

**FINAL Minutes of June 17, 2021 Ethylene Producers' Environmental Sub-Committee Meeting**  
(June 17, 2021, Rev. 0)

Following are the minutes of the June 17, 2021 Ethylene Producers' Environmental Sub-Committee Meeting, held via teleconference with Walter Postula, Shell Global Solutions (US) Inc., as host.

**Present:** Rick Beleutz, LyondellBasell  
Troy Boley, Spectrum Environmental Solutions, LLC  
Ahmad Hamad, Siemens-Energy  
Jacob Hilbrich, ChevronPhillips  
Dan Lutz, Ineos  
Andrés Muñoz Gandarillas, Neste  
Jennifer Port, ExxonMobil Chemicals  
Walter Postula, Shell Global Solutions (US) Inc.  
Gerardo Ruiz-Mercado, US EPA (AIChE Environmental Division)  
Mark Schmidt, Dow  
Mark Whitney, Linde Engineering Americas (substituted for Mark Ulrich)  
Gary Wojnowski, BASF

**Absent:** Benjamin Burns, LyondellBasell  
Ted Heron, The Catalyst Group  
Patti Long, Eastman  
Arijit Pakrasi, Edge Engineering and Science  
Jeffrey Seay, University of Kentucky (AIChE Environmental Division)  
Dick Siegel, R&B Consulting Services (AIChE Environmental Division)  
Edward Soliz Jr., LyondellBasell  
Jason Trembly, Ohio University (AIChE Environmental Division)  
Mark Ulrich, Linde Engineering Americas

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) Welcome of New Member(s) [9:03 AM]
- 3) Chair/Co-Chair for 2022 session [9:06 AM]
- 4) Review of 2021 Session(s) (Attendance data below) [9:10 AM]
- 5) Discussion of Potential Topics for 2021 Environmental Session [9:20 AM]
- 6) Date for Potential Face to Face [9:45 AM]
- 7) Review of Action Items [9:50 AM]
- 8) Important Date Reminders
  - June 28, 2021 – Call for abstracts opens

- November 1, 2021 – Call for abstracts closes
- December ??, 2021 – Papers accepted or rejected
- January ??, 2022 – Program goes live
- March ??, 2022 – Paper submission closes
- April 10-14, 2022 – Spring Meeting – San Antonio, TX

9) Adjourn [10:00 AM]

**Welcome of New Member(s):** Troy Boley (Spectrum Environmental Solutions, LLC) has joined the subcommittee. Welcome Troy!

Post telecon note: An oversight not mentioning during meeting, but Brandon Lithgoe recently left NOVA Chemical to work at an environmental consulting company in The Woodlands. NOVA has yet to name a replacement. Brandon was “encouraged” to remain active on the subcommittee through his new company, but no commitment made yet.

Chair/Co-Chair for 2022 Session: Andrés agreed to move into Session Chair role (per practice of past few years). Request was made for a volunteer to fill Session Co-Chair role. No immediate volunteer. Members encouraged to give some thought and let Andrés and Walter know if you wish to fill Session Co-Chair role. A question came later in the meeting on the responsibilities the Session Chair/Co-Chair. Walter offered that the main responsibilities include: (1) shepherding authors/presenters through process of submitting abstracts and papers to AIChE Confex system; (2) communicating with EPC Program Chair/Co-Chair on status/issues and relaying any communication from Program Chair to the authors/presenters (i.e. deadlines); (3) relay EPC guidelines for presentation and paper formats to authors/presenters; (4) collection of presentations and papers for inclusion in upload of content to Omnipress archive site.

**Review of 2021 Session(s):** Jake stated that there was good interaction during the first session and during the first paper of the second session. Attendance numbers (shown again below) support same. Andrés asked about the Environmental attendance numbers versus the most highly attended session. The highest numbers were for the first/second papers of the first sessions on Monday afternoon (645 for paper 8a). Post telecon note: During the Main Committee meeting the question was asked about the numbers being inflated because of connection difficulties early on, with attendees jumping in and out. AIChE has been asked about this possibility. **AIChE indicated that attendance in the first presentations was indeed inflated. When “unique” visitors were counted, the number for 8a was reduced to 218.**

<b>Ethylene Plant General Environmental I/II</b>	By 4/23	By 6/9
114a. Quick Hit in Decarbonization – Start with the Flare	95	98
114b. Electrification of Steam Cracking and Related Challenges	143	163
114c. The End of the Steam Age?	126	145
145a. Renewable Diesel as a Blend Component to Enhance Olefin Yields of Liquefied Waste Plastics Feedstocks	125	146
145b. The Proposed Ethylene Production NESHAP and Potential Complications with Reclaimed Water Use	72	74
145c. Flare Monitoring and Data Management Challenges	57	61

**Discussion of Potential Topics for 2021 Environmental Session:** The list below was generated.

- CO<sub>2</sub> reduction by existing (through 2035) versus emerging (through 2050) technologies [Rick]
- Water treatment, reuse/recycling [Gerardo]
- CO<sub>2</sub> industrial engineering and R&D approaches [Gerardo]
- Carbon capture (design/optimization) [Gerardo]

- Plastics recycle, how to close the loop [Gerardo, and is willing to organize]
- Technology and Sustainability [Themes suggested by Andrés]
- Decarbonization [Mark S., also AIChE keynote themes]
- Compliance with waste-water discharge (microplastics) [Dan]
- Topics from Academia? [Andrés, e.g. Ghent University]

With technology playing a huge role in CO<sub>2</sub> reduction / decarbonization there is potential for partnering with the Technology Subcommittee on a joint session. Post telecon note: During Main Committee meeting Rick suggested this potential. The Technology Subcommittee was open to this possibility.

**Date for Potential Face to Face:** This item was tabled for discussion at a future meeting. The Main Committee is continuing with virtual through the August meeting. Linde was still open to hosting. The AIChE Annual Meeting will be an in-person/virtual hybrid. The in-person portion will occur November 7-11 and the virtual portion will occur November 15-19 (per Gerardo). The format for the 2022 Spring Meeting is leaning toward in-person, but final decision is yet to be made.

**Review of Action Items:** All to consider volunteering for Session Co-Chair duties. **Post telecon note:** Gerardo Ruiz-Mercado volunteered for Session Co-Chair. Andrés Muñoz will follow up with Ghent University on potential papers. All to utilize potential topic list above to recruit authors/presenters.

**Important Date Reminders:** The dates listed in item 8 of the agenda were reviewed. Some are still to be finalized.

**Adjourn:** The meeting/teleconference was closed at 9:47 am.