Health Hazard Alert
Coal Processing Chemicals

Background

On January 9 and February 1, 2014, chemicals used at coal processing plants were spilled resulting in contamination of local rivers. There are several chemicals that can be used at coal processing plants. Examples include 4-methylcyclohexane methanol (MCHM), propylene glycol phenyl ether (PPH), dipropylene glycol phenyl ether (DiPPH), and polypropylene glycol.

Potential Health Effects from Exposure

Health effects for many of these chemicals are not completely known, but this category of chemicals, commonly called volatile organic compounds, have similar health effects. Such health effects include skin irritation from direct contact with the chemical, upper respiratory and eye irritation when exposed to vapors, and nausea and vomiting when ingested.

MSHA Requirements for Protecting Miners

Under MSHA’s Hazard Communication Standard (HCS) at 30 C.F.R. Part 47, operators are required to identify the hazardous chemicals used on mine property, including those used at coal processing plants. Operators must also ensure miners are aware of the chemicals used at coal processing plants and specific information about those chemicals. Such information must include the hazards, and proper use, storage, and disposal. In addition:

Operators must have a material safety data sheet (MSDS) available for each hazardous chemical.

Operators must ensure that all containers are labelled and that the labels include the chemical identity, appropriate hazard warnings, and the name and contact information of the responsible party who can provide additional information.

Operators must train miners on the hazards of each hazardous chemical, the labelling system, and appropriate protective measures miners must take to avoid exposures and adverse health effects.

Under 30 C.F.R § 77.1710, for any substance that may cause damage or present a hazard to the skin or eyes, operators must ensure miners wear suitable protective clothing which includes faceshields and/or eye protection, body coverings, gloves, and boots.

Although MSHA does not have exposure limits for many of the coal processing chemicals, including those listed above, many of these chemicals are considered hazardous and are covered by MSHA’s HCS.