

SCHEDULE 1

Activities

PART 2

Activities

CHAPTER 4

The Chemical Industry

Interpretation of Chapter 4

1. In Part A(1) of the Sections of this Chapter, “producing” means producing in a chemical plant by chemical processing for commercial purposes substances or groups of substances listed in the relevant Sections.

SECTION 4.1

Organic Chemicals

Interpretation of Section 4.1

1. In this Section, “pre-formulated resin or pre-formulated gel coat” means any resin or gel coat which has been formulated before being introduced into polymerisation or co-polymerisation activity, whether or not the resin or gel coat contains a colour pigment, activator or catalyst.

Part A(1)

- (a) Producing organic chemicals such as—
- (i) hydrocarbons (linear or cyclic, saturated or unsaturated, aliphatic or aromatic);
 - (ii) organic compounds containing oxygen, such as alcohols, aldehydes, ketones, carboxylic acids, esters, ethers, peroxides, phenols, epoxy resins;
 - (iii) organic compounds containing sulphur, such as sulphides, mercaptans, sulphonic acids, sulphonates, sulphates and sulphones and sulphur heterocyclics;
 - (iv) organic compounds containing nitrogen, such as amines, amides, nitrous-, nitro- or azo-compounds, nitrates, nitriles, nitrogen heterocyclics, cyanates, isocyanates, di-isocyanates and di-isocyanate prepolymers;
 - (v) organic compounds containing phosphorus, such as substituted phosphines and phosphate esters;
 - (vi) organic compounds containing halogens, such as halocarbons, halogenated aromatic compounds and acid halides;
 - (vii) organometallic compounds, such as lead alkyls, Grignard reagents and lithium alkyls;
 - (viii) plastic materials, such as polymers, synthetic fibres and cellulose-based fibres;
 - (ix) synthetic rubbers;
 - (x) dyes and pigments;
 - (xi) surface-active agents.
- (b) Producing any other organic compounds not described in paragraph (a).

- (c) Polymerising or co-polymerising any unsaturated hydrocarbon or vinyl chloride (other than a pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbon) which is likely to involve, in any period of 12 months, the polymerisation or co-polymerisation of 50 or more tonnes of any of those materials, or any combination of those materials in aggregate.
- (d) Any activity involving the use in any period of 12 months of 1 or more tonnes of toluene di-isocyanate or other di-isocyanate of comparable volatility or, where partly polymerised, the use of partly polymerised di-isocyanates or prepolymers containing 1 or more tonnes of those monomers, if the activity may result in a release into the air which contains such a di-isocyanate monomer.
- (e) The flame bonding of polyurethane foams or polyurethane elastomers.
- (f) Recovering—
 - (i) carbon disulphide;
 - (ii) pyridine or any substituted pyridine.
- (g) Recovering or purifying acrylic acid, substituted acrylic acid or any ester of acrylic acid or of substituted acrylic acid.

Part B

- (a) Unless falling within Part A(1) of this Section, any activity where the carrying on of the activity 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) Cutting polyurethane foams or polyurethane elastomers with heated wires.
- (c) Any activity for the polymerisation or co-polymerisation of any pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbon, where the activity is likely to involve, in any period of 12 months, the polymerisation or co-polymerisation of 100 or more tonnes of unsaturated hydrocarbon.
- (d) Unless falling within Part A(1) of this Section, any activity involving the use of toluene di-isocyanate or partly polymerised 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 activity may result in a release into the air which contains toluene di-isocyanate.

SECTION 4.2

Inorganic Chemicals

Part A(1)

- (a) Producing inorganic chemicals such as—
 - (i) gases, such as ammonia, hydrogen chloride, hydrogen fluoride, hydrogen cyanide, hydrogen sulphide, oxides of carbon, sulphur compounds, oxides of nitrogen, hydrogen, oxides of sulphur, phosgene;
 - (ii) acids, such as chromic acid, hydrofluoric acid, hydrochloric acid, hydrobromic acid, hydroiodic acid, phosphoric acid, nitric acid, sulphuric acid, oleum and chlorosulphonic acid;
 - (iii) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide;

- (iv) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate, cupric acetate, ammonium phosphomolybdate;
 - (v) non-metals, metal oxides, metal carbonyls or other inorganic compounds such as calcium carbide, silicon, silicon carbide, titanium dioxide;
 - (vi) halogens or interhalogen compound comprising two or more of halogens, or any compound comprising one or more of those halogens and oxygen.
- (b) Unless falling within any other Section, any manufacturing activity which is likely to result in the release into the air of any hydrogen halide (other than the manufacture of glass or the coating, plating or surface treatment of metal) or which is likely to result in the release into the air or water of any halogen or any of the compounds mentioned in paragraph (a) (vi) (other than the treatment of water).
- (c) Unless falling within any other Section, any manufacturing activity involving the use of hydrogen cyanide or hydrogen sulphide.
- (d) Unless falling within any other Section, any manufacturing activity (other than the application of a glaze or vitreous enamel) involving the use of, or the use or recovery of, any compound of any of the following elements—
- (i) antimony;
 - (ii) arsenic;
 - (iii) beryllium;
 - (iv) gallium;
 - (v) indium;
 - (vi) lead;
 - (vii) palladium;
 - (viii) platinum;
 - (ix) selenium;
 - (x) tellurium;
 - (xi) thallium,
- where the activity 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 paragraph 7 of Part 1.
- (e) Recovering any compound of cadmium or mercury.
- (f) Unless falling within any other Section, any manufacturing activity involving the use of mercury or cadmium or any compound of either element or which may result in the release into air of either of those elements or their compounds.
- (g) Unless carried on as part of any other activity within this Schedule—
- (i) recovering, concentrating or distilling sulphuric acid or oleum;
 - (ii) recovering nitric acid;
 - (iii) purifying phosphoric acid.
- (h) Unless falling within any other Section, any activity (other than the combustion or incineration of carbonaceous material as defined in the Interpretation of Part A(1) of Section 1.2) which is likely to result in the release into the air of any acid-forming oxide of nitrogen.
- (i) Unless carried on as part of any other activity within this Schedule, recovering ammonia.
- (j) Extracting any magnesium compound from sea water.

SECTION 4.3

Chemical Fertiliser Production

Part A(1)

- (a) Producing (including any blending which is related to their production) phosphorus, nitrogen or potassium based fertilisers (simple or compound fertilisers).
- (b) Converting chemical fertilisers into granules.

SECTION 4.4

Plant Health Products and Biocides

Part A(1)

- (a) Producing plant health products or biocides.
- (b) Formulating such products if this may result in the release into water of any substance listed in paragraph 7 of Part 1 in a quantity which, in any period of 12 months, is greater than the background quantity by more than the amount specified in that paragraph for that substance.

SECTION 4.5

Pharmaceutical Production

Part A(1)

- (a) Producing pharmaceutical products using a chemical or biological process.
- (b) Formulating such products if this may result in the release into water of any substance listed in paragraph 7 of Part 1 in a quantity which, in any period of 12 months, is greater than the background quantity by more than the amount specified in that paragraph for that substance.

SECTION 4.6

Explosives Production

Part A(1)

- (a) Producing explosives.

SECTION 4.7

Manufacturing Activities Involving Carbon Disulphide or Ammonia

Part A(1)

- (a) Unless falling within Part A(2) of Section 6.7, any manufacturing activity which may result in the release of carbon disulphide into the air.

- (b) Any activity for the manufacture of a chemical which may result in the release of ammonia into the air other than an activity in which ammonia is only used as a refrigerant.

SECTION 4.8

The Storage of Chemicals in Bulk

Part B

- (a) The storage in tanks, other than in tanks for the time being forming part of a powered vehicle, of any of the substances listed below except where the total storage 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—
 - (i) one or more acrylates, 20 tonnes (in aggregate);
 - (ii) acrylonitrile, 20 tonnes;
 - (iii) anhydrous ammonia, 100 tonnes;
 - (iv) anhydrous hydrogen fluoride, 1 tonne;
 - (v) toluene di-isocyanate, 20 tonnes;
 - (vi) vinyl chloride monomer, 20 tonnes;
 - (vii) ethylene, 8,000 tonnes.