

CONSTRUCTION SAFETY PLAN EXAMPLE

FURNACE COLD REPAIR

Furnace Cold Repair -- Background

Furnace rebuilds occur about once every 10 to 12 years.

Four phases during a 13 week period: demolition, transition, rebuild, heat-up.

About 200 contract workers from eight different trades involved.

Two, 10 hour shifts, six days/week

Concerns/Hazards:

High level of activity in a relatively small area.

Short time frame to complete the work

Workers unfamiliar with plant safety requirements

Maintaining production on second line during rebuild

Safety awareness of construction hazards for both COMPANY employees and contractors

Conditions change daily in construction area

Demolition Work Hazards

Material Handling & Storage Issues

Housekeeping

Fall Protection

Controls Measures:

Written Safety, Health and Industrial Hygiene Plan – HFT Contractor

- Hazards Assessment – Four Phases
- Engineering, Administrative and PPE Controls Used – Four Phases

Communications/Training:

Four Types of Training:

Construction Orientation Training

Everyone entering the construction zone is required to attend (COMPANY employees and contractors)

Topics covered:

- Access Control
- Incident Reporting
- Rolling Stock/Traffic Safety
- Process Safety Considerations
- Hazard Communications
- Hazardous/Non-hazardous Waste Handling
- PPE Requirements
- Occupational Health Issues
- Emergency Procedures
- Construction Hazard Awareness (Four phases)
- Behavioral Accident Prevention Process (BAPP) data --At risk behaviors from the previous cold repair projects

Task Specific Training:

Fork Trucks, Respirators, Confined Space, etc.

Daily Safety Toolbox Meetings – Contractor Trades

- Injury Review
- BAPP Observation Review

BAPP Observer Training – COMPANY Observers

Four COMPANY Employees – Experienced observers trained on Construction Critical Behavior Inventory (CBIs)

Eight hours of training to become familiar with construction BAPP Process, CBIs, and the work site

CBIs are based upon past cold repair experience – data back as far as 1997

CBI General Categories

PPE (Fall Protection, Eye/Face, Respirators, Hand, Foot, Hearing, etc)
Walking/Working Surfaces (Housekeeping, Ladders, Floor Openings, Slip/Trip Hazards)
Tools/Equipment/Vehicles
Body Posture (Line of Fire, Lifting & Bending, Pinch Points)
Procedures (LOTO, Hot Work, Confined Spaces)
Imminent Danger

Each BAPP observer was asked to do 8 observations per shift

All BAPP observation data given to COMPANY Construction Manager and Contractor Management

Imminent Danger – initiated immediate corrective action through the contractor safety representative on the shift

Feedback Provided to Construction Trades:

Construction Trade Supervisor Discuss at Daily Tool Box Meetings

- Safe/At Risks observations comment report and tabular reports discussed at daily toolbox meetings
- The trade was requested to provide feedback: reason for the at risk and corrective actions

BAPP data and injuries were reviewed at the daily construction activity meetings.

Contractor Injury Summary for 13 Week Project

- Two OSHA Recordable Cases (one involved 2 days lost time)
- 23 First Aid Cases