Note from Executive Director Alison L. Steele

In early 2020, I was honored to be selected as the new executive director of the Environmental Health Project. I already knew of EHP’s stellar reputation to defend public health in the face of shale gas development, and I had great respect for this team of hard-working experts who have always believed that communities impacted by industrial activities should not have to bear the burden of protecting their own health. And, this year, the greater EHP family—current and past—was thrilled to mark 10 years of leadership on this important issue with a slate of anniversary activities.

From the beginning, EHP stepped in to fill a significant gap in the understanding of health impacts associated with the shale gas lifecycle—from extraction to end uses, transportation to waste disposal. Our team has worked diligently over the years to assemble relevant information from frontline communities and research institutions alike in order to add scientific weight to lived experience and, conversely, relevant context to study results. It is with this more holistic perspective that we can effectively advocate for more proactive public health protections wherever people are—or may be—at risk.

As we mark the end of our first decade, we know it is only the beginning of our work. New markets for shale gas are now expanding in the forms of petrochemical development and methane-based hydrogen fuel. We know that increased demand for shale gas will mean increased extraction activities, and therefore increased health risks. These risks are widespread, and EHP is committed to providing fact-based resources to impacted communities everywhere until they can truly breathe easy, free of harmful pollution from the shale gas industry.

Thank you for joining us in this fight for public health.

Alison L. Steele
Executive Director
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September 15, 2022 – Celebration Dinner

In September, the EHP team hosted a celebration dinner at the Energy Innovation Center in Pittsburgh to mark our tenth anniversary in style. Because of the pandemic, this event was the first time some in attendance ever met in person.

**Event Schedule**

5:00 Welcome
- Cocktails
- Silent Auction
- Building Tours

6:00 Dinner

8:00 Thank You and Goodnight!

Friends, partners, policymakers, and funders joined us for an evening of networking, sharing memories, and looking forward. EHP’s executive director, Alison Steele, led a toast to the founders of the organization: Raina Rippel (founding director), Dave Brown (toxicology consultant), and Norm Anderson (board member) to thank them for their vision in spearheading a truly critical approach to public health protections.
Attorney John Smith, whose hard work was featured prominently in the Pulitzer Prize-winning book *Amity and Prosperity*, took the stage to wrap up the evening with his experiences working to protect members of the public in the face of industry violators. He described how Pennsylvania’s public institutions failed to defend residents from harmful pollution and lauded EHP for stepping into this void to examine the health impacts and raise the alarm.
Since our official beginnings in 2012, EHP made a lot of progress on a lot of fronts. While all the accomplishments we wanted to highlight would not fit into this report, here are a few of which we are particularly proud.

**2012**
EHP opens its office in McMurray, PA, one year after the organization is first conceptualized during a tour of SWPA shale gas wells with impacted residents.

**2013**
EHP joins its first collaboration to form the organization, Protect Our Children, and hosts its first ‘train-the-trainer’ (air model) for community leaders.

**2015**
EHP attends its first meeting with PA Governor Tom Wolf and hosts a national workshop.

**2017**
EHP opens a public health registry aimed at tracking and eventually analyzing the impacts of shale gas development on people living near wells, impoundments, compressor stations, and pipelines.

**2019**
EHP sponsors a Community Meeting on Childhood Cancers in SWPA.

**2020**
EHP is singled out in the 43rd PA Statewide Grand Jury report for filling a void left by government agencies and launches the first cohort of its new HealthWatch initiative.

**2021**
EHP introduces its AirView app to community members, allowing them to view the data collected by their air monitors.

**2014**
EHP expands outside of PA offering air monitoring services to impacted residents in WV and NY, and team members publish their first article in *Review of Environmental Health*.

**2016**
EHP receives the Jean and Leslie Douglas Pearl Award for dedication to improving lives of others and providing a sustainable planet for the future.

**2018**
EHP conducts its New York Environmental Health Study.

**2022**
EHP hosts a Public Health Summit and releases a white paper, *Pennsylvania’s Shale Gas Boom: How Policy Decisions Failed to Protect Public Health and What We Can Do to Correct It*. 
To kick off our anniversary year, the team hosted a public health summit, Shale Gas and Public Health: Translating Science into Policy. Although a spike in COVID-19 cases resulted in a last-minute transition to virtual format, the day was notably productive.

The agenda featured four subject matter experts in various areas: child health and development, endocrine disrupting chemicals, environmental economics, and environmental justice. The guest speakers presented information from their own work in plenary presentations, co-led breakout sessions with members of EHP’s policy team, and participated in a panel discussion with EHP’s executive director to highlight themes and insights on how to approach meaningful, effective, and just policy decisions related to shale gas development.

**Major themes from the event included the following concepts:**

- Knowledge is power. People need to understand what is happening and how it impacts them. Whoever controls the technology and the flow of information holds the power. Most commonly, this power is held by shale gas companies, not by residents whose health is being impacted.
- When concerning evidence of harm exists, swift action needs to be taken to protect public health. However, neither impacted individuals nor government agencies designed to protect them can respond accordingly if there isn’t transparency on the part of industry. Information about health risks needs to be clear and accessible.
- Community engagement is critical, but there is no one-size-fits-all solution. Communities may be impacted differently by the shale gas industry, whether in relation to job availability or pollutant exposure. Individuals need to understand where the benefits and drawbacks are felt and how they fit into the picture.
- If a more health-protective approach means limiting or removing shale gas development altogether, there has to be an economic driver to replace it. Supporting a just transition to renewable energy has multiple benefits, including those tied to economic and public health factors.

For a deeper dive into the discussions and takeaways, click [here](#).
Where We Work

For 10 years, we have cast a wide net from our headquarters in McMurray, PA, and our regional office in New Haven, CT. Although our focus started in Southwestern Pennsylvania, our reach has grown organically through the years to neighboring states and even to other countries around the globe.

In particular, our work has spread into Ohio and West Virginia, as well as to several ongoing engagements in New York State, where—despite a statewide ban on fracking—residents near compressor stations and gas power plants experience adverse health impacts. We are also turning our eye to the Gulf Coast, where the petrochemical industry has increased health risks for residents in states such as Texas and Louisiana. And we have interpreted data and provided public health information to concerned residents in California, Colorado and New Mexico, as well as to groups working in India, Eastern Europe, Scotland, Ireland, and elsewhere.
What We Do

Data Collection & Analysis

EHP’s flagship community engagement program, the Environmental HealthWatch Model is currently operating in multiple locations in New York and Pennsylvania. This train-the-trainer model comprises resources for grassroots organizations, including an introduction to air monitoring tools (continuous PM2.5 and VOC counts) and monitor site selection, data analysis and interpretation, and using Health Impact Assessments and project results to inform policy decisions. The inclusion of our new AirView platform enables more real-time analysis of air quality conditions than was possible before with hard copy reports.

More specifically in 2022, EHP:

- Built and deployed a community profile tool to quickly provide meaningful demographic, environmental, and health data for any location in the United States.
- Employed the HealthWatch Model to assist three communities in Southwestern Pennsylvania hoping to understand and address emissions from shale gas facilities.
- Applied pollution dispersion modeling to monitoring readings and provide results daily to 11 communities to more accurately determine potential sources of air pollution.
- Developed and enacted a feedback system that allows EHP to consistently and effectively integrate new ideas that improve data collection and analysis programs.
Health & Wellness Education

The public health and health care expertise of our team members over the years has helped to establish EHP as a leader in understanding the health impacts of shale gas development. As one of the first organizations examining the subject, we have regularly interacted with people suffering health impacts from living in proximity to shale gas development. The Forty-Third Statewide Investigating Grand Jury, which examined shale gas operations in Pennsylvania, noted that while state agencies stood on the sidelines and did nothing, EHP had stepped in and acted to defend public health.

Throughout 2022, in addressing the health and wellness of residents, EHP:

- Explored the ramifications of PFAS being used in shale gas activities, including the creation of a handout and the organizing of two webinars featuring experts in the field.
- Updated the health professional toolkit to make it fully accessible online and expanded it to include sections on maternal and child health, endocrine disrupting chemicals, oncology, and respiratory and cardiovascular impacts.
- Refreshed and enlarged our website content, specifically adding more information and resources for industry workers.
- Responded to more than 115 calls from impacted residents looking for resources and information regarding their health.
Policy & Advocacy Initiatives

EHP consolidates our own findings from community interactions with leading health research from around the world, and those resources serve to educate individual residents, advocacy organizations, health care providers, and policymakers. Guided by residents’ questions over the years, our aim is not only to raise awareness about the health impacts associated with shale gas development, but also what can be done to guarantee more comprehensive public health protections in the face of this extractive industry.

In 2022, in addition to the Public Health Summit and the White Paper launch and amplification, EHP:

- Met regularly with the U.S. EPA and with state agencies—such as the PA Department of Health and the PA Department of Environmental Protection—to discuss policy issues.
- Provided public testimony and submitted written comments to numerous rulemaking bodies of government, including the U.S. EPA, U.S Office of Environmental Justice, Centers for Disease Control and Prevention, PA Environmental Quality Board, and the Delaware River Basin Commission.
- Strengthened existing ties and forged new relationships with legislators and other policymakers at all levels of government.
- Was featured in more than 32 articles and radio broadcasts while publishing several letters to the editor and op eds that sought to provide factual information to the public at large.
Over the past 10 years, EHP has amassed air quality data, talked with uncounted residents, examined the research of scientists across the globe, and looked at the problem of public health posed by the shale gas industry from many angles. It became time to process some of that information into a discussion on public policy surrounding this heavy industry to understand why residents’ health was routinely ignored while operators made millions.

That discussion resulted in a 70-page white paper titled “Pennsylvania’s Shale Gas Boom: How Policy Decisions Failed to Protect Public Health and What We Can Do to Correct It.” The paper recounts the events that set the stage for the shale gas boom in Pennsylvania, with a particular focus on the actions (and, in many cases, inactions) of governmental bodies that negatively impacted public health across the Commonwealth. While this account is not exhaustive by any means, it does illustrate trends across three policymaking bodies of state government, specifically the General Assembly, the Office of the Governor, and the Pennsylvania Department of Health (DOH).

The paper has become a bellwether for discussion among policymakers who care (and, in some instances, dare) to make public health a part of the shale gas dialogue. While it focuses primarily on Pennsylvania, the lessons learned are easily translatable to other states faced with extractive industries and petrochemical buildouts.
Over a decade of government decisions during Pennsylvania’s shale gas boom have indicated the following trends:

1. A chasm exists between the reliable public health research that has been conducted and the policies or initiatives that Pennsylvania’s leading public health agency and other government policymakers have promoted. Public health actions are meant to be based on strong evidence, not irrefutable evidence. Yet, policymakers have consistently justified inaction by citing a lack of sufficient knowledge about health impacts.

2. Regulations provide a degree of safety, but there is a common misconception that they are data-based, health protective standards; they are not. The widespread presumption of safety means that the burden of proof that emissions are causing harm often falls to the affected individuals and communities.

3. With respect to shale gas development in Pennsylvania, the promise of economic benefits overshadowed the caution over health impacts. In an attempt to attract more economic benefits, policies were created to be exceptionally accommodating to the industry.

Four key areas represent opportunities for Pennsylvania to take a more health-protective approach to shale gas development:

**Equity**
- Protect people in areas that bear the burden of all aspects of shale gas development
- Create more meaningful approaches to ensuring equity

**Transparency**
- Allow individuals, community groups, and other organizations access to important health information that they can understand and act on
- Compel the industry to make public all chemicals it uses

**Authority**
- Provide funding for government agencies to do their jobs effectively
- Authorize these agencies to take action through a strong mandate to protect public health

**Accountability**
- Strengthen health assessment programs at the state level to be more responsive to residents’ needs
- Follow up on reports of adverse health outcomes and risk near shale gas sites

We call on Pennsylvania’s leaders to introduce policy and support decisions that protect the public’s health in the face of this emission-intensive industry. There is much to be done.

Read the full white paper here: [www.environmentalhealthproject.org/white-paper](http://www.environmentalhealthproject.org/white-paper)
Other White Paper Events

**April 13**
Legislative Breakfast in Harrisburg:
EHP hosted a legislative breakfast at the Pennsylvania State Capitol. There, EHP Executive Director Alison Steele presented the organization’s latest white paper to legislators, staffers, and public health partners.

**June 2**
PA Senate Hearing in Monroeville:
Alison Steele, Executive Director, and Makenzie White, Public Health Manager, provided testimony on the findings of the white paper at a hearing hosted by Pennsylvania State Senators Katie Muth and Jim Brewster.

**July 28**
Statewide Webinar: EHP and HealthFirstPA co-hosted a webinar—attended primarily by Pennsylvania environmental, health policy, and advocacy organizations—summarizing the findings of the white paper.

**October 27**
Petrochemicals Webinar hosted by Beyond Plastics: EHP showcased the historical context of shale gas development in the state and how it has laid the groundwork for other industries to exacerbate air quality issues and raise the risk of health harms to residents.
**Program Outlook**

EHP's mission is to defend public health in the face of shale gas development. We do so in three distinct ways:

**Data Collection & Analysis**

Applying tools to collect, analyze, and present shale gas exposure information that informs frontline communities and empowers them to advocate for ending or mitigating harmful emissions.
Health & Wellness Education

Working alongside frontline communities and health professionals to educate residents on exposure pathways and health impacts, and to promote the adoption of strategies that better protect them from shale gas emissions.
Policy & Advocacy Initiatives

Advocating for a health-protective approach to shale gas development that places health and wellbeing at the center of policy decisions, and ensures safety and health for all, regardless of race or ethnicity, sex, sexual identity, age, disability, or socioeconomic status.
Committed to Protecting Public Health

In the coming years, EHP will continue this work as we seek to empower more residents to make informed decisions about their health and their communities. At the same time, we will forge ahead with advocacy efforts that put the best available information in the hands of policymakers so that they can fulfill their duty to protect residents’ health anywhere shale gas development threatens it. EHP is fully committed to meeting this continuing challenge.