

Inspector Safety

Introduction

Field inspections involve a certain degree of risk. Inspections of wastewater treatment plants, manufacturing plants, service stations, and laboratories are each associated with various hazards. Safe field inspections depend on the recognition, evaluation, and control of hazards. However, it is possible to reduce the risk associated with these hazards, through the use of monitoring or testing equipment, personal protective equipment and employee training.

Cal/OSHA Regulations

Unified Program Agencies (UPA) should comply with the Cal/OSHA regulations concerning the hazards to which their inspectors may be exposed.

Cal/OSHA regulations incorporate sound industrial hygiene principles and safety procedures that will help field inspectors minimize the risks in performing their duties. The regulations most relevant to UPA inspectors include the following:

Injury and Illness Prevention Programs
Section 3203

Personal Protection Equipment
Sections 3380 through 3385

Respiratory Protection - Section 5144
(Regulated Carcinogens
Section 5200 through 5220)

Hearing Conservation
Sections 5095 through 5100

Ladders - Section 3276

Guardrails - Section 3209

Elevated Locations - Section 3210

Personal Fall Protection - Section 3299

Hazard Communication - Section 5194

Permit-required Confined Spaces –
Section 5157

Flammable Liquids, Gases, & Vapors
Sections 5415 through 5420

Cal/OSHA Training Requirements

Specialized health and safety training is required for personnel involved in activities at hazardous waste sites, performing emergency response of a hazardous materials release, and specialized toxics inspections like asbestos, lead, and beryllium.

Section 5192 requires employees who are potentially exposed to hazardous substances and health hazards receive 40 hours of instruction in the hazards present, use of personal protective equipment, safe work practices, use of engineering controls, and medical surveillance requirements. Employees who perform specific limited tasks are required to receive 24 hours of instruction.

Cal/OSHA Recordkeeping

Cal/OSHA regulations require agency employers to maintain completed records concerning all of the training and medical monitoring provided, and any other information concerning the overall health and safety program.

Personal Safety

All inspectors should be required to attend an agency-sponsored First Aid/CPR class taught by a certified instructor. (i.e., American Red Cross) Additionally, inspector's should periodically take driver safety training. Basic personal protective equipment includes:

- Hard Hat
- Foot Protection
- Vision and Hearing Protection
- Respirator
- First Aid Kit
- Protective Clothing and Gloves

Heat Disorders and Health Effects

Inspectors should be aware of the potential heat disorders, the primary signs and symptoms, and the treatment for:

- Heat Stroke
- Heat Exhaustion
- Heat Cramps
- Heat Collapse
- Heat Rashes
- Heat Fatigue

Outdoor Places

Inspectors should avoid potential heat illness when inspecting outdoor areas by using shade to cool off and drinking plenty of water.

Five Hazard Categories to Understand

- Chemical
- Fire and Explosion
- Radiological
- Biological
- Physical

Chemical Hazards

Chemical may be solids, liquids, or gaseous. The health effects of chemical exposures may be either chronic or acute. Exposure may be direct or indirect. Reactions may be immediate or require long periods of time to manifest. Gather information, plan ahead, and provide inspectors with the correct personal protective equipment and caution against all hazards before entering a potentially dangerous area.

Fire and Explosion

Fire or explosions may result from chemical reactions such as nitric acid and wood, sodium and water, aluminum powder and iron oxide. Combustion needs three things to take place – heat, fuel, and an ignition source (cigarettes, camera, flashlights, and cellular phones).

Radiological Hazards

Radiation sources may present external or internal danger. Some common sources are medical equipment,

radioactive wastes from medical facilities, and X-ray equipment. Highly radioactive sources will often have an obvious means of identification.

Biological Hazards

Biological hazards consist of micro and macro-biological sources. Microbiological sources include viruses, bacteria, and parasites. Employees bring bacteria and disease into a central location. Inspectors should be particularly cautious around food and water sources, rest rooms and washing facilities. Macro-biological sources may cause harm from bites or stings from dogs and insects.

Physical Hazards

Physical hazards include things that cut or crush you and things that you might trip over or fall into or slip on. They also include extremely high or low temperatures, poor lighting and excessive noise, and bulky clothing.

Inspectors Should Expect the Unexpected

- Be ready to deal with confrontational people
- Look out for dogs and other critters
- Always have an escape plan
- Look for warning lights and signs
- Look out for rotating equipment – conveyor belts, pumps, compressors, and chains
- Avoid walking hazards – black ice, entering a dark room after being in the bright sunshine, wet or oily surfaces
- Look out for electrical hazards – high-voltage lines, transformers, extension cords
- Always consider a container hazardous until proven safe
- Avoid touching equipment (ask facility staff to open drums)