

# Invitation

## Appeal against covering of submarine U-864

Global Mercury Scandal Action Group and has been developed to make attention to the highly dangerous covering alternative, which the Norwegian authorities now consider, as a solution for U-864. We want to make national and international pressure on the government. This appeal can be used for media and politicians in countries around the North Sea, which will be affected by a major mercury leakage in the future.

### **APPEAL: STOP COVERING U-864!**

- Coverage of 67000 kilograms of mercury represents a future environmental disaster on a global scale.
- The biggest environmental crime in modern times, future contamination and irresponsibility.
- The government should be brought to court for environmental crime, and pollution for hundreds of years, related to destruction of the marine environment in the North Sea seabed.
- The government's zero emission target is guaranteed to be broken by covering the wreck.

1. The mercury must be removed and taken out of the environment.
2. The seabed must be suction-cleaned, and removed of environmental poisons.
3. U-864 must be raised to the surface.

- The Norwegian Coastal Administration cannot guarantee that covering the wreck will prevent mercury leakage.
- We requires the government to reject the covering option, presented by the Norwegian Coastal Administration.

- We requires that Norway's authorities act in accordance with the Minamata Convention on Mercury and the OSPAR Convention.

- We require the government to instruct the Norwegian Coastal Administration to choose suppliers that can ensure that the mercury is taken out of the marine environment and treated safely.

**We require the Norwegian Coastal Administration to select suppliers who perform the tasks listed below, which are natural in connection with environmental handling of U-864:**

- Survey status of the keel and quantity of mercury stored. Evaluate salvage by use of solid hull parts or removal of mercury from the U-864 keel.
- Suction cleaning under the submarine to remove mercury sediments, in addition to the area around the submarine (approx. 30000 square meters).
- Collection and cleaning of sludge and separation of mercury on a suitable

barge.

- Get control of air tanks, torpedoes, PCB oil and uranium oxide, probably stored in U-864.
- To raise the wreck to the surface may cause loss of a few kilogram of mercury, but that is a small volume in the big context.

**Our proposal is the best for the environment and health, in the long-term**

- In addition, it will ensure that our rich fishery resources and aquaculture in the North Sea seabed is not exposed to a huge amount of mercury. We want to avoid a new Minamata crisis.
- Norway is a front-runner of the world's offshore technology, and we have all the equipment and expertise needed within the country borders.
- Prime Minister Erna Solberg is focusing on plastic pollution in the ocean, but what about 67,000 kilogram of mercury?

**U-864 must be raised because:**

- The long-term effects of 67 tons of metallic mercury are disastrous.
- Mercury is converted to methyl mercury by decomposition in the environment, and migrates into the food chain. Shellfish and fish will over time absorb mercury, which will increase higher in the food chain.
- Methyl mercury has no lower limit regarding what is harmful for the human body. Almost 100% of the methyl mercury in food is absorbed in the body, and separates very slowly (50% reduction about 70 days).
- Mercury in blood has 50% reduction time about 2 months, while mercury in some parts of the brain has 50% reduction time about 15-25 years.

**Covering is no warranty**

- Covering of the wreck will not give any security against leakage over a long time period.
- For example, shifts in the seabed caused by earthquakes or slides etc., can damage the cover solution.
- A 3 meter layer on the top of the wreck will not ensure that the mercury remains stable, and does not leak out from the covered area. A possible collapse of the hull will lead to proliferation and further leakage of mercury, which is now safely stored in the U-864 keel.
- If uranium oxide is stored in the submarine, there will also be a danger of leakage over time.
- Uranium oxide is in some cases stored in lead containers. This may explain that radioactivity is not measured from the submarine per. today. Uranium oxide has 50% reduction time 700 million years.
- TNT and other explosives can make the cover break and cause massive contamination of the marine environment.

**To raise the wreck to the surface is the best solution.**

- U-864 can be lifted by crane and possibly buoyancy technique. Ref: submarine K-141 Kursk (18100 tons) was raised from 108 meters.
- U-864 is located at 150 meters. (Type IXD-2, a total of 1804 tons or 1/10

of Kursk)

- Norwegian Coastal Administration stated in 2003 that the hull parts are in good condition. The metal in the hull is extremely solid.
- The seabed around the two main wreck parts must be suction-cleaned and the material must be cleaned and transported to a suitable disposal, to extract existing mercury in the sediments. The risk of losing bottles on the seabed is less harmful than if everything should be left. The seabed can then be covered with clean substances.

**Conclusion:**

To raise U-864 is the only solution to secure the environment and future generations against leakage of a large mercury emission that will be in the environment for hundreds of years and pollute the North Sea seabed.

**Environmental organisations signed the petition:**

Neptune Network

Green Warriors of Norway

**ISDE Italy (International Society of doctors for environment)**