



## U. S. Chemical Safety and Hazard Investigation Board RECOMMENDATION STATUS CHANGE SUMMARY

<b>Report:</b>	Wacker Polysilicon Chemical Release
<b>Recommendation Number:</b>	2021-01-I-TN-R5
<b>Date Issued:</b>	June 8, 2023
<b>Recipient:</b>	Wacker Polysilicon
<b>New Status:</b>	Open – Awaiting Response or Evaluation/Approval of Response
<b>Date of Status Change:</b>	Not Applicable – Initial Status

### Recommendation Text:

*Develop and implement a formalized Simultaneous Operations (SIMOPs) program addressing planned and/or permitted co-located work tasks including:*

- a. Identification of potential SIMOPs;*
- b. Identification of potential hazardous interactions;*
- c. Evaluation and implementation of necessary safeguards to allow for safe SIMOPs;*
- d. Coordination, including shared communication methods, between the SIMOPs; and*
- e. Inclusion of emergency response personnel or services in the planning and coordination of the SIMOPs. Ensure relevant staff are trained on execution of the SIMOPs program.*

### Board Status Change Decision:

#### A. Rationale for Recommendation

On November 13, 2020, a graphite heat exchanger cracked during maintenance activities, releasing anhydrous hydrogen chloride at the Wacker Polysilicon facility in Charleston, Tennessee. The incident occurred on the fifth floor of an equipment access structure when a contractor applied excessive torque to flange bolts on the heat exchanger's discharge pipe.

Seven workers from two contracted companies were in close proximity to the release. The location of the release prevented the workers from accessing the platform's single means of egress. While attempting to escape by climbing down piping on the side of the structure, three of the workers fell to the ground, fatally injuring one and seriously injuring the other two. The other four workers remained in place until the release ended. One of these four workers sustained chemical burns from the release due to a rip in their personal protective equipment (PPE). The remaining three workers were uninjured.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated the incident and found several safety issues including ineffective written procedures, control of hazardous energy, and management of hazards during simultaneous operations (SIMOPs), as well as an insufficient means of egress from the platform. As a result of these findings, the CSB issued four recommendations to Wacker Polysilicon. This status change summary addresses **CSB Recommendation No. 2021-01-I-TN-R5**.