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September 1, 2022

Kellie Fay

Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460-0001

EPA-HQ-OPPT-2021-0414

RE: Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances

Ms. Fay,

The National Tribal Toxics Council (NTTC) is an EPA Tribal Partnership Group (TPG) with the Office of Pollution Prevention and Toxics (OPPT). Since the TSCA 2016 revisions, the Council's primary goal is to improve the TSCA risk evaluation process such that risk to tribes is accurately characterized and tribal peoples can be assured that, as Congress intended, their lifeways too are protected through chemical risk management decisions. The NTTC appreciates the opportunity to provide comments on the Draft Systematic Review (SR) Protocol Supporting TSCA Risk Evaluations for Chemical Substances. When finalized, this protocol will serve as a generic guide to EPA risk assessors in identifying, compiling, and integrating unbiased and comprehensive data and information needed for TSCA chemical risk evaluation in a systematic manner that meets statutory obligations. It documents the specific systematic review approaches used for identifying and evaluating evidence for the hazard and exposure assessments, including evidence within three other necessary disciplines (i.e., engineering, physical and chemical properties, and environmental fate). The five disciplines are seen as evidence streams that form and finalize via the SR process, joining additional evidence as needed via a supplementary data gap option that is outside the SR generic protocol. To illustrate the generic protocol, the Draft SR embeds chemical specific protocols that EPA performed for several of the first 10 high priority chemicals.

We have divided our comments into overarching themes, specific comments and recommendations on primary features relevant to tribes, and move on to miscellaneous comments of substance that we believe can add to a methodology that is more robustly responsive to tribal population considerations. We finish by discussing the treatment of exposure.

1 Theme 1: The nature and availability of Tribally relevant data and information is unique, and the greater potential for its exclusion must be addressed.

A primary reason NTTC has a vested concern in the SR protocol is that sources providing data and information necessary for representative and relevant risk evaluation for Tribes are generally fewer in number, more likely to be outside the peer review literature, and/or more likely to be carried out, stored, or otherwise accessed in atypical manner-- or from atypical academic fields-- than risk evaluation sources addressing workers and the general population. We note that this is an issue of which OPPT has demonstrated awareness in the past.

The proposed SR protocol may find a wealth of studies relevant to general population risk but not for tribal peoples' risk. Some protocols that may screen out unnecessary data and information, and save time and resources, may inadvertently screen out the few sources valuable for tribal/PESS risk evaluation.

NTTC believes that extraordinary effort must be taken to ensure any legitimate data and information that is relevant to better characterizing risks for tribes, regardless of any perceived study 'flaws' in quality, design, uncertainty, bias, 'survives' or is incorporated into the final evidence streams for integration without negative bias. We discuss this recommendation further below. Additionally, we strongly advocate for Tribes as subject matter experts for their members and lifeways. Studies, reports, or oral testimonies produced by, or with permission of, the Tribe concerning helpful information and data should be considered, whether it is brought forward during the scoping process or identified via the SR or supplemental data channel. We believe such data and information should be considered legitimate, with the onus on EPA to document reasons for their exclusion.

Resulting Recommendation(s): Several diverse recommendations related to this theme are provided throughout the letter.

2 Theme 2: Tribes are missing from the SR protocol and heavily inadequate and diffuse attention is paid to PESS

The critical role that risk evaluation for PESS has in meeting the TSCA mandate, the larger Environmental Justice mission of EPA and the federal government, and EPA's trust responsibility to Indigenous Peoples is disproportional to the weight accorded to it in the Draft Protocol. **Indeed, Tribes and Tribal populations, as well as EJ communities, are not mentioned in the draft at all, not even as a primary example of PESS.** PESS were also not in any way part of the charge questions given to the SACC.

The lack of attention to EJ communities and Tribes as likely PESS populations, is unacceptable. An SR Protocol for Supporting TSCA Risk Evaluations necessitates explicit attention to all populations considered under TSCA. The SR methodology must be improved to address this deficit and include PESS consideration. The NTTC believes the downplay of PESS is in part due to unsatisfactory document clarity, but also to a strong need for improved SR methodology for PESS consideration.

In terms of clarity, we appreciate OPPT's argument that a fit for purpose SR is needed for TSCA but we agree with National Academy of Science Engineering and Medicine (NASEM), Science Advisory Committee on Chemicals (SACC), and various public commenters that in doing so, the complexity of the protocol, and its parallel development while being applied to Priority chemicals, has made for a complex process document in which consideration of PESS is inadvertently subsumed. Several commenters have raised the issue that systematic review is generally reserved for hazard, for which it is better suited. Exposure necessarily involves a wider type of information, including qualitative considerations, and scenario heterogeneity.

NTTC recognizes that opportunities to systematically supplement evidence streams with PESS data and information exist, but these opportunities are generally included in the document as incidental, conditional, or lacking delineation. Without changes, NTTC is concerned that Tribes will be at a disadvantage because the PESS SR protocol, which EPA described in response to questions at the April 2022 SACC Review Meeting, will not be sufficiently clear or sufficiently explicit to ensure information relevant to tribes is considered.

Resulting Recommendation(s):

- An explicit "PESS path" should be refined and improved from the internal and informal process proposed in the draft, to be featured clearly and prominently within the final protocol.
- Tribes should be named explicitly as a default PESS in the SR for chemicals released to the natural environment, and their unique risk as both a highly exposed and susceptible population named in the text as to an example of why supplemental data and information efforts must be included.

The SR protocol currently names infants, children, pregnant women, workers, or the elderly as examples of PESS, without reference to EJ communities, Tribes, or other populations whose lifeways cannot be represented by general population models. Tribal people can be all of those, but beyond that, Tribes are a population with unique lifeways integrated with the environment that EPA has a trust responsibility and treaty obligations to protect. They are to be consulted under Executive Order 13175 (Consultation and Coordination With Indian Tribal Governments) whenever rules or risk management actions are formulated that may impact them. Additionally, according to EPA's Policy on Consultation and Coordination with Indian Tribes, EPA should be obtaining that information, via government to government consultations, and through Tribal Partnership Groups -- such as the NTTC.

And when it comes to TSCA, as NTTC has stated multiple times prior, anything that may impact the air, lands, and waters with which tribal peoples are integrated, clearly impacts tribes. Indigenous people across the contiguous United States have lost 93.9% of the total geographic area they once occupied¹, via cession, annexation, or otherwise foreseen outcome of failed

¹ Farrell J, Burow PB, McConnell K, Bayham J, Whyte K, Koss G. Effects of land dispossession and forced migration on Indigenous peoples in North America. *Science*. 2021 Oct 29;374(6567):eabe4943. doi: 10.1126/science.abe4943. Epub 2021 Oct 29. PMID: 34709911

Federal Indian Policies. Many tribal peoples were forced to move, at great cost to their people, with a promise by the federal government that the lands and resources left to them would be available in perpetuity. Potential contamination of tribal resources violates this promise. It may be too late to correct the many wrongs, and our purpose of mentioning this grave stain on the US is not to assign blame to EPA for the past, but to remark that America's Indigenous Peoples at least are owed this - protection of their lands and lifeways to the greatest extent possible, as promised. For this, Tribes must be specifically named in TSCA risk assessments and accurately considered with the best available science and resources practical, and thus they must be addressed as the exceptional PESS that they are. For this to occur, tribes must be treated as a PESS originally, the sources that provide the evidence must survive screening, and the integration of that evidence must be performed with due thought to the importance that tribal data and information bring.

Specific comments and recommendations for two key issues under this theme are provided below.

2.1 Issue 1: Systematic Review Structure & Step Progression is Biased towards Missing PESS and PESS-Relevant Conditions of Use (COU)

As current, the SR process uses the COUs and PESS that are largely identified during chemical prioritization and initial scoping, both steps outside the SR. EPA stated in the SACC Review Meeting that 'searching and screening of secondary sources for problem formulation and designation is a key part of the prioritization process, and when the initial PECO statement is formed.'¹ NTTC has participated in the prioritization and scoping process and avers that in its currently practiced present form, it does not and cannot substitute for problem formulation in identifying COUs that may be particular to PESS. While NTTC appreciates that scoping is carried out partly parallel to the SR, the process can be heavily biased to the PESS and COUs identified during prioritization screening and initial scoping.

Both NASEM and SACC reviews recommend a full scoping process prior to the SR. The SACC recommends the following in their SR Review², in line with NASEM recommendations.

to: (1) start with the problem formulation, (2) describe how Populations, Exposures, Comparators, and Outcomes (PECOs) or Receptors, Exposure, Setting or Scenario, and Outcomes (RESOs) statements are developed and refined through the process, (3) describe the process of systematic review, evidence synthesis and integration, and (4) clearly link the steps of the systematic review back to the larger risk evaluation process.

NTTC concurs that problem formulation (i.e. what EPA terms scoping) should take place first. This is a viable structure, assuming the scoping process (i.e. problem formulation) is calibrated so that it intentionally captures Tribally relevant information and data, such as any chemical releases to the natural environment.

² April 2022 SACC Meeting Minutes Final Report at <https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0414-0044> and SACC systematic review meeting Full Transcript Final, at <https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0414-0043>

NTTC agrees with the NASEM Review³ description of what should be entailed in the risk scoping phase (termed planning and problem formulation below):

NASEM pg 3 Prior to the conduct of a systematic review, planning and problem formulation should take place. The planning and problem formulation step should include stakeholder engagement, broad literature searching to map the evidence on the topic, and identification of the most important questions and the best approach for answering such questions.

Tribes, who have lifeways heavily integrated with the natural environment, are a subpopulation highly exposed to toxics released to the natural environment, particularly as a result of product disposal. The particular chemical release circumstances for disposal as a COU may differ in Indian Country and rural Alaska, and the exposure scenario manifestations are many and unique from the general population of consumers, bystanders, or occupational non-users. If such information is not captured prior to the launch of the SR protocol, the funnel of COUs and potential PESS that feed the SR are unlikely to capture evidence that would identify tribes as PESS or appropriately characterize the routes and pathways of examined COUs. PECO and RESO statements are currently formed prior to the final scope, so that the ability of the SR to provide data for evaluation of risk to PESS is compromised. PECO and RESO statements for the SR must be developed either after full scoping is completed with Tribes as a PESS for all receptor groups (occupational, occupational nonuser, consumer), or as a separate process for Tribes with focused PECO and RESO statements.

EPA has identified data gap filling options and sources that are outside of the systematic review process, including model outputs, potential analogs, analog approaches, read-across approaches, and most importantly to Tribes - qualitative information on the conditions of use and generic exposure scenarios. However, as proposed, identification of data gaps is still relative towards the COUs and any PESS "front-loaded" to the SR process from the prioritization/scoping.

As the Tribal Partnership Group for OPPT, we appreciate the restrictive timeline imposed by statute and under which the OPPT staff diligently works, and we appreciate the staff commitment to unbiased work that accounts for Tribal lifeways. But the fact is, with the paucity of, or specialized access to, conventional data and information sources relevant to tribes, an SR protocol is prone to a biased outcome. The NTTC suggests that Tribes are included as essentially a "default PESS", and only screened out via "PESS-focused scoping". Such scoping may need to include consultation with Tribal groups or other entities familiar with whether and what potential intersection of tribal lifeways and COUs exist in and around tribal communities. The exposure context for the COUs is critically important for defining the pathways and exposure routes and defining PECO, RESO, and PESO statements upon which chemical risk management rests. As workers and consumers who are also PESS, tribal people depend on the EPA for chemical protection.

NTTC recommends EPA improve the prioritization / "scoping" process by expanded and focused outreach, a prolonged comment period, and engagement in tribal data and/or information

³ National Academy of Science Engineering and Medicine, [The Use of Systematic Review in EPA's Toxic Substances Control Act Risk Evaluations \(2021\)](https://nap.nationalacademies.org/read/25952) Available at: <https://nap.nationalacademies.org/read/25952>

harvesting that includes solicitation of tribal testimonies on any unique product uses, exposure pathways and routes, and other impacts and concerns -- whether directly from a Tribe, tribal group, or other tribal subject matter expert. The latter step may provide additional COUs of concern, and a much improved tribal exposure context. Barring SR reviewers and risk assessors who are tribal people or who have a substantive knowledge of tribal lifeways, housing, and customary practices, they are unlikely to make correct assumptions about what parameters are needed in compiling the five PESS- inclusive evidence streams.

Alternatively, EPA can implement a Tribes-as-PESS protocol rule for any chemical that is bioaccumulative, persistent, or toxic that releases to the natural environment. Then via the SR "supplemental" data approaches or improved gray literature process (see comments below), bring in sources that identify common tribal COU exposure scenarios and relevant hazard data for organ and cellular level disparities and associated disease SR outcomes potentially linked to the chemical. Overall, Tribal peoples have a wider range and greater level of health disparities than any other primary population group.

2.2 SR Structure - Supplemental Tribal Data & Information Is not Afforded Adequate Consideration

As NASEM points out in Figure 5-1 of their previously referenced Review (reproduced below), if a systematic review is not appropriate, then another evidence based method should be employed (red-circled step); a statement with which NTTC agrees.

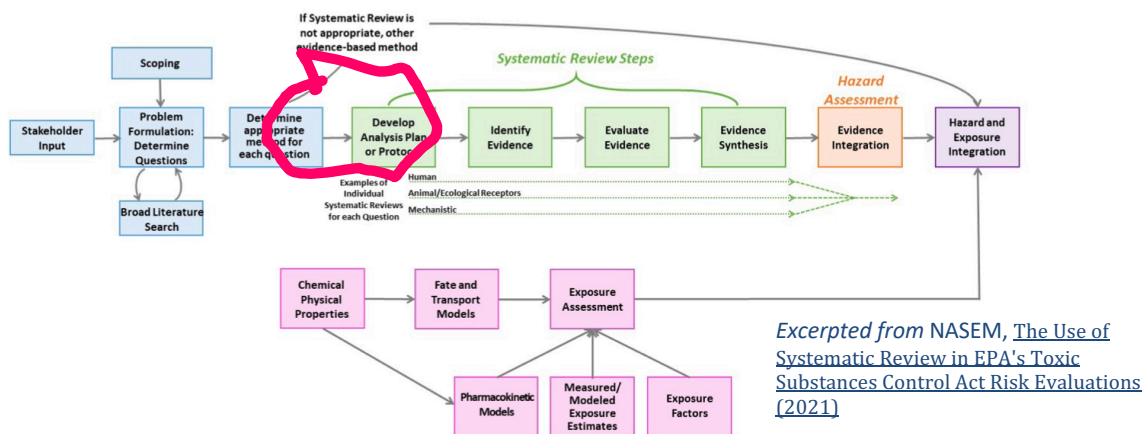


FIGURE S-1 Example approach of systematic review in the context of risk assessment. The blue boxes refer to steps that are conducted prior to the systematic review, green denotes the systematic review process, orange denotes the hazard assessment, and purple is the integration of hazard and exposure. The pink boxes refer to the exposure assessment, which is conducted outside of the systematic review but is used to make the final risk characterization.

We believe EPA provides an avenue for this through its "Data Gap Filling from Sources Outside the Systematic Review Process" step illustrated in Figure 3-1 of the Draft, screen-captured below for convenience. Evidence Integration of data outside systematic review (Step 6 in Figure 3-1), likewise is part of this avenue.

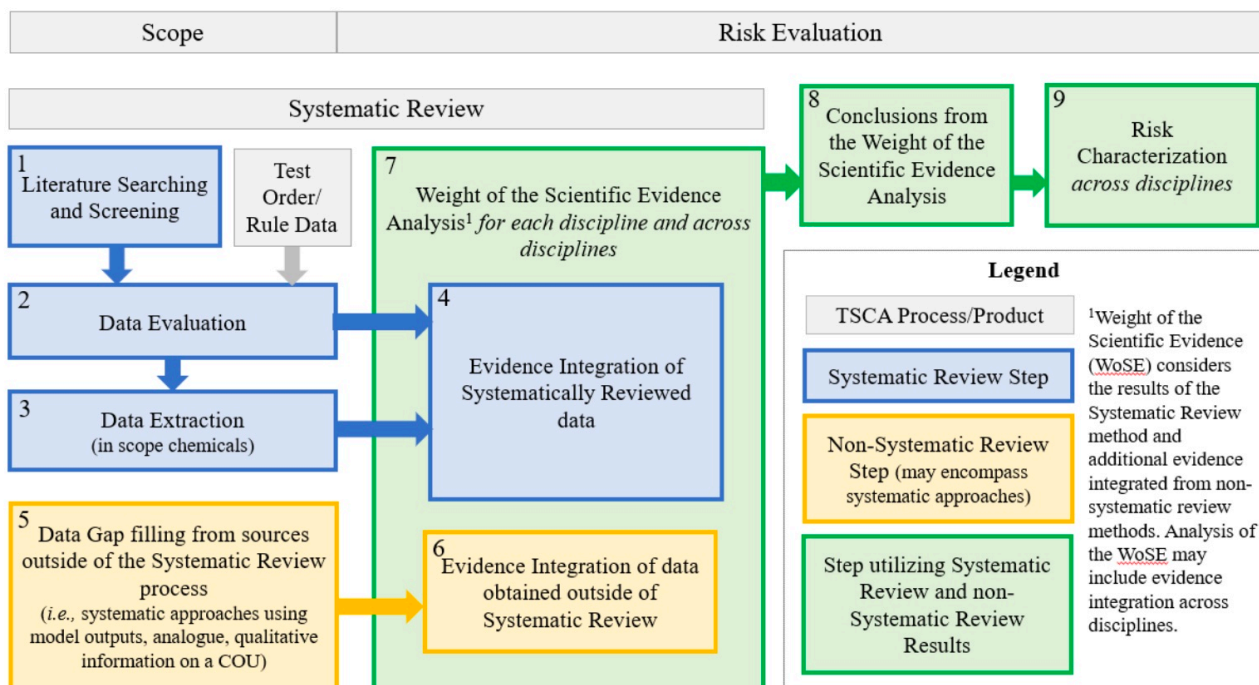


Figure 3-1. Overview of the TSCA Risk Evaluation Process with Identified Systematic Review Steps *Excerpted from USEPA Draft Systematic Review Protocol Supporting TSCA Risk Evaluations*

As EPA states (*italics added*):

In addition to the initial chemical-specific literature search, EPA conducts supplemental literature searches to resolve data gaps that are discovered during screening (*e.g., Conditions of use or other non chemical-specific information topics that may inform exposure or hazard-related susceptibility*).

NTTC applauds the concept of a supplemental data avenue, and notes that data gaps can be filled with more than literature-media, given the different forms that tribal data might take for exposures and conditions of use (COU) - including video and audio testimony. Additionally, and critically, given that tribal data on exposures, COUs and susceptibilities related to health outcomes may not arise via chemical specific searches, *the Council avers that chemical specific searches will not yield much, if any tribal relevant data*. No matter how many different ways a chemical string is permuted, tribally relevant data and information is unlikely to show up. An assurance that tribal data gaps will be identified is missing. Even more problematically, EPA proposes bringing data back into the same SR protocol that may again be inappropriate for Tribal data sources and thus devalue these sources as outliers.

Once the extent of a data gap is determined, a targeted literature search is performed following current protocol guidelines. Unique references that were not captured in the initial search are integrated into the systematic review workflow.

Another issue with this supplemental option is the secondary consideration afforded these data compared to evidence integration within the SR. For Tribes, and possibly other PESS, a substantial portion of relevant data and information may be introduced via the supplemental

avenue -- making it more of an "alternative avenue" with a systematic approach. An "as needed" basis is not entirely faulty, but such treatment may result in biased evidence that does not account for Tribally unique factors with which the reviewers are unfamiliar. Tribally relevant data and information may be too likely dismissed as outlier, including data and information relevant to health susceptibilities disproportionately present in Tribal populations. For chemicals releasing into the natural environment, and/or present DIY opportunities that residents of rural communities may more often partake or other tribal exposure considerations (e.g. low-income housing, subsistence harvesting), tribal people are likely to be *both* highly exposed and biologically susceptible. This fact alone may lend itself to an increased likelihood of being classified as outliers.

To be adequate, the final "evidence based method", or in EPA's suggested language, the systematic 'approach' avenue that is outside SR will be improved if it is more prominent and essentially stress-test proofed for tribally relevant data and information to move forward.

Resulting Recommendation: For Tribes, and possibly other PESS with sparse peer review studies, information and data harvested outside SR must be considered without bias to its source, assuming the source has subject matter expertise. Inclusion of tribal data and information should be prioritized in the evidence integration step, as well (Step 6 in Fig 3-1). If Tribally relevant data are excluded, a justification should be provided by EPA.

Stress-testing of the protocol might include how qualitative information relating to tribal exposure scenarios fares -- whether it is identified in the first place or via the data gap method, and then how it is treated afterwards. NTTC agrees with the SACC:

that the process of identifying data needs and providing the rationale for not conducting qualitative exposure assessment, if applicable, and any assumed exposure scenarios (e.g., the PESS or the lack of) should be clarified. If quantitative exposure assessments are not possible, describe why. If environmental contamination is evident or suspected, what are the exposure scenarios assumed to exist and are there adequate data to assess those exposures and to assure no PESS exist? Exposures are rarely presented evenly over the population of the US and its Territories, suggesting exposure to *vulnerable populations may be a key concern*.

Resulting Recommendation: We recommend specific PESS questions be included into the SR Protocol so as to prompt a salient search for gaps of tribal data whose existence may never be identified otherwise. One possible question is:

- What are the exposure scenarios assumed for tribes and are there adequate data to assess those exposures and to assure tribes are not PESS for this chemical?

Prioritizing inclusion of tribal data and information, with a presumption of evidence-based methodology when the source is from a tribe or tribal subject matter expert, is consistent with Federal Indian Policy and the Law of the Land (i.e. Supreme Court Rulings). Known as the 'Indian ambiguity canon' among legal scholars⁴, when it comes to interpreting ambiguous federal rules, the interpretation of those rules must be carried out with liberal favor towards tribes.

⁴ Textualism and the Indian Canons of Statutory Construction, Alexander Tallchief Skibine, 2021 among others. Part of the Indigenous, Indian, and Aboriginal Law Commons <https://dc.law.utah.edu/scholarship>

When we are faced with two possible constructions, our choice between them must be dictated by a principle deeply rooted in this Court's Indian jurisprudence: '[S]tatutes are to be construed liberally in favor of the Indians, with ambiguous provisions interpreted to their benefit.'⁵

The meaning of the ambiguity canon is typically inferred that the statute must fulfill or effectuate its purpose fully. In this case, TSCA is intended to protect PESS, which more than likely includes Tribes. Without liberal steps taken towards ensuring Tribal information and data are included and considered in the SR approach through supplemental data or otherwise, Tribes will not be protected and TSCA will not be fulfilled.

3 Gray Literature Methodology Recommendations

As the SACC points out:

the information contributing to a sound exposure assessment is complicated, employs a broad range of information, is sometimes modeled, and usually requires a range of discipline expertise and professional judgement

For appropriate Tribal exposure assessment, that discipline expertise and professional judgement includes expertise on tribal lifeways, provided by tribal subject matter experts such as tribal leaders, tribes, and tribal field professionals. As such, the Gray Literature is critically important in identifying pathways and routes for Tribes. EPA states that Gray literature includes data/information sources such as white papers, conference proceedings, technical reports, reference books, dissertations, information on various stakeholder websites, and various databases. Additionally, while GIS Mapping layers have a root in databases, we suggest adding this source type as an example of Gray literature, given its use as a research and monitoring tool, with results that are often publicly available.

3.1 Gray Literature Search

NTTC suggests adding to Table Apx E-2 Sources Used for the Gray Literature Search for the Fate, Engineering, Exposure, Environmental, and Human Health Hazard Topic Areas, a note stating explicitly that the list is non-exhaustive. Gray Literature is unconventional and in the case of tribes and other PESS, relevant data and information may be found in seemingly unlikely databases (e.g. anthropological literature). As additional listed sources for tribes, we suggest adding these sources: ExpoBox, TFERST, State subsistence harvest databases, Tribal and Inter-Tribal Websites, Indian Health Service SDS and OMDS databases, USFWS ECOS database, NPDES.

Additionally, we concur with the SACC that broad category sources should be searched, including States, NGOs, and community groups, in addition to Tribes and Inter-tribal consortia. Searching in some cases may take the form of active engagement with such groups and it is expected that a list of useful sites and sources would develop well worth the initial effort. Expectations that such groups will respond to federal register notices for comments are not realistic.

⁵ County of Yakima v. Confederated Tribes and Bands of the Yakima Indian Nation, 502 U.S. 251, 269 (1992).

3.1.1 PESS-Focused Methodology

Of critical import, and as mentioned above, the large bulk of Tribally relevant data and information useful for chemical risk evaluation will not derive from chemical name string queries, especially for exposures. NTTC agrees with the SACC recommendation to focus the literature search and screening on evidence of PESS in general as an explicit endpoint -- and NTTC believe that evidence for Tribes as PESS should be considered in both Exposure and Health effects. SACC posits two possible approaches, both of which NTTC concurs. The first is to:

. . . seed the search with potential adverse health effects associated with the chemical to identify population pockets of high incidence, geographically or as susceptibility issues. Evidence in the population/community could be related to unique exposure scenarios (duration, periodicity, levels) or highlight susceptibility of some subgroups within the population.

It is our expectation that this approach would resound nicely with relevant evidence for tribal risk evaluation. For example, chemicals which may exacerbate or contribute to the development of respiratory disease such as asthma and COPD could precipitate a PESS search for asthma and AN/AI populations and lead to information about hazard (e.g. differential susceptibility and assignment of uncertainty factors) and exposure scenarios (e.g. inhalation of dust from unpaved roads for tire additives, or smoke from burning waste products).

Secondly, the SACC agrees with NTTC that one potential approach is:

...assuring such information (PESS specific) is solicited from centers of interest for this issue—within EPA, States and Territories, other Agencies, Internationally, NGOs, etc.

3.2 Gray Literature Screening

NTTC appreciates that the Gray Literature Screening Decision Tree (Figure 4.3), reproduced on the next page, requires analysis and decision by the screener, and the screening performed is a manual process. A manual process is important because NTTC avers additional data and information from video, audio, and oral testimony/interviews from tribally-robust sources is equivalent to gray literature and provides a comprehensive alternative data avenue assuring tribally relevant data and information is used in the risk evaluation.

In our comments below, we reference the Step number in Figure 4-3, and discuss the associated Questions or Considerations listed in Table 4-1 that describe Step details. Many of the below comments could pertain to PESS in general, but we will confine comments to tribal-oriented text suggestions. NTTC recommends a separate Decision Tree for Tribes, and potentially other PESS, where the bulk of evidence may lie in unconventional sources. Additionally, this Gray Literature Discussion relates to the Exposure Treatment discussion at the end of our comments.

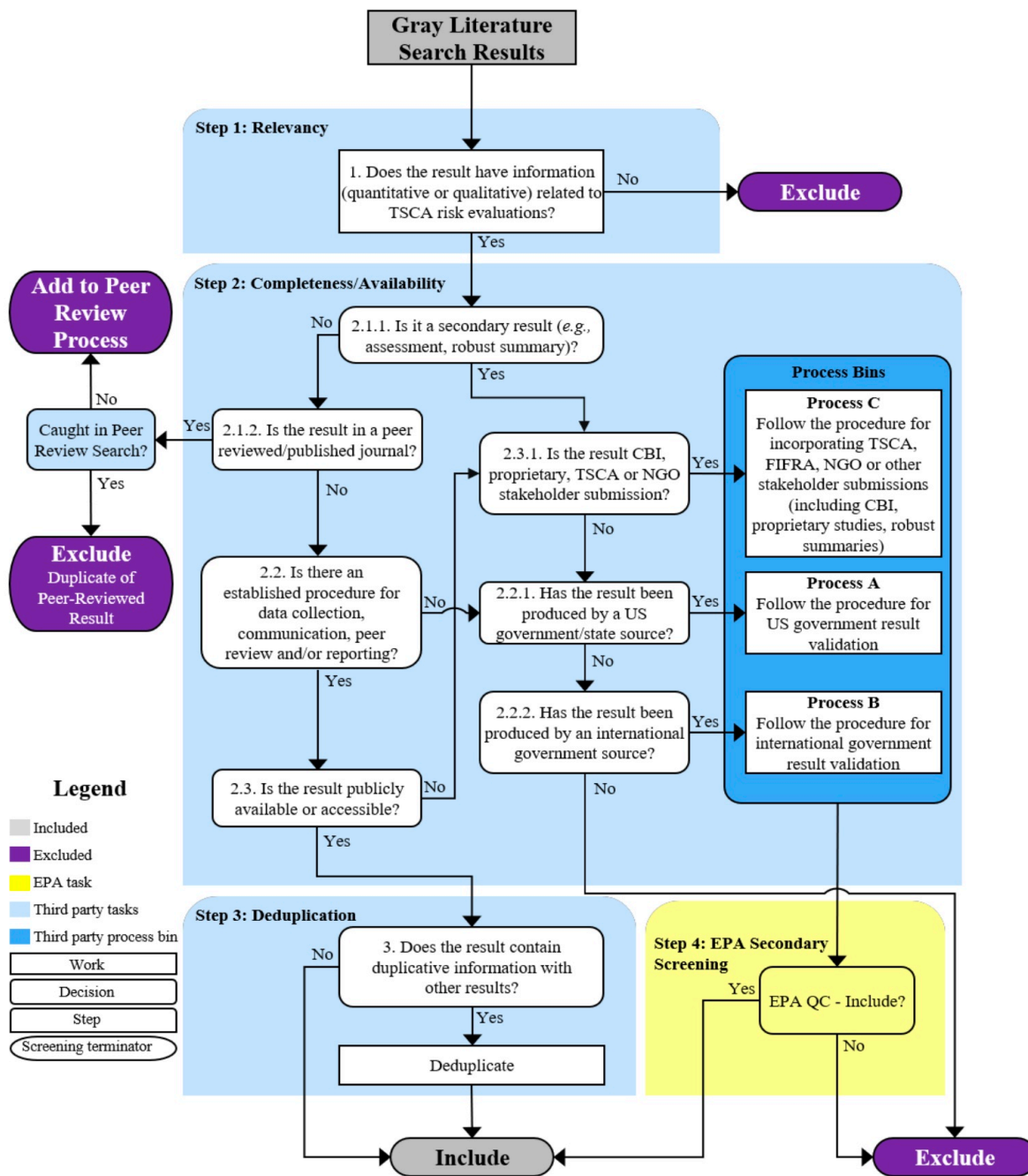


Figure 4-3. Decision Logic Tree Used to Screen Gray Literature Search Results

Excerpted from USEPA Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances

STEP 1: Recommend inserting the blue font question below after the first bullet as follows:

- Does it present information (quantitative or qualitative) that is relevant to TSCA risk evaluations of a chemical of concern?

-
- Does the data or information concern lands, waters, or people in and around Indian Country or rural Alaska that may be associated with exposures, conditions of use, hazards, fate & transport of chemical of concern, including the manufactured product?

Step 2.2: Insert below blue font text as follows:

- If the result presents Tribal relevant information or data and a conventional methodology is not apparent, is there reasonable judgement that a Tribal authority permitted (or performed) the study/report/story/media, thus indicating some quality assurance mechanism via subject matter expertise? With an assumption that academic article publishing was not a goal of the Tribe(s) involved, Does the study use Tribal traditional forms of peer review documentation, such as oral history and ethnographic observation of their people and environment?

STEP 2.2.1: The question as is '*Has the result been produced by a U.S. government/state source?*' and its screening result is unacceptable. Tribes are nations with government to government relationships. The exclusion of tribes is particularly egregious given Step 2.2.2, which moves forward any international government results. NTTC insists this question be changed to (blue font insertions):

Has the result been produced by a U.S. government/state source, territory, federally or state recognized tribe, or recognized Indigenous Hawaiian organization?

Additionally, change first, second, and third bullets to (blue font insertions):

- Results produced by U.S. government sources, Territory, federally or state recognized tribe or consortium of tribes, or recognized Indigenous Hawaiian organization that may or may not have established procedures for data collection, communication and/or reporting, or are not publicly available, do move forward.
- This includes secondary results such as databases or documents curated by government agencies, Territories, Tribes, or Indigenous Hawaiian organizations.
- Examples include the Water Quality Portal (WQP) database with data on chemical occurrence in water, State of Alaska Community Subsistence Harvest System (CSIS), IRIS assessments, Columbia River Inter Tribal Fish Commission Monitoring Data Project reports and products.

Additional comments for Section 4.3 Gray Literature Screening and its subsections are as follows, organized by subheading.

4.3.2.1.1 Step 1: Relevancy Change the following bullets under "Exposure" to (blue text inserted):

- Search result provides chemical-specific or chemical-non-specific information related to consumer and bystander (fenceline) use scenarios, including Tribal and other PESS scenarios including consumer product disposal, and DIY uses that may be more prevalent in EJ and Tribal communities.
- Search result reports measured media concentrations that relate to human exposures, including indoor air contaminants, drinking water, consumer waste disposal site releases, plants and animals living near, on, or around Indian Country, rural Alaska, or are Treaty protected resources, and other environmental exposures.

- Search result contains non-chemical specific exposure factors, such as food or water ingestion rates, unique PESS and Tribal duration parameters such as residency, subsistence harvesting, processing and preparing practices.

4.3.2.1.2 Step 2: Completeness and Availability Suggested text change includes (blue text inserted):

A description or reference to a sampling or analytical methodology, a reporting rule, peer review process, or a guidance manual that describes the quality assurance protocol is adequate/sufficient to include the source in further screening. In working with tribally-relevant or sourced data, where oral tradition derived from lifetimes of observations is a form of peer review, quality assurance is implied when the source can be reasoned to be tribally approved or accepted.

4.3.2.1.3 References that Require Alternate Processes Change first subheading to (blue text insert)

Processes A and B: U.S. Government, Tribal, and International Sources

Additionally make any changes to text in this section (and elsewhere) consistent with equal treatment of Tribal governments.

On pg 52, under 'Other Stakeholder Data Submitted to EPA', add text similar to blue font below:

Also, data may be submitted from non-governmental organizations (NGOs) or academia. Industry may also submit information to EPA in other ways. Sources of other stakeholder data all go through relevant steps identified in Process C described above. When sources contain data/information concerning or potentially concerning PESS, including Tribes that fill gaps for these populations, and are authored or submitted by PESS/Tribal subject matter experts, the process decisions should be made with emphasis towards inclusion, barring explicit, documented justification otherwise.

Under 4.4 'Backward Searches', pg 53, add blue font bullet:

- Document relevant to TSCA risk evaluation
 - Physical and chemical properties
 - Fate properties
 - Engineering and occupational exposure, including Tribal and other PESS occupational exposure
 - General population, consumer, Tribal and other PESS exposure
 - Environmental and human health hazards, including those relevant to potentially exposed and susceptible populations, (e.g. for chemicals releasing to the environment, Tribal populations with health disparities associated with chemical health hazard outcomes)

Under 4.4.1.1, bottom of Pg. 54:

1. E) Significant exposure data, which include
2. Exposure concentration, duration, frequency

3. Worker, consumer, [Tribal and other PESS](#) activity

4 [Comments and recommendations supporting Tribal inclusion and PESS prominence.](#)

The SACC review notes concern in the use of the term PESS regardless of the discipline stream - exposure or hazard, when the two embedded characteristics (exposed or susceptible) denote entirely different fields of science.

pg 30 Exposure is different than biological susceptibility. There are more highly exposed (vulnerable) subpopulations for example, workers in facilities using TSCA chemicals, people living downwind of stacks emitting chemicals, people using/consuming contaminated water, those consuming contaminated fish, wildlife, and infants consuming breast milk containing environmental chemicals. Susceptibility refers to underlying biology that makes a sub-population more likely to experience adverse health effects—for example, the fetus is more susceptible to the effects of chemicals for which the developing brain is a target.

Potential exposure belongs in the exposure discipline and susceptibility belongs in the hazard discipline, requiring different review expertise and methods. For ease of discerning which attribute is being discussed in the SR, the SACC recommends adding separate definitions-- with which NTTC concurs. Such a step is not complete until the SR notes that the same PESS population that is susceptible may also be more highly exposed, as is often the case with tribal populations. Tribes are highly exposed to chemicals released in the natural environment and via consumer use, older and substandard housing, poor ventilation, DIY tendencies, subsistence harvesting, and more. They are also likely to be more susceptible given their health disparity status compared to white non-Hispanics and various minority populations, as well. NTTC therefore recommends modifying the PESS definition to include the sentence in blue font below :

A group of individuals within the general population identified by the Agency 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 (15 U.S.C. 2602 or 40 CFR 702.33). [For a given chemical, some PESS may be both more susceptible and more highly exposed.](#)

Additionally, it is imperative that the SR protocol spell out how data and information relating to the risk evaluation of populations both vulnerable and susceptible is obtained. There must be a method to ensure evidence integration results in analysis and evaluation that incorporates data, information, and/or models relevant to Potentially Exposed And Susceptible Populations (PEASS). Once a PESS group is determined, establishing whether it faces both attributes should be a *required step*, as the presence of a PESS may change the determination of best available science.

4.1 [Miscellaneous Text and Graphic Recommendations](#)

[Separate PESS Table:](#)

NTTC agrees with the SACC for the need of a separate dedicated PESS table similar to Tables 7-3, 7-4, 7-5, entitled "Hierarchy Guiding Integration of PESS Exposure Data/Information ". The

table should include tribally relevant examples and/or a separate Tribal Table should be employed. As noted, Tribes are different from the general population in the data gaps, the evidence streams, the relative levels of qualitative/quantitative ratio, source media, the appropriate systematic approaches that may be needed, the combination of susceptibility and high exposure, the unique scenarios, and the need for assessor judgement on data concerning unfamiliar lifeways and circumstances.

Text Corrections to Highlight PESS:

On Pg 81, these two sentences infer that consideration of PESS (including tribal) information is an afterthought, versus the mandated statute provision that it is :

Other data types (*e.g.*, mechanistic, non-quantitative PESS information) are extracted as needed, depending on the amount and type of other data that are available for a specific chemical. Additionally, relevant PESS information from extracted studies may also be noted alongside the details listed above.

Suggestion:

Non-quantitative PESS information and other data types (*e.g.*, mechanistic,) are extracted as needed, depending on whether the amount of data and type of data that it would bolster was sufficiently available for a specific chemical. Additionally, relevant PESS information from extracted studies will be noted alongside the details listed above.

On Pg 89, suggest adding the blue text (and following through on its policy):

Human health exposure assessment characterizes the exposure levels of the chemical substance in the environment at which human receptors are exposed to. In the risk evaluation process, EPA assesses exposure to the chemical substance to general population, including PESS such as workers (occupational), Tribes, EJ communities, and consumers. EPA utilizes existing data and studies identified and reviewed through the systematic review process, as well as estimation (models) in the exposure

On pg 112, suggest modifying the below sentence and policy:

Data permitting, the integrations also discuss analyses relating to PESS.

to:

The integrations must also discuss analyses relating to PESS. If data are insufficient, they must be obtained via any reasonable method -- PESS group or PESS subject matter engagement, test orders, modeling, etc.

On pg 130, the below text seems to suggest that it is acceptable to not incorporate PESS into evidence integration and dose-response analysis for human health hazard.

- *Potentially Exposed or Susceptible Subpopulations* – Were any identified PESS groups or factors incorporated into evidence integration and dose-response analysis? For any PESS considerations that could not be accounted for quantitatively, how might they qualitatively impact interpretation of the hazard analysis? Are there data gaps related to the extent of

certain sensitive endpoints or in accounting for population variability due to genetics/lifestage/pre-existing conditions or other susceptibility factors?

But Tribes have a great health disparity burden -- across disease prevalence and outcomes, and are likely to be biologically susceptible to most chemical specific health outcomes. If that susceptibility is not accounted for, the risk evaluation will presume a non-protective hazard. Tribes and other EJ groups have disparities precisely because of the default western linear thought rationality suggesting outlier or missing data from unique and less prevalent lifeways can be disregarded in pursuit of the most expedient research and policies for the nation's health and well-being. A move by health-related federal agencies to begin considering more holistic social determinants of health is welcome in this context. Suggest changing text and policy to:

- *Potentially Exposed or Susceptible Subpopulations* – Which identified PESS groups or factors were incorporated into evidence integration and dose-response analysis? For any PESS considerations that could not be accounted for quantitatively, how did the interpretation of hazard analysis change via considering qualitative information? Are there data gaps related to the extent of certain sensitive endpoints or in accounting for population variability due to genetics/lifestage/pre-existing conditions or other susceptibility factors? How can the data gaps be addressed in a way that conservatively prioritizes PESS protection?

At bottom of pg 339, Table Apx H-2 Inclusion Criteria for Data or Information Sources Reporting Environmental Fate and Transport Data Insert blue text:

Any setting or scenario resulting in releases of the chemical substance of interest into the Scenario natural or built environment (*e.g.*, buildings including homes or workplaces, waste disposal sites, or wastewater treatment facilities) that would expose environmental (*i.e.*, aquatic and terrestrial organisms) or human receptors (*i.e.*, general population, and PESS), particularly scenarios specific to natural environments prominent in Indian Country and/or rural Alaska or built environment and disparities (e.g. substandard facilities, older and dilapidated housing, non-OSHA compliant workspaces).

On pg 497 -- Appendix N -- Change title by inserting blue text:

Appendix N DATA QUALITY CRITERIA FOR STUDIES ON CONSUMER, GENERAL POPULATION, PESS, AND ENVIRONMENTAL EXPOSURE

Types of Consumer, General Population, PESS, and Environmental Exposure Data Sources

5 Additional Comments

5.1 Ordinal ranking and exclusion of studies.

NTTC agrees with NASEM, SACC, and other commenters that the ordinal ranking is quantitative ranking without mathematical basis, given the uncertainties of which study parameters matter. We provide a summary statement from NASEM below [*italics added*] and point out that given the small populations of most tribes, higher variance and uncertainty are expected and the potential for inclusion of multiple low power studies for synthesis is important. Additionally,

given there may be a relatively higher volume of qualitative information and data, room must be given for combining multiple studies with lesser documentation that all point to tribes as PEES with additional COUs and exposures.

From NASEM [emphasis added]: Given the large number of metrics scored for these data types, the possibility that a single unsatisfactory rating could completely nullify the use of a particular study from synthesis is problematic as it may lead to a biased review. *Statistical power and statistical significance are not markers of risk of bias or quality.* Statistical significance is not a measure of association or strength of association and should not be used to evaluate studies. *In fact, combining multiple small, low-powered but similar studies in a synthesis is one of the benefits of systematic review.*

NTTC agrees with Public Commenters, NASEM, and SACC that studies should not be excluded. As voiced in public testimony:

The second recommendation that NASEM made to EPA on their study quality approach was do not exclude studies based on risk of bias, study quality, or reporting quality. it's standard practice to include all studies, even studies with a high risk of bias into the evidence synthesis. This concern with using an approach that can exclude studies from a body of evidence based off only one methodological limitation risks a bias of study quality, an assessment that was validated when the NASEM, in its review of the ORD staff handbook -- EPA continues to conflate how well a study is reported with how well the underlying research was conducted and continues to include inappropriate appraisal criteria, such as statistical power.

*Nicholas Chartres,
UCSF Science and Policy Team of the Program on Reproductive
Health and the Environment*

NTTC notes that Table 7-13, Considerations that Inform Evaluations of the Strength of the Evidence within an Evidence Stream (*i.e.*, Human, Animal, or Mechanistic), is biased away from Tribally-relevant studies and information. There are a lesser number of Tribal health studies than for the general population -- or than for broad minority classifications for both complex and obvious reasons⁶. The Table's Factors which impute worse evidence of quality include whether the database has few or only one study. Also, evidence strength is downgraded if studies have high variance (a common hallmark of small populations, which are common for Tribes).

NTTC recommends documentation of why a study is excluded. With this information, reviewers and subject matter experts (e.g. tribal subject matter experts) could provide QA/QC and the SR protocol could advance as lessons are learned.

5.2 Pre-filtering via SWIFT-Review

The SACC was concerned about the validity of pre-filtering studies using SWIFT-Review and recommended additional QA/QC be developed to ensure accuracy in the screening process.

⁶ Tara Becker, PhD, Susan H. Babey, PhD, Riti Shimkhada, PhD, AJ Scheitler, Ed.D., Ninez A. Ponce, PhD, MPP, Limited Access to Health Data on American Indian and Alaska Natives Impedes Population Health Insights, UCLA Center For Health Policy Research, Nov 2020

NTTC recommends in particular spelling out how QA/QC can be used to ensure Tribally relevant data and information are not screened out, given that they may come in atypical form and information related to COUs for example may not seem relevant to a reviewer that is not familiar with the very unique lifeways tribes have.

5.3 Criteria for screening non-hazard studies

Table Apx H-2, which presents the inclusion criteria for sources reporting environmental fate and transport data, seems to screen out studies that do not contain evidence of environmental exposure to human or environmental receptors. NTTC agrees with the SACC in their comments on this Table that receptor exposure evidence is unlikely to be found in chemical specific fate and transport literature.

...exposure to aquatic and terrestrial organisms or to human receptors are not likely to be reported in studies that examine chemical environmental detection, fate or transport. Such studies are more likely to consider how a chemical moves from one environmental compartment to another (transport) or how they are degraded in the environment.

Further, chemical specific fate and transport studies with tribal or other PESS receptors are even more unlikely. NTTC suggests revisiting this table and outlining alternative screening criteria, thus allowing studies presenting relevant fate and transport data but lacking receptor information to move forward.

5.4 Use of Cellular-level versus Apical Endpoints

NTTC is very concerned about tribal health disparities and agrees with commenters and the SACC that use of apical endpoints – at the organ level or higher, is inappropriate in protecting the U.S. population from chemical toxicity, which is TSCA's charge. Outcomes such as reduced thyroid hormone levels, reduced red blood cell counts, reduced immune system function, and epigenetic changes, may not manifest as clinical disease but are clearly medical conditions that can present ill health symptoms and lead to serious clinical disease outcomes. The Council believes that for prevention of disease progression-- and thus for the PECO statement Outcome, use of cellular level (or lower) endpoints associated with biological susceptibility for ill health and disease, or known upstream markers of effect (e.g. biochemical markers) is the only sensible choice. NTTC further agrees with the SACC that the PECO should list the specific chemical metabolites, as well.

5.5 Use OF IRIS methodology

Both NASEM and the SACC Report, as well as public commenters, encouraged EPA to make use of what in general seems to be viewed as a sounder IRIS SR methodology. Leveraging good science from IRIS is helpful, but an overall fit for purpose methodology is needed. Furthermore, with IRIS focused on human health, NTTC is concerned that information and data on the animals and plants might be valued less or dropped out. EPA should clarify that such an event will not occur and why. An example mentioned in the SACC report was that rodent species are considered poor models for human toxicity, but their data could be useful for extrapolation to mammalian wildlife. In the case of tribal peoples, the utility of retaining rodent species extends much further. Consumption and processing of rodents such as beaver, muskrat, and/or squirrel,

is still commonplace for many Tribes, and the same can be said for ingestion of other species that have little hazard relevance for humans.

5.6 Mechanistic (and other data such as *in silico*, read-across, *in vitro*/IVIVE) data should be considered as a data stream.

NTTC agrees with the SACC that such data can provide multiple critical aspects to a risk evaluation. Because tribal population data specific to a chemical are almost certainly sparse, these types of data can be useful, especially in the many instances that tribes face unique exposure pathways and routes.

6 Treatment of Exposure

The treatment of exposure is of great concern to Tribes because it is in this discipline that the uniqueness of their lifeways should be recognized. Tribal lifeways integrate tribal people with their environment and are built on traditions since time immemorial. These are the lifeways that the federal government has throughout the history of this country intentionally disrupted to assimilate, displace, or annihilate tribal peoples. Tribal people fight hard to protect these lifeways and any impingement or suggestion that they are not sufficiently significant to include upfront and explicitly -- as TSCA not only allows, but essentially champions, is naturally unacceptable.

The SACC concurs with NTTC's opinion that PESS are left out of the Exposure stream, which by default leaves Tribes out.

Several Committee members pointed out that consideration of PESS is neither explicit nor implicitly addressed in the exposure evidence. As prepared, the protocol will miss important information and data for exposure assessment and fail to identify PESS or other subpopulations or temporal variations of exposure.

In addition to our recommendations in the Gray Literature Screening and throughout this letter, additional steps can be taken towards the capture of Tribal exposures with accurate representation and relevance for risk evaluation.

Utility vs quality NTTC concurs with the SACC recommendations on exposure, including focusing on study utility versus quality. As NTTC noted above, multiple sources of tribally relevant data or information should be construed as sufficient and useful evidence to incorporate into an evaluation, even if those sources do not meet some quality standards. Even a single study of lesser quality may be helpful in filling the many data gaps that may be present and can lead the review team to additional evidence sources.

As to utility, we reprint the SACC's recommendations on exposure integration (in black font) with NTTC annotation in blue font.

Regarding Exposure, the EPA should consider:

1. Data may exist in atypical formats or may be narrative. Discussed above in Gray Literature Screen and elsewhere.
2. Pedigree may be different from ‘peer reviewed’ literature and may include community/regional representative information that may also be useful. See Gray Literature discussion for examples of peer review when it comes to Tribes. These are Tribal Councils, Leaders, Elders, Tribal subject matter experts that work extensively in and with Tribal communities. They may or may not include state, regional agencies, but typically include Inter-tribal organizations, community based organizations and other institutions serving tribes and tribal communities.
3. Reasons for eliminating data should be noted and be application specific. As mentioned, Tribal peoples have a history of being discounted, and as such it is critical to provide accessible documentation on any excluded tribally relevant data that are from a tribal authority, associated institution, or community based organization.
4. Possible applications of information with quality issues include:
 - i. Have limited applications, e.g., use as confirmatory or corroborative information only. Discussed above.
 - ii. Help in the refinement of missing information, assumption, or value, such as ranges of potential exposure limits for different subpopulations. Qualitative or quantitative descriptions of practices described by Tribal persons provide an oral history and repeated, experiential knowledge. If additional information is needed, engagement with the Tribe should be sought.
 - iii. Evidence of Potentially Exposed or Susceptible Subpopulation(s) (PESS) or specific temporal relationship. Again, in particular if EPA continues to carry out initial prioritization and scoping such that PECO statements are developed prior to a comprehensive problem formulation. Tribes are not a default PESS and it is critical at this stage to flag and add PESS. Temporality is natural advent of living integrated with the environment. Seasonal activities including subsistence and associated seasonal homes are a natural cycle. Foods are seasonal and the way they are prepared is seasonal.
 - iv. Suggestion of factors causing (or contributing to) disproportionate population exposure AND specific conditions (e.g., variability in a data set may be evidence of exposure conditions --seasonal, geographical, sub- population, temporal situation, etc.). Substandard and often unique built environment and extensive activities with and in the natural environment for all ages including infants.
 - v. Relevant for exposure scenarios that match the temporal conditions of toxicology data from which key POD metrics were derived. Subsistence and other tribal activities must be assumed to be unlike other activities with which the reviewers are familiar, and toxicological endpoints may not be appropriate. For example, the meat or fish consumed is from weeks of immersion in sediment, and the source is singular and consumed year-round (dried in winter) and in large doses, and this may be repeated throughout a lifetime, from infants to Elders.

- vi. Any evidence of new exposure scenarios. And suggestions for other relevant data. **For example, ingestion of certain plants and animals that are receptors.**
- i. Application of data to modeling or assessment algorithms. **NTTC encourages the use of modeling to better represent tribes versus an alternative that their lifeways are not incorporated due to insufficient data.**
 1. As full data set
 2. As normalized value
 3. As maximum or high-end value (yielding conservative bias? Yielding lower end bias?)
 4. Replacing previous values in model

Use of standard data evaluation criteria to evaluate non-standard studies and methods.

NTTC understands the challenge of devising a systematic review that is comprehensive in its inclusion of non-standard studies, models, and information for evidence integration, yet include protocols that weed out unreliable, duplicative, or irrelevant data. Still, the use of data evaluation criteria from standardized test guidelines applied to non-standard designs at times is inappropriate, much like 'the square peg in the round hole'. As pointed out by the SACC below, this practice is especially damaging for Tribes because it may lead once again to exclusion or poor representation of tribal exposure scenarios.

Importantly, information is useful for supporting existing assumptions or default factors, or existing data, or refuting or expanding the assumptions or factors. It can lend evidence that variation in measurements implies unique conditions of exposure, uniquely exposed population groups (e.g., potentially exposed or susceptible subpopulation (PESS)) because of duration or frequency or amplitude of contaminants, and the existence of critical data gaps for performed measurements and obtained evidence.

Valuable information for exposure assessment may take form from scientific studies where standardized designs are assessed for study quality or may take the form of accrued observations of metrics important for specific population characterization related to quantifying the duration, intensity, periodicity, and other elements of exposure opportunity to contaminated media. These values may be used in different ways in exposure models and may vary considerably from one subpopulation to another. Current standardization concepts do not address this realm of information, especially for PESS exposure conditions.

In the case of Tribal relevant sources, it is imperative that all forms of Tribal documentation of exposures be accepted and the use of best science prevail in how the exposure is considered in the risk assessment, such that Tribal populations are protected. We suggest 1) Staff training by qualified risk assessors who work extensively with tribal populations in identifying and addressing the different ways these values manifest for tribes, and 2) A separate guidance section to be drafted within the next two years.

Conclusions

NTTC is greatly encouraged by EPA OPPT's recent commitment to assessing risk to tribes in a representative and relevant way. We are grateful for the opportunity to comment on the SR protocol and welcome the opportunity to work closely with EPA to ensure the SR protocol does not preclude the consideration of tribal risk in TSCA actions.

Therefore, we conclude with an overarching recommendation of making certain that 1) Tribes are considered up front and explicitly, 2) evidence for their exposures and other data streams sought out and integrated without negative bias as to source -- including expanded notions of authoritative sources, 3) Recognition that chemical-specific query strings will not result in the vast bulk of tribally-relevant data, 4) a clear graphic and description of Tribally relevant data and information place and flow from the beginning chemical prioritization/scoping phase up through its evidence integration and synthesis. In its efforts to release an SR protocol that most appropriately serves their mission, we trust that EPA will also include changes sought by the worthy SACC and NASEM reviews.

In identifying and integrating relevant evidence and filling data, we ask EPA to continue to aspire to do better when it comes to formulating risk evaluations inclusive of tribal populations. TSCA can be used to achieve equity in that long arc of which Martin Luther King spoke. We believe the concept of a reasonable effort is subjective, and for tribes and EJ communities to be served, it is reasonable to go beyond the same conventional methods used in the past because those are the same strategies that have historically left us out of risk consideration. Tribes and EJ communities are almost certainly PESS for most chemicals and if they are not identified as such, with the outcome of a plan to fill data gaps or otherwise account for their higher susceptibilities and exposures, the methodology is lacking.

As we were writing this comment letter, the Nation's 2021 life expectancy tables were released via news outlets. Native Americans and Alaska Natives in the U.S. on average can expect to live to 65 years of age, eleven years less than white Americans, and equivalent to that in the Congo. If you were one of our men you could expect to live to 61.5 years of age -- not even to the age of an Elder.⁷ We respectfully ask that in developing and implementing the chemical specific protocols and in making judgements, the entire SR review team begin with a question:

What if Tribes were the general population--what would be done?

What if the entire general population had medical susceptibilities across the full spectrum of disease, typically 2 - 4 times higher than the general population? What if everyone's lives, livelihoods, and sense of self revolved around and in the natural environment? What if nearly everything consumed or used or touched derived from the environment, including the full range of endemic plants and animals? What if most children and elders participated in these ways and lived in the same substandard housing, used older low-income products, and had rural healthcare access differences? And the general population lived and worked adjacent to substandard wastewater and waste disposal facilities that released chemicals into this environment. And identification of all of this was primarily not in Peer Review Literature, which tended to focus on other populations and unfamiliar lifeways. What would be done differently? How far would you go to ensure the general population would be protected from chemicals allowed to be used by industry in products we use and are surrounded by every day? What efforts would be considered too much to embark on now would be undertaken then?

⁷ Arias E, Tejada-Vera B, Kochanek KD, Ahmad FB. Provisional life expectancy estimates for 2021. Vital Statistics Rapid Release; no 23. Hyattsville, MD: National Center for Health Statistics. August 2022. DOI: <https://dx.doi.org/10.15620/cdc:118999>.

If it takes every precautionary approach available, or conceivable, to ensure that TSCA risk evaluations have the information, data, and models to ensure that tribes and other EJ communities are protected from chemical harm, then that is to what we aspire.

Should you or your staff have questions or comments regarding this letter, please contact myself, Dianne Barton, NTTC Chair, at (503) 731-1259 / bard@critfc.org.

Sincerely,

A handwritten signature in cursive script that reads "Dianne C. Barton".

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