# Feedstock Contaminants Subcommittee – July 29th, 2021 Meeting Minutes

### Team Members

Mark Davis	X	Yong Wang		Robert Alvers	X
David Smith	X	Joe Lally	Х	David Hood	X
Sheri Elder	X	Andre Bernard	X	Ross Perchuk	Χ
Mark Whitney	Х	Ali Abbaspour			
Dwight Hines		Jennifer Nill			

### 1. Anti-trust statement

"No activity of the Committee shall involve the exchange, collection or dissemination among competitors of information or be used for the purpose of bringing about or attempting to bring about any understanding or agreement written or oral, formal or informal, express or implied, among competitors, with regard to costs, prices, or 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."

### 2. Validate Roster Data

The roster data was reviewed. Confirmed that Art Baumgartner is retiring and will no longer be part of the subcommittee. Ross Perchuck info was updated. Dwight Hines retired but remain in the subcommittee. Dwight's contact info has been updated accordingly.

### 3. Chair & Co-Chair for 2022

Chair: Andre Bernard (Email: andre.bernard@novachem.com)

Co-Chair: Sheri Elder (Email: dr.sherrielder@gmail.com)

Access to confex will be provided to the Chair & Co-Chair once confirmed by the main EPC committee to AIChE.

## 4. Updates from Main EPC Committee

No update. Next main EPC committee meeting schedule for August 12<sup>th</sup>.

# 5. Key Dates

No change

Sessions and Sessions Chairs due in Confex: June 14<sup>th</sup>, 2021 Call for Abstracts opens June 28<sup>th</sup>, 2021 Call for Abstracts closes November 1<sup>st</sup>, 2021 Accept/ Rejects Abstracts: December 6<sup>th</sup>, 2021 Preliminary Acceptance Notices Sent: December 20<sup>th</sup>, 2021 Final Acceptance/ Rejection Notices Sent: January 24<sup>th</sup>, 2022 2022 AIChE Spring Meeting: April 10 to 14<sup>th</sup>, 2022

We will be planning a dry run 2 to 3 weeks prior to the conference.

# 6. Review Paper Idea Left Over List (2021)

- Follow up paper on Debutanizer Bottom Recycle Low likelihood for 2022. Based on some current work conducted at NOVA, this may become a potential paper for 2023 or 2024. The idea will remain in the standby list.
- **Dihydrocyclopentadiene found in C9-200/ Wash oil recovery** Potential for a joint paper. Andre to follow up with KBR.
- NOVA paper on sulfur removal. Author pulled out from 2021 EPC due to time constraint in getting approvals. The Author is still interested in presenting, but still need to look for approval. Since the paper has been pulled out twice during the last 3 years due to approval issues, the author was requested to seek approvals before September 2021 to minimize the likelihood of another last-minute withdrawal. Andre to monitor progress.
- CS<sub>2</sub> rise from H2S scavenger on shale Dorf Ketal. This paper was on the 2020 session agenda, but Dorf Ketal pulled it out due to uncertainty of the conference. They withdrew the paper for 2021 (could not get management approval). They are interested in presenting a paper, but they reported that R&D work is not fully complete and some unknown remains. Depending on the value of the material that can currently be presented, the approach of a 1<sup>st</sup> paper with a follow up paper in 2023 can be considered. It is suggested to get a revised abstract from Dorf Ketal so the team could evaluate the value of the material for the 2022 session. Sheri will follow up with Dorf Ketal.
- **Pipeline Contaminants (glycol, drag reducer).** We had difficulties in getting commitments from companies that were contacted. Joe will follow up with Enterprise in Kinder Morgan.

### Plastic Waste:

Contaminant Treatment – University Ghent agreed to submit a paper for the 2022 session. Yong will monitor progress

CP Chem – CP Chem is not ready to present on plastic circularity contaminants.

Shell Experience – Currently in discussion with management to explore paper on potential impurities & mitigation. Ross will follow up progress.

LyondellBasell Experience – R&D pilot plant in Italy & Plant in Germany who is processing oil from plastic waste. There is a willingness to present material without going in the specific. Checking on how much info LyondellBasell is willing to share specific to contaminants. Robert will follow up progress

Dow Experience – Need to check if a paper focusing on contaminants without disclosing any proprietary information is a possibility. Mark D. to follow up.

ACS – Green Chemistry/ Circular Economy – Believe no information pertinent to contaminants. No further follow ups.

 Contaminants vs ODH technology – Linde is currently not ready/ interested to produce a paper on contaminants. The status may change once data from industrial installations become available. The idea will be move to the standby list. No further follow up at this time.

## CO2 Capture vs

- Amine Process -> MEA/ DEA Celanise/ DOW/ BASF/ Huntsman/ Eastman. DEA process - Ross & Andre to look at paper on Amine process.
- Lenzatech -> CO2 to ethanol -> Lanzatech showed interest in presenting a paper. Yong will follow up.
- Oxydative coupling of methane to ethylene Siluria Dave
  S. to follow up
- Radon. NOVA Industrial Hygiene was contacted and showed interest in presenting a paper on Radon. They are currently awaiting preliminary approvals from management. Andre to monitor progress
- Radon: Potential for Shell involvement. Ross to follow up.

• Inhibitor residual/ measuring methods. Debby Rossana currently working on an abstract. Dave S. to follow up progress.

### Other Business

Nothing to report

## 7. Technical Discussion

Discussion on Dorf Ketal unknown & questions on C2S potential paper.

- decomp of adduct (over 160 C) in the scavenging reaction of CS2. The chemistry being unknown. Does reacted CS2 breaks down or is it release somewhere else.
- o CS2 will ends in the c5 area (isoprene)
- Analogy of amine & CO2 (chemically catch & release).
- MDEA one way

# 8. Schedule Next Meeting

• Next meeting schedule for August 26th, 15h00