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The Honorable Andrew Wheeler
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington DC, 20460

Re: Recommendations of Science Advisory Committee on Chemicals to Strengthen TSCA Risk Evaluation for Asbestos (EPA-HQ-OPPT-2019-0501)

Dear Administrator Wheeler,

As the Asbestos Disease Awareness Organization (ADAO) leadership, we are writing in support of the findings and recommendations of EPA's independent Science Advisory Committee on Chemicals (SACC) on EPA's Draft Risk Evaluation on Asbestos. The SAAC report calls for EPA to make far-reaching and fundamental changes in the draft evaluation. We strongly urge EPA to implement these changes in their entirety.

ADAO is the largest independent non-profit organization in the U.S. dedicated to eliminating asbestos-caused diseases. ADAO's Science and Prevention Advisory Boards are comprised of seventeen world class experts with decades of experience treating asbestos victims, conducting research on asbestos health effects, and mitigating asbestos exposure through prevention and policy efforts.

Asbestos fibers (actinolite, anthophyllite, tremolite, crocidolite, amosite, and chrysotile) are known, deadly carcinogens responsible for hundreds of thousands of deaths. EPA attempted to ban most uses of asbestos in the 1980s but the ban was overturned by the courts in 1991. EPA's inability to ban asbestos was the poster child for the amendments to the Toxic Substances Control Act (TSCA) enacted by the Lautenberg Chemical Safety Act in 2016. Shortly thereafter, asbestos was selected as one of the first 10 substances to undergo a risk evaluation and risk management under the new law. The TSCA risk evaluation is the first major update of EPA's understanding of asbestos science in over 30 years.

Both ADAO and individual Board members filed written comments on the draft evaluation and made oral statements at the SAAC's June 8-11, 2020 public meeting. We expressed deep concerns that the draft evaluation presented an incomplete picture of the current impacts of asbestos on public health, underestimated exposure and risk, and used novel and questionable methodologies that departed from previous assessments by EPA and other expert bodies.

On August 28, the SAAC issued a detailed report strongly reiterating these concerns. The SACC's central conclusion was that: "Overall, EPA's environmental and human health risk evaluation for asbestos was not considered adequate and resulted in low confidence in the conclusions."

The SAAC found numerous flaws in the draft evaluation and recommended fundamental changes in approach:

The draft risk evaluation (DRE) is focused on current commercial uses of chrysotile asbestos. The Committee encourages EPA to incorporate into the assessment other asbestos and asbestos-like fibers in addition to chrysotile exposure beyond the six conditions of use (COUs) evaluated. Because certain exposure sources (drinking water, talc, asbestos-containing building materials, vermiculite, etc.) are not included in this evaluation, the estimate for total exposure to asbestos is deficient. The impact of future chrysotile exposures for limited COUs are modeled with[ou]t accounting for dominating past and ongoing exposure from “legacy” chrysotile and amphiboles. This does not fit the reality of total exposure to asbestos. This DRE includes only a limited slice of the exposure, the results of which compound uncertainties. Pathways of asbestos exposure include occupational, paraoccupational, consumer, bystander, and family households to both amphibole and serpentine asbestos fibers (of a range of sizes, all potentially toxic). Most of the Committee recommended deriving one inhalation unit risk (IUR) for all types of asbestos instead of just for chrysotile asbestos.

It would be a serious mistake for EPA to ignore the SACC report and merely make minor cosmetic changes in order to rush the evaluation to completion. This would undermine the peer review process and give short shrift to public health and EPA’s responsibilities under TSCA. For a substance as ubiquitous and dangerous as asbestos, this is simply unacceptable.

We understand that EPA is planning a supplemental evaluation to address the risks of ongoing exposure to legacy asbestos products, as required by the recent Ninth Circuit decision interpreting TSCA. This evaluation should be combined with the ongoing evaluation of current asbestos uses so that EPA provides the public with a comprehensive picture of “the reality of total exposure to asbestos.” Issuing two separate evaluations would understate the risk by addressing different exposure sources in isolation and failing to account for aggregate risks. Thus, the SACC warned that “[b]y relegating legacy uses of asbestos to another document, EPA is ignoring an important source of exposure.” As the SACC emphasized, “[r]isk from asbestos for disease is cumulative” and cancer risk estimates must reflect the combined impact of legacy and current products “as these are essential to understand how humans may be affected by multiple sources/pathways.” For this reason, the SAAC advised EPA to “Include legacy and aggregate asbestos exposures in the calculation of cancer risk estimates.”

An integrated risk evaluation examining all sources of exposure should incorporate the following SAAC recommendations:

- All fiber types – not just chrysotile – must be considered.
- Risk estimates must recognize that real-world exposure is to mixed fibers because chrysotile itself contains amphiboles in small amounts and they are also present in other exposure sources (industrial talc, drinking water pipes, etc.).
- EPA must account for laryngeal, ovarian and other types of cancer linked to asbestos, not merely lung cancer and mesothelioma.
- Risk estimates must address asbestosis and other non-cancer diseases related to asbestos.
- Industrial and consumer products contaminated with asbestos (i.e. talc-based products and taconite ore) must be addressed along with products with intentionally added asbestos.
- All pathways of exposure must be evaluated, including ingestion of asbestos in drinking water, dermal contact with contaminated surfaces or clothes, and inhalation.
- As required by TSCA, EPA must determine the elevated risks of asbestos exposure to potentially exposed and susceptible subpopulations (PESS), such as smokers, people with chronic lung disease, children, and tribal communities.
- Risks to the families and friends of workers who bring home asbestos on their clothes or bodies must be assessed since this is a known condition of use (COU) for current and legacy asbestos products.

- A single Inhalation Unit Risk (IUR) must be derived for all asbestos based on the literature for the full range of asbestos fibers rather than a chrysotile-only IUR based on the limited body of studies for chrysotile alone.
- EPA must reassess whether the linear or exponential model represents the best approach for deriving the IUR.
- Cancer risk estimates must be based on incidence rates of lung and mesothelioma cancers rather than mortality rates.
- Risk estimates for occupational exposure must be derived without assuming the use of respirators or other personal protective equipment (PPE) to reduce exposure.
- EPA must use its mandatory information collection authority under TSCA to obtain comprehensive information from industry on asbestos uses, number of exposed workers and consumers, and workplace, environmental and general population pathways and levels of exposure.

Asbestos remains a serious and pervasive threat to public health in the US, accounting for nearly 40,000 deaths annually. The magnitude of this threat demands a comprehensive risk evaluation which identifies all pathways of exposure that contribute to asbestos-related death and disease, accounts for all cancer and non-cancer endpoints and bases risk estimates on the best available science and data. As the SACC Report confirmed, the draft EPA evaluation is seriously deficient in all these respects and presents an incomplete and inadequate picture of asbestos exposure and risk. The only prudent and health-protective option is for EPA to fundamentally revise the evaluation based on the roadmap SAAC has provided.

Respectfully submitted,

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