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NATIONAL SAFETY INSTRUCTION

FIRE PROTECTION AREAS

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FIRE PROTECTION AREAS

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FIRE PROTECTION AREAS

1. SCOPE

This National Safety Instruction applies the principles established by the Safety Rules to achieve **Safety from the System** for personnel working in, or entering, areas protected by fixed fire protection systems.

2. DEFINITIONS

Terms printed in bold type are as defined in the Safety Rules.

3. EQUIPMENT IDENTIFICATION

Equipment on which work is to be carried out must be readily identifiable. Where necessary a means of identification must be fixed to it which will remain effective throughout the course of the work.

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4. DANGERS

The main **Dangers** to personnel from the operation of fixed fire protection systems are

- asphyxiation by the gases or chemical extinguishants used
- poisoning due to toxicity of extinguishants
- falling or striking against objects due to poor visibility after the release of extinguishants
- low temperature

5. WATER SYSTEMS

5.1 SPRINKLER SYSTEMS

Water used as an extinguishing agent from a sprinkler system does not, in itself, cause **Danger**. Such a system may generally be left in service when persons enter or work in an area protected by a sprinkler system. An occasion when such equipment must be **Isolated** is when the operation of the system could cause additional **Danger**. An example of this is when working on **Live LV Equipment** when the **Live Equipment** and the safe methods of work could be affected by impure water.

5.2 EMULSIFIED SYSTEMS

Before work commences in an area protected by a water emulsifier fire protection system the system must be **Isolated**.

6. GAS OR CHEMICAL SYSTEMS

- 6.1 The following precautions must be taken if persons are to enter or work in an area in which the operation of an automatic fire protection system, using a gas or a chemical extinguishant, could cause **Danger**
- a the automatic control of the fire protection system must be rendered inoperative and the control placed on 'Manual'. These actions must be recorded in accordance with a Local Management Instruction
 - b notice(s) indicating that the control is on 'Manual' must be fixed to the automatic/manual selector and at point(s) of access to the area
 - c precautions taken to render the automatic control inoperative must be noted on any **Safety Document** issued for work in the protected area.

Note: Automatic fire protection systems using Halon 1301 should have been installed in accordance with BS 5306, Section 5.1 'Halon 1301 Total Flooding Systems'. If the achieved concentration of Halon 1301 is not greater than 6 per cent by volume, it is not necessary to render the equipment inoperative when persons are to enter or work in the protected area.

- 6.2 Automatic control of the fire protection system can be restored after all persons have withdrawn from the area and all access doors have been **Locked**.

7. ACCESS TO AREAS FOLLOWING OPERATION OF FIRE PROTECTION SYSTEMS

- 7.1 Before persons are permitted to enter an area into which a fire protection system has been discharged, whether following a fire or accidentally, the area must be thoroughly checked and verified as safe by an appropriately qualified specialist. If the atmosphere cannot be verified as safe, and it is essential to enter the area, **Approved** breathing apparatus must be worn.