



Hexavalent Chromium Bulletin



- ◆ Background
- ◆ Hazards
- ◆ OSHA Standards
- ◆ Minimizing Exposure
- ◆ Website information
- ◆ "Prevent Events" – tear off page



Background



- ◆ **Cr(VI) present in stainless steel, electroplating, some paints, corrosion inhibitors in cooling water systems**
- ◆ **Overexposure incidents from welding stainless steel: 2 in yr 2003, 4 in yr 2005, 1 in yr 2006, and 2 in yr 2007**



Hazards and Minimizing Exposures



- ◆ All Cr(VI) compounds potential carcinogens
- ◆ OSHA Standards – in 2006, PEL reduced from 52 to 5 $\mu\text{g}/\text{m}^3$ air
- ◆ Section on minimizing exposures during welding, torch cutting, burning of Cr(Vi) materials
- ◆ Website information – OSHA & NIOSH



Prevent Events Page



Management:

- What training have we provided our workers on working with hexavalent chromium-containing materials?
- Do we have written procedures for handling materials that contain Cr(VI) and chromium-containing wastes at our facilities?
- Have we made available to our workforce the proper respiratory, welding and cutting, exhaust extraction, and monitoring equipment?
- What have we done to meet the more stringent OSHA PEL during tasks such as welding and cutting of materials that contain Cr(VI) compounds?
- Do we have legacy water recirculation-type cooling systems that may contain residual solutions of Cr(VI)-containing compounds and that will undergo D&D?



Prevent Events Page



Supervisors and Workers:

- ◆ What type of respiratory gear and clothing should we wear?
- ◆ Will someone be monitoring the air space where we will be working?
- ◆ Will there be local exhaust ventilation?
- ◆ Are we using fume-extraction welding or cutting equipment?
- ◆ Should an airline respirator be used instead of an air-purifying fume respirator?



S&H Bulletins and Summaries



**HS-11 Worker S&H Policy and
HS-30 Corporate Safety Analysis**

<http://www.hss.energy.gov>

Inside HSS

Office of Health and Safety (HS-10)

- **Safety Bulletins**

Corporate Safety Analysis (HS-30)

- **Safety Alerts**

- **Office of Analysis**

 - **Operating Experience Summaries**



Some S&H Bulletins



- ◆ Compressed Gas Cylinder Safety
- ◆ Beryllium Awareness
- ◆ Preventing Eye Injuries
- ◆ Gas Buildup in Drums
- ◆ Natural Gas Line Breaks
- ◆ Hexavalent Chromium
- ◆ Nitrogen Asphyxiation in Confined Spaces
- ◆ Asbestos Awareness
- ◆ Working Safely with Acids
- ◆ Safe Management of Mercury
- ◆ Good Practices for Handling Nanomaterials