EARTHJUSTICE
BECAUSE THE EARTH NEEDS A GOOD LAWYER

June 4, 2025

Sent via UPS and electronic mail to:

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1200 New Jersey Ave, SE
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United States

Re: Request for Enforcement of Hazardous Materials Laws in U.S. Oil and Gas Fields

Secretary Sean Duffy, Acting Administrator Kochman, and Director Lawless:

We write on behalf of Truckers Movement for Justice[1] and Ohio Valley Allies,[2] and alongside the undersigned organizations, to request that (1) the U.S. Department of Transportation ("DOT") immediately enforce federal hazardous materials law for transportation of hazardous materials, particularly the transportation of oil and gas

[1] Truckers Movement for Justice is an organization of drivers, owner-operators and company drivers, with members across the United States, including members who drive oil and gas waste originating in the Marcellus, Utica, and Permian basins.

[2] Ohio Valley Allies is a non-profit organization based in Appalachian Ohio that uses a science-based approach to empower individuals in the Ohio River Valley and beyond to advocate for their right to a healthy environment. Ohio Valley Allies has members who live within the Marcellus and Utica shale fields and who are impacted by oil and gas waste disposal and transport.

waste, and (2) the Federal Motor Carrier Safety Administration ("FMSCA") conduct a formal safety audit for all carriers operating in oilfields across the United States.

Mounting evidence indicates that oil and gas producers, and businesses that handle, process, and dispose of oil and gas waste are offering this waste for transport in violation of hazardous materials regulations (49 CFR Parts 171-180). Specifically, shippers are failing to class their loads, despite oil and gas waste at times meeting hazardous materials thresholds. This failure violates, without limitation, 49 CFR 171.2(e), which prohibits shippers from offering hazardous materials for transport without proper classification. A host of violations follow from this initial violation, including, but not limited to, the transport of hazardous material: (1) by a driver without a hazardous materials ("HAZMAT") endorsement, proper training, and personal protective equipment; (2) without required shipping papers and emergency response information; (3) without mandated placarding; (4) in inappropriate and inadequate packaging; (5) on inappropriate and vulnerable routes; and (5) without the required insurance.

Truckers Movement for Justice believes that America's oilfield drivers deserve the opportunity to obtain HAZMAT endorsements and receive proper training, equipment, and pay that reflects the risks and responsibilities of transporting hazardous material when it is present in their haul, regardless of whether that hazardous material appears in oil and gas waste. Shippers' ongoing failure to class their loads and provide legally required paperwork has deprived truck drivers across America's shale plays of the benefits of being licensed HAZMAT drivers, while subjecting them to the risks of transporting hazardous materials, without any of the protections and compensation to which they are entitled under the law. Moreover, shippers' failure to class their loads forces communities within the shale fields and along transportation routes for oil and gas wastes to bear the burden of hazardous material traveling through their communities without federally required protections.

I. Background on Oil and Gas Waste and Hazardous Material Regulations

Oil and gas production generates enormous quantities of waste compared to other industrial sectors.[3] This waste comes in many forms: drilling fluids/muds, drilling

[3] U.S. EPA, Management of Exploration, Development and Production Wastes: Factors Informing a Decision on the Need for Regulatory Action, 3-10 (2019), https://www.epa.gov/sites/default/files/2019-04/documents/management_of_exploration_development_and_production_wastes_4-23-19.pdf, attached as Exhibit 1.

cuttings, stimulation/workover fluids, settled solids, pipe scale, produced water,[4] gas treatment residuals, wastewater treatment residuals, and hydrocarbon bearing soil and debris.[5] While the exact chemical composition of oil and gas waste depends on the type of waste and its point of origin, peer-reviewed research, government studies, and industry experience all demonstrate that oil and gas waste constituents can adversely impact human health and the environment.[6] These constituents include extraordinary levels of salts, heavy metals, hydrocarbons, and radioactive material such as radium-226 ("Ra-226") and radium-228 ("Ra-228").[7]

While the Resource Conservation and Recovery Act ("RCRA") exempts exploration and production wastes ("E&P Wastes") from regulation as "hazardous waste," federal hazardous materials regulations, 49 CFR Parts 171-180, ("HAZMAT Rules") still govern the transport of hazardous materials—even when those materials appear in E&P wastes.[8] HAZMAT Rules define hazardous material to include not only hazardous waste as defined by RCRA regulations, but also hazardous substances, marine pollutants, elevated temperature materials, materials designated as hazardous in the HAZMAT Rules' Hazardous Materials Table, and materials that meet the defining criteria for the HAZMAT Rules' hazard classes and divisions.[9] As explained below, oil

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[4] The brine "brought up from hydrocarbon bearing strata during the extraction of oil and gas, which can include formation water, injection water, and any chemicals added downhole or during the oil/water separation process." *Id.* at xi.

[5] *Id.* at 3-11, Table 3-4.

[6] *See* Elaine W. Sweidler, et al. *Should solid waste from shale gas development be regulated as hazardous waste?*, 129 Energy Policy, 1020-1033 (2019), attached as Exhibit 2. *See also* Mina Aghababaei et al., *Toxicity of Hydraulic Fracturing Wastewater from Black Shale Natural-Gas Wells Influenced by Well Maturity and Chemical Additives,* 23 Environ. Sci.: Processes Impacts 621 (2021), attached as Exhibit 3.

[7] *Id.*

[8] *See* 40 CFR 261.4(b)(5)(stating "[d]rilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy" are "[s]olid wastes which are not hazardous wastes."). Notably, the oil and gas industry produces many wastes that are not E&P wastes, and therefore not covered by the RCRA E&P waste exemption. *See e.g.* U.S. EPA, Regulatory Determination Letter, September 15, 2010, https://rcrapublic.epa.gov/files/14816.pdf, attached as Exhibit 4. *See also* PHMSA Interpretation Response #18-0043 (2018), attached as Exhibit 5 (explaining that "oil and gas exploration and production wastes" exempt from regulation as "hazardous waste" may still be regulated as "hazardous material" as defined under 49 CFR 171.8).

[9] 49 CFR 171.8.

and gas waste does in some circumstances meet the HAZMAT Rules' definition of hazardous material.

Truck drivers haul oil and gas waste, in its many forms, from places of generation (*e.g.*, wellheads, compressor stations) to and from storage or processing sites (*e.g.*, waste pits, storage tanks, waste processing facilities), and to and from disposal sites (*e.g.*, injection wells, landfills, land application sites). Under HAZMAT Rules, it is a shipper's responsibility to properly class and describe a hazardous material.[10] This responsibility includes preparing shipping papers, marking the package and transport vehicle, providing emergency response information, ensuring required placarding, ensuring persons transporting the materials have HAZMAT training, and in some cases providing transportation security plans.[11] If a shipper classes a load as a hazardous material requiring placarding, only a driver with a HAZMAT endorsement on their commercial license can transport it.[12]

In America's shale plays, shippers regularly fail to class their waste prior to offering it for transport. [13] Because HAZMAT Rules are based on proper classification of shipments by the shipper, this failure ripples through the transport chain, placing drivers in the dangerous position of transporting hazardous materials without the proper training, emergency response information, licensing, personal protective equipment, labeling, placarding, safety plans, and routing. Drivers without HAZMAT endorsements unknowingly transporting hazardous materials in oil and gas waste expose these workers to dangerous chemicals that can have both short- and long-term effects on their health and safety.

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[10] 49 CFR 173.22; *see also* PHMSA Interpretation Response #18-0043 (2018) ("it is the shipper's responsibility to properly classify a hazardous material."); *see also* FMSCA, How to Comply with Federal Hazardous Materials Regulations, https://www.fmcsa.dot.gov/regulations/hazardous-materials/how-comply-federal-hazardous-materials-regulations#hms, attached as Exhibit 6 ("Of all the shippers' (offerors') responsibilities, the requirement to properly classify a hazardous material is very important. It is from the proper identification of the hazardous materials that the other requirements are based on.").

[11] *See* 49 CFR 173.22 (requiring shippers to "class and describe the material in accordance with parts 172 and 173" of the HAZMAT Rules); *see also* 49 CFR 172 (setting forth requirements for shipping papers, marking, placarding, emergency response information, training, and safety and security plans).

[12] *See* 49 CFR Part 172; 49 CFR 383.93(b).

[13] *See e.g.* Justin Nobel, *Petroleum-238: Big Oil's Dangerous Secret and the Grassroots Fight to Stop It*, 46, 53 KARRET PRESS (2024)(describing the regular transport of oil and gas waste without placarding)[hereinafter "Petroleum-238"].

II. Trucks in the Oilfield Are Likely Carrying Radioactive Material Without Adhering to Federal Hazardous Material Regulatory Requirements

Oilfield waste contains a number of radioactive isotopes that emit alpha particles as they decay, including Ra-226, Ra-222, and five different isotopes of polonium.[14] Some of the radionuclides in produced water accumulate and form mineral scales and sludges in pipelines, especially Ra-226, Ra-228, lead-210 (Pb-210), and polonium-210 (Po-210).[15] In addition, radon-222 (Rn-222), or radon gas, follows the extracted gas through the processing and distribution systems and precipitates into Pb-210 and Po-210 on downstream equipment.[16] These and other radioisotope progenies can be found throughout the oil and gas extraction and distribution system, such as in pipeline scrapings and scales, sludge, produced water, crude oil, and gas.[17]

Federal hazardous material regulations classify radioactive material as hazardous class 7 and define radioactive material as "any material containing radionuclides where both the activity concentration and the total activity in the consignment exceed the values specified in tables in [49 CFR] 173.436 or derived according to instructions in [49 CFR] 173.433."[18] Put simply, for a load of oil and gas waste to be classified as "radioactive material"/ "hazardous class 7," DOT regulations require that load to meet limits for *both* (1) the radioactivity at a specific point within the load of waste ("specific activity concentration"), and (2) the total radioactivity within all parts of the load ("total consignment activity").[19] Data suggests that some trucks carrying oil and gas waste are likely carrying material that should be classed as hazardous class 7 and transported accordingly.

Chemical analysis reports submitted to Pennsylvania Department of Environmental Protection ("PADEP"), have shown produced water in the Marcellus Shale to contain Ra-226 activity levels at least as high as 38,600 pCi/L.[20] For a scenario in

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[14] *Id.*; US EPA, *TENORM: Oil and Gas Production Wastes*, U.S. EPA (2024), https://www.epa.gov/radiation/tenorm-oil-and-gas-production-wastes, attached as Exhibit 7.
[15] US EPA, *TENORM: Oil and Gas Production Wastes*, U.S. EPA (2024).
[16] *Id.*
[17] *Id.*
[18] 49 CFR 173.403.
[19] 49 CFR 173.403.
[20] Justin Mackey and Daniel Bain, Characterizing Radium Distributions and NORM Wastes from Marcellus Produced Water, presentation at Shale Gas and Public Health Conference, Pittsburgh, Pennsylvania, February 27, 2025, at 14, attached as Exhibit 8. Additionally, these reports show total radium activity as high as 41,330 pCi/L. *Id.*

which a typical 5,000 gallon brine truck caries produced water with a Ra-226 content of 38,600 pCi/L, that truck would have a total consignment activity of approximately 730,505,000 pCi. This about ***2,705 times*** the consignment activity threshold for Ra-226 under DOT regulations.[21] A 2016 PADEP study on technically enhanced radioactive material in produced water from the Marcellus formation found produced water to contain an average of 8,344 pCi/L for Ra-226; 986 pCi/L for Ra-228; and 9,330 pCi/L for combined Ra-226 and Ra-228.[22] A brine truck carrying 5,000 gallons of produced water with these ***average*** radium contents would result in a total consignment activity of approximately 157,910,200 pCi for Ra-226—which is still approximately ***585 times*** the consignment activity threshold for Ra-226.

Further, produced water is loaded with suspended solids, including metals like barium and strontium, and the radioactive heavy metal radium, that regularly settle out as a sludge on the bottom of tanks and trucks that hold produced water.[23] The radium content in this sludge can be extremely elevated. A compilation of global data of oil and gas waste, including wastes from the Appalachian Basin, shows that the range of radioactive isotopes measured for scales and sludges easily exceeds hazardous material criteria for Ra-226, Ra-228, and Pb-210.[24] Industry experts have suggested radium levels in sludge can be above the HAZMAT Rules' specific activity concentration for Ra-226, which is 270 pCi/g.[25] EPA's own webpage on oil and gas TENORM states that lead-210

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[21] *See* 49 CFR 173.436 (for Ra-226 establishing an activity limit for exempt consignment of 270,000 pCi).

[22] Technologically Enhanced Naturally Occurring Radioactive Materials (TENORM) Study Report, (Pennsylvania Department of Environmental Protection, 2016), attached as Exhibit 9.

[23] US EPA, *TENORM: Oil and Gas Production Wastes* (2024), *supra* note 14; Petroleum-238 at 56-57 (2024)(worker describing sludge building up in the bottom of a brine truck tank during a month of hauling).

[24] Mohsen M. M. Ali et al., *Concentrations of TENORMs in the petroleum industry and their environmental and health effects*, 9 RSC ADV. 39201–39229 (2019), attached as Exhibit 10, (showing levels of Ra-226, Ra-228, and Pb-210 in sludges and scales with ranges that all exceed 10,000 Bq/kg).

[25] *See e.g.* Justin Nobel, *America's Radioactive Secret*, Rolling Stone, https://www.rollingstone.com/politics/politics-features/oil-gas-fracking-radioactive-investigation-937389/ (2020), ("according to a Texas-based TENORM expert, many Pennsylvania brine trucks might meet or just exceed that level because of the concentrated scale that can build up in a truck, but the DOT wouldn't necessarily know. Testing, says a DOT spokesperson, is the responsibility of the operator at the wellhead who dispatches the brine to the hauler, and the DOT is not required to verify or confirm the analysis at all."), attached as Exhibit 11.

levels may be as high as 27,000 pCi/g in sludge, which is *100 times* the HAZMAT Rules' total activity concentration limit.[26]

Samples taken from sediment littering the grounds of a fracking wastewater treatment plant called Fairmont Brine Processing, in Fairmont, West Virginia, found Ra-226 levels at 4,690 pCi/g, well above the HAZMAT Rules' 270 pCi/g activity concentration limit.[27] Additional results of note from the Fairmont Brine Processing facility include Ra-228 at 382 pCi/g, Po-210 at 312 pCi/g, Pb-210 at 393 pCi/g, Pb-212 at 1,470 pCi/g, and Pb-214 at 5,090 pCi/g.[28] Were this sludge located in the base of a fracking wastewater truck rather than littered on the grounds of a fracking wastewater plant, these radionuclide levels would each be well above their respective specific activity concentration (270 pCi/g) under the HAZMAT Rule. For each radionuclide, a 5,000-gallon brine truck would also breach total activity levels, requiring the trucks to travel with a Class 7 Radioactivity HAZMAT placard. Upon information and belief, trucks transported this and similar material without placarding. Waste haulers regularly transport equipment containing or contaminated by oilfield scale and sludges within and outside the oilfields, and indicate that this regularly occurs without a shipper first assessing whether these loads trigger federal regulatory hazardous material requirements.[29]

Experts have long raised the concern that carriers may be transporting oil and gas waste and contaminated equipment without first assessing whether their load triggers Department of Transportation hazardous material regulations for radioactivity.[30] Some Safety Data Sheets for produced water do acknowledge concerns regarding naturally occurring radioactive materials ("NORM").[31] However, upon

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[26] US EPA, *TENORM: Oil and Gas Production Wastes* (2024).

[27] Eberline Analytical/Oak Ridge Laboratory, Concerned Ohio River Residents, Soil, Standard Level IV Report of Analysis Work Order #23-08016-OR, August 31, 2023, Oak Ridge, TN, attached as Exhibit 12 [hereinafter "Fairmont Brine Soil Sample Results"]

[28] Fairmont Brine Soil Sample Results.

[29] *See e.g.* Petroleum-238 at 46 (describing the regular transport of oil and gas waste without placarding).

[30] *See e.g.* Marvin Resnikoff, Review of Pennsylvania Department of Environmental Protection Technologically Enhanced Naturally Occurring Radioactivity Materials (TENORM) Study Report (2015), attached as Exhibit 13.

[31] *See e.g.* Delek US, Produced Water (Sweet) Safety Data Sheet (2022), attached as Exhibit 14 ("NORMS based Radon, a radioactive gas, may be present as a trace component in this product. Special precautions should be taken when entering or dismantling equipment. Equipment

information and belief, most brine haulers never receive any Safety Data Sheets for their loads.[32]

III. Trucks in the Oilfield are Likely Carrying Flammable Materials and Materials that Pose a Host of Health Risks to Workers and Communities Without Adhering to Federal Hazardous Material Regulatory Requirements

Oil and gas waste transported by truck may trigger multiple hazardous materials regulations. In particular, oil and gas waste may meet the requirements for classification as a flammable or combustible liquid.[33] Oil and gas wastes also generally contain a host of constituents that present a risk to human health and the environment, some of which can be at levels to trigger hazardous materials regulations.

Drivers have indicated to Truckers Movement for Justice that they rarely, if ever, receive Safety Data Sheets for their oil and gas waste loads. Indeed, multiple brine haulers have stated that they have never received a Safety Data Sheet for the produced water they transport. Despite truckers rarely receiving them, a quick internet search reveals that some Safety Data Sheets for produced water do in fact exist. These Safety Data Sheets indicate a plethora of hazard statements associated with the material,

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should be checked externally while in service for gamma radiation above background levels. Equipment may contain internal surface deposits of radioactive radon decay products. Minimize unnecessary exposures to these radioactive deposits. Exposures can be reduced by allowing a 4-hour idle (no flow) period before entering or dismantling equipment. During this time the short-lived decay products will decay. Longer lived radio nuclides (Pb-210, Bi210 and Po-210) may be present. Avoid direct skin contact with deposits of radioactivity on surfaces. Avoid generation of dust, smoke or fumes in the work area or if they cannot be avoided, wear a tested and certified respirator for radioactive dusts.")[hereinafter "Delek Sweet SDS"]

[32] *See e.g.* Petroleum-238 at 45 (describing the regular transport of oil and gas waste without papers describing contents of load).

[33] *See e.g.* PHMSA Interpretation Response #18-0043, *supra* note 8 (explaining oil and gas exploration and production wastes with a flash point of less than 140F will be subject to hazardous material regulations as either Class 3 flammable or combustible liquids per 49 CFR 173.120 and 173.121).

including: highly flammable liquid and vapor,[34] combustible liquid,[35] may cause respiratory irritation,[36] may cause cancer,[37] causes serious eye irritation,[38] may cause genetic defects,[39] causes damage to organs through prolonged or repeated exposure,[40] causes skin irritation,[41] toxic to aquatic life,[42] toxic to aquatic life with long lasting effects,[43] may contain or release poisonous hydrogen sulfide gas,[44] may damage fertility or the unborn child,[45] and fatal if inhaled.[46]

Drivers and community members have long raised alarm-bells regarding exposures to hydrogen sulfide gas in oil and gas waste, and in oil and gas production

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[34] *See e.g.* HESS, Produced Water with Hydrocarbon Safety Data Sheet (2018), attached as Exhibit 15 [hereinafter "HESS SDS"]; Keyera, Produced Water, Sour, Flammable Safety Data Sheet (2021), attached as Exhibit 16 [hereinafter "Keyera Flammable SDS"]; Ovintiv, Produced Water, Sweet (2020), attached as Exhibit 17 ("Flammable liquid and vapor") [hereinafter "Ovintiv Sweet SDS"]; Ovintiv, Ovintiv Safety Data Sheet (U.S.) Produced Water Sour (2019), attached as Exhibit 18 ("Flammable liquids") [hereinafter "Ovintiv Sour SDS"; Dominion Energy, Safety Data Sheet (2019), attached as Exhibit 19 ("may contain flammable liquids") [hereinafter "Dominion SDS"].

[35] *See e.g.* Keyera, Produced Water, Sour, Non-Flammable Safety Data Sheet, (2021) attached as Exhibit 20 [hereinafter "Keyera Non-Flammable SDS"].

[36] *See e.g.* HESS SDS.

[37] *See e.g.* HESS SDS; Tesoro Safety Data Sheet SDS Number 888100008856 (2017), attached as Exhibit 21 [hereinafter "Tesoro SDS"]; Delek US, Produced Water (Sour) Safety Data Sheet (2022), attached as Exhibit 22 [hereinafter "Delek Sour SDS"]; ConocoPhillips, Produced Water Safety Data Sheet (2012), attached as Exhibit 23 [hereinafter "ConocoPhillips SDS"]; Keyera Flammable SDS; Dominion SDS ("contains benzene – a known human carcinogen").

[38] *See e.g.* Delek Sweet SDS; Tesoro SDS; Dominion SDS ("contact with eyes may cause irritation").

[39] *See e.g.* Tesoro SDS; Delek Sour SDS; Keyera Flammable SDS.

[40] *See e.g.* Tesoro SDS; Delek Sour SDS (specifying damage to organs includes Hematopoietic system, central nervous system, blood); Dominion SDS ("May be absorbed through the skin and cause systemic toxicity with prolonged or repeated contact;" "May cause pulmonary edema or pneumonitis upon aspiration").

[41] *See e.g.* Tesoro SDS; Ovintiv Sour SDS.

[42] *See e.g.* Delek Sour SDS.

[43] *See e.g.* Delek Sour SDS; Ovintiv Sour SDS; Keyera Non-Flammable SDS ("Harmful to aquatic life with long lasting effects").

[44] *See e.g.* ConocoPhillips SDS.

[45] *See e.g.* Keyera Flammable SDS; Ovintiv Sour SDS ("Suspected of damaging a fetus"); Dominion SDS ("contains n-hexane – a reproductive toxicant").

[46] *See e.g.* Keyera Flammable SDS; Keyera Non-Flammable SDS; Ovintiv Sour SDS ("poisonous by inhalation").

more broadly.[47] This toxic gas is lethal in small quantities, and has killed oil and gas workers and community members living near oil and gas infrastructure.[48]

Further, upon information and belief, drivers are receiving improperly classed loads from shippers, resulting in the transport of hazardous materials in violation of federal hazardous materials regulations.[49] Shippers' failure to class oil and gas waste in compliance with HAZMAT Rules is not without consequence. Drivers regularly come into contact with oil and gas waste. Produced water splashes onto workers' skin and clothes while they are wearing little to no personal protective equipment, and is even accidentally ingested.[50] Exposure to oil and gas waste has resulted in worker hospitalizations, long-term illness, and deaths.[51]

IV. Communities within America's Shale Fields and Along Transportation Routes for Oil and Gas Wastes Also Bear the Burden of Unlawful Transport

Drivers and other oil and gas workers bear the brunt of the oil and gas industry's failure to class oil and gas waste under HAZMAT Rules, but this failure also subjects communities located in oil and gas basins and along waste transportation routes to health and safety risks and harm. Trucks ferrying oil and gas waste through

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[47] *See e.g.* Will Evans, et al., *Oil companies leak toxic gas across Texas — making local residents sick*, The Examination, https://www.theexamination.org/articles/oil-companies-leak-toxic-gas-across-texas-making-local-residents-sick (2024), attached as Exhibit 24.

[48] *Id.*

[49] *See e.g.* Stacey Burling, *Awash in Toxic Wastewater From Fracking for Natural Gas, Pennsylvania Faces a Disposal Reckoning*, Inside Climate News, https://insideclimatenews.org/news/16042023/pennsylvania-produced-water-fracking-gas/ (2023), attached as Exhibit 25 (describing produced water at wellpads in tanks with placards for health and fire hazards being transferred into non-placarded trucks simply labeled "residual waste").

[50] *See e.g.* Petroleum-238 at 54-57 (A former oil and gas waste hauler states "Brine splashes up on you constantly. We have all tasted it," describes workers eating and smoking with oil and gas residue on their hands, and wearing limited personal protective equipment.).

[51] *See e.g.* Kyla Retzer, et al., Gases and vapors continue to pose hazards on oil and gas well sites during gauging, fluid transfer, and disposal (2018), available at https://blogs.cdc.gov/niosh-science-blog/2018/08/24/oil-and-gas-vapors/, attached as Exhibit 26, (for 2015-2016, describing deaths of five workers working with oil and gas waste water, describing hospitalizations of five workers working with oil and gas waste water, some of these incidents involved the transport or transfer of waste water in trucks).

communities makes roads more dangerous for drivers and community members alike.[52] Drivers explain that they are under ever-increasing pressure to deliver loads more quickly, exacerbating already dangerous working conditions.[53]

A review of safety data suggests trucks in oil and gas fields are regularly operating out of compliance with safety laws.[54] Crashes are a regular occurrence in the oilfields, accounting for two-thirds of oil worker deaths in 2023.[55] These accidents can also impact community members and resources. In the Marcellus and Utica Shale Plays, it is not uncommon for the oil and gas industry to place its waste infrastructure, including disposal sites like underground injection wells, in impoverished Appalachian communities.[56] Local roads in these plays experience the greatest amount of truck traffic, however, trucks carrying oil and gas waste also travel beyond active oil and gas development areas.[57] At least one study has found a significant increase in accidents,

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[52] Saul Elbein, *Texas workers face mounting dangers in the heart of America's greatest oil boom*, The Hill, https://thehill.com/policy/energy-environment/5167742-permian-basin-oil-boom-texas-worker-safety/ (2025), attached as Exhibit 27 ("Crashes accounted for two-thirds of oil worker deaths in 2023, according to federal data. But it's not only truckers who are at risk: The roads have also become more dangerous for the populations of the towns they race through.").

[53] Molly Montgomery, *Working in the Permian Basin comes at a high cost*, High Country News, https://www.hcn.org/articles/working-in-the-permian-basin-comes-at-a-high-cost/ (2025), attached as Exhibit 28.

[54] *See e.g.* Truckers News Staff, *38% of inspected trucks placed out of service in west Texas oil patch*, Truckers News, https://www.truckersnews.com/trucks/article/15747089/38-of-inspected-trucks-placed-out-of-service-in-texas-oil-patch (2025), attached as Exhibit 29; Compilation of DOT SAFER Reports, compiled by Truckers Movement for Justice, attached as Exhibit 30 (showing out of service rates regularly above national averages).

[55] *Id.*; Elbein (2025)

[56] *See e.g.* Petroleum-238 at 46 (statement by former Fire Chief Silverio Caggiano explaining the location of injection wells in impoverished regions of Ohio); Genevieve S. Silva, et al., *Spatial Modeling to Identify Sociodemographic Predictors of Hydraulic Fracturing Wastewater Injection Wells in Ohio Census Block Groups*, Environmental Health Perspectives 126:6 CID: 067008, https://doi.org/10.1289/EHP2663 (2018), attached as Exhibit 31 (finding an inverse relationship between number of injection wells and median income in a given census block).

[57] Lauren A. Patterson and Keely O. Maloney, *Transport of hydraulic fracturing waste from Pennsylvania wells: A county-level analysis of road use and associated road repair costs*, 181 Journal of Environmental Management 353-362 (2016), attached as Exhibit 32.

and accidents involving trucks, in counties with a large amount of shale gas development.[58]

In 2014 in Lawrence Township, Ohio, a brine truck flipped over a guardrail, rolled down a hill, struck a home, leaked brine under the house, and left a driver on the ground spitting up blood.[59] In 2016, in Barnesville, Ohio, a brine truck wreck caused oil and gas waste to flow across a livestock field, enter a stream, and enter the village reservoir, which experienced a spike in radium immediately following the accident.[60] In 2017, near Coolville, Ohio, a brine truck wreck impacted an area over 30-feet long, contaminated soil, and entered a culvert that leads to Little Hocking Creek.[61] In May 2025, in Tioga County, Pennsylvania, "a tanker truck carrying fracking wastewater rolled 100 feet down an embankment … spilling about 2,000 gallons of flowback water into a nearby stream."[62] In May of 2022, a tanker truck carrying 6,000 gallons of brine crashed near Salladsburg, Pennsylvania, killing the driver, and emptying the trucks' contents into Larry's Creek.[63] In 2024, in Williams County, North Dakota, a truck crash spilled 150 barrels (6,300 gallons) of produced water/flowback.[64]

A study that investigated residential exposure pathways from spills of flowback water found that for spills of 500 liters or greater that reached drinking water sources,

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[58] Clancy, S.A., et al., The potential for spills and leaks of contaminated liquids from shale gas developments, Sci Total Environ (2018), https://doi.org/10.1016/j.scitotenv.2018.01.177, attached as Exhibit 33.

[59] Petroleum-238 at 46

[60] *Id.;* Cathryn Stanley, *Reservoir cleared after brine spill near Barnesville*, The Daily Jeff, https://www.daily-jeff.com/story/news/2016/07/14/reservoir-cleared-after-brine-spill/18943390007/ (2016) ("April 6 sampling by the OEPA of water in Reservoir #1 showed a spike in radium following the accident, but indicated that levels were still below the standard for drinking water.")

[61] WTAP News, *UPDATE: Brine truck spill is getting cleaned up*, https://www.wtap.com/content/news/Brine-truck-accident-shuts-down-traffic-on-US-50-458637853.html (2017), attached as Exhibit 34.

[62] Caroline Stevens, *Fracking wastewater spills from tanker truck after crash in Sullivan Twp*, Mytwintiers.com, https://www.mytwintiers.com/news-cat/local-news/fracking-wastewater-spills-from-tanker-truck-after-crash-in-sullivan-twp/, (2025), attached as Exhibit 35.

[63] *New York truck driver killed in crash near Salladasburg*, Williamsport Sun-Gazette, https://www.sungazette.com/uncategorized/2022/05/new-york-state-truck-driver-killed-in-crash-near-salladasburg/ (2022), attached as Exhibit 36.

[64] *Williams County truck crash creates produced water spill*, KX News, https://www.kxnet.com/news/local-news/williams-county-truck-crash-creates-produced-water-spill/ (2024), attached as Exhibit 37.

cancer risk increased due to the presence of radionuclides.[65] A 5,000 gallon brine truck carries 18,927 liters. The same study noted that "exposure to radionuclides in flowback water, particularly through the inhalation route … should be the focus of risk assessment and risk mitigation efforts."[66]

Because shippers are regularly failing to class loads of oil and gas waste under HAZMAT Rules, communities in America's shale fields and across oil and gas waste transportation routes are missing key federal protections that require hazardous material to only travel with licensed HAZMAT drivers, on appropriate routes, with clear marking and placarding, and immediately accessible and available emergency information. This omission makes residents more vulnerable and places first responders at risk.[67]

V. Conclusion and List of Demands

Driving hazardous materials can be dangerous and opens drivers up to heightened risks and responsibilities compared to the transport of non-hazardous materials. Yet, in oilfields across the United States, drivers without HAZMAT endorsements regularly transport oil and gas waste that shippers fail to properly class, despite that waste at times meeting hazardous materials thresholds.[68] In order to protect themselves and obtain HAZMAT endorsements, drivers first need shippers to properly class their loads. Without proper classing by shippers, drivers have no indicator telling them they need to obtain HAZMAT endorsements, carriers have no incentive to hire HAZMAT endorsed drivers for oilfield waste transport, and communities go unprotected.

America's oilfield drivers deserve the opportunity to obtain HAZMAT endorsements and to receive proper training, information, equipment, and pay that reflects the risks and responsibilities of transporting hazardous material when it is present in their haul, regardless of whether that hazardous material appears in oil and gas waste. Shippers' ongoing failure to classify their loads and provide legally required

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[65] Noura Abualfaraj, Patrick Gurian & Mira Olson, *Assessing Residential Exposure Risk from Spills of Flowback Water from Marcellus Shale Hydraulic Fracturing Activity*, 15 Int J. Environ. Res. Public Health 727 (2018), attached as Exhibit 38.

[66] *Id.*

[67] *See generally* Petroleum-238 at 42-52 (Former Fire Chief Silverio Caggiano describes dangerous conditions created by lack of training and information in oil and gas waste transport).

[68] *See e.g.* Petroleum-238 at 45, 54-55 (describing the lack of experience and training amongst brine haulers).

paperwork has deprived truck drivers across America's shale plays from the benefits of being licensed HAZMAT drivers, while subjecting them to the risks of transporting hazardous materials, without any of the protections and compensation to which they are entitled under the law.[69]

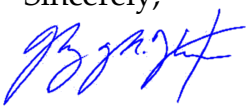
To address these ongoing harms, Truckers Movement for Justice, Ohio Valley Allies, and the undersigned organizations call on the U.S. Department of Transportation, particularly the Pipeline and Hazardous Materials Safety Administration and the Federal Motor Carrier Safety Administration, to take the following actions:

1. Use their enforcement authority to investigate the rampant failures of shippers in America's oilfields to properly class their loads of hazardous materials prior to shipment;
2. Conduct a formal safety audit for all carriers operating in oilfields across the United States;
3. Allow any oilfield driver engaged in the transport of oil and gas waste the opportunity to obtain a HAZMAT endorsement to allow that driver the opportunity to lawfully transport loads of oil and gas waste that meet the HAZMAT Rules' definition of hazardous material.
4. Provide carriers engaged in the transport of oil and gas waste, including oil and gas waste that meets the HAZMAT Rules' definition of hazardous material, 90 days to obtain proper insurance for the transport of hazardous material.
5. Require carriers to develop training in coordination with drivers, other oil field workers, and communities impacted by oil and gas waste generation, storage, handling, processing, and transport, to ensure oil and gas waste that meets the HAZMAT Rules' definition of hazardous material is safely managed during loading, offloading, and all stages of transit.

[Signature block on next page]

[69] *See* Elbein (2025), *supra* note 52 (describing the dangers of oilfield work, including transport of produced water, with limited pay and benefits). *See also* Montgomery (2025), *supra* note 53 (featuring an oil and gas waste hauler describing toxic chemical exposures, long hours, poor pay, and severe illness).

Sincerely,



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on behalf of

Truckers Movement for Justice and
Ohio Valley Allies

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ProtectPT

Becca Pollard, Executive Director
Buckeye Environmental Network

Roxanne Groff, Member
Ohio Brine Task Force

Melissa Troutman, Climate & Health Advocate
Wildearth Guardians

Melissa Marshall, Community Advocate
Mountain Watershed Association