

COMMENTS TO BE RETURNED TO:
 COMPANY/PMC

FAX NO.:

FAX NO.:

BY DATE:

BY DATE:

Contractor Transmittal No.	T-DH-5578-E4-1587	Recd. Date	29 Oct 2010
Document No.	5578-E4-HSE-HU-00037	Rev. Date	27 Oct 2010
Document Title	Fire Prevention & Protection Procedure	Rev	0

COMMENTS:

By:

Signed

Date

Review Code:

- | | | |
|----------------------|---|--------------------------|
| 1. REJECTED | : REVISE AND SUBMIT | <input type="checkbox"/> |
| 2. COMMENTS AS NOTED | : WORK MAY PROCEED SUBJECT TO COMPLIANCE WITH AND INCORPORATION OF COMMENTS | <input type="checkbox"/> |
| 3. NO COMMENTS | : WORK MAY PROCEED | <input type="checkbox"/> |
| 4. INFORMATION ONLY. | : ACCEPTED FOR INFORMATION ONLY | <input type="checkbox"/> |

No. of Pages attached to this form :

FIRE PREVENTION & PROTECTION PROCEDURE

AGREEMENT NO. : 09-5578-E-4

PROJECT NAME : Ruwais Refinery Expansion Project
EPC-4: Tankage & Associated
Interconnecting Piping

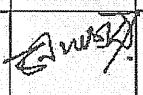



COMPANY : Abu Dhabi Oil Refining Company (TAKREER)

PMC : Mott MacDonald Ltd.

CONTRACTOR : Daewoo Engineering & Construction Co., Ltd.

	RUWAIS REFINERY EXPANSION PROJECT		
TAKREER	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING		DAEWOO E&C
	AGREEMENT No. 09-5578-E-4		
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 2 / 13

This page is a record of all revisions of this document. All previous issues are hereby superseded and are to be destroyed.

Proprietary Information: This document contains proprietary information and may not be partly or wholly reproduced without prior written permission from TAKREER and/or Daewoo Engineering & Construction Co., Ltd.						DOC. CLASS	T/1
						DIST. CODE	18/19
0	27 Oct 2010	Issued For Construction	D. Bhandari	A. Mesquita	DY Kim	M Heo	
A	16 August 10	For Review and Comment	C Wardman	DY Kim	J Brand	M Heo	
REV	DATE	REASON FOR ISSUE	PREP	CHKD	REVD	APP'D	COMPANY
SIGNED (Initials)							

NOTES:

- (a) Revisions are denoted by a vertical line placed in the right-hand margin against the revised text.
- (b) PREP = Prepared by, CHKD = Checked by, REVD = Reviewed by, APP'D = Approved by.
- (c) In case of conflict between any requirements stipulated in this document with the contractual requirements, the contractual requirements shall prevail.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING		
	AGREEMENT No. 09-5578-E-4		
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 4 / 13

CONTENTS

1.	INTRODUCTION.....	5
	1.1 Purpose.....	5
	1.2 Scope.....	5
2.	RESPONSIBILITIES.....	5
	2.1 Project Manager.....	5
	2.2 HSE Manager.....	5
	2.3 Section Managers.....	5
	2.4 Fire Warden.....	5
3.	REQUIREMENTS.....	6
4.	FIRE PREVENTION POLICY.....	6
5.	FIRE PREVENTION GUIDELINES.....	6
	5.1 Smoking Control.....	7
	5.2 Electrical Wiring and Appliances.....	7
	5.3 Flammable Liquids.....	7
6.	WASTE CONTAINERS.....	8
	6.1 Combustible Materials.....	8
	6.2 Separate Containers.....	8
7.	COMPRESSED GASES.....	9
8.	FIRE REPORTING.....	9
9.	FIRE FIGHTING EQUIPMENT.....	10
	9.1 Hoses.....	10
	9.2 Monitors.....	10
	9.3 Portable Fire Extinguishers.....	10
	9.4 Carbon Dioxide Extinguisher.....	10
	9.5 Dry Powder Extinguisher.....	10
	9.6 Foam Extinguisher.....	10
	9.7 Fire Hydrant.....	11
10.	TRAINING & DRILL.....	11
11.	INSPECTIONS AND MAINTENANCE.....	12
12.	EMERGENCY FIRE PROCEDURES.....	12
13.	FIRE EXTINGUISHER REQUIREMENT SUMMARY.....	13

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING		
	AGREEMENT No. 09-5578-E-4		
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 5 / 13

1. INTRODUCTION

1.1 Purpose

The purpose of this procedure is to ensure all work undertaken on the Project is carried out in a manner that will limit the risk of personal injury, damage or incident involving fire.

1.2 Scope

This procedure covers all work carried out at the work site and the accommodation and catering facilities, which may create a risk of fire.

All such work will be carried out in strict adherence to this procedure.

2. RESPONSIBILITIES

2.1 Project Manager

- Has the final responsibility to ensure that the project shall meet the criteria mentioned herein this procedure to prevent the fire.

2.2 HSE Manager

- Should ensure that there should be adequate number of firefighting equipment at site and offices and accommodation areas to meet any kind of fire emergency.
- Plan, inspect and maintain all fire fighting equipments periodically.
- Provide fire awareness training to all employees.

2.3 Section Managers

- Shall make sure that all jobs with the possible source of ignition must be controlled as per the safe work procedures and should have adequate number of fire fighting equipments available to carry out the task.
- Apply for fire awareness training for person and ensure that the person attend the training.

Fire prevention is the responsibility of DEC, its Subcontractors and all of their individual employees on site.

All fire related incidents shall be reported to DEC HSE Department, who shall advise Client accordingly.

2.4 Fire Warden

- Fire wardens are responsible to provide assistance to occupants of the building and Security personnel during emergency evacuations as well as practice drills.
- Fire wardens and their alternates are responsible for coordinating the orderly evacuation of their floor/section of the building as follows:
 - Wear a visible and can easily recognized clothes/vest during emergency and drills
 - Ensure all persons are evacuated from the floor of the building; assist persons with disabilities and visitors as necessary (pre-planning may be necessary to ensure persons with disabilities have assistance or are taken to a pre-designated safe area to be determined in consultation with Security);

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 6 / 13

- En-route to the designated exit, if there is no immediate danger to personal safety, ensure all windows and doors are closed, laboratory equipment (such as heating elements) is switched off, valuables secured, etc.;
- Proceed to designated exit and remain outside the door to discourage re-entry to the building until the “all clear” is given by Security personnel.

3. REQUIREMENTS

Each project must include in its Safety Management Program applicable procedures relating to fire prevention and protection. These procedures must include such topics as:

- Fire reporting
- Fire equipment and extinguishers
- Control of smoking
- Warning signs
- Flammable and combustible liquids and gases - storage, dispensing, and use
- Waste removal
- Welding and cutting procedures

All employees must follow the approved Site Emergency Response Procedure for their personnel to follow when fire is discovered. The procedure covers fire reporting, personnel evacuation, safeguarding high value materials, first-aid, fire fighting procedures, accidents involving hazardous materials, and measures to correct fire hazards when reported. DEC and Clients requirements and Host country statutory regulations are to be incorporated into all such procedures.

4. FIRE PREVENTION POLICY

- All DEC Supervisors and HSE personnel must be trained in fire prevention practices as outlined in this procedure, and in proper use of fire extinguishing equipment.
- DEC must ensure that all fire extinguishers in their area are adequate for recognized hazards, accessible to their personnel and in proper working order.
- During routine fire inspections, if a hazard is noted, the responsible Supervisor shall take necessary action to immediately remove the hazard.
- Subcontractors must advise DEC of hazardous situations that cannot be corrected by their personnel.

5. FIRE PREVENTION GUIDELINES

5.1 Smoking Control

- Smoking is prohibited in offices. Smoking will also be restricted on the work site, a designated smoking area will be provided by DEC as per approval by the Client.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 7 / 13

- Smoking or open flame is prohibited within 15 meters of paint storage or paint work areas, gasoline storage, or similar flammable liquids or gases, fuel dispensing vehicles or refueling operations, garages or similar occupancies, or activities in a highly hazardous and inflammable environment.
- DEC shall provide metal containers in all buildings and areas in which smoking is permitted. An ashtray and fire extinguisher will be provided in each designated smoking area. Warning signs will be placed at all entrances to buildings or areas where smoking is prohibited.

5.2 Electrical Wiring and Appliances

All electrical extension cords shall be equipped with non-conductive plugs. Cords must not be spliced or draped over nails, metal objects, or rafters. The use of extension cords by means of multiple outlet plugs from single outlets is prohibited. Electrical extension cords are not used as permanent wiring in facilities.

Non-essential electrical equipment and appliances shall be disconnected or turned off when not in use. All electrical service removals, alterations, and equipment installations will only be performed by a qualified electrician. Intrinsically safe tools or lighting facilities will be used in an area where there is a possibility of flammable gas exposures.

5.3 Flammable Liquids

- Flammable liquids shall be handled and stored in accordance with Clients requirements, Hazardous Chemicals and Substances Procedure (5578-E4-HSE-HU-00040) and Fuel Storage & Handling Procedure (5578-E4-HSE-HU-00023).
- Sources of ignition, including smoking, are prohibited in all hazardous areas as defined by Clients and project HSE plan.
- Flammable liquids will not be used for any cleaning purposes. Only non-toxic, non-flammable products will be used.
- Plastic and glass containers are strictly prohibited for storing flammable liquids.
- All containers used for storing flammable liquids shall be of an approved safety type and suitably identified and labeled in 50mm height letters. Such containers shall be equipped with a flame arrester and pressure relief device.
- Supplies of flammable liquids for work areas will be stored in cabinets approved by Clients, Hazardous Chemicals and Substances Procedure (5578-E4-HSE-HU-00040) and Fuel Storage Handling Procedure (5578-E4-HSE-HU-00023). They must be adequately ventilated both top and bottom and at a safe distance from heating elements and other flammable materials. Bulk supplies of more than 200 liter will be stored in an area allocated by Client. The storage area will be furnished by DEC with bund walls capable of containing total 110% of fuel stored. All small (20 liters or less) containers shall be tightly sealed when stored.
- All bulk dispensing containers for flammable liquids shall be grounded and provided with a grounding strap for the containers being filled from the dispenser. Drums used for dispensing flammable liquids shall be equipped with approved faucets and approved automatic relief valves.
- All electrical installations and equipment located at storage areas will be in accordance with the relevant standards.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 8 / 13

- Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Approved metal safety cans shall be used for handling flammable liquids in quantities greater than 4 liters. For quantities of 4 liters or less, only metal containers shall be used.
- All bulk quantities of flammable liquids shall be stored in a separate building or located at least 15 meters from any other building.
- When storing materials, clear aisle space is to be maintained as approach lanes to firefighting equipment, sprinkler control valves, fuse boxes, and switch panels. Materials in warehouses shall not be piled higher than 500mm below sprinkler heads or electric light fixtures.
- All flammable liquids in unauthorized containers (commercial or otherwise) and all flammable liquids transferred from bulk supplies will be placed in safety- approved containers before being brought to work areas. Whenever the seal is broken on issue stock and the original container no longer meets safety criteria, the entire contents will be transferred to approved containers.
- Flammable liquids in work areas shall be kept in approved properly labeled metal safety cans. Dispensing cans for gasoline, thinner and similar highly flammable liquids shall be of an approved design.
- No damaged or leaking containers shall be permitted in work or storage areas. Containers of flammable liquids shall be regularly inspected for leakage by DEC. Flammable liquids will not be permitted to enter any drainage system on the Project.

6. WASTE CONTAINERS

6.1 Combustible Materials

Sufficient metal waste containers with metal lids will be provided for each effected area (mechanical workshops, painting areas etc) for the safe disposal of flammable waste and rags. The same type of container will be used for storing clean rags and waste for use in these areas.

6.2 Separate Containers

Metal containers, plainly marked with name of contents, will be used for the separate disposal of oil and paint soaked rags, waste paper shavings, and other flammable materials. At the end of each day, or shift, these containers will be emptied or removed by concern group to a safe location outside the building, for collection by the Waste Management personnel.

Only approved metal containers will be used as waste bin.

Waste containers will be placed in locations which permit full use of fire aisles. Waste materials must not be accumulated in areas such as warehouses, welding shops and paint spray rooms, where flammable liquids or gases are stored or used.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 9 / 13

7. COMPRESSED GASES

- Cylinders containing compressed or liquefied gas shall not be dropped or exposed to impact. They will be isolated from open flames, heat and direct sunlight. Valves and connections shall be kept free of mineral oil and greases, and separated from welding leads, spark producing equipment and electrical leads.
- Cylinders containing oxygen, acetylene, chlorine, sulphur dioxide and liquefied petroleum or fuel will be kept upright and secured to prevent damage.
- Storage of oxygen, acetylene, fuel gas and LPG cylinders, whether empty or full shall be separated by 6 meters or a one-hour fire wall.
- The valves of all compressed gas cylinders will be closed and protective caps installed prior to movement unless (where in use) cylinders are secured to an operating unit or welding cart. Valves will be shut off at the cylinder and not at the regulator or dispensing tip. Suitable valve actuator keys will be attached to all cylinders when in use.
- Gas from cylinders must be used through a pressure-reducing regulator. Never allow oxygen to enter regulators suddenly. Mixing gases in cylinders is prohibited. Do not use cylinders with improperly operating valves or defective regulators. Broken or damaged regulators shall be removed from service immediately.
- Hoses will be properly secured with hose clamps at each end (wire shall not be acceptable) and will be checked regularly for deterioration. Leaks or suspected leaks of gas or vapors shall be immediately reported to DEC HSE Department. All oxygen and acetylene gas cylinders will be fitted with functional flash back arresters located at both ends the cylinder regulators and the torch.

8. FIRE REPORTING

All fires shall be reported immediately to client.

The person reporting the fire shall supply the following information:

- Location and area
- Unit or building name or number
- Reporters name
- Status of fire (if known)
- Ensure the person receiving your call repeats your message back to you for accuracy.

If you have no access to a telephone and you witness a fire you must (1) initiate fire alarm by breaking the glass at the nearest call point (2) report the emergency to any HSE member.

If possible alert HSE Department using emergency channel XXX (e.g. use your own radio, locate the nearest DEC Field Supervisor) otherwise raise alarm.

All personnel are expected to attempt to immediately extinguish all small controllable fires discovered insofar as safety permits. Fires out of control must be reported immediately and persons discovering fire shall spread the alarm by all previously stated means.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING		
	AGREEMENT No. 09-5578-E-4		
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 10 / 13

Client must be notified of all fires immediately. DEC shall provide a written report within 24 hours, detailing the causes, conditions, damage, and cost estimates, corrective actions taken, and firefighting equipment used.

All firefighting equipment used must be replaced or recharged immediately after the fire is suppressed. Personnel shall not put themselves at risk while reporting or suppressing fires.

9. FIRE FIGHTING EQUIPMENT

DEC and its Subcontractor will provide equipment adequate to comply with all requirements as stated in this procedure. 9 kg, or larger, A: B: C dry chemical powder type fire extinguishers are preferred for field use.

9.1 Hoses

Hoses are required to carry water from fire mains or from fire vehicles, to the scene of a fire.

Regular inspection and testing is required and repairs and/or replacements ordered as necessary by the HSE Department.

9.2 Monitors

Monitors are used to discharge either foam or water. They can be on a fixed base, mounted on a mobile unit or on a fixed tower. Monitors that are fixed can be operated locally or remotely.

All monitors are to be inspected regularly by the HSE Department and checked for security and operability.

9.3 Portable Fire Extinguishers

All portable fire extinguishers must be maintained in a fully charged and operable condition and kept in their designated places at all times except during use.

Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of hazard which would affect their use.

9.4 Carbon Dioxide Extinguisher

For use on fires involving electrical equipment where avoidance of damage by the extinguishant is required.

Operation- Hold upright pulls out locking pin and squeeze discharge lever. Direct discharge at base of fire and continue after fire has gone out. Apply in sweeping action from side to side. Not very effective in windy conditions because CO₂ is dissipated.

CO₂ is potentially hazardous in small closed rooms because of the risk of asphyxiation.

9.5 Dry Powder Extinguisher

For use on Class A, B and C fires where contamination is not a problem.

Operation- Remove locking pin and press down on release lever. Remove nozzle from holster and squeeze to operate. Aim nozzle at the base of the fire and make sweeping movements from side to side with the nozzle across the fire.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 11 / 13

9.6 Foam Extinguisher

This is most effective on fires of flammable liquids when it is not splashed into the burning liquid. For best results on flammable liquid fires, it should be sprayed upon the inside of the wall of the container just above the burning surface.

Fire Extinguisher Color Codes

Water	Red
Dry Powder	Blue
Foam	Cream
CO ₂ (carbon Dioxide)	Black

Any fire extinguisher that has been discharged must be reported to the safety officer who will arrange for recharging. Any fire extinguisher with broken seals must be checked to determine if it needs re-charging.

9.7 Fire Hydrant

Where permanent fire hydrants are not installed in project site offices and accommodation or a suitable fire truck is not available, DEC will install of fire hydrants according to the following;

- The distance of the fire hydrants will vary depending on the length of the hoses and the extent of the property to be protected. Each fire hydrants hose shall meet each other when fully extended.
- The water pressure of the hydrant shall be at least 350 kPa (50 lbf/in²) (this pressure varies according to location and depends on various factors including the size and location of the attached water main). This hose can be further attached to a fire engine to boost its pressure.
- Personnel involved in the firefighting should wear appropriate Personal Protective Equipment.
- Only trained personnel will be allowed to use/operate the fire hose and fire hydrants, while a bystander can be a big help in providing assistance to fire fighter in the case of fire by helping him to position the hose and to support the main fire fighter (nozzle holder) to give extra weight and instability.
- The number and specification of the fire hydrants shall be in accordance with local regulation or Clients requirements.

10. TRAINING & DRILL

• Training

A Fire Fighting crew will be organized by DEC and will be trained at frequent and regular basis.

All Project personnel will be briefed on fire extinguishers and other equipment use and reporting procedures during the new employee orientation and at frequent tool box safety meetings. Hands on training are invaluable for those expected to use fire extinguishers. Emergency procedures and telephone numbers will be posted at key locations.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 12 / 13

- **Drill**

It is important to train site personnel, site fire fighters (site personnel trained in fire fighting) and the ERT on how to deal with emergency especially in the case of fire by which people's knowledge and efficiency can be enhanced by formal instruction and practical training.

Drills shall be conducted in regular basis. In addition to the practicing of drills; assessment shall be done after every drill to know drills lapses and improve their response to the kind of problems encountered in a real emergency.

11. INSPECTIONS AND MAINTENANCE

- All fire suppression equipment (extinguishers, hoses, etc.) are inspected by the DEC safety representative on a monthly basis to identify conditions that may prevent emergency use of the appliance. All deficiencies shall be corrected immediately.
- Each fire extinguisher and other fire suppression appliance(s) shall have an inspection tag fixed to the fire extinguisher.
- After the regular monthly inspection, DEC HSE department will keep a consolidated record of the location of all extinguishers, maintenance received, and other conditions relative to the condition and maintenance of fire appliances.

12. EMERGENCY FIRE PROCEDURES

The Fire Fighting Team and Client shall be informed whenever a fire, gas leak or serious injury occurs. The following information shall be provided:

- Type of emergency.
- Work area.
- Your name.
- Status of fire, leak or injury.

Personnel are expected to assist in one of the following ways where applicable:

- Attempt to extinguish any small controllable fire insofar as safety permits.
- Spread the alarm by all available means.
- Assist the injured where possible.
- Avoid creating a panic.
- Shut off all spark producing equipment in use.

When the fire or gas release alarm sounds the following procedures will be followed:

- All vehicles and mobile equipment traffic must stop and have engines turned off.
- All clearance certificates, confined space entry, and hot work permits are automatically suspended until the all clear has sounded or otherwise directed by DEC.

TAKREER	RUWAIS REFINERY EXPANSION PROJECT	DAEWOO E&C	
	EPC-4 TANKAGE AND ASSOCIATED INTERCONNECTING PIPING	AGREEMENT No. 09-5578-E-4	
PROJECT No. 5578	Doc. No. 5578-E4-HSE-HU-00037	Rev. 0	Page 13 / 13

- Personnel shall stop all work, turn off all equipment, and walk to their designated muster point.
- Work shall not resume until the all clear signal sounds.

13. FIRE EXTINGUISHER REQUIREMENT SUMMARY

The following chart lists those areas where fire suppression equipment must be located, minimum number, size, and type of extinguisher for each individual operation or location:

HAZARDOUS CONDITION	NO.	SIZE AND TYPE	COVERAGE AT THE LOCATION
Hot Work Permit or	1	9.0kg A: B: C Dry	At each hot operations or welding, burning, chemical work location anywhere
Other Permit work	1	9.0kg A: B: C Dry	As required by permit
Indoor employee work	1	9.0kg A: B: C	Inside every space/occupancy (Buildings, within office section, trailers, etc.) Single buildings, outside of stair wells, etc.
Combustible materials	1 Per 280 Sq. mtr	9.0 kg A:B:C or firewater outlets	Within 20 meters of all - outdoor properly equipped storage locations.
Flammable liquid			
HAZARDOUS CONDITION	NO.	SIZE AND TYPE	COVERAGE LOCATION
Storage - inside	2	9.0kg A: B: C	Between 10m to 15m from storage
Outside bulk storage Compressed gas storage	2 1	9.0kg A:B:C 25.0kg A:B:C	Between 10m to 15m from storage
Fuel truck or dispensing	1	9.0kg A: B: C	On truck and posted in larger all fuelling areas
Workshops	2	9.0kg A: B: C	Visible and accessible
Computer rooms	2	5.0 kg CO2	Visible and accessible
All cranes, heavy equipment, trucks, etc.	1	4.5kg A: B: C	As In cab of equipment or easily accessible.
Warehouse areas		9.0kg A: B: C for every 100 Sq. mtr	Location marked visible and accessible within 15m of class B material & 20m of class A.
Generators compressors, portable welding	1	9.0kg A: B: C	Attached to machine or machines nearby
Waste disposal areas		1-2	9.0kg A: B: C Between 10m to 15m away.

***NOTE:** Do not use water on electrical fires.