

WVU POLLUTION PREVENTION NEWSLETTER

JUNE 2025

INDUSTRY FOCUS: SAFER CHEMICALS

Welcome to the latest edition of the WVU Pollution Prevention Newsletter! In this issue, we are excited to introduce the dedicated members of the WVU Pollution Prevention Team, committed to environmental stewardship. Explore valuable insights as we share best practices around the use of safer chemicals in at home and in the workplace. Lastly, discover the range of services we offer to support Small and Medium-sized Enterprises and businesses throughout West Virginia. Stay informed, inspired, and engaged with our commitment to environmental excellence and community impact.

FEATURED IN THIS EDITION

WHAT IS POLLUTION PREVENTION 2	UPCOMING EVENTS
OUR SERVICES 2	THE P2 TEAM
POLLUTION PREVENTION FOCUS 3	CONTACT US
LICULICUTING OUR IMPACT	



WHAT IS POLLUTION PREVENTION



Pollution Prevention (P2) is one of the key approaches towards an initiative to improve the energy efficiency and productivity of key industries while prioritizing environmental sustainability. The initiative focuses on reducing or preventing pollution at its source.

The primary objective of our Pollution Prevention program is to provide technical assistance to Small and Medium Enterprises in **key industries** and within disadvantaged communities in West Virginia by assisting with identification, development, and implementation of P2 methods. The recommendations provided to the industries are designed to help the business lower operational costs by reducing expenditures, water and energy usage, waste, and disposal costs, while at the same time maintaining and often improving productivity.

Key Industries:

- 1. Food and Beverage Manufacturing and Processing
- 2. Chemical Manufacturing, Processing, and Formulation
- 3. Automotive Manufacturing and Maintenance
- 4. Aerospace Product and Parts Manufacturing and Maintenance
- 5. Metal Manufacturing and Fabrication

OUR SERVICES

- 1. **Pollution Prevention Assessments:** The project team will make a planned visit to your facility to assess and gather data on energy, water, material, and personnel use. Assessment data along with input from the facility managers will be used to develop P2 recommendations. A detailed report based on the findings will be submitted to the facility shortly after the on-site assessment.
- 2. **Energy Audits/Assessments:** Applying for a USDA-REAP grant and need an assessment? Want to save money? The project team will visit your facility and identify opportunities to improve energy efficiency. A detailed report will be provided to the business, including estimates of implementation costs, energy use savings, energy cost savings, and simple payback period for each identified opportunity.
- 3. **Training Workshops:** Training workshops will be conducted to help businesses learn P2 Best Practices, tools, techniques, and resources available, and how to modify their process or site to improve energy efficiency, productivity, and environmental sustainability.
- 4. **Technical Assistance:** The project team can provide on-site or off-site technical assistance on a variety of industrial concerns related to topics including pollution prevention, energy efficiency, sustainability, environmental impact, and process improvement. Contact us for assistance!
- 5. USDA-REAP Application Assistance: Applying for grant funding can be a challenge, especially for the small businesses that do not have an expert at grant-writing on the payroll. Our project team can help you navigate the application process and assist with completing the application for USDA-REAP funding.

POLLUTION PREVENTION FOCUS

SAFER CHEMICALS

Moving toward a more sustainable future at home and in the workplace doesn't have to be complicated or expensive. Finding safer alternatives for harmful or toxic chemicals or products that are used is an easy first step, with product certifications and other available resources. Let's look at a few of these:

• **E.P.A. Safer Choice Certification**: This program certifies products of a variety of categories (cleaners, degreasers, deicers, laundry products and other detergents, etc.) that use ingredients safer for human health and the environment. Products must meet strict performance and ingredient safety standards to bear the Safer Choice label, which is backed by rigorous scientific review. Check out the following link to search for Safer Choice certified products: https://www.epa.gov/saferchoice/products



• E.P.A. Design for the Environment: Like Safer Choice, Design for the Environment focuses on identifying safer chemical ingredients in products like disinfectants and industrial cleaners. Design for the Environment relies on third-party certification bodies and accredited labs to ensure compliance and credibility. Click the link ahead to search for Design for the Environment certified products: https://www.epa.gov/pesticide-labels/dfe-certified-disinfectants



• **Green Seal**: Green Seal certifies a wide range of products (cleaning and laundry products, paper and plastic products, personal care products, building restoration products, etc.) based on health, performance, and sustainability criteria. Start your search for Green Seal certified products here:

https://certified.greenseal.org/directory



HIGHLIGHTING OUR IMPACT

The WVU Pollution Prevention (P2) team takes great pride in the impact we have within the borders of West Virginia since January of 2023. From energy savings to CO₂ reduction, the recommendations we develop for these businesses not only help these businesses improve their sustainability, but also their bottom line!

Look at the impact of the opportunities we have found! →

28 Energy Efficiency/P2 Assessments

59 Recommendations

With Annual Savings of...

\$518,801 in Energy Costs

3,677 MWh of Electricity

12,521 MMBtu of Natural Gas

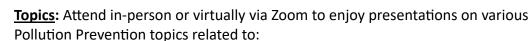
3,160 Metric Ton CO₂ Equivalent

UPCOMING EVENTS

WVU Pollution Prevention Conference

August 2025 @ TBA

Location: TBA



- Beat Practice Approaches to Pollution Prevention
- Novel Approaches to Energy Efficiency & Sustainability
- Efficiency of Industrial Systems
- Case Studies
- And More...

Registration will open soon! Keep an eye out!

THE P2 TEAM

Faculty & Staff



Dr. Ashish Nimbarte PhD, PE, CEM Principal Investigator



Dr. Christopher Moore PhD, CEM Project Manager, Co-PI



Dr. Imtiaz Ahmed PhD



Dr. Avishek Choudhury PhD

Students



Juan Marino



Sagar Timilsina



Akshay Patel



Tilak Bhusal



Aastik Sharma



Shihab Ullah



Aman Dhakal



Ummul Farah



Sagar Panthi



Sterly Pauliscat

CONTACT US

ASHISH NIMBARTE, PHD, PE, CEM

Principal Investigator, Department Chair Industrial and Management Systems Engineering, WVU Email Address: ashish.nimbarte@mail.wvu.edu

CHRISTOPHER MOORE, PHD, CEM

Co-PI, Project Manager, Research Associate
Industrial and Management Systems Engineering, WVU
Email Address: chris.moore@mail.wvu.edu



P2 Website



Inquire about Services



Questions or Comments?