SCHEDULE 1

DESCRIPTIONS OF PROCESSES

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.