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## ENVIRONMENTAL TOXICITY OF CWA RESIDUES IN THE BALTIC SEA

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### ABSTRACT

As a result of the disarmament of Germany after World War II, 65,000 tonnes of chemical munitions were dumped in the Baltic Sea. Approximately 13,000 tonnes was made up by active chemical warfare agents (CWAs) of which 11,000 tonnes were dumped in the Bornholm Basin east of Bornholm. This paper is the first scientific study to address the ecotoxicity of compounds actually present in the Bornholm dumpsite by obtaining novel acute ecotoxicity data. EC50 values were successfully obtained for six CWAs from acute tests using *Vibrio fischeri* (Microtox®). The three most toxic compounds were  $\alpha$ -chloroacetophenone, 1,4,5-oxadithiepane and thiodiglycolic acid having EC50 values of 0.0112, 1.70 and 22.5 mg/L, respectively. The compounds presented in this study are mainly CWA.



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