

air discharges appendix

I PART A PROCESSES

1.

Any combustion processes (not being combustion processes for the drying of grain) involving fuel burning equipment, including flaring or incineration of trade wastes or refuse, which singly or together can be used to burn any combustible matter:

- (a) at a rate of heat release exceeding 50 MW; or
- (b) at a rate exceeding 100kg an hour where pathological material, garbage, refuse, or trade wastes are incinerated; or
- (c) at a rate of heat release exceeding 500kW where the products of combustion are used:
 - (i) to stove enamel; or
 - (ii) to bake or dry any substance that on heating releases dust or other air pollutants; or
 - (iii) to maintain reducing conditions in any manufacturing process; or
- (d) at a rate, where the combustible materials which contain sulphur or arsenically treated wood or rubber or oil sludge or pitch or paint residues, that will incinerate in excess of 100kg an hour of:
 - (i) sulphur; or
 - (ii) arsenically treated wood; or
 - (iii) rubber; or
 - (iv) oil sludge; or



- (v) pitch; or
- (vi) paint residues; or
- (e) at a rate where the combustible matter is a combination of combustible materials which contain chemicals, plastics, or fibre in which fluorine, chlorine, phosphorus, or nitrogen have been chemically combined, that will incinerate in excess of 25kg an hour of such chemicals, plastics or fibre.

2.

Any industrial chemical processes, excluding electro-plating processes, having as a product or by-product or emission any substance that can cause air pollution, including any processes used in:

- (a) bodying of natural oils or manufacture or reaction of monomers for production of synthetic resins, varnishes, and plastics; or
- (b) production of soap, grease, detergents, and surface active agents; or
- (c) synthesis or extraction of organic chemicals, including formulation of insecticides, weedicides, plant hormones, and like toxic or offensive organic compounds; or
- (d) production of inorganic chemicals, including concentration of acids and anhydrides, ammonia and alkalis; or
- (e) production of phosphatic or nitrogenous synthetic fertilisers, including granulation of single or mixed fertilisers; or
- (f) any chemical manufacturing processes using or producing chlorine and any industrial processes using chlorine but only for other than water sterilisation and at rates exceeding 5 kg an hour; or
- (g) separation or concentration for manufacture or disposal of any uranium metal or compound or any radioactive substance.

3.

Any animal or plant matter processes having singly or together a raw material capacity in excess of:

- (a) 0.5 of a tonne an hour, and being processes for rendering or reduction or drying through application of heat to animal matter (including leathers, blood, bone, hoof, skin, offal, whole fish, and fish heads and guts and like parts and organic manures); or

- (b) 5 tonnes an hour, and being processes for deep fat frying, oil frying, curing by smoking, roasting of berries or grains, or where organic matter including wood is subject to such temperatures or conditions that there is partial distillation or pyrolysis; or
- (c) 2 tonnes an hour, and being processes for the drying of milk or milk products.

4.

A process involving the extraction from the surface of the ground or from an open pit of minerals (including coal, coke and carbon), or the size reduction and screening of such minerals, or the storage outside and above the ground of such minerals, or the drying or heating of minerals that on heating release dust or any air pollutant, being processes which, singly or together:

- (a) have or require:
 - (i) an open-cast extraction capacity in excess of 100 tonnes and hour; or
 - (ii) a size reduction and screening capacity in excess of 200 tonnes an hour; or
 - (iii) a storage capacity in excess of 10,000 tonnes; or
 - (iv) a rate of heat release in excess of 2000kW; or
- (b) are part of a manufacturing process for Portland or similar cements and pozzolanic materials; or
- (c) are part of a manufacturing process of the sintering, calcining, or roasting of metal ores in preparation for smelting or for burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides, or the expansion or exfoliation of minerals, or the dehydration of gypsum; or
- (d) are part of a manufacturing process for making hot-mix asphalt paving mixes; or
- (e) are a part of a manufacturing process for making glass or frit from raw materials or making mineral wool or glass fibre, including application of any surface coating to the fibres.

5.

Any individual metallurgical processes, including associated foundry practices, which involve:

- (a) the extraction, including electro-chemical methods of reduction, of any metal or metal

- alloy from its ore, oxide, or other compound; or
- (b) the making of steel or the refining of any metal or modification of any alloy in the molten state by blowing with air, oxygen, or oxygen enriched air, or chlorine or other gases, or by addition of reactive chemicals or volatile fluxes and the use of oxygen lancing in scarfing and similar operations; or
 - (c) the manufacture of silicon or ferrosilicon or of metal powders or of alloys rich in any metals specified or described in clauses 1 to 3 of Part B of this Appendix; or
 - (d) the melting of any metal or metal alloy, including secondary melting, and the sweating of scrap metal, where the aggregated melting capacity exceeds 1 tonne an hour; or
 - (e) hot dip galvanising or other processes for the protection of surfaces by metal coating using fluxes.

6.

Any industrial carbonising or gasification processes in which natural gas, petroleum oil, shale, coal, wood, or other carbonaceous material is subject to:

- (a) pyrolysis, carbonisation, or destructive distillation, the solid liquid or gaseous products being recovered; or
- (b) gasification by partial combustion with air or oxygen or reaction with steam.

7.

Any process (not being the purification by distillation of dry-cleaning solvents at retail outlets) for the refining, purification, or reforming of hydrocarbons in or derived from natural gas, petroleum, shale, coal, wood, or other organic substances, and including:

- (a) hydrocarbon separation or recovery by distillation or absorption and desorption or removal of carbon dioxide or condensable hydrocarbons from natural or manufactured gas; or
- (b) reforming including viscosity breaking by thermal and catalytic cracking and hydrogenation and alkylation and like processes, including preparation of ethylene or other feed stock for chemical syntheses; or

- (c) refining to reduce sulphur or to improve other qualities with the aid of any substance specified in Part B of this Appendix or by air blowing.

8.

Any industrial wood pulp or particle board processes in which:

- (a) wood or other cellulose material is cooked with chemical solutions to dissolve lignin and the associated processes of bleaching and chemical and by-product recovery; or
- (b) hardboard or particle board or wood pulp are made by processes involving emission of air pollutants.

9.

Any use of geothermal steam at a rate of heat release exceeding 5MW.

10.

Any industrial or trade processes involving the use of:

- (a) di-isocyanates at a rate exceeding 100kg an hour; or
- (b) organic plasticisers at a rate exceeding 100kg an hour.

11.

Any process:

- (a) which involves the production of compost from raw materials that contain municipal or domestic refuse and which has a raw materials capacity exceeding 10 tonnes per day; or
- (b) which involves the production of compost from raw materials that do not contain municipal or domestic refuse and which has on the premises at any time a volume of compost and raw materials exceeding 750m³.

12.

Any process specified or described in Part B of this Appendix that is owned or operated by a local authority where the process is situated within the area administered by that local authority.



13.

Any fellmongery processes involving:

- (a) the use of sulphides; or
- (b) the treatment of fellmongery liquid wastes containing sulphides.

II

PART B PROCESSES

1.

Any combustion processes involving fuel burning equipment, including flaring or incineration of trade wastes or refuse, not otherwise specified or described in the Appendix but which singly or together can be used to burn combustible matter:

- (a) for any purpose at a rate of heat release exceeding 5MW; or
- (b) for the purpose of:
 - (i) the recovery of metals from insulated cable, motor vehicles, or any other mixture of combinations of metals and combustibles; or
 - (ii) the cleaning of drums or containers; or
 - (iii) frost protection on more than one occasion in any period of 12 months by the use of fire pots; or
- (c) at a rate not exceeding 100kg an hour, where pathological material, garbage, refuse, or trade wastes, are incinerated; or
- (d) at a rate, where the combustible matter is a combination of combustible materials which contain sulphur or arsenically treated wood or rubber or oil sludge or pitch or paint residues, that will incinerate in excess of 25 kg an hour but not in excess of 100 kg an hour of:
 - (i) sulphur; or
 - (ii) arsenically treated wood; or
 - (iii) rubber; or
 - (iv) pitch; or
 - (v) paint residues; or
- (e) at a rate, where the combustible matter is a combination of combustible materials which contain chemicals, plastics, or fibre in which fluorine, chlorine, phosphorus, or nitrogen has been chemically combined, that will incinerate in excess of 5 kg an hour but not in excess of 25 kg an hour of such chemicals, plastics, or fibre.

2.

Any industrial or trade processes (not otherwise specified or described in Part A of this Appendix) for the blending, packaging, or handling of air polluting substances specified in Part B of this Appendix including grain elevators or seed dressing

plant but not processes solely concerned with retail distribution or with distribution of fuels.

3.

Any industrial or trade animal or plant matter processes:

- (a) described in clause 3(a) of Part A Processes of this Appendix but having a raw material capacity in excess of 250kg an hour but not in excess of 5 tonnes an hour; or
- (b) described in clause 3(b) of Part A Processes of this Appendix, but having a raw material capacity not in excess of 2 tonnes an hour.

4.

Any industrial or trade mineral processes described in clause 4(a) of Part A Processes of this Appendix, but having or requiring:

- (a) an open-cast extraction capacity in excess of 5 tonnes an hour but not in excess of 100 tonnes an hour; or
- (b) a size reduction and screening capacity in excess of 5 tonnes an hour but not in excess of 200 tonnes an hour; or
- (c) a storage capacity in excess of 500 tonnes but not in excess of 10,000 tonnes; or
- (d) a rate of heat release less than 2000kW.

5.

Any industrial processes for manufacture of flock or for the teasing of textiles or shredding of paper or for cleaning sacks or crushing or separating dags from wool.

6.

Any industrial or trade process which is not otherwise specified or described in Part A of this Appendix and which involves dry abrasive blasting.

7.

Any industrial or trade process using di-isocyanates at a rate not exceeding 100kg an hour.

8.

Any process of wool scouring.

9.

Any process:

- (a) which involves the production of compost from raw materials that contain municipal or domestic refuse and which has a raw materials capacity not exceeding 10 tonnes per day; or
- (b) which involves the production of compost (except silage) from raw materials that do not contain municipal or domestic refuse and which has on the premises a volume of compost and raw materials exceeding 100m³ but not exceeding 750m³.



III PART C PROCESSES

1.

Any combustion processes involving fuel burning equipment, including flaring or incineration of trade wastes or refuse, not otherwise specified or described in this Appendix which singly or in combination in any one unit can burn combustible matter having a rate of heat release exceeding 40 kW.

2.

Any industrial or trade processes not otherwise specified or described in this Appendix for pneumatic conveying of any air polluting substance specified in Part B of this Appendix.

3.

Any industrial or trade processes described in clause 3 of Part A Processes of this Appendix but having a raw material capacity less than 250 kg an hour.

4.

Any industrial or trade processes not otherwise specified or described in Part A of this Appendix which may separately or together discharge to the atmosphere hydrocarbons and related substances in quantity exceeding 5 kg an hour.

5.

Any industrial or trade processes not otherwise specified or described in Part A of this Appendix or for which a lower emission limit is not specified in this Appendix but which may discharge to the atmosphere air pollutants specified in Part B of this Appendix.

6.

Any process which involves the production of compost (except silage) from raw materials that do not contain municipal or domestic refuse and which has on the premises at any time a volume of compost and raw materials not exceeding 100 cubic metres.

7.

Any industrial or trade process which is not otherwise specified or described in Part A of this Appendix and which involves wet abrasive blasting.

8.

Intensive Livestock Farming

9.

Waste Management Facilities