |                                       |
| CC125   | Liquid water treatment products           | Water treatment drops  |                 |                                       |
| CC126   | Solid/powder water treatment products     | pH adjusters, filter media, water treatment tablets  |                 |                                       |
| CC127   | Liquid body soap                          | Liquid soap used for washing entire body.  | C108            | Personal care products                |
| CC128   | Liquid hand soap                          | Liquid soap used for washing hands.  |                 |                                       |
| CC129   | Solid bar soap                            | Solid soap used for washing hands and body.  |                 |                                       |
| CC130   | Air fresheners for motor vehicles         | Aerosol spray and continuous action air products used to odorize or deodorize motor vehicles.  | C109            | Air care products                     |

| <b>For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A.</b> |   |   |                 |                                    |
|---|---|---|-----------------|------------------------------------|
| <b>Column A</b>   |   |   | <b>Column B</b> |                                    |
| <b>Code</b>   | <b>Name</b>   | <b>Description</b>  | <b>Code</b>     | <b>Name</b>                        |
| CC131   | Continuous action air fresheners                                  | Liquid, solid, gel diffuser, solid incense products and scented candle products that odorize or deodorize air in indoor environments.   | C109            | Air care products                  |
| CC132   | Instant action air fresheners                                     | Aerosol spray and incense products that odorize or deodorize air in indoor environments.  |                 |                                    |
| CC133   | Anti-static spray   | Spray applied to eliminate or reduce static electricity on apparel.   | C110            | Apparel and footwear care products |
| CC134   | Apparel finishing, and impregnating/surface treatment products    | Products applied to the surfaces of apparel to impart water or stain resistances, flame resistance, but not dyes.   |                 |                                    |
| CC135   | Insect repellent treatment  | Product applied to clothing to repel insects.   |                 |                                    |
| CC136   | Pre-market waxes, stains, and polishes applied to footwear        | Waxes, stains, and polishes applied to footwear to impart water resistance, improve appearance and impart other desirable properties.   |                 |                                    |
| CC137   | Post-market waxes, and polishes applied to footwear (shoe polish) | Waxes and polishes applied to footwear.   |                 |                                    |
| CC138   | Waterproofing and water-resistant sprays                          | Spray applied to impart water resistance to apparel or footwear.  |                 |                                    |
| <b>Chemical Substances in Construction, Paint, Electrical, and Metal Products</b>   |   |   |                 |                                    |
| CC201   | Fillers and putties   | Highly malleable materials used to repair, smooth over, or fill minor cracks and holes in building surfaces.  | C201            | Adhesives and sealants             |
| CC202   | Hot-melt adhesives  | Adhesives (supplied in solid cylindrical sticks and intended for small applications) designed to be melted and dispensed through an electric hot glue gun.  |                 |                                    |
| CC203   | One-component caulks  | Caulks (sealants) which are premixed with their final product formulation. Examples include acrylic solvent-based, butyl solvent-based, latex water-based, silicone and polyurethane.   |                 |                                    |
| CC204   | Solder  | Metal alloys melted down to permanently bond metal parts together. Commonly used in electronics, plumbing and sheet metal work.   |                 |                                    |
| CC205   | Single-component glues and adhesives                              | Adhesives (packaged less than 8 ounces per bottle and intended for small amount per use applications such as bookbinding) which are premixed with their final product formulation. Product use and exposure to light, humidity, or temperature initiates chemical reaction and cure. Examples include anaerobic, cyanoacrylates, heat-cure, moisture-cure, radiation-cure, and silicones. |                 |                                    |

| For the 2020 submission period: (1) use column A for chemical substances designated in 2019 as high priority for risk evaluation (those chemicals listed in 40 CFR 711.15(b)(4)(i)(C), Table 7) and (2) use either column A or B for chemical substances not listed in Table 7. For the 2024 and future submission periods, use only column A. |   |  |          |                        |
|--|---|--|----------|------------------------|
| Column A   |   |  | Column B |                        |
| Code   | Name  | Description  | Code     | Name                   |
| CC206  | Two-component caulks  | Caulks (sealants) which are stored in two separate parts, generally a base and an activator. The activator is added to the base and mixed before application. Examples include epoxy-solvent based silicone and polyurethane.  | C201     | Adhesives and sealants |
| CC207  | Two-component glues and adhesives   | Adhesives (packaged in containers smaller than 8 ounces per container and intended for small applications) which are stored in two separate containers, generally a resin and a hardener which are then mixed together to initiate chemical reaction and cure. Examples include epoxies, methyl methacrylates, silicon adhesives, and polyurethanes. |          |                        |
| CC208  | Adhesive/caulk removers   | Products applied to surfaces to unbind substances or remove sealants and to clean the underlying surface by softening adhesives, caulks and other glues so they can be removed.  | C202     | Paints and coatings    |
| CC209  | Aerosol spray paints  | Pressurized one-component paint released with a propellant and spray applied as a fine mist.   |          |                        |
| CC210  | Lacquers, stains, varnishes and floor finishes  | Liquids applied to surfaces such as floors, countertops, appliances, furnishings, decking, and patios to impart coloring or resistance to fade, scuffing, marking, or wear.  |          |                        |
| CC211  | Paint strippers/removers  | Liquid product applied to surfaces to remove paint, coatings and other finishes and also to clean the underlying surface.  |          |                        |
| CC212  | Powder coatings   | Dry powder coating that does not contain solvents and is cured under heat to create a coating film.  |          |                        |
| CC213  | Radiation curable coatings  | Coatings designed to cure onto surface when exposed to radiation such as ultraviolet or electron beam radiation.   |          |                        |
| CC214  | Solvent-based paint   | Paints that have been formulated to have a solvent as the vehicle.   |          |                        |
| CC215  | Thinners  | Liquids to dilute paints and coatings to obtain suitable viscosity for paint application.  |          |                        |
| CC216  | Water-based paint   | Paints that have been formulated to have water as the main vehicle.  |          |                        |
| CC217  | Construction and building materials covering large surface areas, including wood articles | Floor decking, claddings, toys outdoor equipment, walls, flooring  |          |                        |

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|--|--|--|----------|--|
| Column A   |  |  | Column B |  |
| Code   | Name   | Description  | Code     | Name   |
| CC218  | Construction and building materials covering large surface areas, including paper articles; metal articles; stone, plaster, cement, glass and ceramic articles | Construction and building materials; e.g. insulation panels, wall papers, roof sheets, drinking water pipes, sewer pipes, cement flooring, mirrors             | C204     | Building/ construction materials not covered elsewhere |
| CC219  | Machinery, mechanical appliances, electrical/electronic articles   | Refrigerators, washing machines, vacuum cleaners, computers, telephones, drills, saws, smoke detectors, thermostats, radiators                                 | C205     | Electrical and electronic products                     |
| CC220  | Other machinery, mechanical appliances, electronic/electronic articles   | Large-scale stationary industrial tools  |          |  |
| CC221  | Construction and building materials covering large surface areas, including metal articles   | Roof sheets, drinking water pipes, sewer pipes   | C206     | Metal products not covered elsewhere                   |
| CC222  | Electrical batteries and accumulators  | Batteries  | C207     | Batteries  |
| <b><u>Chemical Substances in Packaging, Paper, Plastic, Toys, Hobby Products</u></b>   |  |  |          |  |
| CC990  | Non-TSCA use   | Items included under non-TSCA use include food packaging, such as plastic wrap, plastic dinner ware, food storage, packaging containers.                       | C301     | Food packaging   |
| CC301  | Packaging (excluding food packaging), including paper articles   | Paper packaging  | C302     | Paper products   |
| CC302  | Other articles with routine direct contact during normal use, including paper articles   | Nappies, feminine hygiene products, adult incontinence products, tissues, towels, toilet paper, newspapers, books, magazines, photographic paper and negatives |          |  |
| CC303  | Packaging (excluding food packaging), including rubber articles; plastic articles (hard); plastic articles (soft)  | Phone covers, personal tablet covers, styrofoam packaging, bubble wrap   | C303     | Plastic and rubber products not covered elsewhere      |
| CC304  | Other articles with routine direct contact during normal use including rubber articles; plastic articles (hard)  | Gloves, boots, clothing, rubber handles, gear lever, steering wheels, handles, pencils, handheld device casing   |          |  |
| CC305  | Toys intended for children's use (and child dedicated articles), including fabrics, textiles, and apparel; or plastic articles (hard)                          | Stuffed toys, blankets, comfort objects, dolls, car, animals, teething rings   | C304     | Toys, playground, and sporting equipment               |



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|--|--|---|----------|---|
| Column A   |  |   | Column B |   |
| Code   | Name                                       | Description   | Code     | Name  |
| CC306  | Adhesives applied at elevated temperatures | Used at elevated temperatures to melt and apply adhesive which when cooled, hardens and adheres the two substances to one another. Examples include solder and hot-melt adhesive, see adhesive definitions. | C305     | Arts, crafts, and hobby materials               |
| CC307  | Cement/concrete                            | Used to create and support structures and pathways.   |          |   |
| CC308  | Crafting glue                              | Used to adhere two substances to one another, see adhesives definitions.  |          |   |
| CC309  | Crafting paint (applied to body)           | Used to add color to fingers, faces, or other body parts.   |          |   |
| CC310  | Crafting paint (applied to craft)          | Used to add color to crafting substances, see paints definitions.   |          |   |
| CC311  | Fixatives and finishing spray coatings     | Fixatives, shellacs, or other spray applied coatings intended to cover or hold other arts and crafts materials to a surface.  |          |   |
| CC312  | Modelling clay                             | Used to mold or sculpt.   |          |   |
| CC313  | Correction fluid/tape                      | Fluids used to cover up permanent ink so that corrections can be made.  | C306     | Ink, toner, and colorant products               |
| CC314  | Inks in writing equipment (liquid)         | Liquids used in pens, markers, or other writing instruments.  |          |   |
| CC315  | Inks used for stamps                       | Inks incorporated into stamp or ink pads used to apply ink to paper and other substrates.   |          |   |
| CC316  | Toner/printer cartridge                    | Pigmented liquids, toners or powders contained in cartridges, bottles, or other dispensers used in printers and copy machines. This category includes printing inks for commercial applications.            |          |   |
| CC317  | Liquid photographic processing solutions   | Chemicals used in the stop bath, fixing bath, hardener, or stabilizer to develop photographs.   | C307     | Photographic supplies, film, and photochemicals |

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|--|--|--|----------|-----------------------------------|
| Column A   |  |  | Column B |                                   |
| Code   | Name                                       | Description  | Code     | Name                              |
| <b>Chemical Substances in Automotive, Fuel, Agriculture, Outdoor Use Products</b>  |  |  |          |                                   |
| CC401  | Exterior car washes and soaps              | Cleaning agents used to remove dirt and grime.   | C401     | Automotive care products          |
| CC402  | Exterior car waxes, polishes, and coatings | Used to increase the shine, add UV protection and scratch resistance to automotive paints, or provide waterproofing/resistant properties to windshields and automotive window glass. |          |                                   |
| CC403  | Interior car care                          | Cleaning agents used to remove stains from interior carpets and textiles, rubber, vinyl, or plastic.   |          |                                   |
| CC404  | Touch up auto paint                        | Used to paint over scratches or cover up dent marks on automotive paints.  |          |                                   |
| CC405  | Degreasers                                 | Product that remove greases or oils from hard surfaces, machinery, or tools.   | C402     | Lubricants and greases            |
| CC406  | Liquid lubricants and greases              | Liquids that reduce friction, heat generation and wear between surfaces.   |          |                                   |
| CC407  | Paste lubricants and greases               | Pastes that reduce friction, heat generation and wear between surfaces.  |          |                                   |
| CC408  | Spray lubricants and greases               | Sprays that reduce friction, heat generation and wear between surfaces.  |          |                                   |
| CC409  | Anti-freeze liquids                        | Reduce the freezing point of surfaces.   | C403     | Anti-freeze and de-icing products |
| CC410  | De-icing liquids                           | Reduce the freezing point of surfaces in order to remove ice.  |          |                                   |
| CC411  | De-icing solids                            | Ice melting crystals, rock salts   |          |                                   |
| CC412  | Lock de-icers/releasers                    | Applied within locks to remove ice so that doors can be opened.  |          |                                   |
| CC413  | Cooking and heating fuels                  | Pressurized liquid fuels generally contained within metal containers and released directly into an appliance in a controlled way to prevent direct release.                          | C404     | Fuels and related products        |
| CC414  | Fuel additives                             | Added to fuels to improve properties such as stability, corrosion, oxygenation, and octane rating.   |          |                                   |
| CC415  | Vehicular or appliance fuels               | Liquid fuels stored in containers and refilled into vehicles or appliances as needed.  |          |                                   |

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|---|--------------------------------------|---|-----------------|--|
| <b>Column A</b>   |                                      |   | <b>Column B</b> |  |
| <b>Code</b>   | <b>Name</b>                          | <b>Description</b>  | <b>Code</b>     | <b>Name</b>                            |
| CC416   | Explosive materials                  | Chemical substances capable of producing a sudden expansion usually accompanied by the production of heat and large changes in pressure upon initiation, that are intended for consumer or commercial use. Examples include pyrotechnics, high explosives and propellants, igniter, primer, initiatory, illuminants, smoke and decoy flares, and, incendiaries.   | C405            | Explosive materials                    |
| CC417   | Agricultural non-pesticidal products | Products used to increase the productivity of crops, or aid in the harvesting of crops. Examples include fertilizers, colorants, and application aids, and soil amendments (e.g. products added to soil to adjust pH, retain water or alter other properties).  | C406            | Agricultural products (non-pesticidal) |
| CC418   | Lawn and garden care products        | Chemical substances contained in lawn, garden, outdoor or potted plant, and tree care products that are intended for consumer or commercial use should be reported under this code. Examples of lawn and garden care products include fertilizers and nutrient mixtures, soil amendments, mulches, pH adjustors, water retention beads, vermiculite, and perlite. Excludes any substance that is manufactured, processed, or distributed in commerce for use as a pesticide as defined in the Federal Insecticide, Fungicide, and Rodenticide Act.  | C407            | Lawn and garden care products          |
| <b><u>Chemical Substances in Products not Described by Other Codes</u></b>  |                                      |   |                 |  |
| CC980   | Other (specify)                      | Provide description of use.   | C909            | Other (specify)                        |
| CC990   | Non-TSCA use                         | Chemical substances contained in products intended for consumer or commercial use that are not regulated by TSCA should be reported under this code. Examples of products with non-TSCA uses include pesticide, insecticide, rodenticide and fungicide formulations; food or drink for humans or animals; articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in humans or animals; substances intended to be applied to the human body other than soap; any radioactive source material, special nuclear material, or byproduct material; pistols, revolvers, fire arms, or ammunition; and tobacco or tobacco products. | C980            | Non-TSCA use                           |