ETHYLENE PRODUCERS SAFETY SUBCOMMITTEE MINUTES FROM JUNE 12, 2014 MEETING

Antitrust Statement – Read to all in attendance.

"No activity of the Committee shall involve the exchange, collection or dissemination of information among competitors for the 1. 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."

Subcommittee Membership

There were six members in attendance, including one new member, **Rob Fox**. Rob is replacing Michael Kennedy as the LyondellBasell safety subcommittee

 representative. Please see meeting attendance log. Survey from 2014 EPC Conference received the names of four engineering professionals interested in the Safety Subcommittee. Please see Attachment 1 for names of potential members and their contact info.

Meeting Attendance Log

Contact information associated with the names highlighted in the previous table indicate that the contact information listed has been confirmed with the member.

Member Name with Company Affiliation	June -14	Email update/confirm.	Phone Update/confirm
Anne Balinsky (Chevron Phillips), session co-chair for 2014	х		
Jake Barrett (Williams)	А		
Toby Darbonne (Westlake)	А		
Rob Fox (LyondellBasell)	х		
David Gent (Nova)	х		
Roy Lucas (Lummus)	А		
Sankar Mahalingam(Technip)	х		
Jeff Melching (Dow)	А		
Michael Moran (Exxon-Mobil)	А		
David Mullenix (Sasol)	А		
Rob Nussbaum (Eastman), chair for 2014	А		
David Smith (BASF)	А		
Jonathan Sterne (INEOS)	х		
Rick Swain (Shell), session chair for 2014	х		
Jack Tindel (DuPont)	А		
Larry Zych (BASF)	А		

Leadership Roles

SAFETY SUBCOMMITTEE:

Chair: Rob Nussbaum was elected to serve as chair for another year. *Co-Chair*: Jonathan Sterne.

3.

EPC SAFETY SESSION:

Chair: No one present volunteered for the position of chair, so it was decided to defer the selection for the next EPC meeting on August 14th, when the topics will may be decided and the need for one or more sessions is determined.

Co-Chair. Two members, Rob Fox and Sankar Mahalingam, volunteered to serve as Co-Chair(s).

Initial Plans for 2014 Safety Session

Key Dates:

April 26th-30th: EPC Spring Meeting in Austin. Safety Session on Wednesday, the 29th (to be confirmed).

Deadline for Abstracts: November 14, 2014 Deadline for Extended Abstracts (Official): April 10, 2015.

It is recommended to give authors a deadline two to three weeks earlier for editing.

Deadline for Presentations: At the discretion of Session Chair.

4. Members are asked to solicit potential abstracts and topics of interest from their companies for the August 14th meeting. Please remind potential authors that their company's approval is critical and sufficient time should be allotted for this step. Members are asked to advise the authors that they must either electronically sign-off on the final extended abstract release or sign a copy of the release form when submitting their "extended abstract" (*the paper*). This step is critical. Guidelines and requirements for "extended abstract" submittal will be provided at the next meeting.

Feedback received from the 2014 session was reviewed for topics.

The session on low temperature embrittlement was well received and is once again proposed for a session with this next session, possibly focusing on process related implications rather than the mechanical.

Andre Bernard (Nova) may be interested in preparing a paper on this topic. David

Gent to follow up.

Brittle fracture analysis: Kannan Subramanian of Stress Engineering Services. Sankar Mahalingam will follow up with Kannan to explore specific topic and ability to deliver a formal paper.

Brittle fracture of ethylene vaporizers was proposed by Shrutika Agrawal of Reliance Industries Ltd. Have session chair/co-chair follow up on possible paper.

CUI Test Methods for Complicated Pipe Branches: Astor Harris of Phoenix Park Gas Processors Ltd. Have session chair/co-chair follow up.

CUI paper: Proposed by Mike Milanowski of SASOL North America. Request that David Mullenix follow up with Mike.

Cold box failure mechanism and prediction is another possible paper from Mike Milanowski.

Carbonization initiation The Williams incident.

REMINDER: NEXT MEETING IS AUGUST 14[™] @ 4:30.

5. Action Register – see Attachment 3.

Attachment 1: Safety Sub Committee-Member Interest **Expressed**

(from conference survey)

Phone # Email address

Name	Company
Shrutika Agrawal	Reliance Industries, Ltd
Harsh Dedhia	Reliance Industries, Ltd
Astor Harris	Phoenix Park Gas Processors Ltd.
Weiran Yang	Dow Chemical Co.

Attachment 2: SUBJECTS OF INTEREST FOR FUTURE CONFERENCES (from conference survey)

Session 113: ETHYLENE UNIT SAFETY SESSION (April 2, 2014)

#	Suggested Topics	Name	Co. & Address	Phone/Fax/email	
1.	+CUI +cold box failure mechanism & prediction	Mike Milanowki	SASOL North America		
2.	More on safety relief valves and flare header design	Brian Hoppe	Willbros Engineers		
Session 150: ETHYLENE PLANT SAFETY/TECHNOLOGY JOINT SESSION-LOW TEMPERATURE EMBRITTLEMENT TUTORIAL (from conference survey)					
#	Suggested Topics	Name	Co. & Address	Phone/Fax/email	

Astor Harris	Phoenix Park Gas Processors Ltd. Rio Grande Drive Point Lesin Industrial Estate Trinidad, West Indies
Nikolaos Vavizos	BOREALIS Danubia Strasse 21-25 Mannsworth Austria 2320
Wei Yan Yang	Dow Chemical Company Freeport, TX
Brian Hoppe	Willbros Engineers
James Rham	Flint Hills 4241 Savannah Port Arthur, TX 77640
Nicholas Graham	Chevron Phillips
Alan Svoboda	FM Global 6035 Feagon Street Houston, TX 77007
Eddie R. Carter	INEOS O&P USA
	Nikolaos Vavizos Wei Yan Yang Brian Hoppe James Rham Nicholas Graham Alan Svoboda

Attachment 3: Action Register

Date Added	Action Item	Steward	Status
6/12/14	Guidelines and requirements for "extended abstract" submittal Guidelines and Requirements for "extended abstract" submittal will be provided at the next meeting.	Balinsky	Pending- provide at next meeting.
6/12/14	Sankar Mahalingam will follow up with Kannan Subramanian of Stress Engineering Services regarding specific brittle fracture topic and ability to deliver a formal paper.	Mahalingam	
6/12/14	David to follow up with Andre Bernard (Nova) on possibility of doing a paper on a process focused embrittlement scenario analysis.	Gent	
6/12/14	Solicit topics/papers from respective companies on ethylene safety topics.	ALL	