

## JUNE SAFETY MEETING

### OUTLINE

#### SAFETY CONTROL PERMITS

#### I. 1981 SAFETY PROGRAM - KEY ELEMENTS

- A. Job Planning - Permits are done to formalize the job planning step. The objective of permit writing is to minimize risk to the individuals performing the work through hazard avoidance or personnel protective equipment.
- B. Teamwork - Everyone involved in performing work must work together to observe for hazards and unusual conditions which can have a safety impact on the work and/or process. Personnel performing the work should challenge working conditions until they believe the risks associated with the work are minimal.  
*INPUT FROM ALL INVOLVED*  
Changing conditions may require a reevaluation of the work and possibly a new permit. Again all personnel involved with the work must be involved in risk assessment.
- C. Communication - Method is very important. Challenges to working conditions must be constructive. Communications which put the other party on the defensive tend to minimize 2-way communications. A brief discussion of safety requirements specified on permits will help to define job restrictions and initiate questions by personnel performing the work.  
  
Positive safety reminders should always accompany job assignments and work authorization.  
  
At best, permits are formalized communication, tools which state that the equipment has been properly prepared, that any restrictions noted on the permit must be adhered to and that the work may begin. Make them work to our advantage.
- D. Training - For the greatest net effect, training must be done in the field as well as in the classroom. Deviations noted in the field are a supervisor's most important clue to training needs. Timeliness is critical. Training should be done when the deviation is noted. Positive methods should be used and can include Interaction Management methods.

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I. 1981 SAFETY PROGRAM - KEY ELEMENTS (continued)

- E. Follow-Up - Our overall success can only be judged by the actions of the personnel doing the work through observation. If our follow-up actions are inadequate, short-cuts which have increased risk can become common practice. Follow-up actions can also help to define inadequacies in our standard work methods. Your efforts can help to improve our work methods whenever inadequacies are noted.

*SHORTCUTS BECOME STANDARD*

II. THE SAFETY CONTROL PERMIT SYSTEM

- A. Purpose - To minimize risk to people and property through the proper equipment preparation, specification of work methods and protective equipment, and finally, the authorization for work to begin.
- B. Who Must Get One - Contractors must always obtain permits while working in the plant operating areas and during off hours work only in the contractors fab area. Mechanics working in departments other than their own or on utilities equipment must have permits. All entries into equipment must be done under authority of a permit. Operating personnel do not need permits for the conduct of their normal job duties. They are however responsible to conduct their work with the same precautions which would typically be required if a permit were written.
- C. Safe Work Permit - This permit is for work which does not require spark making tools or equipment entry.
- D. Hot Work Permit - Required for all spark and heat producing equipment. Special precautions are indicated in the procedure, pages 5 through 7.
- E. Entry Permit - Vessel entry checksheet and permit required on the jobsite (posted) prior to entry authorization.
1. Vessel to be entered must be monitored on a routine basis (15 to 30 minutes) to check for contamination.
  2. Personnel performing "manhole watch" duties must be given detailed instructions regarding their outside observer duties. These include:
    - a) Their duty station while personnel are in a vessel is at the manhole observing personnel inside.
    - b) A radio must be provided to the observer in order that he/she has the ability to immediately summon help if need be.

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II. THE SAFETY CONTROL PERMIT SYSTEM (continued)

2. c) If the work area becomes contaminated with gases or other leak problems develop, the observer must make sure the personnel inside the vessel come out and go to a safe area.
- d) An extra set of entry equipment must be provided for the outside observer in case he/she must enter to render emergency assistance. (This could include an air mask, protective clothing, safety harness, and the like as specified on the permit or checksheet).
- e) Wherever air movers are used as exhausters on vessels to keep contamination levels (VCM in reactors) low enough to eliminate need for air masks, outside observers must notify personnel inside if contamination levels exceed safe levels and require the use of air masks or to come out.
3. In the future, nitrogen for blanketing and emergency air supply will require respirators which are pressure demand operated with emergency egress bottles for escape. This equipment will then be required on all equipment for which nitrogen can enter through the plant air system.
4. Electrical equipment used inside a vessel must be of the low voltage type (36 volts or less) or protected by a ground fault circuit interrupter.
5. Only cylinders which contain breathing quality air can be taken inside a confined space. Under no circumstances are oxygen, acetylene or ~~other~~ compressed gases to be taken into a confined space.
6. Oxy-acetylene hoses must be removed from the confined space during breaks or other periods of non-work. Welding machines must also be shutdown during these periods. - *TAKE OUT LEADS*
7. Arc welding leads which are to be taken into a vessel or confined space must be checked for damaged insulation prior to entry. If damage is found, the insulation must be repaired prior to use.
8. Samples of contaminant (build-up) on vessel surfaces must be sampled for contaminant level and the results entered on the permit or checksheet prior to entry authorization.

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