

## SCHEDULE 1

### Activities

## PART 2

### Activities

## CHAPTER 2

### Production and Processing of Metals

#### SECTION 2.1

##### *Ferrous Metals*

#### Interpretation of Section 2.1

1. In this Section, “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.

#### **Part A(1)**

- (a) Roasting or sintering metal ore, including sulphide ore, or any mixture of iron ore with or without other materials.
- (b) Producing, melting or refining iron or steel or any ferrous alloy, including continuous casting, except where the only furnaces used are—
  - (i) electric arc furnaces with a designed holding capacity of less than 7 tonnes, or
  - (ii) cupola, crucible, reverberatory, rotary, induction, vacuum, electro-slag or resistance furnaces.
- (c) Processing ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per hour.
- (d) Loading, unloading or otherwise handling or storing more than 500,000 tonnes in total in any period of 12 months of iron ore, except in the course of mining operations, or burnt pyrites.

#### **Part A(2)**

- (a) Unless falling within Part A(1)(b) of this Section producing pig iron or steel, including continuous casting, in a plant with a production capacity of more than 2.5 tonnes per hour.
- (b) Operating hammers in a forge, the energy of which is more than 50 kilojoules per hammer, where the calorific power used is more than 20 megawatts.
- (c) Applying protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour.
- (d) Casting ferrous metal at a foundry with a production capacity of more than 20 tonnes per day.

#### **Part B**

*Status: This is the original version (as it was originally made).*

- (a) Unless falling within Part A(1)(b) of this Section, producing pig iron or steel, including continuous casting, in a plant with a production capacity of 2.5 or less tonnes per hour.
- (b) Unless falling within Part A(2)(a) or (d) of this Section, producing, melting or refining iron or steel or any ferrous alloy (other than producing pig iron or steel, including continuous casting) using—
  - (i) one or more electric arc furnaces, none of which has a designed holding capacity of 7 or more tonnes; or
  - (ii) a cupola, crucible, reverberatory, rotary, induction, electro-slag or resistance furnace.
- (c) Desulphurising iron, steel or any ferrous alloy.
- (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) unless—
  - (i) it is carried on in one or more furnaces or other appliances the primary combustion chambers of which have in aggregate a 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 activity falling within this Part of this Section.
- (e) Unless falling within Part A(1) or Part A(2) of this Section, casting iron, steel or any ferrous alloy from deliveries of 50 or more tonnes of molten metal.

## SECTION 2.2

### *Non-Ferrous Metals*

#### Interpretation and application of Section 2.2

1. In this Section “non-ferrous metal alloy” means an alloy which is not a ferrous alloy, as defined in Section 2.1.
2. Part A(1)(c) to (h) and Part B do not apply to hand soldering, flow soldering or wave soldering.

#### **Part A(1)**

- (a) Unless falling within Part A(2) of this Section, producing non-ferrous metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic activities.
- (b) Melting, including making alloys, of non-ferrous metals, including recovered products (refining, foundry casting etc) where—
  - (i) the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals; and
  - (ii) any furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes.
- (c) Except where the activity is related to an activity described in Part A(2)(a), or Part B(a), (d) or (e) of this Section, refining any non-ferrous metal or alloy, other than the electrolytic refining of copper.
- (d) Producing, melting or recovering by chemical means or by the use of heat, lead or any lead alloy, if—
  - (i) the activity may result in the release into the air of lead; and

- (ii) in the case of lead alloy, the percentage by weight of lead in the alloy in molten form is more than 23 per cent if the alloy contains copper and 2 per cent in other cases.
- (e) Recovering any gallium, indium, palladium, tellurium, or thallium if the activity may result in their release into the air.
- (f) 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 both in aggregate.
- (g) Mining zinc or tin bearing ores where the activity may result in the release into water of cadmium or any compound of cadmium in a concentration which is greater than the background concentration.
- (h) Manufacturing or repairing involving the use of beryllium or selenium or an alloy containing one or both of those metals, if the activity may result in the release into the air of any substance in paragraph 6(3) of Part 1; but an activity does not fall within this paragraph by reason of it involving an alloy that contains beryllium if that alloy in molten form contains less than 0.1 per cent by weight of beryllium and the activity falls within Part B(a) or (d) of this Section.
- (i) Pelletising, calcining, roasting or sintering any non-ferrous metal ore or any mixture of such ore and other materials.

#### Interpretation of Part A(1)

1. In paragraph (g), “background concentration” means any concentration of cadmium or any compound of cadmium which would be present in the release irrespective of any effect the activity may have had on the composition of the release and, without prejudice to the generality of the foregoing, includes such concentration of those substances as is present in—

- (a) water supplied to the site where the activity is carried on;
- (b) water abstracted for use in the activity; and
- (c) precipitation onto the site on which the activity is carried on.

#### Part A(2)

- (a) Melting, including making alloys, of non-ferrous metals, including recovered products (refining, foundry casting, etc.) where—
  - (i) the plant has a melting capacity of more than 4 tonnes per day for lead or cadmium or 20 tonnes per day for all other metals, and no furnace (other than a vacuum furnace), bath or other holding vessel used in the plant for the melting has a design holding capacity of 5 or more tonnes; or
  - (ii) the plant uses a vacuum furnace of any design holding capacity.

#### Part B

- (a) Melting, including making alloys, of non-ferrous metals (other than tin or any alloy which in molten form contains 50 per cent or more by weight of tin), including recovered products (refining, foundry casting, etc.) in plant with a melting capacity of 4 tonnes or less per day for lead or cadmium or 20 tonnes or less per day for all other metals.
- (b) The heating in a furnace or any 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 not related to another activity described in this Part of this Section; but an activity does not fall within this paragraph if—

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- (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) Melting zinc or a zinc alloy in conjunction with a galvanising activity at a rate of 20 or less tonnes per day.
- (d) Melting zinc, aluminium or magnesium or an alloy of one or more of these metals in conjunction with a die-casting activity at a rate of 20 or less tonnes per day.
- (e) Unless falling within Part A(1) or Part A(2) of this Section, the separation of copper, aluminium, magnesium or zinc from mixed scrap by differential melting.

**Interpretation and application of Part B**

1. In this Part “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.

2. When determining the extent of an installation carrying on an activity within paragraph (e), any location where the associated storage or handling of scrap which is to be heated as part of that activity is carried on, other than a location where scrap is loaded into a furnace, must be ignored.

*SECTION 2.3*

*Surface Treating Metals and Plastic Materials*

**Part A(1)**

- (a) Unless falling within Part A(2) of this Section, surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m<sup>3</sup>.

**Part A(2)**

- (a) Surface treating metals and plastic materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30m<sup>3</sup> and where the activity is carried on at the same installation as one or more activities falling within—
  - (i) Part A(2) or Part B of Section 2.1;
  - (ii) Part A(2) or Part B of Section 2.2; or
  - (iii) Part A(2) or Part B of Section 6.4.

**Part B**

- (a) Any process for the surface treatment of metal which is likely to result in the release into air of any acid-forming oxide of nitrogen and which does not fall within Part A(1) or Part A(2) of this Section.