# STATUTORY RULES OF NORTHERN IRELAND

# 1998 No. 28

# INDUSTRIAL POLLUTION CONTROL

The Industrial Pollution Control (Prescribed Processes and Substances) Regulations (Northern Ireland) 1998

Made - - - - 2nd February 1998
Coming into operation 2nd March 1998

The Department of the Environment, in exercise of the powers conferred on it by Article 3 of the Industrial Pollution Control (Northern Ireland) Order 1997(1) and of every other power enabling it in that behalf, hereby makes the following Regulations:

# Citation and commencement

1. These regulations may be cited as the Industrial Pollution Control (Prescribed Processes and Substances) Regulations (Northern Ireland) 1998, and shall come into operation on 2nd March 1998.

# Interpretation

- 2. In these regulations:—
  - "the Order" means the Industrial Pollution Control (Northern Ireland) Order 1997;
  - "background concentration" has the meaning given to that term in regulation 4(9);
  - "Part A process" means a process falling within a description set out in Schedule 1 under the heading "Part A";
  - "Part B process" means a process falling within a description so set out under the heading "Part B";
  - "Part C process" means a process falling within a description so set out under the heading "Part C";
  - "integrated central control", "restricted central control" and "local control" have the same meaning as in Article 5 of the Order; and
  - "particulate matter" means grit, dust, or fumes.

#### **Prescribed Processes**

- **3.**—(1) Subject to the following provisions of these Regulations, the descriptions of processes set out in Schedule 1 are prescribed pursuant to Article 3(1) of the Order, as processes for the carrying on of which after the prescribed date an authorisation is required under Article 6 of the Order.
  - (2) Schedule 2 has effect for the interpretation of Schedule 1.
- (3) In paragraph (1), the prescribed date means the appropriate date set out or determined in accordance with Schedule 3.

# **Exceptions**

- **4.**—(1) Subject to paragraph (8), a process shall not be taken to be a Part A process if it has the following characteristics, namely—
  - (a) that it cannot result in the release into the air of any substance prescribed by regulation 6(1) or there is no likelihood that it will result in the release into the air of any such substance except in a quantity which is so trivial that it is incapable of causing harm or its capacity to cause harm is insignificant; and
  - (b) that it cannot result in the release into water of any substance prescribed by regulation 6(2) except—
    - (i) in a concentration which is no greater than the background concentration; or
    - (ii) in a quantity which does not, in any 12 month period, exceed the background quantity by more than the amount specified in relation to the description of substance in column 2 of Schedule 5; and
  - (c) that it cannot result in the release into land of any substance prescribed by regulation 6(3) or there is no likelihood that it will result in the release into land of any such substance except in a quantity which is so trivial that it is incapable of causing harm or its capacity to cause harm is insignificant.
- (2) Subject to paragraph (8), a process shall not be taken to be a Part B or a Part C process unless it will, or there is the likelihood that it will result in the release into the air of one or more substances prescribed by regulation 6(1) in a quantity greater than that mentioned in paragraph 1(a).
- (3) A process shall not be taken to fall within a description in Schedule 1 if it is carried on in a working museum to demonstrate an industrial process of historic interest or if it is carried on for educational purposes in a school as defined by Article 2(1) of the Education and Libraries (Northern Ireland) Order 1986(2).
- (4) The running on or within an aircraft, hovercraft, mechanically propelled road vehicle, railway locomotive or ship or other vessel of an engine which propels or provides electricity for it shall not be taken to fall within a description in Schedule 1.
- (5) The running of an engine in order to test it before installation or in the course of its development shall not be taken to fall within a description in Schedule 1.
- (6) The use of a fume cupboard shall not be taken to fall within a description in Schedule 1 if it is used as a fume cupboard in a laboratory for research or testing, and it is not—
  - (a) a fume cupboard which is an industrial and continuous production process enclosure; or
  - (b) a fume cupboard in which substances or materials are manufactured.
  - In this paragraph, "fume cupboard" has the meaning given by the British Standard 'Laboratory fume cupboards' published by the British Standards Institution numbered BS7258: Part 1: 1990.

- (7) A process shall not be taken to fall within a description in Schedule 1 if it is carried on as a domestic activity in connection with a private dwelling.
- (8) Paragraphs (1) and (2) do not exempt any process described in Schedule 1 from the requirement for authorisation if the process may give rise to an offensive smell noticeable outside the premises where the process is carried on.
  - (9) In these Regulations—
    - "background concentration" means any concentration of the relevant substance which would be present in the release irrespective of any effect the process may have had on the composition of the release and, without prejudice to the generality of the foregoing, includes such concentration of the substance as is referred to in paragraph (10); and
    - "background quantity" means such quantity of the relevant substance as is referred to in paragraph (10).
- (10) The concentration or, as the case may be, quantity mentioned in paragraph (9) is such concentration or quantity as is present in—
  - (a) water supplied to the premises where the process is carried on;
  - (b) water abstracted for use in the process; and
  - (c) precipitation onto the premises on which the process is carried on.

#### **Enforcement**

- **5.**—(1) The descriptions of processes set out in Schedule 1 under the heading "Part A" are designated pursuant to Article 3 of the Order for integrated central control.
- (2) The descriptions of processes set out in Schedule 1 under the heading "Part B" are so designated for restricted central control.
- (3) The descriptions of processes set out in Schedule 1 under the heading "Part C" are so designated for local control.

## Prescribed substances: release into the air, water, or land

- **6.**—(1) The descriptions of substances set out in Schedule 4 are prescribed pursuant to Article 3(5) of the Order as substances the release of which into the air is subject to control under Articles 6 and 7 of the Order.
- (2) The descriptions of substances set out in column 1 of Schedule 5 are so prescribed as substances the release of which into water is subject to control under those Articles.
- (3) The descriptions of substances set out in Schedule 6 are so prescribed as substances the release of which into land is subject to control under those Articles.

Sealed with the Official Seal of the Department of the Environment on

L.S.

2nd February 1998.

R. W. Rogers
Assistant Secretary

#### SCHEDULE 1

# **DESCRIPTIONS OF PROCESSES**

# Chapter 1

Fuel Production Processes, Combustion Processes (including Power Generation) and Associated Processes

#### Section 1.1

# Gasification and associated Processes

#### Part A

- (a) Reforming natural gas.
- (b) Refining natural gas if that process is related to another Part A process or is likely to involve the use in any 12 month period of 1000 tonnes or more of natural gas.
- (c) Producing gas from coal, lignite oil or other carbonaceous material or from mixtures thereof other than from sewage or the biological degradation of waste, unless carried on as part of a process which is a combustion process (whether or not that process falls within Section 1.3 of this Schedule).
- (d) Odorising natural gas or liquefied petroleum gas if that process is related to another Part A process.
- (e) Purifying or refining any product of a process described in paragraphs (a), (c) or (d) or converting it into a different product.

In this Section "carbonaceous material" includes materials such as charcoal, coke, peat and rubber. Part B

- (a) Blending odorant for use with natural gas or liquefied petroleum gas.
- (b) Odorising natural gas or liquefied petroleum gas, except where that process is related to a Part A process.
- (c) Any process for refining natural gas not falling within paragraph (b) of Part A of this Section. In paragraph (c) of Part B of this Section, "refining natural gas" does not include refining mains gas. Part CNil

# Section 1.2

## Carbonisation and associated Processes

# Part A

- (a) The pyrolysis, carbonisation, distillation, liquefaction, partial oxidation or other heat treatment of coal (other than the drying of coal), lignite, oil, other carbonaceous material (as defined in Section 1.1) or mixtures thereof otherwise than with a view to gasification or making of charcoal.
- (b) The purification or refining of any of the products of a process mentioned in paragraph (a) or its conversion into a different product.

Nothing in paragraph (a) or (b) refers to the use of any substance as a fuel or its incineration as a waste or to any process for the treatment of sewage. In paragraph (a), the heat treatment of oil does not include heat treatment of waste oil or waste emulsions containing oil in order to recover the oil. Part BNil

Part CNil

## Section 1.3

## Combustion Processes

#### Part A

(a) Burning any fuel in a combustion appliance with a net rated thermal input of 50 megawatts or more.

For the purposes of this paragraph, where—

- (i) two or more boilers or furnaces with an aggregate net rated thermal input of 50 megawatts or more (disregarding any boiler or furnace with a net rated thermal input of less than 3 megawatts); or
- (ii) two or more gas turbines or compression ignition engines with an aggregate net rated thermal input of 50 megawatts or more (disregarding any such turbine or engine with a net rated thermal input of less than 3 megawatts),

are operated by the same person at the same location those boilers or furnaces, or, as the case may be, those turbines or engines, shall be treated as a single combustion appliance with a net rated thermal input of 50 megawatts or more.

- (b) Burning any of the following in an appliance with a net rated thermal input of 3 megawatts or more otherwise than as a process which is related to a Part B or Part C process—
  - (i) waste oil;
  - (ii) recovered oil;
  - (iii) any fuel manufactured from, or comprising, any other waste.

Nothing in this Part of this Section applies to the burning of any fuel in a boiler, furnace or other appliance with a net rated thermal input of less than 3 megawatts.

Part BNil

#### Part C

The following processes unless carried on in relation to and as part of any Part A or Part B process—

- (a) burning any fuel in a boiler or furnace with a net rated thermal input of not less than 20 megawatts, but less than 50 megawatts;
- (b) burning any fuel in a gas turbine or compression ignition engine with a net rated thermal input of not less than 20 megawatts, but less than 50 megawatts;
- (c) burning as fuel, in an appliance with a net rated thermal input of less than 3 megawatts, waste oil or recovered oil;
- (d) burning in an appliance with a net rated thermal input of less than 3 megawatts solid fuel which has been manufactured from waste by a process involving the application of heat;
- (e) burning, in any appliance, fuel manufactured from, or including, waste (other than waste oil or recovered oil or such fuel as is mentioned in paragraph (*d*)) if the appliance has a net rated thermal input of less than 3 megawatts but at least 0.4 megawatts or is used together with (whether or not it is operated simultaneously with) other appliances which each have a net rated thermal input of less than 3 megawatts and the aggregate net rated thermal input of all the appliances is at least 0.4 megawatts.

In paragraph (b) of Part A and paragraph (e) of Part C, "fuel" does not include gas produced by biological degradation of waste; and for the purposes of this Section—

"net rated thermal input" is the rate at which fuel can be burned at the maximum continuous rating of the appliance multiplied by the net calorific value of the fuel and expressed as megawatts thermal; and

"waste oil" means any mineral based lubricating or industrial oil which has become unfit for the use for which it was intended and, in particular, used combustion engine oil, gearbox oil, mineral lubricating oil, oil for turbines, hydraulic oil; and

"recovered oil" means waste oil which has been processed before being used.

## Section 1.4

## Petroleum processes

#### Part A

- (a) The loading, unloading or other handling of, the storage of, or the physical, chemical or thermal treatment of—
  - (i) crude oil;
  - (ii) stabilised crude petroleum;
  - (iii) crude shale oil;
  - (iv) if related to another process in this paragraph, any associated gas or condensate.
- (b) Any process not falling within any other description in this Schedule by which the product of any process described in paragraph (a) is subject to further refining or conversion or is used (otherwise than as a fuel or solvent) in the manufacture of a chemical.

# Part B

The following processes unless falling within a description in Part A of this Section—

The storage of petrol in stationary storage tanks at a terminal, or the loading or unloading of petrol into or from road tankers, rail tankers or inland waterway vessels at a terminal.

In this part of this Section—

"petrol" means any petroleum derivative, with or without additives, having a reid vapour pressure of 27.6 kilopascals or more which is intended for use as a fuel for motor vehicles, other than liquefied petroleum gas.

"terminal" means any premises which are used for the storage and loading of petrol into road tankers, rail tankers or inland waterway vessels;

"inland waterway vessel" means a vessel other than a sea-going vessel, having a total dead weight of 15 tonnes or more.

Part CNil

# Chapter 2

# Metal Production and Processing

### Section 2.1

## Iron and Steel

# Part A

- (a) Loading, unloading or otherwise handling or storing iron ore except in the course of mining operations.
- (b) Loading, unloading or otherwise handling or storing burnt pyrites.

- (c) Crushing, grading, grinding, screening, washing or drying iron ore or any mixture of iron ore and other materials.
- (d) Blending or mechanically mixing grades of iron ore or iron ore with other materials.
- (e) Pelletising, calcining, roasting or sintering iron ore or any mixture of iron ore and other materials.
- (f) Making, melting or refining iron, steel or any ferrous alloy in an electric arc furnace with a designated holding capacity of 5 tonnes or more, or in any furnace other than a cupola, crucible furnace, reverberatory furnace, rotary furnace, induction furnace or resistance furnace.
- (g) Any process for the refining or making of iron, steel or any ferrous alloy in which air or oxygen or both are used unless related to a process described in Part B or Part C of this Section.
- (h) The desulphurisation of iron, steel or any ferrous alloy made by a process described in this Part of this Section.
- (i) Heating iron, steel or any ferrous alloy (whether in a furnace or other appliance) to remove grease, oil or any other non-metallic contaminant (including such operations as the removal by heat of plastic or rubber covering from scrap cable), if related to another process described in this Part of this Section.
- (j) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding and shot-blasting) if related to another process described in this Part of this Section.
- (k) Handling slag in conjunction with a process described in paragraph (f) or (g).
- (l) Any process for rolling iron, steel or any ferrous alloy carried on in relation to any process described in paragraph (f) or (g), and any process carried on in conjunction with such rolling involving the scarfing or cutting with oxygen of iron, steel or any ferrous alloy.

Nothing in paragraph (a) or (b) of this Part of this Section applies to the handling or storing of other minerals in association with the handling or storing of iron ore or burnt pyrites.

A process does not fall within paragraph (a), (b), (c) or (d) of this Part of this Section unless—

- (i) it is carried on as part of or is related to a process falling within a paragraph of this Part of this Section other than paragraph (a), (b), (c) or (d); or
- (ii) it consists of, forms part of or is related to a process which is likely to involve the unloading in any 12 month period of more than 500,000 tonnes of iron ore or burnt pyrites or, in aggregate, both.

# Part B

- (a) Any process not described in Part A of this Section for making, melting or refining iron, steel or any ferrous alloy where the designed holding capacity of molten metal is 5 tonnes or more.
- (b) Any process for the refining or making of iron, steel or any ferrous alloy in which air or oxygen or both are used, if related to a process described in this Part of this Section.
- (c) The desulphurisation of iron, steel or any ferrous alloy made by a process described in this Part of this Section.
- (d) Heating iron, steel or any ferrous alloy (whether in a furnace or other appliance) to remove grease, oil or any other non-metallic contaminant (including such operations as the removal by heat of plastic or rubber covering from scrap cable), if related to another process described in this Part of this Section.
- (e) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding and shot-blasting) if related to another process described in this Part of this Section.

(f) Any process involving the casting of iron, steel or any ferrous alloy from deliveries of 50 tonnes or more at one time of molten metal.

#### Part C

Any of the following processes, not described in Parts A or B of this Section:

- (a) Making, melting or refining iron, steel or any ferrous alloy in an electric arc furnace, a cupola, crucible furnace, reverberatory furnace, rotary furnace, induction furnace or resistance furnace with a designed holding capacity of less than 5 tonnes.
- (b) Any process for the refining or making of iron, steel or any ferrous alloy in which air or oxygen or both are used, if related to a process described in this Part of this Section.
- (c) The desulphurisation of iron, steel or any ferrous alloy, if the process does not fall within paragraph (h) of Part A or paragraph (c) of Part B of this Section.
- (d) Any such process as is described in paragraph (i) of Part A or paragraph (d) of Part B above, if not falling within those paragraphs; but a process does not fall within this paragraph if—
  - (i) it is a process for heating iron, steel or any ferrous alloy in one or more furnaces or other appliances the primary combustion chambers of which have in aggregate a net rated thermal input of less than 0.2 megawatts;
  - (ii) it does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant; and
  - (iii) it is not related to any other process described in this Part of this Section.
- (e) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding, and shot-blasting) if related to another process described in this Part of this Section.

Any description of a process in this Section includes, where the process produces slag, the crushing, screening or grading or other treatment of the slag if that process is related to the process in question. In this Section "net rated thermal input" has the same meaning as in Section 1.3.

In this Section and Section 2.2, "ferrous alloy" means an alloy of which iron is the largest constituent, or equal to the largest constituent, by weight, whether or not that alloy also has a non-ferrous metal content greater than any percentage specified in Section 2.2 below, and "non-ferrous metal alloy" shall be construed accordingly.

# Section 2.2

#### Non-Ferrous metals

## Part A

- (a) The extraction or recovery from any material—
  - (i) by chemical means or the use of heat of any non-ferrous metal or alloy of non-ferrous metal or any compound of a non-ferrous metal; or
  - (ii) by electrolytic means, of aluminium,

if the process may result in the release into the air of particulate matter or any metal, metalloid or any metal or metalloid compound or in the release into water of a substance described in Schedule 5 and is not a process for the separation of copper, aluminium, magnesium or zinc from mixed scrap by differential melting.

In this paragraph "material" includes ores, scrap and other waste.

(b) The mining of zinc or tin where the process may result in the release into water of cadmium or any compound of cadmium.

- (c) The refining of any non-ferrous metal (other than the electrolytic refining of copper) or non-ferrous metal alloy except where the process is related to a process falling within one or more of the following descriptions—
  - (i) the making or melting of any non-ferrous metal or non-ferrous metal alloy where the designed holding capacity of molten metal is less than 5 tonnes;
  - (ii) melting zinc or a zinc alloy in conjunction with a galvanising process; or
  - (iii) melting zinc, aluminium or magnesium or an alloy of one or more of these metals in conjunction with a die casting process.
- (d) Any process, for making or melting any non-ferrous metal or non-ferrous metal alloy where the designed holding capacity of molten metal is 5 tonnes or more other than any of the following processes—
  - (i) melting zinc, aluminium or magnesium or any alloy of one or more of these metals in conjunction with a die casting process;
  - (ii) melting zinc or a zinc alloy in conjunction with a galvanising process; or
  - (iii) the separation of copper, aluminium, magnesium or zinc from mixed scrap by differential melting.
- (e) Any process for producing, melting or recovering by chemical means or by the use of heat, lead or any lead alloy, if—
  - (i) the process may result in the release into the air of particulate matter or smoke which contains lead; and
  - (ii) in the case of lead alloy, the percentage by weight of lead in the alloy in molten form exceeds 23 per cent. if the alloy contains copper and 2 per cent. in other cases.
- (f) Any process for recovering any of the elements listed below if the process may result in the release into the air of particulate matter or smoke which contains any of those elements—

gallium

indium

palladium

tellurium

thallium.

- (g) Any process for producing, melting or recovering (whether by chemical means or by electrolysis or by the use of heat) cadmium or mercury or any alloy containing more than 0.05 per cent. by weight of either of those metals or of both of those metals in aggregate.
- (h) Any manufacturing or repairing process involving the manufacture or use of beryllium or selenium or an alloy of one or both of those metals if the process may occasion the release into the air of any substance described in Schedule 4; but a process does not fall within this paragraph by reason solely of its involving the melting of an alloy of beryllium if that alloy contains less than 0.1 per cent by weight of beryllium in molten form and the process falls within one or more of the following descriptions—
  - (i) the making or melting of any non-ferrous metal or non-ferrous metal alloy where the designed holding capacity of molten metal is less than 5 tonnes; or
  - (ii) the melting of zinc, aluminium or magnesium or an alloy of one or more of these metals in conjunction with a die casting process.
- (i) The heating in a furnace or other appliance of any non-ferrous metal or non-ferrous metal alloy for the purpose of removing grease, oil or any other non-metallic contaminant (including such operations as the removal by heat of plastic or rubber covering from scrap cable), if related to another process described in this Part of this Section.

- (j) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding and shot-blasting) if related to another process described in this Part of this Section.
- (k) Pelletising, calcining, roasting or sintering any non-ferrous metal ore or any mixture of such ore and other materials.

#### Part B

- (a) Any process not described in Part A of this Section for making or melting any non-ferrous metal or non-ferrous alloy (other than tin or any alloy which in molten form contains 50 per cent. or more by weight of tin) where the designed holding capacity of molten metal is 0.5 tonnes or more (together with any additional refining).
- (b) The fusion of calcined bauxite for the production of artificial corundum.
- (c) Melting zinc or a zinc alloy in conjunction with a galvanising process.
- (d) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding and shot-blasting) if related to another process described in this Part of this Section.

The processes described in paragraphs (a) and (c) include any related process for the refining of any non-ferrous metal or non-ferrous metal alloy.

Part C

Any of the following processes, not described in Parts A or B of this Section:

- (a) The making or melting of any non-ferrous metal or non-ferrous metal alloy (other than tin or any alloy which, in molten form, contains 50 per cent. or more by weight of tin) where the designed holding capacity of molten metal is less than 0.5 tonnes (together with any incidental refining).
- (b) Any such process as is described in paragraph (i) of Part A above, if not related to another process described in that Part; but a process does not fall within this paragraph if—
  - (i) it involves the use of one or more furnaces or other appliances the primary combustion chambers of which have in aggregate a net rated thermal input of less than 0.2 megawatts; and
  - (ii) it does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant.
- (c) Any foundry process (including ancillary foundry operations such as the manufacture and recovery of moulds, the reclamation of sand, fettling, grinding and shot-blasting) if related to another process described in this Part of this Section.

In this Section "net rated thermal input" has the same meaning as in Section 1.3.

Nothing in this Section shall be taken to prescribe the process of hand soldering or flow soldering.

# Chapter 3

# Mineral Industries

## Section 3.1

Cement and lime manufacture and associated processes

### Part A

(a) Making cement clinker.

- (b) The heating of calcium carbonate or calcium magnesium carbonate for the purpose of making lime where the process is likely to involve the heating in any 12 month period of 5000 tonnes or more of either substance, or in aggregate of both.
- (c) Grinding cement clinker, if related to a process described in paragraph (a).
- (d) Any of the following processes, where the process is related to a process described in paragraph (a), namely, blending cement, putting cement into silos for bulk storage and removing cement from silos in which it has been stored in bulk and any process involving the use of cement in bulk, including the bagging of cement and cement mixtures, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products.
- (e) The slaking of lime for the purpose of making calcium hydroxide or calcium magnesium hydroxide when the process is related to a process described in paragraph (b).

### Part B

- (a) Grinding cement clinker, if not related to a process described in Part A.
- (b) The heating of calcium carbonate or calcium magnesium carbonate for the purpose of making lime where the process is not likely to involve the heating in any 12 month period of 5000 tonnes or more of either substance or in aggregate of both.
- (c) The slaking of lime for the purpose of making calcium hydroxide or calcium magnesium hydroxide when the process is related to a process described in paragraph (b) above.
- (d) Any of the following processes, other than at a construction site, namely, blending cement, putting cement into silos for bulk storage and removing cement from silos in which it has been stored in bulk and any process involving the use of cement in bulk, including the bagging of cement and cement mixtures, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products where the process is not related to a process described in paragraph (a) of Part A of this section and is carried on at the same location as a process described in Part B of Section 3.4.

## Part C

Any of the following processes, if not related to a process falling within a description in Part A or B of this Section:

- (a) storing, loading or unloading cement or cement clinker in bulk prior to further transportation in bulk;
- (b) blending cement in bulk or using cement in bulk other than at a construction site, including the bagging of cement and cement mixtures, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products;
- (c) the slaking of lime for the purpose of making calcium hydroxide or calcium magnesium hydroxide unless related to and carried on as part of a process falling within another description in this Schedule.

#### Section 3.2

# Processes involving asbestos

#### Part A

- (a) Producing raw asbestos by extraction from the ore except where the process is directly associated with the mining of the ore.
- (b) The manufacture and, where related to the manufacture, the industrial finishing of the following products where the use of asbestos is involved—

asbestos cement

asbestos cement products

asbestos fillers

asbestos filters

asbestos floor coverings

asbestos friction products

asbestos insulating board

asbestos jointing, packaging and reinforcement material

asbestos packing

asbestos paper or card

asbestos textiles.

- (c) The stripping of asbestos from railway vehicles except—
  - (i) in the course of the repair or maintenance of the vehicle;
  - (ii) in the course of recovery operations following an accident; or
  - (iii) where the asbestos is permanently bonded in cement or in any other material (including plastic, rubber or a resin).
- (d) The destruction by burning of a railway vehicle if asbestos has been incorporated in, or sprayed onto, its structure.

Part B

The industrial finishing of any product mentioned in paragraph (b) of Part A of this Section if the process does not fall within that paragraph.

Part CNil

In this Section, "asbestos" means any of the following fibrous silicates—actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite.

## Section 3.3

# Other mineral fibres

Part A

Manufacturing

- (i) glass fibre;
- (ii) any fibre from any mineral other than asbestos.

Part BNil

Part CNil

# Section 3.4

## Other mineral Processes

Part ANil

Part B

Any of the following processes except where—

- (i) the process falls within a description in another section of this schedule;
- (ii) the process is related to and carried on as part of another process falling within a description in Part A in any section of this schedule; or

- (iii) the operation of the process is unlikely to result in the release into the air of particulate matter—
  - (a) the grading, screening, crushing, grinding or other size reduction (other than the cutting of stone) of any designated mineral or mineral product other than sand;
  - (b) the heating of any designated mineral or mineral product.

In this paragraph "designated mineral or mineral product" means—

- (i) clay, sand, lignite and any other naturally occurring mineral other than coal;
- (ii) metallurgical slag;
- (iii) boiler or furnace ash produced from the burning of coal, lignite, coke or any other coal product;
- (iv) gypsum which is a by-product of any process.

## Part C

- (a) Any of the following processes unless carried on at an exempt location or as part of a process falling within another description in this Schedule—
  - (i) crushing, grinding or otherwise breaking up coal or coke or any other coal product;
  - (ii) screening, grading or mixing coal, or coke or any other coal product;
  - (iii) loading or unloading petroleum coke, coal, coke or any other coal product except unloading on retail sale. In this paragraph—

"exempt location" means—

- (i) any premises used for the sale of petroleum coke, coal, coke or any coal product where the throughput of such substances at those premises in any 12 month period is in aggregate likely to be less than 10,000 tonnes, or
- (ii) any premises to which petroleum coke, coal, coke or any coal product is supplied only for use there.

"retail sale" means sale to the final consumer.

- (b) The crushing, grinding or other size reduction with machinery designed for that purpose of bricks, tiles or concrete.
- (c) Screening the product of any such process as is described in paragraph (b).
- (d) Loading, unloading or storing pulverised fuel ash in bulk prior to further transportation in bulk unless carried on as part of or in relation to a process falling within another description in this Schedule.

Nothing in this Section applies to any process carried on underground.

## Section 3.5

# Glass manufacture and production

#### Part A

The manufacture of glass frit or enamel frit and its use in any process where that process is related to its manufacture and the aggregate quantity of such substances manufactured in any 12 month period is likely to be 100 tonnes or more.

Part B

- (a) The manufacture of glass at any location where the person concerned has the capacity to make 5000 tonnes or more of glass in any 12 month period, and any process involving the use of glass which is carried on at any such location in conjunction with its manufacture.
- (b) The manufacture of glass where the use of lead or any lead compound is involved.
- (c) The making of any glass product where lead or any lead compound has been used in the manufacture of glass except—

- (i) the making of products from lead glass blanks;
- (ii) the melting, or mixing with another substance, of glass manufactured elsewhere to produce articles such as ornaments or road paint;
- (d) Polishing or etching glass or glass products in the course of any manufacturing process if—
  - (i) hydrofluoric acid is used; or
  - (ii) hydrogen fluoride may be released into the air.
- (e) The manufacture of glass frit or enamel frit and its use in any process where that process is related to its manufacture if not falling within Part A of this Section.

Part CNil

# Section 3.6

## Ceramic Production

Part ANil

Part B

- (a) Firing heavy clay goods or refractory goods in a kiln where a reducing atmosphere is essential or with a production capacity exceeding 50 tonnes per day.
- (b) Vapour glazing earthenware or clay with salts.

Part C

Firing heavy clay goods or refractory material (other than heavy clay goods) in a kiln where the process does not fall within a description in Part B of this Section.

In this Section, "clay" includes a blend of clay with ash, sand or other materials;

"refractory material" means material (such as fireclay, silica, magnesite, chrome-magnesite, sillimanite, sintered alumina, beryllia and boron nitride) which is able to withstand high temperatures and to function as a furnace lining or in other similar high temperature applications.

# Chapter 4

# The Chemical Industry

(See paragraph 10 of Schedule 2 as to cases where processes described in this chapter of the Schedule fall within two or more descriptions.)

Except where paragraph 2 or 15 of Schedule 2 applies, nothing in this chapter of this Schedule applies to the operation of a waste treatment plant.

# Section 4.1

# Petrochemical processes

Part A

- (a) Any process for the manufacture of unsaturated hydrocarbons.
- (b) Any process for the manufacture of any chemical which involves the use of a product of a process described in paragraph (a).
- (c) Any process for the manufacture of any chemical which involves the use of a product of a process described in paragraph (b) otherwise than as a fuel or solvent.

- (d) Any process for the polymerisation or co-polymerisation of any unsaturated hydrocarbons (other than the polymerisation or co-polymerisation of a pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbons, or which contains any product of a process mentioned in paragraph (b) or (c) of Part A of this section) which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 50 tonnes or more of unsaturated hydrocarbons or of any such products or, in aggregate, of any combination of those materials and products.
- (e) Any process, if related to and carried on as part of a process falling within another paragraph of this Part of this Section, for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbons, or which contains any product of a process mentioned in paragraph (b) or (c) of Part A of this Section, which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 100 tonnes or more of unsaturated hydrocarbons or of any such products or, in aggregate, of any combination of those materials and products.

#### Part B

Any process unless related to and carried on as part of a process falling within Part A of this Section, for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbons, or which contains any product of a process mentioned in paragraph (b) or (c) of Part A of this Section, which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 100 tonnes or more of unsaturated hydrocarbons or of any such products or, in aggregate, of any combination of those materials and products.

In this Section and in Section 4.2 "pre-formulated resin or pre-formulated gel coat" means any resin or gel coat which has been formulated before being introduced into the polymerisation or copolymerisation process (whether or not the resin or gel coat contains a colour pigment, activator or catalyst).

Part CNil

#### Section 4.2

# The manufacture and use of organic chemicals

#### Part A

Any of the following processes unless falling within a description set out in Section 6.8—

- (a) the manufacture of styrene or vinyl chloride;
- (b) the polymerisation or co-polymerisation of styrene or vinyl chloride (other than the polymerisation or co-polymerisation of a pre-formulated resin or pre-formulated gel coat which contains any styrene) where the process is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 50 tonnes or more of either of those materials or, in aggregate, of both;
- (c) any process if related to and carried on as part of a process falling within another paragraph of this Part of this Section, for the polymerisation or co-polymerisation of any preformulated resin or pre-formulated gel coat which contains any styrene, which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 100 tonnes or more of styrene;
- (d) any process of manufacture involving the use of vinyl chloride;
- (e) the manufacture of acetylene, any aldehyde, amine, isocyanate, ketone, nitrile, any carboxylic acid or anhydride of carboxylic acid, any organic sulphur compound or any phenol if the process may result in the release of any of those substances into the air;

- (f) any process for the manufacture of a chemical involving the use of any substance mentioned in paragraph (e) if the process may result in the release of any such substance into the air;
- (g) the manufacture or recovery of carbon disulphide;
- (h) any manufacturing process which may result in the release of carbon disulphide into the air;
- (i) the manufacture or recovery of pyridine, or of any substituted pyridines;
- (j) the manufacture of any organo-metallic compound;
- (k) the manufacture, purification or recovery of any designated acrylate;
- (l) any process for the manufacture of a chemical which is likely to involve the use in any 12 month period of 1 tonne or more of any designated acrylate or, in aggregate, of more than one such designated acrylate.

In this Part of this Section, "designated acrylate" means any of the following, namely, acrylic acid, substituted acrylic acids, the esters of acrylic acid and the esters of substituted acrylic acids. Part B

Any process unless related to and carried on as part of a process falling within Part A of this Section, for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any styrene, which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 100 tonnes or more of styrene.

Part CNil

### Section 4.3

# Acid Processes

## Part A

- (a) Any process for the manufacture, recovery, concentration or distillation of sulphuric acid or oleum.
- (b) Any process for the manufacture of any oxide of sulphur but excluding any combustion or incineration process other than the burning of sulphur.
- (c) Any process for the manufacture of a chemical which uses, or may result in the release into the air of, any oxide of sulphur or sulphuric acid mist but excluding any combustion or incineration process other than the burning of sulphur and excluding also any process where such a release could only occur as a result of the storage and use of SO<sub>2</sub> in cylinders.
- (d) Any process for the manufacture or recovery of nitric acid.
- (e) Any process for the manufacture of any acid-forming oxide of nitrogen.
- (f) Any other process (except the combustion or incineration of carbonaceous material as defined in Section 1.1 of this Schedule) which is not described in Part B of this Section, does not fall within a description in Section 2.1 or 2.2 of this Schedule and is not treated as so falling by virtue of the rules in Schedule 2, and which is likely to result in the release into the air of any acid forming oxide of nitrogen.
- (g) Any process for the manufacture or purification of phosphoric acid.

## Part B

Any process for the surface treatment of metal which is likely to result in the release into the air of any acid-forming oxide of nitrogen and which does not fall within a description in Section 2.1 or 2.2 of this Schedule and is not treated as so falling by virtue of the rules in Schedule 2. Part CNil

#### Section 4.4

# Processes involving halogens

#### Part A

The following processes if not falling within a description in any other Section of this Schedule—

- (a) Any process for the manufacture of fluorine, chlorine, bromine or iodine or of any compound comprising only—
  - (i) two or more of these halogens; or
  - (ii) any one or more of those halogens and oxygen;
- (b) Any process of manufacture which involves the use of, or which is likely to result in the release into the air or into the water of, any of those four halogens or any of the compounds mentioned in paragraph (a), other than the use of any of them as a pesticide (as defined in Schedule 6) in water;
- (c) Any process for the manufacture of hydrogen fluoride, hydrogen chloride, hydrogen bromide or hydrogen iodide or any of their acids;
- (d) Any process for the manufacture of chemicals which may result in the release into the air of any of the four compounds mentioned in paragraph (c);
- (e) Any process of manufacture (other than the manufacture of chemicals) involving the use of any of the four compounds mentioned in paragraph (c) or any of their acids which may result in the release of any of those compounds into the air, other than the coating, plating or surface treatment of metal.

Part BNil

Part CNil

# Section 4.5

# Inorganic chemical processes

## Part A

- (a) The manufacture of hydrogen cyanide or hydrogen sulphide other than in the course of fumigation.
- (b) Any manufacturing process involving the use of hydrogen cyanide or hydrogen sulphide.
- (c) Any process for the manufacture of a chemical which may result in the release into the air of hydrogen cyanide or hydrogen sulphide.
- (d) The production of any compound containing any of the following—

antimony

arsenic

beryllium

gallium

indium

lead

palladium

platinum

selenium

tellurium

thallium

titanium

vanadium

where the process may result in the release into the air of any of those elements or compounds or the release into water of any substance listed in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5.

- (e) The recovery of any compound referred to in paragraph (*d*) where the process may result in any such release as is mentioned in that paragraph.
- (f) The use in any process of manufacture, (other than the application of a glaze or vitreous enamel), of any element or compound referred to in paragraph (d) where the process may result in such a release as is mentioned in that paragraph.
- (g) The production or recovery of any compound of cadmium or mercury.
- (h) Any process of manufacture which involves the use of cadmium or mercury or of any compound of either of those elements or which may result in the release into the air of either of those elements or any of their compounds.
- (i) The production of any compound of—

chromium

manganese

nickel

zinc.

- (i) The manufacture of any metal carbonyl.
- (k) Any process for the manufacture of a chemical involving the use of a metal carbonyl.
- (1) The manufacture or recovery of ammonia.
- (m) Any process for the manufacture of a chemical which involves the use of ammonia or may result in the release of ammonia into the air other than a process in which ammonia is used only as a refrigerant.
- (n) The production of phosphorus or of any oxide, hydride or halide of phosphorus.
- (o) Any process for the manufacture of a chemical which involves the use of phosphorus or any oxide, hydride or halide of phosphorus or which may result in the release into the air of phosphorus or of any such oxide, hydride or halide.
- (p) The extraction of any magnesium compound from sea water.

Part B

The manufacture of inorganic chemicals not described elsewhere in this Schedule. Part CNil

# Section 4.6

# Chemical Fertiliser Production

## Part A

- (a) The manufacture of chemical fertilisers.
- (b) The conversion of chemical fertilisers into granules.

In this Section, "chemical fertilisers" means any inorganic chemical to be applied to the soil to promote plant growth; and "inorganic chemical" includes urea; and "manufacture of chemical fertilisers" shall be taken to include any process for blending chemical fertilisers which is related to a process for their manufacture.

Part BNil

Part CNil

#### Section 4.7

## Pesticide Production

#### Part A

The manufacture or the formulation of chemical pesticides if the process may result in the release into water of any substance described in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5.

Part BNil

Part CNil

In this Section "pesticide" has the same meaning as in Schedule 6.

#### Section 4.8

#### Pharmaceutical Production

#### Part A

The manufacture or the formulation of a medicinal product if the process may result in the release into water of any substance described in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5.

Part BNil

Part CNil

In this Section "medicinal product" means any substance or article (not being an instrument, apparatus or appliance) manufactured for use in one of the ways specified in section 130 (1) of the Medicines Act 1968(3).

## Section 4.9

## The storage of chemicals in bulk

Part ANil

Part B

The storage in a tank or tanks, other than as part of a Part A process and other than in a tank for the time being forming part of a powered vehicle, of any of the substances listed below except where the total capacity of the tanks installed at the location in question in which the relevant substance may be stored is less than the figure specified below in relation to that substance;

In this Section, "designated acrylate" has the same meaning as in Part A of Section 4.2.

any one or more designated acrylates (20 tonnes) acrylonitrile (20 tonnes) anhydrous ammonia (100 tonnes) anhydrous hydrogen fluoride (1 tonne) toluene di-isocyanate (20 tonnes) vinyl chloride monomer (20 tonnes)

<sup>(3) 1968</sup> c. 67

ethylene (8000 tonnes) Part CNil

# Chapter 5

# Waste Disposal and Recycling

## Section 5.1

## Incineration

#### Part A

- (a) The destruction by burning in an incinerator of any waste chemicals or waste plastic arising from the manufacture of a chemical or the manufacture of a plastic.
- (b) The destruction by burning in an incinerator, other than incidentally in the course of burning other waste, of any waste chemicals being, or comprising in elemental or compound form any of the following—

bromine

cadmium

chlorine

fluorine

iodine

lead

mercury

nitrogen

phosphorus

sulphur

zinc

- (c) The destruction by burning of animal remains, or waste products from rendering animal remains, on premises where there is plant designed to incinerate such remains or waste products at a rate of 1 tonne or more per hour.
- (d) The destruction by burning of any other waste, otherwise than by a process related to and carried on as part of a Part B or Part C process, on premises where there is plant designed to incinerate such waste at a rate of 1 tonne or more per hour.
- (e) The cleaning for reuse of metal containers used for the transport or storage of a chemical by burning out their residual content.

# Part B

- (a) The destruction by burning in an incinerator of radioactive waste in any facility which is authorised for that purpose under section 13 of the Radioactive Substances Act 1993(4).
- (b) The destruction by burning in an incinerator of clinical waste, municipal waste, sewage sludge, sewage screenings or any mixture thereof, on premises where there is plant designed to incinerate such waste at a rate of under 1 tonne per hour.

#### Part C

<sup>(4) 1993</sup> c. 12

- (a) The destruction by burning in an incinerator other than an exempt incinerator of any waste, including animal remains, except where related to a Part A or B process.
- (b) The cremation of human remains.

# In this part—

"exempt incinerator" means any incinerator on premises where there is plant designed to incinerate waste including animal remains, at a rate of not more than 50 kgs per hour, not being an incinerator employed to incinerate clinical waste, sewage sludge, sewage screenings or municipal waste; and for the purposes of this section, the weight of waste shall be determined by reference to its weight as fed into the incinerator;

#### In this section—

"clinical waste" means waste (other than waste consisting wholly of animal remains) which falls within the definition of such waste in regulation 2(1) of the Waste Collection and Disposal Regulations (Northern Ireland) 1992(5), or would fall within that paragraph but for regulation 2(3) of those regulations; and

"municipal waste" means domestic refuse, as well as commercial or trade refuse and other waste which, because of its nature or composition, is similar to domestic refuse;

"waste" means solid or liquid wastes or gaseous waste (other than gas produced by biological degradation of waste).

#### Section 5.2

## Recovery Processes

## Part A

- (a) the recovery by distillation of any oil or organic solvent.
- (b) the cleaning or regeneration of carbon, charcoal or ion exchange resins by removing matter which is, or includes, any substance described in Schedules 4, 5, or 6.

Nothing in this Part of this Schedule applies to—

- (i) the distillation of oil for the production or cleaning of vacuum pump oil; or
- (ii) a process which is ancillary and related to another process which involves the production or use of the substance which is recovered, cleaned or regenerated.

Part BNil

Part CNil

#### Section 5.3

# The production of fuel from waste

#### Part A

Making solid fuel from waste by any process involving the use of heat other than making charcoal. Part BNil

Part CNil

<sup>(5)</sup> S.R. 1992 No. 254

# Chapter 6

# Other Industries

#### Section 6.1

# Paper and pulp manufacturing processes

#### Part A

- (a) The making of paper pulp by a chemical method if the person concerned has the capacity at the location in question to produce more than 25,000 tonnes of paper pulp in any 12 month period.
- (b) Any process associated with making paper pulp or paper (including processes connected with the recycling of paper such as de-inking) if the process may result in the release into water of any substance described in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5.

In this paragraph, "paper pulp" includes pulp made from wood, grass, straw and similar materials and references to the making of paper are to the making of any product using paper pulp. Part BNil

Part CNil

#### Section 6.2

# Di-isocyanate processes

#### Part A

- (a) Any process for the manufacture of any di-isocyanate or a partly polymerised di-isocyanate.
- (b) Any manufacturing process involving the use of toluene di-isocyanate or partly polymerised toluene di-isocyanate if—
  - (i) 1 tonne or more of toluene di-isocyanate monomer is likely to be used in any 12 month period; and
  - (ii) the process may result in a release into the air which contains toluene di-isocyanate.
- (c) The flame bonding and hot wire cutting of polyurethane foams or polyurethane elastomers where such bonding and cutting is related to any other Part A process.

### Part B

- (a) Any process not falling within any other description in this Schedule where the carrying on of the process by the person concerned at the location in question is likely to involve the use in any 12 month period of 5 tonnes or more of any di-isocyanate or of any partly polymerised di-isocyanate or, in aggregate, of both.
- (b) Any process not falling within any other description in this Schedule involving the use of toluene di-isocyanate or partly polymerised toluene di-isocyanate if—
  - (i) less than 1 tonne of toluene di-isocyanate monomer is likely to be used in any 12 month period; and
  - (ii) the process may result in a release into the air which contains toluene di-isocyanate.
- (c) The flame bonding and hot wire cutting of polyurethane foams or polyurethane elastomers, except where these processes are related to any other Part A process.

#### Part CNil

#### Section 6.3

#### *Tar and bitumen processes*

#### Part A

Any process not falling within any other description in this Schedule involving—

- (a) the distillation of tar or bitumen in connection with any process of manufacture; or
- (b) the heating of tar or bitumen for the manufacture of electrodes or carbon-based refractory materials, where the carrying on of the process by the person concerned at the location in question is likely to involve the use in any 12 month period of 5 tonnes or more of tar or of bitumen or, in aggregate, of both.

#### Part B

Any process not falling within Part A of this Section or within any other description in this Schedule involving—

- (a) the heating, but not the distillation, of tar or bitumen in connection with any process of manufacture; or
- (b) (unless the process is related to and carried on a part of a process falling within Part A of Section 1.4 of this Schedule) the oxidation of bitumen by blowing air through it, where the carrying on of the process by the person concerned at the location in question is likely to involve the use in any 12 month period of 5 tonnes or more of tar or of bitumen or, in aggregate, of both.

#### Part CNil

In this Section the expressions "tar" and "bitumen" include pitch.

# Section 6.4

## Processes involving uranium

## Part A

- (a) The treatment of any ore, concentrate or material containing uranium, its compounds or alloys; or
- (b) the manufacture of, and any process involving the use of uranium hexaflouride or any other volatile compound of uranium; or
- (c) the mechanical processing or casting of uranium, its compounds or alloys.

Part BNil

Part CNil

# Section 6.5

# Coating processes and printing

# Part A

- (a) The application or removal of a coating material containing one or more tributyltin compounds or triphenyltin compounds, if carried out at a shipyard or boatyard where vessels of a length of 25 metres or more can be built or maintained or repaired.
- (b) The treatment of textiles if the process may result in the release into water of any substance described in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5.

# Part B

Processes, not described elsewhere in the Schedule, other than for the repainting or respraying of or of parts of road vehicles, involving:—

- (a) the repainting or respraying of or of parts of aircraft or railway vehicles; or
- (b) the application to a substrate of, or the drying or curing after such applications of, printing ink or paint or any other coating material as, or in the course of, a manufacturing process;

where the carrying on of the process by the person concerned at the location in question may result in the release into the air of particulate matter or of any volatile organic compounds and is likely to involve the use in any 12 month period of—

- (i) 400 tonnes or more applied in solid form of any printing ink, paint or other coating material; or
- (ii) 400 tonnes or more of any metal coatings which are sprayed on in molten form; or
- (iii) 200 tonnes or more of organic solvents.

Part C

Processes, not described elsewhere in the Schedule, other than for the repainting or respraying of or of parts of road vehicles, involving:—

- (a) the repainting or respraying of or of parts of aircraft or railway vehicles; or
- (b) the application to a substrate of, or the drying or curing after such applications of, printing ink or paint or any other coating material as, or in the course of, a manufacturing process;

where the carrying on of the process by the person concerned at the location in question may result in the release into the air of particulate matter or of any volatile organic compounds and is likely to involve the use in any 12 month period of—

- (i) greater than 20 tonnes but less than 400 tonnes applied in solid form of any printing ink, paint or other coating material;
- (ii) greater than 20 tonnes but less than 400 tonnes of any metal coatings which are sprayed on in molten form; or
- (iii) greater than 25 tonnes but less than 200 tonnes of organic solvents in respect of any cold set web offset printing process or any sheet fed offset litho printing process, or in respect of any other process, greater than 5 tonnes but less than 200 tonnes of organic solvents.

Any process for the repainting or respraying of or of parts of road vehicles if the process may result in the release into the air of particulate matter or of any volatile organic compound and the carrying on of the process by the person concerned at the location in question is likely to involve the use of 1 tonne or more of organic solvents in any 12 month period.

In this section

"aircraft" includes glider and missile;

"coating material" includes paint, printing ink, varnish, lacquer, dye, any metal oxide coating, any adhesive coating, any elastomer coating, any metal or plastic coating and any other coating material;

The amount of organic solvents used in a process shall be calculated as—

- (a) the total input of organic solvents into the process, including both solvents contained in coating materials and solvents used for cleaning or other purposes; less
- (b) any organic solvents that are removed from the process for re-use or for recovery for re-use.

# Section 6.6

The manufacture of dyestuffs, printing ink and coating materials

Part A

Any process for the manufacture of dyestuffs if the process involves the use of hexachlorobenzene. Part B

# Any process—

- (a) for the manufacture or formulation of printing ink or any other coating material containing, or involving the use of, an organic solvent, where the carrying on of the process by the person concerned at the location in question is likely to involve the use of 200 tonnes or more of organic solvents in any 12 month period;
- (b) for the manufacture of any powder for use as a coating material where there is the capacity to produce 400 tonnes or more of such powder in any 12 month period.

#### Part C

# Any process—

- (a) for the manufacture or formulation of printing ink or any other coating material containing, or involving the use of, an organic solvent, where the carrying on of the process by the person concerned at the location in question is likely to involve the use of 100 tonnes or more but less than 200 tonnes of organic solvents in any 12 month period;
- (b) for the manufacture of any powder for use as a coating material where there is the capacity to produce 200 tonnes or more but less than 400 tonnes of such powder in any 12 month period.

In this section, "coating material" has the same meaning as in section 6.5 and the amount of organic solvents used in a process shall be calculated as—

- (a) the total input of organic solvents into the process, including both solvents contained in coating materials and solvents used for cleaning or other purposes; less
- (b) any organic solvents (not contained in coating materials) that are removed from the process for re-use or for recovery for re-use.

# Section 6.7

# Timber processes

### Part A

The curing or chemical treatment as part of a manufacturing process of timber or of products wholly or mainly made of wood if any substances described in Schedule 5 is used.

Part BNil

# Part C

The manufacture of products wholly or mainly of wood at any works if the process involves the sawing, drilling, sanding, shaping, turning, planing, curing or chemical treatment of wood ("relevant processes") and the throughput of the works in any 12 month period is likely to exceed—

- (i) 10,000 cubic meters, in the case of works at which wood is sawed but at which wood is not subjected to any other relevant processes or is subjected only to relevant processes which are exempt processes; or
- (ii) 1,000 cubic metres in any other case.

## For the purposes of this paragraph—

"relevant processes" other than sawing are "exempt processes" where, if no sawing were carried out at the works, the activities carried on would be treated as not falling within this Part of this Section by virtue of regulation 4(2);

"throughput" shall be calculated by reference to the amount of wood which is subjected to any of the relevant processes, but where, at the same works, wood is subject to two or more relevant processes, no account shall be taken of the second or any subsequent process;

"wood" includes any product consisting wholly or mainly of wood; and

"works" includes a sawmill or any other premises on which relevant processes are carried out on wood.

## Section 6.8

# Processes involving rubber

Part ANil

Part B

Processes for the curing of foam rubber products where hydrogen sulphide or other sulphur containing compounds may be released.

Part C

- (a) The mixing, milling or blending of:—
  - (i) natural rubber; or
  - (ii) synthetic organic elastomers if carbon black is used.
- (b) Any process which converts the product of a process falling within paragraph (a) into a finished product if related to a process falling within that paragraph.

## Section 6.9

## The treatment and processing of animal or vegetable matter

## Part A

Any of the following processes, unless falling within a description in another Section of the Schedule or an exempt process, namely, the processing in any way whatsoever, storing or drying by the application of heat of any dead animal (or part thereof) or any vegetable matter if the process may result in the release into water of any substance described in Schedule 5 in a quantity which in any 12 month period exceeds the background quantity by more than the amount specified in relation to the description of the substance in column 2 of Schedule 5; but excluding any process for the treatment of effluent so as to permit its discharge into controlled waters or into a sewer unless the treatment process involves the drying of any material with a view to its use as an animal feedstuff.

Part B

Any process involving the hydrolysis of feathers where the process may result in the release into the air of hydrogen sulphide or other sulphur containing compounds.

Part C

- (a) Any process mentioned in Part A of this Section unless an exempt process or a process described in Part B of this Section—
  - (i) where the process has the characteristics described in regulation 4(1)(b); but
  - (ii) may release into the air a substance described in Schedule 4 or any offensive smell noticeable outside the premises on which the process is carried on.
- (b) breeding maggots in any case where 5 kg or more of animal or of vegetable matter or, in aggregate, of both are introduced into the process in any week.

In this Section—

"animal" includes a bird or a fish; and

"exempt process" means—

(i) any process carried on on a farm or agricultural holding other than the manufacture of goods for sale;

- (ii) the manufacture or preparation of food or drink for human consumption but excluding—
  - (a) the extraction, distillation or purification of animal or vegetable oil or fat otherwise than as a process incidental to the cooking of food for human consumption;
  - (b) any process involving the use of green offal or the boiling of blood except the cooking of food (other than tripe) for human consumption;
  - (c) the cooking of tripe for human consumption elsewhere than on premises on which it is to be consumed;
- (iii) the fleshing, cleaning and drying of pelts of fur-bearing mammals;
- (iv) any process carried on in connection with the operation of a knacker's yard as defined in regulation 2(1) of the Animal By-Products Regulations (Northern Ireland) 1993(6);
- (v) any process for the manufacture of soap not falling within a description in Part A or B of Section 4.2 of this Schedule;
- (vi) the storage of vegetable matter otherwise than as part of any prescribed process;
- (vii) the cleaning of shellfish shells;
- (viii) the manufacture of starch;
- (ix) the processing of animal or vegetable matter at premises for feeding a recognised pack of hounds registered under regulation 9 of the Animal By-Products Regulations (Northern Ireland) 1993;
- (x) the salting of hides or skins, unless related to any other prescribed process;
- (xi) any process for composting animal or vegetable matter or a combination of both, except where that process is carried on for the purposes of cultivating mushrooms;
- (xii) any process for cleaning, and any related process for drying or dressing, seeds, bulbs, corms or tubers;
- (xiii) the drying of grain or pulses; or
- (xiv) any process for the production of cotton yarn from raw cotton or for the conversion of cotton yarn into cloth;

"food" includes drink, articles and substances of no nutritional value which are used for human consumption, and articles and substances used as ingredients in the preparation of food; and

"green offal" means the stomach and intestines of any animal, other than poultry or fish, and their contents.

#### SCHEDULE 2

Regulation 3(2)

# Rules for the interpretation of Schedule 1

- 1. These rules apply for the interpretation of Schedule 1 subject to any specific provision to the contrary in that Schedule.
- 2. Any description of a process includes any other process carried on at the same location by the same person as part of that process; but this rule does not apply in relation to any two or more processes described in different sections of Schedule 1 which, accordingly, require distinct authorisation. For the purposes of this paragraph, two or more processes which are described in Part A of different Sections of Chapter 4 of Schedule 1 shall be treated as if they were described in the same section.

- 3. Notwithstanding the rule set out in paragraph 2, where a combustion process described in Part A of Section 1.3 of Schedule 1 is operated, or where one or more boilers, furnaces or other combustion appliances which are operated as part of a process so described are operated, as an inherent part of and primarily for the purpose of a process described in Part A of Section 1.1, Part A of Section 1.4, Part A of Section 2.1, Part A of Section 6.3 or Part A of any Section of Chapter 4 ("the other process"), that combustion process or, as the case may be, the operation of those boilers, furnaces or appliances shall be treated as part of the other process and not as, or as part of, a separate combustion process.
- 4. Notwithstanding the rule set out in paragraph 2, where a process of reforming natural gas described in paragraph (a) of Part A of Section 1.1 of Schedule 1 is carried on as an inherent part of and primarily for the purpose of producing a feedstock for a process described in Part A of any Section of Chapter 4 ("the other process"), that reforming process shall be treated as part of the other process and not as a separate process.
- 5. Notwithstanding the rule set out in paragraph 2, where the same person carries on at the same location two or more Part B processes described in the provisions of Schedule 1 mentioned in any one of the following sub-paragraphs, those processes shall be treated as requiring authorisation as a single process falling within Part B of the Section first mentioned in the relevant sub-paragraph—
  - (a) Section 2.1 and Section 2.2;
  - (b) Section 3.4 and Section 3.1;
  - (c) Section 3.6 and Section 3.4;
  - (d) Section 6.5 and Section 6.6;
  - (e) Section 3.4 and Section 6.3.
- 6. Notwithstanding the rule set out in paragraph 2, where the same person carries on at the same location two or more Part C processes described in the provisions of Schedule 1 mentioned in any one of the following sub-paragraphs, those processes shall be treated as requiring authorisation as a single process falling within Part C of the Section first mentioned in the relevant sub-paragraph—
  - (a) Section 2.1 and Section 2.2;
  - (b) Section 3.1 and Section 3.4;
  - (c) Section 3.6 and Section 3.4;
  - (d) Section 6.5 and Section 6.6;
  - (e) Section 6.7 and paragraph (e) of Part C of Section 1.3 insofar as it relates to any process for the burning of waste wood.
- 7. Where a person carries on a process which includes two or more processes mentioned in the same section of Schedule 1, those processes shall be treated as requiring authorisation as a single process. Where the processes are described in more than one Part of the Section and one of the processes is a Part A process, then any Part B or Part C processes shall be regarded as part of the Part A process and so subject to central control. Where the processes are described in Part B and Part C, then any Part C processes shall be regarded as part of the Part B process and so subject to restricted central control.
- 8. Where a person carries on a process which includes two or more processes described in Part A of different Sections of Chapter 4 of Schedule 1, those processes shall be treated as a single process falling within a description determined in accordance with the rule set out in paragraph 10.
  - 9.—(1) Where paragraph 8 does not apply, but—
    - (a) two or more processes falling within descriptions in Part A of any Sections of Chapter 4 of Schedule 1 are carried on at the same location by the same person; and

(b) the carrying on of both or all of those processes at that location by that person is not likely to produce more than 250 tonnes of relevant products in any 12 month period,

those processes shall be treated as a single process falling within the description in whichever relevant Section is first mentioned in the sequence set out in paragraph 10.

- (2) In sub-paragraph (1), "relevant products" means any products of the processes in question, other than—
  - (a) solid, liquid or gaseous waste;
  - (b) by-products, if the total value of all such by-products is insignificant in comparison to the total value of the output of the processes; or
  - (c) any substance or material retained in or added to the final product formulation, not as an active ingredient, but as a diluent, stabiliser or preservative or for a similar purpose.
- 10. Where a process falls within two or more descriptions in Schedule 1, that process shall be regarded as falling only within that description which fits it most aptly: but where two or more descriptions are equally apt and a process falls within descriptions in different sections of Chapter 4, it shall be taken to fall within the description in whichever relevant Section is first mentioned in the sequence, 4.5; 4.2; 4.1; 4.4; 4.3; 4.6; 4.7; 4.8; 4.9.
- 11. Notwithstanding the rules set out in paragraphs 2 and 7 any description of a Part B or Part C process includes any related process which would fall within Part A of Section 1.3 if it were not so related.
  - 12. The following activities, that is to say—
    - (a) the unloading, screening, grading, mixing or otherwise handling of petroleum coke, coal, lignite, coke or any other coal product;
    - (b) the unloading of iron ore or burnt pyrites;

for use in a prescribed process by a person other than a person carrying on the process at the place where the process is carried on shall be treated as a part of that process.

- 13.—(1) Where by reason of the use at different times of different fuels or different materials or the disposal at different times of different wastes, processes of different descriptions are carried out with the same plant or machinery and those processes include one or more Part A processes and one or more other processes, the other processes shall be regarded as within the descriptions of the Part A processes.
- (2) Where by reason of such use or disposal as is mentioned in sub-paragraph (1), processes of different descriptions are carried out with the same plant or machinery and those processes include one or more Part B processes and one or more other processes (but no Part A processes), all those processes shall be regarded as within the descriptions of the Part B processes.
- (3) Where by reason of such use or disposal as is mentioned in sub-paragraph (1), processes of different descriptions are carried out with the same plant and machinery and those processes include Part B processes falling within different Sections of Schedule 1 (but no Part A processes), those processes shall notwithstanding the rule set out in paragraph 2, be treated as a single Part B process falling within the description in whichever of those Sections first appears in that Schedule.
- (4) Where by reason of such use or disposal as is mentioned in sub-paragraph (1), processes of different descriptions are carried out with the same plant or machinery and those processes include one or more Part C processes and one or more other processes (but no Part A or Part B processes), all those processes shall be regarded as within the descriptions of the Part C processes.
- (5) Where by reason of such use or disposal as is mentioned in sub-paragraph (1), processes of different descriptions are carried out with the same plant and machinery and those processes include Part C processes falling within different Sections of Schedule 1 (but no Part A or Part B processes),

those processes shall notwithstanding the rule set out in paragraph 2, be treated as a single Part C process falling within the description in whichever of those Sections first appears in that Schedule.

- 14. The reference to "any other process" in paragraph 2 and the references to "other processes" in paragraph 13 do not include references to a process (other than one described in Schedule 1) of loading or unloading any ship or other vessel.
- 15. Where in the course of, or as a process ancillary to, any prescribed process the person carrying on the process uses, treats, or disposes of waste (other than by means of the process described in paragraph (c) of Part A of Section 5.1 of Schedule 1) at the same location (whether as fuel or otherwise), the use, treatment, or disposal of that waste shall, notwithstanding the rule set out in paragraph 2, be regarded as falling within the description of the prescribed process, whether the waste was produced by the person carrying on the process or acquired by him for such use, treatment, or disposal.
- 16. References in Schedule 1 and this Schedule to related processes are references to separate processes carried on by the same person at the same location.
- 17. References to a process involving the release of a substance falling within a description in Schedule 4 or 5 do not affect the application of paragraphs (1) and (2) of regulation 4.

#### SCHEDULE 3

Regulation 3(1) and (3)

## Date from which authorisation is required under Article 6 of the order

- 1. Unless otherwise provided, this Schedule applies to Part A, Part B, and Part C processes.
- 2. The prescribed date is, except in the case of an existing process, 2nd March 1998.
- 3.—(1) In the case of an existing process, the prescribed date is—
- (i) in the case of a Part A process falling within sub-paragraph (2), the date at which the change mentioned in that paragraph is made, unless later than the date which would otherwise apply in accordance with head (ii);
- (ii) where head (i) does not apply and subject to paragraph 4, the day after that on which the period for applying for authorisation in accordance with the relevant Table in paragraphs 8, 9, or 10 (as applicable) expires.
- (2) A case falls within this sub-paragraph if the person carrying on the process makes a substantial change in that process on or after 2nd March 1998 and that change—
  - (i) has not occasioned construction work which is in progress on that date; or
  - (ii) is not the subject of a contract for construction work entered into before that date.
- 4. Where paragraph 3(1)(ii) applies and application is duly made in accordance with Article 6 of the Order within the relevant period specified in paragraphs 8, 9, or 10 (as applicable) for authorisation to carry on a process, the prescribed date as respects the carrying on by the applicant (or other person in his place) of the process to which the application relates is the determination date for that process.
  - 5. Subject to paragraph 6, references to an existing process are to a process—
    - (i) which was being carried on at some time in the 12 months immediately preceding 2nd March 1998;
    - (ii) which is to be carried on at a works, plant or factory or by means of mobile plant which was under construction or in course of manufacture or in the course of

- commission at that date, or the construction or supply of which was the subject of a contract entered into before that date; or
- (iii) in respect of which the best practicable means which will be required to be used under Section 2 or 7 (as applicable) of the Alkali, &c. Works Regulation Act 1906(7), if that process is subsequently registered as a work under section 9 of that Act, have been notified in writing before the commencement date of these regulations by the chief inspector or an inspector to the person who intends to carry on that process.

# In this paragraph—

"chief inspector" and "inspector" have the meanings assigned by section 10 of the Alkali, &c. Works Regulation Act 1906.

- 6. A process shall cease to be an existing process if at any time between 2nd March 1998 and the last day by which an application is otherwise required to be made for authorisation for the carrying on of that process, the process ceases to be carried on and is not carried on again at the same location (or with the same mobile plant) within the following 12 months.
  - 7. In this Schedule—

"the determination date" for a prescribed process is—

- (a) in the case of a process for which an authorisation is granted, the date on which the enforcing authority grants it, whether in pursuance of the application or, on an appeal, of a direction to grant it;
- (b) in the case of a process for which an authorisation is refused, the date of the refusal or, on an appeal, of the affirmation of the refusal; and
- "substantial change" in relation to a prescribed process means a substantial change in the substances released from the process or in the amount or any other characteristic of any substance so released.
- 8. Application for authorisation to carry on an existing Part A process shall be made in the relevant period specified in the following Table—

TABLE
Application to be made [Part A Processes]

Any process falling within a description set out in	Not earlier than	Not later than
Chapter 1	1st October 1998	31st December 1998
Section 3.1, and 6.3	1st October 1999	31st December 1999
Section 3.2, 3.3, 3.5, 6.7,6.9 and Chapter 4	1st October 2000	31st December 2000
Chapter 2, Chapter 5, Section 6.4 and 6.5	lst October 2001	31st December 2001
Section 6.1, 6.2 and 6.6	1st October 2002	31st December 2002

9. Application for authorisation to carry on an existing Part B process shall be made in the relevant period specified in the following Table—

 $<sup>(7) \</sup>quad 1906 \ c. \ 14 \ as \ amended \ by \ S.R. \ 1991 \ No. \ 49, \ S.R. \ 1994 \ No. \ 104, \ S.R. \ 1994 \ No. \ 192, \ and \ S.R. \ 1994 \ No. \ 444$ 

TABLE
Application to be made [Part B Processes]

Any process falling within a description set out in	Not earlier than	Not later than
Chapter 1	1st October 1998	31st December 1998
Section 3.1, 3.4 and 6.3	1st October 1999	31st December 1999
Section 3.2, 3.5, 3.6, 6.9, and Chapter 4	1st October 2000	31st December 2000
Chapter 2, Chapter 5, Section 6.5 and 6.8	1st October 2001	31st December 2001
Section 6.2 and 6.6	1st October 2002	31st December 2002

<sup>10.</sup> Application for authorisation to carry on an existing Part C process shall be made in the relevant period specified in the following Table—

TABLE
Application to be made [Part C Processes]

Any process falling within a description set out in	Not earlier than	Not later than
Chapter 1, Section 3.4 and 6.9	1st October 1998	31st December 1998
Section 3.1	1st October 1999	31st December 1999
Section 3.6, and 6.7	1st October 2000	31st December 2000
Chapter 2, Chapter 5, Section 6.5 and 6.8	1st October 2001	31st December 2001
Section 6.6	1st October 2002	31st December 2002

SCHEDULE 4 Regulation 6(1)

# Release into the air: prescribed substances

Oxides of sulphur and other sulphur compounds

Oxides of nitrogen and other nitrogen compounds

Oxides of carbon

Organic compounds and partial oxidation products

Metals, metalloids and their compounds

Asbestos (suspended particulate matter and fibres), glass fibres and mineral fibres

Halogens and their compounds

Phosphorus and its compounds

Particulate matter.

# SCHEDULE 5

Regulations 4(1) and 6(2)

# Release into water: prescribed substances

(1) Substance	(2) Amount in excess of background quantity released in any 12 month period (Grammes)
Mercury and its compounds	200 (expressed as metal)
Cadmium and its compounds	1000 (expressed as metal)
All isomers of hexachlorocyclohexane	20
All isomers of DDT	5
Pentachlorophenol and its compounds	350 (expressed as PCP)
Hexachlorobenzene	5
Hexachlorobutadiene	20
Aldrin	2
Dieldrin	2
Endrin	1
Polychlorinated Biphenyls	1
Dichlorvos	0.2
1,2-Dichloroethane	2000
All isomers of trichlorobenzene	75
Atrazine	350*
Simazine	350*
Tributyltin compounds	4 (expressed as TBT)
Triphenyltin compounds	4 (expressed as TPT)
Trifluralin	20
Fenitrothion	2
Azinphos-methyl	2
Malathion	2
Endosulfan	0.5

Where both Atrazine and Simazine are released, the figure in aggregate is 350 grammes.

SCHEDULE 6

Regulation 6(3)

# Release into land: prescribed substances

Organic solvents

Azides

Halogens and their covalent compounds

Metal carbonyls

Organo-metallic compounds

Oxidising agents

Polychlorinated dibenzofuran and any congener thereof

Polychlorinated dibenzo-p-dioxin and any congener thereof

Polyhalogenated biphenyls, terphenyls and naphthalenes

Phosphorus

Pesticides, that is to say, any chemical substance or preparation prepared or used for destroying any pest, including those used for protecting plants or wood or other plant products from harmful organisms; regulating the growth of plants; giving protection against harmful creatures; rendering such creatures harmless; controlling organisms with harmful or unwanted effects on water systems, buildings or other structures, or on manufactured products; or protecting animals against ectoparasites.

Alkali metals and their oxides and alkaline earth metals and their oxides.

## **EXPLANATORY NOTE**

(This note is not part of the Regulations.)

These Regulations prescribe the processes the carrying on of which after a prescribed date require an authorisation under Article 6 of the Industrial Pollution Control (Northern Ireland) Order 1997 ("the Order") (Regulations 3, 4, and Schedule 3).

The Regulations designate the description of each process as one for integrated central control (Part A processes), restricted central control (Part B processes), or local control (Part C processes) (Regulation 5).

The Regulations prescribe the descriptions of substances, the release of which into air, water, and land is subject to the control under Articles 6 and 7 of the Order (Authorisations: General Provisions and Conditions of Authorisations) (Regulation 6).

Copies of the document published by the British Standards Institution referred to in regulation 4(6) may be obtained from the British Standards Institution, 389 Chiswick High Road, London, W4 4AL (telephone 0181 996 9000).