

## Minutes of Meeting Maintenance & Reliability Subcommittee of the Ethylene Producers Committee

**DATE:** February 18, 2016

**LOCATION:** LyondellBasell, Channelview, TX; hosted by Michael Pelton

**Minutes written by:** Dane DeRouen/Jorge Blanco

### MEMBERS ATTENDING:

#### In Person

Michael Pelton, LyondellBasell  
Samantha Borssen, Sasol  
Darren Martone, Williams  
Dane DeRouen, BASF  
Keith Wade, Zeeco  
Jorge Blanco, ARVOS

#### By Phone

Muhammad Imran, Technip S&W  
David Harrison, Eastman  
Mike Kudijaroff, Williams

The meeting was called to order at 9:10 am.

### 1. AGENDA

- a. Welcome, review of attendees
- b. Read anti-trust statement
- c. Review agenda
- d. Read and approve previous meeting minutes
- e. Status update on papers
- f. Review updated papers
- g. Next steps, target dates and needs
- h. Details for conference, subcommittee activities
- i. Other S/C business
- j. Confirm / Schedule Next Meetings
- k. Adjourn Meeting

Presentation by Kubota's Michael Gyorffy.

### 2. PROCEEDINGS

- a. The meeting kicked-off with the reading of the anti-trust statement, and was followed by a review of the Meeting Agenda.
- b. The minutes of the January 21, 2016 meeting were reviewed and approved.

- c. The Status and Review of the Papers are noted in the following table. Since the last meeting AIChE assigned numbers to the papers and presentations, these will be added accordingly as noted below. Document files will use these numbers to identify them.

**2016**

No.	Area of Interest	Title	Status	Author	Sponsor	Remarks	Order
127a	Cooling Water System	Cooling Tower Inspection and Repairs	firm	S. Pierce, L. Speyerer, J. Vernon	M. Pelton	Final paper working - need to add photos and minor edits; current update received by subcommittee, awaiting final version.	1
127b	Cooling Water System	Unique Pre-Cleaning and Passivation Challenges in Cooling Water Systems	firm	R. Fruit, A. Maciejewski, M. Kudijaroff	TC Cannon	Final paper draft presentation received	2
127c	Rope Access for Inspections & Repairs	Innovative Solutions for Flare Stack Inspection, Maintenance, Repair and Other Work Scopes Using Rope Access Techniques	firm	Howard Wall, MHT	TC Cannon	Final paper updates being made by author but not received by S/C yet	3
127d	Furnaces-Convection	Utilizing Ultrasonic in-Line Inspection Technology to Manage Ethylene Furnace Convection Section Reliability	firm	D. Meinen, Quest	DeRouen	Comments sent to author 1/22/16. Need final paper	4
127e	Furnaces-Radiant Section	Case Study on Inspection of Ethylene Furnace Radiant Tubes	firm	K. Stevens, Quest	DeRouen	Final paper received but formatting needs to be converted to EPC format - Mike P will do	5
127f	Furnaces-Combustion	Improving Combustion Efficiency, Reliability, and Safety in Large Fired Heaters Utilizing Multiplexed Laser Based Monitoring and Diagnostic Systems	firm	Greg Heilbrunn, Zolo	J. Blanco	Final paper and draft presentation received - need to add paper #, Mike P will do	6

- d. Only one presentation was received by the meeting today. Submittal schedule is noted in item e.

- e. These target dates were reviewed / modified for paper & presentation development:

1. Papers not yet finalized must be submitted to the S/C by March 11, 2016 and reviewed during March 17, 2016 meeting
2. Papers to be uploaded by March 18, 2016
3. Presentation to be submitted to the S/C for review by March 11, 2016 and reviewed by the S/C during the March 17 meeting.
4. Final and approved presentation to be sent to the S/C by March 29, 2015, minor changes will be allowed until the day before the S/C Session on April 12.

- f. Conference details for the Subcommittee

- i. Sunday April 10, Ethylene Committee sponsored cocktail hour
- ii. Sunday April 10 Subcommittee dinner with the authors (this is not obligatory, but available to those that want and can attend)
- iii. Monday April 11, Speakers Dinner (for authors, and Session Chairs and Co-Chairs)
- iv. Monday April 11, following the last presentation of the afternoon, S/C to meet with authors in the conference to review presentations on stage in preparation for the Session.
- v. Tuesday April 12, Ethylene Networking Lunch
- vi. Tuesday April 12, Maintenance and Reliability Subcommittee Session

g. Other Subcommittee Business

i. Membership

1. Eddie Carter has not offered his replacement, Jorge to follow-up
2. Blake Landry of OxyChem is interested in joining the subcommittee but could not attend the meeting today. Dane will add him to the email list. Jorge to provide contact information.

ii. Proposal for new meeting format proposed by Jorge

With the number of ethylene facilities increasing in the Gulf Coast and the difficulty for S/C members to attend the scheduled meetings in person, it was proposed that regional / satellite meeting places be organized to encourage in-person participation during the meetings. These satellite meetings would connect via web-conference. A thought, to be discussed further in future meetings, is to have regional meetings in:

- Baton Rouge / New Orleans corridor
- Lake Charles, LA / Golden Triangle area
- Sweeny, Point Comfort, Ingleside, Corpus Christi area
- Central – Houston – Freeport or some combination for members in the area.

h. Next Meetings:

- March 17, 2016, last meeting before the conference.
- Dinner meeting to kick-off 2017 conference preparation to be announced around June, after receiving the 2016 session reviews.

Meeting adjourned at 10:40 am

Following the scheduled Subcommittee meeting Kubota made a presentation on ANK 400 performance after a number of years in commercial application. Michael Gyorffy presented results from three case studies of ANK 400 tubes that had been analyzed for carburization and remaining life after 3, 4 and 5 years of service. ANK 400 is an anti-coking tube technology utilizing an inert spinel layer of manganese chromium oxide on the tube inside diameter. His results showed that the technology provides longer run lengths between decokes, less carburization, and therefore longer coil life compared to conventional 35Cr-45Ni alloy tubes, thereby confirming claims made in his 206 EPC paper which introduced the new technology. The expectation is that Michael will develop this topic further into a paper and presentation for the 2017 conference.