

EPC MAINTENANCE & RELIABILITY SUBCOMMITTEE MEETING

Location: LyondellBasell - Channelview, TX

Date: Wednesday, December 11, 2019

Minutes Written By: John Weikel

MEMBERS ATTENDING (* if by WebEx):

Mike Pelton (Lyondell Bassell)

Keith Wade (Zeeco)

Mark Karrs* (Becht Engineering)

Kenneth Kirkham* (Equity Engineering)

Rene Kulik (Arvos)

Sun Wei (Arvos)

Dane DeRouen* (BASF)

John Weikel (BASF)

Linda Robinson (Knighthawk Engineering)

Robert Pritchett (Lyondell Bassell)

Jorge Blanco (Arvos)

Shailendra Inamdar* (Linde)

Jimmy Clevenger* (CPChem)

Sanjeev Kapur* (Apex PetroConsultants)

The meeting was hosted by Mike Pelton at the LyondellBasell facility in Channelview, TX with an option to connect remotely via WebEx. John Weikel led the meeting which was called to order at approximately 9:25 AM.

Proceedings:

I. Introductions

- a. Safety moment regarding CSB findings on a failure/loss of containment of HF at a Sunoco refinery alkylation unit. In the incident, a single piping component was found not to be up to specifications. This led to accelerated corrosion which progressed without discovery through normal mechanical integrity monitoring (MI). Recommendations by the CSB include increased MI scope up to 100% of components. Relative to ethylene plants, the importance of a well-designed MI program was emphasized.

II. Reviewed Agenda

III. Read Anti-Trust Statement

IV. Review and approval of November 14th Minutes of Meeting

- a. Minutes were approved with no corrections

V. Topics & Themes for 2020 EPC - Houston

- a. Mark Karrs led the discussion as we reviewed the list of topics. We are planning to bring 7 papers with the first three scheduled before the afternoon coffee break and the balance afterward. A new submission (see item "c" below) would be the final paper. All members present agreed to the order of papers suggested by Mark.
- b. The ID fan paper by Brad Smith is being transferred to the T4000 Rotating Equipment Session. Sanjeev will provide Mark with the appropriate contact for that session.
- c. The group reviewed an abstract from Wendy Weiss and Ben Ruchte regarding use of P91 alloy piping in the power industry. The power industry provides a very large user-

group for P91 and thus a wealth of knowledge. Within Ethylene plants, use of P91 is primarily in the SHP / VHP steam system. An EPC co-author would be helpful for this paper, but it is not necessary. It was suggested that the paper could reference, if appropriate, a prior EPC paper regarding a 2010 incident where a bi-metallic weld to P91 failed catastrophically.

- d. A paper on **Life Management of High Energy Piping as defined under B31.1 Power Piping Code was also offered by Ben Ruchte and Wendy Weiss**, but not accepted for the 2020 session.
- e. Mark will send paper guidelines to the sponsors. Along with the guidelines, sponsors are asked to convey a January 10th submission date for draft papers to the authors. The papers will be reviewed at the January meeting scheduled below.
- f. The notes/edits are captured within the (embedded) spreadsheet.



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VI. Membership

Jorge Blanco provided the bio of Wei Sun (ARVOS) for consideration by the sub-committee for membership. John W. to share via email.

Robert (Bob) Pritchett of LyondellBasell is re-joining the sub-committee.

VII. Next Meeting(s)

January 21st (Tuesday) at BASF-Total Petrochemicals in Port Arthur, TX at 9 am pending an available conference room. Back-up alternatives are the Zeeco or Arvos offices.

VIII. Meeting Adjourned @ 11:10AM