

ACME CHEMICAL CO. OCCUPATIONAL HYGIENE

Ashley Tranello

WORKSITE ANALYSIS

- Personnel protective equipment needs to be updated to meet current OSHA requirements
- failed to keep out fumes 1,2-dichloroethane.
- No personal health information in workers files
- Biological monitoring needs improvement

PERSONAL PROTECTIVE GEAR

- Respirator masks need to be updated
- Ear plugs should now be included in protective gear – avoid long term hearing loss



BIOLOGICAL MONITORING (MEDICAL TESTS)

- Urine and blood sample test's should be carried out before an employee is hired at Acme AND routinely in order to accurately assess any abnormal levels of toxins present
- Currently Acme only tests employees when hazards occur

OCCUPATIONAL DERMATOSIS

- 2-Thiopheneacetyl chloride and Glycolide, 2-Thiopheneacetyl chloride, thionyl chloride used in Acme chemical process have caused the potential to cause chronic contact eczema
- Perhaps substitutions for these chemicals can be made

FUGITIVE EMISSIONS

- 1,2-dichloroethane and other fumes were detected in the site wide analysis
- New ventilation should be installed

PSYCHOLOGICAL AND PHYSIOLOGICAL STRESSORS AT ACME

- Spend more time improving ergonomic hazards
- Pay more attention to repetitive motion disorders (ex: chronic back problems), and stress or emotional issues workers may face on the job
- Possible long term effects from physiological and psychological stressors- hypertension, heart disease, ulcers, asthma, mental instabilities.

SOLUTIONS

- Improve internal communications
- More Flexible Management Style
- Company Team Building Activities



- Happy workers means higher productivity, less mistakes that could be hazardous to employee health and the environment
- Increased efficiency = better turnout for Acme

IMPROVING OCCUPATIONAL RECORD KEEPING

- Should go beyond information provided by the Materials Safety Data Sheet and should include:
 - A detailed explanation of each workers job operation
 - Personal health status information
 - Duration of exposure to chemicals

This can help make possible links between chronic disease and occupational exposure for a worker in the future.

 Substituting the more hazardous chemicals with less harmful ones or not using them at all can help reduce waste and improve efficiency.

