

## EPC Operations Committee Meeting Minutes

Time: 10:00 - 2:00 pm

Date: 3/5/19

Location: Dow, Enclave Parkway

Attendance: Bryan Tibodeaux, Carl Harry, Claire Cagnolatti, Daryl Bitting, David Dutschmann, Joseph Bell, Muhammad Imran, Richard Rolke, Patty Summers

Agenda:

- Anti-Trust statement
- Review conference presentations (3 papers, 2 tutorials)
- Discuss session ideas for 2020

### Anti-Trust Statement:

"No activity of the Committee shall involve the exchange, collection or dissemination of information among competitors 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."

Meeting Minutes:

### Presentation Review

**Clariant/Dow: Mitigating Risk: A Commercializing New Catalyst Technology in a World Scale Ethylene Plant.** Remove confidential, make name and info larger. Add overview agenda. Pie chart bigger. Two grays close in color. Text above photo in slide 8 not visible. Text in blue boxes hard to read – perhaps darker blue would help. Is a key needed for the graph on slide 9? Slide 13 text in red box hard to read. Try white. Hard to read text in many slides. Add slide on overview of testing process to clarify research to commercial (path to commercialization). Slide 18 needs added clarity on how the size correlates to the chart. Do the colors on the graph align with size of the catalyst batch? Would an index help? Slide 22 – perhaps use a different word for transients. Try larger font on the blue banner takeaways.

**Linde: Root Cause Analysis of a Premature Flooded Debutanizer Using Gamma Scanning, Engineering and Installation of a Bypass Line by Hot Tapping.** Slide 6 & 7, do we need the red legend to show? Slide 20 can the # symbol be removed for ease of viewing? Slide 21 down should be done. Slide 23 – could be increased, not by increased.

**Nova: Liquid Heater Upgrade for Improved Operation with Ethane Feed.** Check with Technip on the use of the name of the furnace or remove specific reference. Fix typo "form" should be from slide 6. Venturi not venturis plural slide 7. Can data in slide 8 be put into a graph? Darker bar on slide 9 may make it easier to read. Larger text for key on slide 19 (?). Graphs have inconsistent colors for runs on slide 21. In conclusion speak about the other furnaces – intent to apply learnings?

**Technip: Decoke Tutorial.** Slide 9 the blue lines are hard to see. Slide 8 SP = set point. Spell out S & Ts TLEs and other abbreviations. Add something short on Chrome oxide and its importance at the beginning. Add in basic images or drawings to support message and make slides more interesting. Last slide need "to"; goal is "to" make . . . Is there something that should be added about the temperature cycling and its impact?

**UOP: Tutorial Adsorbent troubleshooting.** troubleshooting needs to be one word or two. Please be consistent. (one word is more common in our industry.) Slide 3 chart of the outlet data is very small. Link it better to the analyzer point perhaps. Perhaps a call out will help the audience understand the relevance of the chart. Spell out RCA first time used. Slide 7 remove “a” and replace with “and” - #2. Slide 9 Typo correct phase instead of fase. Remove “from” in first bullet last box. Remove Confidential from all slides. Add CDG in parentheses in the title or remove CGD from bullet below. Is HE heat exchanger? 13. Top graph lacks legend – explain it in a text box, or break into more slides? Slide 15 – hypothesis spelled wrong, PE spell out - use Greek delta for DP? Rotate images on slide 17. Larger fonts on flow chart slide 18. Middle box has spelling error in observed. Is slide 19 completed? Pipeline – one word or two. Was liquid entrainment the issue in this example? Mechanisms spelled wrong in title of column. Remove Ucarsol, solvent is probably enough. Under Causes feedstock should be one word. What is the purpose of this slide? Why reference to new gas wells? The two slides on ARM Guard are a bit too salesy. Make this a subtle part of the conclusion while stressing the importance of monitoring. Can he add more about support structure failures? Thermal growth worth mentioning? Was the discontinuous ring an unanticipated consequence?

Presentations looking good at this point. Presenters should practice delivery so papers can be presented in the 20 – 25min time slot, or the tutorials in ~ 45Min.

No need for the alternate paper/presentation from CP Chem.

#### Session Ideas for 2020?

Good discussion of potential focus areas:

Gamma scanning is interesting technology which provides great diagnostics into process vessels without opening them. How do we get gamma scanning into our session? Or was it covered in another session? Is there a case study of a real situation specific to an ethylene plant? Perhaps we could do a joint session with Distillation? Maybe with a focus on fractionation for ethylene. Kister’s session is every other year, so 2020 he doesn’t have one. Is this an opportunity for a joint session with his support? Distillation troubleshooting session which includes gamma testing as an approach to solve problems is a suggested topic. There was a paper on where to scan in 2013 Chemical Engineering Processes by Kister. Good papers on thermal imaging. In a session, we could group together the various troubleshooting technologies. (ex. IR camera.) Sasol also presented a good paper in the past.

Teach someone how to maximize tower capacity – “process insights that allowed for problem solving” using technology?

#### Follow-up Actions:

- Presenters to modify presentations per notes above and practice delivery for timing.
- Email final presentation to Patty Summers or Jagdish Prajapati final presentation by March 26.

#### Important facts regarding the conference:

**The Ethylene Plant Operations session**  
**Tuesday April 2 from 8:00am – 11:00am**  
**Hilton New Orleans Riverside in St. James Ballroom**

**Presentations due to the Committee for review: March 4**  
**Speaker Bio due to [patty.summers@zeochem.com](mailto:patty.summers@zeochem.com): March 15**

**Final presentations due sent by email to [patty.summers@zeochem.com](mailto:patty.summers@zeochem.com): March 26**

It is an absolute requirement that the presentations be received by that date, so they can be uploaded into the AICHE system for presenting directly from the computers provided onsite. Please bring a backup on a thumb drive should there be issues.

The agenda is:

8:00am	Opening Remarks
8:05am	Mitigating Risk: Commercializing New Catalyst Technology in a World Scale Ethylene Plant
8:30am	Root Cause Analysis of a Premature Flooded Debutanizer Using Gamma Scanning, Engineering and Installation of a Bypass Line By Hot Tapping
8:55am	Liquid Heater Upgrade for Improved Operation with Ethane Feed
9:20am	Break
9:40am	Decoke Tutorial
10:17am	Tutorial on Adsorption Unit Troubleshooting
10:55am	Concluding Remarks

Please plan to arrive to the ballroom at 7:30am to familiarize yourself with the room set up. On-site contact is Patty Summers Session Chair (502)-657-9409.

In addition:

1. Friendly reminder to **register** for your chance to save on conference attendance fees. Please use the link below to register:
  - o <https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2019/registration-info>
2. Reminder to also **book your hotel** by **Friday, March 8, 2019** to get the best rate.
  - o <https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2019/hotel-information>
3. **Additional notes:**
  1. Bring their presentations on a flash drive.
  2. The projector aspect ratio will be **16:9**.
  3. Complete recordings permissions form in Confex. (If Applicable)
  4. As mentioned please arrive to the ballroom at 7:30am on April 2
  5. Please submit a full paper or presentation slides for the Pre-conference online proceedings. Deadline: Friday, **March 8, 2019**, midnight EDT.
  6. Speakers Template: <https://www.aiche.org/conferences/aiche-spring-meeting-and-global-congress-on-process-safety/2019/accepted-authors-guide#orals>

If you have any questions regarding presentation formats, proceedings, recordings, indexing, and more, please visit the [Accepted Author's Guide](#) or contact [programming@aiiche.org](mailto:programming@aiiche.org).

**EPC Schedule:**

Future conferences:

- 2020 Houston - Hilton Americas/GRB
- 2021 Dallas
- 2022 Orlando, Florida?
- 2023 Houston
- 2024 San Antonio or New Orleans