

Espejo Azul Ground Truth

Infrastructure Category:

Critical Infrastructure: Espejo Azul (Blue Mirror) Dam and Reservoir

Associated Infrastructure: GeEnergy Nuclear Facility, Water Supply Network

Threat Details:

Dam Collapse and Flood Disaster:

Compromised structural integrity has caused the catastrophic collapse of the dam, and the release of the water held in the dam's reservoir. As a result, a massive flood event has been triggered; threatening essential infrastructure, lives and property downstream. Simultaneously, the failure has caused disruption to the water supply required for cooling reactors at the GeEnergy Nuclear Facility; flooding the facility and leading to a nuclear meltdown.

Nuclear Meltdown:

A severe crisis is underway at the GeEnergy Nuclear facility, with a potential nuclear meltdown on the cards. Temperatures of four reactor cores are rising at a sharp rate due to the failure of emergency cooling systems as a result of flooding. An imminent release of deadly radioactive materials is on the cards, posing a severe environmental and health hazard.

City Flooding: The city of Laramie has been blighted with flash flooding due to heavy rainfall.

Origin of Threat:

The dam's compromised structure is attributed to inadequate construction practices, corner-cutting, and the concealment of crucial information regarding its stability. A culture of prioritising profits over safety appears to be the root cause, principally by AquaTech CEO Arthur Hawthorne, who has vested interests in the dam and nuclear facility. A halt in the water supply required for cooling reactors, due to flooded emergency cooling systems, has led to the inability to adequately manage core temperatures. This disaster is an example of one that is beyond-design-basis.

Unfolding Response:

Immediate Evacuation: An urgent evacuation order is in effect for downstream areas vulnerable to flooding. An immediate evacuation order has been issued for residents in proximity to the nuclear facility. Emergency responders are working to evacuate residents to higher ground, designated shelters and safe zones where applicable.

Search and Rescue: Teams are conducting search and rescue operations to save individuals stranded by floodwaters and to ensure the safety of those affected.

Containment Efforts: Specialised teams are working to prevent a full-scale meltdown by implementing cooling measures and stabilizing the reactor cores.

Emergency Services: First responders, including fire departments, police, and medical units, are mobilised to support evacuation efforts and provide medical assistance to those exposed to radiation.

Other Impacting Factors:

Extreme Weather: The drought has affected crop yields, however, this also leads to a prime situation where flooding can occur as the surface has been hardened. El Niño has caused an oscillation between flood states and drought states in Redmayne (loosely based on the State of California). This leads to surface run-off which causes flooding. The ongoing heavy rainfall, causing unprecedented flooding in the city, complicates emergency response efforts by limiting mobility and access to affected areas.

Communication Disruption: The extensive rainfall has disrupted communication networks, making it challenging to disseminate information to the public and coordinate response efforts.

Public Panic: The convergence of a nuclear threat with the ongoing flood disaster has fuelled public panic, leading to congested evacuation routes, hindering orderly response.

Resource Constraints: The simultaneous nature of the dam collapse and nuclear emergency has stretched emergency resources, including personnel, medical supplies, and transportation.