MANAGEMENT OF CHANGE AT SMALL FACILITIES

INTRODUCTION

PRC.1.0.2 discusses Management of Change (MOC). It recommends that an MOC system appropriate to the facility be put in place. However, small facilities do not have the resources of large ones. As a result, several modifications to the usual MOC approach must be made.

POSITION

Modify the standard MOC system as described in PRC.1.0.2 as necessary to fit the needs and resources of a small facility.

DISCUSSION

Small plants usually have one or more of the following characteristics:

- Few engineers are on staff. Usually, they fulfill all of the typical engineering needs. They are project engineers, process engineers, operations engineers and maintenance engineers usually all rolled into one person. Moreover, many times these personnel have administrative jobs as well.
- Operating staffs are small. There are no intermediate layers of supervision in the operating units and maintenance staffs. Sometimes the operations supervisors function as maintenance planners, using outside contractors to perform maintenance work.
- There is no dedicated process safety or loss prevention technical staff.
- There is little time for formal documentation of procedures or for routine paperwork.
- Everyone works long hours. Everyone pitches in to get the job done. Jobs are shared.
- Plant modifications are usually done by outside engineering firms.

Even with these apparent limitations, effectively managing change at these facilities is possible. It does take a very efficient and creative strategy to implement a formal MOC system in a plant where formal programs have been considered too costly or wasteful.

Smaller facilities should consider modifying the MOC system as follows. These concepts are presented using the same organization as in PRC.1.0.2 but with much of the explanation and options omitted to meet the needs of the lean organization. This leaves the essential features of and ideas for managing change. The explanation and background contained in PRC.1.0.2 may prove useful when combined with the advice contained in this section.

Suggested Modifications

Designing an MOC System for a Small Facility

Do not spend a lot of time putting together a team to design the MOC system. Several existing resources can be used to guide the development of a small MOC program. For example, use the essential features of OSHA's Process Safety Management (PSM) regulation as a guideline to create the MOC system. The system should:

- Be in written form;
- Cover changes to process chemicals, technology, equipment and procedures;
- Address the technical basis of each change;
- Evaluate the safety and health considerations associated with each change;
- Train operators, maintenance workers and contractors whose jobs could be affected by the change before they interact with the changed process;
- If the change is temporary, explicitly state a time limit for allowing the change to exist without further review;
- Update operating procedures, drawings and other process safety information affected by the change.

Developing an MOC System for a Small Facility

One effective way to minimize the amount of effort required to develop a written MOC procedure is to adopt the informal total quality "slogan" of "don't reinvent the wheel." Find an existing well-written MOC procedure for a small facility and revise/adapt it as needed. Consider using the examples listed in PRC.1.0.2.3. Or ask a similar facility for a copy of their written MOC program and pattern procedures after theirs. However, be careful not to mindlessly adopt a procedure that is inappropriate for a specific plant culture (e.g., too complicated).

If a suitable example can not be found, create a simple MOC form that combines the actual MOC procedure along with the means intended to document the MOC review. Then every time an MOC review is done, the procedure is readily available on the form that is to be used to document the review. If creating a form from scratch, consider including the following elements:

- Name of person making request;
- Date of request;
- Process/unit name and related equipment number;
- Reason for the proposed change;
- Brief description of the proposed change;
- Potential safety and health considerations associated with the proposed change;
- Names of people who need to review the change;
- Special conditions or requirements placed upon the proposed change by the reviewers Authorization/date for proceeding with the proposed change;
- Routing slip or multiple copies to personnel responsible for training and updating procedures and drawings.

The procedure used to explain the use of the form should list job titles (e.g., Area Supervisor, Department Head) and not the specific names of people who hold these positions. Consider putting the procedure in flowchart format. Examples of procedures are given in PRC.1.0.2.2.

Installing an MOC System at a Small Facility

Try a brief field test of the MOC procedure on a single operation in the facility to work out the bugs. Solicit opinions of all plant disciplines and revise the procedure as necessary. Hold a short (e.g., 1 h) training seminar to educate all plant personnel with the new procedure. Provide the procedure to contractors in bid packages so they will know their obligations.

Operating an MOC System at a Small Facility

In all likelihood, the administration of the MOC system will fall to someone who already has plenty to do. Even though the day-to-day operation of the system may be orchestrated by area supervision or department heads, consider having an overall “owner” of the system. This person will likely be the one who created the initial written program. He or she should be available as a resource to plant personnel in case there are questions or disputes concerning the MOC procedures. Often, this person will also be the plant PSM “guru.”

Auditing an MOC System at a Small Facility

Periodically, someone should perform an audit of the MOC system as detailed in PRC.1.0.2.4. The plant PSM or MOC “guru” normally does this. Audits can be performed at random, but it is often convenient to do them concurrently with a process hazard analysis that is being performed on the unit/operation. Review the work order file quarterly or annually to see whether changes that were not considered by the MOC system are being made. MOC auditors should also seek the opinions of the work force to see whether they believe the MOC system is being used and whether it is effective and not burdensome.