Track Summary – Air Permitting

Training Classes – February 19 – 21, 2020

Intermediate Air Permitting
Air Permitting for Experts
Air Permitting for Compressor Stations
Essentials of Air Permitting & Compliance for Chemical Plants
Practical Dispersion Modeling

Refinery Fenceline Monitoring Root Cause Analysis: How To Conduct and Then Develop An Effective Corrective Action Plan

Breakout Presentations Thursday February 20, 2020

A False Sense of Security – Shifts in EPA’s Implementation of PSD Capable of Accommodating Determination and The Demand Growth Exclusion
“Once in, Not Always in”
Calculating Project Increases
Recent TCEQ Permitting and Modeling Changes – Lessons Learned and Future Strategies
Air Quality Tools for the 21st Century
Photochemical Modeling for Ozone Inter–Precursor Trading
New Building Downwash Options in AERMOD
EPA NSR Reforms: How to Capitalize Now and Later

Oil and Gas Breakout Presentations – Friday February 21, 2020

Upstream O&G Air Permitting 101
Project Aggregation:’ PSD Applicability in the Fourth Dimension
Optimizing NG Compressor Station Permitting
Air Permitting – Breakout Presentations

Thursday February 20, 2020

10:30 AM – 11:00 AM
  o A False Sense of Security – Shifts in EPA’s Implementation of PSD Capable of Accommodating Determination and The Demand Growth Exclusion – Everard Ashworth – Ashworth Leininger Group
    o The 2002 NSR Reforms provided additional flexibility to exclude emissions from existing operations; however, EPA provided little guidance as to how this emissions calculus is to be performed. Come hear the insight gained by the presenter during recent experience in performing a complex and detailed PSD applicability evaluation in the context of utilizing the Demand Growth Exclusion.

11:00 AM – 11:30 AM
  o “Once in, Not Always in” – Nicholas Petrich – Barr Engineering
    o The EPA issued new guidance that repealed the “once in, always in” policy, allowing reclassification of a major source of hazardous air pollutants (HAPs) to an area source. Therefore, a major source that obtains federally enforceable limits on its HAP potential-to-emit below the major source thresholds can become an area source. This presentation will provide guidance on how and why a facility can become an area source, including the benefits and challenges. A regulatory overview will be provided, including the common major source standards that would no longer apply, the potentially applicable area source requirements, and why some requirements won’t go away even after reclassification. Also, a technical review will include the critical factors for refining site-specific HAP emissions.

11:30 AM – 12:00 PM
  o Calculating Project Increases – Johnny Vermillion – Spirit Environmental
    o Abstract Coming Soon.

12:00 PM – 1:00 PM Lunch Break in the Exhibit Hall
Air Permitting – Breakout Presentations

Thursday February 20, 2020

1:00 PM – 1:30 PM
- **Recent TCEQ Permitting and Modeling Changes – Lessons Learned and Future Strategies**
  - Frank Dougherty – ALL4
  - The Texas Commission on Environmental Quality (TCEQ) has enacted impactful changes to the way it requires permitting and modeling projects to be completed and submitted. These changes, most of which are required by June 2019, include the introduction of several new air permitting and modeling spreadsheets designed to streamline the air permitting process. During this presentation, we will summarize, review lessons learned, and provide examples on how to use these new workbooks, which are intended to significantly reduce the amount of TCEQ spends reviewing applications.

1:30 PM – 2:00 PM
- **Air Quality Tools for the 21st Century**
  - Robert Opiela – NaviKnow
  - The air quality permitting process is a data-driven process. Federal permit applicability (do you trigger PSD?), netting calculations, rule applicability, emission calculations, etc. require input data. A permit application cannot be prepared or reviewed without access to the necessary information required by the rules and regulations. Finding, retrieving, and manipulating the dozens of available data sets adds days, even weeks to the processes.

2:00 PM – 2:30 PM
- **Photochemical Modeling for Ozone Inter–Precursor Trading**
  - Qi Zhang – GHD
  - In a typical ozone Nonattainment New Source Review (NNSR) project, one requirement is to offset the project emissions of ozone precursors (nitrogen oxides [NOx] or volatile organic compounds [VOCs]) with emissions reduction credits (ERCs) obtained from a source within the nonattainment area. As allowed by many state agencies, sometimes permit applicants choose to offset one ozone precursor with another precursor for various reasons, primary due to the ERCs for one precursor being unavailable or too expensive. To support this inter–precursor trading, state agencies and the United States Environmental Protection Agency (US EPA) require a photochemical grid modeling analysis to demonstrate the inter–precursor trading will not adversely affect the area’s attainment demonstration.
Air Permitting – Breakout Presentations

• 2:30 PM – 3:00 PM
  o New Building Downwash Options in AERMOD – Sergio Guerra – GHD Services
  o The presentation will cover the new building downwash options included in the August 2019 version of AERMOD. The current Plume Rise Model Enhancements (PRIME) formulation in AERMOD has a number of theoretical flaws that have been documented on the treatment of downwash in AERMOD. A renewed interest and scrutiny of these downwash shortcomings fueled a parallel, yet complementary, effort led by industry and EPA. These efforts led to the new experimental Alpha options available in the new version of AERMOD. These Alpha options were developed by the PRIME2 committee and EPA’s Office of Research and Development. The current presentation will cover the new Alpha options developed along with the implications of this new process to add new science to the regulatory model.

• 3:00 PM – 3:30 PM Break to Enjoy the Exhibit Hall Refreshments

• 3:30 PM – 4:00 PM
  o EPA NSR Reforms: How to Capitalize Now and Later – Kristin Gordon – ALL4
  o This presentation will provide an overview of the most challenging issues posed by the New Source Review (NSR) construction permitting program for expansion projects. The key aspects of NSR will be summarized along with how they fit in with real world projects (and what makes them most challenging for real world projects). The discussion will then lead to the common sense regulatory and policy reforms that are needed to address these challenges. Finally, we will discuss the current status and anticipated implementation of upcoming reforms to the NSR program by Congress and U.S. EPA. This presentation could serve as an overview for those following the regulatory reform process and also as a primer to those that are attending the in depth NSR workshops.

• 4:00 PM – 5:00 PM Panel
Air Permitting – Training Classes

Training Classes – Wednesday February 19, 2020

- **Room 412 8:00 AM – 12:00 PM**
  - Liquids Fuels Terminals – Basics of Environmental Permitting and Compliance – Al Reich, Corey Mead, and Tony Shoberg, Barr Engineering
  - This 4–hour course will provide an overview of environmental compliance and permitting requirements for liquid fuels terminals. The goal of this course is to provide environmental professionals, terminal operators or managers, and other interested parties a basic understanding of the environmental compliance programs applicable to fuels terminals.

- **Room 412 1:00 PM – 5:00 PM**

- **Room 410 1:00 PM – 5:00 PM**
  - Practical Dispersion Modeling – Robert Opiela - NaviKnow
  - In this 4-hour, to-the-point workshop, you will be presented with all the information needed to complete nearly every dispersion modeling analysis you will ever perform in your career. We will list which model programs are needed, what data is required for those programs, where to find those data, and how to manipulate the data to construct your input files to get the model running so you can get your job done. We will also cover tips and techniques to help you streamline your workflow.

- **Room 415 1:00 PM – 5:00 PM**
  - Oil & Gas Air Regulations – What You Need to Focus on Now – Jay Christopher & Calvin Niss, Trihydro Corporation
  - This workshop will provide some clarity and direction about what the oil and gas sector should be doing now. While not providing formal legal guidance, the workshop will address the compliance challenges confronting upstream and midstream oil and gas companies in meeting EPA and BLM regulations, as well as some evolving issues at the State level. We will particularly focus on EPA’s New Source Performance Standard (NSPS) OOOOa requirements around the implementation of a volatile organic compound (VOC) and methane leak detection and repair (LDAR) monitoring and reporting program as well as associated with the final Bureau of Land Management (BLM) venting and flaring rule (e.g., Waste Prevention) requirements. We will also provide some insights and approaches to recordkeeping and reporting approaches under these programs.
Air Permitting – Breakout Presentations

Training Classes – Friday February 21, 2020

- **Room 412 8:00 AM – 12:00 PM**
  - Air Permitting for Experts – Johnny Vermillion, Leah Pulin, Aaron Hebert, Robert Osborn & Scott Hyden, Spirit Environmental
  - This course is designed to provide a forum for those who already have considerable air permitting experience an environment to interact with each other and the trainers to share experiences regarding some of the nuances of air permitting policy, regulations, and guidance. The examples provided in the class will provide a framework to explore and discuss some of the “gray areas” that can make air permitting challenging. The primary focus of the training will be federal new source review (NSR).

- **Room 410 8:00 AM – 12:00 PM**
  - In order to comply with the Petroleum Refinery NESHAPS Fenceline monitoring provisions (40 CFR 63.658), many refineries have implemented ambient air monitoring networks around their site fencelines. If the annual monitored benzene concentration exceeds the action level specified in the rule, then the rule requires the site conduct a root cause analysis and develop and implement a corrective action plan to bring the benzene concentrations below the action level. The rule explains WHAT to do, but HOW do you conduct the analysis, develop a plan, and test the plan to make sure it is going to satisfy the requirements of the rule? In this two-hour training course, we will take you, step-by-step, through a proven systematic and reproducible process of identifying which emission sources are causing unacceptable concentrations and whether the corrective actions proposed will be effective.

- **Room 412 1:00 PM – 5:00 PM**
  - EPCRA/TRI Training – Bob LaRosa, Aarcher Inc
  - The course covers current EPCRA applicability and reporting requirements, including multiple chemical lists, applicability thresholds, required reporting, deadlines, available reporting tools, and mandatory documentation. Practical applications of the requirements are provided for various industry sectors and for Federal agencies. Illustrative scenarios are presented on industrial and Federal agency reporting under EPCRA Section 313 to provide a clear understanding of where to focus attention and how to apply the complex guidance of the Toxic Release Inventory (TRI) requirements to actual facility operations.

- **Room 415 1:00 PM – 5:00 PM**
  - Permitting for Compressor Stations – Joel LeBlanc – Ashworth Leininger Group