March 26, 2025

### Via Regulations.gov

Shari Barash Director, New Chemicals Division Office of Chemical Safety and Pollution Prevention U.S. Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Re: Certain New Chemicals; Receipt and Status Information for January 2025, Docket No. EPA-HQ-OPPT-2025-0067

Dear Director Barash:

Community In-Power and Development Association and Earthjustice write to express our strong opposition to pending requests for the Environmental Protection Agency ("EPA") to approve 17 new carcinogenic chemicals (collectively, "the Carcinogens") for production at the Motiva Enterprises, LLC ("Motiva") refinery in Port Arthur, Texas. Motiva seeks to manufacture up to 450 million pounds of the following chemicals each year in one of the nation's most severely polluted communities, where residents already experience disproportionate burdens from the Motiva refinery and other industrial facilities:

PMN	Generic Name	Generic Use	Max
Number			Production
			Volume (lbs) <sup>2</sup>
P-25-0041	Gases, processed	Intermediate (generic)	49,594,326
	(generic)		
P-25-0042	Hydrocarbon,	Additive for consumer,	9,483,965
	processed	commercial, and industrial uses	
	(generic)	(generic)	
P-25-0043	Hydrocarbon,	Additive for consumer,	17,132,846
	processed	commercial, and industrial uses	
	(generic)	(generic)	
P-25-0044	Hydrocarbon,	Additive for consumer,	102,674,055
	processed	commercial, and industrial uses	
	(generic)	(generic)	

\_

<sup>&</sup>lt;sup>1</sup> EPA, Certain New Chemicals; Receipt and Status Information for January 2025, 90 Fed. Reg. 10492, 10494-95 (Feb. 24, 2025).

<sup>&</sup>lt;sup>2</sup> Production volumes taken from EPA's ChemView database. EPA, *ChemView*, Pollution Prevention and Toxics, <a href="https://chemview.epa.gov/chemview/">https://chemview.epa.gov/chemview/</a> (last updated Mar. 20, 2025) (search by PMN number and click "new chemical notice;" production volume listed under "Maximum 12-month production volume during the first 3 years").

P-25-0045	Hydrocarbons, carbon range (generic)	Additive for consumer, commercial, and industrial uses (generic)	19,358,174
P-25-0046	Hydrocarbon, processed (generic)	Additive for consumer, commercial, and industrial uses (generic)	32,117,026
P-25-0047	Hydrocarbon, processed (generic)	Intermediate (generic)	7,473,380
P-25-0048	Hydrocarbon, processed (generic)	Intermediate (generic)	7,473,380
P-25-0049	Hydrocarbon, processed (generic)	Intermediate (generic)	3,812,150
P-25-0050	Hydrocarbon, processed (generic)	Additive for consumer, commercial, and industrial uses (generic), Intermediate (generic)	10,190,714
P-25-0051	Hydrocarbon, processed (generic)	Additive for consumer, commercial, and industrial uses (generic), Intermediate (generic)	29,219,528
P-25-0052	Hydrocarbon, processed (generic)	Intermediate (generic)	23,187,756
P-25-0053	Hydrocarbon, processed (generic)	Intermediate (generic)	5,773,415
P-25-0054	Hydrocarbon, processed (generic)	Intermediate (generic)	54,883,447
P-25-0055	Hydrocarbon, processed (generic)	Additive used in industrial and commercial applications (generic)	52,524,578
P-25-0056	Hydrocarbon, processed (generic)	Intermediate (generic)	21,955,854
P-25-0057	Hydrocarbon, processed (generic)	Intermediate (generic)	6,381,635

Because Motiva has unlawfully withheld and redacted critical information from its premanufacture notice ("PMN") submissions, we have only a partial picture of the Carcinogens' risks to workers, fenceline communities, and the environment. But Motiva has acknowledged that its proposed chemicals are linked to cancer, reproductive and developmental harm, and environmental toxicity. The Carcinogens' broad industrial, commercial, and consumer uses,

including in transportation fuels, create the potential for significant releases and exposures. And Motiva's plans to produce and process the Carcinogens at its Port Arthur refinery—which borders a residential neighborhood where the air quality is already among the worst one percent in the nation—only heightens their risks.<sup>3</sup>

TSCA prohibits EPA from approving new chemicals that present unreasonable risk to public health or the environment, and it requires health-protective regulation of any new chemicals that "may present" such risk. To comply with those mandates, EPA must comprehensively evaluate the risks presented by the Carcinogens, including risks to fenceline communities and other "potentially exposed or susceptible subpopulation[s]." That evaluation must include the risks from cumulative exposures to combinations of the Carcinogens, as well as reasonably foreseen but unintended releases at a refinery that has already experienced more than 400 reported spills, malfunctions, and other chemical incidents. EPA must also consider the existing pollution burdens facing residents of Port Arthur, which render them more susceptible to harm from exposure to yet another toxic substance in their community. And, unless EPA can demonstrate that other means of regulation would fully eliminate the Carcinogens' unreasonable risks, EPA must issue an order under TSCA section 5(f) prohibiting their production and use.

## I. The Carcinogens Present Serious Health Risks

TSCA section 5 requires to EPA to review the risks posed by new chemicals before they come to market, and to restrict or prohibit the manufacturing and use of any new chemical that "may present" or "presents" an unreasonable risk to human health or the environment. In making those risk determinations, EPA must consider the chemical's risks to "potentially exposed or susceptible subpopulation[s]," including fenceline communities, workers, and other groups that experience greater risks than the general population due to their greater exposures, greater susceptibility to harm, or both. §

<sup>&</sup>lt;sup>3</sup> EJScreen, *Environmental Justice Screening and Mapping Tool (Version 2.3)*, <a href="https://pedp-ejscreen.azurewebsites.net/">https://pedp-ejscreen.azurewebsites.net/</a> (last visited Mar. 20, 2025) (website hosted by Public Environmental Data Partners). A copy of the EJScreen Community Report covering a one-mile radius from the Motiva refinery is attached as Exhibit 1.

<sup>&</sup>lt;sup>4</sup> 15 U.S.C. § 2604(e)(1)(ii), 2604(f).

<sup>&</sup>lt;sup>5</sup> *Id.* § 2604(a)(3), 2604(e)(1).

<sup>&</sup>lt;sup>6</sup> *Id.* § 2604(f) ("If the Administrator determines that a [new] chemical substance . . . presents an unreasonable risk of injury to health or environment" EPA shall regulate the chemical "to the extent necessary to protect against such risk.").

<sup>&</sup>lt;sup>7</sup> 15 U.S.C. § 2604(e), (f); see also EPA, PFAS Strategic Roadmap: EPA's Commitments to Action 2021–2024, at 10–11 (Oct. 2021), <a href="https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap\_final-508.pdf">https://www.epa.gov/system/files/documents/2021-10/pfas-roadmap\_final-508.pdf</a> ("Where unreasonable risks are identified as part of the [new chemical] review process, EPA must mitigate those risks before any manufacturing activity can commence.").

§ 15 U.S.C. § 2604(a)(3) (requiring EPA to assess new chemicals' risks to potentially exposed or susceptible subpopulations); 15 U.S.C. § 2602(12) (defining potentially exposed or susceptible subpopulation).

If EPA finds that a new chemical presents an unreasonable risk, it must prohibit or restrict the manufacturing, processing, distribution, and use of the chemical "to the extent necessary to protect against such risk." If a new chemical or use "may present" unreasonable risk, or if EPA lacks sufficient information to reasonably evaluate the chemical's effects, EPA must issue an order that "prohibit[s] or limit[s]" the chemical's production and use "to the extent necessary to protect against an unreasonable risk . . . while any required information is being developed." location of the chemical statement of the extent necessary to protect against an unreasonable risk . . . while any required information is being developed."

According to Motiva, the Carcinogens have a cancer classification of 1B under the Globally Harmonized System of Classification and Labelling of Chemicals ("GHS"), <sup>11</sup> indicating" "carcinogenic potential for humans (based on demonstrated animal carcinogenicity)." Motiva has not provided any test data on its chemicals' carcinogenicity, and the heavily redacted Health and Ecotoxicity Assessment that it submitted to EPA does not disclose the chemical analogs used to assess the Carcinogens' cancer risks. However, for several of the Carcinogens, Motiva proposes an Inhalation Unit Risk ("IUR") value of 7.8-in-1,000,000 per μg/m³, meaning lifetime exposure to a single microgram of the chemical per cubic meter of air would result in a cancer risk of 7.8-in-1,000,000, exceeding EPA's cancer risk benchmark of 1-in-1,000,000. This is the same IUR that EPA has calculated for benzene, <sup>14</sup> which is one of the "most carcinogenic [volatile organic compounds] present in ambient air." Several of the Carcinogens are also "very toxic to aquatic life with long lasting effects" and are "suspected of

<sup>&</sup>lt;sup>9</sup> *Id.* § 2604(f)(1).

<sup>&</sup>lt;sup>10</sup> *Id.* § 2604(e).

<sup>&</sup>lt;sup>11</sup> See, e.g., Health and Ecotoxicity Assessment, P-25-0051, at 4, https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0051%2F3%2F0902252680518d07\_09SHealthandEcotoxicityAssessment.PDF. Given the substantial overlap between the Carcinogens' PMN submissions, these comments cite illustrative examples from individual chemicals' submissions that are reflective of the broader group. All documents cited from the PMN submissions are available on ChemView, <a href="https://chemview.epa.gov/chemview/">https://chemview.epa.gov/chemview/</a>, by searching for the PMN number, clicking the link under "Chemical Name/Chemical Identifier," clicking "New Chemical Notice," and then clicking the link indicating the "Latest Version" of the PMN file.

<sup>&</sup>lt;sup>12</sup> Agency for Toxic Substances and Disease Registry ("ATSDR"), *Cancer Classification Systems*, at 10 (May 14, 2020), <a href="https://www.atsdr.cdc.gov/pha-guidance/resources/ATSDR-Cancer-Classification-Systems-508.pdf">https://www.atsdr.cdc.gov/pha-guidance/resources/ATSDR-Cancer-Classification-Systems-508.pdf</a>.

<sup>&</sup>lt;sup>13</sup> See, e.g., Health and Ecotoxicity Assessment, P-25-0041, at 15, https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0041%2F4%2F0902252680518cae\_14SHealthandEcotoxicityAssessment.PDF.

<sup>&</sup>lt;sup>14</sup> EPA, Key IRIS Values: Benzene, Integrated Risk Information System <a href="https://iris.epa.gov/ChemicalLanding/&substance\_nmbr=276">https://iris.epa.gov/ChemicalLanding/&substance\_nmbr=276</a> (last visited Mar. 20. 2025).

<sup>&</sup>lt;sup>15</sup> Poonam Kumari et al., Seasonal and Diurnal Measurement of Ambient Benzene at a High Traffic Inflation Site in Delhi: Health Risk Assessment and its Possible Role in Ozone Formation Pathways, 38 Env't Anal Health Toxicology e2023016 (2023), https://doi.org/10.5620/eaht.2023016.

<sup>&</sup>lt;sup>16</sup> See, e.g., Health and Ecotoxicity Assessment, P-25-0051, at 5.

damaging fertility" <sup>17</sup> and "suspected of damaging the unborn child," <sup>18</sup> among other severe health effects.

In addition to the Carcinogens' severe hazards, there are potentially significant occupational, consumer, and fenceline community exposures from the chemicals' manufacturing, processing, use, and disposal. Although Motiva has provided overly vague descriptions of the Carcinogens' end uses, the fact that they are being produced at a refinery, transported "via pipeline," and "dispensed via automated pumps" indicate that they will be used as fuels or fuel additives, among other purposes. <sup>19</sup> Despite that intended use, the PMN submissions contain no information about air releases of the Carcinogens, either at Motiva's refinery in Port Arthur or from the combustion of fuels containing the Carcinogens in Port Arthur and elsewhere. <sup>20</sup> The air exposure pathway is plainly relevant to the manufacture and use of fuels, and EPA must evaluate the risks from inhalation of the Carcinogens whether or not Motiva submits estimates of air releases.

With their severe hazards, potentially broad exposures, and an annual production volume exceeding 450 million pounds, EPA must conclude that, at a minimum, the Carcinogens "may present an unreasonable risk" to human health or the environment. <sup>21</sup> To ensure the elimination of such risk, as TSCA requires, EPA must first conduct a comprehensive and TSCA-compliant risk assessment.

# II. EPA Must Evaluate Port Arthur Residents' Increased Susceptibility to Harm from the Carcinogens

<sup>19</sup> See, e.g., Process Diagram, P-25-0051, at 3, 8,

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0051%2F3%2F0902252680518cf0 10SProcessDiagram.PDF.

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0051%2F3%2F0902252680518d0c PrimaryPMN P-25-

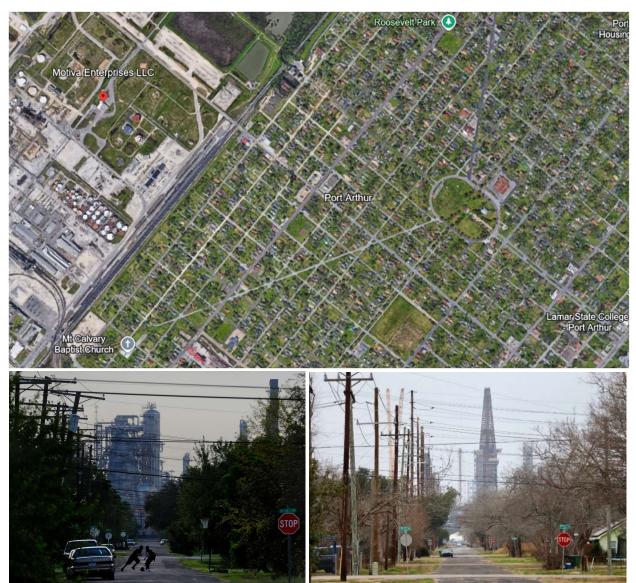
0050\_20250123\_16\_51\_33\_sanitized\_310278405230053157.pdf.

<sup>&</sup>lt;sup>17</sup> See, e.g., Heath and Ecotoxicity Assessment, P-25-0041, at 8.

<sup>&</sup>lt;sup>18</sup> *Id.* at 11.

<sup>&</sup>lt;sup>20</sup> See, e.g., Submission Form, P-25-0051, at 30–32, 36,

<sup>&</sup>lt;sup>21</sup> 15 U.S.C. § 2604(e).



Top: Map depicting the proximity of Motiva's refinery to homes on the west side of Port Arthur<sup>22</sup> Bottom Left and Right: Photographs of Port Arthur with the Motiva refinery in the background<sup>23</sup>

A. EPA Must Evaluate the Risks to Residents Who Are More Exposed to the Carcinogens Because of Their Proximity to the Motiva Refinery

<sup>&</sup>lt;sup>22</sup> Google Earth, <a href="https://earth.google.com/web/">https://earth.google.com/web/</a>.

<sup>&</sup>lt;sup>23</sup> Derek Seidman, *Plastics Are Fossil Fuel Industry's Plan B. Fenceline Communities Pay the Price*, Truthout (Feb. 16, 2024), <a href="https://truthout.org/articles/plastics-are-fossil-fuel-industrys-plan-b-fenceline-communities-pay-the-price/">https://truthout.org/articles/plastics-are-fossil-fuel-industrys-plan-b-fenceline-communities-pay-the-price/</a>; James Bruggers, *A Dream Deferred: '30 Years of U.S. Environmental Justice in Port Arthur, Texas*, Inside Climate News (Feb. 11, 2024), <a href="https://insideclimatenews.org/news/11022024/30-years-of-us-environmental-justice-in-port-arthur-texas/">https://insideclimatenews.org/news/11022024/30-years-of-us-environmental-justice-in-port-arthur-texas/</a>.

Motiva plans to manufacture and process the Carcinogens at its refinery in Port Arthur, TX, worsening the contamination of one of the nation's most overburdened communities.<sup>24</sup> More than a dozen refineries, chemical plants, and other industrial facilities already release more than 2.5 million pounds of hydrogen cyanide, benzene, and other toxic chemicals in Port Arthur each year,<sup>25</sup> resulting in air pollution that EPA ranks among the worst one percent in the nation.<sup>26</sup>

Motiva's refinery—the largest in the nation—looms over the west side of Port Arthur. For much of the 20th century, redlining and Jim Crow laws confined Black residents to West Port Arthur, alongside the City's oil refineries and major industrial facilities. To this day, the west side of Port Arthur remains more than 90 percent Black and heavily industrial. A narrow strip of train tracks separates Motiva refinery from the nearest houses, less than 100 meters away. There are churches approximately 250 meters from the fenceline and a public park 350 meters away. For decades, the smells of sulfur, petroleum, and other chemical odors have filled streets where children play, and flames from refinery flares can be seen from backyards and bedroom windows.

The long-term consequences of these exposures are severe. Childhood asthma rates in Port Arthur are more than twice the national average.<sup>29</sup> Residents also experience increased rates of cancer, heart disease, and other conditions that have been linked to chemical exposures.<sup>30</sup>

0041%2F4%2F0902252680518cb3 PrimaryPMN P-25-

https://edap.epa.gov/public/extensions/TRIToxicsTracker/TRIToxicsTracker.html# (under "Start a Search," click "Geography" and "State, County, City, and/or ZIP Code," enter "Port Arthur, TX" and search under the "Most Recent Year").

<sup>&</sup>lt;sup>24</sup> See, e.g., PMN Submission Form, P-25-0041, at 45, https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-

<sup>&</sup>lt;u>0041\_20250123\_16\_43\_40\_sanitized\_2969720109460876548.pdf.</u>

<sup>&</sup>lt;sup>25</sup> EPA, TRI Toxics Tracker,

<sup>&</sup>lt;sup>26</sup> EJScreen, Environmental Justice Screening and Mapping Tool (Version 2.3), <a href="https://pedp-ejscreen.azurewebsites.net/">https://pedp-ejscreen.azurewebsites.net/</a> (last visited Feb. 28, 2025) (search for "Motiva Enterprises Llc, 2555 Savannah Ave, Port Arthur, TX," click on the link, and then click on "EJScreen Community Report") (reporting a "Toxic Releases to Air" index in the 99th percentile, nationwide).

<sup>27</sup> Christopher Sellers, Port Arthur's Jim Crow Regime into the 1960s (Nov. 15, 2024), <a href="https://storymaps.arcgis.com/stories/c4ec26532b4d4359a532f2eec4498de4">https://storymaps.arcgis.com/stories/c4ec26532b4d4359a532f2eec4498de4</a>; Sharon A. Croisant, Hilton Kelley & Krista Bohn, Toxic Communities of Color: Reparation and Rebirth (June 5, 2022), <a href="https://medium.com/spark/toxic-communities-of-color-reparation-and-rebirth-158d941deaf7">https://medium.com/spark/toxic-communities-of-color-reparation-and-rebirth-158d941deaf7</a>.

<sup>&</sup>lt;sup>28</sup> Ted Genoways, *Port Arthur, Texas: American Sacrifice Zone*, Natural Resources Defense Council ("NRDC") (Nov. 13, 2014), <a href="https://www.nrdc.org/stories/port-arthur-texas-american-sacrifice-zone">https://www.nrdc.org/stories/port-arthur-texas-american-sacrifice-zone</a>.

<sup>&</sup>lt;sup>29</sup> Env't Integrity Project, *Port Arthur, TX*, <a href="https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/">https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/</a> (last visited Mar. 28, 2025)

<sup>30</sup> Bev Harp, *In the Belly of the Beast: Health, Justice, and Resilience in Port Arthur*, Med. Soc'y Consortium on Climate & Health (Jan. 9, 2025), <a href="https://medsocietiesforclimatehealth.org/latest-news/in-the-belly-of-the-beast-health-justice-and-resilience-in-port-arthur/">https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/</a> (last visited Mar. 28, 2025)

\*\*The Belly of the Beast: Health, Justice, and Resilience in Port Arthur, Med. Soc'y Consortium on Climate & Health (Jan. 9, 2025), <a href="https://medsocietiesforclimatehealth.org/latest-news/in-the-belly-of-the-beast-health-justice-and-resilience-in-port-arthur/">https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/</a> (last visited Mar. 28, 2025)

\*\*The Policy of the Beast: Health (Jan. 9, 2025), <a href="https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/">https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-production/port-arthur-texas/</a> (last visited Mar. 28, 2025)

\*\*The Policy of the Beast: Health (Jan. 9, 2025), <a href="https://environmentalintegrity.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy.org/what-we-do/oil-and-gas/the-human-cost-of-energy-policy

A 2001 study found that more than 80 percent of the residents of Port Arthur's west side suffer from heart and lung ailments.<sup>31</sup> In Jefferson County, where Port Arthur is located, the cancer mortality rate for Black residents is nearly 40 percent higher than the state average.<sup>32</sup>

EPA has acknowledged the "disproportionate environmental burdens" facing residents of Port Arthur.<sup>33</sup> In 2009, EPA designated the west side of Port Arthur as an Environmental Justice Showcase Community, pledging its support for the community's efforts to improve public health and reduce environmental burdens.<sup>34</sup> In its public statements and executive orders, this administration has made its position on environmental justice perfectly clear. 35 "Of course, an executive order cannot supersede a statute."<sup>36</sup> When it amended TSCA in 2016, Congress directed EPA to specifically evaluate chemicals' "greater risks" to those who have "greater exposure" or "greater susceptibility" to harm from their exposures. <sup>37</sup> Here, those "potentially exposed or susceptible populations" plainly include the residents who live next to Motiva's refinery and, for too long, have suffered the consequences of industrial pollution from that facility and others.

B. EPA Must Evaluate the Risks to Groups Who Are More Susceptible to Harm Because of Their Cumulative Exposures to Multiple Carcinogens

Since all the Carcinogens will be manufactured and processed in the same location, workers at Motiva's Port Arthur refinery and residents who live around that facility are likely to be exposed to combinations of those chemicals. EPA must also evaluate the increased risks from those cumulative exposures, along with other chemicals that pose similar risks as the Carcinogens.

Multiple provisions of TSCA compel the consideration of cumulative exposures and risks. First, TSCA requires EPA to evaluate the risks posed by the Carcinogens under their "conditions of use," which are defined as "the circumstances... under which a chemical

<sup>&</sup>lt;sup>31</sup> Trevor Bach, 'Sentenced to Death': What It's Like Living in a Cancer-Plagued Oil Town, Vice Magazine (Jan. 2, 2020), https://www.vice.com/en/article/sentenced-to-death-what-its-likeliving-in-a-cancer-plagued-oil-town/.

<sup>&</sup>lt;sup>32</sup> *Id*.

<sup>&</sup>lt;sup>33</sup> EPA, EPA Announces Environmental Justice Showcase Communities (Nov. 17, 2009), https://www.epa.gov/archive/epapages/newsroom archive/newsreleases/b3d235503bc70b3a852 576710060f044.html.
<sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> Press Release, The White House, Ending Radical And Wasteful Government DEI Programs and Preferencing, Executive Order 14151 (Jan. 20, 2025), https://www.whitehouse.gov/presidential-actions/2025/01/ending-radical-and-wastefulgovernment-dei-programs-and-preferencing/; EPA, EPA Terminates Biden's Environmental Justice, DEI Arms of Agency (Mar. 12, 2025), https://www.epa.gov/newsreleases/epa-terminatesbidens-environmental-justice-dei-arms-agency.

<sup>&</sup>lt;sup>36</sup> Marks v. Cent. Intel. Agency, 590 F.2d 997, 1003 (D.C. Cir. 1978).

<sup>&</sup>lt;sup>37</sup> 15 U.S.C. § 2602(12).

<sup>&</sup>lt;sup>38</sup> *Id.* § 2604(a)(3)(A), 2604(e)(1)(2).

substance is intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of."<sup>39</sup> Here, Motiva intends to manufacture, process, and use the Carcinogens at the same refinery, and it is "reasonably foreseen," if not "known," that workers and nearby residents will be exposed to combinations of the Carcinogens. <sup>40</sup> These workers and residents are also exposed to other cancer-causing chemicals from the Motiva refinery, which released almost 30,000 pounds of benzene and more than 3,000 pounds of 1,3-butadiene last year, and other industrial facilities in the surrounding area. <sup>41</sup> Such co-exposures are part of the "circumstances . . . under which [the Carcinogens] [are] intended, known, or reasonably foreseen to be manufactured . . . used or disposed of,"<sup>42</sup> and therefore must be considered when EPA evaluates the Carcinogens' risks "under the conditions of use."<sup>43</sup>

Second, TSCA requires EPA to evaluate the risks to groups who experience "greater susceptibility" to harm from a chemical substance because of their exposures to other chemicals that pose similar health effects. <sup>44</sup> Someone who is exposed to combinations of the Carcinogens, or to other chemicals that increase their risk of cancer will be more likely to experience unreasonable cancer risks than someone who is exposed to just one of the Carcinogens in isolation. <sup>45</sup> By the same measure, someone who is exposed to other cancer-causing chemicals will be more likely to experience unreasonable risks from the Carcinogens than someone who is exposed to the Carcinogens alone. TSCA requires EPA to account for that increased susceptibility in its assessment of the Carcinogens' risks.

Third, the consideration of cumulative exposures and risks is required by TSCA's mandate to evaluate and regulate chemicals "in a manner consistent with the best available science." The National Academy of Sciences has repeatedly called for the consideration of cumulative exposures in chemical risk evaluations, explaining that "it is difficult to imagine any risk assessment in which it would not be important to understand the effects of coexposures to agents or stressors that have similar [modes of action] or to identify characteristics of the

https://edap.epa.gov/public/extensions/TRIToxicsTracker/TRIToxicsTracker.html (search for "Motiva-Port Arthur" facilities under "TRI Facility Name or ID," click "Most Recent Year," click "Search," and click on "Releases.")

https://doi.org/10.1146/annurev-publhealth-032315-021807; Kristi Pullen Fedinick et al., *A Cumulative Framework for Identifying Overburdened Populations under the Toxic Substances Control Act: Formaldehyde Case Study*, 18 Int'l J. Env't Rsch. & Pub. Health 6002 (2021), <a href="https://doi.org/10.3390/ijerph18116002">https://doi.org/10.3390/ijerph18116002</a>.

<sup>&</sup>lt;sup>39</sup> *Id.* § 2602(4).

<sup>&</sup>lt;sup>40</sup> *Id*.

<sup>&</sup>lt;sup>41</sup> TRI Toxics Tracker,

<sup>&</sup>lt;sup>42</sup> 15 U.S.C. § 2602(4).

<sup>&</sup>lt;sup>43</sup> 15 U.S.C. § 2604(a)(3)(A), 2604(e)(1)(2).

<sup>&</sup>lt;sup>44</sup> 15 U.S.C. § 2602(12).

<sup>&</sup>lt;sup>45</sup> See, e.g., Gina M. Solomon et al., Cumulative Environmental Impacts: Science and Policy to Protect Communities, 37 Ann. Rev. Pub. Health 83, 87–88 (2016),

<sup>&</sup>lt;sup>46</sup> 15 U.S.C. § 2625(h).

affected populations that could contribute to vulnerability to a given exposure."<sup>47</sup> More recently, the National Academy of Sciences called on agencies to "move beyond source-by-source and pollutant-by-pollutant . . . risk assessment and toward a fuller characterization of the cumulative and potentially synergistic health risks from multiple environmental and social stressors that disproportionately impact communities of color."<sup>48</sup> EPA's designated TSCA scientific review panel, the SACC, has affirmed that "[t]he best possible science [for chemical assessment] includes cumulative impacts" and described cumulative risk assessment as "a necessary step" under TSCA. <sup>49</sup> The World Health Organization's ("WHO") International Programme on Chemical Safety ("IPCS") has acknowledged "a need . . . for assessing the combined risk from exposure to multiple chemicals via all relevant routes and pathways."<sup>50</sup> In light of those and other scientific findings and recommendations, it would be inconsistent with the "best available science," and thus contrary to TSCA, for EPA disregard the cumulative risks from exposures to multiple carcinogenic chemicals.

C. EPA Must Evaluate the Risks to Groups Who Are More Susceptible to Harm Because of Non-Chemical Stressors

There is broad scientific agreement, from EPA researchers and independent experts, that economic insecurity, racial discrimination, malnutrition, exposure to violence, and other stressors can modify biological responses to chemicals, leaving certain groups at greater risk than others from the same levels of chemical exposure.<sup>51</sup> The consideration of non-chemical stressors is thus

\_

<sup>&</sup>lt;sup>47</sup> Nat'l Rsch. Council, *Science and Decisions: Advancing Risk Assessment*, Nat'l Acads. of Scis., Eng'g, and Med., at 219 (2009) ("Science and Decisions"), <a href="https://nap.nationalacademies.org/catalog/12209/science-and-decisions-advancing-risk-assessment">https://nap.nationalacademies.org/catalog/12209/science-and-decisions-advancing-risk-assessment</a>.

<sup>&</sup>lt;sup>48</sup> Nat'l Rsch. Council, *Transforming EPA Science to Meet Today's and Tomorrow's Challenges*, Nat'l Acads. of Scis., Eng'g, and Med., at 35 (2023), <a href="https://nap.nationalacademies.org/catalog/26602/transforming-epa-science-to-meet-todays-and-tomorrows-challenges">https://nap.nationalacademies.org/catalog/26602/transforming-epa-science-to-meet-todays-and-tomorrows-challenges</a>.

<sup>&</sup>lt;sup>49</sup> Memorandum from Alaa Kemel, Designated Fed. Off., Sci. Advisory Comm. on Chems., EPA to Denise Keehner, Dir., Off. of Pollution Prevention and Toxics, EPA Re: Transmittal of Meeting Minutes and Final Report for the Science Advisory Committee on Chemical Virtual Meeting "Draft TSCA Screening Level Approach for Assessing Ambient Air and Water Exposures to Fenceline Communities Version 1.0", EPA Doc. EPA-HQ-OPPT-2021-0415-0095, at 47–49 (May 16, 2022), <a href="https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0415-0095">https://www.regulations.gov/document/EPA-HQ-OPPT-2021-0415-0095</a> (click "Download").

<sup>&</sup>lt;sup>50</sup> IPCS, Assessment of Combined Exposures to Multiple Chemicals: Report of a WHO/IPCS International Workshop on Aggregate/Cumulative Risk Assessment, at 18 (2009), https://inchem.org/documents/harmproj/harmproj/pdf.

<sup>&</sup>lt;sup>51</sup> See, e.g., Nat'l Acads. of Scis., Transforming EPA Science to Meet Today's and Tomorrow's Challenges, at 2; Rachel Morello-Frosch et al., Understanding the Cumulative Impacts of Inequalities in Environmental Health: Implications for Policy, 30 Health Affs. 879 (2011), <a href="https://doi.org/10.1377/hlthaff.2011.0153">https://doi.org/10.1377/hlthaff.2011.0153</a>; Cliona M. McHale et al., Assessing Health Risks from Multiple Environmental Stressors: Moving from G×E to I×E, 775 Mutational Rsch.11–20

a required part of TSCA's mandate to evaluate and address risks to potentially exposed or susceptible subpopulations.

EPA must not only evaluate Port Arthur residents' increased exposure to the Carcinogens, but also other stressors that render them more susceptible to harm from those exposures. Much of Port Arthur is classified as high social vulnerability, based on the Centers for Disease Control and Prevention (CDC)'s Social Vulnerability Index. <sup>52</sup> In 2023, the poverty rate in Port Arthur was 29.1 percent, more than twice the statewide average. <sup>53</sup> Among Black residents of Port Arthur, the rate was 35.3 percent. <sup>54</sup> Nearly 30 percent of Port Arthur residents lack health insurance, compared to 16.4 percent statewide and 7.9 percent nationwide. <sup>55</sup> A study by the University of Texas Medical Branch at Galveston found Port Arthur residents were "four times more likely than people just 100 miles upwind to report suffering from heart and respiratory conditions; nervous system and skin disorders; headaches and muscle aches; and ear, nose, and throat ailments." <sup>56</sup> Residents of neighborhoods close to the Motiva refinery and other industrial facilities experience these and other health stressors at an even higher rate. <sup>57</sup>

EPA has recognized that "[a]ddressing the cumulative impacts of exposure to multiple chemical *and non-chemical stressors* is necessary for EPA to fulfill its mission of protecting

<sup>(2018), &</sup>lt;a href="https://doi.org/10.1016/j.mrrev.2017.11.003">https://doi.org/10.1016/j.mrrev.2017.11.003</a>; Devon C. Payne-Sturges et al., <a href="https://doi.org/10.3190/ijerph15122797">Methods for Evaluating the Combined Effects of Chemical and Nonchemical Exposures for Cumulative Environmental Health Risk Assessment, 15 Int'l. J. Env't Rsch. & Pub. Health 2797 (2018), <a href="https://doi.org/10.3390/ijerph15122797">https://doi.org/10.3390/ijerph15122797</a>; Gilbert C. Gee & Devon C. Payne-Sturges, <a href="https://doi.org/10.3390/ijerph15122797">Environmental Health Disparities: A Framework Integrating Psychosocial and Environmental Concepts, 112 Env't Health Persps. 1645 (2004), <a href="https://doi.org/10.1289/ehp.7074">https://doi.org/10.1289/ehp.7074</a>; Patricia D. Koman et al., <a href="https://poulation Susceptibility: A Vital Consideration in Chemical Risk Evaluation Under the Lautenberg Toxic Substances Control Act">https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000372</a>; EPA, <a href="https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000372">https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000372</a>; EPA, <a href="https://pournals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000372">https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000372</a>; EPA, <a href="https://pournals.gov/plosbiology/article?id=10.1371/journal.pbio.3000372">Procedures for Chemical Risk Evaluation Under the Toxic Substances Control Act (TSCA), 89</a> <a href="https://pournals.gov/plosbiology/article?id=10.1371/journal.pbio.3000372">https://pournals.gov/plosbiology/article?id=10.1371/journal.pbio.3000372</a>; EPA, <a href="https://pournals.gov/plosbiology/article?id=10.1371/journal.pbio.3000372">Procedures for Chemical Risk Evaluation Under the Toxic Substances Control Act (TSCA), 89</a> <a href="https://pournals.gov/plosbiology/article?id=10.1371/journal.pbio.3000372">https://pournals.gov/plosbiology/article?id=10.1371/

<sup>&</sup>lt;sup>52</sup> ATSDR, *SVI Interactive Map*, <a href="https://www.atsdr.cdc.gov/place-health/php/svi/svi-interactive-map.html">https://www.atsdr.cdc.gov/place-health/php/svi/svi-interactive-map.html</a>.

<sup>&</sup>lt;sup>53</sup> U.S. Census Bureau, *S1701 Poverty Status in the Past 12 Months*, <a href="https://data.census.gov/table/ACSST5Y2023.S1701?g=160XX00US4858820">https://data.census.gov/table/ACSST5Y2023.S1701?g=160XX00US4858820</a> (last visited Mar. 20, 2025).

<sup>&</sup>lt;sup>54</sup> *Id*.

U.S. Census Bureau, S2701Selected Characteristics of Health Insurance Coverage in the United States, <a href="https://data.census.gov/table/ACSST5Y2023.S2701?g=160XX00US4858820">https://data.census.gov/table/ACSST5Y2023.S2701?g=160XX00US4858820</a> ((last visited Mar. 20, 2025); State Health Access Data Assistance Ctr., Uninsurance Rates for Texas in 2022 and 2023 (Sept. 12, 2024), <a href="https://shadac-pdf-files.s3.us-east-2.amazonaws.com/s3fs-public/2025-01/aff">https://shadac-pdf-files.s3.us-east-2.amazonaws.com/s3fs-public/2025-01/aff</a> s2701 TX 2022 2023.pdf.

<sup>&</sup>lt;sup>56</sup> Ted Genoways, *Port Arthur, Texas: American Sacrifice Zone*, NRDC (Nov. 13, 2014), https://www.nrdc.org/stories/port-arthur-texas-american-sacrifice-zone.

<sup>&</sup>lt;sup>57</sup> Nat'l Acads. of Scis., *Equity Informed Climate Resilience Plan in Port Arthur, Texas* (Feb. 2024), <a href="https://harcresearch.org/wp-content/uploads/2024/03/EQUIP-PA-Full-Report.pdf">https://harcresearch.org/wp-content/uploads/2024/03/EQUIP-PA-Full-Report.pdf</a>.

human health and the environment."<sup>58</sup> Income and food insecurity, lack of health care access, preexisting health conditions, and other stressors "heighten vulnerability to the adverse health effects of chemical exposure" by triggering biological responses that deplete the body's ability to cope with and respond to chemical exposures. <sup>59</sup> Without accounting for those known stressors, EPA cannot satisfy TSCA's mandate of evaluating the Carcinogens' risks to Port Arthur residents and other potentially exposed or susceptible subpopulations.

### III. EPA Must Evaluate Any Risks from Unintended Releases of the Carcinogens

A. TSCA Requires EPA to Evaluate the Risks from Reasonably Foreseen But Unplanned Chemical Incidents and Releases

TSCA requires EPA to evaluate the risks presented by the Carcinogens under their "conditions of use," which include all "circumstances . . . under which [they are] intended, known, or reasonably foreseen to be manufactured, processed, distributed in commerce, used, or disposed of. As explained below, unplanned releases resulting from spills, leaks, transportation accidents, equipment malfunctions, and similar incidents occur regularly at the Motiva refinery where the Carcinogens will be produced and potentially used. Under TSCA's plain language, EPA is required to consider the risks and releases resulting from these incidents, which are an unintended but "reasonably foreseen" part of the "circumstances . . . under which" the Carcinogens will be manufactured, processed, and disposed.

TSCA's legislative history reinforces this mandate. The legislative history states explicitly that the definition of "conditions of use" enacted by Congress in the 2016 TSCA amendments "provides . . . authority and a mandate for EPA to consider conditions of use that are not . . . intended but can be anticipated to occur." While the drafters of the 2016 amendments stated that they did not intend for a chemical's "conditions of use" "to include 'intentional misuse' of chemicals," they did "expect[] that the Agency will generally interpret this [term] to mean [circumstances] intended by the manufacturer, known by the manufacturer or the public, or

<sup>&</sup>lt;sup>58</sup> Memorandum from Alison C. Cullen, Chair, EPA Sci. Advisory Bd. to Michael S. Regan, Adm'r, EPA Re: Consultation on Cumulative Impact Assessments, at A-1 (Apr. 25, 2022) <a href="https://www.babstcalland.com/wp-content/uploads/2022/11/EPA-SAB-22-003.pdf">https://www.babstcalland.com/wp-content/uploads/2022/11/EPA-SAB-22-003.pdf</a> (emphasis added).

<sup>&</sup>lt;sup>59</sup> Devon C. Payne-Sturges et al., *Methods for Evaluating the Combined Effects of Chemical and Nonchemical Exposures for Cumulative Environmental Health Risk Assessment*, 15 Int'l. J. Env't Rsch. & Pub. Health 2797 (2018), <a href="https://doi.org/10.3390/ijerph15122797">https://doi.org/10.3390/ijerph15122797</a>.

<sup>&</sup>lt;sup>60</sup> 15 U.S.C. § 2605(b)(4)(A).

<sup>&</sup>lt;sup>61</sup> *Id.* § 2602(4).

<sup>&</sup>lt;sup>62</sup> *Id.* § 2602(4); see id. § 2605(b)(4)(A).

<sup>&</sup>lt;sup>63</sup> 162 Cong. Rec. 7983 (2016) (statement of "lead Senate Democratic negotiators on H.R. 2576," the Lautenberg Act, "describ[ing] the intent of the negotiators on elements of the final bill text").

<sup>&</sup>lt;sup>64</sup> S. Rep. No. 114-67, at 7 (2015).

reasonably foreseeable by the manufacturer or the Administrator."<sup>65</sup> Indeed, when asked directly in a Senate committee hearing whether the enacted definition of "conditions of use" gives EPA authority "to consider accidental releases and spills in the prioritization of chemicals as well as the safety assessment and determination," the Assistant Administrator for EPA's Office of Chemical Safety responded: "It does."<sup>66</sup> This legislative history confirms that EPA lacks discretion to exclude unplanned releases of the Carcinogens from its exposure and risk characterizations. Instead, it underscores the statute's plain meaning—that EPA must consider in its risk evaluations the spills, leaks, transportation accidents, fires, and other incidents that history shows are a known or foreseeable part of the circumstances of the Carcinogens' production, distribution, and use.

B. It Is Reasonably Foreseen that a Refinery With More than 400 Reported Chemical Incidents Will Continue to Have Unplanned Incidents and Releases

Motiva's long history of malfunctions, accidents, and other chemical incidents in Port Arthur makes the unintended release of the Carcinogens "reasonable foreseen." There have been more than 400 "air emissions events" from Motiva's Port Arthur complex since 2003, an average of approximately 17 per year. <sup>68</sup>

Many of those incidents resulted in substantial chemical releases. On February 15, 2025, a process upset at Motiva's on-site chemicals plant resulted in flaring, releasing more than 10,000 pounds of toxic chemicals. A month earlier, Motiva's Light Olefins Unit and Aromatics Unit experienced process unit upsets due to freezing conditions, releasing more than 65,000 pounds of benzene, toluene, 1,3-butadiene, and other chemicals. A "sudden loss of steam" resulted in the shutdown of the Light Olefins Unit and the release of more than 80,000 pounds of chemicals, including 1,655 pounds of benzene. A power outage caused the release of approximately 25,000 pounds of chemicals, including more than 400 pounds of 1,3-butadiene. There have been multiple chemical incidents at the Motiva complex every year for more than

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=194759.

<sup>&</sup>lt;sup>65</sup> H.R. Rep. No. 114-176, at 22 (2015) (emphasis added).

<sup>&</sup>lt;sup>66</sup> Legislative Hearing on the Frank R. Lautenberg Chemical Safety for the 21st Century Act (S. 697) Before the S. Comm. on Env't & Pub. Works, 114th Cong. § 69 (2015) (testimony of Hon. Jim Jones, Assistant Adm'r, Office of Chemical Safety and Pollution Prevention, EPA). <sup>67</sup> 15 U.S.C. § 2602(4).

<sup>&</sup>lt;sup>68</sup> Texas Commission on Environmental Quality ("TCEQ"), *Air Emission Report Database*, <a href="https://www2.tceq.texas.gov/oce/eer/">https://www2.tceq.texas.gov/oce/eer/</a> (search for Regulated Entity Name: "Motiva," County: "Jefferson," and Event Type: "Emissions Event"). A list of reported emissions events from the Motiva complex is attached to these comments as Exhibit 2.

<sup>&</sup>lt;sup>69</sup> TCEQ, Air Emission Event Report Database Incident 436329 (Feb. 28, 2025), https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=436329. <sup>70</sup> TCEQ, Air Emission Event Report Database Incident 433581 (Dec.30, 2024),

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=433581.

<sup>71</sup> TCEQ, Air Emission Event Report Database Incident 365724 (Sept. 9, 2021),

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=365724.

72 TCEO, Air Emission Event Report Database Incident 194759 (Mar. 25, 2014),

two decades. Even if the timing of any particular incident is unpredictable, "once a seemingly unforeseeable pattern develops, . . . the recurring event becomes foreseeable." After 400-plus unintended releases at the Motiva complex, it is "reasonably foreseen" that such incidents will continue to occur, and EPA must therefore evaluate the risks associated with unplanned releases of the Carcinogens.

The Carcinogens are also prone to unintended releases since they will be manufactured and processed in a coastal city that "faces substantial risks from climate-related hazards, including floods, extreme weather events, and sea-level rise." "With [FEMA National Risk Index] percentiles around 98th and above, Jefferson County is one of the most at-risk counties in the United States for hurricanes, riverine flooding, tornadoes, and lightning." In 2005, Hurricane Rita resulted in flooding and power outages throughout Port Arthur, causing the evacuation of more than 95% of Port Arthur residents. In 2008, Hurricane Ike resulted in millions of gallons of spilled oil and hundreds of thousands of pounds of unplanned chemical releases, with Port Arthur among the "hardest hit places." In 2017, Hurricane Harvey left up to 90 percent of Port Arthur underwater and resulted in nearly 8 million pounds of unpermitted air pollutant releases across the Gulf region. Three years later, Hurricane Laura resulted in another four million pounds of excess emissions, including substantial benzene releases from the Motiva refinery. Chemical plants emit more pollutants when they shut down in preparation for severe weather. With rising sea levels and warmer ocean temperatures driven by human-caused

\_\_\_

<sup>&</sup>lt;sup>73</sup> Anderson v. Rochester-Genesee Reg'l Transp. Auth., 337 F.3d 201, 215 (2d Cir. 2003)

<sup>&</sup>lt;sup>74</sup> Houston Advanced Rsch. Ctr. ("HARC") & Cmty. In-Power and Dev. Ass'n (CIDA), *Equity Informed Climate Resilience Plan in Port Arthur, Texas*, at 3 (Feb. 2024), <a href="https://harcresearch.org/wp-content/uploads/2024/03/EQUIP-PA-Full-Report.pdf">https://harcresearch.org/wp-content/uploads/2024/03/EQUIP-PA-Full-Report.pdf</a>.

<sup>&</sup>lt;sup>75</sup> Nat'l Acads. of Scis., Eng'g, and Med., *Community-Driven Relocation: Recommendations for the U.S. Gulf Coast Region and Beyond*, at 167–68 (2004), <a href="https://doi.org/10.17226/27213">https://doi.org/10.17226/27213</a>.

<sup>76</sup> *Id.* at 540; Liane Hansen & Adam Davidson, *Rita Rakes Key Oil Town of Port Arthur*, NPR (Sept. 25, 2005), <a href="https://www.npr.org/2005/09/25/4863129/rita-rakes-key-oil-town-of-port-arthur">https://www.npr.org/2005/09/25/4863129/rita-rakes-key-oil-town-of-port-arthur</a>.

<sup>&</sup>lt;sup>77</sup> Otago Daily Times, *Hurricane Ike's Environmental Toll Apparent* (Oct. 9, 2008), https://www.odt.co.nz/news/world/hurricane-ikes-environmental-toll-apparent.

<sup>&</sup>lt;sup>78</sup> Env't Integrity Project, *Preparing for the Next Storm Learning from the Man-Made Environmental Disasters that Followed Hurricane Harvey* (Aug. 16, 2018), <a href="https://environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-8.16.18-final.pdf">https://environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-8.16.18-final.pdf</a>.

<sup>&</sup>lt;sup>79</sup> Rebecca Hersher, *Millions of Pounds of Extra Pollution Were Released Before Hurricane Laura's Landfall*, NPR (Aug. 28, 2020), <a href="https://www.npr.org/sections/health-shots/2020/08/28/906822940/millions-of-pounds-of-extra-pollution-were-released-before-laura-made-landfall">https://www.npr.org/sections/health-shots/2020/08/28/906822940/millions-of-pounds-of-extra-pollution-were-released-before-laura-made-landfall</a>.

<sup>80</sup> Monica Orozco & Luke Metzger, *Why Extreme Weather Worsens Air Pollution*, Env't Tex. Rsch. and Pol'y Ctr. (July 25, 2024), <a href="https://environmentamerica.org/texas/center/articles/why-extreme-weather-worsens-air-">https://environmentamerica.org/texas/center/articles/why-extreme-weather-worsens-air-</a>

pollution/#:~:text=In%20anticipation%20of%20hurricanes%2C%20refineries,than%20venting%2C%20but%20still%20harmful; Sara Sneath, 'Ticking Time Bombs': Residents Kept In The Dark About Risks To La.'s Chemical Plants During Storms, New Orleans Pub. Radio, NPR (Dec. 7,

climate change, "extreme [weather] events" in Port Arthur and elsewhere "are increasing in intensity, frequency, and geographic extent," making weather-related releases of the Carcinogens "reasonably foreseen."

Finally, EPA must consider reasonably foreseen releases from the Carcinogens' "distribution in commerce." According to Motiva, the Carcinogens will be transported "via pipeline." There have been 12,674 reported spills, leaks, and other "pipeline incidents" over the last 20 years, an average of more than 640 per year. These incidents release approximately 3 million gallons of oil and nearly 2 billion cubic feet of natural gas each year, presenting risks to communities along transportation routes and destinations. The recurring spills and releases of fuels during transportation are reasonably foreseen, and are therefore part of the conditions of use that TSCA requires EPA to consider when evaluating the risks posed by the Carcinogens.

# IV. EPA Must Evaluate any Risks Associated With the Carcinogens' Feedstock Materials and Require Testing to Fill Any Data Gaps

Each of Motiva's PMNs contain supporting documents entitled "Supplier Feedstock Specifications," "Submitter Feedstock Specifications," and "Feedstock Data," all of which are

2020), <a href="https://www.wwno.org/coastal-desk/2020-12-07/ticking-time-bombs-residents-kept-in-the-dark-about-risks-to-la-s-chemical-plants-during-storms">https://www.wwno.org/coastal-desk/2020-12-07/ticking-time-bombs-residents-kept-in-the-dark-about-risks-to-la-s-chemical-plants-during-storms</a>.

https://portal.phmsa.dot.gov/analytics/saw.dll?Portalpages (last updated Nov. 15, 2022).

https://www.biologicaldiversity.org/campaigns/americas dangerous pipelines/.

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0051%2F3%2F0902252680518cf2\_01SSupplierFeedstockSpecifications.PDF; Submitter Feedstock Specification, P-25-0051,

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250125010012%2FP-25-0051%2F3%2F0902252680518cf4\_02SSubmitterFeedstockSpecifications.PDF, Feedstock Data, P-25-0051,

<sup>81</sup> U.S. Glob. Change Rsch. Program, *Fifth National Climate Assessment*, at 9-11 (2023), <a href="https://nca2023.globalchange.gov/downloads/NCA5\_2023\_FullReport.pdf">https://nca2023.globalchange.gov/downloads/NCA5\_2023\_FullReport.pdf</a>; see also id. at 14-12 ("Communities living at the fenceline of the petrochemical industry face ongoing vulnerabilities, such as dual exposure to air pollution and heat and endangerment from damages to petrochemical facilities caused by stronger hurricanes"); id. at 23-11 ("Rapidly intensifying hurricanes have presented challenges for implementing evacuations, and the frequency with which Atlantic hurricanes rapidly intensify may be increasing in response to long-term human-caused climate change.")

<sup>&</sup>lt;sup>82</sup> 15 U.S.C. § 2602(4), 2602(5).

<sup>83</sup> See, e.g., Process Diagram, P-25-0051, at 8.

<sup>&</sup>lt;sup>84</sup> Pipeline and Hazardous Materials Safety Admin., *Pipeline and Hazardous Materials Safety Administration, Pipeline Incident 20 Year Trends*,

Nichola Groom, *U.S. Natural Gas Pipeline Accidents Pose big, Unreported Climate Threat*, Reuters (Mar. 8, 2024), <a href="https://www.reuters.com/sustainability/us-natural-gas-pipeline-accidents-pose-big-unreported-climate-threat-2024-03-08/">https://www.reuters.com/sustainability/us-natural-gas-pipeline-accidents-pose-big-unreported-climate-threat-2024-03-08/</a>; Richard Stover & Ctr. for Biological Diversity, *America's Dangerous Pipelines* (2014),

<sup>86</sup> See, e.g., Supplier Feedstock Specifications, P-25-0051,

almost entirely redacted. There is thus no way for the public to determine what materials the Carcinogens are made from, or what contaminants and impurities may be present in those feedstocks. But those questions are critical to any evaluation of the Carcinogens' risks to human health and the environment. Motiva does not explain why the disclosure of its suppliers' feedstock specifications, or its own feedstock specifications, would "cause substantial harm to [its] competitive position," as required to support a claim of confidential business information. EPA should reject Motiva's CBI claim and disclose that information, with limited redactions only to the extent needed to preserve those portions that fall within the statutory definition of CBI.

EPA must also evaluate the risks of any chemical impurities in the Motiva feedstock materials. According to its Clean Air Act permit, Motiva produces or processes "pyrolysis gasoline," or "pygas," in Port Arthur, containing up to 40% benzene. 88 It is unclear whether the PMNs are connected to that pygas production, but many pyrolysis feedstocks, such as plastic waste, contain harmful chemicals that can contaminate pyrolysis oil. As EPA has previously acknowledged, pyrolysis oils derived from the burning of plastic waste may "contain impurities like per- and polyfluoroalkyl substances (PFAS), heavy metals, dioxins, bisphenols[,] and flame retardants . . . [that] are known to cause cancer and harm the reproductive system, among other health effects." Many chemicals, such as phthalates, are deliberately added to plastic that is used as a pyrolysis feedstock. Other toxic chemicals, including dioxins and furans, can be formed during the pyrolysis process. Prior consent orders for pyrolysis oils have found that "polychlorinated dibenzo-p-dioxins and dibenzofurans could be present as an impurity" in

\_

 $\frac{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview/proxy?filename=ncn\%2F20250125010012\%2FP-25-0051\%2F3\%2F0902252680518d0a~15SFeedstockData.PDF.}{\text{https://chemview.epa.gov/chemview.ep$ 

<sup>&</sup>lt;sup>87</sup> 15 U.S.C. § 2613(c)(1)(B)(iii).

<sup>&</sup>lt;sup>88</sup> TCEQ, *Preliminary Determination Summary: Motiva Enterprises, LLC Permit Numbers 7238 and PSDTX1548*, at 1, 7–8,

https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ\_EXTERNAL\_SEARCH\_GET\_FILE &dID=5236975&Rendition=Web.

<sup>&</sup>lt;sup>89</sup> EPA, Rules for Chemicals Made from Plastic Waste-Based Feedstocks under the Toxic Substances Control Act, <a href="https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/rules-chemicals-made-plastic-waste">https://www.epa.gov/reviewing-new-chemicals-under-toxic-substances-control-act-tsca/rules-chemicals-made-plastic-waste</a> (last updated July 15, 2024); see also EPA, Significant New Use Rules on Certain Chemical Substances (23-2.5e), 88 Fed. Reg. 39,804, 39,806 (proposed June 20, 2023) (identifying "heavy metals (arsenic, cadmium, chromium VI, lead, mercury), dioxins, phthalates, per- and polyfluoroalkyl substances (PFAS), polybrominated diphenyl ethers (PBDEs), alkylphenols, perchlorates, benzophenone, bisphenol A (BPA), organochlorine pesticides (OCPs), ethyl glycol, methyl glycol, or N-methyl-2- pyrrolidone (NMP)" as potential contaminants in plastic waste and in chemicals derived from plastic waste.).

<sup>90</sup> Eur. Chems. Agency, Chemical Recycling of Polymeric Materials from Waste in the Circular Economy at 50–53 (Aug. 2021),

https://echa.europa.eu/documents/10162/1459379/chem\_recycling\_final\_report\_en.pdf/887c418 2-8327-e197-0bc4-17a5d608de6e.

pyrolysis oil and have required regular testing for dioxins and furans. 91 "[Dioxins and furans] are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones[,] and also cause cancer."92

Finally, if Motiva has not provided complete testing of the constituents and contaminants in its feedstock material, EPA must require such tests. EPA has proposed a significant new use rule ("SNUR") that would require additional EPA review of certain fuels derived from feedstocks containing any of the following impurities: "heavy metals (arsenic, cadmium, chromium VI, lead, mercury), dioxins, phthalates, per- and polyfluoroalkyl substances (PFAS), polybrominated diphenyl ethers (PBDEs), alkylphenols, perchlorates, benzophenone, bisphenol A (BPA), organochlorine pesticides (OCPs), ethyl glycol, methyl glycol, or N-methyl-2pyrrolidone (NMP)."93At a minimum, EPA should require the Carcinogens' feedstock materials and end product to be tested for all of the foregoing chemicals. If Motiva does not voluntarily submit such data, then EPA should use its authority under TSCA sections 4 or 5(e) to require such testing prior to the commercialization of any of the Carcinogens. 94

#### Motiva Unlawfully Withheld Health and Safety Information and Other Non-V. **Confidential Material from Its PMNs**

Motiva has unlawfully withheld much of the information about the Carcinogens and their health effects as confidential business information ("CBI"), depriving the public of necessary information about the Carcinogens' risks.

TSCA provides that CBI protections do not extend to "health and safety stud[ies]," as well as "any information reported to, or otherwise obtained by, the Administrator from a health and safety study."95 The statute broadly defines "health and safety study" as "any study of any effect of a chemical substance or mixture on health or the environment or on both, including underlying information and epidemiological studies, studies of occupational exposure to a chemical substance or mixture, toxicological, clinical, and ecological studies of a chemical substance or mixture, and any test performed pursuant to this chapter."96 This "mandate for the

<sup>&</sup>lt;sup>91</sup> EPA, Consent Order and Determinations Supporting Consent Order P-14-0712, P-14-0713, P-14-0714 and P-14-0715: Consent Order Modification, at vii, 6 (signed July 24, 2015), https://chemview.epa.gov/chemview/proxy?filename=sanitized consent order p 14 0712c mo d.pdf.

<sup>&</sup>lt;sup>92</sup> World Health Org., *Dioxins: Effects on Human Health* (Nov. 29, 2023), https://www.who.int/news-room/fact-sheets/detail/dioxins-and-their-effects-on-human-health. <sup>93</sup> 88 Fed. Reg. at 39,806.

<sup>94 15</sup> U.S.C. § 2603(a)(2) ("The Administrator may, by rule, order, or consent agreement . . . require the development of new information relating to a chemical substance or mixture if the Administrator determines that the information is necessary . . . to review a notice under section 2604 of this title."); id. § 2604(e) (authorizing EPA to require the development of necessary information as a condition of the commercialization of a new chemical).

<sup>&</sup>lt;sup>95</sup> 15 U.S.C. § 2613(b)(2).

<sup>&</sup>lt;sup>96</sup> 15 U.S.C. § 2602(8) (emphasis added).

broad availability of health and safety data, with its narrow protection only for the most crucial proprietary information, demonstrates the overriding statutory policy of information access." <sup>97</sup>

In violation of that mandate, Motiva redacted substantial portions of each of the Carcinogens' "health and ecotoxicity assessment," including the complete redaction of the first several pages of that document. Even if those pages contained certain information that was protected from disclosure under TSCA, such as "information . . . that discloses processes used in the manufacturing," when a document contains a mix of confidential and non-confidential information, EPA is obligated to disclose the non-confidential parts. It strains credulity to suggest that the opening pages of a "health and ecotoxicity assessment" contain purely process-related information, particularly when Motiva has separately submitted a "process diagram" and other information related to its production process. Any non-confidential health and safety information contained within that document must be disclosed.

Motiva also redacted two appendices to a process diagram that allegedly provide "additional details" about the use of personal protective equipment ("PPE"). First, EPA cannot assume that workers will be provided with, trained on, and protected by PPE. Instead, as EPA has previously explained, "where EPA identifies a potential unreasonable risk to workers that could be addressed with appropriate personal protective equipment (PPE) and hazard communication, EPA will no longer assume that workers are adequately protected under OSHA's worker protection standards and updated Safety Data Sheets (SDS)." Instead, EPA committed to "identify the absence of worker safeguards as 'reasonably foreseen conditions of use, and mandate necessary protections . . . as appropriate." There is also no basis for withholding information about the alleged use of PPE as confidential. Motiva has not explained how the disclosure of information about respirator and glove use would "cause substantial harm to [its] competitive position," as required to support a CBI claim. In its PMNs and CBI substantiation forms, Motiva does not assert that information related to the use of PPE constitutes CBI. To the extent those appendices discuss Motiva's alleged use of PPE, they must therefore be disclosed.

\_

<sup>&</sup>lt;sup>97</sup> EPA, Final Action Plan: TSCA Confidential Business Information Reform, EPA Doc. No. EPA-HQ-OPPT-2002-0054-0075, at 3 (June 20, 1994) ("EPA CBI Action Plan"), <a href="https://www.regulations.gov/document/EPA-HQ-OPPT-2002-0054-0075">https://www.regulations.gov/document/EPA-HQ-OPPT-2002-0054-0075</a> (click "Download"); see also EPA, General Provisions: Confidential Business Information, 43 Fed. Reg. 39,997, 39,998 (Sept. 8, 1978) ("The congressional policy behind section 14(b) of TSCA is that the public must have access to data about health and safety for those chemicals that are in commerce because the public may be exposed to those substances.").

<sup>&</sup>lt;sup>98</sup> 15 U.S.C. § 2613(b)(2)(B).

<sup>&</sup>lt;sup>99</sup> *Id.* § 2613(b)(1).

<sup>&</sup>lt;sup>100</sup> EPA, *Important Updates on EPA's TSCA New Chemicals Program* (Mar. 29, 2021), https://www.epa.gov/chemicals-under-tsca/important-updates-epas-tsca-new-chemicals-program. <sup>101</sup> *Id*.

<sup>&</sup>lt;sup>102</sup> 15 U.S.C. § 2613(c)(1)(B).

Motiva has even redacted, in their entirety, documents described only as "Permit 1" and "Permit 2." Although Motiva does not discuss the contents of those documents, to the extent they are governmental permits, as their name suggests, their redaction is improper. To claim material as CBI, the submitter must "take[] reasonable measures to protect the confidentiality of the information" and "determine[] that the information is not required to be disclosed or otherwise made available to the public under any other Federal law." A government permit is a public record, which by its nature is non-confidential and therefore cannot be withheld as CBI.

Finally, Motiva withheld the specific names of all the Carcinogens, claiming them as CBI. When a new chemical name is claimed as confidential, however, the submitter "shall include a *structurally descriptive* generic name" that "describe[s] the chemical structure of the chemical substance as specifically as practicable." <sup>105</sup>

The generic names submitted by Motiva fall far short of that requirement. Most of the Carcinogens contain the same generic name: "hydrocarbon processed." That name provides no information at all about the chemical structure, and it could be used to describe anything from jet fuel to petrochemicals to Vaseline. A generic name may only "protect[] those features of the chemical structure—(I) that are claimed as confidential; and (II) the disclosure of which would be likely to cause substantial harm to the competitive position of the person." Here, Motiva has impermissibly withheld *all* features of the chemical structure without any showing that a more descriptive name would "cause substantial harm" to its competitive position.

The Carcinogen's generic names are also inconsistent with EPA guidance and with generic names used for other processed hydrocarbons. According to Motiva, the Carcinogens are "Class 2" chemical substances, covering chemicals with unknown or variable composition, complex reaction products, and biological materials. <sup>107</sup> Per EPA guidance, "[a] generic name is created for a class 2 organic chemical substance by masking the confidential elements of its specific chemical name," while still providing a non-confidential description of the chemical's structure or feedstock material. <sup>108</sup> Generic names previously used for pyrolysis products and related chemicals include:

<sup>&</sup>lt;sup>103</sup> Submission Form, P-25-0055, at 31,

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055%2F4%2F090225268051997f PrimaryPMN P-25-

<sup>&</sup>lt;u>0055\_20250206\_16\_30\_22\_sanitized\_2417634000137789872.pdf</u>; *see also* Permit 1, P-25-0055, <a href="https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055%2F4%2F0902252680519974\_09SPermit1.PDF">https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055%2F4%2F0902252680519974\_09SPermit1.PDF</a>; Permit 2, P-25-0055, <a href="https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055">https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055</a>

https://chemview.epa.gov/chemview/proxy?filename=ncn%2F20250211010022%2FP-25-0055%2F4%2F0902252680519976\_10SPermit2.PDF.

<sup>104 15</sup> U.S.C. § 2613(c)(1)(B).

<sup>&</sup>lt;sup>105</sup> *Id.* § 2613(c)(1)(C).

<sup>&</sup>lt;sup>106</sup> *Id*.

<sup>&</sup>lt;sup>107</sup> Submission Form, P-25-0055, at 8.

<sup>&</sup>lt;sup>108</sup> EPA, Guidance for Creating Generic Names for Confidential Chemical Substance Identity Reporting under the Toxic Substances Control Act (June 2018),

- Naphtha, heavy catalytic cracked (P-21-0041)
- Gas oils hydrotreated vacuum (P-21-0154)
- Waste plastics, pyrolyzed, C20-55 fraction (SN-22-0008)
- Plastics, wastes, pyrolyzed, bulk pyrolysate (P-14-0712)

At least the first two of those examples are processed hydrocarbons, like the Carcinogens. But they were assigned more descriptive generic names, consistent with TSCA's statutory requirement that such names describe the chemical substance "as specifically as practicable." Motiva has not explained why a more descriptive name would not be practicable in this instance, while still "protecting [those] features of the chemical structure . . . that are claimed as confidential." EPA should deny Motiva's CBI assertion for the Carcinogens' chemical identifies and require Motiva to resubmit TSCA-compliant generic names.

#### **CONCLUSION**

Any chemical with the severe hazards and massive production volume of the Carcinogens presents the potential for unreasonable risk. Chemicals that are manufactured and released in overburdened communities like Port Arthur pose even greater concerns. TSCA requires EPA to closely scrutinize the Carcinogens' exposures and risks and to take whatever steps are needed to protect the residents of Port Arthur, workers in Motiva's facility, and other potentially exposed or susceptible subpopulations. We urge EPA to heed those requirements and to prohibit the production of the Carcinogens.

If you have any questions about these comments, please contact Jonathan Kalmuss-Katz, Earthjustice, at <u>jkalmusskatz@earthjustice.org</u>.

Respectfully submitted,

Community In-Power and Development Association Earthjustice

https://www.epa.gov/sites/default/files/2018-06/documents/san6814\_guidance\_for\_creating\_tsca\_generic\_names\_2018-06-13\_final.pdf. 15 U.S.C. 2613(c)(1)(C).