

EPC MAINTENANCE & RELIABILITY SUBCOMMITTEE MEETING

Main Location: BASF, Port Arthur, TX

Date: Wednesday, January 18, 2017

Minutes Written By: David Harrison

MEMBERS ATTENDING:

In Person:

Dane DeRouen (BASF)

John Weikel (BASF)

Paul Van Helmond (Linde)

David Harrison (Eastman)

Phone:

Mike Pelton (LyondellBasell)

Sanjeev Kapur (APEX)

Shailendra Inamdar (Linde)

Jorge Blanco (ARVOS)

Chinh Dang (Technip)

The Meeting was called to order at approximately 9:03 AM.

Proceedings:

- I. Read Anti-Trust Statement
- II. Introductions (In Person and On Phone)
- III. Safety-Reliability Moment by Host Site
 - a. Dane DeRouen proposed the idea of beginning each meeting with a safety moment (a specific instance that occurred and lessons learned from it).
 - i. The host sight will be responsible each presentation.
 - ii. Dane DeRouen presented the first moment regarding findings of solids build up in a piece of furnace feed piping causing under-deposit corrosion. The corrective actions included replacing the pipe cap with a blind flange to allow for future cleaning and add similar points to the inspection program.
- IV. Review Agenda
- V. Read and Approve the Previous Meeting Minutes
 - a. Meeting minutes were approved
- VI. Paper Topics Status Update

- a. Mike Gyorffy (Kubota), is almost complete his paper. We should have it by next week.
- b. Jeff Dudley (Solomon), is no longer providing us with a paper based on his current workload.
- c. Mike Pelton is checking to see if Bruce Harle's (Chart) paper would line up with our subcommittee presentation and if he is still available to present.
- d. We have Theo Knijff's paper, but it is a little broad. We need him to add a little more detail.
 - i. His presentation will include some recent incidences.
- e. John Weikel (BASF) is still working to complete his paper. He will discuss some ideas with Sanjeev Kapur later this week to help him complete his paper.
 - i. We discussed one of his concerns regarding how to present his topic without revealing too much BASF information.
- f. Mike Pelton will contact Paul Van Helmond next week if we are still having any issues with paper topics. Paul Van Helmond will see if he will be able to help.

Area of Interest	Title	Status	Author	Sponsor	Remarks	Order
Furnaces-Radiant Coils	Performance over time and aged properties of Kubota's ANK400 anti-coking material	confirmed	Michael Gyorffy, Kubota	Mike P	Abstract uploaded. Michael is working on paper and seeking client approval to include case study. Draft paper should be available in one week and he is working on the presentation.	1
	Life Cycle Analysis of Brazed Aluminum Plate Fin Heat Exchangers	back-up	Bruce Harle, Chart		Abstract submitted online: keep as back-up for M&R. Possible #1 back-up paper for 2017 if needed. Mike Pelton to contact Bruce Harle to see if he will develop paper for slot 2.	2
General Reliability	Ageing Assets in the Process Industry - an Holistic View	confirmed	Theodorus G. Knijff	Mike P	Mike Pelton confirmed with Theo that he will present at EPC. Abstract is uploaded. Draft paper provided, need to add some content with case study examples. Mike & Sanjeev will follow-up with phone call to Theo.	3
General Reliability	Impact of Shale Gas, Gas Feeds on M&R - Kick-off/ opening paper	confirmed	John W.	Dane	Abstract uploaded. Working on paper.	4
General Reliability	Impact of Age & Move to Lighter Gas Feeds on M&R - Panel Discussion	confirmed		Sanjeev	Panel discussion with ~ 6 panel members	5
General Reliability	Industry trends and focus for reliability	withdrawn	Jeff Dudley, Solomon	Dane	Jeff Dudley withdrew from the session. Need to go to back-up paper - see below.	
	Understanding the corrosion problems in petrochemical industries: An approach	back-up	Yogesh Kumar, B.K.Muduli, Gopalani.L		Consider for next year, unless space available in session this year. Content may be too general, broad. Are specific cases presented and can it be more focused on ethylene plant and not downstream PE units? Possible #2 back-up paper for 2017 if needed.	
	HEXSOL TLE, stiffening of TLE tubesheets	back-up	Luca Zanardi		abstract submitted online. Consider for fundamentals S/C? Back-up #3.	

VII. Review Paper First Drafts – Only Theo Knijff's was available for review.

VIII. Update on Plan for Panel Discussion

- a. Sanjeev Kapur provided updated on the panel discussion.
- b. He has already received several questions and is working to arrange them into a single list. He is expecting to receive a few more.
- c. Sanjeev feels like he has good questions and he wants to try to tie them into the presentation topics.
- d. Theo Knijff (DOW, EEPC) agreed to be on the panel.

- IX. Needs & Target Dates for Papers
 - a. Draft Paper Due: February 10, 2017
 - b. Draft Slides: February 10, 2017
 - c. We will review at our February 15th meeting
 - d. Final Papers: March 3, 2017
 - e. Final presentations: March 3, 2017
 - f. We will review at our March 8th meeting
 - g. Mike Pelton is to send email to authors informing them of due dates and format for papers and presentations.

- X. Subcommittee Dinner at EPC Conference
 - a. Jorge Blanco volunteered to coordinate the Sunday evening dinner.
 - b. He will send an email and poll the subcommittee to see who will be able to attend the dinner.

- XI. Next Meetings
 - a. February 15th (Wednesday)
 - i. LyondellBasell (Channelview, TX)
 - b. March 8th (Wednesday)
 - i. CP Chem (Cedar Bayou, TX)

- XII. Duraloy Technical Presentation
 - a. Richard Kauffmann and Don Voke
 - b. Topics included:
 - 3D Solidification modeling for casting design
 - Alloy development: Alumina-forming alloy with Oak Ridge National Lab
 - Use of digital radiographic testing
 - Electrochemical machining of tube ID's for creating profiled surfaces
 - Coatings, including testing & development
 - Duraloy company overview

Meeting concluded: 11:20 AM