

Destruction of Syrian CW Material

Safety and Environmental Information



- The U.S. government prioritizes safety for both personnel and the environment.
- The configuration of the ship, operating procedures on-board, and the mechanics of hydrolysis, are designed in a manner consistent with strict safety and environmental regulations
- United Nations experts have trained the Syrians in International Maritime Dangerous Goods standards and the Syrians will package the materials under the supervision of the Joint Mission
- OPCW will conduct a non-intrusive scan of all containers prior to loading at Syrian port to ensure configuration is compliant for transportation
- U.S. experts will again inspect the containers at the transloading point prior to any containers being loaded on the Cape Ray
- The storage of the containers and the layout of the destruction equipment onboard the Cape Ray are designed to mitigate risks
- Syrian chemicals stored in International Standards Organization (ISO) shipping containers will be stored on the main trailer deck
- There will be no movement of ISO shipping containers between decks
- Access to the main trailer deck is strictly controlled
- Main trailer deck is outfitted with specially designed carbon filters integrated into the existing ship air ventilation, which will create a negative pressure to the rest of the ship
- The chemical containers will be opened after re-inspection within the environmental enclosure under negative pressure - negative pressure prevents air from flowing out from the enclosure without first being filtered
- Hydrolysis system operators completed 9 days of dockside and at-sea operational trials to ensure the safety and efficacy of the system on the ship
- Two health and safety officers will be on-board to monitor compliance with Safety and Health Emergency Response Plan at all times
- The field deployable hydrolysis system itself is a self-contained system, which means it does not release any byproducts into the air and all chemical tanks, pipes, and hoses used in the hydrolysis process are separate from the ship's pipes and systems
- Creates liquid waste, known as 'effluent', which will be pumped directly from the system into large, specially designed tanks to undergo pH adjustment
- The pH balanced effluent will then be pumped directly into ISO tanks on the ship that have been selected to safely store and transport the effluent. The effluent is similar in toxicity to household chemicals
- Tanks of liquid waste will be safely and properly disposed of at a commercial facility, as determined by the OPCW tender process.