UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Comments of Safer Chemicals Healthy Families, Earthjustice, Natural Resource Defense Council and Environmental Health Strategy Center on Issues Raised at EPA's September 12, 2017 Methylene Chloride Workshop on Furniture Refinishing under Section 6 of the Amended Toxic Substances Control Act

Submitted via Regulations.gov (November 13, 2017)

Docket ID EPA-HQ-OPPT-2017-0139

Safer Chemicals Healthy Families (SCHF), Earthjustice, Natural Resource Defense Council and Environmental Health Strategy Center submit these comments on the issues raised at EPA's September 12, 2017 workshop on the use of methylene chloride (MC) in furniture refinishing.[1] Our groups are committed to assuring the safety of chemicals used in our homes, workplaces and the many products to which our families and children are exposed each day. We believe that effective implementation of the newly strengthened Toxic Substances Control Act (TSCA) is vital to assessing and reducing exposure to the numerous chemicals that pose known threats to public health and the environment.

EPA convened the September 12 workshop as a follow-up to its January 19, 2017 proposed rule to restrict use of MC in paint and coating removal under section 6(a) of TSCA.[2] Under the proposal, MC use would be banned in these applications except for furniture refinishing. Although concluding that this use presented an unreasonable risk of injury to human health, EPA did not propose to regulate it because of concerns about the availability of substitutes. In May 17, 2017 comments on EPA's proposal, our groups emphasized that EPA's determination of unreasonable risk required it to include furniture refinishing in its final section 6(a) rule.

Speakers at the September 12 workshop presented encouraging data about the viability of MC replacements that are under development. These results indicate that, with further development and testing, economically and technically acceptable alternatives to MC-based furniture refinishing products will soon be available. EPA should support and encourage these development efforts by amending its proposed MC ban to include furniture refinishing and setting a firm target date for eliminating MC from this use. This phase-out date should allow a transition period that provides breathing space to continue developing substitutes while assuring that the current risks are eliminated.

SCHF and more than sixty organization recently wrote to Administrator Pruitt urging prompt finalization of the proposed TSCA section 6(a) bans on MC use in paint and coating removal (and related bans on certain uses of trichloroethylene and n-methylpyrrolidone). Our letter is attached. It demonstrates that

[1] 82 Federal Register 41256 (August 30, 2017).
[2] 82 Federal Register 7464 (January 19, 2017).

ED_001625_00045101-00001

MC has been repeatedly determined to pose serious health risks, that large worker and consumer populations are at risk due to significant MC exposure and that the levels of exposure are well above traditional thresholds for regulation according to EPA's comprehensive risk assessment.

SCHF and other groups also recently wrote to EPA's Acting General Counsel and Ethics Official urging the recusal of Deputy Assistant Administrator Nancy Beck from any involvement in the section 6(a) rulemakings because of her conflicts of interests as a former advocate at the American Chemistry Council (ACC), where she authored comments criticizing the EPA risk assessments underlying the proposed rules and was involved in preparation of ACC comments on the proposals on behalf of member companies manufacturing the affected chemicals. A copy of this letter is attached as well.

EPA's Analysis Found Unreasonable Risks Due to MC Exposure in Furniture Refinishing

According to EPA's proposal, there are 15,000 workers at 4900 commercial refinishing operations where MC-based paint and coating removal products are applied.[3] Tens of thousands of consumers also use these products for furniture refinishing. These operations generally involve open processes in which there is direct exposure to MC fumes. EPA has explained that "to carry out furniture stripping, or to remove paint, lacquer, varnish, or other coatings from wood or metal furniture (or similar items such as doors, radiators, and cabinets), chemical paint and coating removal products may be applied to the furniture by either dipping the furniture in an open tank containing the chemicals, brushing or spraying the product onto the furniture surface, or manually applying the chemical product with a brush, rag, or aerosol spray."[4]

EPA's risk assessment demonstrated significantly elevated risks among furniture refinishing workers for acute effects, chronic effects and cancer. Among the Agency's findings were the following:[5]

- "In general, these workplaces are estimated to present exposure levels between 125 times to greater than 1,500 times more than those that are expected to produce no risks of concern. Not only workers, but also occupational bystanders, or workers engaged in tasks other than paint and coating removal, would be at acute risk for central nervous system effects."
- "Workers and occupational bystanders in this industry were estimated to be at risk of non-cancer liver toxicity as a result of chronic exposure to methylene chloride during paint and coating removal under typical exposure scenarios. When workers' exposures were estimated at facilities repeatedly reporting moderate or high methylene chloride air concentration levels, EPA estimated that there were risks of concern for these workers, even for scenarios evaluated with workers wearing respiratory protection with APF 50. Among all of the occupational scenarios, the greatest risk of concern is for workers engaging in long-term use of the product (*i.e.,* 250 days/year for 40 years) with no respiratory protection."
- "In the methylene chloride risk assessment, when exposure for workers and occupational bystanders was estimated in facilities conducting commercial furniture refinishing, EPA identified excess cancer risks if these workers and bystanders were exposed to paint and coating removal with methylene chloride for 250 days per year for 40 years with no respiratory

[3] 82 FR at 7493.
[4] 82 FR 7492.
[5] 82 FR at 7494.

protection. Cancer risks ranged from 2 in 10,000 to 8 in 10,000, with a maximum of 5 in 1,000 (workplaces using immersion methods)."

EPA also underscored that "since 1980, at least seven workers have died while using methylene chloride for commercial furniture refinishing." These deaths are likely not the only ones caused by MC exposure in this industry since "many deaths due to methylene chloride have not been recorded due to a lack of reporting to the OSHA incident database by self-employed individuals and the likelihood that deaths due to methylene chloride exposures are misattributed to heart disease, since the pathology is similar."[6]

EPA also cited evidence that exposures are uncontrolled and worker safeguards minimal in many furniture refinishing operations. For example, Colorado researchers examining small refinishing shops found that in several shops respiratory protection was non-existent or inadequate and that workers experienced acute nervous system effects such as dizziness or nausea. The study concluded that current safety practices in small shops "may be inadequate" and "serious or fatal overexposure can occur."[7]

Although EPA did not propose restrictions to address these serious risks, it did analyze a number of options. A striking conclusion of this analysis was that engineering controls would be "prescriptive and expensive", that furniture refinishing facilities have not generally installed ventilation systems to reduce MC exposure and that ventilation alone would likely not lower MC exposures to 25 ppm (the OSHA workplace standard), let alone to the much lower levels necessary to meet the EPA risk benchmarks. EPA also examined the effectiveness of requiring respirators and found that supplied-air models with an APF of 10,000 would meet the benchmarks but cautioned that this requirement might not be effective due to "the limitations to successful implementation of supplied-air respirators in the workplace." By contrast, EPA indicated that, under a ban on commercial use of MC for paint and coating removal in commercial furniture refinishing operations, "not only non-cancer risks, but also cancer risks would be eliminated."[8]

New Data Presented at the September 12 Meeting Demonstrates that EPA Should Reconsider Its Earlier Conclusions Regarding Lack of Substitutes

EPA explicitly found that MC use in these operations posed an unreasonable risk but declined to propose restrictions to eliminate the unreasonable risk because there "may not be any substitute chemicals or alternative practices" that would effectively substitute for MC in this industry sector.[9] Evidence presented at the September 12 Workshop, however, demonstrates that development of acceptable substitutes is rapidly progressing and is likely to result in near-term availability of viable MC alternatives.

For example, Dr. Katy Wolf of the Institute for Research and Technical Assistance reviewed the results of testing of MC-containing and alternate furniture stripping formulations based on benzyl alcohol. Two benzyl alcohol formulations worked well for equipment and hand stripping, with performance nearly as good as the base MC product and costs that were comparable.

[6] 82 FR at 7495.
[7] Id.
[8] Id.
[9] 82 FR at 7496.

Gregory Morose, Sc. D., research manager at the Toxics Use Reduction Institute (TURI) presented the results of laboratory and field testing on other non-MC formulations containing methyl acetate, DMSO and thiophene. His conclusions from laboratory performance testing were that:

> Performance testing at the TURI Laboratory was conducted for a variety of coating materials on wood, masonry, and metal substrates. The testing results showed that the new solvent blends developed by UMass Lowell, worked equally to methylene chloride-based paint strippers and significantly better than other existing alternatives based on chemicals such as NMP, benzyl alcohol, and dibasic esters.

During field testing, "UMass Lowell Formulation #4 performed equally to the methylene chloride based product for removing multiple layers of lead paint from an old wood substrate."

These data provide encouraging evidence that MC replacements with comparable performance and cost are available and that the development and introduction of commercially acceptable products using these substitutes is likely in the near-term.

EPA Should Expand its January 19 Proposal to Impose a Ban on MC-based Furniture Refinishing Products

Under TSCA section 6(c)(1), once EPA has made a finding of unreasonable risk as it has done for MC use in furniture refinishing, it must propose and finalize a rule under section 6(a) addressing that risk. This rule must impose restrictions "to the extent necessary so that the chemical substance no longer presents such risk." Section 6 does not allow for considering costs or other economic factors in setting the level of protection. While EPA must consider availability of substitutes under section 6(c)(2)(C) "to the extent practicable," its conclusions on substitutes cannot modify or override the Agency's obligation to select restrictions sufficient to eliminate the unreasonable risk.

EPA Can Delay the Compliance Date for Furniture Refinishing under Section 6(d) to Provide Time to Develop Adequate Substitutes

EPA's finding that the furniture refinishing uses of MC present an unreasonable risk compels it to restrict these uses under section 6 and, in so doing, to impose requirements that assure that the unreasonable risk no longer exists. While fulfilling this obligation, however, EPA may structure its rule to take into account substitution concerns and allow time to transition away from the restricted chemical where acceptable substitutes do not yet exist. Section 6(d)(1) requires compliance with a rule "as soon as practicable" but allows EPA to set an effective date that is up to five years from the date of promulgation. Where a longer time is needed to address unusually serious use substitution issues, section 6(g) allows EPA to grant time-limited exceptions for specific conditions of use based on a particularized showing of need under the statutory criteria.

Because of the encouraging data on substitutes presented at the September 12 meeting, industry may not need significant lead-time to develop MC replacements in furniture refinishing. However, if EPA remains concerned about the availability of substitutes, it should set a firm target date for eliminating MC but delay immediate compliance. This would provide some breathing space to industry while at the same time setting in motion incentives and drivers for innovation in furniture stripping techniques that meet industry's needs while avoiding use of MC. Thereafter, if there are particular conditions of use where substitutes are not available, section 6(g) exemptions can be granted where warranted under the

criteria in the law. We strongly believe that, absent a firm target date for MC replacement, industry will not make a meaningful investment in alternatives and worker health protections will be needlessly delayed, resulting in avoidable deaths and serious disease.

We appreciate the opportunity to present these views. Please do not hesitate to contact SCHF counsel Bob Sussman (bobsussman1@comcast.net) if you have any questions about these comments.

Respectfully submitted:

Liz Hitchcock, Government Affairs Director
Safer Chemicals Healthy Families

Eve Gartner, Staff Attorney
Earthjustice

Patrick MacRoy, Deputy Director
Environmental Health Strategy Center

Daniel Rosenberg, Senior Attorney
Natural Resources Defense Council

ED_001625_00045101-00005