July 12, 2022

## <u>Submitted via Email</u>

Dr. Michal Freedhoff Assistant Administrator, Environmental Protection Agency Office of Chemical Safety and Pollution Prevention 1200 Pennsylvania Ave. NW Washington, DC 20460-0001

> Re: Science Advisory Committee on Chemicals' Report on Draft Toxic Substances Control Act ("TSCA") Screening Level Approach for Assessing Ambient Air and Water Exposures to Fenceline Communities Version 1.0

Dear Assistant Administrator Freedhoff:

We write to express our support for the Science Advisory Committee on Chemicals (the "SACC") report on Environmental Protection Agency's ("EPA") Draft TSCA Screening Level Approach for Assessing Ambient Air and Water Exposures to Fenceline Communities Version 1.0 (the "Fenceline Assessment Approach").<sup>1</sup> The signatories include organizations that advocate for equitable and health-protective chemical regulation; coalitions dedicated to environmental justice; and communities where vast amounts of chemicals are manufactured, used, disposed of, and released. Many of our organizations previously submitted comments on the Fenceline Assessment Approach, urging EPA to expand and strengthen its assessment of fenceline community risks without delaying the regulation of chemicals that were previously evaluated under TSCA.<sup>2</sup> In its recent report, the SACC raised similar concerns and provided near- and long-term recommendations for how EPA could improve its fenceline assessments.

The protection of fenceline communities is at the heart of EPA's obligations under TSCA and the Biden Administration's environmental justice commitments. In the 2016 TSCA amendments, Congress directed EPA to evaluate and eliminate chemicals' unreasonable risks not only to the general public, but also to the groups who experience greater risks because they are more exposed to toxic chemicals or are more susceptible to harm from their exposures.<sup>3</sup> Those groups include communities surrounding the sites and facilities where toxic chemicals are manufactured, used, released, and disposed. They also include communities who, while not

https://www.regulations.gov/comment/EPA-HQ-OPPT-2021-0415-0081 (click "Download"). <sup>3</sup> 15 U.S.C. § 2605(a), (b)(4)(A) (requiring EPA to evaluate chemical risks to "potentially exposed or susceptible subpopulation[s]" and to eliminate risks to such subpopulations); *id.* at § 2602(12) (defining "potentially exposed or susceptible subpopulation").

<sup>&</sup>lt;sup>1</sup> See EPA, Document No. EPA-744-D-22-001, Draft TSCA Screening Level Approach for Assessing Ambient Air and Water Exposures to Fenceline Communities Version 1.0 (2022), https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0415-0012 (click "Download") ("Fenceline Assessment Approach").

<sup>&</sup>lt;sup>2</sup> Black Women for Wellness et al., Comments on Draft Toxic Substances Control Act Screening Level Approach for Assessing Ambient Air and Water Exposures to Fenceline Communities Version 1.0, Docket No. EPA-HQ-OPPT-2021-0415-0081 (March 22, 2022),

located at a literal "fenceline," face increased chemical exposures from their food, drinking water, and other sources. All of these are referred to herein as "fenceline communities."

In addition to their increased exposures, fenceline communities often experience greater harm because of their cumulative exposures to multiple chemicals and to non-chemical stressors such as income inequality, pre-existing health conditions, lack of health care access, and racial discrimination.<sup>4</sup> EPA's traditional practices—many of which are reflected in the Fenceline Assessment Approach—have failed to identify and address the serious harms that those communities face on a daily basis. As EPA Administrator Michael Regan acknowledged in an April 2021 memo to EPA staff: "Too many communities whose residents are predominantly of color, Indigenous, or low-income continue to suffer from disproportionately high pollution levels and the resulting adverse health and environmental impacts. We must do better."<sup>5</sup>

One area where EPA must "do better" is its evaluation of fenceline community impacts and risks under TSCA. While supporting EPA's decision to take such impacts into consideration, the SACC found that the current version of EPA's Fenceline Assessment Approach "did not defensibly represent actual exposure of fenceline communities," and thus cannot evaluate or address the real-world risks that those communities experience.<sup>6</sup> "[T]he issue of greatest consensus" among the SACC was that EPA's "narrow" Fenceline Assessment Approach "leads to underestimation of exposure," and a corresponding underestimation of risk.<sup>7</sup> The SACC identified several reasons for this underestimation, which, if not corrected, may leave residents of fenceline communities exposed to unsafe levels of toxic chemicals.

First, even though fenceline communities are routinely exposed to multiple chemicals, EPA assessed the impacts of individual chemicals in isolation. The SACC called on EPA to consider the fenceline communities' increased susceptibility to harm because of their cumulative exposures to chemicals that affect the same organ or cause the same types of harm:

The majority of fenceline communities will be exposed to several different chemicals at the same time. Many of these chemicals will have the same target tissues where they induce adverse effects. Many of these chemicals will affect the receptors using multiple pathways (air, water and dermal). Thus, going forward developing a framework for cumulative exposure assessments is highly recommended. The cumulative exposure assessment will be able to determine the total exposure of the fenceline communities to multiple chemicals via multiple

- <sup>5</sup> Letter from Michael Regan, Adm'r, EPA to Staff, EPA 1 (Apr. 7, 2021), <u>https://www.epa.gov/sites/default/files/2021-04/documents/regan-</u> messageoncommitmenttoenvironmentaljustice-april072021.pdf.
- <sup>6</sup> SACC, Science Advisory Committee on Chemicals Meeting Minutes and Final Report No. 2022-01, Docket No. EPA-HQ-OPPT-2021-0415-0095, at 15 (May 19, 2022),

 $<sup>^4</sup>$  15 U.S.C. 2602(12) (defining "potentially exposed or susceptible subpopulation" to include "a group of individuals . . . who, due to either greater susceptibility or greater exposure . . . may be at greater risk than the general population").

https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0415-0095 (click "Download"). <sup>7</sup> Id. at 63.

routes of exposures. . . . [This] is very critical in getting better comprehensive risk assessment.<sup>8</sup>

Second, while fenceline communities are often exposed to the same chemical from multiple sources and polluting facilities, EPA did not consider those aggregate exposures but rather calculated the risks posed by each facility in isolation as the only source that the community was exposed to. The SACC urged EPA to assess communities' real-world exposures to a chemical substance from multiple sources and pathways:

The Committee noted that it is important to include aggregate and cumulative exposures. For example, some community members are occupationally exposed to the chemical of concern in addition to being exposed in the community. In addition, some people are exposed to multiple facilities, which is not included in the proposed methodology.<sup>9</sup>

The SACC also expressed concern with the "narrow" range of exposure pathways considered by EPA, which fails to account for drinking water from private wells, consumption of contaminated fish and meat, soil vapor intrusion, and other ways that fenceline communities are exposed to harmful chemicals:

The committee relayed the importance of including more pathways to sufficiently characterize exposures and risk . . . . For example, fish consumption is an important pathway for persistent and bioaccumulative toxic chemicals (PBTs).<sup>10</sup>

The Committee observed that groundwater may be an important pathway to include for chemicals that have properties that make them prone to vapor intrusion into private wells for drinking water.<sup>11</sup>

Land disposal poses several environmental problems. . . . First, there is the potential for toxic chemicals or their transformation products to leach into groundwater. . . . Second, toxicants will volatize from surface soils.<sup>12</sup>

Several committee members expressed concern that dermal exposure assessment may not be protective and is limited by the proposed model to recreational swimming while failing to consider exposure via bathing.<sup>13</sup>

In particular, the SACC found that exclusion of the foregoing pathways would understate impacts to tribal and Indigenous populations, many of whom have greater dietary exposure to contaminated fish and game or live in proximity to waste disposal sites:

<sup>&</sup>lt;sup>8</sup> *Id.* at 49.

<sup>&</sup>lt;sup>9</sup> *Id.* at 58.

 $<sup>^{10}</sup>$  Id. at 57.

<sup>&</sup>lt;sup>11</sup> *Id.* at 58.

 $<sup>^{12}</sup>$  *Id.* at 59.

<sup>&</sup>lt;sup>13</sup> *Id.* at 39-40.

The Committee agreed that Version 1 of the screening tool for fenceline communities is currently not adequate for evaluating potential exposures relevant to tribes, indigenous populations, subsistence lifestyles, cultural practices, or other unique circumstances.<sup>14</sup>

The SACC recommended that EPA expand its air modeling to better address exposures both within 100 meters of and more than 10 kilometers away from an emissions source:

The reliance on a rigid 10,000-meter buffer for the air pollutant screening methodology may lead to discounting of exposures for downwind communities that fall outside the arbitrary . . . buffer.

EPA's Integrated Indoor/Outdoor Air Calculator (IIOAC) predicts concentrations at 100m and beyond. This is inadequate for a screening level assessment and should estimate concentrations nearer to sources, especially for fugitive emissions.<sup>15</sup>

The SACC also "raised concerns about the accuracy and completeness of the data used to conduct the screening analysis"<sup>16</sup> and noted that "monitoring data from facilities discharging chemicals assessed under TSCA are needed"<sup>17</sup> Specifically, there were concerns about the accuracy of [Toxics Release Inventory ("TRI")] and [National Emissions Inventory ("NEI")] data, over reliance on the 2019 TRI data and the exclusion of other years, and the lack of 2019 TRI data or emerging contaminants such as PFAS.<sup>18</sup> Other sources of exposure [data] beyond TRI and/or NEI may include self-reporting and self-monitoring by fenceline communities at municipal/city level, academic centers that work with fenceline communities and tribal councils.<sup>19</sup> To account for facility malfunctions, unplanned releases, and other "peak" emission events, the SACC recommended that EPA "present the mean/median and peak emission concentrations.<sup>20</sup>

Finally, the SACC also called on EPA to consider non-chemical stressors that increase the harm residents of fenceline communities experience from their chemical exposures:

In addition to contaminant exposures, fenceline communities also generally have a disproportionate burden of non-chemical stressors such as lack of health care and preexisting untreated disease such as obesity and diabetes (Boyce et al. 2016). It is important to consider these in efforts going forward.<sup>21</sup>

The flaws and gaps in the Fenceline Assessment Approach threaten the health of fenceline communities, because if EPA does not completely and accurately evaluate the risks to

- <sup>16</sup> *Id.* at 39.
- <sup>17</sup> *Id.* at 32.
- <sup>18</sup> *Id.* at 39.
- <sup>19</sup> *Id.* at 51.
- <sup>20</sup> *Id.* at 17.
- <sup>21</sup> *Id* at 49.

<sup>&</sup>lt;sup>14</sup> *Id* at 16.

<sup>&</sup>lt;sup>15</sup> Id. at 27 (citations omitted); see also id. at 28-29.

those communities, it will not have the information it needs to eliminate all unreasonable risks. At the same time, we share the SACC's concern that "[u]ncertainties and improvements to screening methods must not be used to delay protections" against harmful chemicals.<sup>22</sup>

To avoid delay, the SACC recommended several changes to EPA's draft Fenceline Assessment Approach that can be implemented today, using available information and existing resources, for the chemicals that already been evaluated and found to present unreasonable risk. These changes would not defer the regulation of those chemicals; instead, they would support EPA's ongoing risk management efforts by ensuring that the fenceline assessments that EPA conducts for those chemicals are more reflective of communities' actual exposures and risks. EPA should therefore immediately implement the following SACC recommendations for the chemicals that have already undergone TSCA risk evaluations:

- Consideration of all available TRI data, as well as the NEI and other available federal and state data, to estimate chemical releases;<sup>23</sup>
- Use of EPA's existing air modeling software to assess fenceline communities' total exposures to a chemical from multiple facilities and sources;<sup>24</sup>
- Consideration of existing data on preexisting levels of contamination in fenceline communities as well as peak emissions from polluting facilities;<sup>25</sup>
- Application of additional "uncertainty factors" or "safety factors" to account for the absence of cumulative risk considerations in EPA's prior TSCA risk evaluations, as well as other acknowledged gaps in EPA's understanding of fenceline community risks.<sup>26</sup>

For EPA's upcoming risk evaluations, the SACC proposed broader changes to the Fenceline Assessment Approach, including the calculation of cumulative exposures and their associated risks. In addition to providing specific resources on how to incorporate those changes and incorporate environmental justice into EPA's fenceline assessments, the SACC called on EPA to "reach out to Unique Communities . . . such as . . . [the National Tribal Toxics Council] and other tribal, indigenous groups" about improvements to the Fenceline Assessment Approach, and to incorporate their recommendations into Version 2.0 of that document.<sup>27</sup> The SACC specifically advised that "community experts' representing [impacted] communities should hold

<sup>&</sup>lt;sup>22</sup> *Id.* at 46.

<sup>&</sup>lt;sup>23</sup> *Id.* at 50-51; *see also id.* at 17 ("Release data used in modeling should include maximum or high centile release

data over multiple years (not from a single year of data).").

<sup>&</sup>lt;sup>24</sup> *Id.* at 46 ("The AERMOD and IIOAC software used in version 1.0 allow an analysis to include exposure to multiple facilities.").

<sup>&</sup>lt;sup>25</sup> *Id.* at 17 ("Because the emission data could include zero days and spikes, EPA should present the mean/median and peak emission concentrations.").

<sup>&</sup>lt;sup>26</sup> Id. at 41 ("[I]n the interest of moving forward quickly, the use of uncertainty factors can be applied to the [points of departure] and/or to the exposure estimates [to account for unquantified cumulative risks]"); see also id. at 27 ("It is unclear how the Agency can model environmental concentrations without input data. Any such exercise will require use of AFs or uncertainty factors (UFs) to avoid a false negative result." (citation omitted)); id. at 65 (describing support for "the use of Safety Factors where the understanding of the exposure sources and routes are incomplete (for aggregate exposure scenarios), for cumulative (multi-chemical) exposures, where data are sparce or of poor quality, etc.").
<sup>27</sup> Id. at 66.

membership in any group determining the pedigree and representativeness of such information, utility of defaults, extrapolations, and assumptions."<sup>28</sup> We agree; any revisions to the Fenceline Assessment Approach must be made in consultation with fenceline communities.

In short, the SACC has given EPA a roadmap for both near-term improvements to its fenceline assessments of previously assessed chemicals and broader changes for the measurement of fenceline exposures and risks in EPA's upcoming risk evaluations. We urge EPA to follow the SACC's advice and to implement the recommendations outlined above.<sup>29</sup>

For additional information about this letter, please contact Jonathan Kalmuss-Katz, Senior Attorney, Earthjustice at <u>jkalmusskatz@earthjustice.org</u>.

Respectfully submitted,

Alaska Community Action on Toxics Coming Clean Earthjustice Environmental Defense Fund Environmental Justice Health Alliance for Chemical Policy Reform Environmental Protection Network Green America Locust Point Community Garden Louisiana Environmental Action Network Moms for a Nontoxic New York Natural Resources Defense Council Union of Concerned Scientists Women's Voices for the Earth

<sup>&</sup>lt;sup>28</sup> *Id.* at 67.

<sup>&</sup>lt;sup>29</sup> This letter is not, and should not be construed as, an endorsement of any portions of the SACC report beyond those mentioned herein.