

## **Permit with introductory note**

**Pollution Prevention and Control (England and Wales)  
Regulations 2000 (as amended)**

### **Installation address**

**Simon Storage Ltd  
Immingham Storage Co Ltd  
West Terminal  
West Riverside  
Immingham Docks  
Immingham  
DN40 2QU**

**Permit Reference: EP/200200042**

Contact Details:

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Pollution Control Officer  
North East Lincolnshire Council  
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Genesis Office Park  
Europarc  
Grimsby  
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## **Introductory note**

*This introductory note does not form a part of the Permit*

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) (S.I.2000 No. 1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part B to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The permit includes conditions that have to be complied with. It should be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practical, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

### **Description and installation regulated by this permit**

Immingham Storage West terminal has handling facilities for bulk fuels and chemicals.

The process consists of the reception of acrylate from ships berthed at the Immingham West Jetty or via road tanker. Storage of acrylate is in dedicated storage tanks and is followed by the export via the road tanker loading/unloading yard.

All products are stored in vertical, cylindrical tanks with cone roofs of fully welded construction. Acrylate monomers are stored in mild steel tanks, with scrubbers designed to reduce emission concentrations to an acceptable level. Additionally the tanks are equipped with individual roof mounted pressure relief valves to protect the tanks in the event of a scrubber or vapour line blockage.

When discharging ships to storage tanks, vapour is back vented to the ships hold. When loading road tankers or intermediate bulk containers (IBC's), vapour is back vented to the storage tank.

The terminal is located in the highly industrialised port of Immingham. It operates 24 hours per day, 365 days per year.

The company's Quality Assurance System, BS EN 9001:2000 is assessed and confirmed by the British Standards Institute (BSI).

<b>Superseded Licences/Consents/Authorisations relating to this installation</b>		
<b>Holder</b>	<b>Reference Number</b>	<b>Date of Issue</b>
<b>Simon Storage Group</b>	<b>EPA/126/AE/IL/HJ</b>	<b>14<sup>th</sup> June 1995</b>

## **Confidentiality**

The Permit requires the Operator to provide information to North East Lincolnshire Council. The Council will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the operator considers that any information provided is commercially confidential, it may apply to North East Lincolnshire Council to have such information withheld from the register as provided in the PPC Regulations. To enable North East Lincolnshire Council to determine whether the information is commercially confidential, the Operator should clearly identify the information in question and should specify clear and precise reasons.

## **Variations to the permit**

This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted.

## **Surrender of the permit**

Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator should be informed in writing, such notification must include the information specified in regulation 20(3) of the PPC regulations.

## **Transfer of the permit or part of the permit**

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

## **Responsibility under workplace health and safety legislation**

This Permit is given in relation to the requirements of the PPC regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

## **Appeal against permit conditions**

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 27 and Schedule 8 of the PPC regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

The Planning Inspectorate  
Environmental Appeals Administration  
Room 4/19 – Eagle Wing  
Temple Quay House  
2 The Square, Temple Quay  
BRISTOL  
BS1 6PN  
Tel: 0117 372 8812  
Fax: 0117 372 6093

### **Please Note**

An appeal brought under paragraph (1) (c) or (d) in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

**End of introductory note**

**Permit issued under the Pollution Prevention and Control Regulations 2000**

**Permit**

Permit Number: EP200200042

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) hereby permits.

**Simon Storage Ltd** ("the Operator"),

Whose registered office is

**Immingham Storage Co Ltd**  
**Priory House**  
**60 Station Road**  
**Redhill**  
**Surrey**  
**RH1 1PE**

To operate an installation at

**Immingham Storage Co Ltd**  
**Immingham West Terminal**  
**Immingham Docks**  
**North East Lincolnshire**  
**DN40 2QU**

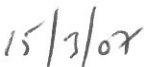
to the extent permitted by and subject to the conditions of this Permit and within the boundary identified in Conditions A and B

Signed



Tony Neul  
Authorised to sign on behalf of  
North East Lincolnshire Council

Dated

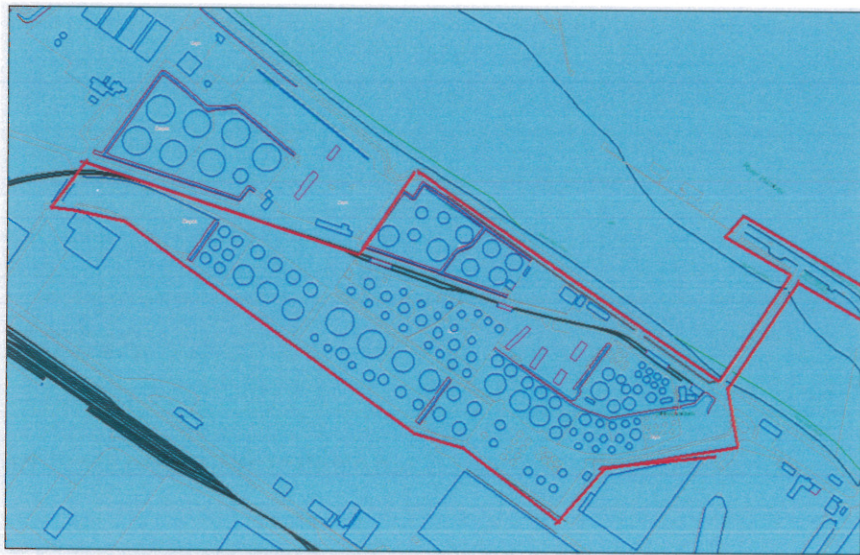




## CONDITIONS

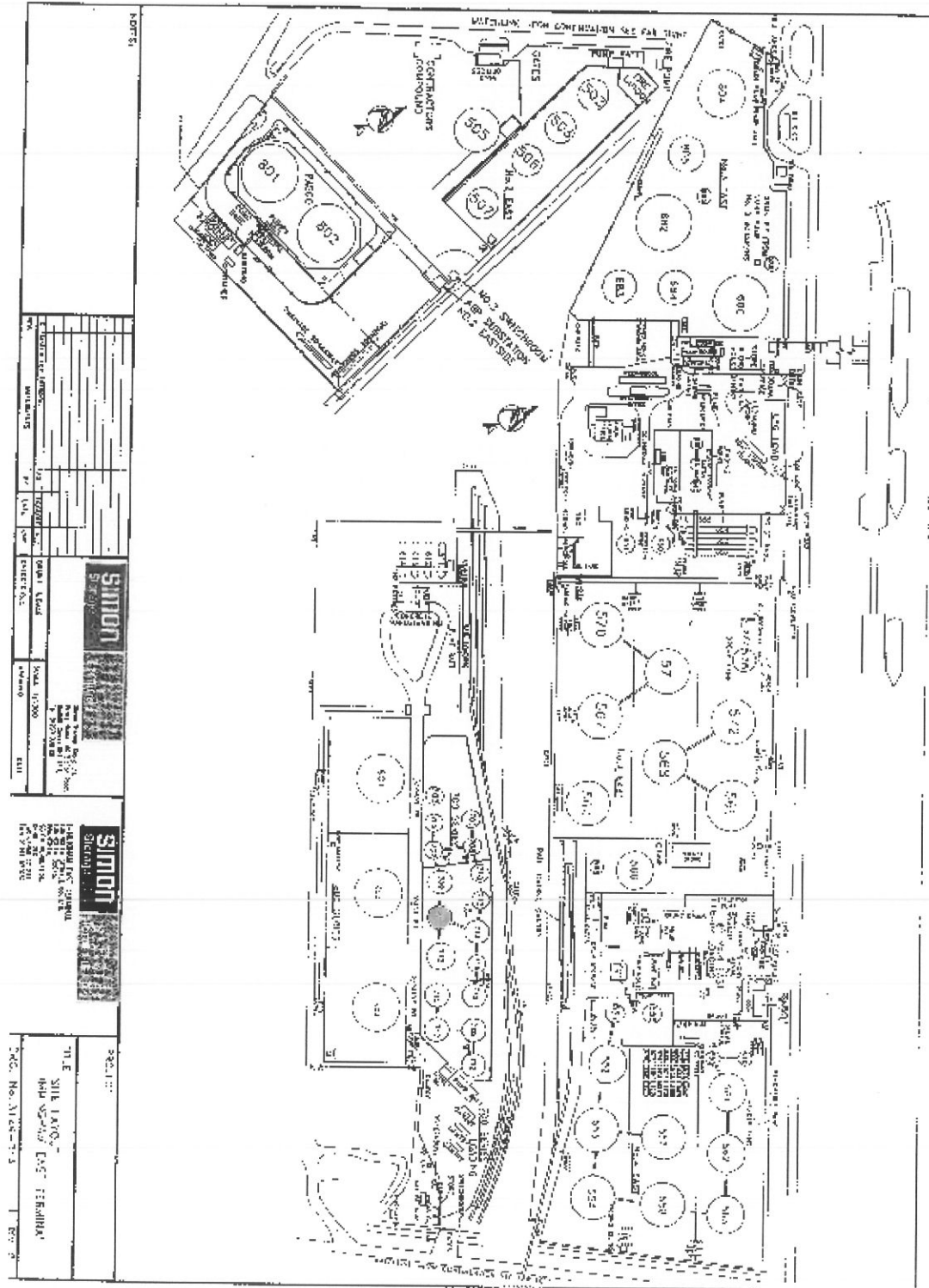
### Extent and limit of the installation

- A** The operator is permitted to carry out the activities and/or associated as specified, within the boundary shown in red on the plan below:-





**B** **Until 30 June 2007:-** The operator is permitted to carry out the activity as specified in Conditions 2.9 to 2.13 within the area identified on the plan below, being part of the Simon Storage Ltd. at their Eastern Terminal site at Immingham Dock. The Tank No. 711 is identified by a the point marked in pink.



## DESCRIPTION OF PERMITTED ACTIVITY

**Immingham Storage West terminal has handling facilities for bulk fuels and chemicals.**

**The process consist of the reception of acrylates from ships berthed at the Immingham west Jetty or via road tanker. Storage of acrylates is in dedicated storage tanks and is followed by the export via the road tanker loading/unloading yard.**

**All products are stored in vertical, cylindrical tanks with cone roofs of fully welded construction. Acrylate monomers are stored in mild steel tanks, with scrubbers designed to reduce emissions concentrations to an acceptable level. Additionally the tanks are equipped with individual roof mounted pressure relief valves to protect the tanks in the event of a scrubber or vapour line blockage.**

**When discharging ships to storage tanks, vapour is back vented to the ships hold. When loading road tankers or intermediate bulk containers (IBC's), vapour is back vented to the storage tank.**

**The terminal is located in the highly industrialised port of Immingham. It operates 24 hours per day, 365 days per year.**

## CONDITIONS

### 1. Releases to Air

- 1.1 During normal operation there shall be no emission of acrylate to air other than from the scrubber vents.
- 1.2 Emissions from air may occur via the storage tanks pressure relief valves if a blockage or malfunction on a wet scrubber occurs. Every effort must be made to keep such incident to a minimum.
- 1.3 Any release to air caused by the operation of the pressure relief system shall be regarded as an escape requiring investigation and notification as specified in Condition 3.5.
- 1.4 Offensive odours associated with the process shall not be noticeable beyond the process boundary.
- 1.5 The maximum release of Acrylate via the wet scrubbing system shall be as follows:-

SOURCE	ACRYLATE	MAXIMUM ANNUAL (KILOGRAMS)	MAXIMUM HOURLY EMISSION (GRAMS)
Acrylate monomer scrubber vent	Acrylate monomers	53.8	6.15
Acrylic Acid Scrubber Vent	Acrylic Acid	70.0	8.0

### 2. Plant and Equipment

- 2.1 All storage of Acrylates shall be in the following tanks as shown on plan number ISW 2.

TANK NO.	PRODUCT	HEIGHT X DIAM	CAPACITY
111	Acrylate Monomer	11M X 9M	676 M <sup>3</sup>
112	Acrylate Monomer	11M X 9M	678 M <sup>3</sup>
113	Acrylate Monomer	11M X 9M	677 M <sup>3</sup>
114	Acrylate Monomer	9M X 8M	438 M <sup>3</sup>
115	Acrylate Monomer	12M X 8M	585 M <sup>3</sup>
116	Acrylate Monomer	10M X 8M	487 M <sup>3</sup>
117	Acrylate Monomer	7M X 8M	341 M <sup>3</sup>
118	Acrylate Monomer	7M X 8M	339 M <sup>3</sup>
119	Acrylate Monomer	14M X 10M	1062 M <sup>3</sup>
120	Acrylate Monomer	10M X 9M	577 M <sup>3</sup>

124	Acrylate Monomer	12M X 8M	583 M <sup>3</sup>
125	Acrylate Monomer	12M X 8M	583 M <sup>3</sup>
127	Acrylate Monomer	11M X 7.6M	485 M <sup>3</sup>
128	Acrylate Monomer	11M X 7.6M	485 M <sup>3</sup>
129	Acrylate Monomer	11M X 7.6M	485 M <sup>3</sup>
130	Acrylate Monomer	11M X 7.6M	485 M <sup>3</sup>
131	Acrylate Monomer	11M X 7.6M	485 M <sup>3</sup>
136	Acrylic Acid	9.144M X 6.553M	305 M <sup>3</sup>
137	Acrylic Acid	9.144M X 6.553M	304 M <sup>3</sup>
139	Acrylic Acid	9.144M X 6.096M	263 M <sup>3</sup>

- 2.2 All acrylate storage tanks shall be equipped with a dedicated export pump with a mechanical seal and high temperature protection.
- 2.3 All acrylate storage tanks shall be painted in a reflective colour to minimise breathing emissions.
- 2.4 All acrylate monomer storage tanks shall be equipped with:-
- a connection to the common wet scrubber circulating 10% caustic soda solution as an absorbent.
  - Roof- mounted pressure relief valves.
  - A flame detonation trap in the vapour line to the scrubber and ship/road facilities.
  - Level gauging remote independent high level alarms
  - Deluge facilities for cooling the tank.
- 2.5 The acrylic acid storage tanks shall be equipped with:-
- a connection to the acrylic wet scrubbing system.
  - roof mounted pressure relief valves.
  - Level gauging and remote independent high level alarms.
  - Remotely monitored tank temperature alarms.
  - Deluge facilities for cooling the tank.
  - A temperature control system to maintain the tank contents at 18° c - 24° c
- 2.6 The integrity of the bunding shown on plan number ISW 2 shall be maintained at all times and have a capacity of at least 110% of the largest tank.
- 2.7 A dedicated vapour return pipeline shall be provided to return displaced vapour from the storage tanks to the ship during discharge.

- 2.8 (a) The road transfer station shall be provided with a concrete surface with suitable drainage via an interceptor system.
- (b) A vapour return pipeline shall be provided to return displaced vapour from the road vehicle to the storage tank.
- 2.9 **Until 30 June 2007:-** This condition permits the use of a storage tank, identified as Tank No. 711, located at the point marked in pink on the plan at Condition B of this permit, for the purposes of the storage of petroleum which will arrive by vessel and be discharged to the tank, with displaced air back-vented to the hold of the vessel, via a dedicated vapour return line, as permitted by the terms of the permit.
- 2.10 **Until 30 June 2007;-** The petroleum stored in the storage tank, identified as Tank No. 711 located at the point marked in pink on the plan at Condition B of this permit, shall be discharged to a vessel, with displaced air back-vented to the storage-tank via a dedicated vapour return line, as permitted by the terms of the permit.
- 2.11 The Regulator shall be notified as soon as it is known of the expected date and time of the arrival of the petroleum and the name of the vessel involved.
- 2.12 The Regulator shall be notified as soon as it is known, of the expected date and time of the discharge of the petroleum from storage tank identified as Tank No. 711 to a vessel for removal from the installation and the date and time of departure of the vessel.
- 2.13 If any extension of the period identified in Conditions 2.9 and 2.10 becomes necessary or desirable, then the Regulator shall be advised as soon as possible, giving the length of extension required and the reasons for it.

### **3. Operations**

#### **3.1 Ship Imports**

- (a) All ship imports shall be via a piggable line, using the ships pumps with vapour return to the ship via the dedicated vapour return pipeline.
- (b) All connection hoses shall be blown clear before disconnecting and blanking.
- (c) All stainless steel lines must be pigged out to the storage tanks, or the dedicated acrylate slops tank, after the discharge of each grade, with vapour vented via the scrubber. The vapour return line must be pigged to the scrubber.

#### **3.2 Road Imports**

- (a) All road imports shall be via the central road tanker transfer station, using the on site import pumps.

- (b) All connection hoses shall be blown clear before disconnection.
- (c) Road tankers shall be earthed before commencement of discharge.
- (d) All lids and openings on the vehicle shall remain closed at all times.

### 3.3 **Export**

- (a) All exports shall be via road tankers or IBC's at the central tanker transfer station.
- (b) All displaced vapour shall be returned to the storage tanks via the vapour return pipeline.
- (c) All road tankers shall be earthed before loading commences.
- (d) All lids and openings on the vehicle shall remain closed at all times.

3.4 A supply of acrylate inhibitor shall be kept on site at all times.

3.5 When any unanticipated alarm relating to the acrylate storage system is activated, or an abnormal temperature rise is detected, or an escape of acrylate is detected, or when any malfunction or breakdown is likely to lead to an escape of acrylate is found, then:-

- (a) an immediate investigation shall be carried out;
- (b) instant corrective action shall be taken;
- (c) The observations, findings, results of the investigation and actions taken under headings (b) and (d) of this condition shall be entered in the log required by condition 3.6, and
- (d) If the corrective action is not immediately effective then action to mitigate any effect shall be taken; and
- (e) A written notification in the form described in annex 1 to this Authorisation shall be forwarded to North East Lincolnshire Council within 7 days.

3.6 A site log shall be kept available for examination by Local Authority Officer at any time. Entries must include:-

- (a) any intentional or unintentional emissions of acrylate from the site;
- (b) the control measures taken to prevent or minimise (a) above;
- (c) any observations made by Local Authority Officers.
- (d) The results of any monitoring required by condition 5.5.

3.7 All records shall be kept for a minimum of 4 years.

- 3.8 Any changes in nominated personnel shall be notified to the Director of Health and Housing, in writing, within 5 working days.
- 3.9 Regular checks of acrylate temperature shall be undertaken as per application document 792/CTN/pkt.12.94.
- 3.10 The company shall supply upon demand and without charge a copy of all or part of the records kept in accordance with the Authorisations as the Local Authority may require.

#### **4. Inspection and Testing**

- 4.1 All storage tanks, pipeline, hoses and abatement equipment shall be tested and inspected in accordance with the regime specified in application document 792/CTN/pkt.12.94. Records of all tests and inspections shall be kept for 2 years.

#### **5. Monitoring**

- 5.1 The caustic solution used in the acrylate monomer wet scrubber shall be sampled quarterly for PH and any necessary adjustments made.

Monitoring of the water in the acrylic scrubber shall be carried out.

- 5.2 The flame detonation trap pressure/ vacuum valves shall be checked by a competent person every 6 months and a record kept of the findings.

- 5.3 The temperature of stored acrylate shall be continuously monitored.

- 5.4 Storage tank filling shall be monitored via the level gauges and the risk of overfilling reduced by the use of high level alarms and road tanker loading shall be monitored continually via flow meter.

- 5.5 Emissions from the vent stacks shall be calculated every 12 months to demonstrate compliance with Condition 1.5. The results of the tests shall be forwarded to North East Lincolnshire Council within 14 days.

- 5.6 Visual and olfactory assessment of emissions shall be made frequently and in case not less than:-

- (a) Main Office – Daily
- (b) Number 1 Boiler House – Weekly
- (c) Fire Pump House – Weekly

The results of all such monitoring shall be recorded in the log required by Condition 3.6.



- 5.7 Should the activity suffer any breakdown or malfunction which affects or may affect releases to air, the Operator shall inform the Local Authority, as the "Regulator" at the following address:-

Origin One  
1 Origin Way  
Genesis Office Park  
Europarc  
Grimsby  
North East Lincolnshire  
DN37 9TZ

Telephone: 01472 313131

## **Ambient air quality management**

### **Air quality**

In areas where air quality standards or objectives are being breached or are in serious risk of breach and it is clear from the detailed review and assessment work under Local Air Quality Management that the Part B process itself is a significant contributor to the problem, it may be necessary to impose tighter emission limits. If the standard that is in danger of being exceeded is not an FC Directive requirement, then industry is not expected to go beyond BAT to meet it. Decisions should be taken in the context of a local authority's Local Air Quality Management action plan. For example, where a Part B process is only responsible to a very small extent for an air quality problem, the authority should not unduly penalise the operator of the process by requiring disproportionate emissions reductions. More guidance on this is provided in paragraph 360 of the Air Quality Strategy which gives the following advice:

"The approach from local authorities' tackling air quality should be an integrated one, involving all strands of local authority which impact on air quality and underpinned by a series of principles in which local authorities should aim to secure improvements in the most cost-effective manner, with regard to local environmental needs while avoiding unnecessary regulation. Their approach should seek an appropriate balance between controls on emission from domestic, industrial and transport sources and draw on a combination and interaction of public private and voluntary effort".

### **Management**

#### **Management techniques**

Important elements for effective control of emissions include:

- Proper management, supervision and training from process operations;
- Proper use of equipment
- Effective preventative maintenance on all plant and equipment concerned with the control of emissions to the air, and
- It is good practise to ensure that spares and consumables are available at short notice in order to rectify breakdowns rapidly. This is important with respect to arrestment plant and other necessary environmental controls. It is useful to have an audited list of essential items.

Spares and consumables – in particular, those subject to continual wear – should be held on site, or should be available at short notice from guaranteed local suppliers, so that plant breakdowns can be rectified rapidly.

## **Appropriate management systems**

Effective management is central to environmental performance; it is an important component to BAT and of achieving compliance with permit conditions. It requires a commitment to establishing objectives, setting targets, measuring progress and revising the objectives according to results.

This included managing risks under normal operating conditions and in accidents and emergencies. It is therefore desirable that processes put in place some form of structured environmental management approach, whether by adopting published standards (ISO 14001 or the EU Eco Management and Audit Scheme [EMAS] or by setting up an environmental management system (EMS) tailored to the nature and size of the particular process. Operators may also find that an EMS will help identify business savings.

Regulators should use their discretion, in consultation with individual operators, in agreeing the appropriate level of environmental management. Simple systems which ensure that LAPC considerations are taken account of in the day-to-day running of a process may well suffice, especially for small and medium-sized enterprises. While authorities may wish to encourage wider adoption of EMS, it is outside the legal scope of an LAPC authorisation/LA-PPC permit to require an EMS for purpose other than LAPC/LA-PPC compliance.

## **Training**

Staff at all levels need the necessary training and instruction in their duties relating to control of the activities and emissions to air. In order to minimise risk of emissions, particular emphasis should be given to control procedures during start-up, shut down and abnormal conditions.

Training may often sensibly be addressed in the EMS referred to above.

Training of all staff with responsibility for operating the process should include:

- Awareness of their responsibility under the permit
- Minimising emissions on start up and shut down
- Action to minimise emissions during abnormal conditions

The operator should maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents should be made available to the regulator on request.

**Maintenance**

Effective preventative maintenance should be employed on all aspects of the process including all plant, buildings and the equipment concerned with the control of emissions to air in particular.

A written maintenance programme should be provided to the regulator with respect to pollution control equipment, and

A record of such maintenance should be made available for inspection.

**End of Permit**