Safety Meeting
Protective Equipment

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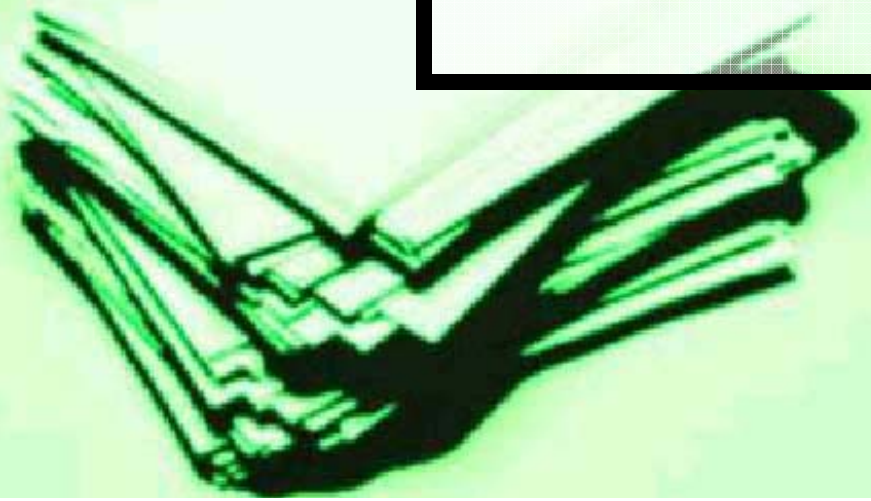

Types of Protective Equipment

- **Hard Hats** - should be worn by all workers when there is a danger of flying, falling, and moving objects.
- **Safety Boots** - with metal toe-caps protect feet of the worker who handles heavy loads or who works around moving equipment. Protects feet from falling or rolling objects, sharp objects, molten metal, hot surfaces, and wet slippery surfaces.
- **Goggles** - protect eyes from chemical splashes, dust or flying particles, molten metal, acids or caustic liquids, chemical gases or vapors, potentially injurious light radiation or a combination of these.
- **Gloves** - protect hands from cuts, chemical exposure, burns, cuts, electrical shock, and absorption of chemicals are examples of hazards associated with arm and hand injuries .
- **Masks** -protect against throat irritation and prevent ingestion of dangerous chemicals or vapors.
- **Vests** - are brightly colored to prevent people or machinery from not seeing an individual on a job site.
- **Coveralls** – are flame retardant and protect the skin from exposure to dangerous chemicals.
- **Earplugs** - Exposure to high noise levels can cause hearing loss or impairment.

Pipeline Accidents

Pipeline Accidents occur for 2 reasons:

1. Pipeline failure or rupture
2. Lack of Safety Training for Employees

- **Bellingham, Washington, 1999 –**
  pipeline rupture released 250,000 gallons of gasoline into Whatcom Creek. The gas ignited, caused 3 deaths and substantial property & environmental damage.
  Cause**:** Investigators found indications of previous external damage that may have weakened the pipeline near the rupture and the pipeline operators continued to operate the pipeline after the rupture.
  Solution: RSPA ordered the pipeline company to install an automatic valve just downstream of the rupture location so that the volume of gasoline would be limited in the event of a future pipeline rupture.

- **Mounds View, Minnesota, 1986 –** gasoline spewed from a pipeline and flowed down a city street before igniting and seriously burning three people, 2 of which later died.
  Cause: the pipeline operator could not promptly stop the release of gasoline.
  Solution: recommend that the RSPA speed up requirements for rapid shutdown methods for pipelines in urban and environmentally sensitive areas.

- **Fork Shoals, South Carolina, 1996 –**
  nearly 1 million gallons of fuel oil were released into the Reedy River when a corroded section of pipeline ruptured. The controller mistakenly shut down a pump station, failed to recognize his mistake and continued to operate the pipeline and pump fuel oil through the ruptured section of pipe.

Organizations that Monitor Pipe Line Safety:

-RSPA (Research and Special Programs Administration) They are the Federal agency that regulates the movement of hazardous materials by all modes of transportation, including pipelines.

-NTSB (National Transportation and Safety Board)

REMEMBER!!!

OSHA interprets its general personal protective equipment standard, and requires employers to provide and to pay for personal protective equipment required by the company for the worker to do his or her job safely and in compliance with OSHA standards.

Using personal protective equipment requires hazard awareness and training on the part of the user. Employees must be aware that the equipment alone does not eliminate the hazard. If the equipment fails, exposure will occur.

Pipeline safety is more than inspecting pipelines: it involves regulation, technology, information, state government partnerships, damage prevention, communication, and public education.