# Contaminants & Impurities in Ethylene Plants Subcommittee – November 30<sup>th</sup>, 2023 Meeting Minutes

#### **Team Members**

Robert Alvers	X	Scott Hailey	X	Ross Perchuk	X
Andre Bernard	X	Omar Hamid	X	Matt Pretz	
Joice G. Boll	X	Dwight Hines		Debby Rossana	X
Jessica Burgin	X	David Hood		Yong Wang	
Mark Davis	X	Joe Lally	X	Mark Whitney	X
Sherri Elder	X	Vinay Naik	X	Lisheng Xu	
Alex Fritz	X	Jennifer Nill			

### 1. Anti-trust statement

"No activity of the Committee shall involve the exchange, collection or dissemination among competitors of information or be used for the purpose of bringing about or attempting to bring about any understanding or agreement written or oral, formal or informal, express or implied, among competitors, with regard to costs, prices, or pricing methods, terms or conditions of sale, distribution, production quotas or other limitations on either the timing or volume of production or sales, or allocation of territories or customers."

# 2. Updates from Main EPC Committee

- The main EPC committee is expected to meet the week of December 11th.
- The session schedule has been distributed.

## 3. Key Dates

- Call for abstract: Closed
- Paper acceptance/rejection: Monday, December 11<sup>th</sup>, 2023
- Draft Program Available for Review: Monday, January 8<sup>th</sup>, 2024
- Comments from Chairs Due: Friday January 12<sup>th</sup>, 2024
- All info in Confex for invited Sessions & Keynotes: Friday January 12<sup>th</sup>, 2024
- Final Program Posted: Wednesday, January 15<sup>th</sup>, 2024
- Paper submission Close/ Presentation -> 1<sup>st</sup> week of March
- Virtual Dry Run -> 2 to 3 weeks prior to the conference
- The Conference will be between March 24th to 28th 2024, in New Orleans
- T4060 Contaminants and Impurities in Ethylene Plants: Tuesday March 26, 2024, 8:00 AM 11:00 AM. In parallel to Rotating Equipment.

• T4095 Contaminants Tutorial: Tuesday March 26, 2024, 13:00 to 17:30. In parallel to Technology & Fundamentals.

## 4. Tutorial on Contaminants Removal Update (Debby)

- Due to time constraint, the topic of chemistry has been dropped. It is planned to have Adsorption first followed by Filtration.
- Debby communicated the agenda with the speakers.

## 5. Review & Rank Submitted abstracts.

- Review Spreadsheet
- Proposed Agenda for 2024
  - 1. Detailed Characterization of Plastic Pyrolysis Oils and Their Contaminants By FT-ICR MS and GCxGC
  - 2. Impact of α-Olefins and Diolefins from Polyolefin Pyrolysis Oil to the Catalytic Cracking Mechanistic Pathways
  - 3. Advances in Dechlorination of Plastic Pyrolysis Oil

#### Break

- 4. Ammonia: Sources, Impacts, Monitoring, and Solutions
- 5. Amine Additives as a Source of Ammonia in Ethylene Production and Its Control: A Case Study.
- 6. Tar in Quench Systems: Causes, Consequences, & Care Solutions
- Given the quality of the rejected abstracts, the authors will be offered a slot in the 2025 session. Assuming positive response from the authors, the 1<sup>st</sup> half would focus on contaminants from renewable feedstock and the 2<sup>nd</sup> half dedicated to conventional contaminants.
  - 1. Overview of Alternative Ethylene Production Feedstock and Their Contaminants Part I
  - 2. Renewable Feedstocks: Challenges & Solutions
  - 3. Contaminants Present in Ethanol and the Impact on Green Ethylene Production

#### Break

- 4. Management of Silicon Contamination on Pygas Hydrogenation Catalyst for a Steam Cracker
- 5. Sulfur As a Contaminant in Ethylene Feedstocks

6. Reducing Olefin Contaminant Removal Costs Via a Hybrid Adsorbent Approach, AZ-500

Andre to communicate with all the authors via email.

### 6. Technical Discussion

• Nothing to report.

### 7. Other Business

- EEPC & EPC have join forces, which will allow sharing Workshop products such as NOx & Cold Embrittlement between the member from both organization.
- Previous discussion with EEPC had been conducted a few years ago relative to sharing the contaminant database. There was some constraint back then that might no longer exist. Mark will follow up if there is still a desire to develop a joint database.

# 8. Schedule Next Meeting

Next meeting December 21st, 2023