Inspection and approval of agrochemical stores by Environment Protection Officers and Fire Officers in Connection with BASIS® (Registration) Limited.

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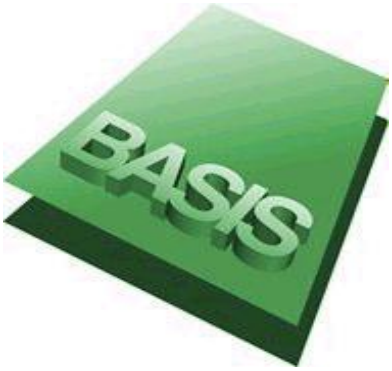

Inspection Officers Guidelines

THE BASIS AGROCHEMICAL STORE REGISTRATION SCHEME
INSPECTING OFFICERS GUIDELINES

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GLOSSARY

BASIS	BASIS (Registration) Limited
CFOA	Chief Fire Officers Association
COMAH	The Control of Major Accident Hazards. A European Directive (96/82) applicable to sites storing above trigger thresholds of certain chemicals. It requires companies to control major hazards on sites that they own and says how this should be done. It aims to prevent major disasters occurring.
COPR	The Control of Pesticides Regulations 1986 and The Control of Pesticides (Amendment) Regulations 1997
CPA	Crop Protection Association
EPA	Environment Protection Agencies – a generic collective term for The Environment Agency of England and Wales, the Scottish Environmental Protection Agency in Scotland and the Environment and Heritage Service for Northern Ireland.
EPO	Environment Protection Officer – a generic term for any officer of the EPA who carries out inspections at BASIS registered stores.
FEPA	The Food and Environmental Protection Act 1985
PPG	Pollution Prevention Guidance Note – produced by the EPAs
SEPA	Scottish Environmental Protection Agency – the environmental regulator for Scotland.
W UK	Water UK – the trade body for UK water supply and sewage disposal companies or authorities.
Yellow Code	Code of Practice for Suppliers of Pesticides to Agriculture, Horticulture and Forestry. Details statutory aspects of FEPA, practical guidance to meet the requirements.

THE BASIS AGROCHEMCIAL STORES REGISTRATION SCHEME - INSPECTING OFFICERS GUIDELINES

Version May 2007

INTRODUCTION

The BASIS Registration Scheme is a system of self-regulation by the agrochemical industry for the safe storage and transport of pesticides. Part III of the Food and Environment Protection Act 1985 (FEPA) has provided powers for strict controls for pesticide storage. Storage of pesticides under the Control of Pesticides 1986 and Control of Pesticides (Amendment) Regulations 1997 (both referred to as COPR), requires **all reasonable precautions** to be taken to protect people, creatures, plants and the environment. Any new pesticide store should have the **highest standards** of design and construction.

Everyone in the commercial sale, supply and storage for sale of pesticides, approved for agricultural use, must comply with the **Code of Practice for Suppliers of Pesticides to Agriculture, Horticulture and Forestry**, otherwise known as the **"Yellow Code"**.

The Code contains information on how to meet statutory requirements of FEPA and legislation made under FEPA, such as COPR. It also contains non-statutory guidance and good practice information.

The Code requires those who sell or supply pesticides in excess of 200 kg or 200 l to have a **Certificate of Competence,** and that the facilities and management arrangements of their store should be assessed at least annually by suitable independent experts.

The Code recommends that the environmental regulators, The Environment Agency, SEPA or Norther Ireland Environment Agency (collectively referred to in this document as EPA), the Fire Authority and others should be consulted during the planning of a new store or the redesigning of an existing one. The Code also says that once a store has been built or commissioned, storeowners should notify the EPA and the Fire Authority in writing, of its existence and location or of any significant changes to it; and that **all stores should** hold the **written approval** of the EPA and Fire Authority.

BASIS (Registration) Ltd is recognised by the Government as an independent organisation and a competent body for assessing and certifying stores against legal and good practice requirements of FEPA. Fundamental to the BASIS certification scheme is that the assessment of environmental risk, pollution control and waste management matters is made by the EPA, as the environmental regulators, and that fire prevention matters are assessed by the Fire Authority.

Stores can only become *certificated* with BASIS if:
a) they pass the annual assessment carried out by BASIS assessors, and
b) they have letters of approval from the EPA and the Fire Authority following assessments made in accordance with the these Guidelines, and
c) have a satisfactory staff audit in accordance with the "Yellow Code".

The BASIS Scheme is not compulsory but provides reassurance that the store meets all relevant requirements. A Distributor or Storekeeper may use other suitable qualified independent assessors to ensure FEPA and COPR requirements are met but they will not benefit from formal involvement of the environment or fire protection agencies. Certification does not give the storekeeper any immunity from prosecution for any breach of environmental (or other) legislation.

This guidance is without prejudice to any other legal obligations or Codes of Practice.

1. THE ROLE OF THE ENVIRONMENT PROTECTION AGENCIES AND FIRE AUTHORITIES IN THE BASIS REGISTRATION SCHEME

1.1 The EPA and Fire Authorities support the BASIS scheme by:

- Assessing registered stores, using this guidance,
- Writing a standard letter of approval or non-approval, highlighting the areas of remedial work required before approval can be given,
- Liaising with BASIS (Registration) Ltd where necessary and by copying all correspondence arising from assessments and inspections

1.2 Ideally at sites in environmentally sensitive locations (Category A) assessments, site inspections and/or discussions on proposed sites should be carried out jointly between the Environment Protection Officer (EPO), the Fire Prevention Officer and the Site Operator. Discussion should cover actions to be taken to overcome any particular hazards, and should include site contingency planning – see Section 5. Any relevant environment protection information should be added to the Fire Service information retrieval system.
NB for lower risk sites the Fire Authority are unlikely to actually visit the site but will pass responsibility for initial screening for satisfactory fire prevention aspects to BASIS (Registration) Ltd so it may not be possible to do joint inspections in all circumstances.

1.3 Standard letters should be used to notify the Site Operator whether the store is passed as "satisfactory "or "unsatisfactory" using the standard letters shown in Appendix 2. If unsatisfactory, the letter should list remedial work or actions required before a store can be passed as satisfactory.

The Site Operator is responsible for notifying the EPA and the Fire Authority when work necessary to comply with the recommendations made after the initial assessment or site visit has been completed. A final inspection/assessment can then be made, and appropriate written approvals issued to the site operator.

All correspondence should be copied to BASIS (Registration) Ltd, 34 St John Street, Ashbourne, Derbyshire, DE6 1GH.

1.4 When complete approval is given to a store by the EPA, and Fire Authority, it will remain in force until:

	a]	5 years from date of approval and then every 5 years
or	b]	The site occupier notifies that there has been material changes and/or structural alterations to the site; see APPENDIX 5
or	c]	the site occupier changes;
or	d]	the Environmental Protection Agencies, and/or Fire Authority carry out any other site inspection (under their relevant legislation) that might result in withdrawal or variation of the approval.

1.5 BASIS certification is annual but inspection by the EPA or Fire Authority for each re-certification isn't necessary. BASIS will advise the relevant authorities in the event of any significant departure from safety procedures or damage to safety measures previously agreed, which would call for re-inspection. EPOs should, in the same way, advise BASIS of any new water intake or other factor, which changes the site sensitivity. Naturally, routine surveillance and check inspections can be carried out as and when appropriate.

1.6 Note that other people may have an interest in new sites or major modifications to existing sites, e.g. the Police, Environmental Health Officers and the Health and Safety Executive, Water Supply Companies, Sewerage Providers, and the site operators should also be involved in any review process. Local Authority Emergency Planning Officers may also have an interest in some sites.

2. PROTECTION OF THE ENVIRONMENT AND PUBLIC WATER SUPPLY – ASSESSING SITE SENSITIVITY.

2.1 To conform to the Yellow Code and the BASIS Scheme, sites must provide a containment capability for the store area. Containment is required to prevent contamination of watercourses, drainage systems or land adjacent to the store and should be designed and constructed to retain any spillage, leaking containers or contaminated water that could be generated in the event of a fire within the store, the so called ***fire water***.

In these circumstances the store containment facility is regarded as a ***Secondary Containment System*** and may also be referred to as a ***Bunded*** area. The pesticide containers themselves provide ***Primary Containment***. At some environmentally sensitive sites additional ***Tertiary Containment*** facilities may be needed.

2.2 The volume of the stores secondary containment is determined for each site by taking into account the environmental sensitivity of the area, especially the water environment, the drainage facilities serving the site and the maximum volume of product to be stored. The capacity should be calculated to provide adequate thinking time, taking into account operational constraints of the fire service and the time required to warn downstream users, such as those who need to close river water intakes or take remedial action at a receiving sewage treatment works.

It's the role of the EPO to assess site sensitivity and recommend the appropriate volume of secondary containment capacity required at sites.

2.3 Assessing Site Sensitivity.

A grading system offers the best way to determine site sensitivity and sites are graded A to C. The flow diagram in 2.4 should be used as a guide but there may be other unusual or unique circumstances that make this flowchart too simplistic for a particular site. In which case, a judgement about the nature of the hazard and environmental risk will have to be made and agreement to the necessary pollution prevention measures obtained. (NB some sites may have been previously given a D categorisation which has been discontinued, when reassessing these sites C category is likely to apply and will not make any difference to the recommended bund capacity required, unless other specific reasons suggest a change.)

2.3.1 Ideally, there should be no compromise on containment capability at Category A Sites and additional, tertiary containment facilities are likely to be necessary, but remember this is not a FEPA legal requirement but good practice guidance. There may be room for compromise at B and C Sites but, as with all potentially polluting sites or operations, certain site-specific measures may be required. A risk-based judgement will be required at all sites.

2.3.2 Operating Regions or Areas may decide to regard the whole of a specific catchment(s) as Category A for the purposes of the BASIS Scheme. This could include groundwater aquifer resource protection zones or catchments as well as surface water catchments.

2.3.3 **EPOs must inform the site operator and BASIS (Registration) Ltd of a site's sensitivity classification and the reasoning behind the decision. This will ensure that the concept of risk based approach and precautionary principle are understood.**

2.3.4 In assessing site sensitivity, EPOs should always refer to the relevant groundwater protection policy and guidance, e.g. the 'Groundwater Protection Strategy for Scotland' or the 'Policy and Practice for the Protection of Groundwater' for England and Wales.

2.4 Flowchart To Assess Site Sensitivity

CONSIDER THE SITE, IS IT:

a) Within a river catchment above a public water supply intake/reservoir or within areas where groundwater is used for water supply?

OR

b) Within a river catchment supporting a fishery?

OR

c) Provided with surface water drainage facilities that drain totally to a foul sewerage and treatment system **without** facilities to isolate and store contaminated water and which drains to catchments detailed in (a) and (b) above?

OR

d) Located in any other environmentally sensitive area where the release of pesticides would result in major environmental harm.

→ **YES CATEGORY A SITE SENSITIVITY**
Containment Capacity should ideally be a minimum of 185% of maximum product volume. Additional (tertiary) containment facilities are likely to be necessary.

↓

NO

↓

e) Within river catchments not in (b) above but which have regular public access? E.g. leisure parks and contact water sports

OR

f) Located within any other area, but not in (d) above, where the release of pesticides would result in unacceptable environmental harm.

→ **YES CATEGORY B SITE SENSITIVITY**
Containment capacity must be at least 110% of the maximum product volume but could be up to 185% in some circumstances. Additional (tertiary) containment facilities may be necessary.

↓

NO

↓

g) Provided with surface water drainage facilities that drain totally to a foul sewerage and treatment system with facilities to isolate and store contaminated water even though it may drain to (a) and (b) above. (This must be agreed with the relevant sewerage provider).

OR

h) Not covered by any of the above (a) to (g).

→ **YES CATEGORY C SITE SENSITIVITY**
Containment capacity must be at least 110% of the maximum product volume. Additional (tertiary) containment facilities could be required.

3. STORE STRUCTURE, ORGANISATION OF STORAGE AND SITE FACILITIES

3.1 General Considerations

The FEPA Yellow Code has sections covering detailed requirements for the store structure and organisation of storage – please read the Yellow Code in conjunction with these notes.

3.1.1 A secondary containment system should be constructed within the pesticide store to provide capacity to contain spillages and fire-fighting water as determined by the site sensitivity category. The height of the store's secondary containment system should be calculated to suit the circumstances but **all** access points (for vehicles and pedestrians) must be, sloped, stepped or ramped as appropriate to maintain effective containment height. An alternative is to construct the store with a sunken floor with a ramped access. Where stores have sloping floors the containment height may be varied to produce the necessary containment capacity. Where containment involves the use of ramps they should have a slope not exceeding 1 in 12 for safe fork-lift truck operation. See Section 3.6 and Appendix 6 on how to calculate containment volume.

3.1.2 Removable bunding for the secondary containment system is **not** acceptable; however temporary, removable bunding can provide **additional** capacity over and above the required minimum store containment capacity.

3.1.3 External walls should be constructed or adapted so that they will hold the force of products falling against them in the event of the collapse of pallets or high rack store, thereby containing any spillage within the premises. Wall sections, which form part of the containment system, should be capable of resisting the pressure of the quantity of liquid generated if the system were to be full. This may be a particular concern where block work walls have been built between steel girder piers.

3.1.4 Where store walls are constructed of prefabricated cladding, the top of any inner bund or other inner wall should be designed and shaped so that containers or chemicals cannot topple or flow into any gap between the bund/wall and the exterior cladding, or through any hole in the outer cladding.

3.1.5 Many pesticide stores are of metal-framed prefabricated panel construction. (Subject to further advice from the Fire Authority) it would appear that:

- double clad walls/roofs offer more drum restraint than single clad ones;
- on single clad wall/roofs where panelling would disintegrate/fall off in a fire, the spacing of the various metal bracing struts and crossbars is relevant;
- internal cladding of prefabricated walls (with bricks or blocks or 'well-keyed concrete) is desirable.
- in stores using a mixture of different styles of container, there are potential benefits of **NOT** storing large 215 litre drums or 1000 litre IBCs on the highest level of racking. (IBCs mostly have plastic containers – the top of the building is likely to be the hottest part in the event of a fire, and heat-related failure of the IBC plastics would lead to a significant liquid release which – subject to the scale of the fire, might not happen if they're at a lower level).

3.1.6 The provision of smoke detectors, sprinkler systems, the number of fire appliances that could/should attend and their pumping capacity taking into account available water supplies should be considered at the planning stage in discussions between the EPA, Fire Authority and Site Operator. See also Section 5 Contingency Planning.

3.1.7 A stable, self-contained, structure with integral spillage containment could be used for the storage of small quantities of pesticides. Several types of purpose built proprietary cabinets are available. A list of manufacturers is available from BASIS.

3.2 Pesticide Storage and Use at Seed Treatment Sites

3.2.1 Chemical seed treatment usually involves two risk areas - the chemical store and seed treatment area.

All containers of seed treatment chemicals not in use should be kept in a dedicated containment store. Where Intermediate Bulk Containers are use, the EPA has accepted that they may be placed next to the seed treatment machine within in a spill tray when "in use" - if this is appropriate - but sited well away from doorways, however when not in use they must be stored in a dedicated containment store. The appropriate operator's handbook should also be consulted and followed.

3.2.2 Drums in use must be protected against spillage and contamination. They can be placed in deep-sided metal trays with sufficient capacity to hold the entire contents of the drum(s).

3.2.3 Sometimes working or inspection pits can be used to trap spillage or fire water in seed treatment areas by providing gullies or water containment walls to direct flow into pits.

3.3 Building Regulations

Prior to any building works being undertaken, the Local Authorities planning department should be consulted and reference made to the Building Regulations 1991.

3.3.1 In England and Wales the Building Regulations 1991 (in Scotland the Building Standards [Scotland] Regulations 1991, in Northern Ireland the Building Regulations [Northern Ireland] 1994) apply to new buildings and to building work such as the erection, extension or material alteration of an existing building. They also apply where there is a material change of use.

The Regulations impose fire safety requirements covering matters such as:

- means of escape in case of fire;
- structural stability;
- fire-resistance of elements and structure;
- compartmentation to inhibit fire spread;
- reduction of spread of flame over surfaces of walls and ceilings;
- space separation between buildings to reduce the risk of fire spread from one building to another; and
- access for fire appliances and assistance to the fire brigade.

3.3.2 The standard of provision is related to the size and height of the building and the use to which it is put. In Scotland the Building Standards (Scotland) Regulations 1991 contain different requirements for the storage of materials that give rise to fire hazards. Where it is proposed to erect a new building, to carry out building work or to make a material change of use, application should be made to your local building control authority or other building approval body.

3.4 Fire Prevention Considerations

3.4.1 The store should be constructed with materials giving a minimum fire resistance of 30 minutes, with soundly constructed impervious floors and walls and sealed floor joints. Wooden floors are not normally acceptable in a BASIS store.

3.4.2 A dedicated store should be roofed with material which can be breached by fire, or be equipped with alternative means of providing a ready release for heat and smoke in the event of fire.

3.4.3 External walls and internal compartment walls should provide at least 30 minutes fire resistance. When there is no intermediate ceiling of 30 minutes fire resistance, internal fire resistant walls should extend to the roof. The local Building Control or Fire Safety Officer may be able to advise on the most appropriate and economical way of achieving this in individual stores. Roofing of chemical stores within a larger general store protects it from the effects of fire and fire-fighting activities in the main building, and in the event of the fire source being within the internal store, to contain it.
Mini-containment systems should not be sited on wooden gantries or floors (which might be destroyed in a fire).

3.4.4 As a general rule, crop protection chemicals should be kept apart from other materials. In addition, it is advisable that certain categories of crop protection chemicals should, as far as possible, be kept separate from other products within the group, notably highly flammable liquid products which should be afforded separate accommodation. The Yellow Code notes that pesticides labelled **"Flammable"** (flashpoint 21-61°C) should be located separately in their own section of the store. Pesticides labelled **"Highly Flammable"** (flash point below 21°C) should be located in a store that is separated by a fire resisting structure from the remainder of the store. For small quantities this can be a fire-resisting cupboard or bin within the store. Such a store should comply with the requirements of **HSE Publications HS(G)51 "The storage of flammable liquids in containers". Pesticides which are highly flammable, and those with an 'Explosive risk' should be included on the store Emergency Contingency Plan and identified.**

3.4.5 Stores intending to house pesticides in large (200 to 1000 litres) containers should have walls and roofs of a design likely to minimise the risk of such containers being projected outside the containment system in a fire. (On those existing stores where alteration is not practicable, such drums should not be stored on high racks.)

3.5 Environmental Protection Considerations

3.5.1 There should be no internal drains within the store connected to any surface water drain, soak-away, foul sewerage system or directly to Controlled Waters.

3.5.2 Storekeepers should produce a comprehensive and up to date drainage plan of the site which accurately identifies all drains. If there is no in-house expertise to do this a reputable drainage company should be used. Key staff need to be familiar with the plan, which should be readily available.

3.5.3 Drains should be identified clearly by colour coding all manhole covers, drainage grills and gullies. For example, foul water drains should be painted red and surface water drains blue.

3.5.4 Storekeepers should use the EPA publication "Pollution Prevention Pays – Getting Your Site Right" to increase understanding of environmental risk, basic pollution prevention and simple measures that can be taken to reduce risk.

3.5.5 The floor and walls of the storage area should be **impermeable** to a height of at least any containment system designed to prevent leakage of pesticide or contaminated water. Floors should be provided with an anti-slip surface, be easily cleaned and resistant to chemical attack.

3.5.6 The store must have adequate suitable equipment to deal with any spillage of solid or liquid products and damaged or leaking containers. Absorbents (non-combustible), brooms, shovels, plastic bags and ties should be provided. An area within the store should be provided where bagged and appropriately labelled wastes should be placed to await safe disposal by a licensed waste disposal contractor. See section 3.8 Waste Management. See also Yellow Code Section14 - Spillage.

3.5.7 The stores secondary containment capacity is intended to provide adequate thinking and response time for Fire Authorities and EPA to deal with the situation, for example to arrange water intakes to be closed and to warn other river users. Total containment of all firewater may not be practicable, hence the concept of thinking/reaction time. The FEPA "Yellow Code" **suggests** a retention capacity equal to 110% of stored product plus an additional 75% in environmentally sensitive situations. This aspect of the Code is guidance rather than law and BASIS consider these volumes as a target to be aimed at rather than a rigid requirement. Therefore, to enforce this particular requirement, the EPA would have to use risk based pollution prevention powers outside the BASIS Scheme, such as The Anti-Pollution Works Notice Regulations, where available.

3.5.8 Internal piped drainage to containment facilities is not recommended because experience has shown that these systems become rapidly blocked under fire-fighting conditions and there may be ground movement which cases leaks. If such internal drainage is provided it should be in the form of open channels. Where a small collecting sump is proposed it should be formed as part of the floor construction (to minimise the risk of subsequent settlement/separation from the remainder of the floor). Where external draw-off for spillages is required (HSE HS(G)51 - flammable liquids) the draw-off access pipe should pass through the external walls above ground, bund and floor levels. Gravity drains from within the store to the outside are not satisfactory.

3.6 Calculating Containment Volume – see also Appendix 7

3.6.1 The containment volume is calculated according to the maximum pesticide stock to be kept in the store at any one time, generally expressed as pallets, where on average 1 pallet = 615 litres or 135 gallons. (I cubic metre contains 1000 litres and 1 cubic foot contains 6.25 gallons).

This includes solids or liquids and account must be taken of displacement within the bund of all materials stored.

3.6.2 In a small store the most practical height of the stores secondary containment will dictate the maximum number of pallets that can be stored and this will have to be strictly adhered to. Where as in a larger store a reasonable containment height will enable storage of more pallets than the store operator envisages being the maximum number at any one time. Maximum product volume will have to be determined in conjunction with the site operator.

3.6.3 The height of the secondary containment is calculated by considering the length and width of the store and the required maximum product volume.

For example:

If a store has a length = 15.25m, and width = 7.62m, the store area = 116.205 sq metres

And if maximum pesticide stock is 50 pallets the max stock volume = 50 x 615 = 30,750 litres

For 110% total containment volume: 30,750 + 10% = 33,825 litres or 33.8 cu metres
For 185% total containment volume: 30,750 + 85% = 56,887 litres or 56.9 cu metres

Using the formula Volume = Length x Width x Height

Therefore $\frac{\text{Volume}}{\text{Length x Width}} = \text{Height}$

The height for 110% containment = $\frac{33.8}{116.205}$ = 0.29m

The height for 185% containment = $\frac{56.9}{116.205}$ = 0.49m

3.6.4 When inspecting a store you should count the approximate number of full pallets to find out if the store is operating at, or near, maximum product volume. If there are more pallets than that used to calculate containment capacity then the containment system may be overtopped in the event of a fire. This is important, especially at Category A sites, and the storekeeper will be required to reduce the amount of product in store. It must be appreciated that stores may be operating at or about the maximum product volume at busy times of the year but this is only acceptable for short periods. If it is a regular occurrence you may decide not to pass the store as satisfactory until the containment height is permanently increased or the number of pallets reduced.

3.7 Unloading and Loading Areas and Outside the Store

3.7.1 Unloading yards and areas outside the secondary containment system should have spillage containment or absorption measures to prevent polluting discharges to surface water drains or foul sewers at all times. The measures should suit the circumstances of the particular store. For example, at Category A and Category B sites an impermeable emergency containment structure fitted with a valve or penstock may be required. Where the sensitivity and/or site usage justify it, for example at aquifer risk sites, an emergency closure valve may be needed on the overall site surface water system, and/or the high risk loading area may need to be segregated and provided with separate arrangements.

3.7.2 Uncontrolled surface water runoff to ditch or ground from the edge of concrete hard-standing is likely to give rise to an unacceptable risk of pollution and is **not** recommended.

3.7.3 Loading/unloading areas, which do not have an impermeable surface, are **not** recommended. Block paviors are unlikely to provide an impermeable surface unless additional impermeable materials are provided.

3.7.4 All underground drainage pipes and joints in the vicinity of the store – whether carrying surface water or foul drainage, should be impermeable.

3.7.5 On new stores it may be appropriate for the design of impermeable external loading and parking areas to allow water to back up within those areas, if necessary, when emergency valves are closed.

3.8 Waste Management

3.8.1 As with any site, correct handling, storing and disposing of waste material is necessary to avoid endangering human health or harm to the environment. In accordance with the waste hierarchy, minimising waste production in the first instance should be recommended. In particular minimising spillages will reduce the amount of hazardous wastes, which are the most expensive to dispose of and so in turn lead to minimising the cost of waste disposal, and is also beneficial to the environment as these waste types are the most hazardous i.e. this point should not relate solely to financial benefits. Store keepers should be encouraged to get advice on waste minimisation from Envirowise.

3.8.2 Wastes that are stored at the place where they are produced do not require a licence when they are stored within the provisions of Regulations 17 (schedule 3 paragraph 41) of the Waste Management Licensing Regulations 1994 (as amended). However, there are restrictions (duration and quantity) on the exemption for temporary storage of hazardous waste at the place where it was produced. Storage must be for no more than 12 months and for liquid wastes, must be in a secure container and total volume must not exceed 23,000 litres. For other wastes, the limit is $80m^3$ if stored in a secure container or $50m^3$ if stored in a secure place. Any skips used for general materials, such

as office wastes, should be clearly marked to indicate what materials they can and cannot be used for. It is preferable to ensure that the material is drained and dry and skips are covered to prevent water ingress.

Wastes from pesticides stores will most likely be controlled wastes and certain wastes may be classed as hazardous (in accordance with the relevant regulations) if they exhibit certain hazardous properties. Waste related to spillage or leaking containers are likely to be hazardous waste and will include pesticide concentrates, containers with pesticides residues and contaminated clothing. Returned containers may have to be considered but in most instances, as long as they have been triple rinsed they are unlikely to be hazardous wastes. More information on hazardous wastes is available from the EPA's websites.

3.8.3 Sites where hazardous waste is produced or stored need to be registered with the EPA. Consignment notes must be used when hazardous waste is moved from one site to another. Note that Storekeepers are required to use the appropriate List of wastes Code (also known as the European Waste Codes (EWC) on their Duty of Care Transfer Notes, and in Scotland, also on special waste consignment Notes. The In England and Wales the List of Waste Regulations 2005 lists all wastes (grouped according to generic industry or process). Each waste type is allocated a 6-digit code. Some types are classed as hazardous outright; others require separate assessment as to whether they are hazardous or not depending on the amount of dangerous substances present above threshold concentrations. Hazardous wastes are identifies in the EWC by an asterisk (*).

3.8.4 Sentinel Plants that treat chemicals and receive material from other sites may, if the material is classed as waste, fall under the Waste Licensing Regulations 1994 or Pollution Prevention and Control Regulations 2000. Sites that accept hazardous waste need to send a hazardous waste return to the EPA every three months.

3.8.5 Storekeepers, as waste producers, have a Duty of Care which requires them to keep waste securely, prevent its escape and observe all the requirements relating to its transfer to any other person or company. Waste can only be transferred to an authorised person such as a registered waste carrier or to a suitably licensed waste facility. If the waste producer chooses to carry their own waste they do not have to be registered but the provisions of the duty of care still apply when they transfer the material to another person.

3.8.6 Any non-hazardous waste transferred must be accompanied by certain information in a written form (a waste transfer note), which includes a description of the waste and details of the two parties involved in the transfer. The storekeeper, as the waste producer, must keep a copy of each waste transfer note for two years and a copy of each hazardous waste consignment note for three years. If the Duty of Care is not followed and if wastes go to a facility not authorised to accept them, then all members of the chain, including the producer may be held liable and may be prosecuted.

3.8.7 If surplus or non-approved products are disposed of as waste, then again the Duty of Care and Hazardous Waste Regulations apply and registered waste carriers and suitably licensed waste facilities must be used. However if they are returned to the supplier with the intention of use elsewhere, without further processing, they may not be classed as waste and the provisions may not apply. If out of date or damaged goods are returned to the store from elsewhere, a waste management licence or a registered exemption from licensing may be required to permit the storage of such items on site.

3.8.8 Inspections may reveal other waste management matters that are outside the current jurisdiction of the BASIS scheme.

4. FIRE SAFETY

The adequacy of fire safety and contingency arrangements for fire spillage should be assessed in conformity with legislative requirements, using the principles of risk assessment. [9]

What is appropriate in terms of fire fighting equipment and fire detection and alarm systems is primarily determined by the dimensions and use(s) of the premises, the equipment it contains, the physical and chemical properties of the substances likely to be present and the maximum number of persons that may be present.

In determining the adequacy of fire safety arrangements, account should be taken of Building Standards together with appropriate Home Office publications and in particular “Fire Safety- An Employers Guide”.

Where existing arrangements are considered inadequate or unsatisfactory, it is expected Fire Officers will act fairly and reasonably in exercising powers of enforcement, in accordance with established procedures which take account of the principles of good enforcement. [10]

In the case of BASIS registration of agrochemical stores, emphasis is placed upon the adequacy of structural, storage and management arrangements to mitigate the potentially damaging public health and environmental effects of fire or spillage. Shortcomings in terms of environmental safety and site pollution control measures will be enforced by the Local Authority and/or EPA.

However, liaison with the Registrant, EPA and between Fire Safety, Operations and specialist Fire Service Officers, will be necessary to ensure effective contingency arrangements are in place. [11]

SUMMARY OF FIRE SERVICE CONSIDERATIONS:-

4.1 Fire safety provisions and Fire Safety management arrangements should be in full compliance with the Fire Safety Legislation applicable to the premises or workplace.

4.2 Adequate consideration should be given to ensuring appropriate fire and spillage prevention measures are in place. However, anti-pollution measures are a matter for the EPA to assess and enforce.

4.3 Particular attention should be paid to the standards of fire safety management and standard of general housekeeping within the premises.

4.4 Adequate means of escape must be provided and maintained.

4.5 Arrangements should be made for adequately illuminating all exit routes and fire points in the event of mains electrical failure.

Fire points normally consist of a suitable fire extinguisher, break glass fire alarm call point, fire notice and any other equipment necessary for use in a fire or spillage emergency.

4.6 Appropriate fire fighting equipment must be provided and maintained.

4.7 Fire points should be sited adjacent to each exit from the premises and be clearly indicated or identified in accordance with the Health & Safety (Safety Signs and Signals) Regulations, 1996.

4.8 An appropriate means of giving warning in the event of fire must be provided.

In large premises or those containing substantial quantities of substances which are potentially

explosive, highly flammable or give rise to highly toxic products of combustion, consideration should be given to the provision of appropriate automatic fire detection, automatic fire suppression and/or smoke ventilation systems.

It is recommended that registrants should liaise with insurers regarding the above risk management provisions.

4.9 Appropriate fire safety notices, signs and symbols must be provided.

4.10 The registrant should consult with emergency services, EPA and the Local Authority regarding emergency plans for fire or spillage and in particular to agree, and action, appropriate site pollution control measures.

4.11 In certain circumstances foam (or other risk-specific) fire fighting or spillage media may be appropriate, the provision and use of which should as far as practicable be pre-planned and sufficient quantities pre-arranged or otherwise made available on-site.

4.12 Consideration must be given to the environmental pollution hazards associated with the use of fire fighting water or foams and contingency measures pre-agreed with the Registrant and EPA for the use and containment of fire-fighting residues or run-off at BASIS registered sites.

4.13 Fire service inspecting officers should ensure that effective consultation and risk information transfer has taken place under Section 1 (1)(d) of the Fire Services Act 1947.

In order to ensure fire fighters are made aware of the structure, nature of the contents, water supplies, levels of personal protective equipment required, fire-fighting action and containment arrangements on site for fire or spillage:-

4.14 In large storage premises or those containing substantial quantities of substances which are potentially explosive, highly flammable or give rise to highly toxic combustion products, consideration should be given to agreeing a joint agency fire and spillage contingency plan and assigning an initial attendance that may include specialist haz-mat officers together with pollution control equipment.

4.15 Where appropriate arrangements should be made to ensure compliance with the requirements of The Dangerous Substances (Notification & Marking of Sites) Regulations, particularly in respect of provision of access and location marking at BASIS registered sites.

NOTES:

9 Dear Chief Officer Letter 5/1987 England & Wales (**Appendix 3**) and Fire Service (Firemaster) Letter No 3/1987 Scotland, updates information on stored pesticides contained in H.O. Technical Bulletin No 1/1975 and provides current guidance on Fire Service operations involving pesticides.
In particular guidance stresses the need for adequate contingency planning and inspection arrangements by fire service personnel under section 1(1)(d) of the Fire Services Act, in order to obtain and action risk information.

10 Due to the potentially hazardous nature of agrochemicals, premises participating in the BASIS scheme are required to re-register every five years, which may involve re-inspection and re-assessment of safety provisions by the agencies involved. Please consult CFOA Protocol

11 The attached standard letter **Appendix 2** (or similar) should be completed and forwarded to the BASIS registrant to indicate that the Fire Authority has no objections

to the premises being registered (or re-registered) under the BASIS scheme. A copy should also be forwarded to the Distribution Manager, BASIS (Registration) Limited.

12 It should be noted that whilst BASIS registration is a voluntary scheme organized and controlled by the Agrochemical industry, statutory provisions exist augmented by an industry Code of Practice for the storage and control of Pesticides.

5. CONTINGENCY PLANNING

5.1 You should make sure that site operators have a contingency plan for in-store and out-of-store spillages and fires, covering also the transporting routes from the unloading area to the store and from the store to working areas. Employees should be trained in the correct response to incidents as described in the BASIS Contingency Planning and Procedures document (copy Appendix 4). The EPA Pollution Prevention Guidance Note 21 Pollution Incident Response Planning and "Pollution Prevention Pays – Getting Your Site Right" will also be useful.

5.2 The Contingency Plan should include detailed plans of the buildings and drainage systems. A copy should be kept away from the main building, and copies should be provided for the Police, EPA and Fire Authorities on arrival.

5.3 A current stock list of chemicals stored and the maximum quantities likely to be held at any one time should be available, away from the main building, and copies should be provided for the Police, EPA and Fire Authorities.

5.4 The contingency plan should include contact details of a suitable waste disposal contractor able to deal with emergency disposal operations that comply fully with the requirements of the Duty of Care (Section 34 of The Environmental Protection Act 1990) and other waste management legislation. Waste material must be taken to a site with a relevant waste management licence for dealing with those materials. Consideration would need to be given to on-site storage if a nearby waste disposal site is not accessible 24 hours a day.

5.5 Storekeepers should provide the Fire Authority, EPA, Police and BASIS with the name, address and telephone number of an out-of-hours contact.

5.6 On new sites, drainage systems outside the store containment areas should be provided with a cut-off valve for use in the event of firewater exceeding the capacity of the containment system etc. Such valves should be clearly identified on the site drainage plans, and provided with durable on-site notices. Care should be taken to ensure, if possible, that provision of a cut-off valve would not result in extensive soil contamination when used. Where a high risk loading area is provided with emergency closure valves protecting a surface water system, providing a canopy for the loading areas may help to resolve any possible rainwater disposal problems in this area.

5.7 On existing sites, if valves cannot be installed, drain bungs should be available in safe storage away from the main store and their whereabouts should be clearly marked and the position shown on the site plan. However it may be advisable to examine other ways of providing pre-planned containment on or near the site on an individual site by site basis.

5.8 Drain gully covers, sandbags (made of durable material) and absorbent materials should be held in safe storage away from the main store (in addition to any absorbents held within the store for "routine" purposes).

5.9 Sites Also Designated as COMAH Sites

Sites which are covered by the COMAH Regulations will need to consider Contingency Planning in more detail as it is a legislative requirement under these regulations.

5.9.1 Every operator of an establishment covered by the COMAH regulations must prepare an emergency plan.

The objectives of that plan are:-

i. To contain and control incidents so as to minimize the effects and limit the damage to persons, environment and property.
ii. To implement the measures necessary to protect persons and the environment from the effects of major incidents.
iii. To communicate the necessary information to the public, the emergency services and the other relevant authorities in the area.
iv. To provide for the restoration and clean up of the environment following a major incident.

Information must be included in the plan such that it complies with Part 2 of Schedule 5 referred to in Regulations 9 and 10 of Part 4 of the Control of Major Accidents Hazards Regulations 1999 (as amended)

5.9.2 COMAH sites may need additional letters of approval from the local Emergency Planning Officer and/or HSE.

5.9.3 Other agencies also have an interest in Contingency Planning such as Environmental Health Officers, and Water Supply and Sewerage companies. See Appendix 4 and 7.

6. ADDITIONAL POLLUTION CONTROL AND PREVENTION ASPECTS

6.1 From a pollution prevention viewpoint, a pesticide store (whether registered under BASIS or not), is treated as an industrial building containing chemicals potentially capable of causing serious pollution of surface or underground waters. The relevant pollution prevention and control policies will be applied, taking into account the individual circumstances of each case.

The general principle currently being applied is of secondary containment for each storage building, with some provision for emergency tertiary retention encompassing adjacent yards/access ways/drainage systems. Some compromise may be required for existing stores but must be acceptable to the EPA.

6.2 In England and Wales, the Environment Agency may, at its discretion, give developers or site occupiers notice that a formal Consent (under Schedule 10 of the Water Resources Act 1991 as amended by the Environment Act 1995) is required for specific existing or proposed surface water discharges. For BASIS stores such consent to discharge is unlikely to be given but further advice should be offered. The general position on discharges of pesticides or other trade effluents into surface or underground waters (controlled waters) is that a site occupier who causes or knowingly permits such a discharge (without, or in contravention of, Schedule 10 Consent) is guilty of a criminal offence.

Similarly in Scotland, SEPA is highly unlikely to consent to the discharge of any agrochemicals to controlled waters and will insist that arrangements are incorporated within drainage systems which minimise the risks of such a discharge.

6.3 Where any poisonous, noxious or polluting matter has entered, or is likely to enter, any controlled waters other than by authorised discharge, the EPA have powers to prosecute and may carry out anti-pollution works and alterations. The reasonable costs of carrying out such work, including the expense of restocking rivers, will be recovered from the responsible person. (Water Resources Act 1991 as amended by the Environment Act 1995).

6.4 EPA site inspections may raise some matters that are outside the current jurisdiction of the BASIS scheme. These matters should be clearly differentiated from BASIS matters in any correspondence. (Examples: oil storage regulations, other oil and chemical storage, unprotected bulk fertiliser storage, bulk treated seed storage, vehicle wash, packaging regulations, other waste management aspects).

The presence of certain materials may affect the Fire Service's strategy of dealing with a fire on-site, which in turn could lead to different environmental consequences compared with a BASIS store alone. This is a matter for the Fire Authority to make a decision which they may refer to in their letter of approval (**Appendix 2**) and which should be referred to in the store Emergency Contingency Plan.

6.5 Some BASIS Stores may be associated with a contracting operation. Facilities for these activities will come under the Pesticides Code of practice for using plant protection products. Again, you will have to consider these matters separately from the BASIS Store inspection. Areas of concern will be the provision of adequate facilities to deal with spray equipment washing, empty containers etc. The Groundwater Regulations will be a relevant consideration.

6.6 **Enforcement of Pollution Prevention Measures**

For England and Wales (and Scotland), The Anti Pollution Works Regulations 1999 – "Works Notices" will be used to enforce the necessary remedial work where negotiations fail to bring about the required standards, provided that there is likely pollution risk to controlled waters and costs/benefits are taken into account.

Northern Ireland is consulting on similar regulations.

6.6.1 The EPA are responsible for enforcing The Groundwater Regulations 1998 in the UK. These Regulations require that any intentional disposal of waste agrochemicals containing listed substances to 'sacrificial' areas of land must be authorised by the relevant national agency. Before authorisation can be granted, the proposed disposal site must be assessed for its suitability. The Regulations also give the agencies powers to issue Notices in the event of other 'non-disposal' activities (such as manufacture, storage, handling and use) posing a clear and serious risk of groundwater contamination by listed substances. Such Notices can either prohibit the activity, or authorise it subject to certain conditions.

APPENDIX I

USEFUL EMERGENCY CONTACTS FOR STOREKEEPERS

For Emergencies Only
Environmental Protection Agencies
Emergency Hotline for England, Wales, Scotland and Northern Ireland (24 hours) for all environmental incidents relating to air, land and water.
Tel: 0800 807060

For General Contact
Environment Agency - Head Office, Bristol
Rivers House, Waterside Drive, Aztec West, Almondsbury, Bristol, BS12 4UD
Customer Contact Centre for local queries
www.environment-agency.gov.uk
Tel: 01454 624400
Fax: 01454 624409
Tel: 08708 500250

Northern Ireland Environment Agency
Calvert House, 23 Castle Place, Belfast BT1 1FY
www.ehsni.gov.uk
Tel: 028 9025 4868
Fax: 028 9025 4777

Scottish Environment Protection Agency
Corporate Office, Erskine Court, The Castle Business Park, Stirling FK9 4TR
www.sepa.org.uk
Tel: 01786 457700
Fax: 01786 446885

Water UK
1 Queen Anne's Gate, London, SW1H 9BT
Tel: 020 7957 4567
Fax: 020 7957 4666

Scottish Water
Po Box 8855, Edinburgh, EH10 6YQ
Tel: 0845 600 8855

BASIS (Registration) Limited
34 St John Street, Ashbourne, Derbyshire, DE6 1GH
email: lindsay@basis-reg.co.uk
Tel: 01335 343945
Fax: 01335 346488

Chief Fire Officers Association
10-11 Pebble Close, Amington, Tamworth, Staffordshire, B77 4RD
Tel: 01827 302300
Fax: 01827 302399

Crop Protection Association UK Limited
2 Swan Court, Cygnet Park, Hampton, Peterborough PE7 8GX
email: info@cropprotection.org.uk
Tel: 01733 355370
Fax:01733 355371

A) ENVIRONMENT AGENCY
(England and Wales)

Region	Environment Agency Regional Offices
Anglian	Environment Agency Anglian Region Kingfisher House Goldhay Way Orton Goldhay Peterborough PE2 5ZR 08708 506506 – ask for your local office 01733 231840 – fax
Midlands	Environment Agency Midland Region Sapphire East 550 Streetsbrook Road Solihull West Midlands 08708 506506 – ask for your local office 0121 711 5824 - fax
North East	Environment Agency North East Region Rivers House 21 Park Square South Leeds LS1 2QG 08708 506506 – ask for your local office 0113 246 1889 - fax
North West	Environment Agency North West Region PO Box 12 Richard Fairclough House Knutsford Road Warrington WA4 1HG 08708 506506 – ask for your local office 01925 415961 - fax
Southern	Environment Agency Southern Region Guildbourne House Chatsworth Road Worthing East Sussex BN11 1LD 08708 506506 – ask for your local office 01903 821832 - fax

ENVIRONMENT AGENCY
(England and Wales) Continued

Region	Environment Agency Regional Offices
South West	Environment Agency South Western Region Manley House Kestrel Way Exeter Devon EX2 7LQ 08708 506506 – ask for your local office 01392 444238 – fax
Thames	Environment Agency Thames Region Kings Meadow House Kings Meadow Road Reading RG1 8DQ 08708 506506 – ask for your local office 0118 950 0388 - fax
Environment Agency Wales	Rivers House/Plas-y-Afon St Mellons Business Park St Mellons Cardiff CF3 0EY 08708 506506 – ask for your local office 029 2079 8555 - fax

WATER SERVICES Plc's
(England and Wales)

Region	Water Services Plc's
Anglian	Anglian Water Services Ltd Endurance House Chivers Way Histon Cambridge CB4 9ZR 01223 547500
Midlands	Severn Trent Water 2297 Coventry Road Sheldon Birmingham West Midlands B91 1QT 0121 722 4000
North East	Northumbrian Water Ltd Abbey Roads Pityme Durham DH1 5FT 01913 832222
North West	North West Water Ltd Dawson House Great Sankey Warrington WA5 3LW 01925 234000
Southern	Southern Water Services Ltd Southern House Yeomans Road Worthing East Sussex BN13 3NX 01903 264444

Region	Water Services Plc's
South West	South West Water Services Ltd Peninsula House Rydon Lane Exeter Devon EX2 7HR 01392 446688
Thames	Thames Water Utilities CUSTOMER SERVICES PO Box 436 SWINDON L Wiltshire SN38 1TU 0345 9200800 01793 424296 fax
Wessex	Wessex Water Services Ltd Wessex House Passage Street Bristol Avon BS2 0JQ 0117 929 0611
Yorkshire	Yorkshire Water Services Ltd West Riding House 67 Albion Street Leeds LS1 2QG 0113 244 8201
Welsh	Welsh Water Services Ltd Welsh Water Customer Services PO Box 690 CARDIFF CF3 9WL 0800 052 0130 or 0800 052 0145

There are other local water supply companies who may also have an interest and could be consulted.

B) SCOTTISH ENVIRONMENT PROTECTION AGENCY

HIGHLANDS AND ISLANDS AREA OFFICES

HQ Office Graesser House Fodderty Way Dingwall Business Park DINGWALL IV15 9XB Tel: 01349 862021 Fax: 01349 863987	**Aberdeen Office** Greyhope House Greyhope Road Torry ABERDEEN AB11 9RD Tel: 01224 248338 Fax: 01224 248591
Elgin Office 28 Perimeter Road Pinefield ELGIN IV30 6AF Tel: 01343 547663 Fax: 01343 540884	**Fort William Office** Carrs Corner Industrial Estate FORT WILLIAM PH33 6TL Tel: 01397 704426 Fax: 01397 705404
Fraserburgh Office Shaw House Mid Street FRASERBURGH AB43 9JN Tel: 01346 510502 Fax: 01346 515444	**Orkney Office** 58A Junction Road Kirkwall Orkney KW15 1AG Tel: 01856 871080 Fax: 01856 871090
Shetland Office O.I.L. Building Esplanade Lerwick SHETLAND ZE1 0LL Tel: 01595 696926 Fax: 01595 696946	**Thurso Office** Thurso Business Park Thurso CAITHNESS KW14 7XW Tel: 01847 894422 Fax: 01847 893365
Western Isles Office 1 Quay Street Stornoway ISLE OF LEWIS HS1 2XX Tel: 01851 706477 Fax: 01851 703510	**Lochgilphead Office** 2 Smithy Lane LOCHGILPHEAD PA31 8TA Tel: 01546 602876 Fax: 01546 602337

SCOTTISH ENVIRONMENT PROTECTION AGENCY

SOUTH EAST AREA OFFICES

HQ Office Clearwater House Heriot Watt Research Park Avenue North Riccarton EDINBURGH EH14 4AP Tel: 0131 449 7296 Fax: 0131 449 7277	**Arbroath Office** 62 High Street ARBROATH DD11 1AW Tel: 01241 874370 Fax: 01241 430695
Galashiels Office Burnbrae Mossilee Road GALASHIELS TD1 1NF Tel: 01896 754797 Fax: 01896 754412	**Glenrothes Office** Pentland Court The Saltire Centre GLENROTHES KY6 2DA Tel: 01592 776910 Fax: 01592 772923
Perth Office Strathearn House Broxden Business Park Lamberkine Drive Perth PH1 1RX Tel: 01738 627989 Fax: 01738 630997	**Stirling Office** Bremner House The Castle Business Park STIRLING FK9 4TX Tel: 01786 461407 Fax: 01786 461425

SCOTTISH ENVIRONMENT PROTECTION AGENCY

SOUTH WEST AREA OFFICES

HQ Office SEPA South West 5 Redwood Crescent Peel Park EAST KILBRIDE G74 5PP Tel: 01355 574200 Fax: 01355 574688	**Ayr Office** 2 Alloway Place AYR KA7 2AA Tel: 01292 294000 Fax: 01292 611130
Dumfries Office Rivers House Irongray Road DUMFRIES DG2 0JE Tel: 01387 720502 Fax: 01387 721154	**Glasgow Office** Law House Todd Campus West of Scotland Science Park Maryhill Road GLASGOW G20 0XA Tel: 0141 9456350 Fax: 0141 9480006
Newton Stewart Office Penkiln Bridge Court Minnigaff NEWTON STEWART DG8 6AA Tel: 01671 402618 Fax: 01671 404121	

SCOTTISH WATER AUTHORITIES

East of Scotland Water Authority 55 Buckstone Terrace EDINBURGH EH10 6XH Tel: 0131 445 4141 Fax: 0131 445 5040 24 Hour Emergency Tel: 0345 420420	**North of Scotland Water Authority** Head Office Cairngorm House Beechwood Park NORTH INVERNESS IV2 3ED Tel: 01463 245400 Fax: 01463 245405 24 Hour Emergency Tel: 0845 7437437
West of Scotland Water Authority Headquarters 419 Balmore Road GLASGOW G22 6NU Tel: 0141 355 5333 Fax: 0141 355 5146 24 Hour Emergency Tel: 0808 1005333	

C) NORTHERN IRELAND ENVIRONMENT AGENCY

Northern Ireland Environment Agency
Calvert House
23 Castle Place
BELFAST
BT1 1FY.

Tel: 028 9025 4868
Fax: 028 9025 4777

D) CHIEF FIRE OFFICERS/FIREMASTERS

CHIEF FIRE OFFICERS - ENGLAND	
The Chief Fire Officer County of Avon Fire & Rescue Service Temple Back BRISTOL Avon BS1 6EU Tel No: 0117 926 2061 Fax No: 0117 925 0980	The Chief Fire Officer Bedfordshire County Fire & Rescue Service Headquarters Southfields Road Kempston Bedfordshire MK42 7NR Tel No: 01234 351081 Fax No. 01234 845035
The Chief Fire Officer, Royal Berkshire Fire & Rescue Service 103 Dee Road Tilehurst READING Berkshire RG30 4FS Tel No: 0118 945 2888 Fax No: 0118 959 0510	The Chief Fire Officer Buckinghamshire Fire & Rescue Service Cambridge Street AYLESBURY Buckinghamshire HP20 1BD Tel No: 01296 424666 Fax No: 01296 282293
The Chief Fire Officer Cambridgeshire Fire & Rescue Service Hinchingbrook Cottage Brampton Road HUNTINGDON Cambridgeshire PE18 8NA Tel No. 01480 444500 Fax No. 01480 444587	The Chief Fire Officer Cheshire Fire & Rescue Service Winsford CHESHIRE CW7 2FQ Tel No. 01606 868700 Fax No. 01606 868712
The Chief Fire Officer Cleveland County Fire & Rescue Service Endeavour House Stockton Road HARTLEPOOL Cleveland TS25 5TB Tel No: 01429 872311 Fax No: 01429 872241	The Chief Fire Officer Cornwall County Fire & Rescue Service Brigade Headquarters Old County Hall, Station Road, TRURO, Cornwall TR1 3AY Tel No: 01872 323752 Fax No: 01872 323804

The Chief Fire Officer Cumbria County Fire & Rescue Service Headquarters Station Road COCKERMOUTH Cumbria CA13 9PR Tel No. 01900 822503 Fax No. 01900 824940	The Chief Fire Officer Derbyshire Fire & Rescue Service The Old Hall Burton Road LITTLEOVER Derbyshire DE23 6EH Tel No: 01332 771221 Fax No: 01332 270360
The Chief Fire Officer Devon Fire & Rescue Service The Knowle Clyst St George EXETER Devon Ex3 0NW Tel No: 01392 872200 Fax No: 01392 872300	The Chief Fire Officer Dorset Fire & Rescue Service County Hall Colliton Park DORCHESTER Dorset DT1 1XJ Tel No: 01305 251133 Fax No: 01305 224974
The Chief Fire Officer Durham County Fire & Rescue Service Framwellgate Moor DURHAM Co Durham DH1 5JR Tel No: 0191 384 3381 Fax No: 0191 386 9512	The Chief Fire Officer Essex County Fire & Rescue Service Rayleigh Close Hutton BRENTWOOD Essex CM13 1AL Tel No: 01277 222531 Fax No: 01277 229281
The Chief Fire Officer Gloucestershire Fire & Rescue Service Keynsham Road CHELTENHAM Gloucestershire GL56 7PY Tel No: 01242 512041 Fax No: 01242 221257	The Chief Fire Officer Guernsey Fire & Rescue Service Fire & Rescue Service Headquarters Town Arsenal St PETER PORT Guernsey Channel Islands CIGY1 1UW Tel No. 01481 724491 Fax No. 01481 715988

The Chief Fire Officer Hampshire Fire & Rescue Service Leigh Road EASTLEIGH Hampshire S050 9SJ Tel No: 02380 620000 Fax No: 02380 643178	The Chief Fire Officer Hereford & Worcester Fire & Rescue Service Copenhagen Street WORCESTER Worcestershire WR1 2HQ Tel No: 01905 24454 Fax No: 01905 723578/723514
The Chief Fire Officer Hertfordshire Fire & Rescue Service Old London Road HERTFORD Hertfordshire SG13 7LD Tel No. 01992 507507 Fax No. 01992 550242	The Chief Fire Officer Humberside Fire & Rescue Service Headquarters Summergroves Way Hessle High Road HULL Humberside HU4 7BB Tel No: 01482 565333 Fax No: 01482 508635
The Chief Fire Officer Isle of Man Fire & Rescue Service Fire & Rescue Service Headquarters Elm Tree House Elm Tree Road ONCHAN ISLE OF MAN IM3 4EF Tel No: 01624 647300 Fax No: 01624 647301	The Chief Fire Officer Isles of Scilly Fire & Rescue Service Fire & Rescue Service Administration Centre The Airport St Marys ISLES OF SCILLY TR21 0NG Tel No: 01720 422677 Fax No: 01720 423302
The Chief Fire Officer Isle of Wight Fire & Rescue Service St Nicholas 58 St Johns Road NEWPORT Isle of Wight PO30 1JQ Tel No: 01983 823194 Fax No: 01983 825728	The Chief Fire Officer Jersey Fire & Rescue Service Headquarters Rouge Bouillon ST HELIER Jersey Channel Islands JE2 3ZA Tel No: 01534 737444 Fax No: 01534 766375
The Chief Fire Officer Kent Fire & Rescue Service Headquarters The Godlands Straw Mill Hill Tovil MAIDSTONE Kent ME15 6XB Tel No: 01622 692121 Fax No. 01622 698310	The Chief Fire Officer Lancashire Fire & Rescue Service Garstang Road Fulwood PRESTON Lancashire PR2 3LH Tel: 01772 862545 Fax No: 01772 865144

The Chief Fire Officer Leicestershire Fire & Rescue Service Anstey Frith Leicester Road Glenfield LEICESTER Leicestershire LE3 8HD Tel No: 0116 287 2241 Fax No: 0116 231 1180	The Chief Fire Officer Lincolnshire Fire & Rescue Service South Park Avenue LINCOLN Lincolnshire. LN5 8EL Tel No: 01522 582222 Fax No: 01522 582200
The Chief Fire Officer London Fire & Rescue Service 8 Albert Embankment LONDON SE1 7SD Tel No. 02075 823811 Fax No. 02075 876394	The Chief Fire Officer Greater Manchester Fire & Rescue Service 146 Bolton Road Swinton MANCHESTER M27 2US Tel No. 0161 736 5866 Fax No. 0161 743 1777
The Chief Fire Officer Merseyside Fire & Rescue Service Hatton Garden LIVERPOOL Merseyside L3 2AD Tel No: 0151 2274466 Fax No: 0151 2360543	The Chief Fire Officer West Midlands Fire & Rescue Service Lancaster Circus Queensway BIRMINGHAM West Midlands B4 7DE Tel No: 0121 359 5161 Fax No: 0121 380 7007
The Chief Fire Officer Norfolk Fire & Rescue Service Whitegates Hethersett NORWICH Norfolk NR9 3DN Tel No: 01603 810351 Fax No: 01603 812261	The Chief Fire Officer Northamptonshire Fire & Rescue Services Moulton Way Moulton Park NORTHAMPTON Northamptonshire NN3 1XJ Tel No: 01604 797000 Fax No: 01604 797070
The Chief Fire Rescue Service Northumberland Fire & Rescue Service Loansdean MORPETH Northumberland NE61 2ED Tel No: 01670 513161 Fax No: 01670 510584	The Chief Fire Officer Nottingham Fire & Rescue Service Bestwood Lodge Arnold NOTTINGHAM Nottinghamshire NG5 8PD Tel No: 0115 967 0880 Fax No: 0115 926 1081

The Chief Fire Officer Oxfordshire Fire & Rescue Service Sterling Road KIDLINGTON Oxfordshire OX5 2DU Tel No: 01865 842999 Fax No: 01865 842712	The Chief Fire Officer Shropshire Fire & Rescue Service St. Michael's Street SHREWSBURY Shropshire SY1 2HJ Tel No: 01743 260200 Fax No: 01743 260268
The Chief Fire Officer Somerset Fire & Rescue Service Hestercombe House Cheddon Fitzpaine TAUNTON Somerset TA2 8LQ Tel No: 01823 364500 Fax No: 01823 413030	The Chief Fire Officer Staffordshire Fire & Rescue Service Pirehill House STONE Staffordshire ST15 OBS Tel No: 01785 813234 Fax No: 01785 816556
The Chief Fire Officer Suffolk Fire & Rescue Service Colchester Road IPSWICH Suffolk IP4 4SS Tel No: 01473 588888 Fax No: 01473 588997	The Chief Fire Officer Surrey Fire & Rescue Service St. Davids 70 Wray Park Road REIGATE Surrey RH2 OEJ Tel No: 01737 242444 Fax No: 01737 222857
The Chief Fire Officer East Sussex Fire & Rescue Service 24 King Henry's Road LEWES East Sussex BN7 1BZ Tel No: 01273 406000 Fax No: 01273 406050	The Chief Fire Officer West Sussex Fire & Rescue Service Northgate CHICHESTER West Sussex. PO19 1BD. Tel No: 01243 786211 Fax No: 01243 780416
The Chief Fire Officer Tyne and Wear Fire & Rescue Service Pilgrim Street, NEWCASTLE-upon-TYNE Tyne and Wear NE99 1HR Tel No: 0191 232 1244 Fax No: 0191 235 9284	The Chief Fire Officer Warwickshire Fire & Rescue Service Warwick Street ROYAL LEAMINGTON SPA Warwickshire. CV32 5LH Tel No: 01926 423231 Fax No: 01926 450332

The Chief Fire Officer Wiltshire Fire & Rescue Service Manor House Potterne DEVIZES Wiltshire SN10 5PP Tel No: 01380 723601-3 Fax No: 01380 727000	The Chief Fire Officer North Yorkshire Fire & Rescue Service Crosby Road NORTHALLERTON North Yorkshire DL6 1AB Tel No: 01609 780150 Fax No: 01609 777038
The Chief Fire Officer South Yorkshire Fire & Rescue Service Wellington Street SHEFFIELD South Yorkshire S1 3FG Tel No: 0114 272 7202 Fax No: 0114 272 6894	The Chief Fire Officer West Yorkshire Fire & Rescue Service Oakroyd Hall Birkenshaw BRADFORD West Yorkshire BD11 2DY Tel No: 01274 682311 Fax No: 01274 651315

FIREMASTERS - SCOTLAND	
The Firemaster Central Region Fire & Rescue Service Brigade Headquarters Main Street MADDISTON Falkirk FK2 0LG Tel No: 01324 716996 Fax No: 01324 715353	The Firemaster Dumfries & Galloway Fire & Rescue Service Brooms Road DUMFRIES DG1 2DZ Tel No: 01387 252222 Fax No: 01387 260995
The Firemaster Fife Fire & Rescue Service Strathore Road Thornton KIRKCALDY Fife KY1 4DF Tel No: 01592 774451 Fax No: 01592 630105	The Firemaster Grampian Fire & Rescue Service 19 North Anderson Drive ABERDEEN Aberdeenshire AB9 2TP Tel No: 01224 696666 Fax No: 01224 692224
The Firemaster Highlands & Islands Fire & Rescue Service 16 Harbour Road Longman West INVERNESS IV1 1TB Tel No: 01463 222722 Fax No. 01463 236979	The Firemaster Operations Planning Lothian Borders Fire & Rescue Service Brigade Headquarters Lauriston Place EDINBURGH EH3 9DE Tel No: 0131 2282401 Fax No: 0131 2286662
The Firemaster Strathclyde Fire & Rescue Service Brigade Headquarters Bothwell Road HAMILTON Strathclyde ML3 OEA Tel No: 01698 300999 Fax No: 01698 338444	The Firemaster Tayside Fire & Rescue Service Blackness Road DUNDEE DD1 5PA Tel No: 01382 322222 Fax No: 01382 200791

CHIEF FIRE OFFICERS NORTHERN IRELAND

The Chief Fire Officer
Northern Ireland Fire & Rescue Service
1 Seymour Street
LISBURN
Northern Ireland
BT27 4SX

Tel No: 02846 664221
Fax No: 02846 677402

CHIEF FIRE OFFICERS - WALES	
The Chief Fire Officer Mid & West Wales Fire & Rescue Service Ucheldir College Road Carmarthen SA31 3EF Tel: 01267 221444 Fax: 01267 238329	The Chief Fire Officer North Wales Fire & Rescue Service Coast Road Rhyl Clwyd LL18 3PL Tel: 01745 343431 Fax: 01745 343257
The Chief Fire Officer South Wales Fire & Rescue Service Fire & Rescue Service Headquarters Lanelay Hall Talbot Green PONTYCLUN Mid Glamorgan CF72 9XA Tel: 01443 237777 Fax: 01443 227435	

APPENDIX 2
STANDARD LETTER TO BASIS REGISTRANT FROM EPA

Dear

SITE INSPECTION FOR BASIS REGISTRATION

I refer to your agrochemical store at [***insert*** *full address*], which was inspected for the purposes of BASIS Registration on [***insert*** *inspection date*] in accordance with the Inspecting Officers Guidelines dated January 2005.

I have classified the environmental sensitivity of your site as [***insert*** *A, B, or C*] and therefore the store's bund retention capacity should be calculated as a minimum of [***insert*** *either 185% (for Cat A sites) or 110% (for B or C sites)]* of the maximum pesticide stock volume.

My findings from an environment protection viewpoint are as follows:

1. The structure and nature of the store is [***insert*** *satisfactory or unsatisfactory see attached Schedule or under review*]
2. Operating practices, including waste management arrangements, emergency and spillage procedures, in relation to the store are [***insert*** *satisfactory or unsatisfactory see attached Schedule or under review*].
3. External drainage arrangements for the store and the external loading area are [***insert*** *satisfactory or unsatisfactory see attached Schedule or under review*].
4. Other non-BASIS installations and/or practices on site are [***insert*** *satisfactory or unsatisfactory see attached Schedule or under review*].

Either add:
In view of the satisfactory assessments for BASIS Registration matters, this letter can be regarded as an Environment Agency / SEPA / NI EA [***delete*** *as appropriate*]}approval letter for BASIS Registration. Please note that it is now necessary to obtain a new approval letter from us every 5 years, but if you extend or alter the store or change your operating practices, or store ownership changes, you should contact us for a new inspection. All approvals are temporary and can be reviewed or revoked at any time. ***Approval for the purposes of BASIS registration does not imply immunity from prosecution should an incident or breach of any relevant environmental legislation occur at the site.***

Or
As one or more of the above store assessments is rated "unsatisfactory", I am unable to approve the site for BASIS Registration at this time. The attached Schedule indicates matters requiring attention and you should contact me as soon as the necessary work has been carried out in order that the site can be revisited.

You may need to add:
Please attend to the non-BASIS problems itemised on the attached Schedule.
Item(s) on the attached Schedule should be completed by [***specify*** *suitable time period*].

Add any non standard comments as necessary:

Please do not hesitate to contact me if you require any further clarification or information.

Yours sincerely

Copy: Distribution Manager, BASIS (Registration) Ltd, 34 St John Street, Ashbourne, Derbyshire, DE6 1GH

EXAMPLE OF SCHEDULE USED TO REPORT ANY PROBLEMS/FAILURES

Schedule: Environmental Protection Agencies site inspection: [***insert*** *occupier name and address, date of inspection, officers initials*]

Part A: Known or suspected illegal discharge(s) to watercourse/underground strata or breaches of waste management legislation
1. [List as necessary]
2.
etc

Part B: Alleged potential sources or pollution/Bad practices likely to give rise to environmental harm
1. [List as necessary]
2.
etc

Part C: Other information
1. [List as necessary]
2.
etc

(If a particular item relates to a BASIS matter then prefix the number with the word “BASIS”, eg BASIS-2)

APPENDIX 2 (FIRE)

From:

Direct Line:
Switchboard:
Fax:
Our Ref:

To:

Your Ref:
If phoning or calling ask for
Date:

SUBJECT: ***BASIS (REGISTRATION) LIMITED – INSPECTION SCHEME FOR AGROCHEMICAL STORES***

NAME AND ADDRESS OF REGISTRANT .....

.....

NAME AND ADDRESS OF PREMISES / SITE .....

.....

Following an inspection of the above premises on ..... by ..... you are hereby informed that safety arrangements made in connection with the following are considered satisfactory.

(i)	Regulatory Reform (Fire Safety) Order 2005	☐	
			N/A
(iii)	Dangerous Substances Notification and Marking of Sites Regulations	☐	☐
(iv)	Section 7(2)(d) of The Fire and Rescue Services Act 2004	☐	

The Fire Authority therefore has no objection to the premises / site being registered under the above scheme.

You are reminded that in order to ensure continued compliance with Fire Safety legislation you have an ongoing duty to regularly review your fire safety arrangements by means of Risk Assessment.

Yours faithfully,

INSPECTING OFFICER
(SERVICE/STATION)

From:

Direct Line:

Switchboard:
Fax:
Our Ref:
To: **Your Ref:**
If phoning or calling ask for
Date:

RE: BASIS (REGISTRATION) LIMITED – INSPECTION SCHEME FOR AGROCHEMICAL STORES

NAME AND ADDRESS OF REGISTRANT ……
……
……
……
……

NAME AND ADDRESS OF PREMISE / SITE ……..
……..
……..
……..
……

Following the receipt of notification from BASIS of the registration of the above premises, received on …… , the Fire Authority has no objection to the premise / site being registered under the above scheme. Due to the premise being of medium/low risk, an inspection has not been undertaken.

You are reminded that in order to ensure continued compliance with Fire Safety legislation you have an ongoing duty to regularly review your fire safety arrangements by means of Risk Assessment.

Yours faithfully

Fire Protection Department

APPENDIX 3

"Dear Chief Fire Officer Letter"

No. 5/1987

Attached is an extract from a "Dear Chief Fire Officer" letter

dated 29 May 1987 which relates to Section C,

"Fires Involving Pesticides".

FIRES INVOLVING PESTICIDES

A: BACKGROUND

1. Technical Bulletins 1/1975 (England and Wales) and (Scotland) provide technical advice on the nature of pesticides and the method of dealing with incidents involving such chemicals. That advice was reviewed and updated by the Joint Industries/Authorities Working Party on fires involving pesticides. This group was set up by the Crop Protection Association and was comprised of representatives of the Industry, MAFF (Defra), HSE, the National Farmers Union (NFU), Water Authorities UKASTA (AIC) and CACFOA (CFOA).

2. Pesticides are designed to destroy or control harmful organisms, or to preserve plants or their crops. There are, in addition, a range of **"Farm Chemicals"**, such as animal medicines, dairy hygiene products, fertilisers and food preservatives, commonly found in storage, which can safely be considered as suitable for being dealt with as pesticides, in the absence of other information.

B: STORAGE

3. Pesticides are used as an essential part of efficient modern farming. Their use is partly seasonal with much larger stocks being encountered in farm stores in the spring and autumn.

4. The manufacturers of pesticides produce and store these chemicals on their premises, often with storage being remote from manufacture. Fire & Rescue Services should be aware of such premises from their 7(2) (d) inspections within their areas, and will have considered the feasibility of pre-planning to deal with any incident. The Crop Protection Association has a Code of Practice for its members which include stringent standards for all safety provisions.

5. Subsequent distribution will be through a network of distributors who will normally be registered with BASIS (Registration) Limited. The premises of such distributors are noted to Fire & Rescue Services and are required to comply with the safety provisions of the scheme, not only in respect of the storage of these chemicals, but also whilst they are in their care in transit. Full details of the Registration Scheme for Distributors are contained in the BASIS handbook, available from: **BASIS (Registration) Limited, 34 St John Street, Ashbourne, Derbyshire, DE6 1GH.**

6. Although it is generally distributors who provide the products to the farming industry, third party warehousing (an intermediate tier of distribution) can also be encountered. Such premises are subject to the same standards as those of BASIS and are notifiable to Fire & Rescue Services by the Crop Protection Association.

7. Pesticides may be found as solids (in the form of granules, grains or powders) and as liquids. Liquid pesticides may be either water based or formulated on flammable solvents, which may be flammable.

8. They are normally stored, distributed and used in comparatively small containers, typically from 1 litre to 25 litre capacities in the case of drums, or in bags or sacks up to 25Kg. Pesticides may also form bulk loads either by road or rail haulage. Containers are marked with the name of the chemicals and considerable other information. It should be noted that some containers may be marked by four-digit identification numbers. These markings do not indicate any form of action code, but only the approvals identification and should not be confused with the substance identification number used with the HAZCHEM scheme.

9. In storage or in use, pesticides can be considered in the same light as all other potentially dangerous chemicals. The risk to fire fighters when dealing with incidents involving pesticides is no greater just because they are pesticides. **The risk, however, is generally very much greater to the environment.**

10. Although earlier products often had low flashpoints in concentrated form, flashpoints in excess of 45°C are now more usual. A typical solvent content would be about 50% of the whole formulation. The solvents may be either hydrocarbon or alcohol based, but in both cases, emulsifying agents will ensure ready miscibility with water and so pesticides will not react adversely when in contact with water. (see footnote at Section E).

11. Dear Chief Officer Letter number 3/1985 (Section F) gave information about a voluntary scheme for marking of buildings containing pesticides. They came into effect in October 1985, with the aim of warning fire fighters that pesticides may be in storage on the premises. The following paragraphs provide additional information.

12. The necessary signs and use of the signs is recommended and supported by all the organisations mentioned in Paragraph 1.*

13. Those using the signs are encouraged to seek the advice of their local Fire & Rescue Service on the positioning of the signs and their use. It is recommended that Fire & Rescue Services should take this opportunity to give advice and obtain information as above.

14. In addition to farm stores, provision is also made for the marking scheme to be used at warehouses or manufacturing plants. In these cases, specialist emergency action codes (**HAZCHEM**) may be added to the sign after local consultation with the Fire & Rescue Service.

C: LEGISLATIVE CONTROL AND SAFETY DATA

15. The sale, supply, storage and use of pesticides is controlled by regulations and codes of practice under the Food and Environment Protection Act 1985. Regulations under the Health and Safety at Work Act are also relevant. Product safety data and information for emergencies is made available by manufacturers to the National Chemical Emergency Centre, Harwell and to the National Poisons Information Service.

D: OPERATIONAL PROCEDURE

16. The nature of this risk requires special attention to be paid before incidents. Knowledge of such a risk is essential if the brigade is to deal effectively with any incident. Inspections under section 7(2i) (d) of the Fire and Rescue Services Act 2004, are essential in order to obtain information and for contingency planning for emergencies. Attention is drawn to the information contained in Fire & Rescue Service Circular No 9/1984 dealing with 1(i) (d) inspections. The local Environmental Health Officer should always be made aware of any possible environmental health risk.

17. **Although in large quantities pesticides do provide a fire risk, this is not the major hazard during fire fighting operations. Every effort should be made to contain any pesticide which may spill or be leaking, and any water used for fire fighting. The importance of this containment cannot be over-stressed.** The implications of any pollution can be very far-reaching, potentially involving risk to human, animal, fish and botanical life and can involve expenditure of enormous resources to combat the hazard produced after containment failed.

18. **At all times Fire & Rescue Services should, therefore concentrate their efforts on containing the chemicals and any water necessary for fire fighting. Water fog or spray should be used in order to reduce the need for containment.** The Environmental Protection Agencies and local Water Company, if public drainage systems are affected, must be informed at the earliest stages and any advice given by them should be very carefully considered. Where effective control of an incident is not possible without the use of large quantities of water, and where containment may be at risk, serious consideration should be given to allowing the chemicals and the storage building to burn under control whilst protecting surrounding risks.

19. In many cases this course of action may be extremely difficult to follow, particularly where large clouds of products of combustion may be seen as a serious risk. However, experience to date has indicated that in the conditions of fire, only limited risk exists from such a cloud, although it is appreciated that it may be extremely difficult, faced with such a circumstance, to take the desirable action of ensuring containment as a high priority. In making any decision, advice from both the user of the premises and from the water authority will be invaluable. Even where the decision is taken to allow a storage building to burn out, due consideration would need to be given to the containment of water used to protect adjacent property.

20. The fire fighters will be adequately protected provided chemical protection suits and breathing apparatus are worn. No higher level of personal protection is necessary for agrochemicals.

21. Once the immediate emergency of an incident is concluded, it is important that containment and control of the fireground is maintained. The Fire & Rescue Service should remain on site until overall control can be properly handed over to the water and pollution control authorities and it is important that this hand-over is carried out formally by the brigade. The debris and spillage left after the incident still presents a major hazard to the environment and loss of control and containment would nullify the previous efforts of the brigade. Similarly the need for standard decontamination procedures should be considered if contamination of fire fighters has occurred.

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* **NB:** Footnotes NOT part of original Home Office letter

a) Buildings storing pesticides must be externally identified with the safety warning sign BS5378 (black and yellow triangle incorporating an exclamation mark), where it can be seen by the Fire & Rescue Service.

b) A list of manufacturers of appropriate signs is available from BASIS.

c) Aluminium phosphide (PHOSTOXIN/LUXAN TALUNEX) produce Phosphine gas and should be dealt with similarly.

APPENDIX 4

CONTINGENCY AND PLANNING PROCEDURES

BASIS GUIDELINES

Distributors must make contingency plans in case of pesticide spillage and fires, as required by the Codes of Practice **for Suppliers of Pesticides to Agriculture, Horticulture and Forestry (Yellow Code)** and the Control of Substances Hazardous to Health Regulations 1999. The details below are offered as guidance to distributors in preparing such plans. The plan should cover the site and any transport routes on the site.

An Emergency Contingency Plan is required to ensure that emergency procedures have been considered and formalised and to ensure that suitable measures are put in place to deal with an emergency at that site.

1. Emergency procedures should be drawn up in agreement with the Fire & Rescue Service, Environmental Protection Agencies and the Chief Officer of Police, who will consider fire fighting arrangements, the consequences of smoke or fumes and the possible escape of contaminated fire water. Details of the procedures should be lodged with these bodies **in the form of an Emergency Contingency Plan for the store.**

Other agencies may have an interest in Emergency Contingency Planning:-

i) Environmental Health Officers of the Local Authority with respect to air pollution in the event of a fire and production of toxic fumes etc.
ii) Water supply and Sewerage Companies with respect to fire water run off from major incidents.

Larger sites may need to refer to the local Emergency Planning Officer, the Local Authority Emergency Planning Officer in Scotland.

Depending on the containment capacity of the premises in relation to local requirements, the local emergency authorities may take the decision to let the premises burn out in a controlled manner. This should be fully discussed and agreed with the site operator and written into the contingency plan where it is considered as an appropriate action.

Appropriate fire fighting equipment should be provided at each fire point.

Where the use of foam is a realistic option, it should be pre-planned and, where necessary, site operators would provide suitable stocks of foam as agreed in the contingency plan. Any foam provided must be compatible with that normally used by the Fire Services and any variations in application rate indicated. Protein foam is not suitable.

Where drainage systems are isolated with a cut-off valve outside the protected bunded areas the location of the valve must be clearly marked, and must also be easily identified on the site drainage plan.

Foam stocks, drain bungs, drain gulley covers, sandbags and absorbent materials should be held in safety away from the main storage area. Their location should be clearly marked on the site drainage plan.

2 A detailed site plan of the buildings, drainage systems and water supply network, showing the location of the stopcocks **including the destination of surface (colour coded blue) and foul water drains (colour coded red) and a detailed drainage plan should be provided which may require the services of a drainage consultant to produce a drainage map of the site**. This plan should be held away from the main storage area and made readily available on site in the event of emergency, copies being lodged with the Fire & Rescue Service, Environmental Protection Agencies and the Chief Officer of Police. The location of poisons and flammable products should be highlighted. Estimated retention capacity of fire water should be marked on the site plan.

Unless written approval to the contrary has been provided by the relevant sewerage undertakers, any on-site public foul or surface water sewers and their associated manholes should be arranged such that **an uncontrolled discharge** of spilt chemicals or contaminated fire fighting water will not occur.

3. Inventories for Authorities

a) A general list of pesticides which may be held in the store during the year, should be made available to the emergency authorities to help them in their own planning and training initiatives.

b) Additionally, a list of stock in the store needs to be held on site (but away from the main storage area) for use in an emergency.

For item **(a)** Product Safety Data Sheets should be offered.
For item **(b)** Data sheets should be available with the inventory.

c) Pesticides which pose a particular risk to emergency services in an incident such as highly toxic (producing toxic fumes), flammables or explosive in nature should be listed and highlighted.

NB: The on-site location of the pesticide inventory and the site plan should be made known to the Fire & Rescue Service, Environmental Protection Agencies, and the Chief Officer of Police.

D) In addition it would be sensible to provide a copy of the ECP off site where it can be produced in an emergency.

4. The name(s), address(es) and telephone number(s) of out-of-hours contacts should be given to the Chief Officer of Police, Fire & Rescue Service, and Environmental Protection Agencies. It may be considered advisable to have these displayed on the outside of the storage area, marked for the attention of the relevant authorities. A sign **"In Case of Emergency Dial 999"** should be displayed, visible to the passing public, to encourage them to alert the emergency services should they observe an accident.

5. Also see Home Office Bulletin, **"Fires Involving Pesticides"**, 29 May 1987, pages 3 - 7.

TRAINING

1. Training in Fire Routine

a. Action to be Taken on Discovering a Fire

- Call the Fire & Rescue Service by dialling **999**. This should be done even if the premises have an automatic fire alarm to a collector station.

- Evacuate the building.

- Attack the fire, if it is safe to do so.

b. Training

Personnel should be made aware of:

- the method of calling the Fire & Rescue Service;

- the position of the fire fighting equipment within the premises;

- the correct method of operating fire fighting equipment.

c. Instruction for Management

Ensure that:

- means of escape from the premises in case of fire are maintained and readily available at all times when persons are on the premises;

- employees are aware of the action to be taken in the event of discovering a fire;

- employees are aware of the correct method of operating fire fighting equipment;

- all fire fighting equipment is tested annually and tests recorded;

- fire alarms are tested in accordance with the local fire authority's recommendations and that a record of any such test is kept;

- fire notices detailing the action to be taken are prominently displayed throughout the building.

2. Training in Spillage Containment

Incidents relating to spillages should be rehearsed and training should include:-

a. reporting to the Environmental Protection Agencies if water contamination is likely and to the local Water Services Company (Water Authority in Scotland) if discharge to a sewer is likely;

b. awareness of products which, if spilled, could be potentially dangerous to personnel, either by contact with the skin or through inhalation;

c. use of correct personal protective equipment;

d. use of emergency equipment;

e. containment and mopping up of spillages;

f. cleaning up of the contaminated area;

g. use of cut-off valves, bungs or sandbags;

h. de-contamination of personal protective clothing;

i procedure for disposing of contaminated absorbent material and any other waste pesticide;

j. procedure for containment and mopping up spillages on vehicles used for pesticide transportation.

3. Training in First Aid

All personnel should be trained in emergency first aid. They should also be aware of what action to take if they or their colleagues become contaminated with, or overcome by, pesticides, For example:

a. siting of and use of first aid equipment;

b. siting and use of eye irrigators and replacement of out-of-date and partially used stocks;

c. procedure for calling a Doctor and/or ambulance;

d. restriction of other people's access to the contaminated area;

e. notification to senior staff member(s);

f. recording of incidents in Accident Records.

APPENDIX 5

CHANGES OF CONDITIONS / MATERIAL CHANGES

Circumstances may change within premises or to technical standards or product safety information, and therefore, safety requirements will have to be reviewed from time to time to determine whether conditions have changed since registration, to the extent that existing management, and environmental or fire safety precautions are no longer adequate.

'Material change' is taken to mean any alteration which would render previously accepted standards of environmental or fire safety arrangements inadequate in relation to the size, layout and uses of the premises, the physical and chemical properties of any substances stored, or used, or the number of persons likely to be present within the premises.
Any changes relate to conditions which existed at the time of inspection by the relevant agencies or authorities in connection with BASIS registration.

Store Keepers must therefore review fire and environmental management protection measures in advance if it is proposed:-

a) to make material extension to, or a material structural alteration to the premises; or

b) to make a material alteration to storage facilities or internal arrangements within the premises; or

c) to materially increase the storage or use of agrochemicals; or

d) to store or materially increase the storage of environmentally hazardous, potentially explosive or highly flammable materials.

APPENDIX 6

STORE CONTAINMENT CALCULATION

The secondary containment capacity of the store can be calculated as follows:-

Store dimensions -	length (m)	width (m)
Floor area of agrochemical store length x width	=	m^2
Height of containment	=	m
Fire water retention/spillage volume area x h	=	m^3
Where 1m3 = 1000 litres	=	Lt
At % containment capacity: (110% or 185%)		
Maximum allowable stock (÷ 1.1 or 1.85)	=	Lt
Where 1 pallet is approx 615 Lt (÷615)	=	Pallets

For example

Store dimensions	10m x 2.706m
Floor area of store	= 27.06m^2
Containment Height	= 0.25m
Fire water retention/spill vol	= 6.75m^3
1m3 = 1000 litres	= 6705 l
At 110% containment capacity	
÷ 1.1	= 6136 maximum allowable stock volume (litres)
Where 1 pallet	= 615 litres
÷ 615	= 10 pallets maximum number of full pallets

OR

At 185% containment capacity	
÷ 1.85	= 3657 maximum allowable stock volume (litres)
Where 1 pallet	= 615 litres
	= 5.95 pallets (approx 6) maximum number of full pallets

APPENDIX 7

PROTECTION OF LOCAL DRINKING WATER SUPPLY

AND PUBLIC SEWERS

1. Water supply, sewerage and sewage disposal is generally the responsibility of the three water authorities in Scotland, the Water Plcs in England and Wales and the Department of the Environment in Northern Ireland. However, in some areas of England, **water supply** is by the statutory Water Companies whilst the **sewerage and sewage disposal** is by the Water Plcs. These bodies are **separate** from the EPA and any approvals or inspections under this section must be obtained from the relevant organisations.

2. All water using equipment, supplied with mains water, must be installed in accordance with the Water Supplier's Water Bylaws.

3. The Water Bylaws set out the performance requirements for water fittings, draw-off taps and pipe work. The Bylaws also set out the installation requirements to prevent the contamination of water supply by backflow and back-syphonage.

4. Care should be taken to locate all pipe work, stop taps and water meter chambers so that they cannot become submerged or saturated by spilled chemicals.

5. All chemical stores with mains water supply should be inspected by the Water Supply Company to ensure no potential contamination of the supply. Any extensions/alterations to pipe work should be notified to the Water Company, which may follow up with a further inspection from the Water Bylaws inspector. [16]

6. Discharges of any trade effluent to any public sewer require the prior permission of the local Sewer Provider

APPENDIX 8

INSPECTION CHECKLIST

Note - sections refer to sections in Inspecting Officers Guidelines Document

BASIS STORE INSPECTION CHECKLIST	
COMPANY NAME:	
STORE NAME:	
ADDRESS:	
TEL:	OUT OF HOURS TEL:
STORE KEEPER/MANAGER:	

Inspection Details			
REASON	**✓ if applicable**	**TYPE OF STORE**	**✓ if applicable**
New store		Dedicated	
Existing - 5 year revisit		Store in store	
Existing - material changes		Contracting operation	
Other		Seed Treatment operation	
		Self contained / cabinet type	
		Other	
JOINT WITH FIRE OFFICER?		Name & Tel	
FEPA ENFORCER? **Local Authority / HSE – if contracting arrangements**		Name & Tel	

Section 2 – Site Sensitivity – tick one category, add details if necessary	✓
CAT A – Potable supply catchment / Aquifer / Fishery / Drains to foul sewer with no isolation facilities / Other environmentally sensitive area would suffer major harm	
Details:	
CAT B – River catchment not in A but with public access/use; Other area that would suffer unacceptable harm	
Details:	
CAT C – Drains to foul with adequate isolation & storage facilities at sewage Treatment Works	
Details:	

Section 3 – Store Structure & Organisation of Store
✓**if satisfactory, X if unsatisfactory, NA if not applicable and any comments**
General
External wall construction
No internal drains to foul or SW
Impermeable, sealed floors, floor/wall joint to height of bund
Building Regulations complied with?
Accurate Drainage Plan?
Secondary Containment System
Type of system e.g. ramped, sunken, small store
All vehicle access points ok?
All pedestrian access points ok?
No removable bunding for secondary containment volume? (✓ means all ok, X means a problem)
If Seed Treatment Site
Pesticide store bunded?
"In use" provisions OK?

Section - 3.6 Bund Containment Volume			
Store length (m) X Store width (m) =			Area (m^2)
Maximum stock in full pallets =			
Containment volume based on site sensitivity	110%	185%	OTHER
Height required for containment volume =			
Actual height =			
Approx number of full pallets stock at time of inspection =			
Stock acceptable?			

Section - 3.5.6, 3.7 Spillage Containment Facilities & Equipment		
✓**if satisfactory, X if unsatisfactory, NA if not applicable and any comments**		
Facilities & equipment (quantity & quality) - inside store		
Locations ok?		
Absorbents	Broom	Shovel
Plastic bags, ties & method for labelling		Disposal "pound"
Other		
Facilities & equipment - unloading area/outside the store		
Locations ok?		
Absorbents	Broom	Shovel
Sandbags	Other drain blocker/drain bungs	
Additional containment facility provided?	Condition	
Valve / Penstock provided?	Condition	
Impermeable drainage pipes?		
Other		

Section 3.8- Waste Management
✓**if satisfactory, X if unsatisfactory, NA if not applicable and any comments**
Duty of Care understanding / arrangements OK?
Spillage / "leakers" waste handling procedures OK?
Waste storage procedures
Waste disposal arrangements – taking into account Special Waste Regulations (see contingency plan above for emergency arrangements)
Waste disposal contractor details

Section 4 - Fire Safety covered by Fire Officer

Section 5 – Contingency Planning	
✓**if satisfactory, X if unsatisfactory, NA if not applicable and any comments**	
Contingency plan produced	Does EA have copy?
Detailed site drainage plan included:	
Surface water discharges to:	
Foul water discharges to:	
Current stock list away from store?	
COMAH applies?	COMAH requirements fulfilled?
Other relevant agencies involved? Details:	
Emergency waste disposal arrangements (details of contractor etc)	
Copies of relevant documentation e.g. waste transfer notes OK?	
Sentinal Plant- if so OK?	

Section 6 – Additional Pollution Control and Prevention Aspects
Any other matters relevant to water pollution and prevention outside the jurisdiction of the BASIS scheme e.g. discharge consents, oil tanks, Groundwater Regulations Waste Management, Packaging?

APPENDIX 9

REFERENCES

- Environment Act 1995 **ISBN** 010-542-5958
- Food and Environment Protection Act 1985 Chapter 48
  ISBN 0-10-544885-0
- Control of Pesticide Regulations 1986 (as amended) SI No 1510
  ISBN 0-11--067510-X
- Code of Practice for Suppliers of Pesticides to Agriculture, Horticulture and Forestry (Yellow Code) (**MAFF** PB3529) - **DEFRA** Publications ADMAIL 6000, London SW1A 2XX Tel: 0645 556000
- Code of Practice for Using Plant Protection Products – **DEFRA** Publications , Admail 6000, London SW1A 2XXTel: 0645 556000
- The Safe Use of Pesticides for Non-Agricultural Purposes 1991 ACOP
  ISBN 0-7176-0542-6
- The Control of Substances Hazardous to Health Regulations 1999
  SI 1999/437**. ISBN** 0-11- 082087-8
- General COSHH ACOP and Carcinogens ACOP and Biological Agents ACOP – Joint Approved Codes of Practice **ISBN** 0-7176-1670-3
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  HS(G)51. **ISBN** 0-11-885533-6
- Dangerous Substances (Notification and Marking of Sites) Regulations 1990 - Guidance on Regulations HS(R)29. **ISBN** 0-11-885435-6
- Control of Industrial Major Accident Hazard Regulations 1984 (CIMAH) - Guidance on Regulations. **ISBN** 0-11-885579-4
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- The Fire Precautions Act 1971 **ISBN** 010 544 071X
- The Fire Services Act 1947 **ISBN** 010 850 1094
- The Fire & Rescue Services Act 2004 **ISBN** 0 10 542 1049
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- Environmental Protection: The Waste Management Licensing Regulations 1994 SI 1056 (and subsequent amendments).

- Poisons Rules 1982. SI No 218. **ISBN** 0-11-026218-2

- First Aid At Work - A Guidance to the 1981 Regulations
  Code of Practice 42. **ISBN** 0-11-885536-0

- A Guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995. L73. **ISBN** 0-7176-10128

- Storage of Packaged Dangerous Substances - HS(G)71. **ISBN** 0-11-885989-7

- Carriage of Dangerous Goods by Road Regulations 1996 (CDG Road)
  SI No 2095. **ISBN** 0-11-062926-4

- Carriage of Dangerous Goods (Amendment) Regulations 1999 SI 1999 No 303
  ISBN 0-11-080470-8

- The Carriage of Dangerous Goods by Road (Driver Training) Regulations 1996
  SI No 2094. **ISBN** 0-11-062928-0

  The Transport of Dangerous Goods (Safety Advisors) Regulations 1999
  ISBN 0-11-080434-1

- Pesticides 2000 "Your Guide to Pesticides Approved under the Control of Pesticide Regulations 1986 and the Plant Protection Products Regulations 1995" Reference Book - **MAFF/HSE** (Annual). **ISBN** 0-11-243051-1

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