COMMENTS ON EPA'S PROPOSED PERCHLOROETHYLENE REGULATION UNDER THE TOXIC SUBSTANCES CONTROL ACT

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These comments are submitted jointly by the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), North America's Building Trades Unions (NABTU), the International Union, and the United Steelworkers (USW). The AFL-CIO is the federation of 60 national and international labor unions representing 12.5 million working people across a wide variety of industries. NABTU is a labor organization representing more than 3 million skilled craft professionals in the United States and Canada and is composed of fourteen national and international unions and over 330 provincial, state and local building and construction trades councils. The USW is North America's largest industrial union, representing 1.2 million members and retirees in many industries throughout the United States, Canada and the Caribbean.

These comments focus on EPA's approach to risk management of *occupational* exposures to perchloroethylene (PCE). After decades investigating health and safety conditions in workplaces, having hands-on involvement with the development and implementation of Occupational Safety and Health Administration (OSHA) regulation of workplace exposures to toxicants, and bargaining on behalf of our members, we have critical information and experience that other stakeholders lack about occupational health issues and OSHA regulation of these issues. We therefore are in a unique position to provide EPA with an understanding of chemical hazards such as PCE in this country's workplaces and to help EPA align its PCE risk

management rules with OSHA policy so the two complement each other. Our comments focus on those issues.[1]

We commend EPA for its proposal to protect all workers from the unreasonable risks PCE poses. Effective regulation of PCE exposures is long overdue and OSHA's permissible exposure limit (PEL) of 100 ppm is woefully out of date. We fully support a ban on all consumer uses of PCE. We also support EPA's proposed ban on many commercial uses of PCE.[2] As explained below, however, we urge EPA also to ban the use of all PCE-containing products in the construction industry.

In those commercial settings in which PCE will continue to be permitted, we strongly support EPA's proposal to require the entities responsible for those workplaces to implement workplace chemical protection programs (WCPPs) and EPA's efforts to align those programs with existing OSHA requirements, albeit at the lower exposure levels EPA has found to pose unreasonable risks to workers. We commend EPA for its proposal that all owners/operators continuing to produce or use PCE must meet the existing chemical exposure limit (ECEL) through primary reliance on substitution, engineering and administrative controls. We also agree that where no evidence exists that owners/operators can meet an ECEL of 0.14 ppm without substantial reliance on respirators, EPA should prohibit the use of PCE. Under no circumstances should EPA accept the mistaken premise that reliance on respirators is an effective means to "eliminate unreasonable risk," as TSCA requires. For this reason, alternatives to the proposed

[1] Our expertise lies in practical and policy issues affecting *occupational* exposure to chemicals. We defer to the expertise of other groups in preventing unreasonable risk to the environment and other affected populations, such as the fenceline communities where many of our members and other workers reside.

[2] 88 Fed.Reg. 39652, 39650 (June 16, 2023).

action that would permit increased reliance on respirators to control occupational PCE exposure should be rejected outright.

Our comments proceed in four parts. First, we describe relevant OSHA practices and legal interpretations of the Occupational Safety & Health Act of 1970 (OSH Act),[3] pointing out approaches we believe EPA should adopt in developing its PCE risk management rule, as well as areas in which EPA has responsibility to act where OSHA's current regulations fall short. Second, we describe the criteria we believe EPA should use to determine when to prohibit PCE for a specific condition of use and when to permit its continued use, under regulated conditions. Third, we offer detailed comments on EPA's proposed risk management rule, section-by-section. Finally, we provide comments on several questions EPA's proposal raises.

At the outset, we address three overriding failings of the proposed risk management rule. First, EPA's approach to worker participation is inadequate. Workers know how chemicals are used and where emissions are highest. They fall victim to a chemical's health effects when unreasonable risks are not controlled. They work with the regulated chemicals every day and know which equipment is effective in controlling emissions and which equipment is not. Unfortunately, EPA has not recognized the essential contribution that workers, unions, and other employee representatives can make in identifying hazardous work operations and ways to reduce hazardous exposures.

OSHA recognizes that unions play an important role in protecting worker safety and health, and its standards routinely provide unions with access to information about toxic exposures. But nothing in EPA's proposal requires owners or operators to include workers or their representatives in the development of their plans. EPA should recognize the critical role of

[3] 29 U.S.C. §§ 651 *et seq*.

workers and their designated representatives in ensuring effective control of toxic substances and *require* that owners/operators consult with workers *and their designated representatives* in developing and implementing their plans.

Moreover, while EPA's proposal requires owners and operators to notify workers of monitoring results, it fails to ensure that worker representatives, such as unions, receive those results as well.[4] The proposed risk management rule also does not make clear worker representatives' rights to access information about exposures, as required by OSHA's access standard.[5] EPA's overall failure to identify workers and their collective bargaining representatives as stakeholders is unfortunate and likely the cause of its failure to ensure genuine, meaningful participation by workers *and their representatives* in the occupational control strategy EPA mandates. Worker participation, and the participation of their representatives, without fear of retaliation or discrimination, is critical for effective implementation of workplace safety and health rules. Throughout these comments, we have identified areas where EPA's control strategy should be better aligned with OSHA's framework on the rights, access and participation of workers and their representatives.

Second, while EPA repeatedly stresses that its risk management rule incorporates the hierarchy of controls,[6] it also alludes to the continued, regular use of respirators under the WCPP.[7] EPA has, moreover, proposed increased reliance on respirators as one of its alternative regulatory actions, an alternative that is completely unacceptable.

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[4] 88 Fed.Reg. at 39675.
[5] 29 CFR 1910.1020.
[6] *See* 88 Fed.Reg. at 39659 (EPA's approach would not rely solely or primarily on the use of respirators); *id.* at 39675 (owners/operators must use engineering and work practice controls to the lowest levels achievable and only then may they resort to reliance on respirators).
[7] 88 Fed.Reg. at 39694 (EPA identified respirators with an APF of 25 as the minimum necessary to eliminate unreasonable risk in a condition of use that may continue to use PCE); *id.* at 39695

Routine reliance on respirators to protect workers from chemical exposures is not an effective alternative to engineering or other controls. OSHA has consistently found respirators to be unreliable as protection against harmful chemicals, warning that respirators are "uncomfortable to wear, cumbersome to use, and interfere with communication in the workplace, which can often be critical to maintaining safety and health."[8] Courts have upheld OSHA's findings that respirators are "woefully inadequate" to protect workers due to "problems with adequate facial fit, increased heat stress, reduced vision, increased breathing resistance, speech limitation, limited mobility, and excess weight."[9] Any regulatory approach that would permit routine respirator use beyond the time necessary to install other controls or where other controls are infeasible would be an unprecedented and unjustified reversal of decades of occupational health policy and practice.

Since OSHA's PEL for PCE has been 100 ppm for the last 50 years, it is particularly important that EPA make clear to owners and operators that, to meet the new ECEL, they may have to implement more effective engineering and administrative controls and cannot simply fall back on respirators. EPA must make clear that its approach to the hierarchy of controls is consistent with the approach OSHA has taken in regulation since its inception and with well-established industrial hygiene policy. In other words, owner/operators that cannot eliminate or

(EPA identified respirators with APF of 10 as the minimum necessary to protect workers). In both these instances, EPA has no information to suggest that engineering and administrative controls have been implemented to reduce exposures to the lowest feasible level and seems to assume that continued respirator use will be acceptable.

[8] *See, e.g.,* Occupational Exposure to Methylene Chloride. 62 Fed. Reg. 1494, 1583 (Jan. 10, 1997); Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite, 51 Fed. Reg. 22,612, 22,693 (June 20, 1986) (describing the limits of respirator use); Occupational Exposure to Respirable Silica, 81 Fed. Reg. 16,286, 16,293 (Mar. 25, 2016) (describing how OSHA health standards generally rely on the hierarchy of controls and limit respirator use).

[9] *Pub. Citizen Health Rsch. Grp. v. U.S. Dep't of Lab.*, 557 F.3d 165, 179 (3rd Cir. 2009) (discussing why respirators are strongly disfavored).

substitute PCE must implement some combination of engineering and administrative controls to reduce PCE exposures to 0.14 ppm or to the lowest levels that those controls can achieve and may rely on respirators only when—in alignment with OSHA policy—engineering, work practice and administrative controls are in place and still do not achieve the ECEL. We object to respirator use except in that limited circumstance.

Finally, EPA should attempt to use the same terminology for regulating occupational exposures that both OSHA and NIOSH routinely use, where appropriate. Some different terminology is mandated by statute (*e.g.,* OSHA regulates industries and workplaces; EPA regulates conditions of use). However, where it is not mandated, the use of undefined new terms will create unnecessary confusion. In particular, OSHA distinguishes between "performance-oriented standards," which allow the regulated entity to adopt the compliance approach that best suits its facility, and "specification standards," which dictate the exact technology or PPE employers must use to comply with a rule (such as fume hoods in laboratories). Sometimes, OSHA's regulatory approach is a combination of both. Presumably, EPA's use of the term "prescriptive controls" is intended to refer (in OSHA terms) to "specification standards," but without a definition, the term may leave the regulated community confused about how EPA's standards compare with OSHA's.

I. The Limits of OSHA PCE Regulation

OSHA adopted a PCE PEL of 100 ppm in 1971 under section 6(a) of the OSH Act, based on science that was outdated even then. In 1989, OSHA published updated PELs for more than 400 substances, including a reduced PEL for PCE of 25 ppm. OSHA's effort to update its outdated PELs in one rulemaking was invalidated by the 11th Circuit.[10] OSHA has made no

[10] *AFL-CIO v. OSHA,* 965 F.2d 962 (11th Cir. 1992).

effort to update its PEL for PCE since the 11th Circuit's decision and it currently has no plans to do so.

The health standards OSHA has promulgated since it adopted its first standards under section 6(a) are comprehensive standards, which include not only a PEL, but prescribe other control and protective measures (which OSHA refers to as "ancillary provisions"). OSHA's PEL for PCE stands by itself; it is not part of a comprehensive standard. As such, it simply leaves employers to meet the PEL by implementing the hierarchy of controls.[11] Employers must also comply with OSHA's respirator standard, which imposes an implicit duty to monitor exposures to ensure compliance. But OSHA imposes no other requirements on employers to control PCE, such as the duty to demarcate regulated areas, to provide training beyond that required by the Hazard Communication standard, to provide housekeeping or hygiene facilities, or to maintain a medical surveillance program.

OSHA's PCE standard fails to protect workers from unreasonable risk in several ways. First, the standard is based on science from the 1960s or earlier. It is based on an industry consensus standard reached before 1970; there is no indication that this consensus standard was aimed at preventing the significant or unreasonable risks workers face today. While many employers may have reduced PCE exposures below 100 ppm in the more than 50 years since OSHA adopted the PCE PEL, employers are under no statutory duty to do so. OSHA imposes no specific duty to protect workers from PCE's dermal effects, beyond the general duty to provide personal protective equipment in 29 CFR 1910.132.

[11] 29 CFR 1910.134(a).

Nor does OSHA's Hazard Communication Standard impose a duty on owners/operators to reduce exposures to PCE below 100 ppm.[12] That standard requires chemical manufacturers to prepare safety data sheets (SDSs) advising of a chemical's hazards and recommended methods for hazard control. But OSHA has made clear that "*there is no requirement for employers to implement the [SDS's] recommended controls.*"[13]

Likewise, the OSH Act's general duty clause is of little use in protecting workers from PCE exposures below 100 ppm.[14] EPA has correctly identified many of the obstacles OSHA would face if it tried to rely on the general duty clause.[15] Other obstacles exist as well. For example, OSHA regulations provide that where a specific standard already applies, the general duty clause does not.[16] OSHA has advised its inspectors that "section 5(a)(1) shall not normally be used to impose a stricter requirement" than required by an OSHA PEL.[17]

Moreover, an analysis of the few recent general duty clause citations OSHA has issued for chemical exposures reveals that none were issued to protect workers from overexposure to PCE or for exposures above an occupational exposure limit. Instead, they were issued only where certain chemical exposures led to clinical health effects, most with symptoms of acute onset within a brief period of time after exposure, and not chronic conditions.[18] So, in practice, OSHA has not cited overexposure to chemicals using the general duty clause absent evidence of

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[12] 29 C.F.R. §1910.1200.
[13] Hazard Communication, 77 Fed. Reg. 17,574, 17,693 (Mar. 26, 2012)(emphasis added).
[14] 29 U.S.C. § 654(a)(1).
[15] 88 Fed.Reg. at 39657.
[16] See 29 U.S.C § 654(a)(1); 29 C.F.R. § 1910.5(f). See also, *Chewy, Inc v. Dep't of Labor,* No. 19-0868 (11th Cir. 2023).
[17] OSHA Regulatory Directive, *Inspection Procedures for the Respiratory Protection Standard* at 5 (June 2014), https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-00-158.pdf.
[18] AFL-CIO, *Death on the Job* at 141 (2023), available at https://aflcio.org/reports/death-job-toll-neglect-2023.

actual, and usually acute, harm, a practice that is not a preventative substitute for EPA risk management requirements.

These limitations on OSHA's standards and statutory authority mean that TSCA risk management rules are necessary to protect a population substantially larger than EPA has acknowledged. It is true, as EPA noted, that TSCA risk management rules are necessary to protect workers who are not covered by OSHA regulations, such as public sector workers in states without OSHA state plans, independent contractors, etc. But TSCA rules are also necessary to protect workers whose exposures to PCE fall between 100 ppm—the lowest exposure level OSHA can currently enforce, yet one set more than 50 years ago—and 0.14 ppm, the exposure level EPA has determined is necessary to protect workers from unreasonable risks.

II. Eliminating Unreasonable Risk

A. Criteria EPA Should Rely Upon to Determine When to Prohibit a PCE Condition of Use

First, EPA must adopt a risk management rule that eliminates the unreasonable risk workers face from PCE. Where an existing chemical exposure limit, together with a short-term exposure limit (STEL) and action level, would do so, we believe EPA should adopt an ECEL that protects workers from the most sensitive health endpoint. TSCA requires nothing less. In this regard, we believe EPA has correctly selected chronic and acute neurotoxic effects of PCE as the reference point for setting an ECEL that will eliminate unreasonable risk to workers.

Second, EPA must also determine, for each identified PCE condition of use, whether employers can feasibly control exposures to the ECEL, through principal reliance on engineering and administrative practice controls, and without relying on respirators. In making that determination, EPA should adopt the definition of technological feasibility first articulated by the

D.C. Circuit for OSHA standards in *United Steelworkers v. Marshall*,[19] and adopted by every other circuit to consider the issue, in the PCE risk management rule. Under the prevailing legal standard, a rule is technologically feasible where the agency can show:

> a reasonable possibility that the typical firm will be able to develop and install engineering and work practice controls that can meet the PEL in most of its operations. [An agency] can do so by pointing to technology that is either already in use or has been conceived and is reasonably capable of experimental refinement and distribution within the standard's deadlines… Insufficient proof of technological feasibility for a few isolated operations within an industry, or even [the Agency's] concession that respirators will be necessary in a few such operations, will not undermine this general presumption in favor of feasibility. Rather, in such operations firms will remain responsible for installing engineering and work practice controls to the extent feasible, and for using them to reduce [chemical] exposure[s] as far as these controls can do so.[20]

By adopting this standard for determining whether PCE exposures can be controlled "by installing engineering and [administrative] controls to the extent feasible," *id.*, EPA can ensure that employers continually work to reduce exposures without regard to respirators to remain in compliance with the ECEL. Industrial hygiene policy and OSHA regulatory requirements conclusively demonstrate that routine reliance on respirators is not an effective means of protecting workers from toxicants. EPA should clarify that this standard applies to its risk management rule for PCE.

Third, when EPA lacks evidence that engineering and administrative controls can reduce exposures to 0.14 ppm, it should ban continued use of PCE. Any course other than a ban on PCE use in such circumstances would fail to meet EPA's statutory duty to eliminate unreasonable risk. Of course, EPA must ensure that any substitutes for PCE are no more toxic and preferably substantially less toxic without posing other hazards than PCE. Once EPA has determined that it

[19] 647 F.2d 1189 (DC Cir. 1980).
[20] *Id.*

will prohibit a PCE use, it should mandate that the use be stopped as soon as feasible. Extended deadlines to comply with a regulatory phase out of a PCE unnecessarily prolong exposure to unreasonable risks.

Finally, where EPA believes it is necessary to prohibit a PCE use, it should limit the critical use exemptions it authorizes under TSCA 6(g). Critical use exemptions should be narrow, and last only as long as necessary for safer substitute alternatives or processes to be developed or for the critical nature of the use to end. This is particularly true when the owner/operator granted the exemption is either the federal government or working for the federal government, because the government can fund the research and development necessary to identify alternatives. Further, when a 6(g) exemption is about to expire, the burden should be on owners/operators to demonstrate that the use of PCE remains critical and there remain no substitutes for PCE. Because, even if workplace exposures to PCE can be controlled to 0.14 ppm, its continued use means downstream exposures will continue and they should be avoided to the extent possible.

The framework we are proposing has a number of advantages. First, it satisfies TSCA's statutory command that EPA eliminate unreasonable risk by using the most effective tools—elimination or substitution, where feasible, or engineering controls and administrative controls. It is also consistent with both OSHA and NIOSH's long-standing preference for controlling exposures through the hierarchy of controls. Second, even in those instances where EPA permits a continued condition of use, this approach will incentivize industry to substitute other, safer chemicals, the preferred method of controlling occupational exposures. Industrial hygiene policy places elimination of, or substitution away from, toxic chemicals at the very top of the hierarchy

of controls.[21] While OSHA's performance-oriented standards generally call on employers to control exposures through any combination of substitution, engineering and work practice or administrative controls, the cost of engineering and work practice controls often convinces employers to eliminate the use of a toxicant posing unreasonable risks. That is, engineering and work practice controls may involve capital investments. Any rational employer should prefer to substitute a safer chemical or process alternative if one is available.

Accordingly, where EPA determines owners/operators can feasibly control exposures to 0.14 ppm, we support EPA's decision nonetheless to require them first to consider elimination or substitution of a safer chemical or process in developing their exposure control plan, but where those options are unavailable, then to implement and maintain engineering and administrative controls to reduce exposures to the lowest level feasible. In the end, we believe this approach will ultimately lead to the development of safer alternatives.

But EPA must additionally prohibit owners/operators from substituting equally or more toxic products that EPA has not yet regulated or chemicals that pose other hazards, such as more flammable chemicals. It must offer technical assistance to owners/operators on safe substitution, because many owners/operators, particularly small businesses, cannot reasonably be expected to weigh the relative toxicity of various chemicals that salespeople promote. Owners/operators, workers, and their representatives will need guidance to identify acceptable substitutes. We believe EPA should identify the substitutes it views as "safe" or the chemical properties it views as preferred (or discouraged). Substituting an unregulated chemical posing unreasonable risks for a regulated chemical posing unreasonable risks does not improve worker health and safety and should be forbidden.

[21] https://www.cdc.gov/niosh/topics/hierarchy/default.html.

B. EPA Should Ban the Use of PCE-Containing Products in the Construction Industry

Consistent with our proposed framework, we agree with EPA's proposal to ban most conditions of PCE use, while permitting the continued use of PCE in a limited number of applications, with one critically important exception: *All* uses of PCE-containing products should be banned in *construction*. In explaining its rationale for permitting certain conditions of use to continue, subject to ECELs and WCPPs, EPA notes that it has the highest confidence that those requirements can be met in highly standardized and industrial settings, such as where PCE is used in closed systems,[22] conditions completely absent in the construction industry. By contrast, EPA notes that among the factors making it doubtful certain conditions of use can comply with an ECEL are work activities that take place in the field, making it difficult to establish regulated areas and conduct monitoring; work that involves open systems, where workers have manual contact to chemical substances; circumstances that create challenges for regular respirator use; and work that may take place in small, enclosed spaces (or, in OSHA parlance, "confined spaces").[23] All of these factors characterize the use of PCE-containing products in construction. In fact, these were among the factors that led EPA to ban completely the use of methylene chloride-containing products in construction, rather than relying on a training and certification regime.[24] We therefore urge EPA to follow the same logic it employed in its methylene chloride risk management proposal and ban the continued use of any PCE-containing adhesives, solvents, paints, coatings, degreasers, and cleaners in the construction sector.

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[22] 88 Fed.Reg. at 39694.
[23] *Id.* at 39691.
[24] Methylene Chloride; Regulation Under the Toxic Substances Control Act (TSCA), 88 Fed.Reg. 28284, 28318, 28322-23 (May 3, 2023).

III. Comments on Specific Provisions of the Proposal

Definitions and Scope:

Owner/Operator – We believe that the PCE risk management rule should broadly apply wherever PCE is found in a workplace. The OSH Act is an employment law, and its application is tied to the employer/employee relationship. TSCA is not. There is no statutory reason to limit the application of this rule to employers with employees. Furthermore, OSHA itself has recognized that it is often necessary to hold one employer responsible for the exposures of another employer's employees.[25] While long true in the construction industry, where employees of different employers work side by side, it is increasingly the case across many industries. We therefore agree with EPA that the PCE risk management rule should apply to owners and/or operators.

Potentially exposed person – We agree that the PCE risk management rule must protect all potentially exposed people at the workplace. As mentioned above, TSCA is not an employment law, and there is no basis for EPA to tie exposure protections to employment status. With businesses' increased reliance on contractors, gig workers, and independent contractors, EPA is correct that this rule must protect everyone who is occupationally exposed, regardless their employment status.

Likewise, EPA is correct in eliminating the distinction between directly exposed workers and occupational non-users (ONUs). This distinction—never before relied upon in assessing occupational risks—is flawed. Some ONUs, like service, cleaning and maintenance workers, may have very high exposures, while other ONUs' exposures may be very low. Grouping both

[25] *Multi-Employer Citation Policy,* OSHA Instruction CPL 2-0.124 (1999), *available at* https://www.osha.gov/enforcement/directives/cpl-02-00-124.

together for purposes of risk evaluation masks important exposure differences. But for purposes of regulation, not risk evaluation, anyone who works in a facility and faces the same exposures should have the same protections. We applaud EPA for recognizing this important point. [26]

Worker Chemical Protection Program Elements:

We agree with EPA that where PCE is not banned, a stringent worker protection program is necessary to protect those who are potentially exposed throughout their working lifetime. We generally support EPA's efforts to closely align its WCPP with OSHA's existing regulatory regime: Owners/operators are familiar with OSHA's approach to regulating health hazards, which is consistent with long-standing and widely accepted principles of industrial hygiene practice. We support EPA's decision to adopt an ECEL and an action level, and requirements for monitoring, regulated areas, training, and recordkeeping (requirements that, as noted earlier, are missing from OSHA's outdated PCE standard). However, we also believe EPA should adopt a short-term exposure limit (STEL).

ECEL and STEL – We agree that EPA should adopt an ECEL that protects workers against the most sensitive health endpoint, even if they have exposure to the chemical for their working lifetime.[27] We also agree that EPA should establish an action level at one-half the ECEL, which triggers certain stratified compliance duties by imposing fewer requirements when exposures are known to be below an action level, requiring continued monitoring when exposures are between the action level and the ECEL and, when exposures exceed the ECEL, requiring strict adherence to the hierarchy of controls, combined with other ancillary requirements, such as regulated areas. This stratified approach to regulation will impose

[26] 88 Fed.Reg. at 39661.
[27] *Id.* at 39659.

appropriate controls, based on the particulars of each workplace, yet should ultimately encourage owners/operators to shift away from using PCE and to substitute safer chemicals and processes.

We commend EPA for selecting the neurotoxic effects of PCE as the health endpoint of concern—because it is the most sensitive health end point for which EPA has data of harm—and seeking to protect workers from this unreasonable risk to their health. However, unlike its proposed risk management rule for methylene chloride, EPA has not proposed a short-term exposure limit for PCE. Given the neurotoxic effects of PCE, we believe a STEL is warranted. The STEL should be set below the highest level at which no neurotoxic effects in humans have been found, with a safety (uncertainty) factor.

Exposure Monitoring – We applaud EPA for proposing to mirror the monitoring paradigm OSHA relies upon in its health standards. Unfortunately, EPA's proposal omits two important elements of the OSHA monitoring program. First, OSHA requires exposure monitoring to be conducted without regard to respirator use.[28] EPA's proposal rule does not make clear that "personal breathing zone" air samples are to be taken without regard to respirator use. In light of the confusion over the role PPE use should play in EPA's decision about chemical risks and their control, it is imperative that EPA explicitly state that exposure must be measured without taking respirators into account, for reasons already covered.

Second, OSHA health standards routinely require employers to provide employees or their designated representatives with the opportunity to observe the monitoring.[29] This is an important check to ensure that owners/operators are correctly monitoring employee exposure and

[28] *E.g.,* 29 CFR 1910.1052(b) (OSHA's methylene chloride standard; definition of employee exposure).
[29] *See, e.g., id.* 1910.1052(d)(6).

that their monitoring is representative of employee exposures. EPA should add this requirement to the final PCE risk management rule.

While we agree with EPA that initial and periodic monitoring should be conducted regularly, we believe it should be completed at least once every one to two years. This ensures that monitoring results continue to be representative of actual exposures. Exposure may change over time. Results taken in one year may not reflect exposures years later. For this reason, EPA's proposal to allow 5-year-old monitoring data to substitute for more recent measurements is too long. A more limited lookback for owners/operators that have representative monitoring data would better reflect actual exposures. In addition, EPA should ensure that owners/operators document what exposure measurements represent and how exposure monitoring was conducted.[30] Finally, area monitoring is not an appropriate substitute for representative personal breathing zone samples.

Methods of Compliance – We applaud EPA for adopting the hierarchy of controls as mandatory in its proposed PCE risk management rule framework. Insisting that owners/operators implement all engineering and work practice controls before resorting to respirator use is fully consistent with established industrial hygiene policy and OSHA's regulatory approach.

Exposure Control Plan – We agree with EPA that owner/operators must document the basis for their selection of controls, including their evaluation of whether substitutes for PCE are available or process changes can eliminate the use of PCE. Analyzing and documenting each step required in the exposure control plan is important to implementing the most effective PCE exposure controls.

[30] *See, e.g., id.* 1910.1052(m)(2).

We agree with EPA that, when possible, elimination or substitution of other chemicals for PCE is the preferred approach to exposure control. We also agree that employers must avoid substituting a chemical which is equally or more toxic than PCE or creates other hazards. However, the language of the WCPP is not strong enough to ensure that owners/operators substitute less hazardous chemicals for PCE, rather than just substituting less *regulated* chemicals. If EPA is to prefer substitution, it should ensure that it does not inadvertently encourage "regrettable substitution." One way to do so would be to prohibit owners/operators from substituting another chemical EPA has found to pose unreasonable risks, and to identify substitutes it views as safe, preferred or discouraged.

EPA omitted several important subjects from the exposure control plan. Most importantly, there is no provision requiring owner/operators to include workers in developing the plan. Workers and their representatives are critically important participants in devising any control strategy. They work with the product and know the practicalities and vulnerabilities in any control strategy and, often, the most effective methods to remedy them. The participation of workers and their representatives in the development of the exposure control plan should be mandatory.

In addition, the exposure control plan should include documented procedures for ensuring that all potentially exposed persons do not take PCE contaminated clothing home with them. Owners/operators must be required to ensure that protective clothing is provided to workers exposed to PCE, to provide changing areas for affected workers, and to launder contaminated clothing.

Direct Dermal Contact Control (DDCC) – We agree that limits on dermal exposure to PCE are necessary to protect workers from exposure through dermal contact with the chemical.

We also agree that dermal protections should align with the hierarchy of controls; in other words, owners/operators must protect workers from dermal exposure primarily through reliance on engineering and administrative controls, and rely on personal protective equipment only to the extent those controls do not fully protect workers. Even with fully implemented engineering and administrative controls, there may be circumstances in which workers will need to wear PPE in order to be protected from dermal exposures. For instance, an operator may still need PPE if the system is not completely enclosed, or some workers who do not need PPE during normal operations of a completely controlled system may still need PPE when troubleshooting, repairing and maintaining the system. Employers must be required to ensure PPE is suitable for the purpose and task, provided at no cost to the potentially exposed person, be replaced frequently enough to maintain its effectiveness, and properly fit.

Training -- We applaud EPA for including specific requirements for training potentially exposed workers in the hazards posed by PCE, how to handle the chemical properly, and the regulatory requirements in place to protect them. Training is an essential component of any control strategy. Equally important is the requirement that training be provided in a form and language suitable for the affected workers.

Recordkeeping:

Employee participation -- Section 751.613 is underinclusive. In the preamble to its proposed rule, EPA states that it is "proposing to require owners/operators to provide potentially exposed persons and their designated representatives regular access to exposure control plans, exposure monitoring records and PPE program implementation and documentation."[31] The proposed rule comes nowhere close. EPA must require owner/operators to provide all potentially

[31] 88 Fed.Reg. at 39679.

exposed persons *and their designated representatives* with access to the information, consistent with OSHA's "Access to Employee Medical and Access Records."[32] Section 751.613(b)(4) does not do so. It requires owners/operators to document the procedures for making information available. It does not ensure that information is made available promptly when requested; it does not forbid owner/operators from redacting relevant information; and it does not include any right to information for a labor union or other representative of exposed employees. Each of these significant failings should be corrected.

Under OSHA's Access Standard, "employees and their *designated representatives*" are entitled to specified information.[33] For purposes of access to exposure records or any analyses of exposure records, OSHA defines a "designated representative" as "a recognized or certified collective bargaining agency" who "shall be treated automatically as a designated representative."[34] A recognized or certified collective bargaining representative is, under Federal labor law, the representative of workers and must be provided with access to information about exposure. Workers not represented by unions should also be permitted to designate a representative to have access to exposure information. Often, unions are the organizations with expertise to analyze exposure information, and they routinely bargain for improved working conditions. EPA should ensure that owners/operators grant worker representatives access to the information that owners/operators must record under Section 751.613.

Record Retention -- The proposed retention period is too brief. The retention period should continue for five years from the date the owner/operator ceases to use PCE. Records about the development of the exposure control plan and its implementation (such as monitoring

[32] 29 CFR 1910.1020.
[33] *Id*. 1910.1020(a) (emphasis added).
[34] *Id.* 1910.1020(c)(3).

results before and after) remain relevant while PCE continues to be used. They do not cease to be relevant after five years if PCE is still being used and workers continue to be exposed. Additionally, record retention should be much longer than the required frequency for exposure monitoring, so comparisons can be made over time.

IV. OTHER COMMENTS

Objective data – Rather than providing an exemption for de minimis amounts of PCE, EPA should consider exempting owners/operators from monitoring if they provide adequate objective data that is representative of worker exposures, showing that exposures will not exceed a limit. This is an approach OSHA has permitted, through some standards and enforcement letters of interpretation. For example, OSHA's 2016 silica standard permits employers to use objective data for their initial exposure assessment.[35] The standard defines objective data as:

> information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to respirable crystalline silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in the employer's current operations."[36]

OSHA's hexavalent chromium standard exempts from its scope employers with objective data showing exposures lower than a certain threshold.[37] In a 2006 letter of interpretation on hexavalent chromium sampling, OSHA clearly outlined the permissible use of objective data:[38]

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[35] 29 CFR 1910.1053(d)(2)(ii).
[36] *Id.* 1910.1053(b).
[37] *Id.* 1910.1026(a)(4) (exempting from its scope workplaces "[w]here the employer has objective data demonstrating that a material containing chromium or a specific process, operation, or activity involving chromium cannot release dusts, fumes, or mists of chromium (VI) in concentrations at or above 0.5 µgm/m^3 as an 8-hour time-weighted average (TWA) under any expected conditions of use").
[38] https://www.osha.gov/laws-regs/standardinterpretations/2006-11-14-0.

- Where objective data are used to satisfy the exposure determination requirement, the employer must establish and maintain an accurate record of all the information it relied on. This record must include: the specific chromium-containing material in question; the source of the objective data; the testing protocol and results of testing or analysis of the material that releases chromium (VI); a description of the process, operation, or activity involved and how the data support the determination; and any other data relevant to the process, operation, activity, material, or employee exposures (71 *FR* 10370).
- Since objective data may be used to exempt the employer from provisions of the standard or provide a basis for selection of respirators, it is critical that this determination be carefully documented. Reliance on objective data is intended to provide the same degree of assurance that employee exposures have been correctly characterized as air monitoring would have. Records must demonstrate a reasonable basis for the underlying exposure determination (71 *FR* 10370).
- OSHA's term "closely resemble" that appears in this standard's definition for both "objective data" and "historical monitoring data" (note that historical data may be used as objective data) in the standard's paragraph (b) has been defined in other standards as circumstances where the major workplace conditions which have contributed to the levels of historic exposure are no more protective than in the current workplace. OSHA's intent is to allow data reflecting past exposures to be used to predict current exposures only when the conditions of the earlier job were not more protective… (reference 59 *FR* 40977, 29 CFR Parts 1910, et al., *Occupational Exposure to Asbestos; Final Rule*, August 10, 1994).

- The burden is ultimately on the employer to show that the objective data comply with the requirements of the standard. OSHA's intent is to allow employers the greatest possible flexibility in selecting methods used to determine employee exposures to chromium (VI), so long as the methods used are accurate in characterizing employee exposures (71 *FR* 10342).

EPA should consult with OSHA on appropriate scenarios where objective data has been permitted and could appropriately be used in managing PCE's risks.

Alternative Regulatory Actions:

Section 9 – OSHA has no plans to regulate PCE. Its last effort to do so—more than 25 years ago—failed in the courts. GAO has found that OSHA standard setting takes, on average, more than 7 years. Referring regulation of PCE to OSHA at this point in time would be inconsistent with EPA's statutory duty to eliminate unreasonable risk to workers within the TSCA timeframes.

Definitions for Conditions of Use – EPA should make clear that any use of PCE that does not fall within the prohibition list in the rule must comply with the WCPP—that is, any new use or use EPA failed to evaluate or described improperly is not exempt from regulation.

Conclusion

We applaud EPA for proposing to adopt critically needed additional health protections for workers exposed to PCE. OSHA's PEL, adopted more than 50 years ago, leaves workers exposed to significant and unreasonable health risks. Since its adoption, too many workers have been made ill or died from overexposure to PCE. EPA should promptly adopt rules to prevent this continuing health threat.

We agree that PCE should be banned for all consumer uses and for commercial uses where exposure cannot be feasibly controlled, *including* in the construction industry. We applaud EPA for proposing a risk management regime for those uses where PCE will continue to be used or phased out, which follows the approach OSHA has relied upon for decades when regulating the control of toxic exposures. This avoids imposing duplicate or conflicting requirements on owner/operators and workers, who are familiar with the OSHA regulatory approach. We believe that with the additions we have proposed, EPA's risk management rule will go a long way to eliminating the unreasonable risk exposure PCE that poses to workers.