

## EPC MAINTENANCE & RELIABILITY SUBCOMMITTEE MEETING

Location: MS Teams / ARVOS Office

Date: February 14<sup>th</sup>, 2024

**Minutes Written By:** Martin Stoessel

### **MEMBERS ATTENDING:**

Martin Stoessel (ARVOS)

Mark Karrs (Becht)

Dane DeRouen (BASF)

Tyler Cunningham (INEOS)

James Cleavinger (CP-Chem)

Shailendra Inamdar (Linde)

Robert Pritchett (LyondellBasell)

Carl Matherne (Motiva)

Timothy McMinn (Oxy)

Lucas Baldesberger (E2G)

Velu Palaniyandi (Technip)

Henry Trahan (Shell)

Dave Sankey (BASF)

The meeting of the EPC Maintenance and Reliability Subcommittee (SC) was hosted by Martin Stoessel in MS Teams. The meeting was called to order at 10:03 AM CST.

### **Proceedings:**

- I. Called to order, reviewed agenda, and read anti-trust statement.
- II. Reviewed minutes of the January 10<sup>th</sup>, 2024, meeting.  
A motion to approve the minutes as amended was made by Dane DeRouen, with a second by Dave Sankey. The minutes were approved as read.
- III. Technical Discussion - Furnace Refractory Inspection and Maintenance
  - Questions
    - i. What is your company doing for refractory inspection and maintenance?
    - ii. Is your company using Infrared external inspection?
    - iii. Is your refractory Inspection expertise in-house or third party?
    - iv. What type of lining do you use, and what is the expected lifetime?
  - In total 8 companies participated
  - Presentation with all anonymous answers prepared by Henry and is attached to this MoM

IV. Papers and Presentations

- Theme for conference: ***Inspection***
- Schedule for presentations was shared by Tom Garza  
Monday March 25<sup>th</sup>, 2024

minutes/paper (default duration)									
Start Time	Preferred Format	Special Duration (min.)	Final Paper Number	Group	Order Within Group	Accept	Reject	Transfer All Notes	Entry
2:30 PM	Break						A		(id=680367) Welcoming Remarks .
2:35 PM	Oral Only						A		(id=679756) PREDICTING THE REMAINING LIFE OF CRACKING COILS: AN APPROACH BASED ON MATERIAL DEGRADATION . R. Andrade, M. J. G. Dessi, W. A. Silva, and D. M. Guarnieri
3:00 PM	Oral Only						A		(id=679759) CARBOWALL SYSTEM CASE STUDY AT PETROBRAS REFINING REPLAN IN 2010 AND RPBC IN 2023 . J. C. Belotti, L. Henrique Rodriguez de Mattos Gobbo, M. Guilherme Camparotto, L. Colombo, M. Gorby, and J. Smith
3:25 PM	Oral Only						A		(id=679758) ADVANCES IN PSA VESSEL LIFE MANAGEMENT . S. Altstadt, A. Karstensen, and K. Picioccio
3:50 PM	Break						A		(id=680005) Break .
4:10 PM	Oral Only						A		(id=678296) Selecting Location of IR Cameras for Thermal Imaging of Ethylene Cracker Furnace in a Brownfield Project . R. Limaye, J. Cross, and Z. Lin
4:35 PM	Oral Only						A		(id=678167) Enhancing Ethylene Cracker Radiant Tube Integrity through Innovative Robotic Inspection . M. Zhang
5:00 PM	Oral Only						A		(id=679922) FAILURE OBSERVED AT CROSSOVER PIPING OF PYROLYSIS FURNACE AND PATH FORWARD . B. Prajapati and J. Cleavinger
5:25 PM	Break						A		(id=680368) Concluding Remarks .

- Power point presentation for our session was shared by email on 02/02/2024



- Topics:

- PREDICTING THE REMAINING LIFE OF CRACKING COILS; AN APPROACH BASED ON MATERIAL DEGRADATION
  - Authors: R. Andrade, M. Dessi, W. Silva and D. Guarnieri
  - Sponsor: T. Garza
  - Reviewer: L. Baldesberger
  - Status: Paper not reviewed yet. Tom to reach out – No update
- CARBOWALL SYSTEM CASE STUDY AT PETROBRAS REFINING REPLAN IN 2010 AND RPBC IN 2023
  - Authors: J.C. Belotti, L. Columbo / M. Camparotto
  - Sponsor: D. DeRouen
  - Reviewer: T. Garza
  - Status: Paper reviewed, comments collected and sent back to the author. Everything on schedule, No revision of the paper and no draft of the presentation. Dane to follow up
- ADVANCES IN PSA VESSEL LIFE MANAGEMENT
  - Authors: S. Altstadt, A. Karstensen and K. Picioccio
  - Sponsor: M. Karrs
  - Reviewer: K. Sprague
  - Status: Paper reviewed by Mark but not sent to Kevin. Scheduled for next week. Paper sent to Kevin and waiting for review / comments
- SELECTING LOCATION OF IR CAMERAS FOR THERMAL IMAGING OF ETHYLENE CRACKER FURNACE IN A BROWNFIELD PROJECT
  - Authors: R. Limaye, J. Cross and Z. Lin
  - Sponsor: T. Garza
  - Reviewer: M. Stoessel
  - Status: No paper reviewed yet. Tom to reach out. Paper received, comments are pending.

- ENHANCING ETHYLENE CRACKER RADIANT TUBE INTEGRITY THROUGH INNOVATIVE ROBOTIC INSPECTION
    - i. Authors: M. Zhang
    - ii. Sponsor: T. Garza
    - iii. Reviewer: Henry
    - iv. Status: No paper reviewed yet, Tom to reach out today; no update, Reviewer added
  - FAILURE OBSERVED AT CROSSOVER PIPING OF PYROLYSIS FURNACE AND PATH FORWARD
    - i. Authors: B. Prajapati and J. Cleavinger
    - ii. Sponsor: M. Karrs
    - iii. Reviewer: W. Sun
    - iv. Status: Paper was sent during the holidays and comments were sent by Mark, Wei is pending; Comments were sent, and the paper is updated and ready for uploading. Jimmy will send the file to Tom, Lucas, Martin and Mark. Paper number to be confirmed.
- Draft Papers latest by End January → Sponsors to follow up
- Final Papers to the SC latest by Feb 15<sup>th</sup>, 2024
- Presentations March 11<sup>th</sup> → final approval in EPC meeting March 13<sup>th</sup>

#### V. Technical Discussion

- Surveys will be distributed by the lead person; participation is voluntary, and the results will be shared anonymous.
- **Spring Hangers support and adjustment history (pushed to the summer)**
  - Suggested by Kevin Sprague, Handled by Carl Matherne
    - i. Kevin to contact Carl on status and/or send out survey – Carl will prepare the survey.
  - **Pushed for after the Kick-off meeting to Summer 2024**
- **Burner Maintenance and Inspection Practices?**
  - Suggested by Robert Pritchett, Handled by **Keith Wade**
  - Potential vendor talk
  - **Pushed for after the Kick-off meeting to Summer 2024**

VI. Next Meetings

- Next meeting is on March 13<sup>th</sup>, 2024
- EPC SC Dinner on March 24<sup>th</sup>, 2024 hosted by ARVOS SCHMIDTSCH SCHACK
  - Invitation will be sent out in the next weeks
- Important dates for the SC:
  - Final Papers to the SC latest by Feb 15<sup>th</sup>
  - Final Presentations March 11<sup>th</sup>
- Important dates from EPC Main Committee:
  - Sunday, March 10, 2024      Paper Submission Closes
  - Sunday, March 24-28, 2024      2024 AIChE Spring Conference
- Meeting at KnightHawk office with Lab tour possible → pushed after EPC and Kick-off

VII. Meeting Adjourned @10:42 am CST