WASC 1853

RO Explosuier Dir

Rules & Safety Procedures





WASC

1823

Explosives Division Research and Development Centre Waltham Abbey

MR AC BIRD ENGINEERING

RULES AND SAFETY PROCEDURES

Mr P Honey



Explosives Division
Research and Development Centre
Waltham Abbey

RULES AND SAFETY PROCEDURES

IN CASE OF EMERGENCY

DIAL 222

STATE ASSISTANCE REQUIRED AND YOUR LOCATION

	CONTENTS	PAGE
INTRODUCTION		1
SECTION 1 -	STATUTORY REGULATIONS	
SAFETY POLIC	YY Y	2
HEALTH AND S	SAFETY AT WORK, ETC, ACT 1974	4
EXPLOSIVES A	ACT 1875 - GENERAL RULES - SPECIAL RULES	6 9
SECTION 2 -	BASIC RULES	
1 CONDUCT	AND DISCIPLINE	12-14
1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11	Entering or Leaving the Establishment Forbidden Articles Contraband Areas Government Property Smoking Food Obedience to Instructions Conduct Barrier Boards, etc Keys Security of Buildings Exits of Buildings Anything Unusual Establishment Cleanliness	
2 ACCIDEN	TS AND EMERGENCIES	14-15
2.2	Emergencies Accidents Accidents Resulting in Death or Serious Injury	
3 TRAFFIC	RULES	16-17
3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11	Traffic Regulations Speed Limit Driving Licence Lighting Loading Parking Electric Towing Units Fork Lift Trucks Riding on Vehicles Seat Belts Priority for Explosives	

		CONTENTS (contd)	PAGE
10	PERSON	AL SAFETY EQUIPMENT	21
	10.5	Safety Spectacles, Goggles and Visors	
11	-	ERS AND CONTAINERS OF COMPRESSED OR IFIED GASES	22
	11.3 11.4 11.5 11.6 11.7 11.8 11.9	Sites for Cylinders etc - Fire Risks Oil and Grease Gauges Gauges Leaks Storage Empty Cylinders etc Partially used Cylinders etc Acetylene Cylinders	
12	WORKIN	G OUTSIDE NORMAL HOURS	22
13	SOLVEN	TS	23
	13.3	Use and Storage of Solvents Pouring of Solvents Choice of Solvents Use of Eye Protection	
14	PORTAB	LE ELECTRICAL EQUIPMENT	23
	14.1 14.2	Inspection Low Voltage Equipment Preferred	
15	ABRASI	VE WHEELS	23
16	ASBEST	os	23
17	REPAIR	OF TANKS, PITS AND CONFINED SPACES	23

					C	ONTENTS (contd)	PAGE
23	EMEF	RGEN	ICY RE	PAIRS			29
24	WASI	CE A	ND SA	LVAGE			29-30
	24.1 24.2 24.3 24.4 24.5 24.6 24.7 24.8 24.1 24.1	2 3 3 5 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7	Waste Contar Waste Uncont Uncont Mercur Secur: Aeroso Drums Dispos	and Surminated Solvent caminated aminated Cells ity Classol Cans	pluwas s d W d M	Waste Metal Fied Waste Paper ge Quantities of Waste	
25	TRAN	ISPO	RT OF	EXPLOSI	VES	3	30
	25.1 25.2 25.3 25.4		Packag in T Moveme Haza	ging and Transport	La t kpl		
Appen				S230A		Danger Building Clearance	
Appen Appen			Form Form			Certificate Magazine Stock Sheet Request for Decontamination	31 32
Appen	dix	D:	Form	SS2		or Disposal of Equipment and Stores Certificate of Decontamination	33
Appen	dix	E:	Form	SS3		or Disposal Request for Use of a Fire, Internal Combustion Engine	34
Appen	dix	F:	Form	WA/S554	_	or Electrical Equipment Request for Movement	35 36

INTRODUCTION

This booklet is issued so that all employees of the Research and Development Centre, Waltham Abbey, together with Ministry of Defence personnel employed at the Site, and Contractors employees who work frequently on Site have a copy of the various Rules and Procedures under which the Centre can operate in a Legal and Safe manner. It is arranged in three Sections:-

Section 1 - Statutory Regulations

Section 2 - Basic Rules

Section 3 - Operational Rules and Procedures.

Section 1 includes:

- (a) the Centre's Safety Policy Statement, as required to be issued to all employees. This is based on the Company Safety Policy given in the "Employees Handbook".
- (b) A note to remind both Management and Employees of their main obligations under the Health and Safety at Work, etc Act 1974.
- (c) The "General Rules" and "Special Rules" made under the Explosives Act 1875. The Former apply to all licensed Explosives Factory, and poster size copies must be displayed in all major explosive buildings. They are couched in late-Victorian English. The "Special Rules" are those additional rules needed to govern conduct at the particular factory Site. They are approved, signed and sealed by H M Inspector of Explosives. Contravention of either set of Rules is regarded as a Criminal Act, and upon conviction can lead to a fine of up to £2,000.00.

Section 2 covers the conduct and standards of work which would apply in any factory or laboratory where hazardous processes take place. Many of the Rules in this Section are governed by Regulations, or Recommended Codes of Practice.

Section 3 sets out the Procedures evolved over the years for the safe systems of work.

Breaches of Rules in Section 2 and 3 can lead to disciplinary action being taken, and where they are breaches of Statutory Regulations, could lead to prosecution under the Health and Safety at Work, etc, Act.

SECTION 1

STATUTORY REGULATIONS

SAFETY POLICY

The Company Safety Policy is given as the Appendix to the "Employees Handbook" published in August 1985. The Centre will comply with this Policy in accordance with the Health and Safety at Work, etc, Act 1974. The aims of the Policy are restated.

- So far as is reasonably practical the Centre will provide inter alia and maintain:
 - (a) Safe facilities, plant, equipment and machinery.
 - (b) Safe systems of work.
 - (c) Safe and healthy places of work, with safe ways in and out.
 - (d) Personal protective equipment and clothing where necessary.
 - (e) Occupational health and safety services.
 - (f) Information and instruction on the HSW Act, and matters relating to Health and Safety.
 - (g) Training to ensure that all employees are competent to do their job safely.
- 2. Management responsibility for Health and Safety is as follows:
 - (a) Ultimately responsibility lies with the Chairman and Board of Royal Ordnance plc. The Director for Research and Development, Royal Ordnance has been designated Safety Director with special responsibility for health and safety policy across the Company for ensuring the overall consistency of the Company's provision for safety, and for providing advice and support on legislative and technical matters.
 - (b) Within each division responsibility lies with the divisional Managing Director. He will be responsible to the Board for implementing the Company's safety policy, and for providing the organisation and arrangements necessary to ensure the success of that policy within his division.
 - (c) At the Research and Development Centre, responsibility lies with the Director.

He will:

- (i) Prepare and maintain a written statement of his general health and safety policy, and bring it to the notice of all employees at the Centre.
- (ii) Issue directions and allocate working responsibility for each aspect of health and safety.
- (iii) Issue local rules as necessary to cover the safety of all processes or operations which may carry unusual potential hazards, and the safekeeping of potentially hazardous materials and substances.
 - (iv) Appoint a Safety Officer to advise him on safety matters, and to assist him in ensuring the implementation of his policy.
 - (v) If necessary appoint the holders of additional nominated posts in functional areas to advise both his line management and the Safety Officer on specialist matters.
- 3. The Centre will maintain a Safety Committee, including representatives of recognised Trade Unions. Safety Representatives appointed by the Trade Unions will be supported by the Centre in pursuit of their statutory powers. The role and duties of both safety committees and representatives are defined in the Company Safety Handbook.
- 4. The Centre will ensure that safety is properly integrated into training and will pay particular attention to:
 - (a) Induction courses for new employees.
 - (b) Training in the operation of machinery and equipment for the task an employee has been set to make him familiar with the hazards, and with means to protect himself.
 - (c) Training to ensure that all employees understand their rights and duties.
 - (d) Subsequent training to ensure that management and employees are kept up to date with legislative and technical requirements.
 - (e) Training for safety representatives as required by statutory requirements.
- 5. Detailed information and guidance are provided in the Company's Safety Handbook, the Centre's Rules and Procedures, and other documents.

Signature of Director

Wiles.

Date:

13. 9.86

HEALTH AND SAFETY AT WORK ETC ACT 1974

Responsibilities under the H & S W Act fall upon both Management and Staff.

1. Management must provide:

Safe facilities, plant, equipment and machinery.

Safe systems of work.

Safe and health places of work with safe access and egress.

Information on matters of Health and Safety.

Training of personnel to enable them to carry out their tasks safely.

2. Under Section 7 of the Act, Staff have a duty to:

Take all reasonable care for the health and safety of themselves and others who may be affected by their acts or omissions at work.

Co-operate with Management in meeting statutory requirements.

Use safety equipment where provided by Management as part of the Safe System of Work.

- 3. No person shall intentionally or recklessly interfere with, or misuse any thing provided in the interest of health, safety or welfare.
- 4. As designers, manufacturers and suppliers we must ensure that risks to health and safety are reduced to an absolute minimum and that all products are safe when being properly handled, transported, stored or used.

HEALTH AND SAFETY AT WORK ETC ACT AND CONTRACTORS

- 1. The Act, Part I, makes provision for securing the health, safety and welfare of persons at work. These apply to Contractors as well as the Primary Occupier of Premises.
- 2. The principal duties imposed by Part I of the Act are:
 - (a) On the Employer (ie the Contractor) to ensure, so far as is reasonably practicable the health and safety of his employees and of other persons (ie occupiers or visitors) who may be affected by the way he conducts his undertaking. Whilst the Authority in the contract is sometimes referred to as the employer of the contractor, his function as such is not that of an employer within the terms of the Act.
 - (b) On a Person (ie Occupying Department, Contractor or Sub-contractor) who has, to any Extent, Control of Premises which are made available as a place of work for persons who are not his employees (eg sub-contractors' employees), to take such measures as it is reasonable for a person in his position to take to ensure, so far as is reasonably practicable, that the premises and plant (and substances) thereon are safe and without risk to the health of such persons.

ADDENDUM TO SAFETY POLICY

MOD PERSONNEL

Where MOD personnel are working on the site the Director of the Royal Ordnance Research & Development Centre will ensure that information is provided to MOD covering Royal Ordnance working procedures, safety manning levels, explosives limits and potential hazards to health and safety. It is for MOD to ensure that their personnel are aware of all site Safety rules and regulations and instruct them to observe the same. Further, MOD will inform Director of Royal Ordnance Research & Development Centre, or his representative, of all changes to working procedures or conditions which have an effect on safety.

Signature of Director: William Date 2.3.87

GENERAL RULES FOR FACTORIES LICENSED UNDER THE EXPLOSIVES ACT 1875

(Order in Council No 2 as amended by Order in Council No 2A)

- 1. Every Factory magazine shall be used only for the keeping of such explosive and of such ingredients thereof as may be specified in that behalf in the licence and receptacles for, or tools or implements for work connected with the keeping of such explosive and ingredients; and
- Every building in which explosive or any ingredient thereof which either by itself is possessed of explosive properties, or which when mixed with any other ingredient or article also present in such building is capable of forming an explosive mixture or an explosive compound, is kept, or present, or in the course of manufacture is liable to be, shall, unless specially exempted by the licence, or by an order of one of H M Inspectors of Explosives, by deemed to be a danger building; and the interior of every such building, and the benches, shelves, and fittings in such building (other than machinery), shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel in such manner, and the detaching of any grit, iron, steel, or similar substance in such manner, as to come into contact with the explosive or ingredients thereof in such building; and such interior benches, shelves, and fittings shall, so far as is reasonably practicable, be kept free from grit and otherwise clean; and
- 3. Every factory magazine and expense magazine shall have attached thereto a sufficient lightning conductor, unless by reason of the construction by excavation, or the position of such magazine, or otherwise, the Secretary of State or H M Chief Inspector of Explosives considers a conductor unnecessary; and every danger building shall, if so required by the Secretary of State or H M Chief Inspector of Explosives; have attached thereto a sufficient lightning conductor; and
- 4. Charcoal, whether ground or otherwise, and oiled cotton, oiled rags, and oiled waste, and any article whatever liable to spontaneous ignition, shall not be taken into any danger building except for the purpose of immediate supply and work of immediate use in such building, and upon the cessation of such work or use shall be forthwith removed; and
- 5. Before repairs are done to or in any room in or other part of a danger building, that room or part shall, so far as practicable, be cleaned by the removal of all explosive and wholly or partly mixed ingredients thereof, and by the thorough washing of such room or part; and such room or part of the building after being so cleaned shall not be deemed to be a danger building within the meaning of these Rules until explosive or any ingredient thereof which either by itself is possessed of explosive properties,

or which when mixed with any other ingredient or article also present in such building is capable of forming an explosive mixture or an explosive compound, is again taken into it; and

- 6. There shall be constantly kept affixed in every danger building, either outside or inside, in such manner as to be easily read, a statement of the quantities of explosive or ingredients allowed to be in the building, and a copy of these Rules, and of any parts of the Act required by the Secretary of State or H M Chief Inspector of Explosives to be affixed, and of such part of the licence and special rules made under the Act as apply to the building; also the name of the building, or words indicating the purpose for which it is used; and
- 7. All tools and implements used in any repairs to or in a danger building shall be made only of wood or copper, or brass, or some soft metal or material, or shall be covered with some safe and suitable material; and
- 8. Due provision shall be made, by the use of suitable working clothes without pockets, suitable shoes, searching, and otherwise or by some of such means, for preventing the introduction into any danger building of fire, lucifer matches, or any substance or article likely to cause explosion or fire, and for preventing the introduction of any iron, steel, or grit into any part of a danger building where it would be likely to come into contact with explosive or the wholly or partially mixed ingredients thereof; but this rule shall not prevent the introduction of artifical light of such construction, position or character as not to cause any danger of fire or explosion; and
- 9. No person shall smoke in any part of the factory except in such part (if any) as may be allowed by the special rules; and
- 10. Any carriage, boat or other receptacle in which explosive, or any ingredient thereof which by itself is possessed of explosive properties, or which when mixed with any other ingredient or article also present in such carriage, boat or receptacle is capable of forming an explosive mixture or an explosive compound, is conveyed from one building to another in a factory, or from any such building to any place outside of such factory, or from one part of a factory to any other part or to a place outside of such factory, shall, unless specially exempted by the licence, or by an order of one of H M Inspectors of Explosives, be constructed without any exposed iron or steel in the interior thereof, and shall convey only the explosive and ingredients, and shall be closed or otherwise properly covered over; and the explosive and ingredients shall be so conveyed with all due diligence, and with such precaution and in such manner as will sufficiently quard against any accidental ignition or explosion; provided that so much of this rule as applies to the exclusion of iron or steel shall not be obligatory in the case of a carriage, boat or other receptacle in which no explosive other than explosive of the 1st division of the 6th (Ammunition) Class is conveyed; and

- 11. A person under the age of eighteen years shall not be employed in or enter any danger building except in the presence and under the supervision of some person of the age of twenty-one years or upwards, and a person under the age of sixteen years shall not be employed in any such building except in some process which has been declared by an Order made by the Secretary of State to be a process which is not in itself dangerous and except in the presence and under the supervision of some person of the age of twenty-one years or upwards; and
- 12. Every ingredient in course of manufacture into explosive which either by itself is possessed of explosive properties, or which when mixed with any other ingredients or article also present in any working building is capable of forming an explosive mixture or an explosive compound, shall be removed with all due diligence from such working building so soon as the process connected with those ingredients which is carried on in such building is completed, and all finished explosive shall with all due diligence either be removed to a factory magazine or sent away immediately from the factory, and such explosive and ingredients shall be loaded and unloaded with all due diligence; and
- 13. Wherever danger may arise from foreign matter being present with the explosive or any ingredient thereof, all ingredients to be made or mixed into explosive shall before being so made or mixed be carefully examined, sifted, or otherwise treated for the purpose of removing therefrom or excluding, so far as practicable, all such dangerous foreign matter.

Wherever in this Order an explosive is distinguished as belonging to a particular class or division of a class, reference is made to the classification of explosives contained in an Order in Council made in pursuance of Section 106 of the Act.

ROYAL ORDNANCE

Explosives Division Research and Development Centre WALTHAM ABBEY

SPECIAL RULES (Made under Section 11, Explosives Act 1875)

- 1. No unauthorised person is to be allowed to enter the Centre.
- 2. No workers are to enter or leave the Centre except by the recognised entrances (Sewardstone Gate, Quinton Gate and Swingbridge Gate) and workers shall leave the factory with all reasonable dispatch after the expiration of their working hours.
- 3. No person shall bring matches or sources of ignition, smoking materials and equipment, or articles, including portable electrical equipment, which may be a cause of fire into a designated Contraband Area without written authorisation.
- 4. No person shall smoke in any part of the Centre except in such buildings as are authorised by the Director. Smoking is not permitted in the open.
- 5. No person shall bring intoxicating liquor into the Centre except by the written permission of the Director, or his authorised deputy.
- 6. No person who is under the influence of intoxicating liquor is to be admitted to the Centre, and any workman found in the Centre under the influence of liquor shall be deemed to have committed a breach of these Rules.
- 7. Meals are not to be taken in any danger buildings of the Centre.
- 8. No worker shall enter any danger building or part of the Centre other than those in which he or she is employed without permission from the Scientist-in-Charge or appropriate Foreman.
- 9. Every person employed in the Centre is to submit to being searched at all times when required, and is to submit any bag, basket or parcel of any kind brought into or taken out of the Centre to be examined by the persons authorised to do so. Provided that in no case should any female person be searched by or in the presence of anyone but a female person.
- 10. No person shall enter any danger buildings or "clean" area without first putting on the special footwear provided, and on no account are such footwear to be worn except in the danger buildings or "clean" areas, and they are never to be deposited where they are liable to come into contact with grit.

- 11. Every person employed in any danger building shall before commencing work put on any danger clothing provided.
- 12. The limits posted in each danger building for the number of workers and the quantities of explosives or ingredients allowed in such danger building shall be strictly observed. The Scientist-in-Charge is held responsible that this rule is observed.
- 13. Oily waste or cloths, or other materials liable to spontaneous combustion shall not be taken into any danger building except for immediate use therein, and on the cessation of such use shall forthwith be removed from the building and deposited in the place appointed. The Scientist-in-Charge is held responsible that this is observed.
- 14. All Fire Buckets are to be kept filled with clean water and ready for use. They are not to be removed from the positions assigned to them, nor used for any but fire purposes. In frosty weather, steps are to be taken by frequent refilling or otherwise to prevent formation of ice in those buckets exposed to frost. The Branch Foreman is held responsible that this rule is observed. Where other Fire Aid Fire Appliances are supplied, the Fire Brigade Officer is responsible for their maintenance.
- 15. All machinery in danger buildings is to be examined before commencing work on any day, and should the plant or machinery in danger building appear to be out of order, or should anything go wrong with it, the operation or machine is at once to be stopped, and an immediate report made to the Scientist-in-Charge.
- 16. Workers are immediately to report to the Supervisor anything which they may observe as unusual or apparently dangerous in the operations, in the plant, machines, tools and implements, or in the appearance of the materials with which they are working, or in the acts and conduct of their fellow workers.
- 17. All work shall be carried on carefully and without undue haste, and in the manner directed by the Management. There shall be no skylarking, riotous or disorderly behaviour of any sort.
- 18. Before work is commenced in any danger building all exit doors shall be unlocked and arranged so that they may easily be pushed open. No exit doors shall be blocked by any table, packing case or other article. The Senior Workman in the building is held responsible that this rule is observed.
- 19. No tools or implements shall be used in any danger building except those provided for the purpose, and all tools and implements shall be used carefully without undue force, and shall not be thrown down.
- 20. Persons employed in the Centre are not to answer inquiries made by unauthorised persons, or to give any information to unauthorised persons as to the amount of explosive stored in, or as to the work carried on in the Centre.

- 21. All boxes and packages are to be lifted and carried, and never dragged across the floors. No broken or defective package of explosive is to be sent out of the Centre.
- 22. The floors and interiors of danger buildings, "clean" areas, trucks and vehicles, as well as all plant and machines are to be kept scrupulously clean and free from grit, and all accumulations of explosives and explosive dust. Danger buildings should not be swept outwards, but inwards, and all sweepings placed in the approved receptacle which should be specified in the Building Operating Instructions.
- 23. On the approach of a thunderstorm work is to be suspended in all danger buildings and all workers are to quit such buildings unless ordered to continue by the Scientist-in-Charge on the grounds that such suspension would be dangerous or impracticable.
- 24. Employees are also to refer to the "Rules and Procedures" booklet for guidance on such matters as Safety Appliances, Compressed or liquified gases, Clearance procedures and Permits to work, Transport of Explosives, etc, and for amplification of some of the above rules.

NOTE: Any person committing a breach of these Special Rules shall, on conviction, be liable to a fine not exceeding Two Thousand Pounds for each offence.

SECTION 2

BASIC RULES

1. CONDUCT AND DISCIPLINE

1.1 Entering or Leaving the Centre (See Special Rule 2)

No person is to enter or leave the Centre except by the authorised gates manned by the MDP (Ministry of Defence Police). Passes are to be shown on entry.

1.2 Forbidden Articles

All personnel are forbidden to bring the following items into the Centre without the written permission of the Director or an Assistant Director.

Cameras

Firearms

Video or Tape Recorders

Radio Transmitters

Alcoholic drinks (drinks purchased in the canteen must be consumed in the canteen)

Domestic Animals

Radio receivers may not be used without permission of the Assistant Director of the area concerned.

1.3 Contraband Areas

Contraband items comprise:

Tobacco, pipes, cigarettes, matches, lighters or any means of procuring a light or flame.

Medicines or drugs.

Battery or mains operated equipment of any type other than approved issue items.

The above items may not be taken into any area defined by a notice as a Contraband area other than by special authority from the Head of Section. Such items must be deposited in the box provided at the main entrance to each area.

Vehicles may not enter a contraband area without permission of the Scientist-in-Charge or the foreman of the section.

Any person finding him/herself in possession of contraband in a defined area should immediately report the fact to his/her senior officer or ask the police to collect it - no disciplinary action will be taken for a genuine mistake. All persons are liable to search within a contraband area by the MDP, Safety Officer, a Safety Assistant, the Scientist-in-Charge, or the Foreman of the area. Disciplinary action will be taken against offenders.

1.4 Company Property

All employees are held responsible for the safe custody of, and for preventing wasteful or improper use or theft, of company property in their charge.

All persons are liable to be searched within the Centre area and must submit themselves or any bag, parcel or vehicle to be searched when entering or leaving the Centre if so requested by the MDP.

1.5 Smoking (See Special Rule 4)

Smoking is forbidden in the open but is permitted in certain buildings authorised by the Director.

1.6 Food (See Special Rule 7)

To avoid cross contamination the consumption of food or beverages in laboratories or process buildings is forbidden. Contaminated clothing should not be worn in the Staff Restaurant.

1.7 Obedience to Instructions

All personnel are to obey the instructions of the person in charge of the work in hand and also adhere to any written instruction appropriate to that work.

Should any grievance be felt against an instruction, representation may be made in accordance with the provisions of Staff Regulations.

1.8 Conduct

All persons are to avoid skylarking or other irresponsible conduct.

1.9 Barrier Boards etc

No person is to pass any board, flag or notice forbidding entry without permission of the person in charge.

1.10 Keys

Keys controlled by the MDP will be issued to authorised personnel. All such keys must be returned, after securing buildings at the end of the day, to the MDP for secure custody. All other keys must be returned to the appropriate issuing authority at the close of work.

1.11 Security of Buildings

When not in use buildings are to be kept locked with windows securely closed. Any variations from this, such as ventilation requirements must be agreed with the MDP.

1.12 Exits of Buildings

All doors and passageways must be kept clear of obstruction. Doors of buildings in use are to be kept unlocked and unbolted unless fitted with a quick release mechanism.

1.13 Anything Unusual

All personnel are to report to higher authority any unusual or apparently dangerous occurrence they may observe.

1.14 Cleanliness

Plant, buildings and the Centre generally are to be maintained in a clean condition and free from accumulations of waste. All forms of waste must be separated and stored in the appropriate bins for disposal. In particular oily rags must be removed immediately. (See Para 19 for Disposal of Waste).

2. ACCIDENTS AND EMERGENCIES

2.1 Emergencies

For assistance in any form of emergency - fire, accident, bomb alert, presence of a suspicious object DIAL 222 and state your emergency and location as shown on the telephone.

Refer to:-

The "Emergency Action" notice, posted near the main door of your building and showing your emergency assembly point.

"Important Notice" posted near the door of your building and explaining the procedure in the event of a "Bomb Alert".

"Emergency Procedure in the Event of Fire or Accident" a copy is held by your Head of Section.

2.2 Accidents

All accidents or injuries are to reported to the person in charge of the building or the foreman.

People with personal injuries should in their own interest report to the Surgery for treatment. The person in charge will forward a Form ROF 47 to the Surgery.

All injuries whether treated by a first aid attendant or the Surgery must be recorded in the Section Accident Book BI 510.

If the injury results in or is liable to result in at least 3 days' absence then Safety Section and Personnel must be informed and all accidents resulting in a 3 day absence will be recorded by Admin Branch in the Blue Book F33.

2.3 Accidents resulting in Death or Serious Injury

Any accident resulting in death or serious injury and any incident which, except by sheer chance, could have been more serious must be entered in the Blue Book and reported to Safety Section for appropriate action, ie informing the Health and Safety Executive as required by the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1985 (RIDDOR). All such injuries and incidents will be subject to Enquiry at the appropriate level, as required by the Company document "Accident Reporting and Investigation Procedure".

SAFETY RULES

3. TRAFFIC RULES

3.1 Traffic Regulations

All drivers must comply with the current Road Traffic Act and associated Highway Code.

3.2 Speed Limit

The speed limit in the Centre is generally 20 mph. Vehicles on Emergency call may exceed the limit with due regard to the safety of others.

3.3 Driving Licence

All drivers must hold a current driving licence for the class of vehicle being driven. Company vehicles may only be driven by personnel additionally holding a Company Vehicle Driving Permit.

3.4 Lighting

All vehicles and bicycles must comply with normal lighting regulations.

3.5 Loading

Vehicles must be carefully loaded and if by necessity a load overhangs the overhang must be indicated by a white flag. Loads are to be secured; this particularly applies to containers of liquid gases.

3.6 Parking

Long term parking is restricted to the designated car parks. The area outside the Surgery and Fire Station is reserved for visitors and emergency service vehicles. Care must be exercised with short term stopping not to obstruct the road and fire hydrants.

3.7 Electric Towing Units

All drivers of Electric Towing Units must be trained and approved by an experienced officer. They must wear safety footwear when driving.

3.8 Fork Lift Trucks

Drivers of fork lift trucks must hold a certificate of competence issued by one of the recognised training organisations and submit themselves for an annual medical check.

3.9 Riding on Vehicles

No person is to ride on vehicles or tractors which are not specifically designed with a passenger seat.

3.10 Seat Belts

Drivers and passengers are advised to wear seat belts where provided.

3.11 Priority for Explosives

Priority in right of way must be given to any truck or vehicle carrying explosives.

4. MACHINERY AND TOOLS

4.1 Guarding of Machinery. All moving parts of machinery must be provided with guards which must be fixed in position during use.

Moveable guards (eg on presses) must be fitted with cut off switches or locking devices.

Machine tools must be guarded as far as practicable and/or fitted with an approved emergency braking system.

- 4.2 Where essential to inspect, adjust or clean machinery in motion this may only be performed by an authorised "machinery attendant".
- 4.3 Worn tools, mushroom-headed chisels, split handles etc must not be used. The fact that the tools may be personal property does not permit their use if in a dangerous condition.
- 4.4 Persons operating machine tools must wear close fitting garments such as the issue coverall and not garments with loose fitting sleeves and flapping fronts such as laboratory coats.
- 4.5 <u>Compressed air</u> must be used with caution. Always wear eye protection and never point the jet towards the body or get involved in horseplay. Compressed air entering the body can kill.

5. SCAFFOLDING, LADDERS AND STEPS

- 5.1 <u>Ladders and Steps</u> are issued by the Rigger who is responsible for testing and maintenance. Each item is suitably labelled with identity number and date of test. When held by a section they are to be adequately stored and any defects which may develop reported to the Rigger.
- 5.1.1 Ladders when in use are to be footed by a second person or adequately tied to prevent movement.
- 5.1.2 Ladders must extend 3 foot 6 inches beyond the place of landing or the highest rung to be reached by the feet of the person using the ladder, as the case may be.
- 5.1.3 It is an offence knowingly to use defective ladders or steps.

- 5.1.4 Ladders are not to be placed or left in positions giving access to unguarded machinery or electric cables. Such machinery or cables must be isolated before access is permitted.
- 5.1.5 Ladders must not be permitted to come into contact with acids or other materials liable to cause corrosion.
- 5.1.6 Metal ladders or steps must not be used in close proximity to live electrical equipment or cables.
- 5.2 <u>Scaffolding</u> is to be constructed with due regard to the normal accepted safety standards under the direction of the Building Works Foreman.
- 5.2.1 No person is to use a scaffold above 6 feet 6 inches unless fitted with adequate hand rails and toeboards.

6. LIFTING TACKLE, SLINGS AND HOISTS

- 6.1 Lifting tackle, slings and hoists are labelled with the SWL (safe working load) which must never be exceeded.
- 6.2 Lifting tackle and slings are issued by the Rigger who inspects the equipment annually.
- 6.3 Powered hoists must only be operated by personnel professionally trained in the correct procedures.

7. SAFETY PRECAUTIONS FOR LABORATORIES

- 7.1 Work on different categories or compatibility groups of explosives must be separated into different sections of a laboratory.
- 7.2 All laboratories in which explosives are handled must be licensed. Amounts should be kept to an absolute minimum and never exceed the authorised limits. No explosives must be left uncovered and must be removed to a magazine at the end of the working day.
- 7.3 Solvents should not exceed 10 x 500 ml hand bottles unless stored in special flame resistant cabinets. Excess quantities must be removed at the end of the day to an external solvent store.
- 7.4 Filters and catchpots in the drains must be cleaned regularly and any waste disposed of according to the laboratory instructions.
- 7.5 Care must be taken not to dispose of poisons, solvents or large amounts of acids or alkalis to the main drainage. Small amounts of acids or alkalis must be washed down with copious amounts of water.
- 7.6 All wastes must be removed at the end of each day. Explosives waste must be separated into the various categories and stored in appropriately labelled buckets in the waste hut or designated area for collection.

Acids, alkalis, flammable solvents and chlorinated solvents must also be clearly labelled and kept quite separate from each other and explosives. Waste solvent containers must <u>not</u> be fitted with ground glass stoppers.

NOTE: Chlorinated solvents are liable to react with aluminium.

- 7.7 No initiating explosives are to be placed in the waste hut but must be dealt with according to the special instructions for the laboratory.
- 7.8 Winchesters must be transported in carriers and never carried by the neck.
- 7.9 Acids bottles in a laboratory should be stood in drip trays.
- 7.10 All gas and electrical equipment should be turned off when not required.
- 7.11 Care should be exercised in the use of glass apparatus and when using a glass system under pressure or vacuum eye protection must be used.
- 7.12 Always store chemicals out of sunlight. Glass bottles form a lens in sunlight and plastic bottles are liable to degrade by autoxidation.
- 7.13 In the interest of safety all new experimental work must be discussed with the Head of Section or Assistant Director before commencing.
- 7.14 Wherever possible work on explosives or hazardous materials should be performed in an armoured cupboard which will be marked with its maximum protective capacity.
- 7.15 Ovens for heating flammable materials must be carefully selected.

8. RADIOACTIVE MATERIALS AND X-RAYS

- 8.1 The use of radioactive materials and X-rays is strictly controlled and demands special discipline. Any new process must be referred to the Safety Officer before work is started.
- 8.2 All personnel involved are subject to regular medical surveillance and film badge monitoring by the National Radiation Protection Service. Advice is available from the Safety Officer.
- 8.3 No radioactive source may be brought into the Centre without prior consultation with the Safety Officer and his approval.

9. SAFETY APPLIANCES

9.1 Fire Fighting Equipment

The Fire Brigade Officer has responsibility for the Centre fire fighting equipment. Hoses, buckets and extinguishers must not be moved from the designated positions or used for purposes other than fire fighting.

NOTE: Hoses are authorised for use in washing down buildings in a few particular locations.

9.2 First Aid Equipment

First Aid boxes and eye wash materials are provided at strategic points throughout the Centre and are normally in charge of a qualified first aider.

9.3 Breathing Apparatus

Self contained compressed air breathing sets are placed in areas where there is a possibility of contamination of the air by toxic fumes.

9.4 Life Belts

Life belts are provided on river banks.

9.5 Harness

Harness and test equipment to be used when entering confined spaces, sewer pits, boilers etc are available from the Fire Brigade.

9.6 Test Equipment

Test equipment of various types for monitoring sound levels, ionising radiation, asbestos fibres, flammable and toxic gases is available through the Safety Section.

9.7 Oxygen Resuscitation Equipment

Oxygen resusciation equipment is available from the Surgery and is also carried in the ambulance. It can be supplied for special hazards with the permission of the Medical Officer.

9.8 Bath or Showers and Eye Wash Bottles

Bath or showers and eye wash bottles are placed for emergency washing, in places of high risk of chemical splashing and they must be maintained for immediate use.

10. PERSONAL SAFETY EQUIPMENT

10.1 Safety Helmets

Safety helmets are issued for building work, climbing amongst machinery etc and their use is also mandatory in certain designated areas.

10.2 <u>Safety Spectacles, Goggles and Visors</u>

Safety spectacles, goggles and visors are issued as appropriate and as scheduled in the Protection of Eyes Regulations 1974. Full eye protection (goggles) is required for pouring bulk solvents, acids or liquified gases. Safety Spectacles (Prescription if necessary) are supplied for personnel working in explosives laboratories, machine shops and other areas where there is the possibility of an eye hazard.

10.3 Face Visors

Face visors must be used where there is a flame or flash hazard.

10.4 Dust Masks or Respirators

Dust masks or respirators are issued as appropriate for use by personnel working in dusty conditions, eg when handling lead and copper salts, asbestos and other obnoxious materials.

10.5 Clothing

Protective clothing of various types is issued as appropriate to the work in hand. Flame resistant clothing is issued for use in explosive manufacture and processing.

10.6 Footwear

There is a general issue of safety type antistatic footwear with steel toe caps to:-

- (a) Process Workers
- (b) Transport personnel handling gas cylinders
- (c) Sheet metal storemen.

Non conducting footwear is issued to electricians.

This issue footwear should be worn at all times other than in explosive processes buildings or magazines where "clean footwear" is required, see Para 12.4. The only exceptions from wearing such footwear is on medical advice.

11. CYLINDERS AND CONTAINERS OF COMPRESSED OR LIQUIFIED GASES

- 11.1 Cylinders or containers must be handled carefully and must not be dropped or bumped.
- 11.2 Valves must be kept clean and valve outlets "snifted" before attaching any fitting to ensure freedom from loose dirt.
- 11.3 Cylinders must be strapped in position or in a stand when in use and where practicable installed on the outside of buildings with fixed connecting lines to the interior.
- 11.4 Cylinders or containers must not be placed near heat or combustible materials.
- 11.5 Oil or grease must never be used on gauges, valves or pipe lines, serious explosions can occur particularly with oxygen.
- 11.6 Only gauges appropriate to the gas involved and to the gas suppliers recommended pressure may be used.
- 11.7 Gauges must be restricted to one type of gas and not interchanged.
- 11.8 Suspected leaks in a system may be traced by the application of soap solution. Naked flames must never be used.
- 11.9 Cylinders and containers should be stored in the shade.
- 11.10 Empty cylinders or others no longer required must be returned to Stores.
- 11.11 Partially used cylinders must be appropriately labelled.
- 11.12 Acetylene cylinders must always be stored and used in an upright position.
- 11.13 Cylinders containing oxygen should be stored separate from cylinders of combustible gases.

12. WORKING OUTSIDE NORMAL HOURS

12.1 All working outside normal hours must be approved by the appropriate Assistant Director. If a person is working on explosives or potentially dangerous plant and laboratory processes then a second person must be available in the vicinity to render assistance if necessary. In any event the MDP and Safety Officer must be informed. The Safety Officer will decide upon necessary cover by the Emergency Services.

13. SOLVENTS

- 13.1 The use of solvents will be governed by local Working Instructions. Bulk Storage of flammable solvent must conform to the requirements of the Petroleum Regulations and/or Flammable Liquids Regulations. Approved storage buildings must be used.
- 13.2 Drums must be opened in the open air or in a well ventilated building. Drums must be earthed with detachable earthing tape when flammable solvents are being poured. See Rule 16.8 (Contaminated Rags) and 19.10 (Disposal of Empty Drums).
- 13.3 The least toxic and least flammable solvent suitable for the requirement should be used.
- 13.4 Goggles must be worn for pouring from bulk containers.

14. PORTABLE ELECTRICAL EQUIPMENT

- 14.1 No portable electrical equipment drills, hammers, grinding wheels, ovens, etc will be put into use until inspected by the Electrical and/or Engineering Sections. The equipment must then be submitted to the Electrical Section for inspection every six months or earlier if a fault is suspected.
- 14.2 As far as is practicable all portable electrical equipment for use in the open will be low voltage operating from an isolation centre tap transformer.

15. ABRASIVE WHEELS

15.1 The use, marking, guarding and mounting of abrasive wheels is governed by the Abrasive Wheel Regulations 1970. Wheels may only be mounted by authorised trained personnel.

16. ASBESTOS

16.1 The use of asbestos and asbestos containing materials is now strongly discouraged or prohibited but where its use is essential the handling, disposal, dust extraction and personal protection are all governed by the Asbestos Regulations 1969. Removal must be in accordance with the licensing of Asbestos Removal Contractors Regulations 1984.

17. REPAIR OF TANKS, PITS, AND CONFINED SPACES WHERE DANGEROUS FUMES MAY BE PRESENT

17.1 Entry to tanks, pits and confined spaces where dangerous fumes may be present is subject to special precautions of safety harness, availability of breathing apparatus etc, as legislated in Chemical Work Regulations Section 7.

SECTION 3

OPERATIONAL RULES AND PROCEDURES

18. AUTHORISATION OF BUILDINGS AND PLANT FOR EXPLOSIVE USE

- 18.1 All buildings and plant for use in connection with explosives must be approved by the Safety Officer.
- 18.2 All changes of use or in the introduction of a new process must similarly be approved by the Safety Officer.

19. EXPLOSIVES LIMITS AND USE LISTS

- 19.1 The details of the licence must be exhibited in every Explosive Building.
- 19.1.1 The Explosives Limits give details of weight limit, the classification and compatibility group.
- 19.1.2 The Man Limit gives the maximum and the normal number working in the building.

The man limit does not include visitors and members of supervisory staff although the person in charge can limit the number of visitors if there is a danger of obstruction or overcrowding.

- 19.2 Process buildings must have a copy of the process working instructions posted inside.
- 19.3 The Use List is a list of all normal tools held in the process building and must be posted and the tools checked daily against such list.
- 19.4 All magazines and explosive store houses must have a stock list Form S518 (See Appendix 'B') posted and additions or removals from stock noted so that the list will always show the content of the building.

The Safety Section use these stock lists to assess the monthly stock position.

20. DANGER BUILDING RULES

- 20.1 <u>Danger Building Clothing</u>. This fire resistant clothing is issued to all Process Workers involved in the manufacture of explosives.
- 20.2 <u>Personal Possessions</u>. The only personal possessions permitted when wearing such clothing is money, locker key and handkerchief carried in the bag provided. Plain rings too tight to remove and spectacles if required are also permitted.

Building keys and means of writing are to be kept in an approved position in the building.

Where circumstances permit a Head of Branch may give permission for other items such as watches, hearing aids and keepers for pierced ears to be used. Such relaxations must be included in the Special Rules for the Building.

20.3 Opening Danger Buildings

Before commencing work in any danger building all doors are to be unlocked and unbolted. Keys, locking bars, and bolts are to be hung in the positions provided. Doors once unlocked should be either closed to or fastened back. Danger buildings must be locked if left unattended.

20.4 Footwear

All persons when crossing the barrier into the "clean area" of a danger building must put on some form of clean footwear.

- 20.4.1 Regular workers must replace outdoor footwear with the special shoes or half wellingtons issued on a personal basis.
- 20.4.2 Casual visitors may put on cotton overshoes or galoshes over their own outdoor footwear as an alternative to clean footwear.
- 20.4.3 Certain clearly designated buildings are subject to an experiment where a person may enter in outdoor footwear which is free of blakies or metal tips provided the footwear is rendered free of grit on the soles by walking over a sticky mat.
- 20.4.4 Casual visitors should, prior to entry to the building, clean trouser turn-ups and footwear of any dirt.

20.5 Danger Building Limits

All danger buildings are licensed by HM Inspector of Explosives upon application by the Safety Officer. The limits are posted in each explosives building. The senior employee in the building is responsible that the quantity and type of explosive, and the number of workers permitted by the licence are not exceeded.

20.6 Operating Instructions

All operations in danger buildings, firing pits etc are to be performed in accordance with the Special Process Rules and Operating Instructions applicable to the process.

Undue force with tools must be avoided and any difficulty encountered referred to the Scientist-in-Charge.

No deviations from the normal process are permitted without the authority of the Section Leader and experiments or deviations not covered by the Special Process Rules may only be performed with the written permission of the Head of Branch.

20.7 Handling of Explosives and Explosives Receptacles

- 20.7.1 Explosives must be handled carefully and not exposed to sunlight.
- 20.7.2 Explosive containers, boxes and bags must be clean and examined inside before use, for freedom from foreign matter.
- 20.7.3 All explosives and filled stores are to be kept covered except when being worked upon.
- 20.7.4 Containers of explosives must not be roughly handled or dropped. They are to be lifted clear from place to place and not dragged or slid along.
- 20.7.5 Bags containing explosives must be securely tied and lids of boxes securely fixed before conveyance.

20.8 Cleanliness

All explosive buildings must be kept clean and free from grit, leaves, and unnecessary accumulations of materials.

20.9 Spillage of Explosives

Minor spillages of explosives should be dealt with in accordance with the approved Operating Instructions. Where appropriate Operating Instructions do not exist or in the event or major spillages clearance must be supervised by the Scientist-in-Charge. No attempt should be made to move any vehicle, truck, trailer or box involved except under such supervision.

20.10 Steam Pipes

Explosives are not permitted within 2 feet, and timber and other flammable substances within 6 inches of steam pipes, boilers and ovens except under controlled conditions in well tried processes.

20.11 Aluminium Paint

Aluminium paint is not to be used in Explosive Buildings other than on timber.

20.12 Fire, Electric Drills, Petrol or Diesel Engines etc

No fires, naked lights etc are permitted in or near an explosives building. This includes portable electric tools, petrol or diesel driven vehicles. (See Para 16.4).

20.13 Thunderstorms

On the approach of a thunderstorm it is normal for the person in charge to call a halt to the processing of explosives, in accordance with any special process rules for the building. Any vacated buildings must be locked.

20.14 Antistatic

Certain buildings containing explosives sensitive to an electric discharge are subject to stringent regulations regarding earthing, flooring, footwear, electric supply etc and due regard must be taken of these special precuations. Areas particularly sensitive to static discharge are supplied with Personnel test meters which must be used before entry.

21. FIRING POINTS

All firings for a day must be reported to the Safety Office before 9.00 am in order that a record of firings can be maintained.

22. CLEARANCE PROCEDURE FOR EXPLOSIVES BUILDINGS AND PLANT

- 22.1 Clearance Certificate (Form WA/S509 See Appendix 'A').
- 22.1.1 Before any repairs (other than a minor repair provided for in Section 2 Para 15) to building or plant is commenced, that plant or part of a building must be cleared of explosives, acids, and other hazardous materials.
- 22.1.2 A Form WA/S509 must be submitted by a responsible person (Foreman or Scientist) stating that the building and/or plant is free from explosives.
- 22.1.3 A Safety Assistant will check and if satisfied approve the work to proceed with any reservations such as isolation of electrical or gas supplies.
- 22.1.4 When the work is complete the Trades Foreman will sign the form to say that the work is complete, all tools and materials removed and conforms to the standard required and any relevant statutory requirements.
- 22.1.5 The Section Staff will clean the area and plant and if satisfied that all is clean and tools removed the Safety Assistant will approve recommencement of normal work.
- 22.1.6 The Scientist in Charge gives the final approval for normal work to proceed.
- 22.2 No undue force must be used in dismantling plant. Tight nuts and bolts may be treated with easing oil except on plant which has been in contact with a perchlorate or chlorate.

In some areas the working instructions may require phosphor bronze tools to be used.

- 22.3 During the dismantling of Explosive plant a process worker must stand by to deal with any explosive which is revealed.
- 22.4 No naked flame, welding equipment or portable electrical equipment eg drills, is permitted inside or outside the building without approval of a Safety Assistant. Application for a fire paper must be made on Form SS3 (See Appendix 'E').
- 22.5 Every precaution must be taken to preserve the floors of buildings under repair. It is recommended that dust sheets are used to prevent dust and grit being trodden in.
- 22.6 Solvents for cleaning should be avoided if possible because of possible toxicity/flammability hazards. If solvents are to be used in cleaning the building must be well ventilated and spillage must be avoided.
- 22.7 Plant cleaned by solvent before welding must be finally steamed to remove the solvent and the information supplied on the fire paper.
- 22.8 Rags contaminated with solvent or oil must be removed from the building as soon as practicable and stored outside to await disposal.
- 22.9 Plant before transfer to a repair shop must be thoroughly cleaned and certified as such by the Scientist in Charge or the Foreman on Form SS2 (See Appendix 'D'). If there is any doubt it will be submitted to the Safety Section for decontamination together with completed Form SS1 (See Appendix 'C') giving details of possible contamination and treatment so far given. A certificate of decontamination Form SS2 will be issued by the Safety Section (See Appendix 'D').
- 22.10 No plant will be stored for future use until it is certified clean and will be marked in white or red paint to show up distinctively:

One dot for rough cleaning

Two dots for thorough washing-clean

Three dots for flame or fire treatment - free from explosives.

- 22.11 Contaminated pipework must not be unscrewed or sawn. Roller cutters must be used and just before complete penetration is reached the pipe is to be broken. Advice should be sought from the Scientist-in-Charge or Safety Officer.
- 22.12 Contaminated lead is not to be re-used but passed to the Burning Ground for decontamination by burning.

23. EMERGENCY OR MINOR REPAIRS TO EXPLOSIVES PLANT OR BUILDINGS

23.1 Where minor repairs or adjustments are necessary to enable normal work on or manufacture of explosives to proceed this may be performed under the personal supervision of the Scientist in Charge.

All explosives must be covered and the tradesmen involved must not work in intimate contact with any explosives.

This relaxation does not apply to the use of naked flames or portable electric apparatus, for which a fire paper would still be required.

24. WASTE AND SALVAGE

24.1 Waste and surplus explosives are collected on a routine basis and are disposed of by the Safety Section.

Waste explosives must be segregated into types and the containers labelled and stored according to the Section Working Instructions.

Special disposals may be made by arrangement with the Safety Section.

NOTE: Disposal of initiators and pyrotechnic disposals and large amounts of surplus explosives are always made by special arrangement.

- 24.2 Any disposals outside the routine collections and all decontaminations must be requested on a Form SSl (See Appendix 'C').
- 24.3 All explosives contaminated waste is to be disposed of on the Burning Ground. Details must be supplied on Form SSl (See Appendix 'C'). Timber, leather, cloth, paper, solvents will be burnt. Iron, brass, copper etc will be decontaminated by fire and put to salvage. Lead will be melted down and recycled.
- 24.4 Flammable solvents and chlorinated solvents must be clearly labelled and stored separately from each other for disposal on the Burning Ground. Waste solvent containers must not be fitted with ground glass stoppers.

NOTE: Chlorinated solvents are liable to react with aluminium.

- 24.5 Uncontaminated waste, unsuitable for salvage, is collected outside buildings in dustbins which are emptied by local arrangement into one of the skips placed at several points of the Centre.
- 24.6 Uncontaminated metal is disposed of at the appropriate scrap metal collection point.

- 24.7 Mercury batteries are handed to the Safety Section for return to a manufacturer.
- 24.8 Security classified paper waste must <u>not</u> on any account be placed in a skip; it is collected and disposed of regularly by the Labour Pool.
- 24.9 Aerosol cans must not be placed in waste to be burned within the Centre. They must be sent separately to the Burning Ground for disposal, or pierced in the open air with the correct tool.
- 24.10 Solvent, acid and oil drums are cleaned on the Burning Ground before disposal.
- 24.11 Large quantities of oil, and acid are subject to special disposal arrangements by contract.
- 24.12 Surplus chemicals unacceptable for return to Stores must be clearly labelled and sent to the Burning Ground for disposal. Any unidentified materials must be noted on the Form SS1.
- 25. TRANSPORT OF EXPLOSIVES (See SIS No 14)
- 25.1 The transport of explosives is governed by:

Road	 Sta	atutory	Ins	tru	ıment	No	888	of	1977	7
	or	Transpo	ort [*]	of	Explo	osiv	res	by	Road	Act

Rail Statutory Instrument No 889 of 1977 or RID Regulations

Sea Statutory Instrument No 890 of 1977 or IMD Regulations

Air Although generally forbidden is governed by IATA Regulations

Post Completely forbidden

- 25.2 Explosives for transport must be correctly packed and boxes labelled with the classification and address. The explosives must be officially classified by the HSE Explosives Inspectorate, or in the case of UK Military Explosives by the ESTC. Exceptionally, unclassified explosives can be transported under closely controlled conditions on issue of a "Permit to Convey Unclassified Explosives".
- 25.3 All requests for the movement of explosives and hazardous materials must be submitted on Form S554 (See Appendix 'F') through the Safety Officer who will approve the movement after assuring himself of the classification and/or the requirements for labelling and packing of toxic or hazardous materials.
- 25.4 Drivers must be conversant with "Instructions to Drivers" ESTC 220, Leaflet 20.

DANGER BUILDING CLEARANCE CERTIFICATE

PART A - To be completed before work commences	
Building:	Section:
Nature of Work:	
1. BWD/Plumbers	
2. Electricians	
3. Services/Machinery	
4. Electronics	
The above work is authorised, subject to clearance and overleaf.	to any precautions noted
Scientist-in-Charge	19
Safety Section	
All explosives and dangerous chemicals have/have not be	
Branch Foreman/Scientist-in-Charge	19
Foreman (Trades Section)	
Safe for work to proceed except as noted overleaf.	
Safety Section	
PART B - To be completed <u>before</u> building is taken into	use.
Scientist-in-Charge	
Work completed.	
1	19
2	19
3	19
Foreman (Trades Section)	
Plant, machinery and building thoroughly cleaned and re	,
Safety Section	19
Building and plant ready for operation.	·,
building and plant ready for operation.	
Scientist-in-Charge	
$\overline{\text{NB}}$: After final signature this form is to be passed to	the Safety Section.

MAGAZINE STOCK SHEET

BUILDING No	Date	19
BUILDING NO	Date	

DATE	STOCKS IN	STOCKS OUT	BALANCE	INITIALS
!				
	,			
			,	-

WA/S518

$\frac{\texttt{REQUEST} \ \ \mathsf{FOR} \ \ \mathsf{DECONTAMINATION} \ \ \mathsf{OR} \ \ \mathsf{DISPOSAL} \ \ \mathsf{OF}}{\mathsf{EQUIPMENT} \ \ \mathsf{AND} \ \ \mathsf{STORES}}$

To Safety Section
Please decontaminate
WA No
It has been contaminated with
and the following cleaning has already
been given to the item
After decontamination please return to
Signed
Section
Date
Please complete the above as appropriate and delete where necessary.

Form SS1

CERTIFICATE OF DECONTAMINATION OR DISPOSAL

Certificate No
To
The following item has been decontaminated disposed of
••••••
Signed
Date
Please complete the above as appropriate and delete where necessary.

Form SS2

REQUEST FOR USE OF A FIRE EQUIPMENT	, INTER	RNAL COMBU	JSTION ENGINE	OR ELECTRICAL
ESO				ye goral
Permission for the use of	the fo	ollowing i	c roquested.	
Fire/Equipment: Date: Time: Place: Purpose:	To To	or towning i	.s requested:	
		Signed:		
			• • • • • • • • • •	• • • • • • • • • • • • • • •
		Section:	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • •
		Date:	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
To: The above request is appropriately instructions:	oved.			
		Signed:	Safety	y Section
		Date:	• • • • • • • • • •	• • • • • • • • • • • • • •
FIRE PERMIT				
SERVICES/ELECTRICAL/BWD				
Permission is granted for	the us	e of the	followings	
Fire/Equipment: Date: Time: Place: Purpose: Special instructions:	To To	e or the	-	
		Signed:	Safety	y Section
		Date:	• • • • • • • • • • • • • • • • • • • •	
FBO				
Please supply a light to:				
Section: Place: Date:	To To			
		Signed:	Safety	Section
SS3		Date:	• • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •

WA S554 (Rev Jan 85).

To: EO/Stores (through ESO if explosive or dangerous materials are concerned) $$^{\circ}$$. Please arrange for the following movement

Collect from:	Despatch to:	
Description of Goods Asset No Qt	y Approx Wt and Dimensions	Local Purchase Order No
		Cost Code
Date goods required by consignee	Security Classification	
If movement is in connection with a cor		
CONTRACT No		
Royal Ordnance Ref	(allocated by F/MA West	ccott)
Proposed Terms of Issue	L for guidance)	
REMARKS		
Signature Date	Section	Extn
To: EO/Stores		
These stores are Government Explosive G Dangerous Chemicals. The following pre	Groups Nosecautions should be taken.	
Signature	ESO (Extn 229) Date	
To: Stores Officer (Extn 253) through	Transport Officer (Extn 221)	
The above Issue/Acquisition is approved Stores Issue Authorisation number Conveyance is authorised at Royal Ordna	nce WA expense.	
Please raise Issue Vouchers and Propert	y Passes as necessary and arr	ange despatch. °
Signature E	O/Stores (Extn 365) Date	