FINAL Minutes of February 11, 2021 Ethylene Producers' Environmental Sub-Committee Meeting

(February 11, 2021, Rev. 0)

Following are the minutes of the February 11, 2021 Ethylene Producers' Environmental Sub-Committee Meeting, held via teleconference with Walter Postula, Shell Global Solutions (US) Inc., as host.

Present:Rick Beleutz, LyondellBasell
Ahmad Hamad, Siemens
Brandon Lithgoe, NOVA Chemicals
Andrés Muñoz Gandarillas, Neste
Jennifer Port, ExxonMobil Chemicals
Walter Postula, Shell Global Solutions (US) Inc.
Mark Schmidt, Dow
Jason Trembly, Ohio University (AIChE Environmental Division)
Gary Wojnowski, BASF

Absent:Benjamin Burns, LyondellBasell
David Elam, TRC Solutions
Jacob Hilbrich, ChevronPhillips
Dan Lutz, Ineos
Ted Heron, The Catalyst Group
Patti Long, Eastman
Arijit Pakrasi, Edge Engineering and Science
Gerardo Ruiz-Mercado, US EPA (AIChE Environmental Division)
Jeffrey Seay, University of Kentucky (AIChE Environmental Division)
Debalina Sengupta, Texas A&M (AIChE Environmental Division)
Dick Siegel, R&B Consulting Services (AIChE Environmental Division)
Edward Soliz Jr., LyondellBasell?
Mark Ulrich, Linde Engineering Americas
Russell Wozniak, Dow

The teleconference began at 9:02am with Walter Postula reading the Ethylene Producers' Committee (EPC) 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 an understanding or agreement, written or oral, formal or informal, express or implied, among competitors, with regard to costs, prices, 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.

The meeting agenda was published in advance and is included below:

- 1) Reading of Anti-Trust Statement [9:02 AM]
- 2) Review of Session Timing and Submitted Abstracts (see attached) [9:04 AM]
 - . As in 2020, session will be split in two blocks:
 - i. "Ethylene Plant General Environmental I" Wednesday, April 21, 2021 (2:45 4:00 PM) 3 papers

- "Quick Hit in Decarbonization Start with the Flare", R. Ogbongbemiga and G. Cammack (Siemens)
- *Electrification of Steam Cracking and Related Challenges", G. Kracker (Linde) and J. Becker (Lyondell Basell)
- ➤ "The End of the Steam Age?", N. Rogers (TechnipFMC)
- ii. "Ethylene Plant General Environmental II" Thursday, April 22, 2021 (2:45 4:00 PM) 1 paper
 > "Renewable Diesel as a Blend Component to Enhance Olefin Yields of Liquified Waste Plastics Feedstocks", A.E. Munoz et al. (Neste)
- 3) Other potentials? [9:30 AM]
 - "Utilizing a Digital Connected Platform to Improve Combustion Safety and Asset Reliability",
 - E.Gebhard (OnPoint Digital Solutions) and Alvin Siow (Motiva)
 - a. Oxychem (John Zylks on Main Committee suggested they had some presentations, but had to check with legal)
 - b. Rejected papers from 2020 session (see September 10th minutes for abstracts)
- 4) Review of Action Items [9:40 AM]
- 5) Important Date Reminders
 - March ??, 2021 Paper submission closes
 - April 18-22, 2021 Spring Meeting VIRTUAL
- 6) Adjourn [9:45 AM]

Review of Session Timing and Submitted Abstracts: Just prior to the telecon, Jake received a reply from Bill Celenza (KBR) regarding his interest in presenting at the conference. His abstract is "4b" as listed in the September 10, 2020 minutes. The abstract will be added (by AIChE) to the Confex system. There was a question posed by the AIChE/EPC Program Chair (prior to the knowledge of the 5th abstract) regarding consolidating our 4 papers into a single session. Question now moot, informed AIChE of same. Brandon asked if (lack of) Session Chair control during the session will be same as in 2020.

<u>Other potentials</u>: Nothing additional to the three listed in the agenda. Brandon had reached out to the Carbon Capture Institute but did not receive any response. Nothing firm to pursue on the three listed in the agenda. Andrés suggested that we use the "6th slot" for overall session Q&A.

Review of Action Items: Andrés Muñoz will inform AIChE (Justin Canna) of proper author/presenter list for Neste paper. Walter Postula will follow-up Session Chair control for 2021 (DONE: Confirmed that Session Chair functionality is same as 2020. Walter Postula will inquire on specific deadlines for papers and presentations (DONE: Recordings for presentations are requested by March 22nd. Papers should be completed by April 5th.) Walter Postula will follow-up on use of "6th slot" for session Q&A (DONE: AIChE was not open to idea, did not view it as workable because of the "all recorded" format.)

Important Date Reminders: Deadline for recording presentations is March 22, 2021. Target completion of papers by April 5, 2021.

Adjourn: The meeting/teleconference was closed at 9:35 am.