National Tribal Toxics Council

400 D Street, Suite 200
Anchorage, AK 99501
907-277-2111 Office
1-877-335-6780 Fax
www.tribaltoxics.org
@tribaltoxics

June 2, 2020

Stan Barone
Office of Pollution Prevention and Toxics
Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460-0001

RE: Asbestos, Draft TSCA Risk Evaluation; Docket ID: EPA-HQ-OPPT-2019-0501

Dear Dr. Barone,

The National Tribal Toxics Council (NTTC) appreciates the opportunity to provide comments on the draft Toxic Substances Control Act (TSCA) risk evaluation for asbestos. NTTC is an EPA Tribal Partnership Group (TPG), supported by the EPA Office of Pollution Prevention and Toxics (OPPT), that works to provide Tribes with information on issues and rulemakings related to toxic chemicals and pollution prevention. On behalf of Tribes, the NTTC works to ensure that tribal risks are accurately characterized and evaluated in EPA's risk assessment process by informing and educating the EPA on tribal lifeways, exposures, and risks.

In March 2020, the EPA released a draft risk evaluation on asbestos. The purpose of TSCA is to determine whether a chemical substance presents an unreasonable risk to health or the environment under the conditions of use, including an unreasonable risk to any relevant potentially exposed or susceptible subpopulations (PESS). According to EPA, asbestos has been used in a wide variety of materials in building construction for its heat and fire resistant properties, as well as in a wide range of manufactured goods, such as roofing shingles, ceiling and floor tiles, attic and wall insulation, paper products, cement products, automobile parts, heat resistant fabrics, packaging, gaskets, and coatings. A select few uses of asbestos are banned, though the majority of uses are not. According to the American Cancer Society, exposure to asbestos is known to cause lung cancer and mesothelioma, as well as cancers of the larynx, pharynx, stomach, colon, ovaries, and rectum.

EPA has provided a 60-day public comment period on this draft risk evaluation, which NTTC finds insufficient given the impact of the global COVID-19 pandemic on tribal

environmental offices and staff. The current coronavirus pandemic disproportionately impacts tribal communities[1]. Incidence rates are alarmingly high on some reservations and healthcare infrastructure is generally poor. High risk conditions, such as diabetes, are disproportionately present in these nations' populations. Many isolated tribal communities have had their supply chains severely disrupted. For example, the primary, and in many cases only, transport and freight airlines stopped serving over one hundred Alaska tribes[2].

Tribal environmental staff, who typically would be the primary parties to research and prepare comments for discussion and direction from their Councils, are the very staff who are also responsible for leading their tribal nation's response to the numerous COVID-19 environmental health concerns. They must ensure indoor air, waste disposal, water treatment operations, and community practices are changed to conform with the best up-to-date information and that their workers and communities are safe and informed. They do this while often homeschooling, caring for elders, and carrying out customary and traditional practices. Our volunteer Council members, as tribal employees, are no exception and their NTTC duties are in addition to their work for their tribes.

We believe that a 60-day comment period, the entirety of which occurs during a pandemic, is far too short under normal circumstances to expect substantial tribal comment for reasons expressed previously by the NTTC regarding other TSCA-related comment opportunities. As a primary grantor to most federally recognized tribes, EPA is aware that many Tribal Councils are shut down except for essential operations by explicit order. It would be impossible for tribes to send in comments or for Councils to consider whether they wish to send in comments. EPA should provide an additional 90-day comment period on the asbestos draft risk evaluation.

The impact of COVID-19 on our Council members is the primary reason for the brevity of our comments on this draft risk evaluation. The public comment periods that EPA has provided on several important TSCA-related actions of interest to tribes during the pandemic have overlapped, further contributing to a challenging, and even impossible, task for tribes to find sufficient time to devote to comments.

Based on our initial review of the draft risk evaluation for asbestos, NTTC is concerned that EPA has once again left out tribal populations' exposures to toxic chemicals from consideration, mainly by 1) not evaluating tribes as a potentially exposed subpopulation; 2) assuming that environmental statutes are protective of tribal communities; and 3) not considering all conditions of use and all exposure pathways.

---

[1] Hedgepeth, D., Fears, D., and Scruggs, G. Indian Country, Where Residents Suffer Disproportionately from disease, Braces for Coronavirus. Washington Post, April 4, 2020; https://www.washingtonpost.com/climate-environment/2020/04/04/native-american-coronavirus/

[2] Hollander, Zaz. Ravn Suspends Air Service, Including Mail Deliveries, to Most Rural Alaska Communities. Anchorage Daily News, April 3, 2020. https://www.adn.com/alaska-news/aviation/2020/04/02/ravn-suspends-air-service-including-mail-deliveries-to-most-rural-alaska-communities/

Tribes as potentially exposed subpopulations

TSCA defines a "potentially exposed or susceptible subpopulation" (PESS) as "a group of individuals within the general population identified by the Administrator who, due to either greater susceptibility or greater exposure, may be at greater risk than the general population of adverse health effects from exposure to a chemical substance or mixture, such as infants, children, pregnant women, workers, or the elderly." As detailed below, *tribes clearly meet this definition for the majority of chemical substances but are not considered as PESS in this or previous TSCA draft risk evaluations, leaving risks specific to tribes unevaluated and out of any future risk management.*

If, as we mention is possible below, tribal lifeways indeed present higher exposure risks, then exclusion of tribes as PESS is in violation of TSCA, as well as EPA's commitment to integrating environmental justice into "the development, implementation, and enforcement of environmental laws, regulations, and policies". Environmental justice is defined as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. According to the EPA, "no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies". Executive Order 12898, to which risk assessment processes are subject, directs federal agencies to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Tribes are a minority and low-income population whose lifeways place them at higher exposure potential to chemicals in the natural environment so that EPA must include exposure scenarios representative of tribal lifeways in its TSCA risk assessment process. In not doing so, tribal risks are left unevaluated, and tribes are left with a disproportionate share of the negative consequences and effects resulting from EPA's TSCA policies and operations.

In all risk evaluations, EPA needs to identify all PESS and analyze their risks, as required by TSCA, and tribes should be explicitly considered as such. As NTTC has informed the EPA in previous comment letters and presentations to the Agency, tribes have unique lifeways that place them at different risk due to multiple exposure pathways not experienced by the general population. For example, these lifeways include differences in:

1. Diet, such as significantly higher consumption of fish and other aquatic life that is typically locally harvested
2. Higher consumption of deer, elk, and other wildlife that is locally harvested and may be contaminated from industrial and mine releases to tribal lands
3. Housing, which tends to be more often substandard, with older household furniture and products, to lack garages (resulting in product storage inside the home), and can be associated with dirt yards and unpaved roads

4. Worker safety protocols, which tend to be less stringently practiced due to multiple small businesses, self-employment, and do-it-yourself practices, and remote access locations unvisited by OSHA
5. Water use for:
    - Drinking, which can be from untreated and unregulated small systems (less than 15 homes), including well water, surface haul water, and spring water systems
    - Hygienic use, through daily steam baths and/or immersion in surface water flows
    - Ceremonial use through steam baths and full body immersion in surface water flows
    - Multiple cultural activities (e.g. reed harvest, mouthing, weaving)
    - Subsistence activities (e.g. hunting, gathering)
    - Recreational activities (swimming in natural water)
    - Other lifeways.

Due to aggregate exposures via multiple pathways of which many have greater frequency and duration than those of the general population or other human receptor populations, Native Americans are at higher risk generally from chemical releases to the natural environment than the general population. For convenience, we include a graphic that depicts many of these exposures.

EPA's Science Advisory Committee on Chemicals, in its November 2019 report[3] on the HBCD and 1,4-dioxane draft risk evaluations, strongly agreed with NTTC's recommendation that EPA must consider all exposure routes and give:

> …special consideration to specific populations (e.g., tribal, arctic inhabitants, etc.) who depend on fish as a major source of food because of cultural considerations and provide some quantitative sense of how much extra risk exists for these populations.[4]

> In considering special and susceptible population exposures, more consideration needs to be given to populations with specific preexisting conditions, such as metabolic disease and obesity, as well as to tribal, ethnic and other subpopulations that depend heavily on potentially contaminated foods, such as Native American subsistence fishers"[5].

Referencing the conceptual model above, the SACC also recommended that "the context of the assessment would be improved by including a graphic similar to the one presented by the National Tribal Toxics Council at the public meeting, that illustrates exposure routes for potentially sensitive or highly exposed populations"[6]. Despite this feedback from its SACC, and despite NTTC's work to educate the EPA on tribal exposures, tribes were not considered as PESS in the asbestos draft risk evaluation. The TSCA amendments of 2016 require the EPA to consider all PESS for each chemical risk evaluation and EPA should evaluate tribes as PESS in the final risk evaluation for asbestos. The multiple aggregate exposures inherent in tribal lifeways and circumstances must be considered in order to make that determination. Aggregate exposures, defined as "the combined exposures to an individual from a single chemical substance across multiple routes and across multiple pathways" (40 C.F.R. § 702.33) should also be considered, as mandated by TSCA Section 6(b)(4)(F). We address aggregate exposures further below.

In section 2.3.3 of the asbestos draft risk evaluation, EPA lists the PESS identified as relevant for consideration based on greater exposure and included are:

> "…groups of individuals within the general population who may experience greater exposures due to their proximity to conditions of use identified in… that result in releases to the environment and subsequent exposures (e.g., individuals who live or work near manufacturing, processing, use or disposal sites)."

Many tribal communities live in close proximity to a landfill or other waste disposal site, such as a transfer station. For example, three quarters of the 229 tribal communities in Alaska have residents living within 1 mile of unlined landfills, which lack design performance, are open access, and typically employ open burning without emissions treatment as a waste

[3] TSCA Science Advisory Committee on Chemicals Meeting Minutes and Final Report No. 2019-02, Peer Review for EPA Draft Risk Evaluations for 1,4-Dioxane and Cyclic Aliphatic Bromide Cluster (HBCD), July 29- August 2, 2019, 166 pp.

[4] Ibid, pg. 149.

[5] Ibid, pg 155.

[6] Ibid, pg 40.

management strategy, all in compliance with RCRA Subtitle D, as well as the Clean Air Act (CAA) which includes a specific provision for Alaska villages[7]. Because such communities are often off the road system, drinking water sources and primary diet sources are also typically proximate so that aggregate exposures are likely to be present. These landfills receive all wastes in the community, including those from the included COU by DIYers of repair/replacement/disposal of asbestos brakes, and the repair and disposal of gaskets in utility vehicles. Transfer stations and landfills that receive auto shop repair wastes may also be unlined. Analyses of the aggregate exposures associated with living in proximity to such landfills need to be explicitly included in the final risk evaluation.

Because it is EPA that is ultimately responsible for these authorized exceptions, and because exposures from disposal site releases are clearly not adequately managed under other statutes, such releases need to be evaluated and should include releases from *all* waste disposal and waste disposal sites, including those left unregulated by RCRA, such as transfer stations and construction waste landfills specifically, in the case of asbestos. The multiple exposure pathways associated with proximity to unlined disposal site releases to environmental media must be analyzed for both individual exposures and the aggregate exposures that tribal members face from their customary and traditional tribal lifeways. If these exposures are not analyzed, then no determination can be made on the risks these populations face, which would be in violation of TSCA.

NTTC has expressed concern at the paucity of data on tribal risks, as well as the observation that tribal people are underrepresented or absent from EPA's risk evaluations and proposed actions. It is well documented in the scientific literature that Native Americans experience significant health disparities from the general population. The practice of leaving them out of any protections will only contribute to further health disparities. NTTC has in the past provided detailed information to EPA on the chronic exposures tribal people experience. In order to protect tribal communities, the unique tribal lifeways and exposures, including those from disposal of products containing toxic chemicals in open dumps that are unlined and that practice open burning of wastes, have to be considered by EPA. NTTC is willing to assist EPA in obtaining or generating relevant data on tribal risks and exposures that EPA can use in order to accurately determine tribal risks.

Tribes as Susceptible Subpopulations

Because exposure to asbestos is closely linked with lung cancer, NTTC notes that, while American Indian/Alaska Native lung cancer incidence rates are lower overall, their mortality

[7] Federal Incinerator Regulations for Remote Alaska Incinerators Commercial/Industrial (CISWI) and Other Solid Waste Incinerators (OSWI) Prepared May 25, 2017 by ADEC Air Compliance Program.

rate is 17% higher overall that non-Hispanic Whites. Additionally, Alaska Native people have a 53% higher lung cancer incidence rate than the non-Hispanic white population[8].

In the draft risk evaluation of asbestos, EPA states that smokers may be more susceptible than others to the health effects from exposure to asbestos (page 23). According to the Centers for Disease Control and Prevention (CDC), American Indian/Alaska Native youth and adults have the highest prevalence of cigarette smoking among all racial/ethnic groups in the U.S.[9]

According to the American Cancer Society, and as mentioned on page 131 of the draft risk evaluation, exposure to asbestos is also linked with stomach cancer. The stomach cancer incidence rate for American Indian/Alaska Natives is 40% higher for men, and 70% higher for women, than that of the non-Hispanic white population. The mortality rate from stomach cancers is 210% higher for AI/AN men, and 200% higher for AI/AN women[10].

NTTC urges EPA to consider tribes as susceptible populations and evaluate their health risks from exposure to asbestos in the final risk evaluation for asbestos.

Reliance on Environmental Statutes to Address Tribal and General Population Exposures

In this draft risk evaluation, EPA has excluded all general population risks from exposures due to releases of asbestos to land, air, and water, based on the assumption that other statutes adequately address these exposures. On pages 214-215, the EPA states that:

> "In this risk evaluation for asbestos, EPA did not evaluate hazards or exposures to the general population. Further, as part of the problem formulation for asbestos, EPA identified exposure pathways under other environmental statutes, administered by EPA, which adequately assess and effectively manage exposures and for which long-standing regulatory and analytical processes exist, i.e., the Clean Air Act (CAA),

---

[8] Source: US HHS, NCI 2020. Seer Cancer Statistics Review, 1975-2016. Tables 1.20, 2.15 through 24.15, Source: NCI 2020. Seer Cancer Statistics Review, 1975-2016. Table 1.20 https://seer.cancer.gov/csr/1975_2016/sections.html and Alaska Native Epidemiology Center, http://anthctoday.org/epicenter/healthData/factsheets/Cancer_Mortality_statewide_09_03_2019.pdf

[9] U.S. Department of Health and Human Services. Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, Hispanics: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1998 [accessed 2018 Jun 12].

[10] NCI 2020. Seer Cancer Statistics Review, 1975-2016. Table 1.20 https://seer.cancer.gov/csr/1975_2016/sections.html https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=31

> the Safe Drinking Water Act (SDWA), the Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA). The Office of Chemical Safety and Pollution Prevention works closely with the offices within EPA that administer and implement the regulatory programs under these statutes. EPA believes that the TSCA risk evaluation should focus on those exposure pathways associated with TSCA uses that are not subject to the regulatory regimes discussed above because these pathways are likely to represent the greatest areas of concern to EPA."

One issue with relying on other environmental statutes is that TSCA tasks EPA with addressing human and environmental health risks, while other environmental statutes may have standards that are not health-based. TSCA section 6(b)(4)(A) states: "The Administrator shall conduct risk evaluations pursuant to this paragraph to determine whether a chemical substance presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant to the risk evaluation by the Administrator, under the conditions of use." Many statutes require EPA to consider other non-health factors, such as cost and/or feasibility, when setting their standards, factors that TSCA explicitly forbids EPA from taking into account when determining risks. EPA is the agency that is mandated to administer TSCA. Relying on other statutes that are presumably protective ignores significant media releases and their resultant exposure scenarios which, as the preceding quotation makes clear, is not the intent of TSCA. The environmental releases of asbestos EPA is ignoring are substantial. Based on data from EPA's Toxics Release Inventory (TRI), *32,411,158 lbs of asbestos were released to the environment in 2018.*

As NTTC has detailed in previous letters to EPA, these regulatory statutes have many exemptions, exceptions, and exclusions that disproportionally affect tribes and make the assumption that they are universally protective inaccurate.

While NTTC had insufficient time to review environmental statute issues specific to asbestos, we provide examples of how tribal populations may be unprotected by these statutes in the subsections below. If EPA relies on the nexus of environmental statutes to protect Americans, then it is NTTC's opinion EPA must consider tribes separately. Tribal circumstances too often fall under the gaps of statute coverage and tribes cannot be assumed protected from environmental releases of toxic chemical substances.

Inadequate Protection of Native Americans by the Safe Drinking Water Act (SDWA)

In the draft risk evaluation, EPA states that asbestos is subject to National Primary Drinking Water Regulations (NPDWR) under the Safe Drinking Water Act (SDWA). Human exposure to asbestos via drinking water was not evaluated in the draft risk evaluation because it is "currently addressed in the Safe Drinking Water Act (SDWA) regulatory analytical process for public water systems" (page 52).

NTTC notes that there are multiple exemptions to the SDWA that leave tribes and other small communities unprotected by this statute. As an example, 13 million rural households throughout the United States rely on private drinking water wells–for drinking and other purposes—that are unregulated by the SDWA[11]. Due to the rural and remote nature of most reservations, multiple tribes have residents relying on individual groundwater wells or community water systems serving less than 25 people, which are also exempt from the SDWA. This unregulated and unmonitored water is used for drinking, cooking, bathing, daily steam baths, ceremonies, home crops, and more, and any exposures via these pathways will not be managed under SDWA. EPA's current policy of reliance on SDWA excludes these critical exposure pathways from evaluation.

Substantial documentation exists that groundwater wells are used for drinking water and household use, particularly for those homes that are unplumbed[12]. Haul water for unplumbed homes is often from unregulated and untreated surface and groundwater sources. It is noteworthy that Native American households are 19 times more likely than other households to lack indoor plumbing[13]. Nearly 14% of Native households lack access to a public water system compared to 0.6% of the USA as a whole, with some tribes lacking access for more than 30% of their populations, creating a greater reliance on unregulated sources[14]. EPA clearly cannot assume that these exposures are adequately managed by the SDWA for tribes and other small or rural populations and these exposure pathways cannot be left out of the asbestos risk evaluation.

Even when water used by tribes is regulated by statute, it is noteworthy that EPA does not account for violations. For example, in 2015, nearly 21 million people relied on community water systems that violated health-based quality standards under the SDWA[15]. In 2013, tribal water systems were 19 times more likely to have violations than other water systems[16]. A 2016 legal analysis of the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA) revealed that, compared with nontribal facilities, tribal facilities experience less rigorous CWA and SDWA enforcement and are more likely to violate these laws[17].

---

[11] USEPA Private Drinking Water Wells webpage, accessed May 23, 2020. https://www.epa.gov/privatewells, using data from the US Census American Housing Survey 2017

[12] Lewis J, Hoover J, MacKenzie D. Mining and Environmental Health Disparities in Native American Communities. *Curr Environ Health Rep*. 2017;4(2):130-141. doi:10.1007/s40572-017-0140-5

[13] US water alliance, Closing the Water Access Gap in the United States, 2019 closethewatergap.org

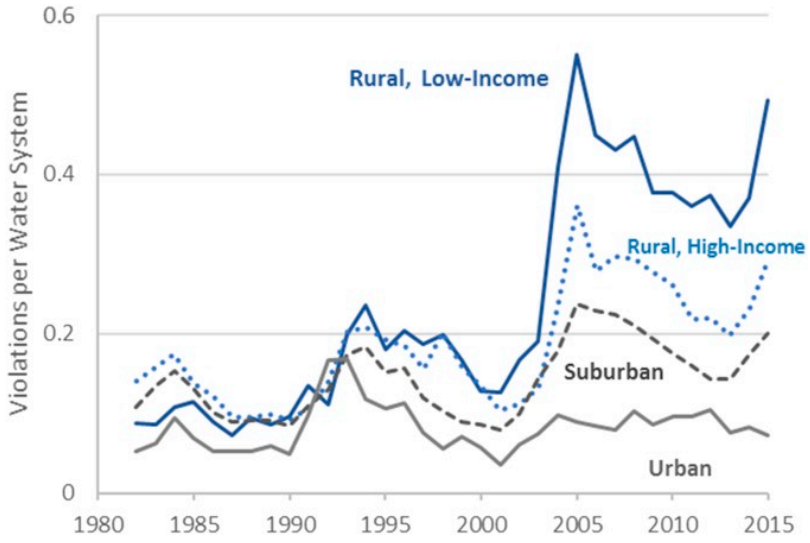
[14] Lewis J, Hoover J, MacKenzie D. Mining and Environmental Health Disparities in Native American Communities. *Curr Environ Health Rep*. 2017;4(2):130-141. doi:10.1007/s40572-017-0140-5

[15] Allaire M, Wu H, Lall U. National trends in drinking water quality violations. *Proc Natl Acad Sci U S A*. 2018;115(9):2078-2083. doi:10.1073/pnas.1719805115

[16] Note, 2013 just the last year that EPA published this statistic. Providing Safe Drinking Water in America: National Public Water Systems 2013 Compliance Report, https://www.epa.gov/sites/production/files/2015-06/documents/sdwacom2013.pdf

[17] M. Teodoro, M. Haider, D. Switzer U.S. Environmental Policy Implementation on Tribal Lands: Trust, Neglect, and Justice, Policy Science JournalVol 46(1), Pages 37-59, Feb 2018https://doi.org/10.1111/psj.12187

According to a study published by the National Academy of Science that examined health-based violations (which excludes recording and monitoring violations), substantial differences across time exist between rural and urban areas, with low-income rural areas having a larger compliance gap than higher-income rural areas[18]. The study states that "Utilities in more rural, less urbanized areas tend to have less capacity to comply with quality regulations and face financial strain due to declining populations and lower incomes." For reference, NTTC includes the study graphic below.



Inadequate Protection of Native Americans by the Clean Water Act (CWA)

Asbestos is designated as a toxic pollutant under the CWA and is subject to effluent limitations and is thus assumed to be effectively managed under this statute. The draft risk evaluation for asbestos states that:

> "Based on the reasonably available information in the published literature, provided by industries using asbestos, and reported in EPA databases, there is minimal or no releases of asbestos to surface water associated with the COUs in this risk evaluation. Therefore, EPA concludes there is no unreasonable risk to aquatic or sediment-dwelling environmental organisms." (Page 24)

EPA acknowledges one of the shortcomings of this approach by also stating that:

> "The reasonably available information indicated that there were surface water releases of asbestos; however, not all releases are subject to reporting (e.g., effluent guidelines) or are applicable (e.g., friability)." (Page 29)

[18] Allaire M, Wu H, Lall U. National trends in drinking water quality violations. *Proc Natl Acad Sci U S A*. 2018;115(9):2078-2083. doi:10.1073/pnas.1719805115

Multiple CWA exemptions and exceptions leave tribes and other small communities unprotected by this statute. For example, many publicly owned wastewater treatment plants (POTWs) discharging into marine waters have received NPDES variances under the CWA. One example is the NPDES permit administered by EPA for the city of Anchorage POTW, which comprises nearly half the population of the state of Alaska and discharges primary treated effluent into an inlet used by tribal people for millennia in multiple customary and traditional practices. This permit has been administratively extended since 2005. In issuing variances under the CWA for discharges, tribal customary and traditional uses are not specifically included for consideration.

Another example of an exclusion in the CWA is the Navigable Waters Protection Rule, which was published by EPA on April 21, 2020. This Rule excluded ephemeral waters and wetlands not adjacent to navigable waters, or used for harvest of fish or shellfish sold in commerce. Because these waters are often critical in supporting native plants, fish, and wildlife[19,] they are vital to tribal lifeways and exposures resulting from chemical releases to such water must be evaluated. Such exposures include harvesting and mouthing plants and resources for cultural, ceremonial, and consumption purposes.

Additionally, tribal communities and reservations support multiple small businesses and self-employed contractors. The Small Business Exemption under CWA § 122.21(g)(8) does not consider local use of water for the wide variety of tribal uses, and the vast majority of tribes at this time have no specific delegated authority to make the exemption more stringent.

Inadequate Protection of Native Americans by the Clean Air Act (CAA)

Inhalation of asbestos is the main exposure pathway that EPA has considered in this draft risk evaluation. Asbestos is designated as a Hazardous Air Pollutant under the CAA and is assumed to be managed by that statute. The EPA states on page 215:

> "Because stationary source releases of asbestos to ambient air are adequately assessed and any risks are effectively managed when under the jurisdiction of the CAA, EPA did not evaluate emission pathways to ambient air from commercial and industrial stationary sources or associated inhalation exposure of the general population or terrestrial species in this TSCA evaluation."

Exposures via inhalation of chemicals released to the air from landfills and other disposal sites are also assumed to be adequately managed by the CAA. But exemptions to the CAA leave tribes unprotected from certain exposures by this statute and the risks they face still must be evaluated under TSCA. We outline examples of CAA exceptions relevant to tribes below. Again,

[19] For example, US EPA ORD, NERL, Environmental Sciences Program, The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest, 2008. ephemeral_streams_report_final_508-kepner.pdf

without adequate time to prepare comments, we are unable to make a determination as to whether all of these exceptions may present higher risk of asbestos exposure.

A majority of tribes live in rural areas where individuals employ open barrels for burning of household wastes. Under an exemption of the State's delegated CAA program, over three-quarters of Alaska tribes use a "burnbox" at the landfill to burn the full community waste stream and its untreated emissions release directly to ambient air[20]. A self-report database with information collected from tribal environmental professionals whose positions are paid and trained through EPA Indian General Assistance Program (IGAP) monies indicates residents in over one-quarter of those communities smell the smoke three or more days each week, with nearly nine in ten communities experiencing emissions odors in town at least monthly. Without burn controls, the fire is left to self-extinguish, and can smolder for up to two days with associated low-temperature emissions. Very Small Municipal Incinerators qualify as Other Solid Waste Incineration (OSWI) and are subject to less reporting and only annual monitoring and visual opacity tests. Small and Remote Commercial/Industrial Solid Waste Incineration (CISWI) units such as those used at mine camps, oil and gas facilities and construction camps are likewise subject to reduced burdens of reporting and monitoring. Again, because of the small population sizes, and the inherent nature of natural resource development occurring in rural areas, tribes are more likely to live near incineration units with less stringent regulations.

For non-incinerated waste emissions, the installation and removal of a gas collection and control system (GCCS) is not required for facilities producing less than 34 Mg/yr of nonmethane organic compounds (NMOC) emissions, so that sampling cannot be easily performed. Further, as of March 2020, 42 states and territories have not submitted plans for their Emission Guidelines (EG) for Municipal Solid Waste (MSW) Landfills. Additionally, emission controls apply only to landfills constructed after July 2014. Therefore, EPA cannot presume landfills are in compliance with emission guidelines.

Beyond the sections of the CAA dealing with waste disposal, States, local governments, and tribes can be given delegated responsibilities for developing emission plans for area sources and small businesses (non-major source emitters). These sources may be under general permits which again do not guarantee monitoring or compliance for HAPS, and may be subject to little or no enforcement. In addition, many tribes are impacted by State issued permits, that are often violated and leave tribal lands with elevated levels of contaminants. Tribal members are left unprotected by the CAA and are relying on the intent and foundation of TSCA to offer some protections.

[20] Federal Incinerator Regulations for Remote Alaska Incinerators Commercial/Industrial (CISWI) and Other Solid Waste Incinerators (OSWI) Prepared May 25, 2017 by ADEC Air Compliance Program.

Inadequate Protection of Native Americans by the Resource Conservation and Recovery Act (RCRA)

In the draft risk evaluation for asbestos, like in previous draft risk evaluations under TSCA, the EPA assumed that disposal-related releases of asbestos to the environment from Municipal landfills, Hazardous landfills, underground injection, and off-site waste transfer are adequately managed by RCRA. This assumption is faulty in the case of tribes.

Many tribal populations are in rural areas and operate or use waste transfer stations, which are not subject to RCRA design or monitoring requirements, and are likely to allow public access, and be unlined. Because they reside in rural areas with small populations, tribal communities may live proximate to tribal or county landfills receiving less than 20 tons per day, which again, under RCRA and the 1996 ``Land Disposal Program Flexibility Act'' (LDPFA), are exempt from the design requirements of larger facilities, including daily cover, leachate treatment, gas recovery, and liners. Small landfills receiving less than 25 inches per year of precipitation are also not subject to groundwater monitoring requirements. Additionally, approved State RCRA programs have the ability to grant a No Migration Exemption to larger landfills that waives groundwater monitoring requirements. Several states do not even require site specific data, in order for landfills to be granted such an exemption[21]. For example, high salinity is a sufficient parameter for an exemption in the State of Utah. Beyond these waste disposal exceptions, other landfill types are also not covered by RCRA, including Construction Waste landfills, which tend to be unlined in many states and often may lack cover, monitoring, or leachate and gas collection and treatment. Construction waste landfills tend to be sited in rural areas because, without the more stringent design and operational regulations, it is less costly to operate a large expanse of land inefficiently than a small one with higher areal waste density requiring more intensive management.

Additionally, RCRA may not be delegated to Tribal governments so most, if not all RCRA permits are issued by states or overseen by the EPA. States many times do not provide information on releases to tribal governments, putting tribal populations at even greater risks when a release occurs. Many industrial facilities that require RCRA permits may not coordinate with Tribal governments on their release notifications and again, by the time tribal governments are informed of the RCRA release or violation, the tribal membership living in the vicinity of the facility have been exposed.

We have brought to EPA's attention the fact that in evaluating risks, long absent has been the consideration of waste disposal and transfer facilities that either are not covered by RCRA, or not required under RCRA to have liners, leachate treatment, groundwater monitoring, daily cover material, and/or other protective features. Such facilities are prevalent in and near tribal communities, particularly rural areas, where the bulk of tribes reside. As mentioned, all rural landfills in Alaska lack these protective features. Wastes are managed by burning or placement

[21] USEPA, Preparing No-Migration Demonstrations for Municipal Solid Waste Disposal Facilities: A Screening Tool, EPA530-R-99-008 February 1999

nearby in unlined and uncovered landfills that commonly flood at least annually, joining snowmelt and breakup waters in which residents walk and children play. Most of the state is located in wetland. Landfills are often only a few feet above the water table and are proximate to surface drinking water intakes and traditional (untreated) household use water, particularly for unplumbed communities. Chemicals release to rivers and ponds from which Alaska tribes obtain drinking water and foods. About three quarters of landfills are less than one mile from homes and about one-fifth are within one quarter mile. Inhalation of disposal site emissions is prevalent. Emissions can adhere to, or ash settle on, fish and marine mammals that are placed on in-town drying racks and that potentially represent a full year's supply of a family's dietary protein.

The above exposure pathways present clear human and environmental health implications. Indeed, associations between open dump sites and negative health outcomes in Alaska have been identified. Adverse health effects were found for newborn babies associated with community landfills characterized to be of moderate to high hazard threat, including low birth weight, preterm birth, and intrauterine growth restriction (IUGR). Infants born to mothers residing in communities with high hazard site contents were more likely to have "other" birth defect(s) than other infants, and positive odds ratios were found for all categories of congenital anomalies. In a preliminary retrospective cohort study, residents living near dumpsites had greater incidences of self-reported vomiting and fever. Vomiting and dizziness was associated with a dose response to burning waste near residences. Odor complaints (a wind direction proxy) and dumpsite visits were correlated with increases in several symptoms with indications of dose-response, including fever, vomiting, cough, and headache.

NTTC's position is that the disposal exposure pathways faced by tribes throughout the United States as a result of the multiple RCRA exceptions and exemptions that apply to rural, remote, and small populations should be evaluated. If they are not, then any risk assessment conducted under TSCA is not relevant to tribal peoples, and their risk has not been evaluated. We believe that EPA agrees this circumstance would be unacceptable. EPA is mandated by TSCA to determine whether the disposal of toxic chemicals presents unreasonable risk to human health and/or the environment. For example, transfer stations are unregulated by federal RCRA requirements. In rural areas, they are generally unlined, allow open access, and have few or no design requirements, and the majority of non-Alaska tribes use such facilities. These facilities are often located proximate to residences to provide convenience.

Small landfills, drier landfills, and transfer stations typically receive all wastes from tribal communities, including those from the included COU by DIYers of repair/replacement/disposal of asbestos-containing brakes, and the repair and disposal of gaskets in utility vehicles. Transfer stations and landfills that receive auto shop repair wastes may also be unlined. Auto junkyards where DIYers obtain their parts are typically unlined. Asbestos-containing construction and demolition waste from older buildings is also disposed in such landfills.

On page 216 of the asbestos draft risk evaluation, EPA states that:

> "…EPA did not evaluate the following: emission pathways to ambient air from

> commercial and industrial stationary sources or associated inhalation exposure of the general population or terrestrial species; the drinking water exposure pathway for asbestos; the human health exposure pathway for asbestos in ambient water; emissions to ambient air from municipal and industrial waste incineration and energy recovery units; on site releases to land that go to underground injection; or on-site releases to land that go to asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR part 61, subpart M) compliant landfills or exposures of the general population (including susceptible populations) or terrestrial species from such releases."

This leaves out of evaluation the risks tribal populations face from these exposures due to the exemptions, exceptions, and exclusions in regulatory statutes mentioned above.

Risks from Aggregate and Cumulative Exposures

NTTC notes that to fulfill the intent of Congress, EPA must evaluate the true risk of a chemical in commerce, and to consider aggregate and cumulative exposures, and not just for workers. Assessment of risk should mirror the real world so that the public is truly protected by agency risk management decisions.

For example, in tribal communities, a substantial number of residents have multiple jobs and live near their community facilities, including disposal facilities. A single person may be a landfill worker, an occupational bystander, a near-facility general population, as well as a consumer. They will likely derive their food and water, including untreated water, near-source. Such scenarios are the norm for landfill workers in the over two hundred Alaska tribal communities. The resulting multiple exposures should be considered in aggregate, and in cumulative. In fact, tribal peoples tend to reside on the lands of their ancestors for their entire lifetime. The connection to these lands is paramount to tribal peoples' well-being and what it means to be a tribal person.

In the case of asbestos, NTTC questions whether EPA considered that in tribal communities, cars and trucks are more likely to be older, requiring replacement of asbestos brake pads, and that ownership of "other utility vehicles", including ATVs, snowmobiles, and boats is commonplace due to their use in subsistence lifeways and their practicality in moving around unpaved roads, rural terrain, and waterways. Additionally, while EPA considered some DIY exposures from brake pads and gaskets, it assumed that Utility Vehicles were brought to dealerships for repairs, which will typically not be the case, particularly for the vast majority of rural-based tribes. For ATVs, which are used daily in rural Alaska villages, maintenance, including repacking the exhaust silencer, is indicated annually on machines that are frequently used. Whenever exhaust system maintenance is performed, some sources suggest the gaskets are also replaced to ensure an ongoing effective seal for safety and efficiency.

No mention is made of boats and snowmobiles, but these are also a DIY COU. NTTC questions whether aggregate exposure was considered for the multiple tribal persons who conduct their own repair and replacement (and disposal) of their car/truck, tractor, ATV, snowmobile, and boat. NTTC questions whether such exposures were considered in the context of occasional use, or frequent and regular use, requiring more frequent replacement and repair. Additionally, the same person who operates an ATV every day for subsistence and travel in town, a snowmobile every day for hunting, a boat for subsistence fishing and hunting, may be the landfill worker who is exposed to asbestos from disposal. Asbestos has been found in surface and groundwater, (e.g., collected from/near current or former National Priorities List (NPL) hazardous waste sites (ATSDR, 2001) and finished drinking water. A tribal worker who conducts DIY COUs may also be someone who is drinking water and taking daily steam baths from water sources impacted by releases from unlined and uncovered sites.

Further, while we had insufficient time to assess this potential pathway, it is possible that Tribes are disproportionately exposed to naturally occurring asbestos because it is most prevalent in the West and Alaska, where resource development activities take place, including quarrying for local gravel and rock, which is used for local unpaved foundations. Driveways are also unpaved. Did EPA consider inhalation and contact exposures for outside DIY work assuming it is performed on unpaved ground with dust entrainment? We do not have sufficient time to determine whether this is an exposure pathway, but are notifying EPA that unpaved work surfaces are common.

Legacy Use

On November 15, 2019, the Ninth Circuit Court of Appeals released its decision in the challenge to the TSCA risk evaluation and prioritization rules that EPA can no longer exclude "legacy" chemical uses from a risk evaluation, nor can it exclude any conditions of use from consideration". It also affirmed that "TSCA's definition of 'conditions of use' clearly includes uses and future disposals of chemicals".

Asbestos was used in residential and commercial construction before the 1980s and legacy exposure is a significant risk today but was not evaluated in this draft risk evaluation. EPA states on page 207 of the draft risk evaluation that:

> "…the potential for exposure to legacy asbestos for any populations or subpopulation, due to activities such as home or building renovations, as well as occupational or consumer exposures identified in this RE, is possible. Legacy asbestos exposure is not considered in the RE at this time which could underestimate exposures and thus, risks…EPA will consider legacy uses and associated disposal in subsequent supplemental documents."

NTTC is looking forward to the opportunity to provide comments on the above-mentioned supplemental documents addressing legacy and associated disposal. It is legacy use of asbestos that most concerns tribes both because of 1) their disposal circumstances, described above, as

well as unlined Construction waste landfills, and 2) their disproportionate possession of older homes and products, homes with disrepair and potentially exposed asbestos, and use of wood stoves with asbestos linings, pads, and other asbestos-containing components that are still operation today. In a 2004 EPA-funded study by the Tribal Association of Solid Waste and Emergency Response, asbestos was the #1 hazardous contaminant concern by the 121 tribes in a nationwide survey[22]. The legacy of BIA schools and their demolition and disposal in unlined and uncovered sites contributes to this concern. NTTC urges a diligent evaluation of legacy asbestos disposal and consideration of tribes as a PESS in the supplemental risk evaluation.

Closing Remarks

We note that EPA found unreasonable risk for lifetime cancer risks for several DIY scenarios, including DIY Central Tendency and High End Users (both 62 year and Lifetime), Gasket change (62 year) for High-end, and Gasket Repair Replacement for both Central and High-end Users. This is a commendable start, as asbestos should not remain in commerce, given the considerable cumulative exposure experienced by virtually the entire U.S. population. The finding is also concerning for reasons mentioned related to potentially higher aggregate exposures for multiple DIY vehicles used commonly by tribal peoples. We look forward to your response to our comments and your proposed risk management actions, which we urge to include consideration of potential tribal exposure scenarios not captured here unless the proposed management action is a ban on future use. Should you or your staff have questions or comments regarding our letter, please contact myself, Dianne Barton, NTTC Chair, at (503) 731-1259 / bard@critfc.org or Fred Corey, NTTC Co-Chair, at (207) 764-7765 / fcorey@micmac-nsn.gov.

Sincerely,

Dianne C. Barton, Ph.D.
Chair, National Tribal Toxics Council

[22] Tribal Association of Solid waste and Emergency Response, Tribal Hazardous Sites 2004 Report, Funded by USEPA, compiled by Zender Environmental Science and Planning.2004. (Note TASWER was the EPA partnership group prior to Office reorganization into OLEM)
http://www.zendergroup.org/docs/Final_Report.pdf