

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

Report:	Honeywell Geismar Chlorine and Hydrogen Fluoride Releases
Recommendation Number:	2023-02-I-LA-R4
Date Issued:	May 23, 2025
Recipient:	Environmental Protection Agency (EPA)
New Status:	Open – Awaiting Response or Evaluation/Approval of
	Response
Date of Status Change:	Not Applicable – Initial Status

Recommendation Text:

Per the requirements in EPA Rule Procedures for Prioritization of Chemicals for Risk Evaluation Under the Toxic Substances Control Act, initiate prioritization to evaluate whether hydrogen fluoride, including its anhydrous and aqueous acid forms, is a High-Priority Substance for risk evaluation. If it is determined to be a High-Priority Substance, conduct a risk evaluation of hydrogen fluoride to determine whether it presents an unreasonable risk of injury to health or the environment. If it is determined to present an unreasonable risk of injury to health or the environment, apply requirements to hydrogen fluoride to the extent necessary to eliminate or significantly mitigate the risk, for example by using a methodology such as the hierarchy of controls.

(Supersedes 2019-04-I-PA-R3 from the Philadelphia Energy Solutions Report)

Board Status Change Decision:

A. Rationale for Recommendation

Three separate chemical incidents occurred from October 2021 to June 2024, involving the release of anhydrous hydrogen fluoride (HF) from the HFC-245fa unit at the Honeywell Performance Materials and Technologies facility in Geismar, Louisiana. The first two incidents occurred during reactor startup and the third during planned maintenance work.

One worker was fatally injured as the result of the first incident, and another was seriously injured as the result of the third. The second incident resulted in substantial property damage and a release of over 800 lbs. of HF and over 1,600 lbs. of chlorine gas when a reboiler within the unit exploded.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) investigated these incidents and found several safety issues including those associated with safe work practices, management of change, and mechanical integrity. One factor common to all these incidents was the lack of an effectively implemented safety management system. As a result of these findings, the CSB issued one recommendation to the Environmental Protection Agency (EPA). This status change summary addresses CSB Recommendation No. 2023-02-I-LA-R4.