May 27, 2025

VIA ELECTRONIC MAIL

The Honorable Lee Zeldin
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania, Avenue, NW
Mail code: 1101A
Washington, DC 20460

RE: American Chemistry Council's Petition for Rulemaking to Reconsider Provisions of the Trichloroethylene TSCA Risk Management Rule, 89 Fed. Reg. 102568 (Dec. 17, 2024)

Dear Administrator Zeldin:

The American Chemistry Council ("ACC") hereby petitions the U.S. Environmental Protection Agency ("EPA" or "the Agency") under Section 21 of the Toxic Substances Control Act ("TSCA"), 15 U.S.C. § 2620, and under 5 U.S.C. § 553(e), to reconsider two aspects of the Agency's rule regulating trichloroethylene (CASRN 79–01–6) ("TCE") under Section 6 of TSCA, 15 U.S.C. § 2605 ("TCE Rule" or "Final Rule"). Specifically, through this petition, ACC requests that EPA reconsider and amend two discrete provisions of the rule:

(i) revise the byproduct exclusion in 40 C.F.R. § 751.301(c) by removing the "site-limited" restriction that requires byproduct TCE to be reused as a "part of the same overall manufacturing process." This would allow facilities to continue reusing/processing byproduct TCE *either* at the same facility where the byproduct was generated *or* at another facility; and

(ii) delete the last sentence from the "regulatory threshold" provision in 40 C.F.R. § 751.301(b), which would allow facilities to continue discharging wastewater that contains TCE at less than 0.1 percent by weight pursuant to their valid, existing Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permits.

Because time is of the essence and to give EPA adequate time to consider the issues raised in this petition, ACC also hereby requests that EPA take immediate action to revise the TCE Rule by extending the compliance deadlines for the prohibitions on wastewater disposal and reuse of byproduct TCE. An extension would ensure the regulated community does not expend significant resources on compliance with prohibitions that EPA may ultimately modify.

Although this petition focuses on the two above-referenced concerns, which pose immediate harm for ACC's members, the narrow focus of this petition does not indicate acceptance of the rest of the TCE Rule. ACC's submission of this petition does not serve as a waiver of any legal claims, including those related to the matters covered in this petition or those pertaining to other aspects of the TCE Rule.

BACKGROUND

I. Byproduct TCE Reuse by ACC Member Companies.

ACC's member companies manufacture chlorinated organics, including methylene chloride, carbon tetrachloride (CTC), perchloroethylene (PERC), and ethylene dichloride, which unintentionally generate TCE as a byproduct (referred to herein as "byproduct TCE").[1] The companies then further process and reuse that unintentional byproduct TCE as a feedstock in distinct, downstream manufacturing processes to produce a more refined product.

Reuse of byproduct TCE allows companies to obtain and realize the full value of every chlorine molecule processed at the various manufacturing facilities. If the byproduct TCE is not reused in such a manner, it must be disposed of through incineration. Consequently, virgin chlorine must then be generated, using significant energy resources, as a replacement feedstock.

Sometimes, companies reuse the byproduct TCE in the same facility as the one in which the manufacturing process that generated TCE as the byproduct takes place. But in other situations, the reuse or further processing of byproduct TCE takes place at a different, downstream facility with distinct manufacturing processes. For example, the byproduct TCE-containing heavy end stream may be transported to another facility for reuse in a PERC/CTC reactor to produce PERC or CTC. CTC and PERC are chemical compounds used as raw materials in manufacturing processes to create the feedstock for the production of refrigerant gases, such as HFC-134a and HFO-1234yf, which are next generation refrigerants that are critical to "the gradual transition to new technologies driven by the AIM Act,"[2] and in other critical uses such as automative and stationary air conditioning and foam-blowing agents for insulation products that enhance energy efficiency.

Manufacturing sectors in the United States have expanded to reuse these feedstock streams. For example, a new state-of-the-art facility was built in Louisiana in 2017 that reuses streams from other facilities to produce key feedstocks used in the manufacture of next-generation refrigerants for air conditioning systems in 95% of automobiles sold in the United States. Limiting feedstock supplies from domestic manufacturing facilities would force downstream users to import from Chinese producers.

ACC believes that, at the time EPA prepared and finalized the TCE Rule, EPA may not have understood that byproduct TCE is often used in manufacturing processes at a different, downstream site from which it was generated. For the refined downstream use, the byproduct TCE may not be simply fed into the same process from which it was generated. Obtaining the full value of the stream containing byproduct TCE may require a chemical facility with process-specific reactors to reuse and transform the stream into the final product. The loading and unloading processes applicable to such byproduct from the site of generation to another site for

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[1] Throughout the rulemaking process, EPA consistently stated that "TCE that is manufactured as a byproduct (*such as during the manufacture of other chemicals*, *e.g.*, 1,2-dichloroethane (1,2-DCA)) is not considered to be within the condition of use of TCE manufacturing." 89 Fed. Reg. at 102592 (emphasis added); *see also id.* at 102598 (confirming that EPA will consider "TCE production as a byproduct, including during the manufacture of 1,2-dichloroethane ... in the risk evaluation for 1,2-dichloroethane"). Regarding other chemicals, where manufacturing results in the production of TCE byproduct *and* for which EPA has already completed risk management rules, EPA emphasized that risk management requirements for PERC and CTC "provide a level of protection from TCE for potentially exposed persons while addressing the unreasonable risk from [PERC] or CTC." *Id.* at 102593.

[2] *See* 89 Fed. Reg. at 102597.

reuse are subject to existing federal regulatory and industry standard engineering, administrative and personal protective controls to both safely contain the product and protect personnel. EPA was likely not aware of these critical facts because the proposed rule did not distinguish between the byproduct TCE reuse process at the same site or reuse at a downstream facility, so it was not pertinent to the comments. Likely as a result of this, EPA did not acknowledge or address the large volume of byproduct TCE that is reused in processes separate from where it was generated.

II. Regulatory Proceedings Relevant to Byproduct TCE Reuse and Disposal.

On December 17, 2024, EPA announced the TCE Rule, restricting the manufacturing, processing, distribution in commerce, and disposal of TCE (89 Fed. Reg. 102568, adopting 40 C.F.R. Part 751, Subpart D). Although the proposed rule indicated that the effective date would be "60 days following publication of the final rule in the Federal Register,"[3] which is the norm for such rules,[4] EPA, under the prior administration, changed the effective date of the TCE Rule to only 30 days after *Federal Register* publication, in an apparent attempt to push the TCE Rule through before the start of this Administration.[5]

A. Regulation of Reuse of TCE Formed as a Byproduct.

In discussing the TCE Rule, it is worth noting that EPA elected to regulate the "processing (including reuse) of TCE that was manufactured as a byproduct … under the processing as a reactant/intermediate condition of use of TCE."[6] Accordingly, the reuse of byproduct TCE is *not* considered to be part of the "processing: recycling"[7] condition of use, even though there are limited instances in the rulemaking record where the reuse of byproduct TCE is incorrectly described as "recycling." As relevant here, 40 C.F.R. § 751.305(b)(9) permits processing/reuse of TCE that was manufactured as a byproduct only until December 18, 2026, after which time such reuse is prohibited unless the byproducts are reused "within site-limited, physically enclosed systems" in accordance with § 751.301(c) ("Site-Limited Exception"). More generally, 40 C.F.R. § 751.305(b)(2) prohibits processing after June 16, 2025, "except as specified for processing or distributing in commerce in paragraphs (b)(5) through (25) of this section[.]" Within the referenced subsections, section 751.305(b)(9) contains a more specific prohibition on processing, stating that "After December 18, 2026, all persons are prohibited from (i) Processing TCE as a reactant/intermediate." Thus, other than reuse under the Site-Limited Exception, reuse of byproduct TCE is prohibited as of December 18, 2026.

The Site-Limited Exception "exclud[es] from this rule the processing of TCE as a byproduct when that byproduct TCE is processed within a site-limited, physically enclosed system that is part of the same overall manufacturing process from which the byproduct substance was generated."[8] In the TCE Rule, EPA also limits

[3] 88 Fed. Reg. 74712, 74751 (Oct. 31, 2023).

[4] *See, e.g.*, Methylene Chloride; Regulation Under the Toxic Substances Control Act (TSCA), 89 Fed. Reg 39254 (May 8, 2024).

[5] 89 Fed. Reg. 102568.

[6] *Id.* at 102592.

[7] *Compare id.* at 102598 (defining the "Processing as a Reactant/Intermediate" condition of use to "include[] reuse of TCE, including TCE originally generated as a byproduct or residual TCE, as a reactant") *with id.* at 102599 (defining the "Processing: Recycling" condition of use without reference to the reuse of TCE byproduct).

[8] 89 Fed Reg 102592.

such reuse to TCE "processed as a byproduct in a … system that is part of the same overall manufacturing process from which the byproduct TCE was generated."[9] Processing byproduct TCE in such a manner is a blanket exemption from the TCE Rule such that EPA does not regulate such reuse in any way.

Significantly, the TCE Rule also entirely exempts distribution from any regulation. EPA found that "Exposures and emissions are not expected" from "distribution in commerce of TCE."[10] EPA specifically stated that "transportation of TCE is in compliance with existing regulations for the transportation of hazardous materials," which is true for both hazardous wastes and hazardous materials generally, so "EPA determined there is no unreasonable risk of injury to health (workers and ONUs) from the distribution in commerce of TCE."[11]

B. Regulation of Trace TCE in Wastewater.

In the 2020 Risk Evaluation, EPA noted that TCE is a priority pollutant and that it has developed recommended water quality criteria for protecting human health, which are available for adoption into NPDES permits.[12] Consequently, EPA noted it was not evaluating exposures from the surface water exposure pathway in the Risk Evaluation under TSCA.

The TCE Rule itself completely excludes disposal of TCE from regulation except to the extent it involves disposal of TCE in wastewater.[13] "[A] facility that generates TCE as a byproduct, isolates the TCE from the process for the sole purpose of disposal, and sends it off-site for disposal to a hazardous waste incinerator permitted under RCRA is not covered by this final rule."[14] Thus, a facility that generates TCE as a byproduct, processes it in any manner to aid disposal, prepares the TCE for transportation to a disposal facility, and transports the byproduct TCE for disposal is not subject to any requirements of the TCE Rule.[15]

However, for wastewater, 40 C.F.R. § 751.305(b)(4) states that, "After September 15, 2025, all persons manufacturing (including importing), processing, and using TCE are prohibited from disposal of TCE to industrial pre-treatment, industrial treatment, or publicly owned treatment works except as specified in paragraphs (b)(14), (23) (24), and (26) of this section." Such a disposal prohibition appears out of place when evaluating it against the rest of the TCE Rule. First, EPA intended to align permitted uses with permitted disposal in a staggered compliance timeline[16] but the prohibition on processing as a reactant/intermediate (in Section 751.305(b)(9)) applies in December 2026, well after the disposal prohibition application in September

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[9] *Id.* at 102592-93.

[10] Risk Evaluation for Trichloroethylene (Nov. 2020) ("Risk Evaluation"), at 392. Available at https://www.epa.gov/sites/default/files/2020-11/documents/1._risk_evaluation_for_trichloroethylene_tce_casrn_79-01-6.pdf.

[11] *Id.* at 421-22.

[12] *Id.* at 66.

[13] 89 Fed Reg 102593.

[14] *Id.* at 102600.

[15] *Id.*; *see also id.* at 102593 ("the disposal of TCE and the processing and distribution in commerce for such disposal is out of scope for this rule").

[16] 89 Fed Reg 102573.

2025. Second, the TCE Risk Evaluation (at 57) evaluated disposal separately for the "Process Solvent Recycling and Worker Handling of Wastes" condition of use, yet the Final Rule inappropriately includes the "Processing Reactant/Intermediate" condition of use (including TCE as a byproduct reuse) in the same disposal prohibition.[17] Finally, the disposal prohibition applies without the regulatory threshold of 0.1 percent by weight implemented in the Final Rule, which effectively imposes a zero liquid discharge requirement contrary to EPA's decision in the Risk Evaluation not to evaluate wastewater discharges regulated under the CWA NPDES permit program.[18]

C. These Novel Last Minute Final Rule Provisions Were Not Proposed or Considered in the Proposed Rule.

ACC and its members were blindsided by these two provisions that were not fairly noticed in the proposed rule and were developed whole cloth for the Final Rule. For example, the ban on transporting byproduct TCE to another facility for reuse outside a closed system is unique to the Final Rule, and EPA did not preview that it would potentially use the "site-limited" concept in the proposal. Consequently, impacted industry stakeholders did not provide information relevant to the *inter*-facility transfers of byproduct TCE for purposes of reuse. Similarly, nothing in the Risk Evaluation or the proposed rule suggested that EPA would use its TSCA risk management authority to exclude wastewater disposal from the 0.1 percent regulatory threshold in the Final Rule.

ISSUES MERITING RECONSIDERATION AND SUPPORTING RATIONALE

I. EPA Should Remove the "Site-Limited" Restriction from the Byproduct Exclusion in 40 C.F.R. § 751.301(c).

A. EPA Lacked Critical Facts Regarding Reuse of Byproduct TCE Between Sites.

ACC believes that reconsideration of the TCE Rule is appropriate because EPA should weigh additional facts it did not consider at the time it adopted the rule.

First, as discussed above (Background, Section I), it appears that, when EPA drafted the proposed rule and prepared the Final Rule, the Agency did not understand various facts surrounding the reuse of byproduct TCE. EPA may not have understood that while byproduct TCE may be used in the same manufacturing process from which it was generated, it is also frequently transferred to other facilities for processing and reuse. Although EPA said it "recognizes the significant risks to workplace safety if all facilities manufacturing TCE as a byproduct had to distill, remove, and destroy all traces of TCE before further chemical processing could commence,"[19] that is effectively what the TCE Rule requires, because companies that transfer byproduct TCE between facilities for reuse cannot meet the site-limited exclusion requirements for reuse permitted by the TCE Rule. EPA never addressed such issues.

Second, ACC is providing additional information and clarification regarding the limited potential exposures connected with transferring byproduct TCE from the generation site to a separate facility for reuse.

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[17] See *id.* at 102592.

[18] *See* Risk Evaluation at 66.

[19] 89 Fed. Reg. 102592.

As described above, EPA determined that preparation and offsite transfer of TCE-containing waste was appropriately protected by site procedures, and that there was no unreasonable risk during the distribution process, including for waste that contains byproduct TCE. The very same site procedures are protective when transferring byproduct TCE to a downstream site for reuse. Yet, despite recognizing that such protections are in place, the Final Rule failed to consider that the implementation of existing regulatory requirements would also be sufficient for transfer and distribution of byproduct TCE to another facility for reuse.

For example, when transferring byproduct TCE for reuse, facilities utilize OSHA and Clean Air Act (CAA) compliant engineering, personal protective equipment (PPE) and emission control devices when loading the byproduct. Once the byproduct arrives at the destination for reuse, receiving facilities likewise utilize their OSHA and CAA compliant engineering, PPE and emission control devices for unloading.

The Tank Trunk Loading SOP—*i.e.*, the "1. SOP Flow Chart" and "2. SOP Overview," provided below—collectively describe the typical standard operating procedure (SOP) steps for loading and unloading operations at a facility that handles byproduct TCE. First, the SOP Flow Chart depicts the order of the multi-step process to prepare for, conduct and complete loading and unloading activities. Next, the SOP Overview provides additional detail on when PPE is donned or removed for each step.[20]

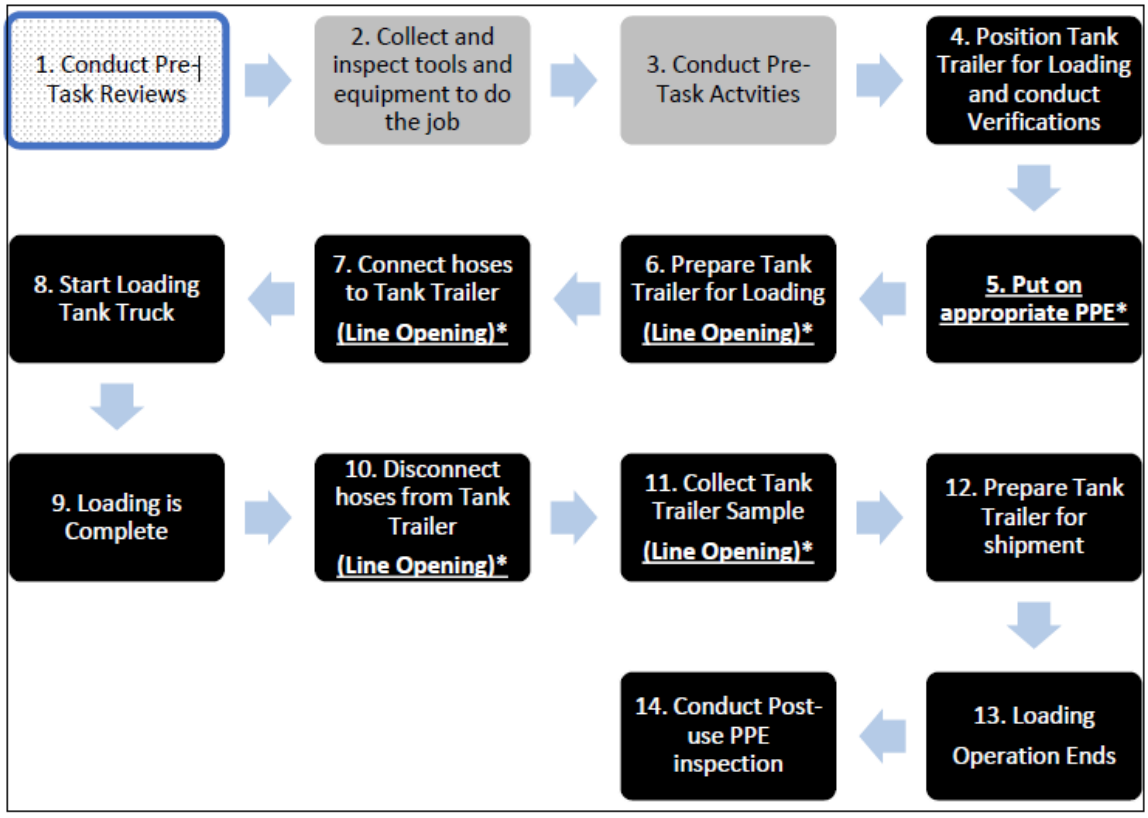
[20] Comments of Halogenated Solvents Industry Alliance (HSIA) on Draft Revision to TCE Risk Determination, Docket No. EPA-HQ-OPPT-2016-0737-0126, Appx. 1, at 9 (Aug. 8, 2022). The SOP Overview references CTC as an example facility that handles byproduct TCE in loading and unloading activities.

B. Tank Truck Loading SOP

1. **SOP Flow Chart**

Color Key:

- Occur in office / control room
- Occur in field
- Occur in both office/control and field



Underline text denotes steps that require additional PPE, and/or when additional PPE is donned or removed

B. Tank Truck Loading SOP (Continued)

2. SOP Overview

1. Conduct Pre-Task Reviews
    a. Scope & Risk Assessment
    b. Safety, Health and Environmental and Ergonomic Considerations
    c. Determine Proper PPE Requirements
    d. Consequences of Deviation from Procedure
    e. Confirm current DOT training for loading personnel
2. Collect and inspect tools and equipment necessary to do the job
3. Conduct Pre-Task Activities
    a. Review Plant Safety Standards
    b. Verify safety equipment operational
    c. Inspect tools, hoses, sample equipment
    d. Evaluate spill potential and verify emergency procedures in place (spill response, evacuation)
    e. Conduct Elevated Work pre-task analysis
4. Collect general information prior to loading
    a. Verify that an order has been placed and the vehicle has arrived at CTC load area
    b. Review the trailing loading papers
    c. Spot tank truck at the CTC loading rack
    d. Verify correct DOT classification and capacity of the trailer.) Apply wheel chocks and place sign in windshield.
    e. Lower the ramp and fall protection in place over dome.
5. **Put on protective equipment (PPE) for loading operation***
6. **Prepare Tank Trailer to Load**
    a. Inspect dome area of tank trailer
    b. Check pressure on trailer
7. **Connect hoses to Tank Trailer**
    a. Connect vent hose and depressurize tank trailer to Vapor Recovery Unit (VRU)
    b. Connect load line to tank trailer.
    c. Verify pressure test of tank trailer and loading/vent hoses.
    d. Place CTC placards on trailer
    e. Line opening ends – extra PPE can be removed if conditions permit
    f. Set CTC load meter – automatic block valve closes once load amount reached.
8. Start loading Tank Trailer
    a. Open manual liquid fill and vent valves on tank trailer
    b. Notify control room ready to load CTC.
    c. Open CTC loading valves in field.
    d. **The CTC is now loading**
    e. Inspect hoses, tank trailer and piping for leaks during the loading process
9. When load is complete,
    a. Put on protective equipment (PPE) for loading and sampling operation*
    b. Close liquid loading valve
    c. Blow any remaining liquid in loading hose back into the tank trailer.
    d. Verify tank trailer is depressurized.
    e. Close vent valve to VRU
10. **Disconnect loading and loading hoses**
    a. Place caps on end of each hose.
11. **As needed, Collect Tank Trailer Sample**
    a. Ensure all personnel are away from the area
    b. Collect samples.
    c. Line opening ends – extra PPE can be removed if conditions permit
12. Prepare tank trailer for shipment
    a. Inspect dome area for cleanliness
    b. Close dome
    c. Attach product tags
    d. Apply tamper evident seal to dome, Record seal numbers
    e. Raise and secure load ramp
    f. Inspect tank trailer for leaks.
    g. Remove chocks and windshield sign
    h. Verify trailer sample analyses meet sales specifications
    i. Give completed load sheet and keys to driver
    j. Record end time.
13. Loading operation ends
14. Conduct Post-Use PPE Inspection and store for future use or discard PPE if not suitable for reuse

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*At a minimum, Line and Equipment Opening Activities require additional PPE: Full or Half Face Air Purifying Respirator and Chemical Resistant Gloves. Some LEO tasks with higher risk of exposure require Chemical Suit and Supplied Air Respirator

Figure 2 below, "Typical Minimum PPE Requirements at Facilities that Process or Load/Unload TCE Byproduct," provides additional detail on the type of PPE used when personnel conduct line equipment opening (LEO) activities, including loading or unloading byproduct TCE.:[21]

Figure 2: Typical Minimum PPE Requirements at Facilities that Process or Load Byproduct TCE

(A.) Operations and Maintenance Personnel - Minimum Facility PPE Requirements:

- **Head:** Safety Glasses with side shields, Hard Hat, Monogoggles (must carry on person), Hearing Protection (muffs or ear plugs)
- **Respiratory Protection**: Mouthbit Organic Vapor Respirator (must carry on person) or Half Face Air Purifying Respirator
- **Body:** Fire Retardant Clothing (area or task specific requirement)
- **Feet:** Safety Shoes with Steel Toes
- ***Goggles and work gloves are required anytime valves are operated**

(B.) Line and Equipment Opening (LEO) Activities with minimal risk of exposure – PPE Requirements:

- **Head:** Safety Glasses with side shields, Hard Hat, Monogoggles (must carry on person), Hearing Protection (muffs or ear plugs)
- **Respiratory Protection**: Full or Half Face Air Purifying Respirator
- **Body:** Fire Retardant Clothing (area or task specific requirement)
- **Gloves**: Chemical Resistant Gloves (i.e. Nitrile)
- **Feet**: Chemical Resistant Boots with Steel Toes

(C.) Major LEO Activities or those with increased risk of exposure – PPE Requirements:

- **Head:** Safety Glasses with side shields, Hard Hat, Monogoggles (must carry on person), Hearing Protection (muffs or ear plugs)
- **Respiratory**: Full Face Respirator with Supplied Air Line (can also include a 5 minute Escape Pack)
- **Gloves**: Chemical Resistant Gloves (i.e. Nitrile)
- **Body**: Chemically Resistant Suit
- **Feet**: Chemical Resistant Boots with Steel Toes

[21] HSIA Comments on Draft Revision to TCE Risk Determination, Appx. 1, at 3. Note that the same PPE requirements apply to handling and transport of both CTC and byproduct TCE.

The PPE and procedures applicable to transferring byproduct TCE for disposal, which is not covered by the TCE Rule,[22] result in little if any difference in risk profile between movement to another facility for reuse. Yet, EPA provided no rationale for allowing offsite disposal of byproduct TCE but prohibiting transfer of byproduct TCE for reuse, despite recognizing that ACC provided information during the rulemaking process about "controls in place at chlorinated organic facilities to mitigate risk associated with TCE byproduct creation and recycling as well as citations to communications with EPA regarding these processes."[23]

Given the CAA and OSHA regulations and associated procedures that already require controls and PPE, preparing and transferring byproduct TCE for reuse at another facility does not result in meaningful risk, and certainly no more risk than transfers for disposal, which EPA found did not pose a risk.

Such low risks are confirmed by recent industrial hygiene ("IH") data that EPA did not have at the time it was preparing the Final Rule. ACC is attaching to this petition this IH data, which documents that the preparation and transport of byproduct TCE for reuse does not result in worker exposure.[24] This IH data provides results outside of the respiratory PPE donned during the loading and unloading process. The data includes monitoring on loading and unloading activities for material contain byproduct TCE and shows no meaningful exposure and, therefore, no unreasonable risk (and certainly no more exposure or risks than may occur during preparation for disposal, which EPA found did not pose an unreasonable risk).

ACC hopes that this additional information regarding procedures already in place at these OSHA-regulated sites, together with the IH data demonstrating no unreasonable risk during loading and unloading of byproduct TCE, allows EPA to reconsider the site-limited reuse exemption and allow reuse of byproduct TCE between sites.

B. The Ban on Reuse Between Facilities Is Not Appropriate or in Accordance with Law.

1. The TCE Rule Exceeds EPA's Authority Under TSCA.

EPA's restriction on byproduct TCE reuse is contrary to TSCA. The Final Rule imposes restrictions on reuse that are beyond the extent necessary to prevent unreasonable risks. In imposing such unnecessary restrictions, EPA exceeded its authority under TSCA Section 6(a).

Under Section 6(a), EPA may only regulate a substance "to the extent necessary" for the substance to no longer present the unreasonable risk. EPA far exceeded that authority by banning off-site processing/reuse of material containing unintentional byproduct TCE when it does not pose an unreasonable risk.[25]

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[22] 89 Fed Reg 102600 ("[A] facility that generates TCE as a byproduct, isolates the TCE from the process for the sole purpose of disposal, and sends it off-site for disposal to a hazardous waste incinerator permitted under RCRA is not covered by this final rule.").

[23] *Id.* at 102592.

[24] *See* Attachment 1 hereto.

[25] Even assuming off-site processing/reuse of byproduct TCE did present unreasonable risk, such risk could be managed by measures less than a ban, such as implementing the Workplace Chemical Protection Program (WCPP) requirements that include testing for and limiting exposures to TCE remain at or below the "Existing Chemical Exposure Limit" or

New restrictions on reuse of byproduct TCE at a downstream facility are unnecessary because this condition of use does not pose any unreasonable risk. In permitting on-site reuse, EPA acknowledged that the reuse process itself is safe and does not pose an unreasonable risk. Again, in excluding on-site reuse from the general prohibition on processing as a reactant/intermediate, EPA referenced information that ACC provided about "controls in place at chlorinated organic facilities to mitigate risk associated with TCE byproduct creation and recycling as well as citations to communications with EPA regarding these processes."[26] These controls and protections are in place at both the site that generates the byproduct TCE and the downstream site that would reuse the byproduct.

Regarding transport of byproduct TCE to another facility for reuse, EPA has broadly acknowledged that transportation of TCE in commerce is safe.[27] Specifically, EPA found that "transportation of TCE is in compliance with existing regulations for the transportation of hazardous materials," so "there is no unreasonable risk … from the distribution in commerce of TCE."[28] Moreover, as discussed above, ACC is providing additional IH data (Attachment 1 hereto) for loading and unloading activities that provides further evidence that there are no meaningful exposures from the movement of byproduct TCE between facilities for purposes of reuse. This data shows there is no unreasonable risk to address, and certainly no more risk than is present during the very same preparation activities that would be required for transportation for disposal, which is unregulated under the TCE Rule. Transportation to a waste disposal facility, which is not regulated under the rule is no safer than transportation to another facility for reuse under existing industry protocols. Thus, additional restrictions on inter-facility transport and reuse are unnecessary.

But even if inter-facility reuse of byproduct TCE did pose unreasonable risk, it could be managed in a less burdensome manner than prohibition. The plain text and legislative history of section 6 show that EPA must tailor its regulation, but EPA did not do so.[29] EPA should recognize the existing OSHA, CAA, and DOT regulations work in tandem to provide sufficient protection regarding the transport and reuse of byproduct TCE between sites.

The TCE Rule is inconsistent in its logic and has accordingly imposed unnecessary restrictions on reuse of byproduct TCE between sites, contrary to TSCA.

2. <u>The TCE Rule Is Arbitrary and Capricious and Not Supported by Substantial Evidence.</u>

As discussed above, movement of byproduct TCE between facilities for purposes of reuse is not meaningfully distinguishable from movement between facilities for purposes of disposal, and yet the TCE Rule treats the two as polar opposites: the former is prohibited after December 2026, while the latter is exempt from

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"ECEL" during the required transfers Although ACC does not object to the 0.2 ppm ECEL, we do not otherwise endorse the WCPP requirements that EPA finalized in the TCE Rule.

[26] 89 Fed. Reg. at 102592.

[27] Risk Evaluation at 460 ("EPA has determined that the following conditions of use of TCE do not present an unreasonable risk of injury to health or the environment: Distribution in commerce").

[28] *Id.* at 421-22.

[29] Under EPA's own reasoning, there are measures short of a ban, such as applying the [interim] ECEL or incorporating the use of PPE and other workplace controls, that would eliminate any potential unreasonable risk from transport and reuse of byproduct TCE between facilities.

the rule. Such unexplained, differential treatment is inherently arbitrary. Moreover, the barebones rationale for banning inter-facility reuse is not supported by substantial evidence, in that it does not present any facts suggesting any potential for adverse effects when transferring byproduct TCE between facilities under tightly controlled conditions, as compared to exempt uses such as disposal and intra-facility reuse. In fact, as EPA's own Risk Evaluation reflects, the transportation that differentiates off-site reuse from intra-facility reuse does not pose meaningful risks. The TCE Rule arbitrarily treats off-site reuse differently than on-site reuse or off-site disposal.

3. EPA Failed to Consider an Important Aspect of the Issue.

Finally, in adopting the TCE Rule, EPA failed to consider whether to permit reuse outside of site-limited reuse, between facilities, was reasonably safe and therefore did not present unreasonable risk. The agency failed to consider whether reuse between facilities was safe even though: 1) EPA considered the act of transporting byproduct TCE for disposal is safe; and 2) EPA concluded that "TCE manufactured as a byproduct should logically be able to be processed, including reused, during or concurrent with the processing of the intended manufactured chemical substance(s),"[30] and permitted such use without any restrictions, indicating that such reuse does not pose an unreasonable risk.

Despite these two conclusions, EPA has not provided an explanation as to why inter-facility reuse introduces unreasonable risk and is not included within the byproduct reuse exemption. It is unclear if EPA was simply under the misunderstanding that byproduct TCE is only or mostly reused on-site. For example, in its response to comments, EPA's response only refers to "comments requesting clarity on whether TCE produced as a byproduct can continue to be processed on-site," and EPA does not acknowledge that the comments were also aimed at byproduct reuse occurring between facilities. EPA also stated that it "understands that TCE may inadvertently be present as a byproduct and that this byproduct waste stream is then processed and recycled back into the manufacturing process,"[31] whereas, in fact, byproduct TCE is *reused* (not recycled) in *a different* manufacturing process than the one from which it was generated to obtain additional value out of a product stream. EPA may not have understood that reuse often occurs off-site, and it certainly failed to consider or address this aspect of the issue.

C. ACC's Members and the Public Face Significant Injury if the Byproduct Reuse Ban Goes into Effect.

Two points are worth noting at the outset: companies that generate TCE as a byproduct cannot simply stop producing such byproduct without ceasing manufacture of the intended substance; and facilities cannot simply flip a switch to relocate the downstream manufacturing facilities currently reusing streams with byproduct TCE to the same facility that generated the byproduct in the first instance. As such, facilities will be significantly impacted by the ban on reuse between facilities. First, downstream facilities that lose access to the byproduct TCE will have to produce additional raw product to make up for the lost product. Second, for byproduct TCE that cannot be used downstream, facilities will have to either reconfigure to incinerate TCE on site that would have otherwise been reused, or they will need to transport all byproduct TCE to an off-site

[30] 89 Fed. Reg. 102592.

[31] *See* EPA, Response to Public Comments, at 37, EPA-HQ-OPPT-2020-0642-0726 (Nov. 20, 2024).

disposal facility. Where incineration onsite is not possible, additional disposal costs will be required to transport the product streams to offsite incineration.

Compliance will be made difficult by the fact that byproduct TCE incineration requires various permits that limit incineration capacity. If all byproduct TCE that is currently reused in a different facility must be incinerated, it is unclear if there is sufficient incineration capacity to manage the volume. Alternatively, if there is insufficient disposal capacity at permitted disposal sites, facility closures may become necessary. A closure of facilities or loss of capacity harm the public interest. Byproduct TCE is used to generate CTC, the building block for next-generation refrigerants. Rules like this that eliminate available resources for such products stifle progress.

Paramount to cost concerns associated with disposal of streams for reuse, the inability to reuse byproduct TCE would require affected companies to generate virgin feedstock and bear the associated capital costs or lose the ability to generate the value-added product. Generating additional streams is also an energy intensive process and at a time that the Administration has declared a National Energy Emergency,[32] EPA should not require companies to expend energy resources when reuse is far less energy intensive.

Based on the foregoing, it is clear there is no benefit to the TCE Rule's ban on reuse of byproduct TCE in a separate facility, and there is significant public and private harm from such a ban. ACC requests that EPA amend the reuse exclusion in 40 C.F.R. § 751.301(c) by eliminating the "site-limited" and same manufacturing process concepts and instead applying the byproduct exclusion to all reuse of byproduct TCE, whether at the same facility from which the byproduct TCE was generated or at a different facility.

II. EPA Should Reconsider the Prohibition on Disposing Even Trace Amounts of TCE in Wastewater by Deleting the Last Sentence from 40 C.F.R. § 751.301(b).

ACC also requests that EPA reconsider the general prohibition on the disposal of TCE in wastewater. EPA should revise 40 C.F.R. § 751.301(b) by deleting the final sentence that currently states: "This threshold does not apply to wastewater." This revision would allow facilities to continue discharging wastewater containing TCE at thresholds less than 0.1 percent by weight in accordance with the terms of their NPDES permits.

As finalized, the TCE Rule prohibits the discharge of wastewater containing *any* level of TCE, including TCE concentrations below the regulatory threshold and regardless of whether such discharges are authorized by an existing NPDES permit. *See* 40 C.F.R. § 751.305(b)(4). EPA imposed this broad prohibition even though there is no scientific basis for finding that discharges pursuant to an NPDES permit present unreasonable risk. During risk evaluation, EPA's analysis of wastewater disposal focused on the "Process Solvent Recycling and Worker Handling of Wastes" occupational exposure scenario, but not other scenarios, such as "Processing as a Reactant."[33] Yet, in the Final Rule, EPA broadly prohibited disposal of TCE in wastewater across all uses and

[32] Executive Order No. 14156, 90 Fed. Reg. 8433 (Jan. 29, 2025).

[33] *See, e.g.*, Risk Evaluation at 389-401 (Table 4-59), 458-59 (explaining that EPA's determination that disposal of TCE in wastewater presents an unreasonable risk is based on comparison of the risk estimates for non-cancer effects and cancer to the benchmarks summarized in Table 4-59).

exposure scenarios, including discharges of trace amounts of TCE in wastewater following reuse of byproduct TCE (*i.e.*, processing as a reactant/intermediate).

Consequently, any processing that may cause trace TCE in wastewater could be prohibited as soon as September 2025. Such a disposal prohibition appears out of place, assuming EPA intended to align authorized uses with allowing ongoing disposal under a staggered compliance timeline.[34] This is because the prohibition on processing as a reactant/intermediate applies in December 2026 (Section 751.305(b)(9)), well after the disposal prohibition applies in September 2025. ACC's members are still evaluating whether their wastewater streams contain TCE, but they are concerned that any trace quantities from an otherwise permitted and permissible use of TCE will lead to noncompliance with the Final Rule. EPA has not adequately justified the basis for excluding wastewater from the otherwise-applicable regulatory threshold (0.1%) or the need to regulate trace amounts of TCE below this threshold.

Because EPA evaluates such discharges under the CWA and regulates them under NPDES permits, the agency excluded the surface water exposure pathway from the TCE Risk Evaluation. As a result, the decision to prohibit such discharges (to any extent) was not evaluated, not included in the proposed rule, and, perhaps, not intended. Industry did not comment on the impact of a zero liquid discharge requirement that would effectively nullify valid NPDES permits, given that it was not in the proposed rule. It seems particularly likely that the prohibition on *de minimis* discharges of TCE in wastewater was unintentional given that the Final Rule permits ongoing manufacturing and processing of TCE longer than it permits discharge of TCE-containing wastewater in accordance with a NPDES permit. The wastewater prohibition could effectively curtail manufacturing and reuse of TCE before the otherwise-applicable 2026 compliance deadline for processing as a reactant/intermediate if companies cannot eliminate every trace of TCE from their discharges.

As noted above, ACC believes the easiest option to address these concerns is to amend 40 C.F.R. § 751.301(b) by deleting the following sentence: "This threshold does not apply to wastewater."

III. EPA Should Extend the Compliance Deadlines While It Considers Revisions to the Final Rule.

To give the agency time to consider these (and potentially other) proposed revisions to the Final Rule, it is critical that EPA promptly take action to extend the compliance dates established in the rule. Specifically, EPA should immediately undertake a targeted notice-and-comment rulemaking proceeding to extend the compliance deadlines in: (i) 40 C.F.R. § 751.305(b)(4), which generally prohibits disposal of TCE in wastewater after September 15, 2025; (ii) 40 C.F.R. § 751.305(b)(8), which generally prohibits manufacture of TCE for processing of TCE as a reactant/intermediate after June 10, 2026; and (iii) 40 C.F.R. § 751.305(b)(9), which generally prohibits processing byproduct TCE as a reactant/intermediate after December 18, 2026. By acting immediately to extend these compliance deadlines, EPA will minimize owners' and operators' investment of limited capital resources on requirements that EPA may ultimately revise. EPA has promulgated (and successfully defended) such limited delay rules.[35]

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[34] 89 Fed Reg 102573.

[35] *See Clean Water Action v. EPA*, 936 F.3d 308 (5th Cir. 2019) (upholding EPA's final rule entitled "Postponement of Certain Compliance Dates for the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category," 82 Fed. Reg. 43,494 (Sept. 18, 2017)).

IV. Reconsideration and Revision of the TCE Rule Would Advance the Purpose of Executive Order 14219, "Ensuring Lawful Governance and Implementing the President's 'Department of Government Efficiency' Deregulatory Initiative."

Under Executive Order 14219, EPA must identify various classes of regulations, with an eye toward rescission or modification, such as "regulations that are based on anything other than the best reading of the underlying statutory authority or prohibition," "regulations that impose significant costs upon private parties that are not outweighed by public benefits," and "regulations that harm the national interest by significantly and unjustifiably impeding technological innovation, ... economic development, [and] energy production." As detailed in this petition, the TCE Rule meets each of these criteria for rescission or modification. Most importantly, the rule is inconsistent with TSCA Section 6(a) by regulating well beyond the "extent necessary" to eliminate unreasonable risk.

CONCLUSION

ACC reiterates that this petition for reconsideration does not seek to address or correct all the issues our members have with the final TCE Rule. Rather, this petition is narrowly focused on two concerns that could be remedied quickly: (1) removing the "site-limited" restriction from the byproduct reuse exclusion in 40 C.F.R. § 751.301(c) that currently requires the byproduct to be reused as "part of the same overall manufacturing process" to allow for reuse at a different site; and (2) deleting the last sentence from the regulatory threshold in 40 C.F.R. § 751.301(b), which would allow facilities to continue disposing of wastewater that contains TCE at less than 0.1 percent by weight in accordance with existing NPDES permits. ACC requests, pursuant to TSCA Section 21, that EPA, in accordance with TSCA Section 6, amend the TCE Rule to address these two concerns. Absent the relief requested in this petition, the TCE Rule would have an unwarranted impact on industry.

Sincerely,

Robert Simon
Vice President, Chemical Products and Technology

Attachment 1

date	constituent	minutes	result	*8-hour TWA
Site A				
6/6/2024	Trichloroethylene (TCE)	420	0.013	0.011
9/12/2024	Trichloroethylene (TCE)	470	0.024	0.024
Site B				
3/12/2024	Trichloroethylene (TCE)	666	0.068	0.094
3/12/2024	Trichloroethylene (TCE)	435	<0.0001	–
6/20/2024	Trichloroethylene (TCE)	488	<0.000099	–
2/13/2025	Trichloroethylene (TCE)	660	<0.000073	–
2/18/2025	Trichloroethylene (TCE)	480	<0.0001	–
2/14/2025	Trichloroethylene (TCE)	480	<0.000073	–
Site C				
2/10/2025	Trichloroethylene (TCE)	701	<0.000069	–
2/13/2025	Trichloroethylene (TCE)	700	<0.000069	–