During World War II Nazi forces began dumping chemical and conventional weapons in the ocean to avoid devastation by enemy aerial bombings. Following the Nazi Party’s unconditional surrender in May 1945, the Allied powers continued with this practice to dispose of German arsenals. Munitions from WWII still pollute German coastal waters, mainly the result of large-scale weapons-dumping between 1945 and 1948. According to Germany’s Program on Underwater Munitions, eight dumpsites in the North and Baltic Seas contain 1.6 million metric tons of aerial mines, bombs, shells and unexploded ordnance (UXO). Of these, roughly 14 percent, or 230,000 tons, are chemical munitions.

Since 1947, hundreds of Danish fishermen have been injured by mustard gas munitions mixed in with their catches. In 2005, three fishermen caught a bomb in their nets and were killed when it exploded on the vessel. Danish sailor and fisherman Lorenz Marquardt pulled a 500-kg (1,102-lb) bomb onto his boat alongside his catch in April 2013. In Germany’s Usedom North region in 2012, two female tourists from Saxony and Saxony-Anhalt became victims of a phosphorous flame (which had leaked from incendiary bombs), leaving them with second- and third-degree burns. This was the 12th incident reported in the region since 1990.

In addition to injuries, underwater contamination has slowed offshore construction of wind farms and pipelines. Boskalis Hirdes, a German company specializing in underwater construction, was hired to install wind turbines off the German coast. While undertaking the project, Boskalis Hirdes’ technical director, Jan Köbel, shared that they were laying cable on one specific route where they expected to find 50 items of UXO but instead discovered 2,000.

According to Köbel, because the ammunition is unstable, controlled detonations in situ are often the only safe option for disposal. These detonations, however, have severe detrimental effects on marine wildlife. Environmental organizations like Naturschutzbund Deutschland have “issued demands for legal guidelines” on clearance of underwater UXO and explosive remnants of war. Köbel said that such guidelines would be helpful. Although the German government has yet to perform clearance, the Program on Underwater Munitions focuses on technical research, reporting and documentation, and monitoring and mapping in order to fully understand the contamination’s extent.

~ Dan Braun, CISR staff

Endnotes