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SUPPLEMENT

*Please note that **API** Recommended Practice 2005 is a **STEP** publication and the following language pertains to this document:*

STEP

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- To make safety, health and environmental considerations a priority in our planning, and our development of new products and processes.
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- To counsel customers, transporters and others in the safe use, transportation and disposal of our raw materials, products and waste materials.
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- To work with others to resolve problems created by handling and disposal of hazardous substances from our operations.
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- To promote these principles and practices by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of similar raw materials, petroleum products and wastes.

Service Station Safety

API RECOMMENDED PRACTICE 2005
SIXTH EDITION, SEPTEMBER 1996



Service Station Safety

Health and Environmental Affairs Department
Safety and Fire Protection Subcommittee

API RECOMMENDED PRACTICE 2005
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FOREWORD

This publication provides guidelines for the protection of personnel and property during the operation of service stations. This publication also provides information and recommendations for the employer (service station manager or designated site operator) on the basic principles of safety and fire protection. The types of service station operations covered in this publication include: full service and self service (with or without repair bays); car washes, convenience stores and food kiosks with fuel services; truck stops and quick-lubes.

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Suggested revisions are invited and should be submitted to the director of the Safety and Fire Protection Subcommittee, American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005.

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Service Station Safety

SECTION 1—GENERAL SERVICE STATION SAFETY

1.1 General

This publication provides information and recommendations for the service station (facility) manager (employer) or designated site operator (employer) on the basic principles of safety and fire protection. The types of service station operations covered in this publication include: full service and self service, with or without repair bays; car washes; convenience stores; food kiosks; and also truck stops and quick-lubes.

This publication is presented in two sections. Section 1, General Service Station Safety Measures, addresses issues common to all types of service station (facility) operations. Section 2, Service Stations With Repair Bay Operations, covers the unique concerns of service stations (facilities) with these types of operations.

Prevention of accidents and injuries can be best achieved by establishing and following safe practices and procedures applicable to the service station and work performed. Employers can reduce or eliminate accidents by training employees to recognize potential hazards and take corrective action and by establishing appropriate safe work procedures and practices.

When developing service station safety programs, consideration must be given to the type, frequency, and severity of previous incidents. This publication does not address every potential hazard of service station operations. As a guide, a few of the more frequent types of incidents that have occurred at service stations are listed below.

Fires and environmental exposures have resulted when:

- a. Spills and **overflows** are caused by customers, employees, tank truck drivers or improperly maintained fuel dispensing equipment.
- b. Flammable or combustible materials are handled and stored improperly.
- c. Engines are left running in the fueling area.
- d. Smoking is not restricted near the fueling area.
- e. Failure to guard against accidental fuel releases during fuel system repairs.
- f. Changing fuel filters on dispensers.
- g. Use of **improper/unprotected** work lights.
- h. Failure to understand **and/or** properly use fire extinguishers and spill cleanup kits.

Employee injuries have resulted from:

- a. Using hand tools, equipment and ladders improperly.
- b. Not wearing required personal protective equipment.
- c. Falling on slippery or uneven walking surfaces.
- d. Tripping on tools and equipment.

- e. Working in awkward positions.
- f. Lifting or carrying cases of motor oil, soda, beverages or other materials incorrectly.
- g. Failure to observe safe practices when working on hot radiators and other equipment or machinery.
- h. Robbery and assault.
- i. Horseplay.
- j. Electrical **shock/burns** by failing to disconnect equipment prior to maintenance or repair.
- k. Improper use of cleaning chemicals.
- l. Scraping decals from equipment or vehicles.

1.2 Emergency/Incident Response Plan and Procedures

It is important to plan for emergencies as even the safest service station could have an incident. Regulations require development of **emergency/incident** plans and procedures and employee training to implement the plans and assist in a safe and orderly emergency evacuation, if necessary. OSHA 1910.38, **Employee Emergency Plans and Fire Prevention Plans**, requires that such emergency plans be in writing (except for employers with 10 or fewer full and part-time employees).

The employer is responsible to review the service station emergency plan with each employee upon hire and whenever the employee's responsibilities change, the service station's hazards change and/or the emergency plan changes.

Examples of the types of incidents to be covered by emergency plans include, but are not limited to, the following:

- a. Fires.
- b. Spills and leaks.
- c. Robberies and other security threats.
- d. Employee and customer injuries/illnesses.
- e. Natural disasters.
- f. Civil disturbances.

Elements to be considered in emergency plans, as a minimum, include:

- a. Emergency evacuation procedures and escape routes.
- b. Procedures to account for all employees after the emergency evacuation has been completed.
- c. Emergency response, rescue and first aid.
- d. The preferred means of reporting fires, spills, releases and other emergencies.
- e. An employee alarm/warning system (automatic or manual alarm or voice).

- f. How and when to activate emergency shutdown switches and (where provided) fixed fire suppression systems.
- g. Use of fire extinguishers.
- h. Names of persons to contact for further emergency information.

1.3 Emergency Telephone Numbers

Include an emergency notification system in the emergency response plan. Prominently post emergency 24 hour telephone numbers near the telephone and on the service station's door or window so as to be viewed from outside the building. Typical emergency numbers to be posted on the door or window include, but are not limited to, fire, police and employer 24 hour emergency response, if available. Typical emergency telephone numbers to be available to employees should include the employer's and/or manager's home number, and the numbers of the fire department, police department, ambulance service and other applicable emergency responders.

Assure that all employees, including those for whom English is not a primary language, know where these numbers are posted and are familiar with the procedures and can effectively report emergencies and other incidents.

1.4 Medical and First Aid

Provide an appropriate service station employee first aid kit, which is readily accessible, regularly inspected, and replenished as necessary, so that employees can administer self help for their own personal minor injuries such as cuts, burns, and product exposures to the skin and eyes.

OSHA 29 CFR 1910.1030, *Bloodborne Pathogens*, requires that employers shall have a plan to reduce or eliminate employee exposure to bloodborne pathogens. Exposure, as it pertains to the OSHA Bloodborne Pathogens rule, is a reasonably anticipated skin, eye or mucous contact with blood, or infectious materials during performance of employees duties. This is the reason that employees should not be allowed to administer first aid to others. (Only designated persons who are trained and certified in first aid, and who have received annual training on the prevention of bloodborne pathogen disease transmission, may administer help to others.)

Injuries from chemical burns may occur in service station operations. Should battery acid, brake fluid, gasoline, or caustic solutions contact eyes or skin, flush the exposed area continuously with lukewarm, potable water for at least 15 minutes. This water may be from a drinking water fountain, potable water faucet or spigot, or approved eye wash bottle. Persons who are injured should seek immediate medical attention.

1.5 Emergency Shutdown Switches

Train employees in the purpose, location and operation of fuel dispenser emergency shut down controls. These switches

must be installed at unobstructed locations (acceptable to the authority having jurisdiction), clearly identified and immediately accessible at all times.

NFPA 30A, *Automotive and Marine Service Station Code*, requires that at attended service stations and self-service stations, emergency controls shall not be more than 100 feet from the (furthest) dispenser. At unattended self service stations, emergency controls shall be more than 20 feet but less than 100 feet from the dispensers. Local authorities may have stricter requirements for locating emergency control devices.

1.6 Fire Extinguishers and Fixed Protection Systems

When fixed protection systems are installed, educate and/or train employees upon hire and annually thereafter, so they know when and how to activate and deactivate the systems. Assure that all fixed fire protection systems are regularly inspected, tested and maintained by a qualified person, as required by local regulation. Keep records of employee education and/or training, and protection system inspection and servicing. Maintain an MSDS on file for each of the extinguishing agents used.

Fire extinguishers are essential for proper response to certain emergency situations. All portable fire extinguishers should be fully charged and in good working condition. Educate and/or train employees in incipient fire fighting and in the proper use of fire extinguishers upon hire and annually thereafter. This education and/or training must be documented and records maintained on file. Employers may utilize extinguisher training provided by their fire extinguisher supplier or service contractor.

Either the employer, company, or fire department can determine the number and type of extinguishers that are needed at the service station. Where company standards are not established, and to ensure compliance with local regulations, the employer may consult with the appropriate authority having jurisdiction regarding extinguisher selection, location, use, storage, and display.

NFPA 30A, *Automotive and Marine Service Station Code*, requires service stations to be provided with at one or more 40 B:C rated extinguishers, for use on fuel fires. Class B:C extinguishers should be located so as to be within 50 feet of each pump, dispenser, underground tank fill pipe opening, tank vent or other outdoor hazard. It is recommended that service stations with inside operations such as repair and service bays, convenience stores, quick lubes, etc. have at least one fire extinguisher available with a minimum 20 A:B:C rating for use on Class A combustible fires located within 75 feet of each lubrication bay or service room.

Locate fire extinguishers at identified, designated places so that they are readily accessible and immediately available in the event of fire. Do not block fire extinguishers by obstacles or hide them from view. Whenever an extinguisher has been