May 8, 2024

Honorable Josh Shapiro

Governor of Pennsylvania

Honorable Members

Pennsylvania General Assembly

Dear Governor Shapiro, Legislators,

In written <u>testimony</u> on road spreading of conventional drilling wastewater the DEP submitted to the Senate Democratic Policy Committee, the agency said that "if a valid coproduct determination can be made that adequately compares brine to a commercially available product, even if it may not be as effective as other road-spreading products, **it's possible that oil and gas waste brine may continue to be spread as a dust suppressant.** [emphasis added]" Given the scientific evidence of the danger road spreading poses, as well as the inability of the agency to manage oil and gas waste, continued road spreading is unacceptable. The undersigned organizations and individuals are calling for an outright ban on road spreading of all oil & gas waste in the Commonwealth.

In 2022, the DEP issued a <u>report</u> ordered by Governor Wolf evaluating the agency's oversight of the conventional drilling industry in Pennsylvania that declared, "A significant change in the culture of non-compliance as an acceptable norm in the conventional oil and gas industry will need to occur before meaningful improvement can happen." The remark was based, in part, on shocking statistics that indicated that fewer than half of the conventional drillers operating in the state had filed production and waste reports in the previous five years. The yearly percentages told an even worse story. The rate of non-compliance was trending upward from 53.7% in 2017 to 61.8% in 2021. It was no surprise in March when Kurt Klapkowski told the House Environmental Resources and Energy Committee that the figure for 2023 had risen to 86%.

When a moratorium on road spreading of conventional drilling waste was imposed in 2018, some companies continued the practice by claiming a loophole in a program managed by the Bureau of Waste Management called the Coproduct program. Some of those drillers continued to report road spreading in their annual waste reports, so we know that at least 3.5 million gallons of highly toxic, radioactive drilling waste has been disposed of on our roads in the past six years. Given the degree of non-compliance, the amount that has gone unreported is surely much higher.

The program allows owners of a waste product to use it in place of a commercial product if it performs a function as well and does no more damage to the environment or health than the commercial product does. Although the program was conceived with the best of intentions, it was designed so poorly that it was vulnerable to exploitation by the oil & gas industry. The determination of how a waste product stacks

up is made by the waste owner, guided by section 287.8 of the Pennsylvania Code. Upon making a positive determination, the waste owner can start using the waste as a coproduct without having to notify the DEP. If the agency becomes aware of a coproduct, it can request a copy of the determination report. The owner is required to provide it.

In 2021, the Bureau of Waste Management started requesting determination reports from drillers who reported road spreading in 2020. It was the beginning of a process that continues today. The 3.5 million gallons of waste spread since the moratorium represents the amount that has been reported by 46 waste owners, most of them drilling companies. For the three years leading up to the Bureau's intervention, the Office of Oil and Gas Management did nothing to question the drillers' ongoing reporting of road spreading. In fact, in 2019, the Oil and Gas office acted on a verbal request from Pennfield Energy to create a nonexistent product type, "brine coproduct", that would provide the air of legitimacy to the continued reporting of road spreading. The agency's written testimony to the Senate Democratic Policy Committee says that the Oil and Gas office and the Bureau have coordinated efforts to address use of the Coproduct program, but there is no evidence of that, none was provided, and the agency canceled its scheduled appearance before the committee, so nothing in its testimony could be questioned.

In its 2022 report, in a similarly questionable statement, the agency said that it had "undertaken significant efforts to force compliance or penalize operators for their non-compliance." A chart of the most frequent violations in both environmental/health/safety and administrative categories shows a total of 13,615 for the years 2017 through 2021. A chart of enforcement actions broken down by type indicates that between 2017 and 2021, there were 1,293 enforcement actions taken, but only 98 that resulted in fines that totaled \$1,353,403. In other words, roughly 9.5% of the total of most frequent violations resulted in enforcement actions and not quite 0.7% resulted in fines. We could not find any fines for failure to file waste reports. We could find no violations issued for road spreading since the moratorium.

The astonishing combination of defiance of a moratorium, failure to fulfill basic reporting requirements, and the inability of the DEP to manage waste are occurring as a mounting body of evidence[i] proves the environmental and health impacts of road spreading and the ineffectiveness of the practice. When asked at the Senate Democratic Policy Committee hearing what research is still needed to make the case for a ban on road spreading, Penn State dirt and gravel road expert William Burgos, Ph. D., Professor of Environmental Engineering in the Department of Civil and Environmental Engineering, said none is needed. The case has been made.

The conventional drilling industry has forfeited its power to run roughshod over the state with its outrageous level of non-compliance with the most basic reporting requirements and its exploitation of a beneficial use program to sidestep the DEP's authority once again. However, the agency is just as much to blame. If there is a years'-long free-for-all of non-compliance, then it has only come about because the DEP's culture tolerates it and even enables it. The agency cannot demonstrate at present that it is capable of overseeing the disposal of highly toxic, radioactive waste.

We cannot ignore the realities that conventional drilling waste will never meet the requirements of any beneficial use program, that the conventional drilling industry will never stop testing the limits of noncompliance until some governmental body makes it, and that DEP has demonstrated through its passive, enabling behavior that it is not that governmental body today.

Governor Shapiro, Legislators, we call on you to ban all road spreading of oil and gas wastewater and take steps to ensure that Pennsylvania is protected from all oil and gas waste by mandating and helping to implement needed changes in the culture of the DEP.

Respectfully,

Organizations

Karen Feridun, Co-founder, Better Path Coalition

Mayor Nikole Nesby, Environmental Organizer, 412 Justice

Peter Crownfield, Coordinator, Alliance for Sustainable Communities

Hilary O'Toole, Executive Director, Beaver County Marcellus Awareness Community

Karen Feridun, Founder, Berks Gas Truth

Jess Conard, Appalachia Director, Beyond Plastics

Rebecca Roter, Chairperson, Breathe Easy Susquehanna

Matthew Mehalik, Executive Director, Breathe Project

Sharon Furlong, Spokesperson, Bucks Environmental Action

Ellen Gerhart, Administrator, Camp White Pine

Jodi Borello, Washington County Community Organizer, Center for Coalfield Justice

Citizens' Environmental Assn. of Slippery Rock Area, Inc., Legal Liaison, CEASRA, Inc.

Vera Scroggins, Director, Citizens for Clean Water

Liz Green Schultz, Political Director, Clean Air Action

Alex Bomstein, Executive Director, Clean Air Council

Phoebe Reese, Former Chair, Climate Reality: Pittsburgh and Southwestern PA Chapter

Sandy Field, Chair, Climate Reality Project: Susquehanna Valley PA Chapter

Barbara W. Brandom, MD, Steering Committee Member, Concerned Health Professionals of Pennsylvania

Barbara Arrindell, Director, Damascus Citizens for Sustainability

Barbara Laxon, Co-treasurer, Defend Ohi:yo'

Maya van Rossum, The Delaware Riverkeeper, Delaware Riverkeeper Network

Melissa Ostroff, Pennsylvania Policy and Field Advocate, Earthworks

Robin Lesko, Western PA Organizing Manager, Food & Water Action

Ginny Marcille-Kerslake, Pennsylvania Organizer, Food & Water Watch

Shannon Smith, Executive Director, FracTracker Alliance

Maya van Rossum, Founder, Green Amendments For The Generations

Patrick Campbell. Executive Director, Group Against Smog & Pollution (GASP)

Debra Borowiec, Co-ordinator, LAWPA (Local Authority Western PA)

Timothy Runkle, Co-chair, Lancaster County Green Party

Ann Pinca, President, Lebanon Pipeline Awareness

Michael Bagdes-Canning, Planning Group Member, Marcellus Outreach Butler

Michael Pollack, Executive Director, March on Harrisburg

Ashley Funk, Executive Director, Mountain Watershed Association

Tamela Trussell, Founder, Move Past Plastic

Anita Forrester, Faculty Advisor, NCC Climate Action Network

Jay Notartomaso, Founder, NEPA Green Coalition

Karen Elias, Co-founder, No False Solutions PA

Edith Abeyta, Co-founder, North Braddock Residents For Our Future

Dianne Petersen, Steering Committee Member, PASUP (Pennsylvanians Against Single Use Plastics)

Craig Stevens, Founder, Patriots From The Oil & Gas Shales

Michael Bagdes-Canning, Steering Committee Member, Pennsylvania Action on Climate

Jenny Lisak, Co-director, Pennsylvania Alliance for Clean Water and Air

Tonyehn Verkitus, Executive Director, Physicians for Social Responsibility PA

Barbara Jarmoska, President, Project CoffeeHouse

Jill Taylor, Business Manager, Protect Elizabeth Township

Gillian Graber, Executive Director, Protect PT

Maren Cooke, Director, Putting Down Roots

Glenn Olcerst, Esq., General Counsel, Rail Protection Pollution Pittsburgh (RP3)

Michael Schroeder, President, Quittapahilla Watershed Association

D. Snelbaker, Leader, Political Education, Reclaim Philly

Jesse Turri, President, Responsible Decarbonization Alliance

Laurie Barr, Training Coordinator, Save Our Streams America

Sandy Field, Chair, Save Our Susquehanna

Dan Tomkinson, Co-founder, Save The Allegheny

Faith Zerbe, Co-Founder, Schuylkill Pipeline Awareness

Douglas Mason, Chair, Sierra Club Moshannon Group

Kelsey Krepps, Senior Field Organizer, Sierra Club Pennsylvania

MacKenzie MacFarland, Communications Lead, Sunrise Movement Pittsburgh

Heather Hulton Van Tassel, Executive Director, Three Rivers Waterkeeper

Ron Slabe, Director, UBCAMP (Upper Burrell Citizens Against Marcellus Pollution)

Rachel Mark, Chair, Environmental Justice, UUJusticePA

Andie Grey, Lead Wrangler, Watchdogs of Beaver County

Chris DiGiulio, Co-founder, Watchdogs of Southeastern PA (WASEPA)

Martha Evans, Organizer, YoughCARE.

Peggy Berry, Executive Director, Between the Waters, Ohio

Lea Harper, Managing Director, FreshWater Accountability Project, Ohio

Individuals

M Adams, Allegheny Melody Fleck, Dauphin

Nancy Adams, Jefferson Hilary Flint, Beaver

Randi Anderson, Berks Colleen Foley, Huntingdon

Victoria Austin, Allegheny Kellianne Frketic, Allegheny

Laurie Barr, Potter Ron Gavalik, Allegheny

Nancy Bernstein, Allegheny Karen Gdula, Beaver

Janice Blanock, Washington Gwynn Goldring, Allegheny

Larry Borowiec, Westmoreland Karen Granche, Elk

Joan Bouchard, Centre Joe Guthrie, Allegheny

Barbara Brandom, Allegheny Joanne Hall, Westmoreland

Felecia M. Bute, Allegheny Aaron Henderson, Allegheny

Liz Cates, Berks Marci Henzi, Allegheny

Barbara Clifford, Susquehanna Katherine Heron, Allegheny

Jackie Colclaser, Allegheny Elizabeth Hoffman, Lancaster

Julie Delozier, York Richard Horton, Clearfield

Mary Ann Demi, Mifflin Georgina Hricak, Potter

Susan DeSantis, Jefferson Gene Hunter, Northampton

Carol Anne Donohoe, Berks Patsy Ann Johnson, Butler

Lois Drumheller, Allegheny Katie Jones, Allegheny

Cheryl Epp, Adams

Pete Kasich, Allegheny

J Federico, Bucks Ray Kemble, Susquehanna

Kate Fissell, Allegheny G Kochanski, Allegheny

Norman Koerner, Philadelphia Ryan Rauch, Allegheny

Siri Lawson, Warren Kate St. John, Allegheny

Barbara Laxon, McKean Michael Sauers, Columbia

Louise Legun, Berks Pamela Shaffer, Allegheny

Marcia Lehman, Beaver Kai Shaikh, Allegheny

Kevin Long, Perry Barbara Sims, Westmoreland

Nichole Lupari, Allegheny Pam Steckler, Centre

MacKenzie MacFarland, Allegheny John Stolz, Allegheny

Jean MacFarlane, Montgomery Victoria Switzer, Susquehanna

Sherri Mackenstein, Beaver Peri Unligil, M.D., Allegheny

Risa Marmontello, Berks Tammy Walker, Allegheny

Dean Marshall, Clinton Garret Wasserman

Richard McCorkle, Centre Leon Weber, Lancaster

Gary Metzger, Centre Joe Webster, PA House of Representatives

Linda Murphy, Columbiana Joseph Wells, Susquehanna

Katie Muth, PA Senate Linda Willhide, Allegheny

Erin Needham, Allegheny Michael Willhide, Allegheny

The Honorable Nikole Nesby, City of Duquesne

(2018 - 2022)

Gail Neustadt, Allegheny

Diana Noble, Butler

Jody Wilson, Allegheny

Ed Wrenn, M.D., Allegheny

Diane Young, Allegheny

Donald Noble, Butler

Frank Noll, Allegheny

Tara Zrinski, Northampton County Controller Kari Pohl, Beaver

Jessica Wilson, Susquehanna

Lloyd Zeiler, Allegheny

Sheri Deal-Tyne, Johnson County, Iowa

Andrew Puglionesi, Philadelphia

David Pedersen, Capital Regional District (British Columbia, Canada)

cc: Acting Secretary Jessica Shirley, DEP

[i] The following research papers were referenced by Dr. William Burgos in his testimony before the Senate Democratic Policy Committee on April 17, 2024.

Oil and gas produced waters fail to meet beneficial reuse recommendations for use as dust suppressants

J. Farnan, A. Eck, A. Kearney, F. L. Dorman, H. Ismail, E. Chase, X. Liu, N. R. Warner, W. D. Burgos

Science of the Total Environment, 2024, 919, 170807

DOI: 10.1016/j.scitotenv.2024.170807

Toxicity and chemical composition of commercial road palliatives versus oil and gas produced waters

J. Farnan, J. P. Vanden Heuvel, F. L. Dorman, N. R. Warner, W. D. Burgos,

Environmental Pollution, 2023 334, 122184

DOI: 10.1016/j.envpol.2023.122184.

Geochemical and isotope analysis of produced water from the Utica/Point Pleasant Shale, Appalachian Basin

T. L. Tasker, N. R. Warner, W. D. Burgos

Environmental Science: Processes and Impacts, 2020 22 (5), 1234 – 1232

DOI: 10.1039/D0EM00066C

Laboratory Method to Assess Efficacy of Dust Suppressants for Dirt and Gravel Roads

A. M. Stalworth, E. H. Chase, W. D. Burgos, N. R. Warner

Transportation Research Record, 2020 2674 (6), 188-199

DOI: 10.1177/0361198120918246

Environmental and Human Health Impacts of Spreading Oil and Gas Wastewater on Roads

T. L. Tasker, W. D. Burgos, P. Piotrowski, L. Castillo-Meza, T. A. Blewett, K. B. Ganow, A. Stallworth, P. L. M. Delompré, G. G. Goss, L. B. Fowler, J. P. Vanden Heuvel, F. Dorman, and N. R. Warner

Environmental Science & Technology 2018 52 (12), 7081-7091

DOI: 10.1021/acs.est.8b00716