**2019 Shale Network Workshop TENTATIVE Agenda**

***Monitoring Communities and Their Environment***

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| **Thursday, May 16, 2019** | | |
| **9:30 a.m. – 4:30 p.m.** | Field Trip to Eureka Resources, LLC and Wayne Township Landfill *(Meet in The Nittany Lion Inn main lobby at****9:30 a.m.****to depart at 9:45 a.m.)* *David Yoxtheimer (Penn State University)* | |
| **\*\*\*All Sessions are in Boardrooms 1 & 2 at The Nittany Lion Inn unless noted otherwise\*\*\*** | | |
| **5:30 – 6:30 p.m.** *Outside Boardrooms 1 & 2* | Registration | |
| **5:30 – 7:30 p.m.** *Boardroom 1* | Ice Breaker *Poster presenters: put posters up for Ice Breaker and poster presentation during lunch Friday.* | |
| **7:30 – 9:00 p.m.** *Boardroom 2* | Group Discussion *(facilitated by the PA Coal – Gas Committee)*: Issues Related to the Interface of Coal Mining and Natural Gas Development *Moderators: Susan L. Brantley (Penn State University), Seth Pelepko (PA DEP)*  *Greg Rumbaugh (MSHA Technical Services), John Love (Dominion Energy Transmission), Carl Carlson (Range Resources), Casey Saunders (Consol), Heather Dougherty, Daniel Su, Steven Schatzel (NIOSH)* | |
| **Friday, May 17, 2019 *\*\*\*All Sessions are in Boardrooms 1 & 2 at The Nittany Lion Inn unless noted otherwise\*\*\**** | | |
| **7:15 a.m.** *Outside Boardrooms 1 & 2* | Registration | |
| **7:30 a.m.** *Breakfast located outside Boardrooms* | Continental Breakfast and Poster Setup *Speakers, please upload talks before session starts* *Poster presenters: put posters up before 8:00 a.m. and remove by 5:00 p.m.* | |
| **8:00 a.m.** | Shale Network: Promoting Better Dialogue about Environmental Issues around Shale Gas Development for Communities *Susan L. Brantley (Penn State University), Shale Network Team* | |
| **8:20 a.m.** | Collaboration in Shale Gas Development: The Case of the Center for Responsible Shale Development *Jared Cohon (Carnegie Melon University; Chair of the Center for Responsible Shale Development)* | |
| **8:40 a.m.** | The Trajectory of Shale Gas Development, Natural Gas Liquids, and the Plastics Industry in the Northeastern USA *Warren Wilczewski (U.S. Energy Information Administration)* | |
| **9:00 a.m.** | Petrochemical Facility Overview and Update, Monaca PA: The "Cracker Plant” *Jim Sewell (Environmental Manager, Shell Chemical Company)* | |
| **9:20 a.m.** | Involving Communities in Decision Making: The PA “Cracker Plant” *Jennifer Baka (Penn State University)* | |
| **9:40 a.m.** | Mapping and Reservoir Characterization of Geologic Intervals for Natural Gas Liquids Storage Applications *Kristin Carter (PA Geological Survey; Douglas G. Patchen (WV University Research Corporation); Jessica P. Moore (West Virginia Geological and Economic Survey); Mohammad Fakhari (Ohio Division of Geologic Survey); Gary Daft, Philip Dinterman (West Virginia Geological and Economic Survey); Michael P. Solis (Ohio Division of Geologic Survey); Robin V. Anthony, Katherine W. Schmid, Brian J. Dunst, Antonette Markowski, Stephen Shank (PA Geological Survey)* | |
| **10:00 a.m.** | Where Does Frac Water Come From?  An Overview of Regulatory and Monitoring Experiences from the Susquehanna River Basin Commission with Focus on Natural Gas Development *James Shallenberger (Susquehanna River Basin Commission)* | |
| **10:20 a.m.** | Coffee Break *Speakers, please upload talks for next session* | |
| **10:30 a.m.** | **Panel Discussion**: Can Government, Industry, and Citizenry Work Together? How It Works and How It Could Work *Afton Sterling (Southwestern Energy), Jessica Shirley (PA Department of Environmental Protection), Jennifer Baka (Penn State University), Matthew Mehalik (Breathe Project)* | |
| **11:30 p.m.** | Beneficial Re-Use of Shale Gas Brines? *Nathaniel Warner, Thomas J. Geeza (Penn State University); David P. Gillikin (Union College); Bonnie McDevitt, Katherine Van Sice, Audrey Stallworth, Frank Dorman, William Burgos, Patrick Drohan, Katherine E. Marak, Miriam Arak Freedman (Penn State University)* | |
| **11:50 a.m. – 1:00 p.m.** | Reception-Style Lunch and Poster Session *Afternoon speakers, please upload talks* | |
| *Coffee service located outside Boardrooms* | **Boardroom 1** *From Imacts to Exposure* | **Boardroom 2** *Connecting Science and Communities* |
| **1:00 p.m.** | A Semi-Quantitative Geospatial Pollutant-Specific Exposure Metric for Use in Health Studies Associated with Unconventional Natural Gas Development in Pennsylvania ***James Fabisiak****(University of Pittsburgh)* | Petrochemical Development and Plastics: Community Impacts and Economics ***Matthew Mehalik****(Breathe Project)* |
| **1:20 p.m.** | Investigating Hydrocarbon Sources in Upland Groundwater, Marcellus Shale Region, Northeastern Pennsylvania and Southern New York ***Bruce Lindsey,****Peter B. McMahon, Matthew Conlon (U.S. Geological Survey)* | Connecting Community Organizations, Schools, and Volunteers through Water Quality Monitoring ***Holly Travis,****Katie Farnsworth (Indiana University of PA); Matt Genchur (Stormwater Education Partnership)* |
| **1:40 p.m.** | What to do with shale gas brines if recycling for hydraulic fracturing is not feasible? ***Radisav D. Vidic,****Vikas Khanna (University of Pittsburgh)* | Working with citizen scientists and homeowners to understand hydrocarbon-related contamination of water resources near oil and gas development ***Josh Woda,****Tao Wen (Penn State University); Jacob Lemon (Trout Unlimited); Frederick B. Zelt (Independent Geoscientist); Chuck Keeports (National Forest Service); Susan L. Brantley, (Penn State University)* |
| **2:00 p.m.** | Break for coffee, rooms opened back up for Plenary | |
| **2:15 p.m.** | Methane Emissions from New and Legacy Oil and Gas Development *Mary Kang (McGill University)* | |
| **2:35 p.m.** | Methane Emissions from Unconventional Natural Gas Production in the Marcellus Shale *Zachary Barkley, Ken Davis (Penn State University); Thomas Lauvaux (Universite Paris-Saclay); Aijun Deng (Utopus Insights, Inc); Natasha Miles, Scott Richardson (Penn State University); Colm Sweeney, Alan Fried (University of Colorado)* | |
| **2:55 p.m.** | A Status Report on the Management of Legacy Well Liability by PA DEP *Seth Pelepko, Harry Wise, Serena Oldhouser (PA DEP)* | |
| **3:15 p.m.** | A Legal Perspective on Abandoned Wells in Pennsylvania *Katherine Knickelbein and Rick Watling (Office of Chief Counsel for the PA DEP)* | |
| **3:35 p.m.** | Wrap Up Plenary Discussion: What Do We Need to Do Next? *Susan L. Brantley, Radisav Vidic, Jennifer Baka* | |
| **4:00 p.m.** | Assessment and Adjournment *Poster presenters*, *please remove your posters promptly.* | |