

Dumping was carried out on a global scale

The Army unloaded its chemical weapon stockpiles off the coasts of more than a dozen countries as WW II ended.

1 NORTH SEA

Between Scotland and Norway

- The Philip Heiniken was sunk with 2,000 tons of unidentified German chemical munitions July 24, 1948, in 3,400 feet of water.
- An estimated 2,500 tons of unidentified German chemical munitions were scuttled in the Marey on Aug. 24, 1948, in 3,900 feet of water.

2 NORWAY/DENMARK

- The Army and the British dumped an estimated 170,000 tons of captured German mustard and nerve gas in the Skagerrak area of the North Sea, a relatively narrow strait that separates Norway and Denmark. Much of the chemical ordnance was sunk in 33 German ships, part of Operation Davy Jones Locker.

■ The Norway side of the strait is deeper than Denmark's side, which might explain why some of the material has washed up on Denmark's shore and not Norway's. Danish officials have estimated that 150 fishermen have accidentally pulled up mustard gas and been seriously burned or killed.

Known Army dumps of captured German chemical warfare agents into the Skagerrak Strait include:

1945

Dec.: The Army dumped 11,000 tons of nerve gas, 4,000 tons of mustard gas and 66,000 tons of either mustard gas or phosgene gas. Water depth is unknown.

July 1: An estimated 1,349 tons of unidentified chemical munitions were sunk in the Sperrbrecher in an estimated 2,100 feet of water.

On the same day, a ship called T65 was sunk in 2,100 feet of water, filled with 1,526 tons of captured chemical munitions.

1946

July 2: About 671 tons of unidentified chemical weapons were sunk in 2,100 feet of water in the UJ305.

Aug 30: An estimated 3,653 tons of unidentified chemical warfare agents were scuttled in the James Otis in 2,100 feet of water.

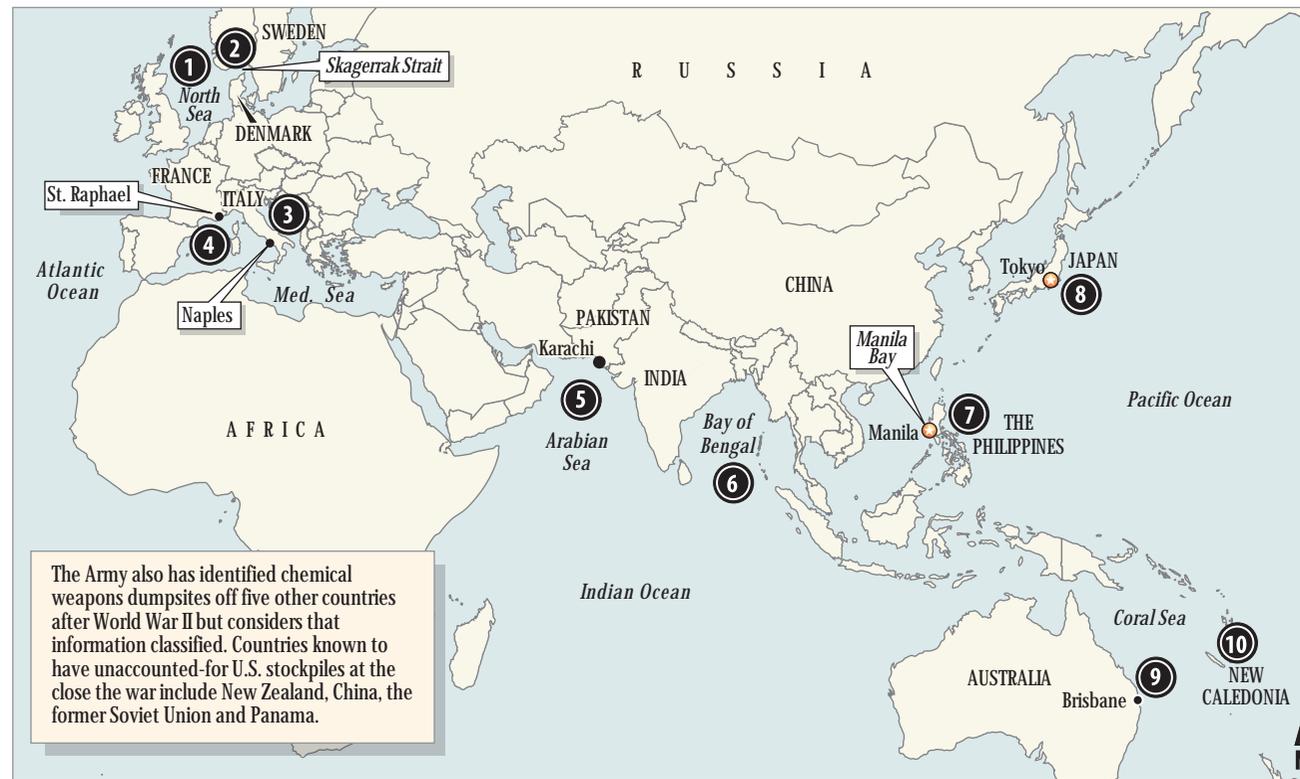
1947

June 6: An estimated 4,000 tons of unidentified chemical munitions were sunk in the James Sewell in 2,300 feet of water.

June 30: 3,000 tons of unidentified chemical munitions were sunk in the James Harrod in 2,200 feet of water.

June 30: 1,000 tons of unidentified chemical munitions were sunk in the George Hawley in 2,200 feet of water.

July 18: About 6,000 tons of unidentified chemical munitions were sunk in the Nesbit in 1,900 feet of water.



3 ITALY

- After World War II, the Army dumped an unknown quantity of phosgene and hydrogen cyanide bombs near the west coast resort island of Ischia. The material was loaded at Italian ports under Army control and dumped from Oct. 21 to Dec. 15, 1945.

■ Over two weeks in April 1946, the Army disposed of a load of U.S.-made mustard gas and Lewisite bombs off Ischia. The number of bombs and where they were dumped has never been determined. The bombs were shipped for disposal from Auera, Italy.

■ An unknown number of 100-pound mustard-filled bombs were dumped in the Mediterranean Sea off Italy after World War II.

■ A barge loaded with 100-pound mustard gas bombs, going from La Serpe to Manfredonia, either sank or listed enough to dump some of its load into Manfredonia Bay, adjacent to the Adriatic Sea on the country's east coast. A few weeks later, some of the bombs were recovered, the barge reloaded and the shipment thrown overboard 54 miles away at an unknown location.

Some of the bombs later were found floating nearby. The Army thinks some bombs settled into the harbor mud. They have never been found, to the Army's knowledge.

■ Somewhere off Naples, the Army dumped 13,000 mustard gas mortar rounds and artillery shells, as well as 438 55-gallon drums of mustard agent, during or after World War II. The Army doesn't know exactly where that dump zone is.

4 FRANCE

- An estimated 1,700 Lewisite bombs and 1,700 mustard gas bombs were dumped in the Mediterranean Sea somewhere off St. Raphael in the French Riviera from July to October 1946. The bombs were transported from France and dumped by the U.S. Army, but it's unclear whether they were of U.S. or French manufacture. The Army has no other information on this dumpsite.

5 PAKISTAN

- In 1943, unknown quantities of mustard gas bombs were thrown over the side of an unidentified ship in a mere 250 feet of water off the coast of Karachi. The Army has no other information on this site.

6 BAY OF BENGAL

- From May 10 to 12, 1945, off India, Pakistan or Bangladesh, 16,000 mustard gas bombs were dumped that had been stored at Ondal Advance Chemical Park in India during World War II.

The USS George B. Porter and USS O.B. Martin dumped the bombs. The ships were under orders to dump their loads at least 60 miles offshore in at least 5,000 feet of water. Exactly where the dumping took place is unknown.

■ The Army recorded three other dumpsites in the Bay of Bengal in May 1945, but it is unclear whether they are one or separate disposal sites.

Thrown overboard were 9,000 100-pound mustard gas bombs; 2,400 500-pound phosgene gas bombs; 8,700 1000-pound phosgene bombs; and 2,500 1,000-pound cyanogen chloride bombs. Also tossed overboard were 608 55-gallon drums of mustard agent, 2,600 1-ton containers of mustard agent and 883 1-ton containers of Lewisite.

7 THE PHILIPPINES

- An unknown number of 100-pound mustard gas bombs were dumped in Manila Bay from the USS Tilly in December 1941. The bombs had been stored at Fort William McKinley in the Philippines and dumped by order of the Army's Ordnance Department. The exact location is unknown. They haven't been found to this day, to the Army's knowledge. The average depth of Manila Bay is a mere 55 feet and the bay is 125 feet at its deepest.

■ About 1,000 pounds of white phosphorous shells of unknown caliber were dumped with six 1-ton containers of chlorine in Mariveles Bay in 1942. Japan invaded the country at the close of 1941, so the weapons might have been dumped to keep them from falling into enemy hands. Mariveles Bay, at the southern tip of Bataan, is also shallow and has long been dredged for oysters.

■ The U.S. ship Robert Lesley dumped an unknown number of leaking mustard gas bombs near Asuncion in the Philippines in October 1945. The Army has no other information.

8 JAPAN

As was done in Germany, captured Japanese chemical munitions were dumped off its coast after World War II. The Army also sent several shipments from U.S. West Coast bases for disposal off the Japanese coast.

The Japanese government has designated eight areas off the coast as chemical sea dumps by either the Japanese or U.S. military. At least 52 people have been injured in at least 11 incidents at one dumpsite alone over the past 50 years.

Known U.S. dumpsites include:

■ 3,200 tons of unspecified chemical agent, probably part of a captured Japanese stockpile, off the Japanese coast. The Army has no further information.

■ One 150-pound chlorine cylinder was dumped off the S.S. Eugene Skinner on March 6, 1946, while en route from Washington state to Yokohama, Japan. It is off Japan's coast.

■ More than 1 million Japanese chemical smoke candles were dumped at sea by the Army in 1946. And 191,000 cans of imitation mustard gas also were dumped.

■ The Army dumped at least 3,200 tons of presumably captured mustard and Lewisite warfare agents at sea from May 8 to Nov. 30, 1946. The Army has no further information.

9 AUSTRALIA

■ The Army emptied its chemical weapon depot near Brisbane in 1945 and dumped it all a scant 20 miles off the island of Cape Moreton in a mere 600 feet of water.

Over a three-month span, the Army threw overboard at least 8,000 tons of mustard gas containers, 8,000 tons of Lewisite containers, 8,000 tons of artillery shells filled with unidentified chemical warfare agents and 6,400 tons of unidentified toxic "projectiles."

On Jan. 19, 1970, an Australian fishing trawler pulled up a 1-ton container of mustard gas in 400 feet of water. No one was hurt. Another 1-ton container washed ashore a few years later.

On Aug. 25, 1983, two men on a fishing trawler snagged a partially full 1-ton container of mustard gas off Cape Moreton. No one was injured. The Australian government posted the area on nautical charts as a hazard to mariners.

10 NEW CALEDONIA

■ In September 1945, more than 4,200 tons of unidentified "toxic artillery ammunition" was taken from Guadalcanal in the hold of the S.S. Louis A. Sengteller and dumped at sea somewhere near Noumea, New Caledonia.

Sources: *Off-Shore Disposal of Chemical Agents and Weapons Conducted by the United States, 2001*, by Army officials at Aberdeen Proving Ground; *Chemical Weapons Movement History Compilation, 1987*, by the Office of the Program Manager for Chemical Munitions; *Sea Dumping in Australia: Historical and Contemporary Aspects*, Australian Dept. of Defence and Dept. of Environment and Heritage, 2003.