GAO Highlights

Highlights of GAO-22-104494, a report to congressional requestors

Why GAO Did This Study

Over 11,000 RMP facilities across the nation have extremely hazardous chemicals in amounts that could harm people, property, or the environment if accidentally released. Risks to these facilities include those posed by natural hazards, which may damage the facilities and potentially release the chemicals into surrounding communities. Climate change may make some natural hazards more frequent or intense, according to the Fourth National Climate Assessment.

GAO was asked to review climate change risks at RMP facilities. This report examines, among other things, (1) what available federal data indicate about RMP facilities in areas with natural hazards that may be exacerbated by climate change; and (2) challenges RMP facilities face in managing risks from natural hazards and climate change, and opportunities for EPA to address these challenges. GAO analyzed federal data on RMP facilities and four natural hazards that may be exacerbated by climate change, reviewed agency documents, and interviewed agency officials and stakeholders, such as industry representatives.

What GAO Recommends

GAO is making six recommendations, including that EPA issue regulations, guidance, or both to clarify requirements and provide direction to facilities on incorporating natural hazards and climate change into risk management programs. EPA agreed with our recommendations.

View GAO-22-104494. For more information, contact J. Alfredo Gómez at (202) 512-3841 or gomezj@gao.gov.

CHEMICAL ACCIDENT PREVENTION

EPA Should Ensure Regulated Facilities Consider Risks from Climate Change

What GAO Found

The Environmental Protection Agency's Risk Management Plan (RMP) Rule requires certain facilities that make, use, handle, or store hazardous substances (chemicals) to develop and implement a risk management program to detect and prevent or minimize the consequences of an accidental release. These facilities, known as RMP facilities, include chemical manufacturers and water treatment plants. Federal data on flooding, storm surge, wildfire, and sea level rise—natural hazards that may be exacerbated by climate change—indicate that over 3,200 of the 10,420 facilities we analyzed, or about 31 percent, are located in areas with these natural hazards (see figure). View the full results of GAO's analysis here.

RMP Facilities Located in Areas That May Be Impacted by Flooding, Storm Surge, Wildfire, or Sea Level Rise



. Risk Management Plan (RMP) facilities that GAO analyzed (10,420)

Located in an area with one or more of these natural hazards (3,219)

Located in an area without one or more of these natural hazards or where hazards are unknown (7,201)

Sources: GAO analysis of Environmental Protection Agency, Federal Emergency Management Agency, National Oceanic and Atmospheric Administration, and U.S. Forest Service data; U.S. Census Bureau (map). | GAO-22-104494

Notes: This map does not include one RMP facility in each of Guam and the U.S. Virgin Islands, Storm surge data are not available for the West Coast and Pacific islands other than Hawaii, and sea level rise data are not available for Alaska.

RMP facilities face several challenges, including insufficient information and direction, in managing risks from natural hazards and climate change, according to some EPA officials and stakeholders. By issuing regulations, guidance, or both to clarify requirements and provide direction on how to incorporate these risks into risk management programs, EPA can better ensure that facilities are managing risks from all relevant hazards. When developing any such regulation, EPA should, pursuant to relevant executive orders, conduct a cost-benefit analysis.