Signs, Signals, and Barriers

MSC-PRAC-30479

Revision 0

Effective Date: December 9, 2009

Topic: Safety and Health
PURPOSE

This practice identifies a key aspect of the Safety and Health (S&H) program and establishes the requirements for the consistent and proper use of signs, signals, and temporary barricades.

SCOPE

This practice includes the following major sections:

- General Requirements
- Accident Prevention Tags
- Safety Signs and Barricades

The requirements of this practice are consistent with the requirements published in the Mission Support Contract (MSC) Safety and Health virtual manual.

APPLICATION

This practice applies to MSA construction personnel.

NOTE: Employee failure to heed safety signs, tags, or barriers will result in appropriate disciplinary action.

Refer to practice MSC-PRAC-30492, Safety Color Coding for Marking Physical Hazards and Piping for appropriate color coding requirements.

GENERAL REQUIREMENTS

The source requirement of 29CFR1926.200 refers to ANSI standards Z53.1-1967, Z35.1-1968, and Z35.2-1968. These ANSI standards were updated and replaced by six standards that form the ANSI Z535 series which has been adopted for this practice. Implementation of these requirements will occur as new or replacement safety tags, signs and barriers are needed. Existing signs, tags and tapes in use or already manufactured that use the older format may continue to be used. Records generated during the performance of this activity are to be included in the Construction Work Package and will be managed in accordance with MSC-PRAC-30374, Construction Work Package and MSC-PRAC-30376, Construction Document Control.

ACCIDENT PREVENTION TAGS

Use accident prevention tags as a temporary means to warn employees of an existing hazard, such as defective tools or equipment. Requirements for accident prevention tags are found in ANSI Z535.5-2007, Safety Tags and Barricade Tapes (for Temporary Hazards).

Do not use accident prevention tags as a substitute for signs.
NOTE: Accident prevention tags with the message “Danger – Do Not Operate” or candy stripe tags with the message “Danger” are used only for lock and tag as a standard part of the energy control program.

SAFETY SIGNS AND BARRICADES

Requirements for safety signs and barricades are found in ANSI Z535.2-2007, Environmental and Facility Safety Signs, and Z535.5-2007, Safety Tags and Barricade Tapes (for Temporary Hazards). Refer to practice MSC-PRAC-30457, Travel Safety for requirements when establishing signs, signals, and/or barricades on or near roads or railroads.

Use of barricade tape is accompanied with signs to denote the hazard.

Construction areas are barricaded and posted “Construction Area” with a physical boundary (such as rope or fencing, where practical) to control access and warn of potential hazards.

NOTE: It is recommended that “hurricane” fencing be used for barricading outdoor areas.

Place signs in strategic and prominent locations to warn against hazards.

Remove or cover signs promptly when the hazard no longer exists. Remove accident prevention tags only after the condition that prompted their placement is resolved.

Danger signs, tags and tape are used to indicate a hazardous situation which, if not avoided, will result in death or serious injury. The signal word “DANGER” is to be limited to the most extreme situations.

Warning signs, tags and tape are used to indicate a hazardous situation which, if not avoided, could result in death or serious injury. Warning signs, tags or tape should not be used for property damage hazards unless personal injury risk appropriate to this level is also involved.

Caution signs, tags and tape are used to indicate a hazardous situation which, if not avoided, could result in minor or moderate injury. Caution signs, tags or tape used without a safety alert symbol may be used to alert against unsafe practices that can result in property damage only.
Yellow/Black Barricade Tape

This type of barricade tape serves as a caution to indicate to employees that a potential hazard exists. Employees may enter without permission from erector of this tape. This barricade tape is used for, but not limited to, the following:

- Excavation less than 1.2 meters (4 feet) in depth
- Identification of trip hazards, and low hanging objects
- Material storage on the site

Red Barricade Tape

This type of barricade tape indicates DANGER and that a potential serious hazard may be present. No employee, other than the craft assigned to work inside a RED barricade, may enter without first obtaining permission from the erector of the tape. This barricade tape is used for, but is not limited to, the following:

- Overhead work
- Live electrical components
- Scaffold under construction
- Around swing radius of equipment with a rotating superstructure

Magenta (Purple)/Yellow Tape

This barricade tape is used to indicate DANGER—RADIATION and that possible exposure may be present. This barricade tape is considered to be as an equal to red, in that no employees are allowed to enter this area without first obtaining permission from the erector of the tape. This color is representative of x-ray work being performed.

Posting and labeling for radiological hazards is conducted in accordance with MSC-5173, *MSC Radiological Control Manual*.

Barricade Erection

Construction Supervisors/Superintendents responsible for work that requires barricade tape to be erected will:

- Ensure tape is erected to enclose the specific area to be protected only. Do not block passageways unless entirely necessary. If passageways or accessways must be blocked, contact the general foreman for coordination with other crafts and/or possible alternatives.

- Ensure tape is erected in a secure and neat manner that will maintain a height of between 1020 millimeters and 1140 millimeters (40 inches and 45 inches) from the floor or ground surface.

**NOTE:** *The barricade tape is removed by the craft supervisor or craft person who erected the barricade tape.*
Floor Opening Covers

Floor opening covers are labeled, “Hole Cover – Do Not Remove,” and secured to prevent movement. Covers are 19-millimeter (3/4-inch) thick plywood at a minimum.

FORMS

None

RECORDS IDENTIFICATION

Records Capture Table

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REFERENCES

29CFR1926, Subpart G, Signs, Signals, and Barricades
ANSI Z535.2-2007, Environmental and Facility Safety Signs
ANSI Z535.5-2007, Safety Tags and Barricade Tapes (for Temporary Hazards)
MSC-PRAC-30374, Construction Work Package
MSC-PRAC-30376, Construction Document Control
MSC-PRAC-30457, Travel Safety
MSC-PRAC-30492, Safety Color Coding For Marking Physical Hazards and Piping
MSC-5173, MSC Radiological Control Manual