TRI and PFAS

Chris Rascher
TRI Program Coordinator
US EPA, Region 1
(617) 918-1834
rascher.chris@epa.gov
May 21, 2021

1

1

PFAS added to TRI through the National Defense Authorization Act

- Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

2

2

PFAS Implementation

- Reporting forms on the 172 PFAS initially added by the NDAA for Reporting Year 2020 are **due by July 1, 2021.**
- On June 22, 2020, EPA published a final rule to include these PFAS in the Code of Federal Regulations.

3

3

3 additional PFAS Chemicals for next year

- For Reporting Year 2021 (reporting forms due by July 1, 2022), the NDAA automatically added three PFAS to the TRI list.
- EPA will be revising the EPCRA Section 313 list of reportable chemicals in 40 CFR 372.65 to include the three PFAS added by the NDAA:
  - Perfluorooctyl iodide (507-63-1)
  - Potassium perfluorooctanoate (2395-00-8)
  - Silver(I) perfluorooctanoate (335-93-3)

4

4

Notable reporting requirements for PFAS are :

- All PFAS have a de minimis level of 1%.
- Except Perfluorooctanoic acid (PFOA) (CASRN: 335-67-1) The de minimis level is 0.1%.
- The NDAA establishes TRI manufacturing, processing, and otherwise use reporting thresholds of 100 pounds for each of the listed PFAS.

5

5

List of PFAS can be found here:

- https://www.epa.gov/toxics-release-inventory-tri-program/list-pfas-added-tri-ndaa
- There are 175 PFAS chemicals currently on the list:

You may need a PDF reader to view some of the files on thi
learn more.

- List of PFAS Added to the TRI by the NDAA (PDF)
  (10 pp, 214 K, 1/12/2021)

6

6

PFAS Threshold

- The manufacturing, processing, and otherwise use thresholds for each of the listed PFAS is 100 pounds.
- PFAS are each listed individually, not as a chemical category;
- Facilities should review manufacturing, processing, and otherwise use of each TRI-listed PFAS individually to determine if thresholds are met.

7

7

Question # 562
When a company has a mixture on-site that does not have its own CAS number, what CAS number should be used?

- The company should use the best readily available information (e.g., SDSs, supplier notifications, and process and chemistry knowledge) at the facility to identify the listed Section 313 toxic chemicals in the mixture, in accordance with 40 CFR Section 372.30.
- A separate report must be filed for each toxic chemical for which the fraction of the toxic chemical in the mixture multiplied by the total weight of the mixture processed or otherwise used exceeds the applicable threshold.
- The toxic chemicals are treated as if they were present in pure form and each is reported under its own CAS number.

8

8

Determining if a material contains PFAS

- If your facility processed or otherwise used mixtures or other trade name products during the calendar year, you are required to use readily available data (or reasonable estimates if such data are not readily available) to determine whether the toxic chemicals in a mixture meet or exceed the de minimis concentration and, therefore, whether they must be included in threshold determinations and release and other waste management calculations.

9

9

De minimis exemption

- The de minimis exemption allows covered facilities to disregard certain minimal levels of listed toxic chemicals in mixtures or trade name products.
- For PFOA (perfluorooctanoic acid, CAS# 335-67-1), the de minimis level is 0.1%.
- At the present time, all of the other TRI-listed PFAS have a de minimis level of 1%.
- See the de minimis exemption guidance in GuideME.

10

10

De Minimis (cont'd)

- Note that once a listed toxic chemical concentration is above the appropriate de minimis concentration, threshold determinations and release and other waste management calculations must be made, even if the chemical later falls below the de minimis level in the same process stream. Thus, a facility cannot dilute the concentration of a chemical in order to qualify for the de minimis exemption.
- However, if a facility manufactures PFAS and then incorporates the PFAS into a mixture below the de minimis concentration level and sells this mixture to another facility, the recipient facility may consider the de minimis exemption from TRI reporting as part of its use or further distribution of the PFAS.

11

11

Suppliers are required to notify customers that a product contains Section 313 chemical(s) if the supplier meets the following criteria:

- is in SIC codes 20 through 39 or a North American Industry Classification System (NAICS) code that corresponds to Standard Industrial Classification [SIC] codes 20-39;
- manufactures (including import) or processes an EPCRA Section 313 chemical; and
- sells or otherwise distributes a mixture or other trade name product containing the EPCRA Section 313 chemical to either:
  - A covered facility under §372.22, or
  - A person that then may sell or otherwise distribute the same mixture or other trade name product to a firm described in §372.22(b).
- Supplier notification may be provided on a Safety Data Sheet (SDS) or may take other forms such as a letter, product labeling, or product literature. See the supplier notification guidance in GuideME.

12

12

Using Supplier Notifications:

- Certain suppliers are required to provide annual written notification if a product contains TRI-listed chemicals. Supplier notifications may be considered among a facility's data sources for determining TRI reporting requirements and release and waste management quantities. Supplier notification may be provided on a Safety Data Sheet (SDS) or may take other forms such as a letter, product labeling, or product literature.
- Some TRI-listed PFAS have been reported to the Chemical Data Reporting (CDR) program during the 2012 and 2016 reporting cycles. Note that certain sites may have made a confidential business information claim to protect its identity and thus any such site is not included on this list.

13

13

Is it true that covered facilities need not make any special effort to measure or monitor releases for Section 313 reporting and may use information that is on hand?

- Yes, EPCRA section 313 states that covered facilities need not conduct monitoring or other activities beyond that required by other statutory or regulatory requirements (EPCRA section 313(g)(2)). Congress included this language to limit the burden on the affected industry for development of release and other required data. Without measurement or monitoring data, the facility is required to make reasonable estimates using its best readily available data.
- Question 569

14

14

Many federal facilities send their hazardous waste containing EPCRA section 313 chemicals to off-site TSD facilities. If a federal facility is reporting these toxic chemicals on a Form R report, what is the facility's obligation to ascertain the final, known disposition of the EPCRA section 313 chemical for purposes of choosing a waste management code in Part II, section 6.2.C.?

- The federal facility is required to use the best data available at the facility to identify the final, known disposition of an EPCRA section 313 chemical that it is reporting on a Form R report for the purpose of entering a waste management code in Part II, section 6.2.C of the Form R. While obtaining additional information from the off-site location concerning the fate of the particular EPCRA section 313 chemical is not required, it is certainly an option for facilities who lack a complete understanding of the final disposition of an EPCRA section 313 chemical in a waste sent off-site.

15

15

Firefighting

- PFAS have been used to formulate some firefighting foams (e.g., aqueous film forming foam (AFFF)) that have been stored and used at facilities for fire suppression, fire training, and flammable vapor suppression.
- Use of a fire suppression system for system testing, training, or to suppress a fire as part of an emergency response would constitute otherwise use of the TRI-listed chemicals in the firefighting foam, per the definition of otherwise use in the TRI Reporting Forms and Instructions Section B.3.a.

16

16

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

- The benzene would be considered otherwise used for the Section 313 threshold determination since the benzene is being used in a non-incorporative activity in order to train individuals to use equipment. The laboratory activity exemption is intended to cover activities in a laboratory (e.g., product testing) under the supervision of a technically qualified individual. Training is not considered product testing nor research and development and thus would not be exempt under the laboratory activities exemption.
- Question 405

17

17

Chemicals present in fire suppression equipment that is not used

- Storage is not considered a manufacturing, processing, or otherwise use activity. However, if the facility exceeds the manufacturing, processing, or otherwise use threshold for the same toxic chemical elsewhere at the facility, the facility must consider these quantities towards the maximum amount on-site and include any releases from the storage of the toxic chemical in the Form R (e.g., accidental discharges, emissions, leaks, spills, etc.).
- A facility receiving and incorporating AFFF into a fire suppression system on-site is considered to be storing the AFFF for intended future use. A fire suppression system is not a closed-loop, nor is the AFFF reused. The placement of AFFF into a fire suppression system is not an otherwise use activity for TRI reporting purposes, until the AFFF is released from the system.

18

18

Chemicals present in fire suppression equipment that is disposed

- Sending TRI chemicals off-site for disposal does not constitute otherwise use by the facility that sent it. However, the facility receiving and managing the waste for the purposes of disposal or other waste management (e.g., a hazardous waste treatment and disposal facility) is considered to be otherwise using those chemicals, per the definition of otherwise use in the TRI Reporting Forms and Instructions Section B.3.a.

19

19

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

- If the PCB-laced oil is removed from an on-site transformer for disposal and is not replaced with clean PCB-laced oil, this would not be considered processing or an otherwise use. Removal of a toxic chemical from an article for disposal does not constitute a process or otherwise use activity. Therefore, this activity would not be subject to threshold determinations and release and other waste management reporting under EPCRA section 313.
- Question 195

20

20

Future Changes that may Affect Reporting of PFAS to TRI

- Additional PFAS may be added to the TRI list for future reporting years due to the automatic addition of PFAS to the TRI list mandated by NDAA Section 7321(c) that occur under certain circumstances:
- EPA finalizing a toxicity value for a PFAS;
- issuing certain Significant New Use Rules (SNURs) under TSCA for a PFAS, or adding a PFAS to certain existing SNURs;
- adding a PFAS as an active chemical on the TSCA Inventory.

21

21

Future Changes that may Affect Reporting of PFAS to TRI

- For PFAS with an identity that is subject to a claim of protection from disclosure, Section 7321(e) of the NDAA requires that EPA must follow a process before any such PFAS is added to the TRI list. Therefore, any PFAS that meets the automatic listing criteria discussed above, but is subject to a claim of protection from disclosure, must first go through this review process before being added to the TRI list.

22

22

Future Changes that may Affect Reporting of PFAS to TRI

- The NDAA also directs EPA to determine whether certain PFAS are TRI-listable, based on the listing criteria in EPCRA Section 313, by December 19, 2021, and then to add any such PFAS no later than two years after EPA makes the determination.
- Therefore, the list of TRI-reportable PFAS may expand in the future. For any future changes to the list of PFAS included on the TRI, EPA will update web materials and the TRI chemical list.

23

23

EPA Resources

for additional information on EPA's activities related to PFAS, I've included a list of resources

- Webinar slides from April 16, 2020, on TRI Reporting and New Requirements for PFAS Chemicals
- EPA's PFAS webpage includes EPA actions to address PFAS and tools and resources.
- **EPA's Air Emission Measurement Center's** Other Test Method (OTM) 45
  - Measurement of select PFAS from stationary sources; OTM-45 documentation is at the bottom of the page.
- Research on Per- and Polyfluoroalkyl Substances (PFAS)
  - EPA is developing analytical methods to detect and quantify PFAS; current research and existing methods detailed here.
- Chemview
  - EPA database including chemical data from the Toxic Substances Control Act (TSCA) assessments and actions, TSCA Chemical Data Reporting (CDR), and TRI
- CompTox Chemicals Dashboard
  - EPA resource that provides information on over 800,000 chemicals, including PFAS

24

24