

Overview of the Criticality Accident at the JCO Uranium Processing Plant

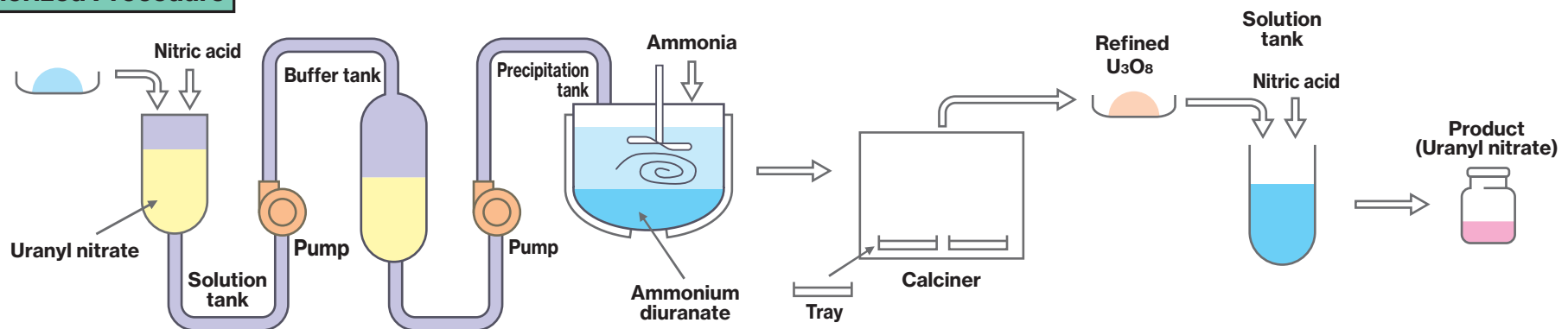
Overview of the accident

On September 30, 1999, while equalizing a solution of enriched uranium at the JCO uranium processing plant, workers poured a solution containing uranium into a settling tank not designed for that purpose beyond its critical mass, initiating a criticality accident. They were acting in accordance with an illegal company manual. The critical state continued for some 20 hours and resulted in the 2 workers dying.

Impact on residents

In addition to the radiation emitted to the environs during the criticality period, a small amount of radioactive gas was also released into the air and some 319 people were estimated to have received a dose of radiation exceeding 1 mSV, the annual effective dose limit for the general public; those exposed include workers, disaster responders and the residents of the surrounding area (130 residents).

Authorized Procedure



Procedure Used in the Accident

