

SAUDI ARABIAN OIL COMPANY (Saudi Aramco)

GENERAL INSTRUCTION MANUAL

ISSUING ORG. FIRE PROTECTION DEPARTMENT

SUBJECT FIREFIGHTING TRAINING - COMPANY PERSONNEL

G. I. NUMBER **Approved**

1783.001

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CONTENT

This Instruction outlines the responsibilities of proponent organizations and the Fire Protection Department (FrPD) in training company personnel, excluding active Plant Emergency Response Team (PERT) or Reserve Fire Brigade (RFB) members, in the use of company owned firefighting equipment. This General Instruction (GI) includes:

1. Definitions
2. References
3. Proponent Responsibilities
4. Fire Protection Department Responsibilities
5. Reports and Record Keeping
6. Supplements
7. Approval

1.0 DEFINITIONS

- 1.1 Confined Space: Areas with limited access and egress and are usually not designed to be worked in continuously. There is usually little or no ventilation, little room for movement and limited exits and entrances.
- 1.2 Incipient Stage Firefighting Equipment: Firefighting equipment available to properly trained employees to attack the beginning stages of a fire, for example, portable extinguishers, fire blankets, hoses, etc.
- 1.3 SAP: Acronym for Systems, Application, & Production.
- 1.4 Self-Contained Breathing Apparatus (SCBA): An atmosphere-supplying respirator in which the respirable air source is carried by the wearer.

2.0 REFERENCES

- 2.1 Saudi Aramco General Instruction 1780.001, "Atmosphere-Supplying Respirators"
- 2.2 Saudi Aramco General Instruction 1781.001, "Inspection Testing, and Maintenance of Fire Protection Equipment"
- 2.3 Saudi Aramco General Instruction 1784.001, "Reserve Fire Brigades"
- 2.4 Saudi Aramco General Instruction 1785.001, "Plant Emergency Response Team (PERT)"
- 2.5 Saudi Aramco General Instruction 1787.000, "Report of Fire, Emergency, or False Alarm"
- 2.6 U. S. Department of Labor, Code of Federal Regulations (CFR) Title 29, Part 1910, "Occupational Safety & Health Standards"
- 2.7 United Kingdom Home Office, Fire Precautions Act 1971
- 2.8 National Fire Protection Association, NFPA 1 "Uniform Fire Code" 2003 Edition
- 2.9 National Fire Protection Association, NFPA 101 "Life Safety Code" 2003 Edition

3.0 PROPONENT RESPONSIBILITIES

- 3.1 Supervisors whose daily operations are limited to a specific area in which fire fighting equipment and/or SCBA are permanently located, shall ensure that employees who could be expected to use this equipment are trained in the use of firefighting equipment as outlined in Supplement "1783.001-01."

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- 3.2 Proponent may request a specialized or specific training course unique to their area from the local fire control unit. Proponent is then expected to work closely with the local fire control unit to develop the course, if required.
- 3.3 Proponent organizations shall be responsible for scheduling with the Area Fire Control Unit the appropriate firefighting training for their employees as indicated in Supplement 1783.001-01. Training can be requested more often if proponent feels it is necessary or it is mandated by outside regulatory agencies. New hires, including apprentices, are to be sent for fire fighting / fire safety training within the first 6 months of employment.
- 3.4 Proponent organizations shall provide necessary transportation, housing, and restricted area access as required for their employees to attend training.
- 3.5 Proponent organization shall provide their employees with personal protective equipment (PPE), such as safety shoes, hard hats, gloves, and goggles appropriate for the training session they will attend.
- 3.6 Proponent organizations shall forecast and submit their training requirements to the Area Fire Control Unit Head on a yearly basis during September of each year.
- 3.7 Employee nominations for training from proponent organization shall come from one source such as the Department's Training Coordinator and only through the SAP "Saudi Aramco Training/Certification Program."
- 3.8 Employees nominated should be physically, mentally, and medically able to perform the mental and/or physical requirements of the firefighting training sessions.
- 3.9 Personnel assigned to non-industrial functions:
 - 3.9.1 Supervisors shall be responsible for scheduling themselves and their employees with the Area Fire Control Unit the Fire Safety Awareness course (SAP 40032412) every two years.
 - 3.9.2 Supervisors shall instruct their employees as to the location and application of incipient stage fire extinguishing equipment located within their area of responsibility. This instruction shall be included as part of the employee's orientation and should be discussed during employee safety/communication meetings.
 - 3.9.3 All employees shall receive instruction on how to report fire and emergencies using the emergency telephone number 110 and given instructions regarding evacuation routes and location of and reporting to assembly points.
- 3.10 Personnel Assigned to Industrial Facilities:
 - 3.10.1 Supervisors of Industrial Security, operations and maintenance personnel shall be responsible for scheduling with the Area Fire Control Unit the appropriate firefighting training for themselves and their employees as indicated in Supplement 1783.001-01.
 - 3.10.2 Plant Emergency Response Teams (PERT) and Reserve Fire Brigades (RFB) are required to attend training in accordance with General Instruction 1785.001 and 1784.001 respectively.
 - 3.10.3 Supervisors shall instruct their employees as to the location and application of incipient stage fire extinguishing equipment located within their area of responsibility. This instruction shall be included as part of the employee's orientation and should be discussed during employee safety/communication meetings.
 - 3.10.4 All employees shall receive instruction on how to report fire and emergencies using the emergency telephone number 110 and given instructions regarding evacuation routes and location of and reporting to assembly points.

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3.11 Employees shall:

- 3.11.1 Report all fires and emergencies in accordance with the established procedures at their work location, and as per GI-1787.000 and report to their safe assembly areas.
- 3.11.2 Attempt to extinguish the fire using available equipment and methods taught during training until the arrival of the Fire Protection Department.

NOTE: It should be emphasized that 3.11.2 actions should only be attempted if it can be achieved without undue personal risk.

4.0 FIRE PROTECTION DEPARTMENT RESPONSIBILITIES

The concerned Area Fire Control Unit shall:

- 4.1 Have the Divisional FrPD Registrar confirm acceptance of the employee's requested training course through the SAP, "Saudi Aramco Training/Certification Program" within two weeks upon receipt of the requested training.
- 4.2 Provide training for participants in the Fire Training Courses as indicated in Supplement "1783.001-01," and as required by Paragraphs 4.3, and 4.4.
- 4.3 Provide other specialized or area specific Fire Training and Emergency Response Courses that may be requested by any organization within Saudi Aramco. The FrPD will obtain a SAP course number and work closely with the proponent, if required, to develop the training course.
- 4.4 Provide required training for Plant Emergency Response Team Members (PERT) and area Reserve Fire Brigades (RFB) in accordance with General Instruction 1785.001 and 1784.001 respectively.
- 4.5 Provide qualified Fire Protection Department training instructors using Fire Protection Department equipment and designated Fire Training Ground Facilities to conduct all training.
- 4.6 Conduct the training session when the minimum number of attendees is 10 with the discretion to set policy as to maximum amount of employees allowed per training session. However, this policy must be communicated to the proponents they serve.
- 4.7 Provide all training on a fire training ground under the direction of the responsible Area Fire Control Unit. Where it is not practical to utilize designated fire training ground facilities, the concerned Fire Control Unit may be requested to conduct actual fire extinguishment training at locations convenient to operational personnel subject to the Area Fire Marshal's approval. Area Industrial Security Control Center shall be informed of any live fires conducted at suitable and safe outside training centers.

5.0 REPORTS AND RECORD KEEPING

- 5.1 Each Fire Control Unit shall maintain a copy of the participant's attendance records and all relevant information.
- 5.2 The Area Fire Marshal shall ensure that all training records are properly completed and updated in the SAP System within two weeks upon completion of the course.

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6.0 SUPPLEMENTS

6.1 The following Supplements are provided with this Instruction:

- 6.1.1 Supplement 1783.001-01, Fire Protection Department Training Courses.
- 6.1.2 Supplement 1783.001-02, Fire Protection Department Training Course Descriptions.
- 6.1.3 Supplement 1783.001-03, Fire Reporting Instructions Within Saudi Aramco.

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7.0 APPROVAL

Recommended by:

Approved by:

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Supplement 1783.001-01

Fire Protection Department Training Courses for Company Personnel

Employees	Course(s) Required Upon Employment	Duration	Frequency
NON-INDUSTRIAL EMPLOYEES			
Office employees, clerical staff, administrative staff, medical personnel, engineers, shop personnel, service personnel, hydrocarbon support personnel	SAP-40032412	4 Hours	Every (2) Years
Aviation personnel:			
Ground Crew	SAP-40005015	2 Hours	Every (2) Years
Flight Crew	SAP-40002211	4 Hours	
INDUSTRIAL EMPLOYEES			
Operations personnel, maintenance personnel, engineers, & Industrial Security	#SAP-40032856 #SAP-40000396 !SAP-40037804 *SAP-40000528	8 Hours 8 Hours 40 Hours 80 Hours	Every (2) Years

These courses can be taken during separate sessions but within one calendar year of each other.

! This optional course is currently recommended for plant foremen and above. Future policy may make this course mandatory.

* This optional specialized course prepares Saudi Aramco employees who work in and around confined spaces and are more than 10 minutes response time from the nearest fire station with special techniques of confined space rescue procedures. See course description for further details.

NOTE: Refer to Supplement 1783.001-02 for course descriptions.

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SUPPLEMENT 1783.001-02

Course Descriptions

Fire Safety Awareness – SAP – 40032412

This course provides Saudi Aramco employees with information and instruction to make them aware of the importance of basic fire prevention and how to make their work place and home fire safe. It also provides them with instruction on the use of portable fire extinguishers and involves live fire drills. Duration: 4 hours.

Aviation Fire Training – SAP – 40005015

This course in basic aircraft emergency procedures and the use of portable firefighting equipment is designed to give Saudi Aramco Aviation Department personnel a basic understanding of the various types of aircraft in the Aramco fleet and the knowledge and skills to safely and effectively operate first aid firefighting equipment when confronted with a fire at an aviation facility. Duration: 2 hours.

Aviation Flight Crew Fire Training – SAP – 40002211

This course is designed to give Saudi Aramco Aviation Department Flight Crew personnel a basic understanding of the various types of aircraft in the Aramco fleet, and the knowledge and skills to safely and effectively operate first aid firefighting equipment when confronted with a fire at an aviation facility. The course also contains information on the type of personal breathing equipment for use by the flight crew and the types of portable fire extinguishers that are carried on aircraft. Duration: 4 hours.

Industrial Fire Safety Awareness – SAP – 40032856

This course provides Saudi Aramco employees who work in an industrial setting with information and instruction to make them aware of the importance of basic fire prevention and how to make their work place and home fire safe. It also provides them with instruction on the use of portable and wheeled fire extinguishers and involves live fire drills. Duration: 8 hours.

SCBA and Confined Space Rescue Awareness – SAP – 40000396

This course is designed to provide plant operation personnel the fundamentals of confined space rescue procedures when extricating and rescuing victims from confined space situations. It provides training to enable Saudi Aramco employees to safely don and use self-contained breathing apparatus (SCBA). The course does not take into account the specialized equipment necessary for equipment intensive (technical) confined space entries and rescues. The course stresses proper and safe methods and procedures for doing confined space rescues, with minimum equipment available. The course also stresses conditions that make confined space entry unsafe for plant personnel under any circumstances. Students perform practical evolutions and exercises, while wearing SCBA, involving procedures and techniques presented during the course. Duration: 8 hours.

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SUPPLEMENT 1783.001-02 (cont'd)

Course Descriptions

Incident Command System (ICS) – SAP 40037804

Plant Foremen and above are encouraged to attend this course to obtain the strategic and tactical planning skills needed to effectively manage and control their emergency resources when they are deployed at an incident. The course stresses the necessary actions an officer must perform to manage and utilize equipment and manpower to their fullest potential at incidents. The students are fully tested through a series of “hot seat” exercises. Duration: 40 hours.

Confined Space Rescue – SAP – 40000528

This specialized course prepares Saudi Aramco employees who work in and around confined spaces and are more than 10 minutes response time from the nearest fire station with advanced techniques of confined space rescue procedures. Procedures to be used when extricating and rescuing victims from confined space situations. The course is equipment intensive and stresses the proper and safe methods and procedures for using confined space rescue equipment. Students perform practical evolutions and exercises involving the procedures and techniques presented during the course. Duration: 80 hours.

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SUPPLEMENT 1783.001-03

FIRE REPORTING INSTRUCTIONS WITHIN SAUDI ARAMCO

A. ON DISCOVERY OF A FIRE

1. IF THE FIRE ALARM HAS NOT ALREADY SOUNDED, OPERATE THE NEAREST FIRE ALARM PULL STATION.
2. ENSURE THAT, FROM A SAFE LOCATION, YOU OR SOMEONE ELSE DIALS "110" (SAUDI ARAMCO ONLY), AND REPORTS THE FIRE.
3. ATTEMPT TO EXTINGUISH THE FIRE WITH THE CORRECT TYPE OF FIRE EXTINGUISHER ONLY IF IT CAN BE DONE SAFELY AND WITHOUT PERSONAL RISK.
4. IF THE FIRE IS TOO BIG TO CONTROL, CLOSE THE DOOR OF THE AFFECTED ROOM (DO NOT LOCK IT) AND LEAVE THE BUILDING. REPORT TO YOUR SAFE ASSEMBLY AREA.

B. ON HEARING THE FIRE ALARM

1. IF YOU ARE UNSURE THAT THE FIRE HAS BEEN REPORTED; FROM A SAFE LOCATION, DIAL "110," (SAUDI ARAMCO ONLY) AND GIVE THE FOLLOWING INFORMATION:
 - A) EXACT LOCATION AND TYPE OF FIRE (IF KNOWN)
 - B) DESCRIBE THE EMERGENCY
 - C) ANY PERSONS INJURED AND TYPES OF INJURIES (IF KNOWN)
 - D) YOUR NAME, BADGE NUMBER, & TELEPHONE NUMBER
 - F) DO NOT HANG UP UNTIL TOLD TO DO SO BY THE 110 DISPATCHER
2. LEAVE THE BUILDING BY THE NEAREST AVAILABLE EXIT AND REPORT TO YOUR DESIGNATED ASSEMBLY AREA. DO NOT USE ELEVATORS.

C. GENERAL ADVICE

1. DO NOT EXTINGUISH A FLAMMABLE GAS LEAK FIRE INSTEAD, SHUT OFF THE FUEL SUPPLY.
2. DO NOT PUT YOURSELF AT RISK WHILE FOLLOWING THE ABOVE INSTRUCTION.
3. DO NOT STAY AT OR RETURN TO YOUR WORKPLACE TO COLLECT PERSONAL BELONGINGS.
4. CLOSE, BUT DO NOT LOCK, ALL OFFICE DOORS AS YOU LEAVE THE BUILDING. REPORT TO YOUR SAFE ASSEMBLY AREA.
5. DO NOT RE-ENTER THE BUILDING UNTIL YOU RECEIVE INSTRUCTIONS FROM SOMEONE IN AUTHORITY THAT IT IS SAFE TO DO SO.