PFOA & PFOS CERCLA Hazardous Substance Designation / TRI Reporting
PFAS TSCA Report Rule

TAPPI Knowledge Share

November 13, 2024

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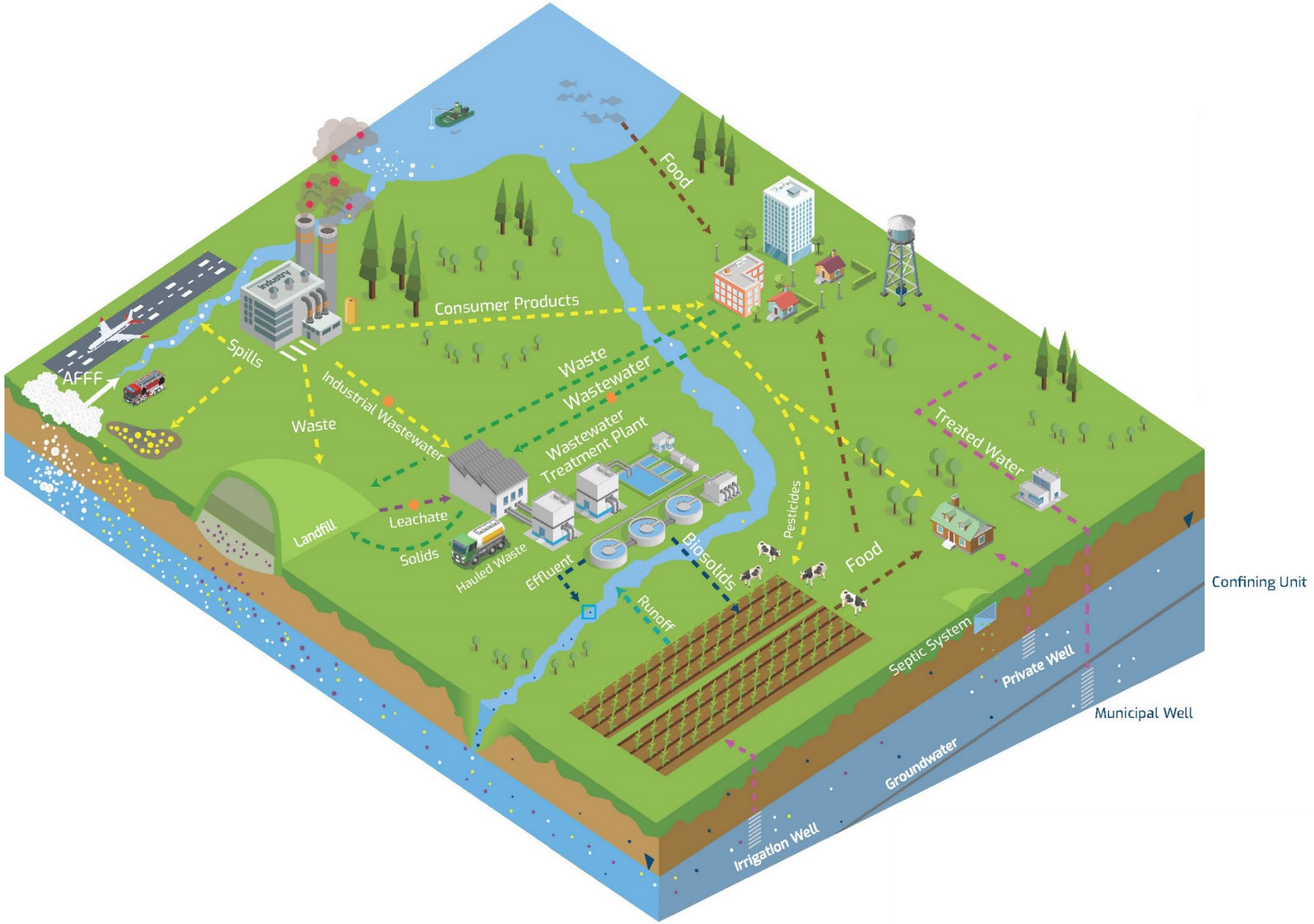
Presentation Overview

- What the CERCLA Hazardous Substance Designation Means
- Potential Impacts
- ASTM Phase I Environmental Site Assessments and Due Diligence
- PFAS Liability/Risk Assessment & Management
- EPCRA TRI Reporting
- TSCA Regulatory Reporting Rule
  - Requirements
  - Deadlines

PFAS in the Environment

PFAS are known to be present throughout the environment.



CERCLA Hazardous Substances

The CERCLA hazardous substance list is a **list of chemicals that are considered hazardous for the purposes of the CERCLA**.

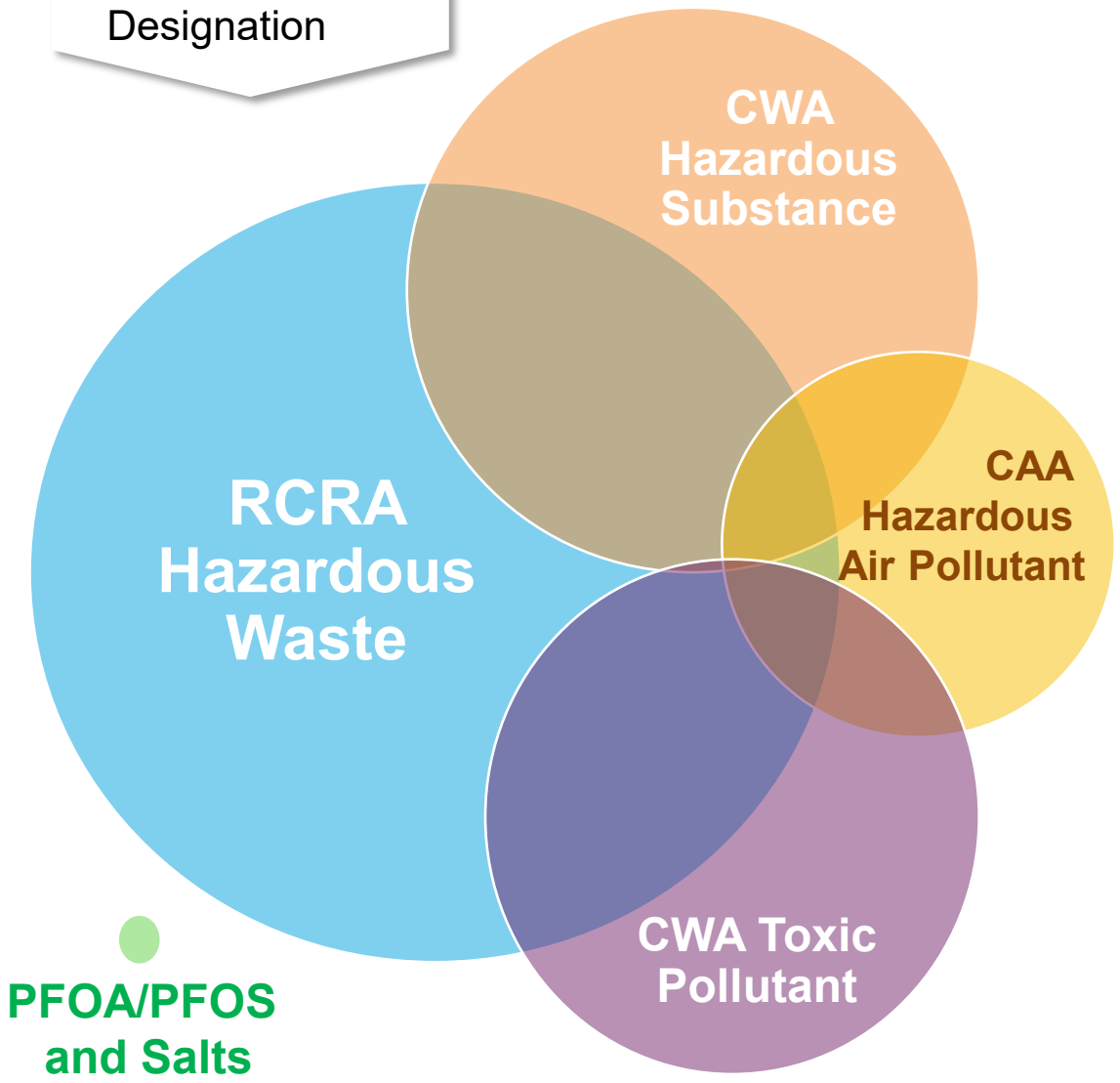
It previously was a List of Lists

- Clean Water Act Hazardous Substance
- Clean Water Act Toxic Pollutant
- Clean Air Act Hazardous Air Pollutant
- RCRA Hazardous Waste

- ***PFOA/PFOS are the first substances designated solely under section 102(a) of CERCLA***

July 8, 2024

- Effective Date of Designation



List can be found in 40 CFR Part 302, Table 302.4.

Important Aspects of Designation

- EPA determined that both PFOA and PFOS “may present substantial danger to public health or welfare or the environment”
  - Therefore, meets statutory designation criteria
- EPA concluded that designation would result in meaningful health benefits
- Designation allows EPA to deploy full suite of CERCLA tools to identify, characterize, and clean up the most contaminated sites expeditiously
  - Would not extend to actions taken on pollutants or other contaminants
  - Fully employ CERCLA cost recovery provisions (“Polluter Pays”)
- No other EPA statute provides the breadth of authority to fully address highly contaminated sites
  - The clean up process is comprehensive and can address contamination to air, water, groundwater, and soil

Other Impacts of CERCLA Designation

- Release Reporting
- Increased Sampling and Treatment to Reach Very Low Standards
- More Costly Cleanups
- More Disposal Capacity Bottlenecks
- Potential Site Reopeners or Addition of PFAS
  (5 Year Reviews or Consent Decree/AOC Negotiations)
- More Litigation and Cost Recovery Damages
- Additional National Priorities List (NPL) Listings

PFAS Reportable Quantities (RQs)

****Threshold = 1 lb per 24-hour period****

Equates to a release of 2 to 3 million gallons of typical MilSpec fluorinated AFFF

Equates to 1 million gallons per day (MGD) wastewater discharge containing 120,000 ng/L of PFOA or PFOS

EPA Does Not Expect A Significant Amount of RQ Exceedances and Reporting other than Significant Sources

USEPA PFAS Enforcement Discretion and Settlement Policy under CERCLA (April 19, 2024)

USEPA Enforcement Discretion

EPA doesn't intend to enforce against entities who appear to be innocent parties because they did not/do not manufacture or use PFAS directly.

For example:

- POTWs & Community Water Utilities
- Municipal Separate Storm Sewer Systems (MS4s)
- Publicly Owner-Operated Municipal Solid Waste Landfills
- Farms That Apply Biosolids
- State/Tribal/Municipal Airports
- Tribal/Local Fire Departments

USEPA Enforcement Discretion

Sectors Targeted for Enforcement

- Manufacturers
- Federal Facilities
- "Other" industrial sources

"…entities who significantly contributed to the release of PFAS contamination into the environment…"

Major PRP settlements with EPA will provide protection from 3rd Party Claims

NPL (Superfund) Sites - Approach

Typical Mechanism - Five-Year Reviews

- Also Consent Decrees and AOCs

If Requested or Required to Sample for PFAS

- Clearly establish the objectives for the sampling
- Focus testing on those PFAS regulated federally and within that state
- Consider a risk-based approach to the testing
  - Understand the potential receptors and exposure pathways
  - Sample background locations and downgradient compliance or sentry well locations
- Coordinate with your selected laboratory on analytes, methods, and quality control (QC)
- Collect appropriate field QC samples to support evaluation of the results

ASTM Phase I / Due Diligence

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Where are PFAS Found?

- Fire stations and training facilities
- Refineries and bulk storage facilities
- DoD sites and military bases
- Commercial and private airports
- Landfills
- Biosolids land application
- Rail yards
- Car washes
- Chemical facilities
- Plating facilities
- Textile/carpet manufacturers
- Residential areas/schools with septic systems
- Public water supplies





PFOA and PFOS listed as CERCLA Hazardous Substances

- **Releases of PFOA and PFOS now meet the ASTM Phase I definition of a Recognized Environmental Condition (REC).**
- Releases of PFAS that are not designated as a CERCLA hazardous substance do not meet the ASTM Phase I definition of a REC and may more appropriately be considered a Business Environmental Risk (BER).

Implications for Due Diligence

- PFOA and PFOS, and their salts and isomers, are subject to the same scrutiny as other CERCLA hazardous substances.
- In states that regulate additional PFAS, those may also be considered a REC.
- Other PFAS releases could be BER or REC, location dependent.
- Findings and conclusions important due to unclear liability and potentially high remediation costs.
- PFAS subject matter experts (SMEs) needed.
- External education, knowledge sharing, and expectation management.

Post-Phase I Considerations

- Phase I ESA results regarding liability to remediate
- Additional evaluation related to PFAS required?
- Recommendations for further investigation of RECs / BERs
- Presence of PFAS should not stop transactions from occurring
- Attorney assistance to ensure proper protections are in place

What Are Some Questions You Need to Answer?

- PFAS manufactured on site now or previously?
- PFAS used in prior or current operations?
- Any fires on or near the property? (AFFF?)
- Is / was there a Fire Fighter Training Area?
- Is / was there an airport or military facility near the site?
- Are there wastewater discharges?
- Were biosolids used on a site you are trying to purchase?

PFAS Regulatory Update: Reporting Rules Update

September 2024

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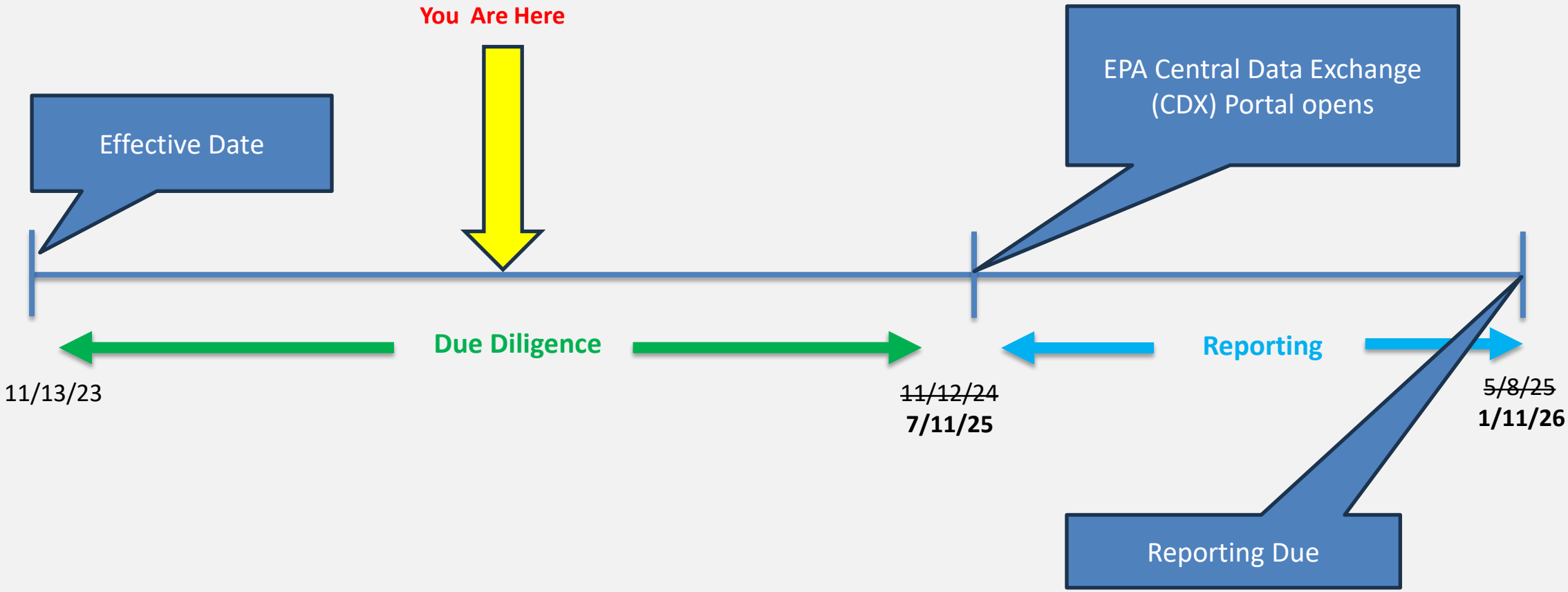
TSCA 8(a)(7) PFAS Reporting / Rule Overview

- Adding Imported Articles to this Reporting Rule was the “Surprise”

- This Section was added to Toxic Substances Control Act (TSCA) under 2020 National Defense Authorization Act (NDAA)
- 40 CFR 705
- Manufacturers and importers of PFAS must report their past PFAS activities from 1/1/2011 through 12/31/2022
- Reporting includes information related to chemical identity and structure, production, use, byproducts, exposure, disposal, and health and environmental effects
- Facilities need to document due diligence throughout 2024 and complete reporting in EPA’s Central Data Exchange (CDX) by **1/11/2026**

Reporting (the "When") – Updated 9/7/24



Small manufacturing entities importing articles (see 40 CFR 704.3) get an extra 6 months of reporting time – **July 11, 2026**

Reporting (the “How”)

For suppliers claiming Confidential Business Information (CBI), importer can submit “joint submission” – importer completes most of the form, and the foreign supplier can complete the chemical identity CBI.

- Uses TSCA Chemical Data Reporting (CDR) format in CDX
- There are no *de minimis* thresholds for PFAS
- Structural Definition of PFAS (list for most)
- There are few exceptions (e.g., the rule has one for municipal solid waste)
- PFAS Reporting requires a look back at the manufacturing / importing from 1/1/2011 to 12/31/2022 (12 years)
- Includes Fluoro-Polymers

Reporting (the “How”)

EPA considers information obtained through trade association meetings, regulatory update conferences, etc. as reasonably ascertainable.

- Reporting standard is CDR’s “Known or Reasonably Ascertainable”
- 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
- In effect, make “NKRA” responses defensible

Reporting (the “How”)

- Streamlined reporting for article importers
  - Generic names allowed for PFAS in articles – LVEs and TSCA Accession systems can be used instead of CAS
  - No joint submissions needed
  - Report imported article volumes as opposed to estimate of quantity of PFAS in the article itself
- Streamlined reporting for R&D manufactured quantities <10kg
  - Since not distributed in commerce, only “chemical information” fields included

Generic Names are used with TSCA Accession Numbers to protect Confidential Business Information. For example, “Alkyl Sulfonic Acid, Perfluoro-” would be the generic name for PFOS, describing the general chemical structure without stating the number of carbons in the alkyl tail.

TSCA PFAS Reporting Applicability (the Who?)

Evaluate which PFAS Reporting Categories apply to your Facility(ies)

Domestic Manufacture of PFAS

- **Chemical Industry**
- Report Production
- Evaluate and report chemicals and byproducts
- Use Regular Reporting

Manufacture using domestic/ imported PFAS in reactions

- **Production**
- **Facilities**
- Evaluate and report byproducts
- Use Regular Reporting

Import PFAS chemical for processing

- **Production**
- **Facilities**
- Coordinate with Supplier
- Use Regular Reporting
- Use Joint Submittals for CBI

Import PFAS Articles

- **Equipment**
- **Distribution**
- Coordinate with Intl Supplier
- Evaluate and report articles manufactured with PFAS
- Use Streamlined Article Reporting

R&D Manufacturer of PFAS

- **Laboratory**
- Report Synthesis and Production
- Use Streamlined R&D Reporting

Due Diligence (the “How”)

Import PFAS Articles

- **Equipment**
- **Retail/Distribution**
- Coordinate with Intl Supplier(s)
- Evaluate and report articles manufactured with PFAS
- Use Streamlined Article Reporting

- **Imported Articles** – start with your stakeholders – train, brainstorm, and document
- Identify the import dataset used by the organization
- Compare your dataset to your US Customs Automated Customs Environment (ACE) records
- Develop survey, distribute to suppliers, and document responses (and non-responses)
- While the FAQ indicates that article importers can use the regular reporting and Joint Submittals, try to leverage the “generic” name option
- Imports of process equipment or complex items (e.g., automobiles) may be source for many PFAS and many fluoropolymers
- Combining the data for article imports into a facility/chemical report will require creativity and careful documentation
- Stakeholders – Customs Records Manager, EHS, Legal, product managers, product stewardship, supplier management

Due Diligence (the “How”)

Import PFAS chemical for processing

- **Production**
- **Facilities**
- Coordinate with Supplier
- Use Regular Reporting
- Use Joint Submittals for CBI

- **Imported Chemicals** – these can be liquids or powders
- Start with import records and figure out the chemicals
- Check the SDS
- Survey the importers
- If the international supplier won’t disclose their CBI, then offer as Joint Submittal
- Joint submittals require lots of coordination – plan extra time internally or for your consultant
- Stakeholders – Customs Records Manager, EHS, Legal, R&D chemists, operational leads, product stewardship, supplier management

Due Diligence (the “How”)

Manufacture using domestic/ imported PFAS in reactions

- **Production**
- **Facilities**
- Evaluate and report byproducts
- Use Regular Reporting

- **Byproducts** – these could occur in plant manufacturing process or in facilities processes – investigate both pathways with the right stakeholders
- Unlikely to have HS data or environmental effects data for byproducts
- Document if no reactions occur / no byproducts are known
- Stakeholders - EHS, Legal, facilities engineering, operational leads, product stewardship

Considerations

Documenting due diligence "encouraged" by EPA

Ask Suppliers for data and document before answering "not reasonably known or ascertainable"

Evaluate the FAQ documents for situational guidance; check EPA TSCA PFAS website for updates

Joint Submissions require significant coordination time

Finding the health and environmental effects data to accompany a PFAS report may be a challenge

Article importers/suppliers may not even know the name of the PFAS in their article - the Streamlined Report format allows use of generic PFAS names

May FAQ Link: https://www.epa.gov/system/files/documents/2024-05/tsca-8a7-reporting-instructions_may2024.pdf

Considerations

Data Consistency – reporting strategy should include checks against other chemical reporting (TRI, CDR, ACE Import Records)

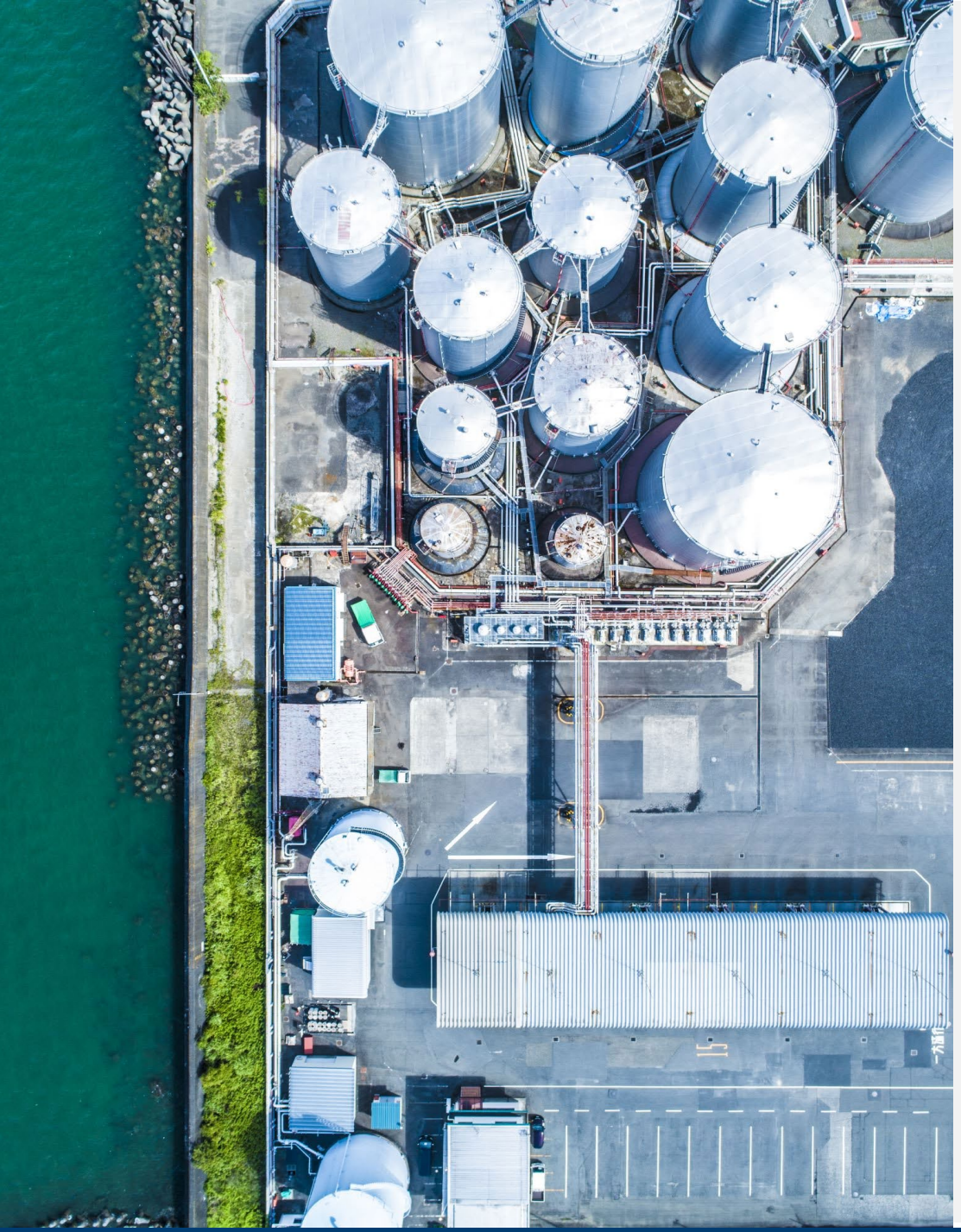
Elimination of PFAS TRI Supplier Notification *de minimis* threshold may create additional information that affects PFAS Reporting

Transfers of ownership during the 2011-2022 period should follow TSCA definitions and guidance – see EPA's "Fact Sheet: Reporting After Changes to Company Ownership or Legal Identity"

No sampling needed!

TRI PFAS Reporting Changes: Eliminating the TRI and Supplier Notification *de minimis* Exemption

EPCRA Section 313



Toxics Release Inventory (TRI) Rule Change

- Effective date November 11, 2023
- USEPA has applied the “Chemicals of Special Concern” designation on the TRI-reportable PFAS to remove the *de minimis* exemption.
- This affects the TRI reporting year beginning January 1, 2024, with
  July 1, 2025 reporting deadline.
- In parallel, EPA continues to add PFAS to the TRI list

Toxic Release Inventory (TRI) Rule Change

PFAS THRESHOLDS

Manufactured (including imported)
more than *100* pounds of the chemical in the reporting year

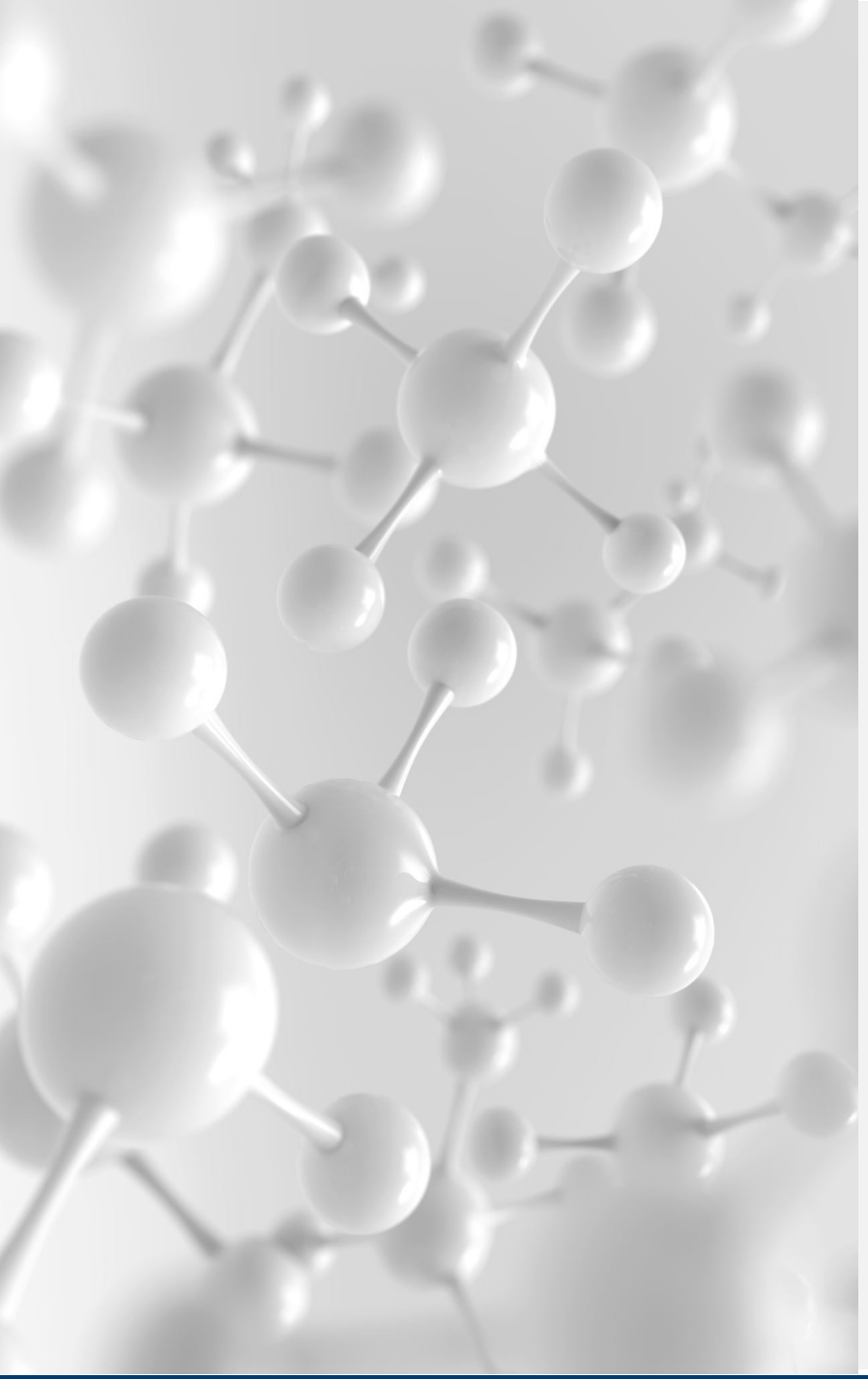
OR

Processed
more than *100* pounds of the chemical in the reporting year

OR

Otherwise Used
more than *100* pounds of the chemical in the reporting year

- Previously, if the concentration of a non-carcinogenic TRI-reportable PFAS was below 1 percent, there was no requirement to identify materials present in a mixture at less than 1% by weight or volume (0.1% if carcinogenic). TRI supplier notification rule removes this *de minimis* exemption for Chemicals of Special Concern, including TRI-Reportable PFAS.
- Eliminating the *de minimis* threshold on the reportable PFAS, combined with the 100-lb reporting threshold for these PFAS chemicals, will increase the number of facilities required to report PFAS under TRI.



Supplier Notifications

- In addition to eliminating the *de minimis* exemption for TRI reporting of Chemicals of Special Concern, this rule also eliminates that exemption for Supplier Notifications.
- For the 190+ TRI-reportable PFAS, “suppliers must notify each customer of any toxic chemical present in a mixture or trade name product with at least the first shipment of the mixture or trade name product in each reporting year.”
- A data avalanche about PFAS will begin as suppliers provide notifications to their clients of the presence of TRI-reportable PFAS in their products.
- Facilities should strengthen the systems used to gather updated SDS or other notifications and track purchases containing PFAS throughout 2024.

Thanks!

Let us know if any questions?

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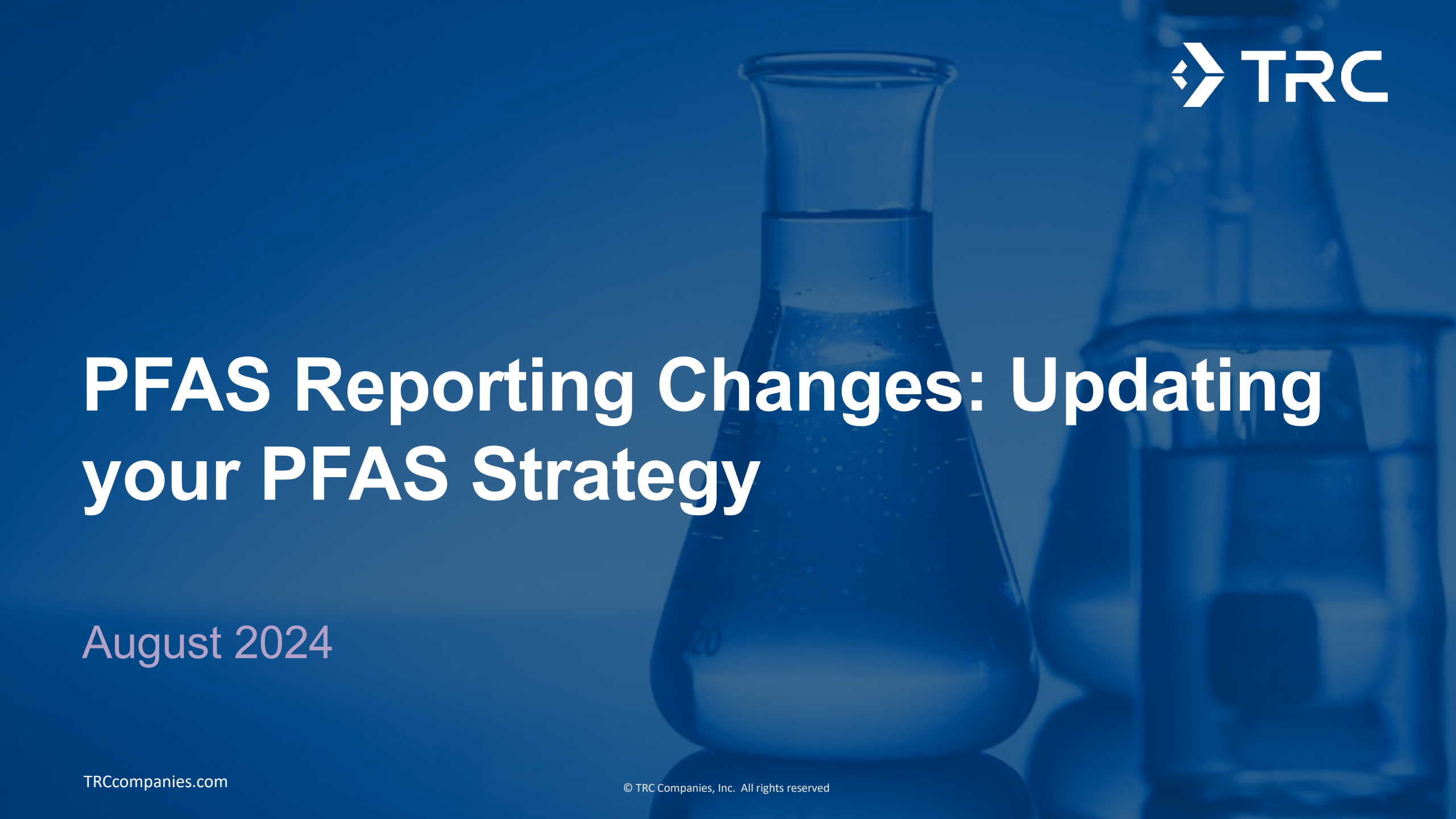

PFAS Reporting Changes: Updating your PFAS Strategy

August 2024

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Manage Risks

- Manage Sites Proactively
  - Develop a plan prior to a site becoming an emergency
- Understand what constituents might become an issue
- Understand what regulatory limits are being considered or implemented
- Minimize potential PFAS contamination
  - Re-structure/re-engineer the “process”
  - Understand alternative products and the supply chain
- Maintain a Balanced Approach
  - Is there a regulatory requirement to address contamination?
  - Understand the fate & transport of PFAS at your site; create a conceptual site model

- Develop / modify organization’s **Chemical Approval Process** to address PFAS
- Consider mass-balance inputs from
  - Process
  - Facilities
  - Contractors

Nuts and Bolts of PFAS Risk/Liability Assessment

Review facility operations, past use, potential use of PFAS-containing substances

Review regional PFAS data and other publicly available information

Maintain understanding of regulatory environment in facility locations

Develop a conceptual site model (CSM): sources, migration, exposure

Characterize and prioritize potential PFAS risks

Develop risk management plan: potential mitigation; PFAS-free alternatives

Takeaways

- Documenting what's reportable / not reportable is most of the TSCA PFAS Reporting effort
- "Data Consistency" - include aligned chemical reporting approaches for all media in your reporting strategy, and document where the numbers don't match
- Plan for Supplier Notifications and RY2024 TRI
- Watch for regulatory changes in TSCA, CWA, CERCLA, and RCRA that will have impacts to your EHS programs
- Leverage your PFAS Risk Management Strategy to mitigate risk