

## USEPA/PADEP UPDATES AND NORM/TENORM RADIATION SAFETY TRAINING MARCH 1, 2022

Naturally occurring radioactive material (NORM) is present in soils, rocks and other undisturbed materials. During drilling, well development, and production activities, the natural rock formation materials are brought to the surface, resulting in NORM being classified as technologically enhanced, or TENORM, under Pennsylvania DEP regulations (§287.1). Since 2016 federal and state regulations have been updated and new technologies, best practices and protocols have been developed by industry experts.

Join oil and gas industry professionals to gather information on the pertinent topics below and capitalize on the opportunity to pose questions directly to the U.S. EPA, PA DEP and industry experts:

- Radiation basics, and how TENORM is generated from oil and gas development activities
- New industry sampling and analysis protocols, and framework for handling, transporting, landfill allocating, monitoring and disposal requirements
- Federal updates related to radiation safety and the industry
- Updates to Pennsylvania's TENORM study and a review of the New Radiation Technical Guidance Document
- A review of the Radiation Action Plan required for the oil and gas industry to develop when processing drill cuttings onsite

### PROGRAM

|                     |  |
|---------------------|--|
| 8:30 am – 9:00 am   | Registration and Continental Breakfast                         |
| 9:00 am – 10:00 am  | NORM/TENORM 101 and Industry Best Practices                    |
| 10:00 am – 11:00 am | USEPA Overview and Regulatory Status                           |
| 11:00 am – 11:15 am | Break  |
| 11:15 am – 12:15 pm | TENORM Study and Updated Radiation Technical Guidance Document |
| 12:15 pm – 1:15 pm  | Lunch  |
| 1:15 pm – 1:45 pm   | Landfill Allocation, Monitoring and Disposal                   |
| 1:45 pm – 2:00 pm   | Break  |
| 2:00 pm – 2:30 pm   | Chapter 78a Regulations: Radiation Action Plan                 |
| 2:30 pm – 3:15 pm   | Panel Discussion and Q&A                                       |

For a complete list of speakers, see reverse page or visit <https://22normtenormtraining.eventbrite.com>

**5.5 PROFESSIONAL DEVELOPMENT HOURS AVAILABLE**

### REGISTER

|                         |       |
|-------------------------|-------|
| MSC Member:             | \$225 |
| MSC Member Group Rate*: | \$200 |
| Non-Member:             | \$300 |
| Non-Member Group Rate*: | \$275 |

\* Receive group rate when registering four or more attendees from one company.

Admission fees are non-refundable. Substitutions are accepted.

<https://22normtenormtraining.eventbrite.com>

### LOCATION

Hilton Garden Inn Pittsburgh/  
Southpointe  
1000 Corporate Drive  
Canonsburg, PA 15317

A block of rooms has been reserved at the Hilton Garden Inn Pittsburgh/Southpointe under the Marcellus Shale Coalition on a first-come, first-served basis. Please call (724) 743-5000 and reference the Marcellus Shale Coalition to make a reservation.



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## DETAILS

|                     |  |
|---------------------|--|
| 8:30 am – 9:00 am   | Registration and Continental Breakfast   |
| 9:00 am – 10:00 am  | <b>Welcome and Introductions</b><br>Robert Petrilli, Vice President, Marcellus Shale Coalition<br>Loren Anderson, Director, Technical Affairs and Membership, Marcellus Shale Coalition<br><br><b>NORM/TENORM 101 and Industry Best Practices</b><br>Alex Lopez, Certified Health Physicist, NORM Practice Lead, Perma-Fix Environmental Services, Inc.  |
| 10:00 am – 11:00 am | <b>USEPA Overview and Regulatory Status</b><br>Philip Egidi, Environmental Scientist, Radiation Protection Division, United States Environmental Protection Agency   |
| 11:00 am – 11:15 am | Break  |
| 11:15 am – 12:15 pm | <b>TENORM Study and Updated Radiation Technical Guidance Document</b><br>David J. Allard, CHP, Director, Bureau of Radiation Protection, Pennsylvania Department of Environmental Protection   |
| 12:15 pm – 1:15 pm  | Lunch  |
| 1:15 pm – 1:45 pm   | <b>Landfill Allocation, Monitoring and Disposal</b><br>Michael T. Rind, Director of Operations, Waste Management Energy Services Oil and Gas Solutions   |
| 1:45 pm – 2:00 pm   | Break  |
| 2:00 pm – 2:30 pm   | <b>Chapter 78a Regulations: Radiation Action Plan</b><br>Kurt Klappkowski, Director, Bureau of Oil and Gas Planning and Program Management, Office of Oil and Gas Management, Pennsylvania Department of Environmental Protection  |
| 2:30 pm – 3:15 pm   | <b>Panel Discussion and Q&amp;A</b><br>Luke Marsh, Lead EHS Specialist, Coterra Energy Inc. (moderator)<br>David J. Allard, CHP, Director, Bureau of Radiation Protection, Pennsylvania Department of Environmental Protection<br>Jon Dufalla, Environmental Compliance Manager, Range Resources<br>Alex Lopez, CHP, Principal Health Physicist, Perma-Fix Environmental Services Inc.<br>Michael T. Rind, Director of Operations, Waste Management Energy Services Oil and Gas Solutions<br>Benjamin L. Seiber, MPA, Radiation Health Physicist 2, Department of Environmental Protection |
| 3:15 pm             | <b>Closing Remarks</b><br>Robert Petrilli, Vice President, Marcellus Shale Coalition   |