



Safety Alert

From the International Association of Drilling Contractors

ALERT 04 – 45

DANGERS OF FOAM SEALANT

WHAT HAPPENED:

Recently while performing hot work operations an employee suffered exposure to a substance that caused severe irritation to his eyes, nose and lungs. Upon investigation of this incident, and as a result of information contained within the medical diagnosis after treatment, it was determined that the employee was likely to have been exposed to hydrogen cyanide. It is suspected that the exposure occurred as the employee performed hot work on metal that had previously been coated with a foam sealant.

WHAT CAUSED IT:

Although the foam sealant had been scrapped off the metal prior to the start of the hot work, some residue remained, thus allowing a gaseous discharge during the burning process. In review of the MSDS supplied by the manufacture it was discovered that when foam sealant is burned, it can give off trace amounts of hydrogen cyanide. Hydrogen cyanide is toxic to the body at high concentrations of 110 ppm or greater. In lesser concentrations, this chemical can cause irritation of the mucus membranes, throat, eyes and lungs.

CORRECTIVE ACTIONS: To address this incident, this company issued the following directives to rig personnel:

As always, it is vital that we are aware of the dangers of our environment when performing work.

- The individual should **ALWAYS** consult the MSDS of all chemicals that arrive, and are in use onboard your facility.
- The individual should **NEVER** perform work in the presence of a chemical unless you are familiar with its potential effects, and fully understand all of the recommended precautions for use.
- All foam sealant should be completely removed from metal by means of buffing, prior to burning or welding operations.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

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