

# Features - Seaworthy

## Danger: Zinc Chromate is Still Around

Recently, onboard a MWV, a Senior Sailor passed by a civilian contractor, covered in a yellow powder, walking off the ship. He immediately went to the scene and discovered that zinc chromate had been removed from a bulkhead utilising air tools. An emergency clear ship occurred and the area was cleaned, using proper PPE.

Personnel need to be aware of the health implications associated with zinc chromate if found during maintenance. Zinc chromate dust has the potential to cause short-term health effects such as skin irritation, rashes, ulcers and irritation of the eyes, nose and throat. The National Occupational and Safety Commission (NOHSC) determined that there is sufficient evidence to establish a casual association between human exposure to these substances and the development of cancer. Zinc chromate, as a dry film, is inert and presents no risk if it stays that way. It's only when it is disturbed by sanding, grinding and welding activities that it presents a health risk. Before maintenance work of a compartment or piece of machinery, first consult the ship's paint register, which indicates

areas of zinc chromate coverage. Areas not recorded in the register are to be tested for zinc chromate, using test kits, prior to any sanding, grinding and welding work that may generate paint dust or smoke. If you are unsure of an area, consider several small scratch tests of the area to possibly uncover the distinctive yellow paint. If a patch of zinc chromate is discovered, all personnel should leave the immediate area and close the compartment down. Warn all personnel and the immediate vicinity, and then inform the OOD of the potential contamination area. Any work involving the potential for removing zinc chromate should be conducted in accordance with the Australian standard for removal of lead-based paints (AS 4361.2 – 1998 and Technical Directive 34/05 Rev 1), since the methods of dealing with zinc chromate and leaded paints are the same. For most jobs requiring small areas of zinc chromate to be removed, paint stripper (used in accordance with its MSDS) will be effective without generating dust. The FIMA, or the BOHSCO of your home base, will also have/hold established procedures for dealing with zinc chromate.