

FINAL Minutes of June 18, 2020 Ethylene Producers' Environmental Sub-Committee Meeting
(June 18, 2020, Rev. 0)

Following are the minutes of the June 18, 2020 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
Jacob Hilbrich, ChevronPhillips
Brandon Lithgoe, NOVA Chemicals
Dan Lutz, Ineos
Andrés Muñoz Gandarillas, Neste
Arijit Pakrasi, Edge Engineering and Science
Jennifer Port, ExxonMobil Chemicals
Walter Postula, Shell Global Solutions (US) Inc.
Jeffrey Seay, University of Kentucky (AIChE Environmental Division)
Jason Trembly, Ohio University (AIChE Environmental Division)
Mark Ulrich, Linde Engineering North America
Gary Wojnowski, BASF

Absent: Benjamin Burns, SASOL North America
David Elam, TRC Solutions
Ted Heron, The Catalyst Group
Brad Hopper, BASF
Patti Long, Eastman
Gerardo Ruiz-Mercado, US EPA (AIChE Environmental Division)
Mark Schmidt, Dow
Debalina Sengupta, Texas A&M (AIChE Environmental Division)
Dick Siegel, R&B Consulting Services (AIChE Environmental Division)
Edward Soliz Jr., SASOL North America
Russell Wozniak, Dow

The teleconference began at 9:00am 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) Update on 2020 Spring Meeting Going Virtual [9:03 AM]
- 3) Chair/Co-Chair for 2021 session [9:25 AM]
- 4) Discussion of Potential Topics for 2021 Environmental Session [9:30 AM]
- 5) Date for Potential Face to Face [9:45 AM]
- 6) Review of Action Items [9:50 AM]

- 7) Important Date Reminders
 - June ??, 2020 – Call for abstracts opens
 - November ??, 2020 – Call for abstracts closes
 - December ??, 2020 – Papers accepted or rejected
 - January ??, 2021 – Program goes live
 - March ??, 2021 – Paper submission closes
 - April 18-22, 2021 – Spring Meeting – Dallas, TX
- 8) Adjourn [10:00 AM]

Jason Trembly (Ohio University) was welcomed to the call. He is the new Co-Chair for the AIChE Environmental Division, sitting in for Gerardo Ruiz-Mercado.

Safety Moment: Rick shared that a LyondellBasell mechanical engineer was killed in a bike/pick-up accident. Important to be even more observant of traffic during this time. There may be less on the road, but Rick's impression was that speeds were higher. Jennifer echoed that based on her recent experience driving to the office.

Update on 2020 Spring Meeting Going Virtual: Not many specifics available as AIChE is still working to finalize plan. Walter provided some information based on discussions with AIChE. The vendor AIChE has chosen is **vFairs** because of the "convention center" feel. Most presentations will be pre-recorded with the presenter being available for live Q&A during their talk. AIChE is proposing a more spread out program with longer times between "sessions." Brandon shared that 4 of 5 planned speakers for 2020 Spring were on-board with presenting at the virtual conference. Awaiting reply from Steve Smith (Rick will follow-up).

Chair/Co-Chair for 2021 Session: Per usual succession, Jacob Hilbrich agreed to move into Session Chair role. Post the telecon, Andrés volunteered to be Session Co-Chair. He was somewhat concerned with ability to serve because of his location. Brandon assured him that it should not be an impediment. As usual, others on the subcommittee who have filled one/both of these roles previously will be available to help Jake and Andrés with questions they may have.

Discussion of Potential Topics for Environmental Session: Before discussion began, Jeff Seay reminded subcommittee that the AIChE Environmental Division was holding a "virtual" Topical on waste plastic for the Spring 2021 meeting. The idea is to "package" presentations on the subject together (virtually). For 2022 there will be a "real" Topical with a physical session(s). Jeff will be the Chair. They are open to co-sponsoring of other sessions.

Specific to the EPC Environmental Session, the list below was generated:

- 1) Waste plastic liquids as steam cracker feed (topic from Andrés Muñoz, Neste, planning paper). With all the interest in the industry, there could potentially be an entire session on this topic.
- 2) Electrification of crackers (from Brandon). Walter mentioned the recent announcement from Dow & Shell on their joint effort on this topic. (<https://www.shell.com/business-customers/chemicals/media-releases/2020-media-releases/dow-and-shell-team-up-to-develop-electric-cracking-technology.html>).
- 3) Use of fixed sensors for LDAR compliance (topic from Gary). He is attending a presentation the following week. Post telecon note: Gary sent e-mail stating that company (mpact2wo) has real world examples and is interested in presenting at the 2021 environmental session.
- 4) Rejected papers from 2020 session (list provided by Brandon post telecon)
 - a. "Flare Instrumentation – Minimum Expectations," Derek Stuck, Spectrum Environmental
 - b. "The Proposed Ethylene Production NESHAP and Potential Complications with Reclaimed Water Use," Bill Celenza and Sarah Shank, KBR

- c. "Proposed Ethylene MACT Flare Requirements," Herman Holm, Spectrum Environmental
- d. "A Novel Approach of Converting Industrial Wastewater into Energy," Chad Felch, Siemens (I think Ahmad Hamed was a sponsor for this paper)

Date for Potential Face to Face: Tabled this topic as openness to travel and face-to-face meetings is still unclear at this time. Has typically been the October meeting.

Review of Action Items: **Rick Beleutz** to follow-up with Steve Smith on willingness to participate in virtual format of conference (done, Steve confirmed). **Brandon Lithgoe** send list of rejected 2020 papers to Walter (done).

Important Date Reminders: The dates for the 2021 Spring Meeting are not yet confirmed. The opening of the call for abstracts will be later than usual, but other dates will likely follow 2020 timing.

Adjourn: The meeting/teleconference was closed at 9:41 am.