Instructions for Reporting PFAS Under TSCA Section 8(a)(7)

U.S. Environmental Protection Agency Office of Pollution Prevention and Toxics
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DOCUMENT HISTORY

Document Date	Action
October 2023	Creation of original document and posting to docket and TSCA website
April 2024	Clarifying revisions to Section 2.1.2: Is Your Chemical a PFAS? Removal of references to online reporting guide Edits to Section Byproduct Reporting section to clarify CBI substantiation questions Revisions to Appendix C: Examples of PFAS covered by this rule

HIGHLIGHTS OF REPORTING AND RECORDKEEPING REQUIREMENTS FOR PFAS UNDER TSCA 8(a)(7)

- Reporting is required for any manufacturer (including importer) of a per- or poly-fluoroalkyl substance (PFAS).
- Reporting is required for all PFAS, as defined in 40 CFR 705, that are chemical substances as defined by TSCA, that have been manufactured (including imported) for commercial purposes during this rule's lookback period.
- Information on the reportable chemical substance must be reported during the data submission period (40 CFR 705).
- All reporting sites must report PFAS data electronically, using the section 8(a)(7) web-based reporting tool within 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 the PFAS section 8(a)(7) tool to complete your form.
- Streamlined reporting is available for importers of articles and for manufacturers of less than 10 kg of a substance used solely for research and development.
- No small manufacturer exemptions are in effect for this data call. You may be required to report under this PFAS data call even if you are not required to report to under other TSCA requirements such as CDR due to a small manufacturer exemption.
- Information submitted under this data call may be claimed as confidential; however, such claims must be made at the time of submission and substantiated in accordance with TSCA and the PFAS data reporting rule. Submitters must provide upfront substantiation of all confidentiality claims except for claims made for import or yearly production volume information. Submitters who do not know the underlying identity of the chemical other than a generic chemical name (i.e., do not know a CASRN, or TSCA Accession or LVE numbers) are not required to assert and substantiate a CBI claim for chemical identity. Reporters using the article importer form also are not required to assert and substantiate a CBI claim for specific chemical identity. Certain processing and use data elements or a response that is designated as "not known or reasonably ascertainable" may not be claimed as confidential (40 CFR 705.30).
- Visit the section 8(a)(7) rule website (*https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-8a7-reporting-and-recordkeeping*) for 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 TSCA Section 8(a)(7) Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances rule, hereafter referred to as section 8(a)(7) reporting. 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 section 8(a)(7) rule to report to EPA information concerning the manufacturing, use, disposal, and environmental and health effects of certain Perfluoroalkyl or Polyfluoroalkyl Substances (PFAS). Manufacturers (including importers) are subject to the reporting requirements based on manufacturing (including importing) activities conducted since January 1, 2011. This is a one-time reporting event to provide greater transparency on the uses and risks associated with PFAS and is mandated by the Fiscal Year 2020 National Defense Authorization Act (NDAA).

Data submissions are due by the close of the submission period. The submission period will begin twelve months following the effective date of the final rule and will last for six months. PFAS manufacturers will have 18 months from the effective date of the rule to report: May 8, 2025. For small manufacturers (using the same definition as 40 CFR 704.3) whose PFAS reporting obligations are exclusively due to article import, the submission period will last twelve months, such that all reporting from these small article importers is due two years from the effective date of the final rule: November 10, 2025. Data must be submitted using the "TSCA section 8(a)(7) PFAS data call rule" service via EPA's Central Data Exchange (CDX), hereafter referred to as the "reporting tool." Submitters are required to use the reporting tool to prepare their submissions. The reporting tool guides users through a "hands-on" process of creating an electronic submission. A user guide on how to register for CDX and access the reporting tool is available on the *TSCA section 8(a)(7) Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances* website at *https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-8a7-reporting-and-recordkeeping*.

This instructions document contains the following chapters and appendices:

- Chapter 1 – Introduction to the TSCA section 8(a)(7) PFAS reporting rule.
- 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 section 8(a)(7) reporting.
- Chapter 5 – How to obtain copies of documents cited in this Instructions document.
- Appendix A – Glossary.
- Appendix B – Key Comparisons between Section 8(a)(7) Data Call and CDR

- Appendix C – Examples of PFAS covered by this rule.
- 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 accordance with obligations under TSCA section 8(a)(7), as amended by the National Defense Authorization Act for Fiscal Year 2020, EPA is requiring persons that manufacture (including import) or have manufactured these chemical substances for commercial purposes in any year since January 1, 2011, to submit information to EPA regarding PFAS uses, production volumes, byproducts, disposal, exposures, and existing information on environmental or health effects.

This document provides detailed information and examples to assist manufacturers (including importers) in reporting under TSCA section 8(a)(7). Appendix A of this document provides a glossary of terms, which may help you to understand the reporting requirements.

This document is not a substitute for the TSCA section 8(a)(7) PFAS rule in 40 CFR Part 705. To the extent that any inconsistencies exist between the section 8(a)(7) rule and this document, the requirements as promulgated in the rule should be followed. You should carefully review 40 CFR Part 705 and the final rule preamble (available in this rule's docket at *www.regulations.gov*; docket ID EPA-HQ-OPPT-2020-0549) to determine whether you are required to report information under the section 8(a)(7) rule.

1.2 Duplicative reporting

Your site may have already reported some section 8(a)(7) data to EPA through another EPA program. If that is the case, the site should determine whether EPA has identified such reporting as "duplicative" in the section 8(a)(7) rule. If EPA has identified the reporting as duplicative, your site is not required to re-report duplicative information, but must submit a report and include all information required by this data call that has not been previously reported to EPA. Information that has been reported for some but not all years from 2011 to 2022 must be reported for the "missing" years. Information that has been previously reported, but not to the level of detail required by this data call, or using exemptions not applicable to this data call, must be reported under this data call to the level of detail required, if known to or reasonably ascertainable by you. In the event that new, more accurate, or more detailed information has become known to or reasonably ascertainable by the site, that information must be reported under this data call.

The electronic reporting system will allow you to indicate that certain information has already been reported to EPA. EPA has identified data elements that could have been previously reported under Chemical Data Reporting (CDR); Toxics Release Inventory (TRI) reporting, also known as section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA 313); Greenhouse Gas Reporting (GHGRP); and TSCA sections 8(d) and 8(e). Additionally, there may be limited overlap between forms submitted under section 8(a)(7) reporting in the event

that a reportable PFAS is produced as a byproduct during manufacture, processing, or disposal of another reportable PFAS.

The section 8(a)(7) reporting software will identify the data elements that could contain information already reported to EPA. For these data elements, you may indicate if your company has already reported the information to EPA. You must clearly indicate where the information can be found (i.e., which reporting program) and when that information was submitted (i.e., which year). **Information must have been reported *as required by the section 8(a)(7) rule***; for example, other programs may have exemptions, such as for articles or impurities, that could mean information reported to those programs was not reported as required by this data call.

EPA anticipates that the primary program with "duplicative reporting" is Chemical Data Reporting (CDR). Two other EPA programs that have minor overlap with section 8(a)(7) include the Toxics Release Inventory (TRI) and the Greenhouse Gas Reporting Program (GHGRP).

Note, however, that these programs both cover only a limited subset of the PFAS covered by section 8(a)(7) and have thresholds for reporting that do not apply to this data call. Therefore, you may be required to report under this data call even if you were not required to report under TRI or GHGRP. Further, due to differences in how data are to be reported to those programs, reporting to TRI or GHGRP may not fulfill the requirements of this data call. Some health or environmental information may also have been reported under TSCA section 8(d) or TSCA section 8(e) or another authority.

Note that information reported on pre-manufacture notices (PMNs) or low volume exemptions (LVEs) generally does not fulfill requirements under section 8(a)(7), as PMNs and LVEs reflect information before manufacture of a substance commences.

Information reported to entities other than EPA, such as state agencies, or provided to EPA outside a formal EPA reporting program (such as comments provided on a proposed rule), ***does not*** fulfill your requirement to report to EPA under section 8(a)(7) and cannot be cited as duplicative reporting.

EPA expects that even when a company has previously reported some section 8(a)(7) information, that information will constitute only a minority of information to be reported under this data call.

Information that may have previously been reported under CDR includes:

(1) Physical state of the PFAS pursuant to § 711.15(b)(3)(C)(ix);

(2) Industrial processing and use type, sector(s), functional category(ies), and percent of production volume for each use, pursuant to § 711.15(b)(4)(i)(A) through (D);

(3) Consumer and/or commercial indicator, product category(ies), functional category(ies), percent of production volume for each use, indicator for use in

products intended for children, and maximum concentration in the product, pursuant to § 711.15(b)(4)(ii)(A) through (F);

(4) Number of workers reasonably likely to be exposed for each combination of industrial processing or use operation, sector, and function, pursuant to § 711.15(b)(4)(i)(F), and the number of commercial workers reasonably likely to be exposed when the substance is used in a commercial product, pursuant to § 711.15(b)(4)(ii)(G).

Information that may have been reported to TRI includes:[1,2]

(1) Total volume recycled on-site

(2) Description of disposal process(es)

(3) Total volume released to land

(4) Total volume released to water

(5) Total volume released to air

(6) Total volume incinerated on site[3]

Information that may have been reported to GHGRP includes:[1]

(1) Production volume (imported)

(2) Volume directly exported

(3) Total volume incinerated on site

[1] Due to differences in reporting requirements, exemptions, and other programmatic requirements, reporting to TRI and GHGRP may not meet the requirements of TSCA section 8(a)(7). Carefully review any previous TRI or GHGRP submissions and calculation methods to determine if you may claim duplicative reporting. You may claim duplicative reporting for TRI and/or GHGRP only if the data were reported ***as required by the section 8(a)(7) rule*.**

[2] Only certain PFAS chemicals are reportable under TRI. Most PFAS were added to the TRI chemical list for 2020 reporting, while some chemicals meeting the definition of PFAS used for PFAS 8(a)(7) reporting have been reportable since before 2011. Note that the TRI chemical list includes certain chemicals as unspecified isomers, such as dichloropentafluoropropane, which could include both chemicals considered to be PFAS and chemicals not considered to be PFAS. In the event you know which isomer(s) were used at the site, you must report the specific isomers for PFAS 8(a)(7) reporting and may not consider reporting to TRI under a mixed isomer listing as duplicative.

[3] Carefully review any incineration data reported to TRI to determine if it is duplicative. To claim duplicative reporting, EPA must be able to determine the total volume of the chemical incinerated on site. EPA anticipates that many reporters' TRI reports will not fulfill the requirements of Section 8(a)(7) for the total volume incinerated on site.

Information that may have been reported under TSCA section 8(d) or 8(e) or another authority includes:

(1) Environmental and health effects (OECD harmonized template)

(2) Environmental and health effects study report

(3) Environmental and health effects supporting information

Table 1-1Table 1-1 shows some examples of how companies may consider prior reporting.

Table 1-1. Examples of prior reporting impacts on PFAS data call reporting

Previous Reporting	Site section 8(a)(7) responsibilities
A manufacturer previously reported on Example PFAS A under 2020 CDR. That report included information required by section C of this data call, from 2016 through 2019. Most information required by section C was reported for only the principal reporting year, 2019, and some information for section C was reported for 2016-2018. The site started manufacturing the PFAS in 2015 but did not meet the CDR reporting threshold for that year. The manufacturer continued to produce Example PFAS A in the years since its last CDR report.	The manufacturer considers whether any exemptions applied to the prior CDR reporting that are not available under this rule. The manufacturer determines that the data previously submitted to CDR did not exempt any activities or quantities that would be reportable under this rule, and therefore may be considered duplicative. For section C, the manufacturer indicates that data were already reported to CDR for the applicable fields for 2019, completing the fields for "site-limited?" and recycling, which are not reported to CDR. The manufacturer also indicates the data were already reported to CDR for the fields that were reported for 2016-2018. The manufacturer fills in the remaining section C information for 2016-2018 and all section C information for 2015 and 2020-2022. The manufacturer fills in information for 2015-2022 in all other sections of its PFAS data call reports, as that information has not been reported to EPA for any year.
A manufacturer previously reported information about Example PFAS B, which was manufactured from 2012-2015, to the 2016 CDR. At the time of 2016 CDR submission, several required data fields were not known to or reasonably ascertainable by the company (NKRA). However, the company since learned additional information about the chemical.	The manufacturer indicates duplicative reporting for the data that was known to the site and submitted to EPA for 2012-2015. The manufacturer must report newly acquired information to this PFAS data call for fields reported as "NKRA" to CDR for 2012- 2015. The manufacturer may indicate duplicative reporting for remaining fields that were originally reported as "NKRA" and for which the manufacturer has not acquired new information.
Example Company C manufactures Example PFAS C and has begun gathering and compiling information about this chemical for 2024 CDR (for activities from 2020-2023). The company's 2024 CDR report will not be submitted before the end of the section 8(a)(7) submission period.	The company must report the 2020-2022 information under section 8(a)(7) reporting, even if the information will be reported to EPA in the future. EPA encourages submitters to review their in- progress CDR submissions in gathering data for section 8(a)(7) submissions, and vice versa, to reduce overall reporting

Previous Reporting	Site section 8(a)(7) responsibilities
	burden.
Example Company D imported Example PFAS D at one site in 2015. 10,000 pounds of Example PFAS D was imported as a component of an article, and 50,000 pounds was imported in a mixture. The company reported Example PFAS D to CDR for 2015, reporting on the 50,000 pounds imported in the mixture. The company did not consider the 10,000 pounds of Example PFAS D imported as articles, which are exempt for CDR reporting.	The company must newly report all information for Example PFAS D under this data call. Because information reported to CDR excluded quantities imported in articles, which are not exempt under this data call, the information was not previously reported as required by this data call. The site may not indicate duplicative reporting.
Example Company E imported an article containing Example PFAS E in 2012, 2013, and 2017, but has not been previously required to report this information to any EPA programs. The site reported information about this chemical to the state of Washington's Department of Ecology pursuant to the state's requirements for chemicals in children's products.	The company must report to EPA all information required by this data call for 2012, 2013, and 2017, and indicate that Example PFAS E was not produced in the other years. Reporting to a state program does not fulfill or reduce any requirements for reporting under this PFAS data call.
Example Company F manufactured 1,000 pounds of Example PFAS F each year during 2019, 2020, and 2021. Example PFAS F was added to the TRI chemical list for 2020 reporting and was not TRI-reportable for 2019. Each year, 50 pounds of the PFAS were manufactured and used for quality control in a laboratory on-site. All Example PFAS F produced at Example Company D was disposed of in the site's on-site landfill. After determining that the quantity of Example PFAS F used in the laboratory was exempt from TRI reporting, Company C reported 950 pounds of Example PFAS F releases to TRI for 2020 and 2021.	The company must report all information about Example PFAS F for 2019, because no TRI report was filed for that year. The site may not indicate duplicative reporting for release quantities for 2020 and 2021, because the quantities reported to TRI excluded laboratory uses that are not exempt under Section 8(a)(7) reporting. The company instead reports 1,000 pounds of land disposal for 2020 and 2021. The company may indicate duplicative reporting for types of disposal processes and the quantities released to air, water, and recycled on-site.

2. Reporting Requirements

PFAS data reporting rule requirements apply to certain persons that manufacture (including import) or have manufactured PFAS in any year since January 1, 2011. The term "PFAS" is defined in Appendix A and examples of PFAS are provided in Appendix B. Please note that any use of the term "manufacture" in this document will encompass "import" and the term "manufacturer" will encompass "importer."

For reporting to the PFAS data reporting rule, manufacturers (including importers) are required to use the section 8(a)(7) reporting tool via EPA's CDX to submit information in response to the requirements of the section 8(a)(7) rule (40 CFR Part 705). You must register with CDX to submit online, and you must register the name of the company on whose behalf you are submitting. EPA does not accept paper submissions or electronic media (diskette, CD-ROM, etc.) for any section 8(a)(7) submission (40 CFR 705).

Note that many aspects of reporting for this PFAS data reporting rule are similar to Chemical Data Reporting (CDR), but there are important differences. Even if you have reported previously under the CDR or were exempt from reporting under CDR, you should carefully review the reporting requirements for this rule to ensure you report correctly. Key comparisons between section 8(a)(7) and CDR are outlined in Appendix B of this document.

You should consider the following three steps to determine whether you are required to report for each PFAS chemical substance that you domestically manufacture (including import) into the United States **during each year since** 2011 (i.e., consider calendar years 2011 through 2022):

- Step I: Is your chemical substance subject to PFAS 8(a)(7)?
- Step II: Do you qualify for streamlined reporting?
- 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 section 8(a)(7)?

For the purposes of the section 8(a)(7) Reporting Rule, *per- and polyfluoroalkyl substances* or *PFAS* means any chemical substance that contains at least one of these three structure units:

1) R-(CF_2)-CF(R')R'', where both the CF_2 and CF moieties are saturated carbons
2) R-CF_2OCF_2-R', where R and R' can either be F, O, or saturated carbons
3) $CF_3C(CF_3)$R'R'', where R' and R" can either be F or saturated carbons.

This definition may not be identical to other definitions of PFAS used within EPA and/or other organizations. See Section 2.1.2 for further description of these structures. To assist potential reporters with determining whether certain substances may be covered under this structural definition, EPA has identified specific PFAS covered by this rule. This non-exhaustive list is available in EPA's CompTox Dashboard (*https://comptox.epa.gov/dashboard/chemical-lists/PFAS8a7*) and a limited version including only chemicals on the public TSCA Inventory or with low-volume exemptions is included as Appendix B in this guidance document.

Note that the manufacture of PFAS as a byproduct, an impurity, or a non-isolated intermediate **is not** exempt for the purpose of this rule, unlike CDR reporting. However, because entities that import of municipal solid wastes (MSW) for the purpose of disposal or destruction cannot know or reasonably ascertain that they imported PFAS in the MSW streams, these waste management activities are not within the scope of this rule's reporting requirements. Per 40 CFR 705.15, "reporting under this part is not required for the import of municipal solid waste streams for the purpose of disposal or destruction of the waste."

2.1.1 Is Your Chemical Substance Manufactured for Commercial Purposes During the Reporting Period?

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 import into the customs territory of the United States (as defined in general note 2 of the Harmonized Tariff Schedule of the United States), produce, or manufacture for commercial purposes. (40 CFR 705.3)
- ***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 705.3).

For purposes of section 8(a)(7) reporting, a chemical substance is manufactured (including imported) only if it is domestically produced 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." In the case of chemical substances manufactured (including imported) by one person on behalf of another person, the manufacturer is the person actually manufacturing the chemical substance.

As identified above, the term *manufacture for commercial purposes* means that the chemical substance is produced for the purpose of obtaining an immediate or eventual 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 705.3). Certain activities are not considered "manufacture for a commercial purpose" (e.g., non-commercial R&D activities such as scientific experimentation, research, or analysis conducted by academic, government, or independent not-for-profit research organizations, unless the activity is for eventual commercial purposes) and are not subject to the reporting requirements in this rule.

2.1.1.1 Changes to Company Ownership or Legal Identity

Under 40 CFR 705, the reporting obligation falls to the "person who manufactured (including imported)" a chemical substance that is a PFAS. EPA recognizes that in some cases, business transactions occurring during the reporting 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 (*note that while this fact sheet was developed for CDR, changes in company ownership or legal identity are to be handled the same for section 8(a)(7) reporting as for CDR)*. It is ultimately the manufacturer's responsibility to report appropriately under this data call, notwithstanding the complexity of its own business transactions.

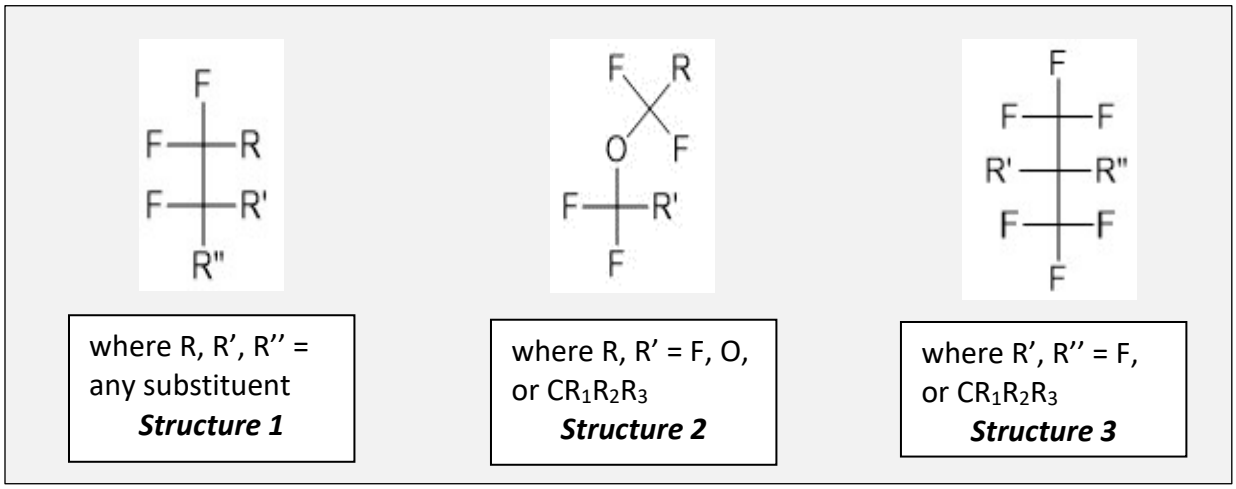
2.1.2 Is Your Chemical Substance a PFAS?

For the purposes of this action, the definition of PFAS includes any chemical substance that structurally contains at least one of the following three sub-structures. Note that in these formulas, R refers to the atom directly adjacent to the backbone:

1) R-(CF_2)-CF(R')R'', where both the CF_2 and CF moieties are saturated carbons (since the R groups are not defined, R, R', and R'' may be any substituent).

2) R-CF_2OCF_2-R', where R and R' can either be F, O, or saturated carbons (i.e., R and R' may be any of the following: a fluorine atom, an alcohol or ether; or any substituent bonded to the backbone by a saturated carbon atom such as a CH_2 group).

3) $CF_3C(CF_3)R'R''$, where R' and R" can either be F or saturated carbons (i.e., R' and R" may be a fluorine atom or any substituent bonded to the backbone by a saturated carbon atom such as a CH_2 group).



This definition may not be identical to other definitions of PFAS used within EPA and/or other organizations. To assist potential reporters with determining whether certain substances may be covered under this structural definition, EPA has identified specific PFAS covered by this rule. This non-exhaustive list is available in EPA's CompTox Dashboard and a limited version including only chemicals on the public TSCA Inventory or with low-volume exemptions as of the publication of this guidance document is included as Appendix B in this guidance document. Note that the CompTox list may change as chemicals are added to the Dashboard.

Manufacturers must consider all manufacturing activities during the reporting period, which begins January 1, 2011. If a manufacturer has manufactured PFAS for commercial purposes in any year since January 1, 2011, they would be required to report under this rule even if they are not currently manufacturing PFAS.

This rule is limited to manufacturers (including importers) of PFAS that are considered a "chemical substance" under TSCA section 3(2). This rule does not require reporting on activities that are excluded from the definition of "chemical substance" in TSCA section 3(2)(B).

Under TSCA section 3(2), "chemical substance" means any organic or inorganic substance of a particular molecular identity, including (1) any combination of such substances occurring in whole or in part as a result of a chemical reaction or occurring in nature, and (2) any element or uncombined radical. This rule does not require reporting on activities that are excluded from the definition of "chemical substance" in TSCA section 3(2)(B). The term "chemical substance" does not include: "(i) any mixture, (ii) any pesticide (as defined by the

Federal Insecticide, Fungicide, and Rodenticide Act) when manufactured, processed, or distributed in commerce for use as a pesticide, (iii); tobacco or any tobacco product, (iv) any source material, special nuclear material, or byproduct material (as such terms are defined in the Atomic Energy Act of 1954 and regulations issued under such Act), (v) any article the sale of

which is subject to the tax imposed by Section 4181 of the Internal Revenue Code of 1954 (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 (vi) any food, food additive, drug, cosmetic, or device, as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, when manufactured, processed, or distributed in commerce for use as a food, food additive, drug, cosmetic or device" [15 USC 2602(2)(B)].

Even though the definition of chemical substance excludes mixtures, PFAS as a chemical substance may be present in a mixture. Therefore, this rule requires reporting on each chemical substance that is a PFAS, including as a component of a mixture. This rule does not require reporting on components of a mixture that do not fall under the structural definition of PFAS.

2.2 Step II: Do You Qualify for Streamlined Reporting?

If you determined from Step I that you manufacture (including import) a reportable PFAS for commercial purposes, Figure 2-1Figure 2-1 presents a decision logic diagram that may help you determine whether you are a manufacturer (including importer) who must report with the Standard Form or if you may qualify for streamlined reporting. The following subsections explain each question in greater detail. Note that unlike CDR reporting, no reporting exemptions apply to section 8(a)(7).

2.2.1 Did you import an article containing a reportable PFAS?

If you imported an article containing PFAS, you may use a streamlined Article Import form. This streamlined form does not require all information required for the standard form; when you select "article import reporting" in the section 8(a)(7) reporting tool, the program will show only fields required for this streamlined reporting. Only certain fields in Sections A, B, and C are required for the streamlined article importing. Further, because importers may not know or be able to ascertain how much PFAS is contained within the articles, the article import form allows production volume to reported as the total weight of the imported articles or as the quantity of articles imported (see Section 4.7.2.24.7.2.2), rather than weight of the PFAS. If you have any additional information, such as an SDS or information about disposal, report that information in the Optional Information section of the form (see Section 4.12).

Some sites may both import a PFAS in an article and otherwise manufacture the same PFAS (i.e., domestically manufacture or import other than in an article). In that case, you may choose to either report the imported article and otherwise manufactured PFAS separately, using the streamlined article import form for the imported article and using the standard form for the otherwise manufactured PFAS, or you may include the information for the imported article within the standard form, submitting one standard form for all PFAS produced and imported by the site.

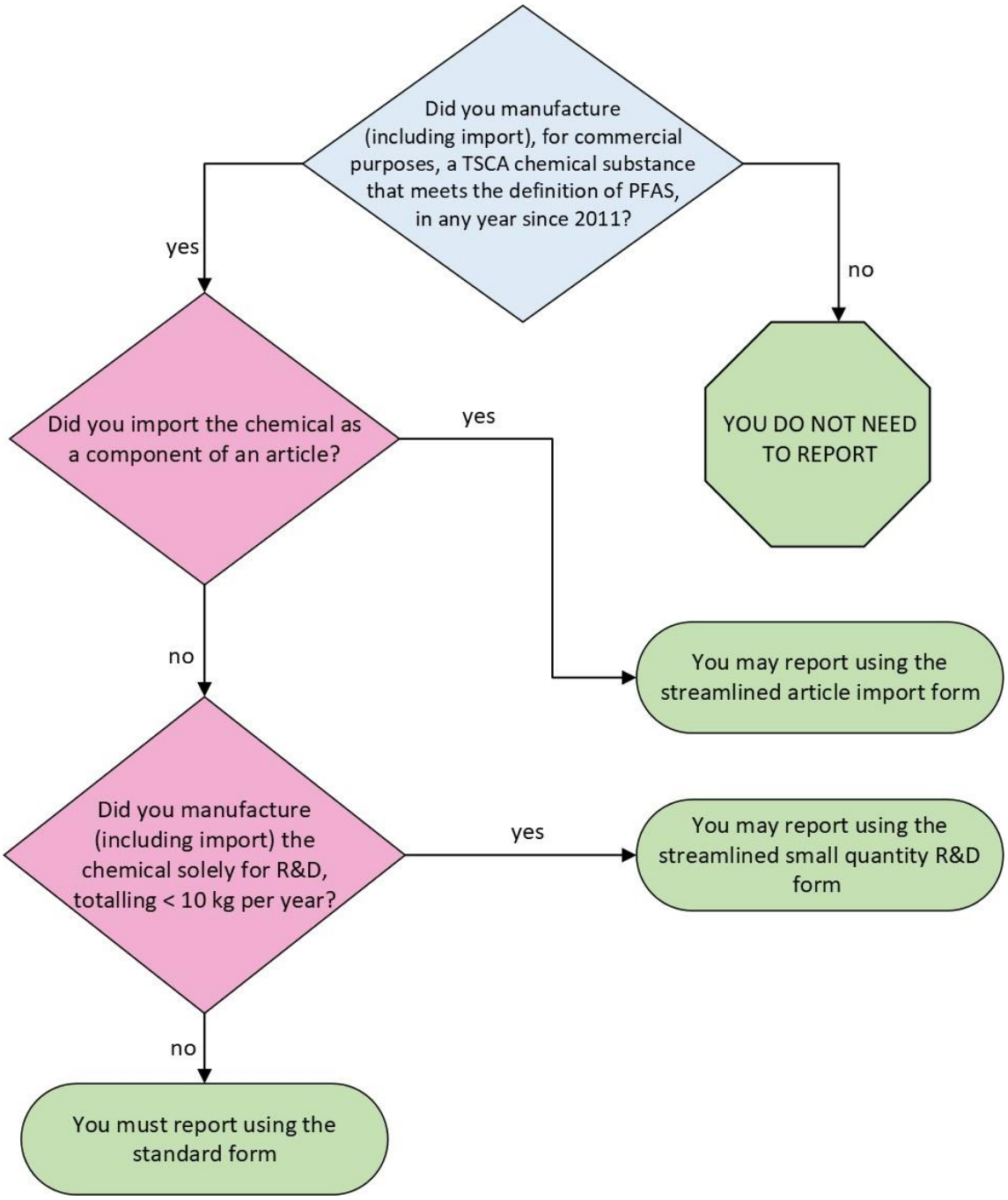


Figure 2-1. Decision Logic Diagram for Evaluating Step II

If you are unsure whether you are importing an article, refer to the CDR "Imported Articles" factsheet at *https://www.epa.gov/chemical-data-reporting/tsca-chemical-data-reporting-fact-sheet-imported-articles-2020*. The TSCA definition of an article is the same for both CDR reporting, as referenced in this factsheet, and for PFAS section 8(a)(7) reporting (40 CFR 705.3). However, recall that while importing an article is exempt from CDR, it is **not** exempt from section 8(a)(7) reporting. If you import an article containing a chemical substance that is a PFAS, you may be eligible to use the streamlined Article Import form, but you **are not** exempt from reporting. You have until May 8, 2025, to report. However, if you meet the following two criteria, you have until November 10, 2025, to report: (1) are considered a small manufacturer pursuant to 40 CFR 704.3 (see Appendix A); and (2) have reporting obligations under this rule exclusively due to importing articles.

2.2.2 Did you manufacture a reportable PFAS in quantities below 10 kg per year exclusively for purposes of research and development (R&D)?

Persons who manufacture (including import) PFAS in small quantities solely for research or analysis for commercial purposes may report using the streamlined small quantity R&D form. The streamlined small quantity R&D form requires reporting only of the chemical substance identification information (see Section 4.3), domestic manufacture and imported volumes, indication of whether the substance was imported but never on site, and an optional additional information field.

Note that any PFAS manufactured for commercial purposes is reportable under this data call. "Manufacture for commercial purposes" encompasses any importing, production, or other manufacturing activities with the purpose of obtaining an immediate or eventual commercial advantage and includes chemicals "for use by the manufacturer, including use for product research and development." R&D substances which meet the scope of "manufactured for commercial purposes" are to be reported under this rule, even if the PFAS itself was not later commercialized. See Section 2.1.12.1.1 for additional guidance on determining if a PFAS was manufactured for commercial purposes."

Some sites may both manufacture a PFAS in small quantities for R&D and otherwise manufacture the same PFAS (i.e., domestically manufacture or import). In that case, your site does not qualify for use of the streamlined form. The streamlined form is limited to persons manufacturing (including importing) PFAS ***solely*** for research or analysis.

Example 2-1. Example Company G produces Example PFAS G at one site. Example PFAS G was produced in amounts of 3 kg in 2011, 7 kg in 2012, and 6 kg in 2013. Example PFAS G was not produced during any other year since 2011 and the quantities produced were used exclusively for research and development.

Because Example PFAS G is used only for research and development, and the volume manufactured was less than 10 kg each year, Example Company G reports using the streamlined R&D form for Example PFAS G.

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 reportable PFAS and are required to report, this section will help you determine what information you must report.

If you are required to report and do not qualify for either streamlined form, you are required to report all information described in 40 CFR 705. Importers of PFAS-containing articles and manufacturers (including importers) of small R&D quantities may use streamlined forms, which include only the data elements that EPA believes will be known to or reasonably ascertainable to manufacturers in those situations. The online reporting software will guide you through the data elements required for each form.

Basic company and site identification information, (submitted on Part I of the form) is required by 40 CFR 705.15(a)(1). Chemical identification and information pertaining to the manufacture (including import) of chemical substances (described in *Part II – Section A*) is required by 40 CFR 705.15(a)(2). Note that the basic company and site information is reported once per site, while the manufacturing information is reported separately for each reportable PFAS at the site. Industrial processing and use, and consumer and commercial uses of the chemical substance (described in *Part II – Section B*) is required by 40 CFR 705.15(a)(3).

Information about byproducts (described in *Part II – Section D*) is required by 40 CFR 705.15(a)(3). Information about the environmental and health effects of the PFAS (described in *Part II – Section E*) is required by 40 CFR 705.15(f). Information about worker exposure to the PFAS (described in *Part II – Section F*) is required by 40 CFR 705.15(g). Information about the release or disposal of the PFAS (described in *Part II – Section G)* is required by 40 CFR 705.15(h).

Example 2-2. Example Company H manufactures 8 kg of Example PFAS H in 2017 for on-site R&D operations in development of a new cleaning product. The company scales up R&D for this substance and manufactures 100 kg of Example PFAS H in 2018. The company then discontinues R&D and does not ultimately commercialize Example PFAS H. Example PFAS H is not manufactured after 2018.

Example PFAS H is manufactured for commercial purposes because Example Company H manufactured the chemical with the purpose of obtaining an eventual commercial advantage, so Example Company H must report the substance, even though it was not ultimately commercialized. For 2017, the company manufactured < 10 kg of the substance for R&D and meets the requirements for the R&D form. For 2018, the company manufactured > 10 kg so exceeds the threshold for the R&D form. The company may take one of two actions:

1) Use the R&D form to report for 2017 and the standard form for 2018

2) Report for both 2017 and 2018 on one standard form, completing all fields on the form for both years.

Example 2-3. Example Company I begins importing an article containing Example PFAS I in 2017 and continues importing the article through 2022. Example PFAS I provides stain resistance in a finished textile product. Example Company I does not produce or import any other products containing Example PFAS I.

Because Example PFAS I is only imported in an article, Example Company I reports for this chemical using the streamlined article importer form.

3. When You Must Report

You are required to report information pertaining to each calendar year since January 1, 2011 through December 31, 2022, in which you manufactured a PFAS. The submission period begins twelve months after the effective date of the section 8(a)(7) final rule and lasts for six months. Therefore, reporting is due 18 months after the effective date of this final rule: May 8, 2025. Small manufacturers (per 40 CFR 704.3) whose PFAS reporting obligations are exclusively due to importing articles have an additional six months to report. These small article importers have 24 months from the effective date of the final rule to report: November 10, 2025.

Your report must be submitted to EPA using the electronic section 8(a)(7) reporting tool ("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 the reporting tool to submit your PFAS data call information (40 CFR 705.35). To get you started, guides are available on EPA's website:

- CDX Registration Guide, which covers the specifics of CDX registration (https://cdx.epa.gov/About/UserGuide)

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 705.1).

4. Instructions for Completing Section 8(a)(7) Reporting

This chapter will help you complete section 8(a)(7) reporting. Section 4.1 describes how to certify your submission. Section 4.2 discusses the reporting standard – the effort required to comply with the PFAS data call. Sections 4.3 through 4.11.3 provide information to help you complete each required section of the reporting form.

You are required to use the section 8(a)(7) online reporting tool in CDX to complete and submit a reporting form for each reportable PFAS. If you are reporting information for more than one PFAS at your site, you must report information for each reportable PFAS on its own form. If you are reporting for multiple sites, you must submit separate forms for each site. In most cases, you will submit exactly one form per chemical at the site. However, in certain cases if you are an article importer, you may submit multiple forms for the same chemical at one site; see Section 2.22.2.

The standard reporting form is comprised of a certification statement and three parts, as follows:

- The certification statement and Part I of the form are completed once per reporting site. Part I contains company, site, and contact information, some of which is pre-populated based on the information in your CDX account for the site. Once this section has been completed for a reporting site, the reporting tool will automatically populate Part I with this information for any additional forms for the site.
- Part II – Sections A – C are completed for each reportable PFAS at the site and contains information associated with the identity, manufacture, and properties of the chemical substance.
- Part II – Section D is completed for the byproducts produced during manufacture of each PFAS.
- Part II – Section E is completed for each reportable PFAS at the site and contains information associated with the environmental and health effects of the PFAS.
- Part II – Section F is completed for each reportable PFAS at the site and contains information associated with workers' exposure to the PFAS.
- Part II – Section G is completed for each reportable PFAS at the site and contains information associated with the disposal of the PFAS.
- Part II – Section H is an optional free text field that allows submittal of any additional information.
- 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 streamlined article import and small-quantity R&D forms reduce the number of fields to be reported. Sections D – G are not required on these forms and the requirements for Sections A – C are reduced. If any information in the omitted sections is known to you, you may report that information in the free text field in Section H.

Note: Items such as the validation page and the SRS search page will appear in separate windows. Ensure that your pop- up blocker is disabled before you begin to complete PFAS section 8(a)(7) reporting.

4.1 Certification

Your submission(s) must be certified, indicating that your submitted information has been completed in compliance with the PFAS data call requirements, such as all information known or reasonably ascertainable is submitted, and that the confidentiality claims made in this report are 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(s). You must include the printed name, title, and email address for the person signing the certification.

See the CDX User Guide for information on how to complete an electronic signature agreement.

This certification statement applies to all the information supplied on the form(s) for your site. The certification statements appear when the submission process has been initiated, at which time the submitter must either certify or cancel the submission process. If you are completing forms for multiple sites, one submission certification will be created and must be submitted for each site. 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)(1).

4.2 Reporting Standard

Submitters are required to exercise certain levels of due diligence in gathering the information required by the section 8(a)(7) 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 705.3, 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 section 8(a)(7) 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

section 8(a)(7), 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 manufacturer, such as marketing studies, sales reports, or customer surveys,
- Information contained in standard references, such as a safety data sheet (SDS) or a supplier notification, 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 section 8(a)(7). 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.

This reporting standard does not confer a testing requirement on manufacturers. But, if manufacturers have previously tested their products for the presence of PFAS, then that information may be considered known to or reasonably ascertainable to them and should be submitted to EPA as appropriate.

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
Scenario: Example Company J discovers that it has no knowledge of how a particular PFAS (Example PFAS J) is processed or used by its customers. Example Company J 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 Example PFAS J due to an inadvertent computer malfunction. Example Company J 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 Example PFAS J is generally used for. **Application of KRA Reporting Standard:**

If:	**Then:**
Example Company J 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
Example Company J did not endeavor to supplement the information it already knew.	Duties Not Fulfilled

Scenario: Example Company K has never maintained information on how a particular PFAS (PFAS K) 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. Example Company K has many customers, who it believes process and use the particular PFAS in a similar manner and it expects that it could substantially fill this data gap by reviewing the public website of its largest customer.

Application of KRA Reporting Standard:

If:	**Then:**
Example Company K reviews its largest customer's website, and of the information contained on the website	Duties Likely Fulfilled
Example Company K did not endeavor to supplement the information it already knew.	Duties Not Fulfilled

Scenario: Example Company L maintains seasonal marketing data on changes in use patterns for a particular PFAS (Example PFAS L). Comparable manufacturers typically only maintain such data on an annual basis, in line with reasonable business practices. Example Company L irrevocably loses its summer marketing data for Example PFAS L, due to an inadvertent computer malfunction. Example Company L 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 Example PFAS L for in the past summer.

Application of KRA Reporting Standard:

If:	**Then:**
Instead of attempting to reconstruct the summer data by contacting its largest customer, Example Company L 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
Example Company L designated the information as "not known or reasonably ascertainable" simply because one of the seasonal marketing reports was missing	Duties Not Fulfilled

Scenario: Example Company M has never maintained information on how a particular PFAS (Example PFAS M) 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. Example Company M has one major customer and ten minor customers.

Application of KRA Reporting Standard:

If:	**Then:**
Example Company M asks its major customer to supply information about how Example PFAS M is processed and used, but that customer is unwilling to supply this information. Example Company M reasonably expects that the only remaining way to substantially fill this data gap would be to send a survey to its ten minor customers. Example Company M reports that the information is "not known or reasonably ascertainable" to it.	Duties Likely Fulfilled
Example Company M did not endeavor to obtain processing and use information from its customers and	Duties Not Fulfilled

designated the information as "not known or reasonably ascertainable."	

Scenario: Example Company N imports an article with a water repellant "fluoropolymer" surface. However, Example Company N does not know the chemical identity or molecular structure of the fluoropolymer coating.

Application of KRA Reporting Standard:

If:	**Then:**
Example Company N contacts their supplier to determine the name, CASRN, and molecular structure of the fluoropolymer. The supplier provides this information or a joint submission is initiated.	Duties Likely Fulfilled
Example Company N did not contact their supplier to obtain information on the fluoropolymer coating	Duties Not Fulfilled

Scenario: Example Company O imports stain-resistant garments. Example Company O does not know specifically what chemical is used to impart stain resistance, but Example Company O does know that chemicals used to impart stain resistance are often fluorinated chemicals and could meet the definition of PFAS.

Application of KRA Reporting Standard:

If:	**Then:**
Example Company O contacts their supplier to determine the name, CASRN, and molecular structure of the stain-resistant chemical. The supplier provides this information or a joint submission is initiated.	Duties Likely Fulfilled
Example Company O did not contact their supplier to obtain Duties Not Fulfilled information on the stain-resistant chemical.	Duties Not Fulfilled

4.3 Part I - Section A. Parent Company Information[4]

You must provide information about your parent company. For purposes of section 8(a)(7), 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. 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 in different situations.

Note that although CDR requires you to report your U.S. parent company and your foreign parent company, section 8(a)(7) reporting requires only the U.S. parent to be reported.

[4] See Section 4.4.1 for information concerning CBI claims for Parent Company Information.

Table 4-2. Applying Highest-level Parent Company Definition in Different Situations

Site Ownership	***U.S. Parent Company***
(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.
(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.
(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)	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). 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 parent company is a foreign company, then the site is its own U.S. parent company.
(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.
(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 site is the U.S. parent company.
(6) If the site is a federally owned site	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. Parent Company Name(s)

All sites must enter the full name of the U.S. parent company. EPA requires that parent companies be referenced consistently by the same name so that site-level information can be aggregated to the associated parent company. 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.

Table 4-3. Parent Company Name Standardization

Use This	Not This
&	AND
CORP	CORPORATION
ASSOC	ASSOCIATION
CO	COMPANY
COS	COMPANIES
DIV	DIVISION
INC	INCORP
INC	INCORP.
INC	INCORPORATED
INC	INCORPERATED
LP	LIMITED PARTNERSHIP
LTD	LIMITED
LLC	LIMITED LIABILITY COMPANY
LLC	LIMITED LIABILITY CO.
PTNR	PARTNERSHIP
USA	U.S.A.
USA	U.S.A
USA	U S A
USA	UNITED STATES OF AMERICA
USA	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. 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 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 site.

For the purpose of responding to the section 8(a)(7) rule, you are ***not*** required to obtain a D&B number for your parent company if none exists. However, if your parent company does not have a D&B number, you can request one from your local office of D&B if desired. 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*. 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:

Table 4-4. Parent Company Street Address Standardization

Use This	Not This
AVE	AVENUE
AVE	AVE.
BLVD	BOULEVARD
BLVD	BLVD.
DR	DRIVE
DR	DR.
HWY	HIGHWAY
HWY	HWY.
JCT	JUNCTION
JCT	JCT.
LN	LANE
LN	LN.

PL	PLACE
PL	PL.
PO BOX	P.O. BOX
RD	ROAD
RD	RD.
RTE	ROUTE
ST	STREET
ST	ST.

4.4 Part I - Section B. Site Information

EPA requires the following information to be reported for each 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, and six-digit North American Industry Classification System (NAICS) code(s) of the site.

4.4.1 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 to appear later in the CBI Substantiation portion of the form. See Table 4-13Table 4-13 for substantiation questions related to these data elements. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.** Further, 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* 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 PFAS is confidential and not publicly available. You may claim the connection between chemical substance and company, site, or technical contact as confidential for some PFAS for which you are reporting, while not making the claim for others. 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. If the chemical identity is confidential, your company may instead claim the chemical identity as confidential to protect the link between the company, site, or technical contact

information and the chemical identity. Ensure you are claiming the correct data elements as CBI to protect confidential data.

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.

4.4.2 Special Provisions for Certain Sites

For PFAS that are domestically manufactured, the site is the location where the PFAS is physically manufactured.

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 section 8(a)(7), 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 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 50,000 lb of Example PFAS P imported from Japan to the Old Town plant site. The headquarters site in New Town controls the import transaction and is the site reported.

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 50,000 lb of Example PFAS R imported from Japan. The chemical is distributed as follows: 2,000 lb is delivered to Site 1; 18,000 lb is delivered to Site 2; and 30,000 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 50,000 lb of Example PFAS R. The site reported is New Town.

4.4.3 Site Name

The section 8(a)(7) reporting tool will automatically populate the site name from the site used for CDX registration. If you need to change this information, you will need to make corrections or create a new site in CDX and create a new form for the corrected or new site.

4.4.4 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 are ***not*** required to obtain a D&B number for the site if none exists. However, if the site does not have a D&B number, you can request one from your local office of D&B if desired. Please refer to Section 4.3.2 for information on obtaining a D&B number.

4.4.5 Site Street Address

The reporting tool will automatically populate the site address from the site used for CDX registration. If you need to change this information, you will need to make corrections or create a new site in CDX and create a new form for the corrected or new site.

4.4.6 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/*.

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. For example, headquarters sites that import for other sites may have difficulty identifying a single NAICS code.

4.4.7 Technical Contact Information

This section requests information about the person whom EPA may contact for clarification of the information in your submission. The technical contact should be a person who can answer questions about the reported PFAS. 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 section 8(a)(7) online reporting tool. In selecting the technical contact, submitters should consider that EPA may have follow-up questions about a PFAS data submission years after the submission date. The technical contact need not be the person who signed the certification statement.

4.4.7.1 Technical Contact Name and Company Name

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

4.4.7.2 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.

4.5 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 4.5.4 and4.5.6. 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 reportable PFAS at your site. If you wish to report a PFAS listed on the confidential portion of the TSCA Inventory, you will need to report the PFAS using a TSCA Accession Number (the generic chemical 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. If you have a low-volume exemption (LVE) case number for the chemical substance, that number may be used if a CASRN or Accession Number is not known to or reasonably ascertainable by you. If you know the CASRN or Accession Number for the chemical substance, report that number instead of an LVE case number.

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 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 section 8(a)(7).

> ***Duplicative Reporting***
> The information in this section regarding physical form, described in Section 4.5.12, may have been previously reported under CDR. See Section 1.2 for instructions on how to inform EPA that this information has already been reported.

If certain information in section A is not known to or reasonably ascertainable by you (including your company), you may enter or select "NKRA" for "not known or reasonably ascertainable" in the box corresponding to that data element. You may only report NKRA in this section for the chemical ID, molecular structure, or physical state of the PFAS. You **may not** report NKRA for the specific or generic chemical name or trade or common name.

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.

Accession numbers are only assigned to inventory chemicals and not to other chemicals authorized to be in US commerce, like LVEs. 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 715.30(a)(2)(i)). This includes claims for confidential treatment of the chemical name, ID, and molecular structure.

You may claim as confidential the identity (chemical name, CAS registry number, and molecular structure) of a chemical substance that is already listed as confidential on the TSCA Inventory (40 CFR 715.30(c)). To do so, you must check the appropriate CBI box 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 chemical name listed on the public portion of the TSCA Inventory is already public and cannot be claimed as confidential. You may also claim as confidential the identity of a chemical substance that is not listed on the TSCA Inventory, e.g., LVE substances. CBI claims for trade names or common names are allowed but may not be valid if the trade name or common name is public.

CBI claims for physical state(s) of the chemical are allowed regardless of the confidentiality status of the chemical. Substantiation questions to be answered for physical state CBI claims are the same questions to be answered for confidentiality of manufacturing information listed in Table 4-13Table 4-13 in Section 4.7.1.2

CBI claims for chemical identity will be accepted only when accompanied by a separate written substantiation for the chemical substances claimed as CBI, except for chemicals reported on article importer forms. Article importers are not required to assert CBI claims for chemical identity. Additionally, PFAS manufacturers (except article importers) who do not know nor can reasonably ascertain one of the following chemical-specific identifiers, are not required to assert and substantiate a CBI claim for the PFAS identity: CASRN, TSCA Accession number, or LVE number. Checking the CBI box automatically triggers the substantiation questions to appear later in the CBI Substantiation portion of the form. If you fail to click the checkbox next to "CBI

for Chemical Identification" or 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. 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.

Following the conclusion of the reporting period for this rule, EPA intends to compile a list of reported confidential Inventory substances for which either no chemical identity CBI claim was asserted or for which the claim was denied. Similar to past compilations, EPA will publish this list of candidates for disclosure on the public version of the Inventory, by TSCA accession number, on the EPA website for several months in advance of any update to the Inventory itself. Interested parties will have an opportunity to review the list for possible errors and contact EPA with any questions or concerns about specific candidates. In some cases, there may be assertions by a company that a mistake has been made (e.g., an incorrect chemical was reported), in which case EPA will undertake appropriate factual investigation as necessary to confirm whether there were any errors that would cause EPA to reconsider whether the chemical is no longer entitled to confidential Inventory protection. This investigation would take place prior to the point that the specific chemical identity would be disclosed on the public Inventory.

The requirements to report by Accession number, assert a CBI claim, and to substantiate such claims to maintain confidential Inventory treatment **do not apply** to submissions concerning imported articles. Such reporters may assert a CBI claim for trade name (if not already public) or other non-public identifiers, but need not report by Accession number or assert a CBI claim to maintain the confidential status of any chemical(s) associated with the trade name or generic chemical name. EPA will not determine the CBI status of a chemical identity based on imported article reporting.

Additional information about making and substantiating confidentiality claims is available on EPA's website, at *www.epa.gov/tsca-cbi*.

Table 4-5. Substantiation Questions to be Answered when Asserting Chemical Identity CBI Claims (40 CFR 705.30(e))

No.	Question
1.	Please specifically explain what harm to the competitive position of your business would be likely to result from the release of the information claimed as confidential. How would that harm be substantial? Why is the substantial harm to your competitive position likely (i.e., probable) to be caused by release of the information rather than just possible? If you claimed multiple types of information to be confidential (e.g., site information, exposure information, environmental release information, etc.), explain how disclosure of each type of information would be likely to cause substantial harm to the competitive position of your business.

No.	Question
2.	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. If the same or similar information was previously reported to EPA as non-confidential (such as in an earlier version of this submission), please explain the circumstances of that prior submission and reasons for believing the information is nonetheless still confidential.
3.	(i) Is any of the information claimed as confidential required to be publicly disclosed under any other Federal law? If yes, please explain. (ii) 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.
4.	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.
5.	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.
6.	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 (*e.g.*, 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: I certify that on the date referenced, I searched the internet for the chemical substance identity (*i.e.*, 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].
7.	Does this particular chemical substance leave the site of manufacture (including import) in any form, *e.g.,* as a product, effluent, emission? If yes, please explain what measures have been taken to guard against the discovery of its identity.
8.	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 (*e.g.*, product, effluent, emission), in light of existing technologies and any costs, difficulties, or limitations associated with such technologies? Please explain why or why not.
9.	Would disclosure of the specific chemical name release confidential process information? If yes, please explain.

4.5.2 Are you manufacturing a mixture or a chemical substance of unknown or variable composition or a polymer?

You should report for PFAS that are chemical substances as defined by TSCA. Note that a mixture is not considered a chemical substance. ***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))*

If you manufacture a mixture, you must determine whether you manufactured any components of the mixture and report for each individual PFAS component of the mixture using the information known to or reasonably ascertainable by you.

If you manufacture a PFAS as a result of a chemical reaction, you may manufacture a chemical substance of unknown or variable composition (UVCB). 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 section 8(a)(7) and is considered a single chemical substance.

- If you imported a mixture, you will need to report the individual PFAS components of the mixture.
- If you domestically manufactured a mixture, you will need to determine whether any PFAS chemical substances were formed from a chemical reaction that occurred as part of manufacturing the mixture. If a chemical reaction has occurred, a PFAS formed from the chemical reaction may be a chemical substance subject to reporting. 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 requirement to report under the PFAS data call.
- 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;

- Toxic Substances Control Act Inventory Representation for Combinations of Two or More Substances: Complex Reaction Products. Available online at: www.epa.gov/sites/production/files/2015-05/documents/rxnprods.pdf

Polymers are a specific type of chemical that may have unknown or variable composition. Polymers often consist of a mixture of molecules with varying degree of polymerization, so that individual polymer molecules have different chain lengths and/or branching and therefore have different molecular structures. For copolymers (polymers formed from multiple monomer species), there may also be variance in the ratio and connectivity of the monomer subunits. In that case, report the identity of each monomer and average ratios for each copolymer. A polymer should be reported as a single PFAS. Provide any known information about the structure and variability of the structure in the chemical description and molecular structure data fields.

4.5.3 How to Report when Chemical Identity is Unknown

In some cases, you may know that you are manufacturing (including importing) a PFAS but not know the identity of the PFAS. For instance, this can occur if you import a PFAS and your supplier will not disclose the identity of the chemical, or if you do not know the identity of reaction products or byproducts.

You must use all information known to or reasonably ascertainable by you to determine if you are manufacturing a PFAS. For example, if you import a type of product known to sometimes include PFAS, this could include reviewing purchase records, SDS or product data sheets, or contacting your supplier. Additionally, you may consider the generic or trade name provided by your supplier, published studies, results of testing or other analysis, or any other information known to or reasonably ascertainable by you, in determining whether you have a reportable PFAS. If you determine that the chemical substance is unlikely to be a PFAS as defined by section 8(a)(7), you are not required to report.

If you determine that the chemical substance likely meets the definition of PFAS, you must report the chemical even if you do not know its specific chemical identity. You must report a chemical ID number (i.e., CASRN, TSCA Accession number, or LVE number) if one is known to or reasonably ascertainable by you; note that CAS numbers, Accession numbers, and LVE numbers may be assigned to chemicals with unknown or variable composition. Additionally, if you know or can reasonably ascertain another entity who would be able to provide the chemical identity (e.g., a co-manufacturer or a foreign supplier), you must initiate a joint submission with that entity. See Section 4.13 for more details on joint submissions.

For the chemical name, report the CA Index name if known to or reasonably ascertainable by you. If the CA index name is not known to or reasonably ascertainable by you, provide the generic chemical name or description of the PFAS instead. If the PFAS is not on the

public portion of the TSCA Inventory, you may claim the name as CBI. Substantiation is required unless the PFAS has not been introduced into commerce (TSCA section 14(c)(2)(G)).

Provide the trade name or common name as appropriate. If the PFAS does not have a trade name or common name, report "NA." For the molecular structure, provide a correct representative or partial chemical structure diagram, as complete as can be known, if one can be reasonably ascertained. Further details on what to include in the structure diagram are provided in Section 4.5.9.

4.5.4 Chemical Substance Identifying Number

Every chemical substance reported in accordance with the section 8(a)(7) rule must be accompanied by its correct CASRN, corresponding to the chemical substance's specific chemical name as described in Section 4.5.6. (40 CFR 705.15(b)(1)(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. 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.

PFAS are often confidential and therefore are usually assigned Accession numbers. You can look up a chemical's Accession number in SRS if you have the PMN case number. You may also submit an inventory inquiry via the CDX TSCA communications module if your rights to access this information have been validated.

If the PFAS is not listed on the TSCA Inventory, it may have a low-volume exemption (LVE) case number. Report the LVE case number as the chemical identification number. If you also know the CASRN for the PFAS, report the CASRN instead. If none of these types of identification numbers have been assigned to the chemical, or if you do not know enough information about the chemical identity to determine one of those identification numbers, report NKRA.

4.5.5 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
Low-volume exemption (LVE) Case Number	L

4.5.6 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 synonyms. In the event that a synonym is used for multiple chemical substances, you should take care to select the correct substance. In describing the chemical substance, the EPA requires Chemical Abstracts Service (CAS) chemical nomenclature be used for identification purposes when it is available.

In cases where a chemical substance is listed on the confidential portion of the TSCA Inventory, the generic chemical 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 waives any confidentiality claim for the chemical identity and will likely result in the transfer of the chemical substance from the confidential portion of the TSCA Inventory to the public portion of the TSCA Inventory.

If any entity reports a PFAS by specific chemical identity and does not claim the specific chemical identity as CBI, EPA expects to determine that the specific chemical identity is no longer entitled to confidential treatment. However, EPA would not make this determination where an entity attests that it does not have knowledge of the specific chemical identity. Instead, an entity that does not have knowledge of a specific chemical identity must initiate a joint submission with its supplier or other manufacturer if that entity is known. In these cases, the secondary submitter would be responsible for providing the specific chemical identity and for asserting and substantiating any CBI claims concerning the specific chemical identity. See, e.g., 40 CFR 711.15(b)(3); 711.30(c). Importers of articles using the streamlined article import form are not required to assert or substantiate CBI claims for chemical identity. Therefore, joint submissions are not required or enabled for article importers.

4.5.7 Trade Name or Common Name

Report the common or trade name(s) by which the product is sold or commonly known.

4.5.8 Generic Chemical Name or Description

If you do not know the specific identity of the chemical substance, provide a description of the substance. If you claimed CBI for the chemical name, you must provide a generic chemical name. If the chemical is on the confidential portion of the TSCA Inventory, the generic chemical name will be pre-populated from EPA's Substance Registry Service (SRS).

Generic chemical names must be sufficiently detailed to identify the reported chemical as a PFAS. Specifically, any generic chemical name reported for a PFAS that does not contain "fluor" in the name would be rejected by EPA as insufficient under TSCA section 14(c)(1)(C).

Additionally, any previously existing generic chemical names from earlier TSCA section 5 submissions for PFAS without "fluor" are insufficient. Further, even if a generic chemical name reported under the TSCA 8(a)(7) rule lacks the structural unit "fluor," the Agency will identify the chemical substance as a PFAS.

4.5.9 Molecular Structure

Upload as an attachment a representative molecular structure. This is not required if your chemical is listed as a class I substance on the TSCA inventory. If the chemical has a single defined structure, provide a complete, correct chemical structure diagram. The diagram should clearly indicate the identity of the atoms and the nature of bonds joining the atoms. Any ionic charges or stereochemistry should be shown clearly. All known stereochemical details should be provided. Carbon atoms in ring systems and their attached hydrogen atoms need not be explicitly shown. Where applicable, specify the proportions of isomers or tautomeric forms, degree of neutralization, etc.

For a substance with unknown or variable composition, provide a correct representative or partial chemical structure diagram, as complete as can be known, if one can be reasonably ascertained. The diagram should indicate the characteristic structure or variable compositional elements of the substance. For PFAS described as reaction products, as much specific detail as possible should be provided.

For polymers, provide a simple, representative structural diagram that illustrates what you know or can reasonably ascertain concerning the key structural features of the polymer molecules. For example, you could identify the linkages formed during polymerization, the functional groups present, the range and typical values for the number of repeating structural units, and the relative molar ratios of the precursors. Indicate if the repeating substructures are arranged in a nonrandom order such as in graft or block arrangements. For example:

HO-C(=O)-R-O-(C(=O)-R'-C-O-R-O)$_n$-H

3<n<10, where R may be either

-CF_2CF_2-or -CF_2CF-CF_3

and R' may be either a 1,4-substituted benzene ring or -(CF2)-

4.5.10 Additional Information on Chemical Identity

In this free text field, provide any additional information known to or reasonably ascertainable by you regarding the identity, structure, or composition of the PFAS. This may include, but is not limited to, additional information on the composition of a UVCB chemical or descriptions of a polymer. Report any additional information that was known to or reasonably ascertainable by you at the time of the substance's manufacture. If no additional information is known to or reasonably ascertainable by you, leave this text field blank.

4.5.11 Special Provisions for Joint Submitters of Unknown Chemical Substances

You may report an alternate chemical name, and a trade name, in those instances where your supplier will not disclose to you the specific chemical name of an imported PFAS 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 4.13 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 section 8(a)(7) reporting as is known to or reasonably ascertainable by you. In addition, you must use the reporting tool to ask the supplier (secondary submitter) of the confidential chemical substance to directly provide EPA with the correct chemical identity (as described in Section4.5.2), in a joint submission with you. Note that if you actually know or can reasonably ascertain the specific chemical identity of the chemical, you must provide that information regardless of your supplier's confidentiality claims, rather than using a joint submission.

Your request to the supplier must include instructions for submitting chemical identity information electronically, using the reporting tool via 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.

If the secondary submitter does not know the chemical components of a mixture supplied to you, they may ask their supplier to complete the form as a tertiary submitter. When the secondary (or tertiary, as appropriate) submitter responds to the primary submitter's

request, the secondary submitter would use the reporting software to identify the chemical substance in question.

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 section 8(a)(7) reporting, you must provide that information irrespective of a supplier's confidentiality claims.

EPA will only accept joint submissions that are submitted electronically using the reporting tool via CDX (see 40 CFR 711.35) and that clearly reference the specific section 8(a)(7) submission to which they refer. See Section 4.13 in this chapter for more information on preparing joint submissions.

In the event that the supplier is unknown or no longer exists (e.g., supplier has gone out of business without a successor entity), provide as much identifying detail as is known to you and report NKRA for the secondary submitter. In this case a joint submission will not be required.

4.5.12 Physical Form

Report all physical forms of the PFAS at the time it is reacted or as it leaves your site (40 CFR 711.15(b)(2)). For each PFAS 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

4.6 Part II – Section B. The categories of use of each such substance or mixture

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). See Section 4.2 for a discussion of this reporting standard and examples of information that may or may not be known to or reasonably ascertainable by you.

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. Keep in mind that you **cannot** claim an "NKRA" designation as confidential.

4.6.1 Confidentiality of Processing and Use Information

Most data elements in Section B may not be claimed as confidential. 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:
  - type of process or use
  - industrial sector
  - function code

- *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:
  - product category
  - function of the chemical in the consumer or commercial product
  - whether the chemical is used in commercial or consumer products
  - whether the chemical predictably is used in children's products

In this section, you may only assert a claim of confidentiality for the maximum concentration of the chemical in any product. Checking the CBI box associated with this data element automatically triggers substantiation questions. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.** See Table 4-13Table 4-13 for substantiation questions to be answered when asserting CBI claims for processing and use information.

4.6.2 Industrial Processing and Use

For purposes of section 8(a)(7) 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 705.3).

For each PFAS 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 4.6.2.1), the Industrial Sector (IS) (described in Section4.6.2.2), and the Function Category (FC) (described in Section4.6.2.3) (40 CFR 705.15(c)(4)). A combination of these three data elements defines a potential exposure scenario for risk-screening and priority-setting purposes. 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. The reporting tool will allow you to enter more than ten combinations if you choose to do so.

For each of these unique combinations, you are also required to report the percentage of production volume in Section C (described in Section 4.7.2.5), and information about worker exposure in Section F (described in Section4.10.5) (40 CFR 705.15(g)). When you reach these sections, the reporting tool will populate the TPU, IS, and FC codes reported in this section.

You are required to report information that is known to or reasonably ascertainable by you concerning the industrial uses of the PFAS 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 705.15(c)(1)).

4.6.2.1 Type of Process 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 4-7 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 705.15(c)(1). 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 4-7. Codes for Reporting Types of Industrial Processing or Use Operations

Designation	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.

4.6.2.2 Industrial Sectors

Report the code that corresponds to the appropriate Industrial Sector (IS) for all sites that receive a reportable PFAS from you either directly or indirectly (including through a broker/distributor, from a customer of yours, etc.) and that process and use the PFAS to the extent that this information is known to or reasonably ascertainable by you (40 CFR

711.15(c)(2)). Table 4-8 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 list identifying the correspondence between NAICS codes and IS codes is provided in Appendix D (Table D-2). Additional, more detailed information can be found on the CDR website at *www.epa.gov/cdr*. (The IS codes used for PFAS section 8(a)(7) reporting are the same as CDR IS codes).

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. If you select the IS "Other," a text box will appear for you to enter the description.

Table 4-8. Codes for Reporting Industrial Sectors

Code	Sector description
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	Plastics 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.

Code	Sector description
IS29	Soap, cleaning compound, and toilet preparation manufacturing.
IS30	Printing ink manufacturing.
IS31	Explosives manufacturing.
IS32	Custom compounding of purchased resins.
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	Non-metallic mineral product manufacturing (includes cement, clay, concrete, glass, gypsum, lime, and other non-metallic mineral product manufacturing)
IS38	Primary metal manufacturing.
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).

4.6.2.3 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(c)(3)). You must use the codes in Table 4-9 for reporting under this data call. These codes, based on Organisation for Economic Cooperation and Development (OECD) standards, were required for reporting of chemical substances designated by EPA as a high priority for risk evaluation for 2020 CDR reporting and were optional for the 2020 CDR for other chemical substances; if you reported to 2020 CDR, you may be familiar with these codes. If your site reported this PFAS to 2020 or earlier CDR using other codes, you will need to determine the appropriate 2020 CDR codes and report those in this section. Because data reported using other codes was not reported as required by the PFAS section 8(a)(7) rule, it is not considered duplicative. Descriptions for each FC and a crosswalk between the OECD-based 2020 CDR codes and 2016 CDR codes are provided in Appendix D (Table D-4Table D-4). This crosswalk may be helpful if you are already familiar with the 2016 CDR codes and can help you determine the correct 2020 CDR codes to use if you have previously reported the PFAS using 2016 CDR codes. Function Category codes to be used for section 8(a)(7) reporting are provided in Table 4-9.

If you select 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 for consumer or commercial 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 4.6.3 below.

Table 4-9. Codes for Reporting Function Categories

Code	Category
F001	Abrasives
F002	Etching agent
F003	Adhesion/cohesion promoter
F004	Binder
F005	Flux agent
F006	Sealant (barrier)
F007	Absorbent
F008	Adsorbent
F009	Dehydrating agent (desiccant)
F010	Drier
F011	Humectant
F012	Soil amendments (fertilizers)
F013	Anti-adhesive/cohesive
F014	Dusting agent
F015	Bleaching agent
F016	Brightener
F017	Anti-scaling agent
F018	Corrosion inhibitor
F019	Dye
F020	Fixing agent (mordant)
F021	Hardener
F022	Filler
F023	Anti-static agent
F024	Softener and conditioner

Code	Category
F025	Swelling agent
F026	Tanning agents not otherwise specified
F027	Waterproofing agent
F028	Wrinkle resisting agent
F029	Flame retardant
F030	Fuel agents
F031	Fuel
F032	Heat transferring agent
F033	Hydraulic fluids
F034	Insulators
F035	Refrigerants
F036	Anti-freeze agent
F037	Intermediate
F038	Monomers
F039	Ion exchange agent
F040	Anti-slip agent
F041	Lubricating agent
F042	Deodorizer
F043	Fragrance
F044	Oxidizing agent
F045	Reducing agent
F046	Photosensitive agent
F047	Photosensitizers
F048	Semiconductor and photovoltaic agent
F049	UV stabilizer
F050	Opacifer
F051	Pigment
F052	Plasticizer
F053	Plating agent
F054	Catalyst
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
F061	Antioxidant

Code	Category
F062	Chelating agent
F063	Defoamer
F064	pH regulating agent
F065	Processing aids not otherwise specified
F066	Energy Releasers (explosives, motive propellant)
F067	Foamant
F068	Propellants, non-motive (blowing agents)
F069	Cloud-point depressant
F070	Flocculating agent
F071	Flotation agent
F072	Solids separation (precipitating) agent, not otherwise specified
F073	Cleaning agent
F074	Diluent
F075	Solvent
F076	Surfactant (surface active agent)
F077	Emulsifier
F078	Thickening agent
F079	Viscosity modifiers
F080	Laboratory chemicals
F081	Dispersing agent
F082	Freeze-thaw additive
F083	Surface modifier
F084	Wetting agent (non-aqueous)
F085	Aerating and deaerating agents
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

Code	Category
F099	Stabilizing agent
F100	Alloys
F101	Density modifier
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

4.6.3 Consumer and Commercial Use

For purposes of section 8(a)(7) 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 PFAS manufactured (including imported), report up to ten unique combinations of the following data elements: the Product Category (PC) (described in Section4.6.3.1), the Function Category (FC) (described in Section4.6.3.2), whether the use is consumer and/or commercial (described in Section4.6.3.3), and whether the use is in products intended for use by children (described in Section4.6.3.4) (40 CFR 705.15(c)(7)). A combination of these four data elements defines a potential exposure scenario for risk-screening and priority-setting purposes. 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 705.15(c)(4)). The reporting tool will allow you to enter more than ten combinations if you choose to do so.

For each of these unique combinations, you are also required to report the maximum concentration (described in Section4.6.3.5), the percentage of production volume (reported in Section C of the reporting form – described in Section4.7.2.6), and, for commercial uses, information about worker exposure (reported in section C of the reporting form – described in Section4.10.7) (40 CFR 711.15(c)(8)).

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 PFAS (40 CFR 711.15(c)(4)).

4.6.3.1 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(c)(4)). 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(c)(4)). The reporting tool will allow you to enter more than ten categories if you choose to do so.

You must use the codes in Table 4-10Table 4-10 for reporting under this data call. These codes, based on OECD standards, were required for reporting of chemical substances designated by EPA as a high priority for risk evaluation for 2020 CDR reporting and were optional for the 2020 CDR for other chemical substances; if you reported to 2020 CDR, you may be familiar with these codes. If your site reported this PFAS to 2020 or earlier CDR using other codes, you will need to determine the appropriate 2020 CDR codes and report those in this section. Because data reported using other codes was not reported as required by the PFAS section 8(a)(7) rule, it is not considered duplicative. Descriptions for each product category code and a crosswalk between the OECD-based 2020 CDR codes and 2016 CDR codes are provided in Appendix D (Table D-3Table D-3).

This crosswalk may be helpful if you are already familiar with the 2016 CDR codes and can help you determine the correct 2020 CDR codes to use if you have previously reported the PFAS using 2016 CDR codes. Product Category codes are provided in Table 4-10.

If you select 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.

Table 4-10. Product Category Codes

Code	Category
Chemical Substances in Furnishing, Cleaning, Treatment Care Products	
CC101	Construction and building materials covering large surface areas including stone, plaster, cement, glass and ceramic articles; fabrics, textiles, and apparel
CC102	Furniture & furnishings including plastic articles (soft); leather articles
CC103	Furniture & furnishings including stone, plaster, cement, glass and ceramic articles; metal articles; or rubber articles
CC104	Leather conditioner
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
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)
CC114	Powder cleaners (floors)
CC115	Powder cleaners (porcelain)
CC116	Dishwashing detergent (liquid/gel)
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
CC125	Liquid water treatment products
CC126	Solid/Powder water treatment products
CC127	Liquid body soap
CC128	Liquid hand soap
CC129	Solid bar soap

Code	Category
CC130	Air fresheners for motor vehicles
CC131	Continuous action air fresheners
CC132	Instant action air fresheners
CC133	Anti-static spray
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
Chemical Substances in Construction, Paint, Electrical, and Metal Products	
CC201	Fillers and putties
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
CC209	Aerosol spray paints
CC210	Lacquers, stains, varnishes and floor finishes
CC211	Paint strippers/removers
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
CC218	Construction and building materials covering large surface areas, including paper articles; metal articles; stone, plaster, cement, glass and ceramic articles
CC219	Machinery, mechanical appliances, electrical/electronic articles
CC220	Other machinery, mechanical appliances, electronic/electronic articles
CC221	Construction and building materials covering large surface areas, including metal articles
CC222	Electrical batteries and accumulators

Code	Category
Chemical Substances in Packaging, Paper, Plastic, Toys, Hobby Products	
CC990	Non-TSCA use
CC301	Packaging (excluding food packaging), including paper articles
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)
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)
CC306	Adhesives applied at elevated temperatures
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
CC314	Inks in writing equipment (liquid)
CC315	Inks used for stamps
CC316	Toner/Printer cartridge
CC317	Liquid photographic processing solutions
Chemical Substances in Automotive, Fuel, Agriculture, Outdoor Use Products	
CC401	Exterior car washes and soaps
CC402	Exterior car waxes, polishes, and coatings
CC403	Interior car care
CC404	Touch up auto paint
CC405	Degreasers
CC406	Liquid lubricants and greases
CC407	Paste lubricants and greases
CC408	Spray lubricants and greases
CC409	Anti-freeze liquids
CC410	De-icing liquids
CC411	De-icing solids

Code	Category
CC412	Lock de-icers/releasers
CC413	Cooking and heating fuels
CC414	Fuel additives
CC415	Vehicular or appliance fuels
CC416	Explosive materials
CC417	Agricultural non-pesticidal products
CC418	Lawn and garden care products
Chemical Substances in Products not Described by Other Codes	
CC980	Other (specify)
CC990	Non-TSCA use

4.6.3.2 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 705.15(c)(5)). You must use the codes in Table 4-9Table 4-9 for reporting under this data call. These codes are the same as those used 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 more than one consumer or commercial product category applies to a given function category.

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

If one function is predominant, simply report the primary function; or

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).

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.

4.6.3.3 Consumer and/or Commercial Use

For each product category reported, report whether the use is a consumer use or a commercial use (40 CFR 705.15(c)(4). If the product has both consumer and commercial uses, report both.

4.6.3.4 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 705.15(c)(7)). 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 reporting form. If you determine that your chemical substance or mixture is not used in a consumer product intended for use by children, report "No."

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 705.3). 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 4-11Table 4-11 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 4-11. Examples of Products Intended for Use by Children

Code	Category	Examples
Chemical Substances in Furnishings, Cleanings, Treatment Care Products		
CC102	Furniture & furnishings including Plastic articles (soft); Leather articles	Child's car seat, children's sheets
CC103	Furniture & furnishings including Stone, plaster, cement, glass and ceramic articles; Metal articles; or Rubber articles	Baby cribs, changing tables
CC106	Textile (fabric) dyes	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	Baby shampoo, children's bubble bath
Chemical Substances in Construction, Paint, Electrical and Metal Products		
CC219	Machinery, mechanical appliances, electrical/electronic articles	Electronic games, remote control cars
CC222	Electrical batteries and accumulators	Batteries used in toys
Chemical Substances in Packaging, Paper, Plastic, Hobby Products		
CC302	Other articles with routine direct contact during normal use, including paper articles	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)	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	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

4.6.3.5 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 (40 CFR 715.15(c)(8)). For each chemical substance used

in a reported commercial or consumer product, report the code that corresponds to the appropriate concentration range. Table 4-12 shows the codes and concentration ranges.

Table 4-12. 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 Part II – Section C. Manufacturing, Processing, and Use Information

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

4.7.1 Confidentiality of Manufacturing Information

Information reported in the manufacturing section of the section 8(a)(7) 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 domestically manufactured volume, imported volume.
- IS required for all other data elements.

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 the reporting tool, you will be prompted to substantiate claims where CBI substantiations are required.

For additional information about how to answer substantiation questions, visit *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.

4.7.1.1 Confidentiality of Production Volume Information

Check the appropriate CBI box in this block to assert a confidentiality claim for the associated production volume information (domestically manufactured volume, imported volume, or percent production volume for each consumer and commercial use) being submitted. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.**

Further, 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.

4.7.1.2 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 to appear later in the CBI Substantiation portion of the form. See Table 4-13 for substantiation questions related to these data elements. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.** Further, 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* on the EPA website.

Table 4-13. Substantiation Questions to be Answered when Asserting Manufacturing, Processing, and Use-Related Confidentiality Claims (40 CFR 705.30(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	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	i. Is any of the information claimed as confidential required to be publicly disclosed under any other Federal law? If yes, please explain. ii. 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. iii. 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

This section describes the manufacturing data elements that should be reported for your PFAS for each year. 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 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). See Table 4-14Table 4-14 for examples.

4.7.2.2 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 PFAS at each site.

> ***Reporting for a chemical with multiple sources***
> If you import a PFAS from multiple sources, or domestically manufacture the PFAS through multiple processes, sum those sources together for reporting the total production volume, and consider the total amount for all other data fields.
>
> If you import or domestically manufacture a chemical and also have quantities on site that were not manufactured by your site (e.g., purchased from a domestic source), consider **only the volume manufactured (including imported) by your site** when reporting total production volume and all other data fields. Do not report on quantities of the PFAS that were not manufactured (including imported) by your site.

Note that if you import various mixtures containing PFAS, you should add all import volumes associated with each PFAS. For

instance, if you import three mixtures and each mixture contains PFAS A, then you would determine the volume of PFAS A in each mixture and report the aggregated amount. See Table 4-14 for examples.

For article importers reporting on the Article Importer form, you should report the volume of the article imported, rather than attempting to calculate the volume of the PFAS contained within the articles. You may choose to report the total weight of the PFAS-containing articles (e.g., in tons or pounds) or the quantity of the article imported (e.g., the number of vehicles). You must specify the unit of measurement for the reported production volume.

4.7.2.3 For Imported Chemical Substances, Is the Chemical Never Physically at Site?

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

- ☐ Yes, the imported PFAS **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 PFAS **is** physically present at the reporting site.
- ☐ NA, not applicable because the PFAS is not imported.
- ☐ NKRA, it is not known to or reasonably ascertainable by you whether the imported PFAS is physically present at the reporting site.

4.7.2.4 Volume Directly 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 PFAS to a distributor who then exports it without repackaging it, even if it is relabeled. Direct exporting does not include sending a PFAS 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 B of the reporting form. 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 section4.7.2.1). See Table 4-14 for examples.

Table 4-14. Examples of Reporting Volumes for Part II – Section C

Description	Reporting Requirement
Example Site S domestically manufactures 31,415 lb of Example PFAS S.	Example Site S should report 31,415 lb as domestically manufactured for Example PFAS S. The total production volume (i.e., the domestically manufactured volume) should be used to report all remaining information.
Example Site T domestically manufactures 15,000 lb of Example PFAS T and directly imports 15,112 lb of Example PFAS T.	Example Site T should report 15,000 lb as domestically manufactured. Because Example Site T controls the import transaction, Example Site T should also report 15,112 lb as imported for Example PFAS T. The total production volume (i.e., sum of the domestically manufactured and import volumes, 30,112 lb) should be used to report all remaining information.

Description	Reporting Requirement
Example Site U domestically manufactures 33,500 lb of Example PFAS U. Of the 33,500 lb manufactured, Example Site U directly exports 13,000 lb to a foreign customer.	Example Site U should report 33,500 lb as domestically manufactured and 13,000 lb as exported for Example PFAS U. The volume not directly exported (20,500 lb) should be used to report all remaining information.
Example Company V coordinates the import of 105,000 lb of Example PFAS V, which is imported directly to three different sites owned by Company V. Site 1 receives 41,000 lb and Sites 2 and 3 each receive 32,000 lb of Example PFAS V.	Example Company V should report 105,000 lb as imported for Example PFAS V. The total production volume (i.e., the imported volume) should be used to report all remaining information. Because the three sites controlled by Company V did not control the import transaction, the sites are not required to report the imported volumes.
Example Site W domestically manufacturers 77,000 lb, imports 22,000 lb, and exports 11,000 lb of Example PFAS W.	Example Site W should report an amount that does not exceed 88,000 lb as volume used at site for Example PFAS W, as the volume used at site should not be greater than the sum of the domestically manufactured and imported volumes minus the volume exported (77,000 lb + 22,000 lb – 11,000 lb).
Example Site X imports 20,000 lb of Example PFAS X and purchases 30,000 lb of Example PFAS X from a domestic producer.	Example Site X should report 20,000 lb as imported for Example PFAS X. The total production volume is 20,000 lb; the 30,000 lb of Example PFAS X purchased from a domestic producer is not included because Example Site X is not the manufacturer of that quantity of PFAS X (i.e., Site X neither imported nor produced those 30,000 lb). Only the 20,000 lb of PFAS X imported should be considered throughout the entire section 8(a)(7) form.

4.7.2.5 Industrial Processing and Use – Percentage of Production Volume

Report the estimated percentage of total production volume of the PFAS associated with each unique combination of industrial processing or use operation, sector, and function category (TPU, IS, and FC) as reported in Part II – Section B of the reporting form (see section4.6.2). 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(d)(4)). 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. In such cases, you must report the percentage of production volume attributable to that combination to the nearest one percent of 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 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.

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 PFAS to sites in your control as well as downstream sites, some of which are not immediate purchasers from your original manufacturing site. Thus, you may "double count" quantities of the PFAS as you consider its use at multiple sites. The sum may also add to more than 100% 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 of your production volume is processed or used;
- More than 10 combinations of codes are applicable to your chemical substance;
- You export a portion of the production volume;
- A portion of the production volume is used for commercial, or consumer uses rather than industrial uses; or
- Percentages round such that they do not sum to 100% (e.g., three use combinations that each account for one-third of total use will be reported as 30% each, totaling 90%).

Table 4-15 provides examples of reporting industrial processing and use data.

Table 4-15. Examples of Reporting Industrial Processing and Use Information

Description	Reporting Requirement
Example Site Y manufactures 12,000 lb of Example PFAS Y 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% (8,000 lb) is used as an anti-stain agent and 33% (4,000 lb) is used as a viscosity modifier.	On line 3.A.1 of the Form, enter PF for type of process or use, IS17 for industrial sector, F090 for FC, and 70% for production volume. On line 3.A.2 of the form, enter PF for type of process or use, IS17 for industrial sector, F079 for FC, and 30% for production volume.
Example Site Z manufactures 50,000 lb of Example PFAS Z for processing for incorporation into a mixture. All of the production is for use under	On line 3.A.1 of the form, enter PF for type of process or use, IS17 for industrial sector, F090 for FC, and 100% for production volume. On line 3.A.2

Description	Reporting Requirement
industrial sector IS17 (Synthetic Dye and Pigment Manufacturing). Of the production volume, 97% (48,500 lb) is used as an anti-stain agent and 3% (1,500 lb) is used as a viscosity modifier.	of the form, enter PF for type of process or use, IS17 for industrial sector, and F079 for FC. Because less than 10% of the production volume is used as a viscosity modifier, enter the percentage to the nearest one percent, i.e., 3%, for production volume.

4.7.2.6 Consumer and Commercial Use – Percentage of Production Volume

Report the estimated percentage of total production volume of the reportable chemical substance associated with each consumer and commercial product category as reported in Part II – Section B of the reporting form (see Section 4-274.6.3.1). 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 705.15(d)(5)). 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. In such cases, you must report the percentage of production volume attributable to that combination to the nearest one percent of production volume.

The total percentage of production volumes associated with the product codes 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. Thus, you may "double count" quantities of the PFAS as you consider its use at multiple sites. The sum may also add to more than 100% due to rounding.

How to determine your percent production volume:

1. Determine the production volume that is attributable to each consumer or commercial product category.
2. Determine your total production volume for the 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.

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;
- You export a portion of the production volume;
- A portion of the production volume is used for industrial uses rather than commercial/consumer uses; or

- Percentages round such that they do not sum to 100% (e.g., three use combinations that each account for one-third of total use will be reported as 30% each, totaling 90%).

Table 4-16 provides examples of reporting consumer and commercial use information.

Table 4-16. Examples of Reporting Consumer and Commercial Use Information

Description	Reporting Requirement
Example Site AB manufactures 12,000 lb of Example PFAS AB for processing for incorporation into a mixture. All of the production is for use in commercial products. Of the production volume, 67% (8,000 lb) is used in waterproofing sprays for apparel and 33% (4,000 lb) is used in paper packaging (for non-food use).	On one line, enter CC138 for PC and 70% for production volume. On another line, enter CC301 for PC and 30% for production volume.
Example Site CD manufactures 50,000 lb of Example PFAS CD for processing for incorporation into a mixture. All of the production is for use in commercial products. Of the production volume, 97% (48,500 lb) is used in waterproofing sprays for apparel and 3% (1,500 lb) is used in paper packaging (for non-food use).	On one line, enter CC138 for PC and 100% for production volume. On another line, enter CC301 for PC. Because less than 10% of the production volume is used in paper packaging, enter the percentage to the nearest one percent, i.e., 3%, for production volume.

4.7.2.7 Site-limited?

Indicate whether the PFAS was site-limited. Site-limited means a chemical substance is manufactured and processed only within a site and is not distributed as a chemical substance or as part of a mixture or article outside the site. Imported chemical substances are never site-limited. Report yes if the PFAS was site-limited, no if the PFAS was not site-limited, or NKRA if you do not know and cannot reasonably ascertain whether the PFAS was site-limited.

4.7.2.8 Recycled Volume

Report the volume of the manufactured PFAS, which otherwise would be disposed of as a waste, that is being removed from the waste stream (on site) and is being used for a commercial purpose (40 CFR 705.15(d)(7)). Report the quantity, in pounds, 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.

Table 4-17 provides examples of reporting recycling activities.

Table 4-17. Examples of Reporting Recycling

Description	Reporting Requirement
Example Site EF manufactures 2,721 lb of Example PFAS EF, none of which is recycled instead of being disposed of as a waste.	Enter 0 as no portion of the chemical is being recycled.
Example Site GH manufactures 5,550 lb of Example PFAS GH, 1,650 lb of which is then recycled instead of being disposed of as a waste.	Enter 1,650 lb as the volume recycled.
Example Site IJ manufactures 52,000 lb of Example PFAS IJ, 10% (1,500 lb) of which is manufactured as a byproduct. That 1,500 lb is then directly recycled and the other 50,500 lb is sold into commerce.	Enter 1,500 lb as the volume recycled.
Example Site KL manufactures a chemical substance, WonderChem. The process to manufacture WonderChem results in the production of a byproduct, Example PFAS KL. Some portion of PFAS KL stays with WonderChem. The remaining portion of PFAS KL is 58,000 lb. Initially Site KL disposed of PFAS KL as a waste, but partway through the year discovered a use for PFAS KL and diverted the remaining portion (29,000 lb) from the waste stream. The full volume of WonderChem is intended for commercial use.	Enter the portion of Example PFAS KL that is being recycled instead of being disposed of as a waste. Do not include any quantity of PFAS KL that stays with and is distributed with WonderChem, because WonderChem is produced for commercial use and no quantity is intended to be disposed of as a waste or recycled. In this case, 29,000 pounds were recycled.
Example Site MN manufactures 12,000 lb of Example Chemical MN for processing by incorporation into a mixture. Of the production volume, 92% (11,040 lb) is processed for incorporation and 8% (960 lb) is shipped to a waste management facility that also recycles certain materials. The manufacturer cannot reasonably ascertain whether this portion of Example PFAS MN is being recycled or disposed of as a waste.	Enter NKRA as the manufacturer does not know and cannot reasonably ascertain whether PFAS MN is being recycled or disposed of as a waste.
Example Site OP manufactures 100% of Example PFAS OP (15,000 lb) as a byproduct. That 15,000 lb is then sold directly to a recycler.	Enter 15,000 lb as the entire volume of Example PFAS OP is known to be recycled rather than disposed of as a waste.

4.8 Part II – Section D. A description of the byproducts resulting from the manufacture, processing, use, or disposal of each such substance or mixture

In this section, report information about all byproducts resulting from the manufacture, processing, use, or disposal of the PFAS. Report information about all byproducts that are chemical substances, regardless of whether the byproducts are themselves PFAS. Information in this section is to be reported for each byproduct for each year. Report all information known to or reasonably ascertainable by you, including byproducts produced during processing, use, or disposal of the PFAS at sites not under your control.

Note that in the case that you produce a PFAS as a byproduct, you may also be required to report that PFAS on its own section 8(a)(7) form. For example, if you are reporting for PFAS A, and PFAS B is produced as a byproduct of manufacturing PFAS A, note that you may also need to complete a section 8(a)(7) form for PFAS B. In that case, you may indicate duplicative reporting for PFAS B in this section.

For purposes of section 8(a)(7) reporting, refer to the following definition of byproduct:

> ***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)*

> ***Manufacture for commercial purposes*** means:
>
> *(1)* To manufacture, produce, or import with the purpose of obtaining an immediate or eventual commercial advantage, and includes, among other things, the "manufacture" of any amount of a chemical substance or mixture
>
> *(i)* for commercial distribution, including for test marketing, or
>
> *(ii)* for use by the manufacturer, including use for product research and development or as an intermediate.
>
> *(2)* The term also applies to substances that are produced coincidentally during the manufacture, processing, use, or disposal of another substance or mixture, including byproducts that are separated from that other substance or mixture and impurities that remain in that substance or mixture. Byproducts and impurities without separate commercial value are nonetheless produced for the purpose of obtaining a commercial advantage, since they are part of the manufacture of a chemical substance for commercial purposes.

4.8.1 Confidentiality of Byproduct Information

Except for the byproduct source, any information reported in the byproducts section of the section 8(a)(7) form can be claimed as confidential. For all of the data elements in this section, upfront substantiation of the claim is required.

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 to appear later in the CBI Substantiation portion of the form. See Table 4-5 for substantiation questions related to the byproduct chemical identity and Table 4-13 for substantiation questions related to the other byproduct data elements. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you**. Further, 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* on the EPA website.

4.8.2 Byproduct Name or Description

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. Using the search widget to select a substance will automatically populate both the chemical name and chemical ID.

If the name of the byproduct is unknown, describe the byproduct. The description may be a descriptive name, or you may describe the byproduct as specifically as possible. The description you provide should accurately and precisely convey as much information about the molecular structure of the byproduct as is known to you.

4.8.3 Byproduct Generic Chemical Name [if byproduct chemical name is CBI]

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

4.8.4 Byproduct Chemical ID

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.

If your chemical substance is not on the TSCA Inventory, report the CASRN if one has been assigned. Report "NKRA" only if no CASRN has been assigned to the chemical substance or if the identity of the byproduct is not known to or reasonably ascertainable by you.

Every byproduct reported in accordance with section 8(a)(7) requirements must be accompanied by its correct CASRN, corresponding to the chemical substance's specific chemical name as described in Section4.5.6. (40 CFR 705.15(e)(1)). You may use the search widget to 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. Using the search widget to select a substance will automatically populate both the chemical name and chemical ID.

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. Similarly, if a chemical substance has an LVE Number and a CBI claim, the reporter should report the LVE Number as the identifying number.

If the chemical substance is not listed on the TSCA Inventory, report the CASRN if one has been assigned to the chemical substance; report NKRA only if no CASRN, Accession Number, or LVE Number has been assigned or if you do not know and cannot reasonably

ascertain the identity of the byproduct. If you do not know and cannot reasonably ascertain the identity of the byproduct, you must provide a generic, structural description of the byproduct.

4.8.5 Byproduct Source

Indicate whether the byproduct was created as a result of manufacturing, processing, use, and/or disposal. For example, a byproduct created unintentionally while manufacturing a PFAS was created as a result of manufacturing. A byproduct created during management of the PFAS waste, such as a combustion byproduct formed during thermal treatment, is considered to be created as a result of disposal.

4.8.6 Byproduct Release

Indicate whether the byproduct(s) were released to the environment. Select yes, no, or NKRA. For purposes of reporting under this section, "released to the environment" includes quantities of the chemical disposed of in contained land disposal units such as underground injection wells and landfills as well as releases directly to air, water, and soil.

4.8.7 Byproduct Release Medium

If the byproduct(s) were released to the environment, select all media to which the byproducts(s) were released: air, water, or land. If unknown, select NKRA. If the byproduct was not released, report "not applicable."

4.8.8 Byproduct Release Volume

Report the total weight of the byproduct released to all media, 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. Release volumes should be reported in numeric format, without commas (e.g., 6352000). Report only the weight of the byproduct(s) released. Do not include the weight of other materials (e.g., water, solvents, containers, or other chemical substances).

If the byproduct was not released, report "not applicable."

Table 4-18 provides some examples of facilities reporting byproduct information.

Table 4-18. Examples of Byproducts Reporting

Example	Reporting
Example Company QR manufactures Example PFAS QR and is completing the section 8(a)(7) form for Example PFAS QR. During treatment of PFAS QR-containing waste, the site produces 5.0 pounds of hydrogen fluoride. 80% of the hydrogen fluoride is captured by a dry scrubber and spent scrubber medium is disposed of on site in a landfill. The remaining 20% is directly released to air through the site's stacks.	Example Company QR enters CAS # 7664-39-3 as a byproduct. The section 8(a)(7) software populates the CAS name for the chemical, hydrofluoric acid. Company QR reports that the source of this byproduct was disposal. The company reports that the byproduct was released to air and land and 5.0 pounds were released.
Example Site ST manufactures Example PFAS ST and is completing a section 8(a)(7) form for Example PFAS ST. During manufacture of Example PFAS ST, another chemical substance is formed that is also a PFAS, Example PFAS UV. Most of PFAS UV remains in the company's product, but 12 pounds of PFAS UV are released to air on site.	Example Site ST enters the CAS number and CA name of Example PFAS UV and reports manufacturing as its source. Example Site ST reports that PFAS UV was released to air and that releases totaled 12 pounds. Example Site ST also completes a full section 8(a)(7) submission for Example PFAS UV, including reporting these releases in Section G of that reporting form.
Example Site WX manufactures Example PFAS WX. The company knows that during on-site processing of Example PFAS WX, a byproduct is formed, but the company does not know the identity of the byproduct. All of the byproduct produced remains in the company's product and is distributed into commerce.	Example Site WX reviews the information they know and can reasonably ascertain and determines that the specific chemical identity is unknown. Example Site WX provides a description of the byproduct and indicates "NKRA" for the Chemical ID. Example Site WX indicates that the byproduct was produced during processing and that the byproduct was not released to the environment. The site reports "N/A" for the byproduct release medium and release volume.
Example Site YZ manufactures Example PFAS YZ. During manufacture of Example PFAS YZ, two byproducts are formed, Example PFAS AA and Example PFAS BB. PFAS AA is separated from the mixture and all 150 pounds produced are disposed of in the site's on-site landfill. Most of PFAS BB remains in the product and is distributed into commerce. The company knows some amount of PFAS BB is released to air on site but cannot determine how much.	Example Site YZ first reports the chemical name and CAS number for PFAS AA and indicates that PFAS AA is produced during manufacturing. Site YZ reports that 150 lb of PFAS AA are disposed of to land. Next, Site YZ enters the name and CAS number of PFAS BB as another byproduct. For PFAS BB, the company reports its source as manufacturing and reports that it is released, to air, with total release quantity NKRA.

4.9 Part II – Section E. All existing information concerning the environmental and health effects of such substance or mixture

In this section, report all information concerning the environmental and health effects of the substance or mixture that is known to or reasonably ascertainable by you. This information includes but is not limited to:

- Toxicity information (e.g., in silico, in vitro, animal test results, human data); and
- Other data relevant to environmental and health effects including range-finding studies, preliminary studies, OSHA medical screening or surveillance standards reports, adverse effects reports.

4.9.1 Confidentiality of Environmental and Health Effects Information

Information reported in this section of the PFAS data reporting form can be claimed as confidential, but reporters should note that TSCA section 14(b) places significant limitations on confidentiality protections for information from health and safety studies. CBI claims for environmental and health effects are only valid if they would disclose certain information related to a company's process or operations used in the manufacturing of the chemical. For all of the data elements in this section, upfront substantiation of the claim is required. For any environmental or health effects information being claimed as CBI, you must also submit a sanitized version (omitting only information that is claimed as confidential and appropriately substantiated) of the study report or other attachment for public release.

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 to appear later in the CBI Substantiation portion of the form. See Table 4-5 for substantiation questions related to the byproduct chemical identity and Table 4-13 for substantiation questions related to other data elements. Further, **if you fail to substantiate your CBI claims *and to provide a sanitized version of the report or attachment* 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* on the EPA website. Redactions must be as sparing as possible. It is your responsibility to ensure that any sanitized reports are thoroughly sanitized. EPA may publicly release sanitized reports as provided by you. It is your responsibility to ensure you have fully sanitized the report and that any changes or redactions cannot be reversed in the submitted sanitized version.

4.9.2 OECD Harmonized Environmental and Health Effects Template (attachment)

Upload all known or reasonably ascertainable information concerning the environmental and health effects of the substance or mixture, using OECD Harmonized Templates (OHTs) if available for the endpoint being reported on. OHTs are available from the OECD website: *https://www.oecd.org/ehs/templates/harmonised-templates.htm*. This can be accomplished by using the freely available IUCLID6 software (*https://iuclid6.echa.europa.eu/*), exporting the dossier in the OHT working context, and uploading via this rule's reporting tool. As of this writing, EPA uses IUCLID6 v6.27.2; submitters using future IUCLID6 v7 can export their dossier via the "Export to previous major version" function described in the IUCLID Manual (*https://iuclid6.echa.europa.eu/documents/1387205/1809908/iuclid_functionalities_html_en.pdf/9d01cb53-902d-dbb6-fb00-fa141688c395?t=1667168830907*). Submitters using future versions IUCLID6 v8 and higher (such as IUCLID7) should consult with EPA before submitting

their data to confirm the current data format acceptance standards. EPA can accept any dossiers generated using an earlier version of IUCLID6. You may already have data in this format if the company has submitted the studies under the European Union's Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulation.

The reporting software will guide you through the process of uploading attachment(s).

4.9.3 Study Report (attachment)

Upload as attachment(s) any relevant study report(s). You are required to provide any test data on the health and environmental effects of the PFAS in your possession or control, and a description of any other health and environmental effects data on the substance known to or reasonably ascertainable by you. Data in the possession or control of either a parent company or an affiliated subsidiary located outside the U.S. are considered by the Agency to be data that should be known to or reasonably ascertainable by a submitter.

Data must be submitted in English. Standard literature citations may be submitted for data in the open scientific literature. Complete test data (not summaries) must be submitted if they do not appear in the open literature. Incomplete reports (e.g., from ongoing studies) are exempt from full reporting. However, you must describe the nature and objective of any incomplete study, report, or test, the name and address of any laboratory developing the data; progress to date; type of data collected; significant preliminary results; and an anticipated completion date. If significant preliminary results or final results are obtained prior to the submission deadline or any other additional information significant to the review of the notice becomes available to you, you must submit this information. This includes reports from studies not conducted by your company, such as studies commissioned by your company. The reporting software will guide you through the process of uploading attachment(s). You may consider developing and voluntarily submitting a robust study summary along with the record as EPA is interested in the potential utility of this information to reduce the future burden of reporting, but this may not be submitted in lieu of a full study report.

4.9.4 Supporting Information (attachment)

Upload as attachments any relevant supporting information. This section is intended for you to provide any supporting information related to the study reports uploaded in the previous section. Other data not related to the uploaded study reports will be uploaded in the "Other Data Relevant to Environmental or Health Effects" section (i.e., section 4.9.6 below). The reporting software will guide you through the process of uploading attachment(s).

4.9.5 Analytical/Test Methods

Use the text entry field to describe any and all known analytical or test methods for the PFAS substance. If the method is an EPA method or is substantially similar to an EPA method, you may state which EPA method is the basis of the test method used and clearly describe all modifications. If the method is not an EPA method or substantially similar to an EPA method, describe all steps of the method in as much detail as possible. Standard literature citations may

be submitted for test methods described in the open scientific literature. Complete method descriptions (not summaries) must be submitted if they do not appear in the open literature.

4.9.6 Other Data Relevant to Environmental or Health Effects

Provide, as attachments, any other data relevant to environmental or health effects not published in a study report. Such information may include, but is not limited to, material safety data sheets (SDS), information on physical/chemical properties, preliminary studies, range-finding studies, OSHA medical screening or surveillance standards reports, adverse effects reports, anonymized or aggregated informal test results in workers, underlying environmental monitoring data, blood levels, or inhalation studies.

4.10 Part II – Section F. The number of individuals exposed, and reasonable estimates of the number who will be exposed, to such substance or mixture in their places of employment and the duration of such exposure

In this section, report information concerning workers' exposure to the PFAS. Reporting in this section includes information on the activities resulting in exposure, number of workers exposed and the maximum duration of exposure, at the manufacturing site as well as industrial users and commercial sites.

Information in this section may depend on knowledge of activities occurring at sites not under your control. Recall that information provided under section 8(a)(7) reporting follows the "known to or reasonably ascertainable" reporting standard, which may entail requesting information from downstream users. Refer to Section 4.2 of this Guidance Document for a discussion of the reporting standard.

4.10.1 Confidentiality of Worker Exposure Information

Information reported in the worker exposure section of section 8(a)(7) reporting can be claimed as confidential. For all of the data elements in this section, upfront substantiation of the claim is required.

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 to appear later in the CBI Substantiation portion of the form. See Table 4-13 for substantiation questions related to these data elements. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.** Further, 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* on the EPA website.

4.10.2 Worker Activity Descriptions

Describe the activities for workers at the manufacturing site. For example:

- Workers unload totes of the PFAS from delivery trucks into different containers in site chemical storage area.
- Workers take samples of the product for QA/QC testing.
- Workers clean reaction vessels which contain residual PFAS product and reactants.

4.10.3 Number of Workers Exposed at the Manufacturing Site

For each activity listed above, report the total number of workers reasonably likely to be exposed to the reportable PFAS at the manufacturing site (40 CFR 711.15(g)). Select the code corresponding to the appropriate range for the number of workers reasonably likely to be exposed to the PFAS during manufacture. Table 4-19 lists the codes and ranges.

Table 4-19. 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.

Workers are considered to be exposed even if the chemical does not enter the body. For instance, skin contact with a PFAS-containing article is considered an exposure if the worker comes into contact with the PFAS, even if it is believed not to migrate from the article or is not dermally absorbed.

There is no minimum duration or frequency of exposure for determining the number of workers reasonably likely to be exposed to a chemical substance. If it is determined that a worker is reasonably likely to be exposed at any time during the year for any length of time, this worker should be included in the estimate.

There is no minimum level of exposure to a PFAS below which a worker need not be counted among the number reasonably likely to be exposed to a chemical substance. Therefore, if a company knows that a chemical substance manufactured at the site is present in the air throughout the site, all workers at the site must be included in the number of workers 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.

Throughout this section, for clarity, the terms “exposed” and “exposure” are used to mean “reasonably likely to be exposed” and “reasonably likely exposure.”

4.10.4 Maximum Duration of Exposure for Manufacturing Workers

For each activity reported, indicate the maximum duration of exposure for any worker at the manufacturing site in hours per day and the maximum number of days per year that workers may be exposed. If workers have different lengths of exposure (for example, due to shift schedules or different job roles), consider two scenarios: the worker(s) who have the longest duration of exposure on any day of the year (called maximum daily exposure), and the worker(s) who are exposed on the highest number of days per year (called maximum annual exposure). For each of these workers, report the maximum duration of exposure on any single day as well as the number of days per year that the worker is reasonably likely to be exposed. For each activity, consider the following questions:

1) What worker or group of workers is exposed for the longest amount of time on any one day doing this activity?
    a. How long is that maximum amount of time that the worker or group of workers is exposed doing this activity?
    b. On how many days per year is this worker(s) exposed to the PFAS while doing this activity?
2) What worker or group of workers is exposed on the largest number of days each year doing this activity?
    c. How many days per year is that worker or group of workers exposed doing this activity?
    d. What is the longest amount of time that worker(s) is exposed doing this activity on any one day?

Report maximum daily exposure to the nearest hour, except for workers exposed for less than one hour. Report 1 hour for any worker exposed for less than one hour; do not round to zero. If you know the duration of exposure to a greater degree of precision than the nearest hour, report the more precise information. If work shifts at your site cross midnight, you may consider the work shift to be one day (e.g., a worker who is exposed on one shift from 10 PM until 6 AM the next day may be counted as one day of exposure and 8 hours of daily exposure). Recall that in this section, you are reporting exposure by activity. If a worker at your site may be exposed to the PFAS during multiple activities, report for each activity considering that activity alone, and not any other activities.

Table 4-20 shows how companies would report in various example scenarios.

Table 4-20. Example manufacturing worker exposure scenarios

Exposure Scenario	Exposure for worker(s) with maximum daily exposure	Exposure for worker(s) with maximum annual exposure
Example Site CC has reported reaction vessel clean-outs as an activity with worker exposure to Example PFAS CC. Production line workers perform one thorough clean out per year, which takes 10 hours, and less-thorough monthly clean-outs, which each take 5 hours, for a total of 12 cleanings per year. The same workers perform all cleanouts.	Report 10 hours as the maximum daily exposure, because this is the longest duration of exposure for workers on any single day. Report 12 days as the maximum annual frequency, because these workers are exposed up to 12 days per year.	In this case, this activity is only done by one group of workers, so the workers with the maximum daily exposure are also the workers with the maximum annual exposure. Report 10 hours as the maximum daily exposure and 12 days as the maximum annual frequency.
At Example Site DD, workers may be exposed to Example PFAS DD when charging reactor vessels, a process that usually takes one hour but sometimes takes up to two hours. Reactor vessels are charged every day and the site operates 360 days per year, but no one worker works more than 5 days per week, or 260 days per year.	Report 2 hours as the maximum daily exposure, because this is the longest amount of time the activity takes. Report 260 days per year as the maximum annual exposure, because any single exposed worker may be exposed up to 260 days per year.	In this case, this activity is only done by one group of workers, so the workers with the maximum daily exposure are also the workers with the maximum annual exposure. Report 2 hours as the maximum daily exposure and 260 days as the maximum annual frequency.
Example Site EE imports Example PFAS EE in sealed vessels, re-labels the containers, and ships the containers without repackaging. No workers are expected to be exposed to PFAS EE.	Because no activities resulting in worker exposure occurred, report "N/A" for this section.	Because no activities resulting in worker exposure occurred, report "N/A" for this section.
Workers at Example Site FF are reasonably expected to be exposed to Example PFAS FF while charging reactor vessels, which takes no more than 3 hours. Reactor vessels are charged every day. The site rotates staff duties, so that no worker performs reactor vessel charging more than one day per week, or 52 times per year. Line supervisors may also be briefly exposed to PFAS FF during this activity. Supervisory duties are split equally between two workers, so that each performs this duty 180 days per year.	The workers with the maximum daily exposure for this activity are the workers actually charging reaction vessels, who may be exposed for up to 3 hours in a single day. Report 3 hours for the maximum daily exposure in this section. These workers are exposed up to 52 days per year, so report 52 days as the maximum annual exposure in this section.	The workers with the maximum annual exposure for this activity are the supervisors, who may each be exposed for up to 180 days during the year. These workers are exposed for no more than 15 minutes on any given day. Report 1 hour (do not round exposures less than one half-hour down to zero) for the maximum daily exposure and 180 days as the maximum annual exposure in this section.

Exposure Scenario	Exposure for worker(s) with maximum daily exposure	Exposure for worker(s) with maximum annual exposure
Workers at Example Site GG are exposed to Example PFAS GG during two activities: transferring the chemical from totes to smaller vessels and cleaning empty totes. Workers transfer the chemical from totes multiple times per day, resulting in total daily exposure of up to one hour. Workers perform this activity at the site up to 208 days per year. Empty totes are cleaned twice a year and the process takes two hours. The same workers do both tasks.	Transfer to smaller vessels: Workers are exposed to PFAS GG for a maximum of 1 hour per day while transferring the chemical. This exposure may happen on a maximum of 208 days per year. Report 1 hour per day and 208 days per year for this activity. Tote cleaning: Workers are exposed to PFAS GG for up to two hours while cleaning totes, which may occur a maximum of two days per year. Report 2 hours and 2 days per year for this activity.	In this case, the workers with the maximum daily exposure and maximum annual exposure are the same for each activity. Report 1 hour per day and 208 days per year for chemical transfer and 2 hours and 2 days per year for tote cleaning. Note that although the same workers perform both activities, reporting in this section is by activity. Do not combine exposure from multiple activities when reporting in this section.

4.10.5 Number of Workers Exposed for each Industrial Process and Use

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(g)(4)). Include workers at sites that are not under your control as well as those sites you control. For each combination of TPU, sector, and function, report the code that corresponds to the estimated range of the number of workers reasonably likely to be exposed. Table 4-19 shows the codes and worker ranges. See Section 4.10.3 for a discussion of "reasonably likely to be exposed."

4.10.6 Maximum Duration of Exposure for Industrial Workers

For each unique combination of Type of Process or Use Operation, Industrial Sector, and Function Category, estimate the maximum duration of exposure for workers that are reasonably likely to be exposed to the chemical substance at sites that process or use the chemical substance. Include workers at sites that are not under your control as well as those sites you control.

If workers have different lengths of exposure (for example, due to shift schedules or different job roles), consider two scenarios: the worker(s) who have the longest duration of exposure on any day of the year (called maximum daily exposure), and the worker(s) who are exposed on the highest number of days per year (called maximum annual exposure). For each of these workers, report the maximum duration of exposure on any single day as well as the number of days per year that the worker is reasonably likely to be exposed. For each activity, consider the following questions:

1. What worker or group of workers is exposed for the longest amount of time on any one day for this combination of Type of Process or Use Operation, Industrial Sector, and Function Category?
    a. How long is that maximum amount of time that the worker or group of workers is exposed for this TPU/IS/FC combination?
    b. On how many days per year is this worker(s) exposed to the PFAS for this TPU/IS/FC combination?

2. What worker or group of workers is exposed on the largest number of days each year doing this activity?
    a. How many days per year is that worker or group of workers exposed for this TPU/IS/FC combination?
    b. What is the longest amount of time that worker(s) is exposed for this TPU/IS/FC combination?

Report maximum daily exposure to the nearest hour, except for workers exposed for less than one hour. Report one hour for any worker exposed for less than one hour; do not round to zero. If work shifts cross midnight, you may consider the work shift to be one day (e.g., a worker who is exposed on one shift from 10 PM until 6 AM the next day may be counted as one day of exposure and 8 hours of daily exposure). Recall that in this section, you are reporting exposure by activity. If a worker at your site may be exposed to the PFAS during multiple activities, report for each activity considering that activity alone, and not any other activities.

Table 4-21. Example industrial worker exposure scenarios

Exposure Scenario	Exposure for worker(s) with maximum daily exposure	Exposure for worker(s) with maximum annual exposure
Example Site HH incorporates Example PFAS HH into a metalworking fluid. Site HH knows that workers at its customers' facilities may work with the metalworking fluid for an entire shift and are reasonably likely to be exposed to the PFAS during this activity, which may occur on a daily basis. Site HH also knows its customers operate on 4x10-hour shift schedule, and therefore exposed workers are likely to be exposed for up to 10 hours per day, up to 4 days per week, or 208 days per year.	Report 10 hours per day as the maximum duration per day for this this combination of Type of Process or Use Operation, Industrial Sector, and Function Category. Report 208 days per year as the maximum duration per year.	In this case, this activity is only done by one group of workers, so the workers with the maximum daily exposure are also the workers with the maximum annual exposure. Report 10 hours as the maximum daily exposure and 208 days as the maximum annual frequency.

Exposure Scenario	Exposure for worker(s) with maximum daily exposure	Exposure for worker(s) with maximum annual exposure
Example Site II manufactures Example PFAS II and processes the chemical on site. The site knows that its processing activity is reasonably expected to expose workers for no more than 3 hours per day and occurs on Monday and Thursday every week. One group of production workers performs the activity on Mondays and a different group of workers performs the activity on Thursdays. One supervisor may also be exposed for no more than one hour during the activity. The same supervisor oversees the activity every time it is performed.	The workers with the most exposure on any given day are the production workers, who are exposed for up to 3 hours per day. Report 3 hours per day for the workers with the maximum daily exposure for this combination of TPU, IS, and FC codes. Report 52 days as the maximum duration per year for workers with the maximum daily exposure for this this combination of TPU, IS, and FC codes, because no single production worker is exposed more than one day per week, or 52 days per year.	The worker with the largest number of days of exposure is the supervisor, who may be exposed twice per week, or 104 days per year. The supervisor is not exposed for more than one hour per day during this activity, so report 1 hour for the maximum daily exposure for the worker with maximum annual exposure. Report 104 days per year for the maximum annual frequency of exposure for the worker with the maximum daily exposure.
Example Site JJ imports a PFAS chemical in an article. The PFAS chemical is part of a non-stick coating on the inside of equipment and workers are not expected to have physical contact with the internal non- stick surface.	Report N/A for this combination of TPU, IS, and FC codes.	Report N/A for this combination of TPU, IS, and FC codes.

4.10.7 Number of Workers Exposed for each Commercial Use

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 705.15(g)(5)). For each combination of commercial Product Category and Function Category reported (Section4.6), report the code which corresponds to the appropriate range of commercial workers reasonably likely to be exposed. Table 4-19 shows the codes for numbers of workers. See Section 4.10.3 for a discussion of “reasonably likely to be exposed.”

4.10.8 Maximum Duration of Exposure for Commercial Workers

For each unique combination of Product Category and Function Category, estimate the maximum duration of exposure for workers that are reasonably likely to be exposed to the chemical substance at sites that process or use the chemical substance. Include workers at sites that are not under your control as well as those sites you control.

If workers have different lengths of exposure (for example, due to shift schedules or different job roles), consider two scenarios: the worker(s) who have the longest duration of exposure on any day of the year (called maximum daily exposure), and the worker(s) who are exposed on the highest number of days per year (called maximum annual exposure). For each of these workers, report the maximum duration of exposure on any single day as well as the

number of days per year that the worker is reasonably likely to be exposed. For each activity, consider the following questions:

1. What worker or group of workers is exposed for the longest amount of time on any one day for this combination of Product Category and Function Category?
    a. How long is that maximum amount of time that the worker or group of workers is exposed for this PC/FC combination?
    b. On how many days per year is this worker(s) exposed to the PFAS for this PC/FC combination?
2. What worker or group of workers is exposed on the largest number of days each year doing this activity?
    a. How many days per year is that worker or group of workers exposed for this PC/FC combination?
    b. What is the longest amount of time that worker(s) is exposed for this PC/FC combination?

Report maximum daily exposure to the nearest hour, except for workers exposed for less than one hour. Report one hour for any worker exposed for less than one hour; do not round to zero. If work shifts cross midnight, you may consider the work shift to be one day (e.g., a worker who is exposed on one shift from 10 PM until 6 AM the next day may be counted as one day of exposure and 8 hours of daily exposure). Recall that in this section, you are reporting exposure by activity. If a worker may be exposed to the PFAS during multiple activities, report for each activity considering that activity alone, and not any other activities.

Table 4-22. Example commercial worker exposure scenarios

Exposure Scenario	Exposure for worker(s) with maximum daily exposure	Exposure for worker(s) with maximum annual exposure
Example Company KK incorporates Example PFAS KK into a lubricating wax. Many of its customers are sporting good rental and repair shops, including ski shops and bike shops. Company KK knows that workers are likely exposed to the PFAS when applying lubricating waxes to equipment, an activity that may be done intermittently throughout a shift. Company KK knows from discussions with its customers that ski shops use the wax daily during the ski season, and that workers work up to 12 hour shifts up to 5 days per week during this 20-week season; the shops are closed the rest of the year. Bike shops using these products operate with shifts no longer than 10 hours long, up to 5 days per week year round.	The ski shop workers in this scenario have the longest maximum exposure on any given day and should be considered the workers with the maximum daily exposure. The ski shop workers work up to 12 hours at a time. Although exposure is intermittent, these workers may be exposed throughout the 12 hour shift. Company KK reports 12 hours as the maximum daily exposure. The ski shop workers work up to 100 days per year, so Company KK reports 100 days per year as the maximum annual exposure for the workers with the maximum daily exposure.	The bike shop workers in this scenario are exposed for the most days per year and should be considered the workers with the maximum annual exposure. Bike shop workers work up to 10 hours at a time. Although exposure is intermittent, these workers may be exposed throughout the 10 hour shift. Company KK reports 10 hours as the maximum daily exposure for the workers with maximum annual exposure. The bike shop workers work up to 260 days per year, so Company KK reports 260 days per year as the maximum annual exposure.
Example Company LL uses PFAS LL as a stain-resistant coating for carpets sold to commercial customers. Company LL knows from news reports that PFAS from coated carpets can be released into indoor air and dust over time, resulting in worker exposure. Company LL assumes that its commercial customers operate with 8 hours shifts and that workers work five days per week, 52 weeks per year.	Example Company LL estimates that workers in commercial customers using its carpets are exposed for eight hours per day, five days per week. Example Company LL reports 8 hours as the maximum daily exposure and 260 days as the maximum annual exposure for workers with the maximum daily exposure.	In this case, this Product Category/Function Category for Example PFAS LL is only done by one group of workers, so the workers with the maximum daily exposure are also the workers with the maximum annual exposure. Company LL reports 8 hours as the maximum daily exposure and 260 days as the maximum annual exposure for workers with the maximum annual exposure.
Example Site MM produces a PFAS-coated part used in commercial machines. The PFAS is not expected to produce any emissions or migrate from the coating under normal conditions of use.	Site MM reports 0 hours per day and 0 days per year, as workers are not expected to be exposed for any amount of time.	Site MM reports 0 hours per day and 0 days per year, as workers are not expected to be exposed for any amount of time.

4.11 Part II – Section G. The manner or method of its disposal, and in any subsequent report on such substance or mixture, any change in such manner or method

4.11.1 Confidentiality of Disposal Information

Information reported in the disposal section of the section 8(a)(7) reporting form can be claimed as confidential if it is not already public information. For all of the data elements in this section, upfront substantiation of the claim is required.

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 to appear later in the CBI Substantiation portion of the form. See Table 4-13 for substantiation questions related to these data elements. **If you do not check the CBI box for any information element, then that information is not claimed as CBI and may be made public without further notice to you.** Further, 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* on the EPA website.

4.11.2 Manner or Method of Disposal

If the PFAS is disposed of, report the method of disposal using a code or codes from Table 4-23. Report all disposal controlled by the site (e.g., include shipments of waste for disposal to third parties). You are not required to report disposal by downstream users. Provide additional description of the disposal method as needed; additional description is required for code D99 "other." For each year, report any disposal methods(s) used during that year. You will be prompted to and are required to report disposal in any year from 2011 to 2022, even if you did not manufacture the PFAS in each year. For example, if you manufactured a PFAS in 2014, 2015, and 2016, and disposed of remaining waste containing that PFAS in 2017, you must include the disposal that occurred in 2017 even though you did not manufacture the PFAS that year.

If the PFAS is not disposed of in a given year, select "N/A" for that year. If you do not know and cannot reasonably ascertain whether the PFAS is disposed of, or if you know the PFAS is disposed of but do not know and cannot reasonably ascertain the method of disposal, select "NKRA."

Table 4-23. Disposal Process codes

Code	Description
D1	On-site land disposal: RCRA Class C landfill (hazardous)
D2	On-site land disposal: Other landfill

Code	Description
D3	Other on-site land disposal
D4	On-site underground injection (UIC)
D5	Off-site land disposal: RCRA Class C landfill (hazardous)
D6	Off-site land disposal: Other landfill
D7	On-site incineration
D8	Off-site incineration
D9	Publicly owned treatment works (POTW)
D10	Other off-site waste transfer
D11	On-site release to surface water
D12	On-site release to air (stack emissions)
D13	On-site release to air (fugitive emissions)
D99	Other

4.11.3 Changes in Disposal Methods

Use the free text field to describe any changes to the disposal process or methods since January 1, 2011.

4.11.4 Release Quantity

Report the total weight of the PFAS released to each medium (i.e., air, water, or land) 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. Release volumes should be reported in numeric format, without commas (e.g., 6352000). ***Report only the weight of the specific PFAS released***. Do not include the weight of any other materials (e.g., water, solvents, containers, or other chemical substances). Consider all possible sources of releases, including treated waste streams. For example, incineration of PFAS waste may not fully destroy the PFAS and there may be air releases of the PFAS associated with this process.

Table 4-24. Release media for disposal codes

Code	Description	Release Medium
D1	On-site land disposal: RCRA Class C landfill (hazardous)	Land
D2	On-site land disposal: Other landfill	Land
D3	Other on-site land disposal	Land
D4	On-site underground injection (UIC)	Land

Code	Description	Release Medium
D5	Off-site land disposal: RCRA Class C landfill (hazardous)	Land
D6	Off-site land disposal: Other landfill	Land
D7	On-site incineration	If combustion is incomplete, PFAS may remain in stack air emissions, ash, or scrubber blowdown, filter material, etc., and may be released to any medium
D8	Off-site incineration	Report off-site release media to the extent known to or reasonably ascertainable by you.
D9	Publicly owned treatment works (POTW)	Water
D10	Other off-site waste transfer	Report off-site release media to the extent known to or reasonably ascertainable by you.
D11	On-site release to surface water	Water
D12	On-site release to air (stack emissions)	Air
D13	On-site release to air (fugitive emissions)	Air
D99	Other	

4.11.5 Incineration Quantity and Temperature

Report the total weight of the PFAS incinerated on-site each year. If on-site incineration occurred, also report the incineration temperature (in degrees Celsius). If incineration occurred at multiple temperatures, indicate the minimum temperature (in degrees Celsius) at which the PFAS was incinerated. Report only the weight of PFAS destroyed by incineration. Quantities of PFAS not destroyed (e.g., released to air or remaining in ash) should be reported as releases in the previous section.

4.12 Optional Information

This section consists of a text field for submitting additional information. Use this field to provide any additional information about your submission that may be relevant.

4.13 Joint Submissions

4.13.1 Determining the Need for a Joint Submission

Joint submissions are required in those instances where a company (e.g., foreign supplier, contracting company) will not disclose to the manufacturer (including importer)

certain chemical substance identifiers (i.e., CASRN, Accession number, or LVE number), due to confidentiality concerns.

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 each separately report their portion of the required information, resulting in a joint submission. The importer must ask the supplier of the confidential chemical substance to directly provide EPA with the correct chemical identity (see 40 CFR 705.15(b)(iii)).

A manufacturer (including importer) can identify, on a chemical-by-chemical basis, the supplier for a chemical substance. The reporting 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 PFAS that comprise the mixture.

It is the responsibility of the primary submitter to ask its supplier, or secondary submitter, to send the information to EPA by the end of the submission period. The 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.

Note that not all submitters are required to initiate joint submissions. Article importers using the article importer reporting form will not be required or have the option to initiate joint *submissions.* Additionally, if a secondary submitter is not known or reasonably ascertainable to the PFAS manufacturer (e.g., if a foreign supplier is no longer in business and has no successor entity), then the manufacturer would indicate that the secondary submitter is NKRA and need not initiate a joint submission.

4.13.2 The Primary Submission is Completed by the PFAS Manufacturer

The primary submitter for a joint submission is either an importer or a manufacturer of a PFAS of unknown chemical identity (i.e., CASRN, TSCA Accession number, or LVE number). 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. The importer uses the reporting tool to notify the secondary submitter (e.g., its supplier or contract manufacturer) of the need to complete the secondary portion of the joint submission, and completes the sections related to manufacturing (Part II.A – C), processing and use (Part II.D), byproducts (Part II.D), environmental and health effects (Part II.E), (40 CFR 705.15(f)) and the processing and use-related section (Part II.D) (40 CFR 705.15(c)) for the imported substance.

Identifying the chemical identity of the unknown chemical substance and its secondary submitter

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 secondary submitter correctly identify the substance, and the identity and contact information for the secondary submitter. See Sections 4.4.2 and 4.5.11 for additional information.

Notifying the secondary submitter about the joint submission

Using the reporting tool, the importer enters the email address of the secondary submitter, and any necessary instruction for the secondary submitter to complete its part of the joint submission, into a system generated email. Also contained within the email is the unique identifier. The importer will need to click the link to send this information from CDX to the Secondary Authorized Official. Additional recipients may be added by the importer. 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 of the form as it relates to the proprietary substance or mixture. See Sections 4.7 through 4.12 of this document for additional information about completing Part II.

4.13.3 The Secondary Submission is Completed

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.

4.13.3.1 Receiving notification from the primary submitter about the joint submission

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

4.13.3.2 Completing the Secondary Form, the secondary portion of the joint submission

The secondary submitter is responsible for completing the Secondary Form of the joint submission, which includes its company identity, a technical contact, identification of its customer (i.e., the primary submitter), the product trade name, and the unique identifier supplied by the primary submitter. The secondary submitter then provides the chemical identity and percentage of formulation of each PFAS in the product. See Section 4.54.5 for information about chemical identity.

4.13.3.3 When the Supplier Doesn't Know the Chemical Identity

There may be instances where a foreign supplier (i.e., secondary submitter) 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 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 form.

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.

4.13.4 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 a generic chemical name or trade name and secondary submitter's 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 (pursuant to TSCA section 14(c)(2)):

- Joint submission information from the primary submitter consisting of trade name and supplier identification required pursuant to § 705.15(b)(1)(i) and § 705.18(b)(2)(i).
- Joint submission information from the secondary submitter consisting of the percentage of formulation required pursuant to § 705.15(b)(1)(i) and (ii).

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 report. The reporting tool will match both submissions based upon the unique ID number sent by the manufacturer (including importer) to notify the secondary submitter of the partial section 8(a)(7) submission. Suppliers do not have access to any of the information submitted to EPA by the manufacturer (except the manufacturer's identity and contact information and the submitted trade name or chemical identifier) . 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 section 8(a)(7) 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 section 8(a)(7) rule, *40 CFR 705*, is available on the U.S. Government Publishing Office website, *www.ecfr.gov*.

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

5.2 Obtaining Copies of Other Information Materials

EPA has developed documents to provide additional information on submitting information for this data call. Except where otherwise noted, materials are available on the section 8(a)(7) website at *https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-8a7-reporting-and- recordkeeping*. In addition to materials developed specifically for section 8(a)(7) reporting, some materials developed for TSCA more broadly or for CDR reporting are also applicable to reporting under this data call.

Reporting Electronically:

- Instructions on CDX registration: *CDX Online Registration User Guide*
- Some fact sheets Fact Sheets for CDR are relevant to section 8(a)(7) reporting. These fact sheets are available at *How To Report Under Chemical Data Reporting*. CDR fact sheets relevant to reporting under this data call include:
- *Reporting After Changes to Company Ownership or Legal Identity*
- *Imported Articles* (use this fact sheet as guidance in determining if your chemical substance is contained in an article; other items discussed in this fact sheet, such as references to reporting thresholds and polymer exemption, do not apply to this data call)

Appendix A. Glossary of Terms

The definitions and descriptions of terms used in section 8(a)(7) 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 Information Submission System (CISS) means EPA's electronic, web-based reporting tool for the completion and submission of data, reports, and other information, or its successors.

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))

Environmental or health effects information means any information of any effect of a chemical substance or mixture containing a chemical substance on health or the environment or on both. This includes all health and safety studies.

(1) Not only is information that arises as a result of a formal, disciplined study included, but other information relating to the effects of a chemical substance or mixture containing a chemical substance on health or the environment is also included. Any information that bears on the effects of a chemical substance on health or the environment would be included.

(2) Examples are:

(i) Long- and short-term tests of mutagenicity, carcinogenicity, or teratogenicity; data on behavioral disorders; dermatoxicity; pharmacological effects;

mammalian absorption, distribution, metabolism, and excretion; cumulative, additive, and synergistic effects; and acute, subchronic, and chronic effects.

(ii) Tests for ecological or other environmental effects on invertebrates, fish, or other animals, and plants, including: Acute toxicity tests, chronic toxicity tests, critical life-stage tests, behavioral tests, algal growth tests, seed germination tests, plant growth or damage tests, microbial function tests, bioconcentration or bioaccumulation tests, and model ecosystem (microcosm) studies.

(iii) Assessments of human and environmental exposure, including workplace exposure, and impacts of a particular chemical substance or mixture containing a chemical substance on the environment, including surveys, tests, and studies of: Biological, photochemical, and chemical degradation; structure/activity relationships; air, water, and soil transport; biomagnification and bioconcentration; and chemical and physical properties, e.g., boiling point, vapor pressure, evaporation rates from soil and water, octanol/water partition coefficient, and water solubility.

(iv) Monitoring data, including but not limited to when they have been aggregated and analyzed to measure the exposure of humans or the environment to a chemical substance or mixture containing a chemical substance. (40 CFR 705.15)

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

Health and safety studies means any study of any effect of a chemical substance or mixture on health or the environment or on both, including underlying information and epidemiological studies, studies of occupational exposure to a chemical substance or mixture, toxicological, clinical, and ecological studies of a chemical substance or mixture containing a chemical substance, and any test performed under TSCA. [15 U.S.C. 2602(8)]

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).

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

(6) 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 aged 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. [15 U.S.C. 2602(9)]

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)

Per- and polyfluoroalkyl substances or **PFAS**, means any chemical substance or mixture containing a chemical substance that structurally contains at least one of the following three sub-structures:

1. R-(CF_2)-CF(R')R'', where both the CF_2 and CF moieties are saturated carbons
2. R-CF_2OCF_2-R', where R and R' can either be F, O, or saturated carbons
3. $CF_3C(CF_3)$R'R'', where R' and R"" can either be F or saturated carbons. (40 CFR 705.15)

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.

Possession or control means in possession or control of the submitter, or of any subsidiary, partnership in which the submitter is a general partner, parent company, or any company or partnership which the parent company owns or controls, if the subsidiary, parent company, or other company or partnership is associated with the submitter in the research, development, test marketing, or commercial marketing of the chemical substance in question. (A parent company owns or controls another company if the parent owns or controls 50 percent or more of the other company's voting stock. A parent company owns or controls any partnership in which it is a general partner). Information is included within this definition if it is:

(1) In files maintained by submitter's employees who are:

(i) Associated with research, development, test marketing, or commercial marketing of the chemical substance in question.

(ii) Reasonably likely to have such data.

(2) Maintained in the files of other agents of the submitter who are associated with research, development, test marketing, or commercial marketing of the chemical substance in question in the course of their employment as such agents. (40 CFR 705.15)

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.

Research and development (R&D) means activities intended solely as scientific experimentation, research, or analysis. R&D focuses on the analysis of the chemical or physical characteristics, the performance, or the production characteristics of a chemical substance, a mixture containing the substance, or an article. R&D encompasses a wide range of activities which may occur in a laboratory, pilot plant, commercial plant outside the research facility, or at other sites appropriate for R&D. General distribution of chemical substances to consumers does not constitute R&D. (40 CFR 705.15)

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 data are submitted to EPA.

United States, when used in the geographic sense, means all of the States. (TSCA3(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.

Worker means someone at a site of manufacture, import, or processing who performs work activities near sources of a chemical substance or mixture or directly handles the chemical substance or mixture during the performance of work activities. (40 CFR 705.15)

Appendix B. Key Comparisons between Section 8(a)(7) Data Call and CDR

This PFAS data call is promulgated under TSCA section 8(a)(7) and has many similarities to Chemical Data Reporting (CDR) required under TSCA section 8(a)(1). You or someone else at your site or company may have previously reported to CDR. However, it is important to note that there are certain differences between section 8(a)(7) reporting and reporting under CDR. You should review the final rule in 40 CFR 705 as well as this document to ensure you are reporting correctly. To assist you, this section outlines key differences between section 8(a)(7) reporting and reporting under CDR. Important differences to consider include:

- Absence of certain reporting exemptions and reporting thresholds that exist under CDR
- Differences in what data elements are to be reported
- Timeframe (years covered by the rule)
- Considerations for claiming information as confidential business information (CBI)
- Availability of streamlined reporting options in certain manufacturing scenarios

Reporting Exemptions

PFAS section 8(a)(7) reporting does not provide any exemptions. Do not assume you qualify for a section 8(a)(7) exemption because you qualify for a CDR exemption. Review Section 2 of this document for additional guidance on determining if you are required to report. For example, CDR reporters are not required to report for small manufacture/import quantities, chemicals imported as part of an article, or chemicals manufactured as byproducts that meet exemption requirements under 711.10(c), 711.10 (d)(1), or 711.10(d)(2). ***No such exemptions apply to section 8(a)(7) reporting – you may be required to submit a section 8(a)(7) report even if one of these, or any other, CDR exemption applies to your chemical substance.***

CDR exemptions that ***do not apply*** to PFAS Section 8(a)(7) reporting include, but are not limited to, exemptions for: articles containing PFAS (including imported articles containing PFAS such as articles containing PFAS as part of surface coatings), byproducts, impurities, polymers, and non-isolated intermediates.

Reported Data Elements

Data to be reported under section 8(a)(7) include some fields comparable to data reporting under CDR and some additional data. For fields comparable to CDR reporting, note that there may be differences between requirements for how to report to this data call compared to CDR reporting. In particular, lists of codes (such as codes for reporting industrial uses) may differ from the codes your site has used to report to CDR in the past. Additional data to be reported includes information on byproducts, environmental and health effects, worker exposure during industrial and commercial use, and disposal.

Covered Timeframe

This data call covers activities occurring from January 1, 2011, through December 31, 2022 (i.e., the end of the last calendar year prior to the effective date of this rule), a period of 12 years. Unlike CDR reporting, all years are treated equally for purposes of this data call; there is no "principal reporting year," and the same data elements must be reported for each year. The reporting software allows you to select a subset of years to report on if you did not manufacture the PFAS every year.

Considerations for CBI claims

Although the process of asserting CBI claims is similar to the process used for CDR reporting, there are some important differences. Review the section 8(a)(7) rule and this guidance when asserting CBI claims. It is your responsibility to ensure you are claiming and substantiating CBI claims **as required by the section 8(a)(7) rule**. 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. However, EPA intends to publish a list of Accession numbers for which either no chemical identity CBI claim was asserted or the claim was denied as candidates for moving to the public Inventory and provide opportunity for other claimants of the chemical identity to appeal. Instructions for claiming and substantiating CBI claims are included in the instructions for each section. For additional information about how to answer substantiation questions, visit *www.epa.gov/tsca-cbi* on the EPA website.

Appendix C. Examples of PFAS covered by this rule

The requirements of this part apply to all chemical substances and mixtures that are PFAS, consistent with the definition of PFAS at § 705.3. A non-exhaustive list of PFAS is provided in EPA's CompTox Dashboard. The CompTox list includes all chemicals with known structures that meet the definition of PFAS for section 8(a)(7) reporting. The CompTox list includes all known chemicals, regardless of their TSCA Inventory status, and is updated as new chemicals are added to the database. The CompTox list does not include all polymers or chemicals with undefined (unknown or variable) structures, which may be covered by this rule. This list is also available via EPA's Substance Registry Service. An Excel® file of chemicals on the TSCA Inventory that meet the definition of PFAS is provided in the Additional Resources section of the PFAS 8(a)(7) website: https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/tsca-section-8a7-reporting-and-recordkeeping#additional-resources. The Excel® file includes both chemicals with known structures as well as polymers and other chemicals with unknown or variable composition.

Note that this rule defines PFAS using a structural definition. While EPA is providing these lists to assist potentially affected entities with identifying reportable PFAS, manufacturers are advised that a chemical substance's omission from these lists does not necessarily mean it is not reportable under this rule. EPA notes that some possible reasons that a TSCA chemical substance that meets this rule's PFAS definition include: (1) being exempt from other TSCA reporting or notification requirements (e.g., certain byproducts, impurities, R&D substances); (2) a substance whose identity (even a generic identity) EPA cannot currently reveal due to confidential business information (CBI) protections.

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(c) and reported in Part II.D of the section 8(a)(7) reporting. Table D-3Table D-3, Table D-4, Table D-5and Table D-6Table D-6 include crosswalks between OECD standardized codes to be used for section 8(a)(7) reporting and codes used for reporting to CDR.

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 provides the type of processing or use operation (TPU) codes with descriptions of the types of operations. These codes are used to report in Part II, Section B.

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 provides a crosswalk between Industrial Sector (IS) codes used to report in Part II Section B with North American Industrial Classification System (NAICS) codes commonly used to classify businesses.

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		
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

NAICS	IS Code	IS Title
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)
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		

NAICS	IS Code	IS Title
56		
61		
62		
71		
72		
81		
92		
	IS48	Other (requires additional information)

Table D-3 provides the 2020 CDR Product Category codes (based on OECD harmonized codes) to be used for section 8(a)(7) reporting, with corresponding product category codes from 2016 CDR reporting. The 2016 CDR codes are provided only as a reference to assist you if your company has used these codes in past reporting. Do not use 2016 CDR codes for section 8(a)(7) reporting.

Table D-3. Product Category Codes

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Category**	**Code**	**Category**
Chemical Substances in Furnishing, Cleaning, Treatment Care Products			
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)		
CC114	Powder cleaners (floors)		
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		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Category**	**Code**	**Category**
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		
Chemical Substances in Construction, Paint, Electrical, and Metal Products			
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

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Category**	**Code**	**Category**
CC209	Aerosol spray paints		
CC210	Lacquers, stains, varnishes and floor finishes		
CC211	Paint strippers/removers		
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
Chemical Substances in Packaging, Paper, Plastic, Toys, Hobby Products			
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	

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Category**	**Code**	**Category**
CC307	Cement/concrete		Arts, crafts, and hobby materials
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		
CC316	Toner/Printer cartridge		
CC317	Liquid photographic processing solutions	C307	Photographic supplies, film, and photochemicals
Chemical Substances in Automotive, Fuel, Agriculture, Outdoor Use Products			
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)

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Category**	**Code**	**Category**
CC418	Lawn and garden care products	C407	Lawn and garden care products
Chemical Substances in Products not Described by Other Codes			
CC980	Other (specify)	C909	Other (specify)
CC990	Non-TSCA use	C980	Non-TSCA use

Table D-4Table D-4 provides the Function Category codes based on OECD harmonized codes to be used for section 8(a)(7) reporting, with corresponding Function Category codes from 2016 CDR reporting. The CDR codes are provided only as a reference to assist you if your company has used these codes in past reporting. Do not use CDR codes for section 8(a)(7) reporting.

Table D-4. Function Category Descriptions and Crosswalk: Section 8(a)(7) reporting and 2016-2020 CDR

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Description**	**Code**	**Description**
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		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Description**	**Code**	**Description**
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
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

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Description**	**Code**	**Description**
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, motivepropellant)	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 by other codes
F082	Freeze-thaw additive		
F083	Surface modifier		
F084	Wetting agent (non-aqueous)		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Description**	**Code**	**Description**
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		
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		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.			
Column A: Section 8(a)(7) codes		**Column B: 2016 CDR codes**	
Code	**Description**	**Code**	**Description**
F116	X-ray absorber		
F999	Other (specify)		
NOTE: For codes F085 – F116, no comparable crosswalk code existed in 2016 CDR			

Table D-5Table D-5 provides the Consumer and Commercial Product Category codes based on OECD harmonized codes to be used for section 8(a)(7) reporting, with corresponding consumer and commercial product category codes from 2016 CDR reporting. The CDR codes are provided only as a reference to assist you if your company has used these codes in past reporting. Do not use CDR codes for section 8(a)(7) reporting.

Table D-5. Consumer and Commercial Product Category Descriptions and Crosswalk

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
Chemical Substances in Furnishing, Cleaning, Treatment Care Products				
CC101	Construction and building materials covering large surface areas including stone, plaster, cement, glass and ceramicarticles; fabrics, textiles, and apparel	Cement flooring, stone tile, mirrors, flooring or wall materials, carpets, rugs, tapestries	C101	Floor coverings
CC102	Furniture & furnishings includingplastic 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.		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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).		
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.		
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.		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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 sheetsadded to driers, bleach, film, lime and rust removers.		
CC121	Laundry detergent (unit-dose/granule)	Powder or powder/liquid tablet cleaners added to washing machinesto remove dirt from clothing and other textiles.		
C122	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).		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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.	C107	Water treatment products
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
CC131	Continuous action air fresheners	Liquid, solid, gel diffuser, solid incense products and scented candle products that odorize or deodorize air in indoor environments.		
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.		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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.		
<u>Chemical Substances in Construction, Paint, Electrical, and Metal Products</u>				
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.		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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.		
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.		
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

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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	C203	Building/ construction materials - wood and engineered wood products

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
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
Chemical Substances in Packaging, Paper, Plastic, Toys, Hobby Products				
CC990	Non-TSCA use	Items included under non-TSCA use include food contact articles, 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		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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
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.		

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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
Chemical Substances in Automotive, Fuel, Agriculture, Outdoor Use Products				
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

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
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.		
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,	C405	Explosive materials

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
		high explosives and propellants, igniter, primer, initiatory, illuminants, smoke and decoy flares, and incendiaries.		
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
<u>Chemical Substances in Products not Described by Other Codes</u>				
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	C980	Non-TSCA use

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: Section 8(a)(7) codes			**Column B: 2016 CDR codes**	
Code	**Name**	**Description**	**Code**	**Name**
		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.		

Table D-6Table D-6 provides examples of products intended for use by children, including 2020 CDR (OECD-based) codes to be used for section 8(a)(7) reporting as well as 2016 CDR codes. This table is meant to help you identify products intended for use by children and may not include all products intended for use by children. The 2016 CDR codes in this table are provided only as a reference to assist you if your company has used these codes in past reporting. Do not use 2016 CDR codes for section 8(a)(7) reporting.

Table D-6. Examples of Products Intended for Use by Children

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: section 8(a)(7) codes		**Column B: 2016 CDR codes**		**Examples**
Codes	**Category**	**Code**	**Category**	
Chemical Substances in Furnishings, Cleanings, Treatment Care Products				
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
Chemical Substances in Construction, Paint, Electrical and Metal Products				
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
Chemical Substances in Packaging, Paper, Plastic, Hobby Products				
CC302	Other articles with routine direct contact during normal use, including paper articles	C302	Paper products	Diapers, baby wipes, coloring books

Use column A for all reporting. Column B shows 2016 CDR codes, which may have been used for CDR reporting.				
Column A: section 8(a)(7) codes		**Column B: 2016 CDR codes**		**Examples**
Codes	**Category**	**Code**	**Category**	
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