

ORDINANCE  
OF THE STATES OF DELIBERATION

ENTITLED

**The Environmental Pollution (Air Pollution) Ordinance,  
2019 \***

*[CONSOLIDATED TEXT]*

**NOTE**

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\* No. \*\* of 2019.

# ORDINANCE OF THE STATES OF DELIBERATION

ENTITLED

## **The Environmental Pollution (Air Pollution) Ordinance, 2019**

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*(Made on 27th November, 2019.)*

## **The Environmental Pollution (Air Pollution) Ordinance, 2019**

**THE STATES**, in pursuance of their Resolutions of the 1<sup>st</sup> February, 2017<sup>a</sup> and the 27<sup>th</sup> November, 2019<sup>b</sup>, and in exercise of the powers conferred on them by sections 3, 13, 14, 22, 25(3)(k), 25(10), 49 to 54, 58 to 62, 64, 69(2), and 72 of the Environmental Pollution (Guernsey) Law, 2004<sup>c</sup>, and all other powers enabling them in that behalf, hereby order: –

### **PART I**

#### **AMBIENT AIR QUALITY STANDARDS**

##### **Establishment of ambient air quality standards.**

**1.** (1) The standards for ambient air in Schedule 1 are established for the purposes of section 3(3) to (5) of the Law.

(2) The standards comprise –

(a) objectives for ambient air quality in Table 1 of Schedule 1 ("**Table 1**"),

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**a** Article III of Billet d'État No. III of 2017.

**b** Article IX of Billet d'État No. XXIII of 2019.

**c** Order in Council No. XIII of 2004; as amended by Order in Council No. XIII of 2010; Nos. XV and XVI of 2015; Ordinance No. XXXIII of 2003; No. XXXVIII of 2006; No. XLIX of 2006; No. XIII of 2007; No. XVIII of 2010; No. V of 2011; No. IX of 2016 and the Environmental Pollution (Enforcement and Appeals) Ordinance, 2019.

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- (b) maximum limits for the level of pollutants in ambient air in Table 2 of Schedule 1 ("**Table 2**"), and
- (c) target values for concentrations of arsenic, cadmium, nickel, benzo(a)pyrene and PM2.5 in Parts I and II of Table 3 of Schedule 1 ("**Table 3**").

(3) The objectives for the pollutants in ambient air described in column 1 of Table 1, measured as set out in the corresponding entry in column 3 of Table 1 –

- (a) are set out in the corresponding entry in column 2 of Table 1, and
- (b) should be achieved by the date set out in the corresponding entry in column 4 of Table 1.

(4) The maximum limit values for the level of the pollutants in ambient air described in column 1 of Table 2, measured over the period set out in the corresponding entry in column 2 of Table 2 –

- (a) are set out in the corresponding entry in column 3 of Table 2, and
- (b) are subject to any allowed margin of tolerance set out in the corresponding entry in column 4 of Table 2.

(5) The target values for concentrations of the pollutants, referred to in column 1 of Parts I and II of Table 3, are set out in the corresponding entry in column 2 of Parts I and II of Table 3 and should be achieved by the date set out in the corresponding entry in column 3 of Parts I and II of Table 3.

- (6) The Director –
- (a) is required to take into account any relevant objectives, target values or maximum limits established under this section in considering an application for a licence in accordance with section 14(3)(b) of the Law, and
  - (b) may attach to a licence, conditions intended to ensure the attainment of the maximum limits prescribed under subsection (4) in accordance with section 16(2)(b) of the Law.

(7) The Director may by Regulations amend or substitute subsection (2)(c) or Schedule 1 in order to adapt it to, and keep up to date with, technical or scientific progress.

## PART II

### PRESCRIBED OPERATIONS AND LICENSING

#### **Operations in Schedule 2 to be prescribed operations.**

2. (1) The operations described in Schedule 2, being operations, which in the opinion of the States, may involve a risk of environmental pollution, are prescribed as operations for the carrying on of which a licence is required under Part III of the Law.

- (2) If any operation falls within a description –
- (a) in Schedule 2, and
  - (b) in section 1(1) of the 2010 Ordinance,

it shall be treated as only being prescribed under the 2010 Ordinance.

(3) For the avoidance of doubt, the descriptions of operations in Parts I to V of Schedule 2 are subject to any relevant application and interpretation provisions in Part VI of Schedule 2 and other Parts of that Schedule.

**Application of licensing provisions in 2010 Ordinance.**

3. (1) Despite any provisions of the 2010 Ordinance to the contrary, the following licensing provisions of the 2010 Ordinance apply in relation to a description of operation prescribed under section 2 –

- (a) section 3 (exemptions),
- (b) section 4 (licence and related applications and fees),  
and
- (c) section 5 (requirements for applications, accompanying plans, maps and other documents).

(2) For the avoidance of doubt, the Director may specify different requirements under sections 4 and 5 of the 2010 Ordinance in relation to different descriptions of operation set out in Schedule 2.

PART III  
DARK SMOKE

**Prohibitions in relation to emission of dark smoke.**

4. (1) An occupier of a building, other than a dwelling house, must not on any day cause or permit any dark smoke to be emitted from a chimney of the building.

(2) A person having possession of a fixed boiler or industrial plant must not on any day cause or permit dark smoke to be emitted from a chimney (not being a chimney of a building), which serves the furnace of the fixed boiler or industrial plant.

(3) A person must not on any day cause or permit any dark smoke to be emitted from premises, other than a dwelling house, in the course of the burning of commercial waste on the premises.

(4) Subsection (3) does not apply to the emission of dark smoke from any chimney to which subsections (1) or (2) applies.

(5) The owner of a vessel and the master or other officer or person in charge of a vessel must not on any day cause or permit any dark smoke to be emitted from a chimney of the vessel.

(6) The Director may by Regulations provide for exemptions from the prohibitions in this section for emissions taking place at such times and places, lasting no longer than such periods and otherwise in such circumstances as the Director may prescribe in those Regulations.

(7) In proceedings for an offence under the Law in relation to a contravention of any provision of this section, there is taken to have been an emission of dark smoke from a chimney or premises in any case where –

- (a) a substance is burned on or in the building, fixed boiler, industrial plant or vessel in question, and
- (b) the circumstances are such that the burning would be likely to give rise to the emission of dark smoke,

unless the person charged with the offence shows that no dark smoke was emitted.

(8) In any proceedings for an offence under the Law in relation to a contravention of subsections (1), (2) or (5) of this section, it is a defence to prove one or more of the following –

- (a) that the alleged emission was solely due to the lighting up of a furnace or boiler which was cold and that all practicable steps had been taken to prevent or minimise the emission of dark smoke,
- (b) that the alleged emission was solely due to some failure of the furnace or boiler, or of apparatus used in connection with a furnace or boiler, and that –
  - (i) the failure could not reasonably have been foreseen, or, if foreseen, could not reasonably have been provided against, and
  - (ii) the alleged emission could not reasonably have been prevented by action taken after the failure occurred, or
- (c) that the alleged emission was solely due to the use of unsuitable fuel and that –
  - (i) suitable fuel was unobtainable and the least unsuitable fuel which was available was used, and

- (ii) all practicable steps had been taken to prevent or minimise the emission of dark smoke as the result of the use of that fuel.

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**NOTE**

*The following Regulations have been made under section 4:*

*Air Pollution (Dark Smoke) (Exemptions) Regulations, 2019.*

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PART IV

FURNACES AND BOILERS INSTALLED ON PREMISES OTHER THAN A  
DWELLING HOUSE

**Requirement for new furnaces and boilers.**

5. (1) A person who, or on whose instructions, a furnace or boiler is installed on any premises, other than a dwelling house, must not so install, or cause the installation of the furnace or boiler unless it is, insofar as is practicable, capable of being operated continuously without emitting smoke when burning fuel of a type for which the furnace or boiler was designed.

(2) Any furnace or boiler installed in accordance with plans and specifications submitted to, and approved for the purposes of this section by, the Director is treated as complying with subsection (1).

(3) For the avoidance of doubt, this section applies in relation to the attachment to premises of industrial plant which already contains a furnace or a boiler.

(4) The Director may by Regulations provide for exemptions from subsection (1) for boilers or furnaces of the same or a similar description, including in size and rates of emissions, to those commonly installed in a dwelling house.

**Emission of grit, dust and other pollutants from furnaces or boilers.**

6. (1) Schedule 3 prescribes the limits on the rates of emission of grit and dust from the chimneys of furnaces (including furnaces of boilers) installed on premises, other than a dwelling house, for the purposes of section 51(2) of the Law.

(2) The occupier of premises, other than a dwelling house, in which a furnace or boiler is installed must –

- (a) in the case of a limit prescribed under subsection (1), not on any day cause or permit grit or dust to be emitted from a chimney serving the furnace at a rate exceeding the relevant limit set out in Schedule 3, or
- (b) in a case of a chimney of a boiler which has no furnace or another case where no limit is prescribed in Schedule 3, use any practicable means there may be for minimising the emission of grit and dust from the chimney.

(3) In any proceedings under the Law for an offence in relation to a contravention of subsection (2), it is a defence to prove that the best practicable means had been used for minimising the alleged emission.

(4) The Director may by Regulations –

- (a) amend or substitute any provision of Schedule 3, or
- (b) make any necessary amendments to this section and to Schedule 3 to extend their requirements in relation to prescribing limits on the rates of emissions –

- (i) to chimneys of other types of furnace or boiler,  
or
- (ii) to other specified pollutants.

**Arrestment plant for new furnaces or boilers.**

7. (1) An occupier of premises, other than a dwelling house, must not, subject to subsection (5) and section 8, on any day use a furnace or boiler in the premises –

- (a) to burn pulverised fuel,
- (b) to burn, at a rate of 45.4 kilograms or more an hour, any other solid matter, or
- (c) to burn, at a rate equivalent to 366.4 kilowatts or more, any liquid or gaseous matter,

unless the furnace or boiler meets the conditions in subsection (2).

- (2) The conditions referred to in subsection (1) are that –
  - (a) the furnace or boiler is provided with plant for arresting grit and dust which has been –
    - (i) approved by the Director, or
    - (ii) installed in accordance with plans and specifications submitted to and approved by the Director, and

(b) the plant referred to in paragraph (a) is properly maintained and used.

(3) The Director may by Regulations substitute the rates mentioned in subsection (1)(b) or (c).

(4) Regulations under subsection (3) which reduce any rate shall not apply to a furnace or boiler which has been installed, the installation of which has been begun, or an agreement for the purchase of which has been entered into, before the date on which the Regulations come into force.

(5) Subsection (1) does not apply to a furnace or boiler which was installed, the installation of which has been begun, or an agreement for the purchase or installation of which was entered into, on or before the 2<sup>nd</sup> December, 2019.

**Exemptions from section 7.**

8. (1) Furnaces of a description in column 1 of the Table in Schedule 4 are exempt from section 7(1) when used for the purpose set out in the corresponding entry in column 2 of that Table.

(2) The Director may, on the written application of the occupier of the premises where a furnace or boiler is used, exempt –

(a) a furnace from section 7(1) whilst it is used for a specific purpose other than one set out for the relevant description of furnace in the Table in Schedule 4, or

(b) a boiler from section 7(1) whilst it is used for a specific purpose,

if the Director is satisfied that the emission of grit and dust from any chimney serving a furnace or boiler on the premises, without compliance with section 7(1), will not give rise to a risk of significant environmental pollution if the furnace or boiler is used for that purpose.

(3) The Director must give written notice to the applicant of the Director's decision on an application under subsection (2) and, in the case of a refusal, of the reasons for the same.

(4) An occupier of premises must not, on any day, use a furnace or boiler which is exempt from section 7(1) for a purpose other than one in relation to which the furnace or boiler is exempt under subsection (1) or (2).

**Application for an approval in relation to a furnace or boiler.**

9. (1) This section applies to an approval of the Director referred to in section 5(2) or 7(2).

(2) An application for an approval must be –

(a) made to the Director in such manner as the Director thinks fit including, without limitation, by means of the submission of a specified form of application completed in such manner as the Director may approve, and

(b) accompanied by such plans, maps and other documents, including copies of any specified form as may be specified for the purpose by the Director.

(3) A fee or charge may be prescribed under section 8 of the Law in relation to work undertaken by the Director in connection with an application for

an approval.

(4) The Director is not obliged to consider an application for an approval unless –

- (a) it complies with the requirements of subsection (2),
- (b) any specified form of application has been fully completed by the applicant,
- (c) the application satisfies the requirements set out in subsection (5),
- (d) the plans, maps and other documents, which are submitted with the application are accurate, clear and as reasonably up to date as is possible in the circumstances, and
- (e) any fee or charge prescribed under section 8 of the Law is paid when due.

(5) The requirements for the purposes of subsection (4)(c) are that the application –

- (a) properly identifies the applicant, the owner and occupier of the premises, the furnace or boiler, and any equipment associated with the same, which are the subject of, or otherwise relevant to, the application, and
- (b) contains sufficient information to enable the Director–

- (i) to be satisfied that the building, furnace or boiler, and any equipment associated with the same, will be installed and operated in accordance with all relevant provisions under this Ordinance, and
- (ii) to impose such conditions on the approval as may be reasonably necessary.

(6) The Director may attach to an approval such conditions as appear to the Director to be appropriate.

(7) The Director must give written notice to the applicant of a decision on an application for an approval and in the case of –

- (a) a grant subject to conditions, or
- (b) a refusal,

the reasons for the same.

(8) A decision of the Director to refuse to grant an approval or to attach a condition to an approval is prescribed, for the purposes of section 25(3)(k) of the Law, as a decision of the Director against which an appeal shall lie under section 25 of the Law.

(9) In this section, "**specified**" means specified in writing by the Director.

**Measurement of grit and dust by occupiers.**

- 10.** (1) If a furnace or a boiler in premises, other than a dwelling

house, is used –

- (a) to burn pulverised fuel,
- (b) to burn, at a rate of 45.4 kilograms or more an hour, any other solid matter, or
- (c) to burn, at a rate equivalent to 366.4 kilowatts or more, any liquid or gaseous matter,

the Director may, by written notice served on the occupier, direct that the provisions of subsection (2) apply to the furnace or boiler.

(2) Where this subsection applies to a furnace or a boiler, the occupier must comply with Schedule 5 which makes provision relating to –

- (a) the installation and use of apparatus for the recording of emissions of grit and dust from the furnace or boiler,
- (b) the maintenance and recording of measurements of such emissions, and
- (c) providing, or otherwise making available to, the Director the results obtained from the measurements.

(3) The occupier of premises, who is subject to a duty under subsection (2) to use apparatus for the recording of measurements of grit and dust, must permit the Director to be represented during the making and recording of those measurements.

(4) The Director may by Regulations –

- (a) substitute the rates mentioned in subsection (1)(b) or (c),
- (b) amend or substitute any requirements set out in Schedule 5, or
- (c) make any necessary amendments to this section and Schedule 5 to extend their requirements in relation to the recording of emissions of other specified pollutants.

(5) A direction under subsection (1) may be revoked by the Director by subsequent written notice served on the occupier.

(6) Subsection (5) is without prejudice to the Director's power to issue a further direction under subsection (1) in relation to the same furnace or boiler.

(7) A decision of the Director to issue a notice under paragraph 1(1) or 2(2) of Schedule 5 is prescribed, for the purposes of section 25(3)(k) of the Law, as a decision of the Director against which an appeal shall lie under section 25 of the Law.

**Information about furnaces or boilers and fuel consumed.**

**11.** (1) The Director may, for the purpose of carrying out the Director's functions under this Part, require the occupier of any premises other than a dwelling house by written notice served on the occupier, to provide such information as the Director may reasonably require for that purpose, relating to the furnaces or boilers on the premises and the fuel or other substance burned in them.

(2) The Director may in a notice under subsection (1) require the information to be provided within –

- (a) 14 days starting from the date of the notice, or
- (b) such longer period as may be set out in the notice.

(3) An occupier must comply with the requirements of a notice served on the occupier under subsection (1) within the time period set out in the notice.

**Grit and dust from outdoor furnaces or boilers etc.**

**12.** (1) Any reference in this Part to the occupier of premises is, in relation to a furnace of any fixed boiler or industrial plant, to be read as a reference to a person having the possession of the boiler or plant.

(2) The reference in section 7(4) and (5) to the installation and to the purchase of a furnace is to be read, in relation to a furnace which is already contained in any fixed boiler or industrial plant, as a reference to attaching the boiler or plant to the premises or fixing it to or installing it on any land forming part of the premises and to purchasing the boiler or plant respectively.

PART V

SULPHUR CONTENT OF LIQUID FUELS

**Application.**

**13.** (1) This Part does not apply to heavy fuel oil or gas oil intended for –

- (a) the purpose of research and testing,
- (b) processing prior to final combustion, or

(c) processing in the refining industry.

(2) This Part does not apply to any petroleum derived liquid fuel intended for use or in use on board a vessel, including those fuels defined in international standard ISO 8217, except to the extent the particular fuel is used, or intended for use, on land.

**Maximum sulphur content of heavy fuel oil.**

**14.** (1) For the purposes of section 53(1) of the Law, any heavy fuel oil must not have a sulphur content exceeding 1 per cent by mass.

(2) A person must not use or cause or permit another person to use any heavy fuel oil that has a sulphur content exceeding that set out in subsection (1).

**Maximum sulphur content in gas oil.**

**15.** (1) For the purposes of section 53(1) of the Law, any gas oil must not have a sulphur content exceeding 0.1 per cent by mass.

(2) A person must not use or cause or permit another person to use any gas oil that has a sulphur content exceeding that set out in subsection (1).

**Sampling and analysis.**

**16.** (1) The Director must take all necessary measures to ensure that periodic sampling is carried out of heavy fuel oil and gas oil and that the samples are analysed to check that the use of those fuels complies with sections 14 and 15.

(2) Sampling must be carried out with sufficient frequency and in such a way that the Director is satisfied that the samples are representative of the fuels examined.

(3) The reference method adopted for determining the sulphur

content of fuels sampled under subsection (1) must be as defined by European standard EN ISO 8754: 2003 or EN ISO 14596: 2007.

**Defences to offences concerning contraventions of Part V.**

**17.** In any proceedings for an offence relating to a contravention of this Part it is a defence for the accused to prove that –

- (a) the accused acted under instructions from the accused's employer and the accused neither knew, nor had reason to suppose, that the acts done by the accused constituted an offence under the Law, or
- (b) the acts alleged to constitute the offence were done in an emergency in order to avoid danger to the public and that, as soon as reasonably practicable after they were done, particulars of them were sent to the Director in writing.

**Interpretation of Part V.**

**18.** (1) In this Part, unless the context requires otherwise –

"**ASTM method**" means a method laid down by the American Society for Testing and Materials in the 1976 edition of standard definitions and specifications for petroleum and lubricating products,

"**CN Code**" means the code set out in Annex I to Council Regulation (EEC) No. 2658/87 of 23rd July, 1987 on the tariff and statistical nomenclature and on the Common Customs Tariff<sup>d</sup>,

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<sup>d</sup> OJ L 256, 7. 9. 1987, p. 1.

**"gas oil"** means any petroleum-derived liquid fuel –

- (a) that falls within CN Code 2710 19 25, 2710 19 29, 2710 19 47, 2710 19 48, 2710 20 17 or 2710 20 19, or
- (b) where less than 65% by volume (including losses) distils at 250°C and at least 85% by volume (including losses) distils at 350° C by the ASTM D86 method,

except for diesel fuels (as defined by Article 2(2) of Directive 98/70/EC<sup>e</sup> of the European Parliament and of the Council of 13th October, 1998 relating to the quality of petrol and diesel fuels) and fuels used in non-road mobile machinery or agricultural tractors,

**"heavy fuel oil"** means any petroleum-derived liquid fuel –

- (a) that falls within CN code 2710 19 51 to 2710 19 68, 27 20 31, 2710 20 35 or 2710 20 39,
- (b) which by reason of its distillation limits, falls within the category of heavy fuel oils intended for use as a fuel and of which less than 65% by volume (including losses) distils at 250°C by the ASTM D86 method, or
- (c) where the distillation cannot be determined by the ASTM method, that is categorised as heavy fuel oil,

except for gas oil.

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<sup>e</sup> OJ L 350, 28. 12. 1998, p. 58.

(2) Expressions used in this Part which are not defined elsewhere in this Ordinance, have the same meaning as in Directive (EU) 2016/802 of the European Parliament and of the Council of 11<sup>th</sup> May, 2016 relating to a reduction of the sulphur content of certain liquid fuels<sup>f</sup>.

## PART VI

### BURNING OF WASTE ON LAND IN THE OPEN AIR

#### **Prohibition on uncontrolled burning of waste on land in the open air.**

**19.** (1) A person must not burn waste, or cause or knowingly permit the burning of waste, on land in the open air, other than in a receptacle which is designed and constructed –

- (a) for that purpose, and
- (b) to prevent or reduce to the minimum, in accordance with best practice, the introduction of pollutants into the environment.

(2) Subsection (1) does not apply to the burning of waste which consists of dry plant matter provided that the waste is burnt on the land where the plants were grown.

(3) Subsection (1) does not apply to the burning of waste on land in the open air when carried out –

- (a) under and in accordance with a licence for a prescribed operation, or

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<sup>f</sup> O.J. L 132, p. 58.

- (b) in accordance with the terms or conditions of any exemption under the Law from the requirement to hold a licence for a prescribed operation.
- (4) Schedule 6, which provides for exemptions from subsection (1), has effect.

PART VII  
GENERAL PROVISIONS

**Notices to provide information on air pollution.**

20. (1) The Director may require by written notice –
- (a) the occupier of any premises, other than a dwelling house, or
  - (b) the owner of any vessel, plant or machinery,

to provide to the Director, by periodical returns or other means, such estimates or other information concerning the pollution of air, or the risk of the same, arising from emissions of pollutants into the air from the premises, vessel, plant or machinery in question.

- (2) A notice under subsection (1) –
- (a) must specify the premises, vessel, plant or machinery to which it relates,
  - (b) must specify that a person who –

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- (i) fails to comply with a requirement of the notice may be guilty of an offence under section 66(1)(a) or 67(2) of the Law, and
  - (ii) provides information in response to the notice which is false, deceptive or misleading may be guilty of an offence under section 67(3) of the Law,
- (b) may, without limiting the generality of subsection (1), relate to the emission of pollutants from any chimney used for the discharge, from any premises, vessel, plant or machinery to the atmosphere, of any emission of –
- (i) sulphur dioxide or particulate matter derived from any combustion process where the material being heated does not contribute to the emission,
  - (ii) any gas or particulate matter derived from any combustion process where the material being heated contributes to the emission, or
  - (iii) any gas or particulate matter derived from any non-combustion process or other similar industrial activity.

(3) A notice under subsection (1) may, without limiting the generality of subsection (1), require the provision of estimates or other information of the following kinds, in respect of the premises, vessel, plant or machinery –

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- (a) in relation to emissions of sulphur dioxide during any specified period –
  - (i) the total duration of all discharges from the specified premises, vessel, plant or machinery during that period, or
  - (ii) the temperature in degrees Celsius, the efflux velocity in metres per second, and the volume flow rates in cubic metres per hour, of the gases discharged from any specified chimney during that period, and the height in metres above ground level at which each such discharge takes place,
  - (iii) the total quantity of sulphur dioxide discharged during that period, to be ascertained, in the case of sulphur dioxide derived from a combustion process, either –
    - (A) by calculation from the quantity of fuel or other matter burnt and its sulphur content, or
    - (B) if the occupier of the premises and the Director so agree, by direct measurement,
- (b) in relation to total emissions of particulate matter of all kinds during any specified period –

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- (i) the total duration of all discharges from the specified premises, vessel, plant or machinery during that period,
  - (ii) the temperature in degrees Celsius, the efflux velocity in metres per second, and the volume flow rates in cubic metres per hour, of the gases discharged from any specified chimney during that period, and the height in metres above ground level at which each such discharge takes place,
  - (iii) the average concentration of particulates in the gases discharged during that period in grams per cubic metre at standard temperature and pressure (i.e. a temperature of 15 degrees Celsius and a barometric pressure of one bar), or
  - (iv) the total quantity of particulates discharged during that period, and
- (c) in relation to emissions of gas other than sulphur dioxide or emissions of any specified particulate matter during any specified period –
- (i) the total duration of all discharges from the specified premises, vessel, plant or machinery during the period,
  - (ii) the temperature in degrees Celsius, the efflux velocity in metres per second, and the volume

flow rates in cubic metres per hour, of the gases discharged from any specified chimney during that period, and the height in metres above ground level at which each such discharge takes place,

- (iii) the average concentration of specified pollutants in the discharges made during the period, or
- (iv) the total quantity of specified pollutants discharged during the period.

(4) Where a notice under subsection (1) relates to an emission which has taken place before the giving of the notice, it may not require information of a kind set out in subsection (2) or (3) concerning that emission, except and insofar as that information is in the possession of –

- (a) the occupier of the specified premises, or
- (b) the owner of the specified vessel, plant or machinery,

as the case may be, or is immediately available to that person.

(5) In this section, "**specified**" means specified in the relevant notice under this section.

(6) The person on whom a notice is served under this section must comply with the notice within six weeks starting from the date of service of the notice, or within such longer period as the Director may specify in the notice.

(7) A notice under this section must not –

- (a) require returns at intervals of less than three months, or
- (b) in the case of a single notice, require a person to provide returns (whether periodic or otherwise) covering a period of more than twelve months.

(8) A decision of the Director to issue a notice under subsection (1) is prescribed, for the purposes of section 25(3)(k) of the Law, as a decision of the Director against which an appeal shall lie under section 25 of the Law.

(9) In addition to the grounds of appeal in section 25(4) of the Law, a person making an appeal against a decision of the Director to issue a notice under subsection (1), may appeal on the ground –

- (a) that providing the Director with all or part of the information required by the notice would –
  - (i) prejudice to an unreasonable degree some private interest by disclosing information which is about a trade secret, or
  - (ii) be contrary to the public interest, or
- (b) that the information required by the notice is not immediately available and cannot be readily collected or obtained without incurring undue expenditure for the purpose.

**Power to substitute references to EU instruments.**

**21.** The Director may by Regulations substitute any reference to an EU

instrument under this Ordinance for a reference to equivalent legislation applying in any part of the United Kingdom.

Relationship with public health legislation.

22. For the avoidance of doubt, nothing in this Ordinance affects the operation of the Loi relative à la Santé Publique<sup>g</sup> or any enactment made under it.

**Interpretation.**

23. (1) In this Ordinance, unless the context requires otherwise –

"**2010 Ordinance**" means the Environmental Pollution (Waste Control and Disposal) Ordinance, 2010<sup>h</sup>,

"**ambient air**" means outdoor air in the troposphere, excluding workplaces where members of the public do not have regular access,

"**arsenic**", "**cadmium**", "**nickel**" and "**benzo(a)pyrene**", except in Schedule 2, mean the total content of those elements and compounds present within the PM<sub>10</sub> present in ambient air,

"**boiler**" means a fuel burning apparatus for heating water,

"**dark smoke**" means smoke which, if compared in the appropriate manner with a Ringelmann Smoke Chart, would appear to be as dark as or darker than shade 2 on that Chart,

"**day**" means a period of twenty-four hours beginning at midnight,

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<sup>g</sup> Ordres en Conseil Vol. IX, p. 386; there are amendments not relevant to this Ordinance.

<sup>h</sup> Ordinance No. XVIII of 2010; as amended by Ordinance No. IX of 2016.

**"fixed boiler or industrial plant"** means any boiler or industrial plant which is attached to a building or is for the time being installed on any premises,

**"furnace"** means an enclosed chamber in which material can be heated to very high temperatures,

**"Guernsey"** includes the Islands of Guernsey, Herm and Jethou, all other islands, islets and rocks around the coasts of those Islands, whether or not attached at low water, and all of the territorial waters adjacent thereto,

**"industrial plant"** means any still, melting pot or other plant used for any industrial or trade purposes, and also any incinerator used for or in connection with any such purposes,

**"installed on premises"** includes fixed on or attached to premises,

**"the Law"** means the Environmental Pollution (Guernsey) Law, 2004,

**"limit value"** means a limit fixed on the basis of scientific knowledge, with the aim of avoiding, preventing or reducing environmental pollution, to be attained within a given period and not to be exceeded once attained,

**"margin of tolerance"** means the percentage of the limit value by which that value may be exceeded in a given year,

**"the occupier"** means the occupier of the premises,

**"particulate matter"** means PM<sub>2.5</sub> and PM<sub>10</sub>,

**"PM<sub>2.5</sub>"** means particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of PM<sub>2.5</sub>, European standard EN 14907, with a 50% efficiency cut-off at 2.5 µm aerodynamic diameter,

**"PM<sub>10</sub>"** means particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of PM<sub>10</sub>, European standard EN 12341, with a 50% efficiency cut-off at 10 µm aerodynamic diameter,

**"practicable"** means reasonably practicable having regard, amongst other things, to local conditions and circumstances, to the financial implications and to the current state of technical knowledge and, **"practicable means"** includes the provision and maintenance of plant and its proper use,

**"premises"** has the same meaning as in the Law and, for the avoidance of doubt, does not include a vessel,

**"Ringelmann Smoke Chart"** means –

- (a) a Ringelmann chart which conforms to British Standards publication BS2742C, as referred to in British Standard BS2742: 2009, or
- (b) a miniature smoke chart that conforms to British Standards publication BS2742M, as referred to in British Standard BS2742: 2009,

**"target value"** means a level fixed with the aim of avoiding, preventing or reducing environmental pollution, to be attained where possible

over a given period,

"**µm**" means a micrometre (one millionth of a metre), and

"**vessel**" includes every description of vessel used in navigation.

(2) In this Ordinance any reference to a chimney of the building includes a reference to a chimney which serves the whole or part of a building but is structurally separate from that building.

(3) A reference to a British standard or the standard of a European or international standards organisation under this Ordinance is, unless the context requires otherwise, a reference to that standard as from time to time revised or replaced.

**Transitional provisions in relation to prescribed operations.**

**24.** (1) Subject to subsection (2), where an operation prescribed under section 2 is being carried on immediately before the commencement of this Ordinance, such operation shall, on or after the commencement of this Ordinance, be deemed to be one in respect of which a licence has been issued under Part III of the Law to the person carrying on the operation provided that an application for a licence to carry on such operation is made to the Director –

- (a) in accordance with sections 4 and 5 of the 2010 Ordinance as applied by section 3 of this Ordinance, and
- (b) within two months starting from the date of the commencement of this Ordinance.

(2) The person carrying on the operation in question shall be

treated as a licensee for the operation in question under subsection (1) until –

- (a) the application to carry on the prescribed operation in question is granted by the Director (whether or not subject to conditions), or
- (b) if such an application is refused –
  - (i) the expiry of the period for appealing against the refusal under section 25(5) of the Law, or
  - (ii) where an appeal is duly instituted against the refusal, the date the appeal is finally determined or withdrawn; and an appeal is finally determined when the appeal and any further appeal is finally determined.

**Consequential amendments.**

**25.** In section 25 (right of appeal) of the Law, after subsection (8A) add –

" (8B) Despite subsection (8), on an appeal against a decision of the Director which is not suspended under subsection (8A), the appellate body may on –

- (a) the application of the appellant, and
- (b) such terms as the appellate body thinks just,

suspend or modify the operation of decision pending the determination of the appeal."

**Extent.**

26. This Ordinance has effect in Guernsey.

**Citation.**

27. This Ordinance may be cited as the Environmental Pollution (Air Pollution) Ordinance, 2019.

**Commencement.**

28. This Ordinance shall come into force on the 2<sup>nd</sup> December, 2019.

SCHEDULE 1  
 AMBIENT AIR QUALITY STANDARDS

## Section 1

TABLE 1 AIR QUALITY OBJECTIVES

Column 1	Column 2	Column 3	Column 4
Pollutant	Objective	Measured as	To be achieved by
Benzene	16.25 µg/m <sup>3</sup>	Running Annual Mean	31 <sup>st</sup> December, 2020
Benzene	5 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
1, 3-Butadiene	2.25 µg/m <sup>3</sup>	Running Annual Mean	31 <sup>st</sup> December, 2020
Carbon Monoxide	10.0 mg/m <sup>3</sup>	Maximum daily 8 Hour Mean	31 <sup>st</sup> December, 2020
Lead	0.25 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Nitrogen dioxide	200 µg/m <sup>3</sup> Not to be exceeded more than 18 times per year	1 Hour Mean	31 <sup>st</sup> December, 2020
Nitrogen dioxide	40 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Nitrogen Oxides	(V) 30 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Particles (PM <sub>10</sub> ) (gravimetric)	50 µg/m <sup>3</sup> Not to be exceeded more than 35 times per year	24 Hour Mean	31 <sup>st</sup> December, 2020
Particles (PM <sub>10</sub> ) (gravimetric)	40 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Particles (PM <sub>2.5</sub> ) Exposure Reduction	25 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Sulphur dioxide	266 µg/m <sup>3</sup> Not to be exceeded	15 Minute Mean	31 <sup>st</sup> December, 2020

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	more than 35 times per year		
Sulphur dioxide	350 µg/m <sup>3</sup> Not to be exceeded more than 24 times per year	1 Hour Mean	31 <sup>st</sup> December, 2020
Sulphur dioxide	125 µg/m <sup>3</sup> Not to be exceeded more than 3 times per year	24 Hour Mean	31 <sup>st</sup> December, 2020
Sulphur dioxide	(V) 20 µg/m <sup>3</sup>	Annual Mean	31 <sup>st</sup> December, 2020
Sulphur dioxide	(V) 20 µg/m <sup>3</sup>	Winter Mean (01 October-31 <sup>st</sup> March)	31 <sup>st</sup> December, 2020

TABLE 2 LIMIT VALUES

Column 1	Column 2	Column 3	Column 4
Pollutant	Averaging Period	Limit Value	Margin of Tolerance
Sulphur Dioxide	One hour	350 µg/m <sup>3</sup> not to be exceeded more than 24 times a calendar year	150 µg/m <sup>3</sup> (43%)
Sulphur Dioxide	One day	150 µg/m <sup>3</sup> not to be exceeded more than 3 times a calendar year	
Nitrogen Dioxide	One hour	200 µg/m <sup>3</sup> not to be exceeded more than 18 times a calendar year	
Nitrogen Dioxide	Calendar year	40 µg/m <sup>3</sup>	
Benzene	Calendar year	5 µg/m <sup>3</sup>	
Carbon Monoxide	Maximum daily 8 Hour Mean	10 mg/m <sup>3</sup>	
Lead	Calendar year	0.5 µg/m <sup>3</sup>	100%
Particles (PM <sub>10</sub> )	One day	50 µg/m <sup>3</sup> not to be	50%

*Consolidated text*

		exceeded more than 35 times a calendar year	
Particles (PM <sub>10</sub> )	Calendar year	40 µg/m <sup>3</sup>	20%
Particles (PM <sub>2.5</sub> )	Calendar year	25 µg/m <sup>3</sup> to be achieved by 31 <sup>st</sup> December, 2020	

TABLE 3 TARGET VALUES

PART I

Column 1	Column 2	Column 3
Pollutant	Target Value for the Total Content in the PM <sub>10</sub> Fraction Averaged Over a Calendar Year	Date by which Target Value Should be Met
Arsenic	6 ng/m <sup>3</sup>	31 <sup>st</sup> December, 2020
Cadmium	5 ng/m <sup>3</sup>	31 <sup>st</sup> December, 2020
Nickel	20 ng/m <sup>3</sup>	31 <sup>st</sup> December, 2020
Benzo(a)pyrene	1 ng/m <sup>3</sup>	31 <sup>st</sup> December, 2020

PART II

Column 1	Column 2	Column 3
Pollutant	Target Value	Date by which Target Value Should be Met
PM <sub>2.5</sub>	25 µg/m <sup>3</sup>	31 <sup>st</sup> December, 2020

**Notes to the Schedule.**

1. In this Schedule, unless the context requires otherwise –

"ng/m<sup>3</sup>" means nanograms per cubic metre,

"nitrogen oxides" means the sum of the volume mixing ratio (part per billion by volume) of nitrogen monoxide (nitric oxide) and nitrogen dioxide expressed in units of mass concentration of nitrogen dioxide (µg/m<sup>3</sup>),

" $\mu\text{g}/\text{m}^3$ " means micrograms per cubic metre, and

" $\text{mg}/\text{m}^3$ " means milligrams per cubic metre.

2. The "**maximum eight hour daily mean**" concentration of carbon monoxide referred to in Table 1 and Table 2 should be selected by examining eight hour running averages, calculated from hourly data and updated each hour; and each eight hour average so calculated should be assigned to the day on which it ends so that the first calculation period for any one day would be from 17.00 on the previous day to 01.00 on that day and the last calculation period for any one day would be the period from 16.00 to 24.00 on that day.

SCHEDULE 2  
PRESCRIBED OPERATIONS

Section 2

PART I  
ENERGY INDUSTRY OPERATIONS

**Combustion operations.**

1. (1) The burning of any fuel in an appliance or a combination of appliances with a rated thermal input of 0.4 megawatts or more where carried on by way of business, as a public service or in the course of the activities of a non-profit organisation.

(2) For the purposes of subparagraph (1) –

- (a) **"appliance"** means a boiler, furnace, gas turbine or compression ignition engine,
- (b) where two or more appliances with an aggregate rated thermal input of 0.4 megawatts or more are operated on the same site by the same operator those appliances are to be treated as a single appliance with a rated thermal input of 0.4 megawatts or more, and
- (c) "non profit organisation" has the meaning in the Charities and Non Profit Organisations (Registration) (Guernsey) Law, 2008<sup>i</sup>.

**Refining, gasification and liquefaction operations.**

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<sup>i</sup> Order in Council No. XXVI of 2008; amended by Ordinance No. XXXVI of 2008; there are other amendments not relevant to this Ordinance.

2. (1) The refining of gas including natural gas or its products.
- (2) The production of coke.
- (3) Pyrolysis, carbonisation, distillation, gasification, liquefaction, partial oxidation or other heat treatment of coal (other than drying of coal), lignite, oil, or other carbonaceous material or mixtures, otherwise than with a view to making charcoal.
- (4) The gasification or liquefaction of fuels other than as described in subparagraph (3) in installations with a total rated thermal input of 20 megawatts or more.
- (5) The refining of mineral oils, or the loading, unloading or other handling of, or other physical, chemical or thermal treatment of –
  - (a) crude oil, or
  - (b) stabilised crude petroleum.
- (6) The purifying or refining of any of the products of an operation mentioned in subparagraph (1) or its conversion into a different product.
- (7) The blending of odorant for use with natural gas or liquefied petroleum gas.
- (8) The storage of petrol in stationary storage tanks at a terminal, or the loading or unloading of petrol into or from a road tanker at a terminal.
- (9) The unloading of petrol into stationary storage tanks at a service station if the total quantity of petrol unloaded into such tanks at the service

station in any 12 month period is likely to be equal to or greater than 500m<sup>3</sup>.

(10) Motor vehicle refuelling operations at an existing service station if the petrol refuelling throughput at the station in any 12 month period is more than 3000m<sup>3</sup>.

(11) Motor vehicle refuelling operations at a new service station if the petrol refuelling throughput at the station in any 12 month period is, or is intended to be, 500m<sup>3</sup> or more.

(12) Motor vehicle refuelling operations at a new service station if the petrol refuelling throughput at the station in any 12 month period is, or is intended to be, 100m<sup>3</sup> or more and the service station is under permanent living quarters or working areas.

(13) Nothing in subparagraph (3) or (6) refers to the use of any substance as a fuel or to any operation in relation to waste.

(14) In this paragraph –

**"carbonaceous material"** includes charcoal, coke, peat, rubber and wood,

**"existing service station"** means a service station –

- (a) which is put into operation, or
- (b) for which planning permission under the Land Planning and Development (Guernsey) Law, 2005<sup>j</sup> is granted,

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<sup>j</sup> Order in Council No. XVI of 2005; there are amendments not relevant to this

before 2<sup>nd</sup> December, 2019,

**"new service station"** means a service station which is put into operation on or after 2<sup>nd</sup> December, 2019, and includes an existing service station where a major refurbishment is completed on or after that date (and for that purpose a major refurbishment means a significant alteration or renewal of the station infrastructure, in particular the tanks and pipes),

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

**"service station"** means any premises where petrol is dispensed to motor vehicle fuel tanks from stationary storage tanks, other than premises described in subparagraphs (10) to (12) used only in connection with the construction and delivery of new vehicles, and

**"terminal"** means any premises which are used for the storage and loading of petrol into road tankers.

(15) Any expression used in subparagraphs (7) to (14) and in either of the following Directives has the same meaning as in the relevant Directive –

- (a) European Parliament and Council Directive 94/63/EC<sup>k</sup> on the control of volatile organic compound (VOC) emissions resulting from the storage of petrol and its distribution from terminals to service stations, and

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Ordinance.

<sup>k</sup> OJ L 365 31.12.1994, p. 24.

- (b) Directive 2009/126/EC<sup>I</sup> of the European Parliament and the Council on stage II petrol vapour recovery during the refuelling of motor vehicles at service stations.

## PART II

### PRODUCTION AND PROCESSING OF METALS

#### **Operations in relation to ferrous metals.**

- 3. (1) The roasting or sintering of metal ore, including sulphide ore, or any mixture of iron ore with or without other materials.
  - (2) The production, melting or refining of iron or steel (including pig iron or steel) or any ferrous alloy including continuous casting unless falling within subparagraph (7).
  - (3) The processing of ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per hour.
  - (4) The loading, unloading or otherwise handling or storing of more than 500,000 tonnes in total in any period of 12 months of –
    - (a) iron ore (except in the course of mining operations), or
    - (b) burnt pyrites.
  - (5) The operation of hammers in a forge (the energy of which is more than 50 kilojoules per hammer) where the calorific power used is more than 20

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<sup>I</sup> OJ L 285, 31. 10. 2009, p. 36.

megawatts.

(6) The application of protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour.

(7) The casting of ferrous metal at a foundry with a production capacity of more than 20 tonnes per day.

(8) The desulphurising of iron, steel or any ferrous alloy.

(9) The heating of 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 scrap cable) unless it –

(a) is carried out 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,

(b) does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant, and

(c) is not related to any other operation falling within this paragraph.

(10) The casting of iron, steel or any ferrous alloy from deliveries of 50 tonnes or more of molten metal falling within any of subparagraphs (1) to (7).

(11) In this paragraph, "**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 paragraph 4.

**Operations in relation to non-ferrous metals.**

4. (1) The production of non-ferrous metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic activities; and in this paragraph "**secondary raw materials**" includes scrap and other waste.

(2) The melting, including making alloys, of non-ferrous metals, including recovered products, and the operation of non-ferrous metal foundries in an installation with a melting capacity exceeding –

(a) 4 tonnes per day for lead or cadmium, or

(b) 20 tonnes per day for all other metals in aggregate.

(3) The production, melting or recovering (whether by chemical means or by electrolysis or by the use of heat) of cadmium, 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.

(4) The melting (including making of alloys of non-ferrous metals, including recovered products), refining and foundry casting in a furnace, bath or other holding vessel which has a design holding capacity of 5 tonnes or more unless falling within another subparagraph of paragraph 4.

(5) The melting (including making of alloys, of non-ferrous metals, including recovered products) refining, foundry casting or carrying on of similar operations in an installation which has a design holding capacity of less than 5 tonnes, other than in respect of an operation –

- (a) described in any of subparagraphs (1) to (4), or
  - (b) carried out in respect of tin, or an alloy which in molten form contains 50 per cent or more by weight of tin.
- (6) The separation of copper, aluminium, magnesium or zinc from mixed scrap by differential heating.
- (7) The heating in a furnace or any other application 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 operation described in any of subparagraphs (5) to (9); but an operation does not fall within this subparagraph if it –
- (a) involves the use of 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, and
  - (b) does not involve the removal by heat of plastic or rubber covering from scrap cable or of any asbestos contaminant.
- (8) The melting of zinc or a zinc alloy in conjunction with a galvanising operation at a rate not exceeding 20 tonnes per day.
- (9) The melting of zinc, aluminium or magnesium or an alloy of one or more of these metals in conjunction with a die-casting operation at a rate not exceeding 20 tonnes per day.

(10) In this paragraph, "**non-ferrous metal alloy**" means an alloy which is not a ferrous alloy as defined in paragraph 3.

(11) Nothing in subparagraphs (3) to (9) prescribes the activities of hand soldering, flow soldering or wave soldering for the purposes of section 2 of this Ordinance.

**Operations in relation to the surface treatment of metals and plastic materials.**

5. (1) The surface treatment of metals and plastic materials using an electrolytic or chemical operation where the aggregated volume of the treatment vats exceeds 30m<sup>3</sup>.

(2) The surface treatment of materials using cadmium or any compound of cadmium where the operation may result in the release into the air or water of cadmium and its compounds, as listed in column 1 of the Table set out in paragraph 31(7), in a quantity which, in any 12 month period, exceeds the background quantity for cadmium and its compounds by more than the amount specified in relation to it in column 2 of that Table.

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

PART III

MINERAL INDUSTRY OPERATIONS

**Operations in relation to the production of cement, lime and magnesium oxide.**

6. (1) The production of cement clinker in rotary kilns with a production capacity exceeding 500 tonnes per day or in other kilns with a production capacity exceeding 50 tonnes per day.

(2) The production of lime or magnesium oxide in kilns with a production capacity exceeding 50 tonnes per day.

(3) The storing, loading or unloading of cement or cement clinker in bulk prior to further transportation in bulk.

(4) The blending of cement in bulk or using cement in bulk other than at a construction site, including the bagging of cement and cement mixture, the batching of ready-mixed concrete and the manufacture of concrete blocks and other cement products.

(5) The grinding of cement clinker.

(6) The slaking of lime for the purpose of making calcium hydroxide or calcium magnesium hydroxide.

(7) The heating of calcium carbonate or calcium magnesium carbonate for the purpose of making lime.

**Operations involving asbestos.**

7. (1) The production of asbestos or manufacturing products based on or containing asbestos.

(2) The stripping of asbestos from railway vehicles except –

(a) in the course of the repair or maintenance of the vehicle,

(b) in the course of recovery operations following an accident, or

- (c) where the asbestos is permanently bonded in any material, including in particular in cement, plastic, rubber or resin.

(3) The industrial finishing (including shaping, drilling, or fitting manufactured asbestos products) of any of the following products where not carried out in conjunction with manufacture –

- (a) asbestos filters,
- (b) asbestos friction products,
- (c) asbestos jointing, packaging, and reinforcement material,
- (d) asbestos packing, or
- (e) asbestos textiles.

(4) In this paragraph, "**asbestos**" includes any of the following fibrous silicates: actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite.

**Operations involving glass and glass fibre manufacture.**

**8.** (1) The manufacture of glass or glass fibre in an installation with a melting capacity exceeding 20 tonnes per day.

(2) Unless it is an operation described in subparagraph (1) –

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- (a) the manufacture of glass at any location with the capacity to make 5,000 tonnes or more in any 12 month period, and any operation 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 the 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) the polishing or etching of glass or glass products in the course of any manufacturing operation if –
  - (i) hydrofluoric acid is used, or
  - (ii) hydrogen fluoride may be released into the air, and
- (e) the manufacture of glass frit or enamel frit and its use in any operation where that operation is related to its manufacture.

**Operations in relation to production of other mineral fibres.**

9. The melting of mineral substances, including the production of mineral fibres, in an installation with a melting capacity exceeding 20 tonnes per day.

**Other mineral operations.**

10. (1) The manufacture of cellulose fibre reinforced calcium silicate board.

(2) Unless it falls within any other description of operation in this Schedule, the crushing, grinding or other size reduction (other than the cutting of stone), or the grading, screening or heating of any designated mineral or mineral product, except where the operation is unlikely to result in the release into the air of particulate matter.

(3) Any of the following operations, unless carried on at an exempt location –

(a) the crushing, grinding or otherwise breaking up of coal or coke or any other coal product,

(b) the screening, grading or mixing of coal, or coke or any other coal product, or

(c) the loading or unloading of petroleum coke, coal, coke or any other coal product, except unloading on retail sale.

(4) The crushing, grinding or other size reduction, with machinery designed for that purpose, of bricks, tiles or concrete.

(5) The screening of the product of any operation described in

subparagraph (4).

(6) The coating of road stone with tar or bitumen.

(7) The loading, unloading, or storing of pulverised fuel ash in bulk prior to further transportation in bulk.

(8) The fusion of calcinated bauxite for the production of artificial corundum.

(9) In this paragraph –

**"coal"** includes lignite,

**"designated mineral or mineral product"** means –

- (a) clay, sand and any other naturally occurring mineral other than coal or lignite,
- (b) metallurgical slag,
- (c) boiler or furnace ash produced from the burning of coal, coke or any other coal product, or
- (d) gypsum which is a by-product of any operation,

**"exempt location"** means –

- (a) 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

- (b) any premises to which petroleum coke, coal, coke or any coal product is supplied only for use there, and

**"retail sale"** means sale to the final customer.

(10) Nothing in this paragraph applies to any operation carried on underground.

**Operations relating to ceramic production.**

**11.** (1) The manufacture of ceramic products (such as roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain) by firing in kilns –

- (a) with a production capacity exceeding 75 tonnes per day, or
- (b) where the kiln capacity exceeds 4m<sup>3</sup>, and the setting density of the kiln exceeds 300 kg/m<sup>3</sup>.

(2) The firing of heavy clay goods or refractory goods, other than heavy clay goods in a kiln, where the operation does not fall within a description in subparagraph (1).

(3) Vapour glazing earthenware or clay with salts.

(4) In this paragraph –

**"clay"** includes a blend of clay with ash, sand or other materials, and

**"refractory"** means refractory 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.

PART IV  
CHEMICAL INDUSTRY OPERATIONS

**Operations in relation to organic chemicals.**

12. (1) The production of organic chemicals including –
- (a) hydrocarbons, linear or cyclic, saturated or unsaturated, aliphatic or aromatic,
  - (b) organic compounds containing oxygen, including alcohols, aldehydes, ketones, carboxylic acids, esters, acetates, ethers, peroxides, phenols, epoxy resins,
  - (c) organic compounds containing sulphur, including sulphides, mercaptans, sulphonic acids, sulphonates, sulphates and sulphones and sulphur heterocyclics,
  - (d) organic compounds containing nitrogen including amines, amides, nitrous, nitro or azo-compounds, nitrate, nitriles, nitrogen heterocyclics, cyanates, isocyanates, di-isocyanates and di-isocyanate prepolymers,
  - (e) organic compounds containing phosphorus including substituted phosphines and phosphate esters,

*Consolidated text*

- (f) organic compounds containing halogens, such as halocarbons, halogenated aromatic compounds and acid halides,
- (g) organometallic compounds, such as lead alkyls, Grignard reagents and lithium alkyls,
- (h) plastic materials such as polymers, synthetic fibres and cellulose-based fibres,
- (i) synthetic rubbers,
- (j) dyes and pigments,
- (k) surface-active agents, and
- (l) any other organic compounds not described in items (a) to (k) above which have the potential to pollute the environment.

(2) Unless described in subparagraph (1), the carrying on of any operation involving the use, in any 12 month period, of –

- (a) 5 tonnes or more of diphenyl methane di-isocyanate or other di-isocyanate of lower volatility than toluene di-isocyanate, or
- (b) partly polymerised di-isocyanates or prepolymers containing 5 tonnes or more of di-isocyanate monomers, where the operation may result in a release into the air of such monomers.

(3) The flame bonding or cutting with heated wires of polyurethane foams or polyurethane elastomers.

(4) Any operation, if not related to any other operation falling within subparagraph (1), 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.

(5) Any operation, if not related to any operation falling within subparagraph (1), for polymerising or co-polymerising any unsaturated hydrocarbons or a product of an operation described in subparagraph (1) (other than a pre-formulated resin or pre-formulated gel coat which contains any unsaturated hydrocarbons), which is likely to involve, in any 12 month period, the polymerisation or co-polymerisation of 50 tonnes or more of any of those materials or, in aggregate, of any combination of those materials.

(6) In this paragraph, "**pre-formulated resin or pre-formulated gel coat**" means any resin or gel coat which has been formulated before being introduced into a polymerisation or co-polymerisation operation, whether or not the resin or gel coat contains a colour pigment, activator or catalyst.

**Operations in relation to inorganic chemicals.**

**13.** (1) The production of inorganic chemicals including –

- (a) inorganic substances, including those in gaseous form, such as ammonia, hydrogen chloride, hydrogen fluoride, hydrogen cyanide and hydrogen sulphide, carbon oxides, sulphur compounds, nitrogen oxides, hydrogen, sulphur dioxide, and phosgene,

*Consolidated text*

- (b) acids, such as chromic acid, hydrofluoric acid, hydrochloric acid, hydrobromic acid, hydroiodic acid, phosphoric acid, nitric acid, sulphuric acid, oleum, sulphurous acids, and chlorosulphonic acid,
- (c) bases, such as ammonium hydroxide, potassium hydroxide, sodium hydroxide and calcium hydroxide,
- (d) salts, such as ammonium chloride, potassium chlorate, potassium carbonate, sodium carbonate, perborate, silver nitrate, cupric acetate, ammonium phosphomolybdate,
- (e) non-metals, metal oxides, metal carbonyls or other inorganic compounds such as calcium carbide, silicon, silicon carbide,
- (f) halogens or any compound comprising only –
  - (i) two or more halogens, or
  - (ii) any one or more of those halogens and oxygen.

(2) Unless falling within a description in any other paragraph of this Schedule, any production operation which is likely to result in the release into –

- (a) the air of any hydrogen halides (other than the coating, plating or surface treatment of metal), or

- (b) the air or water of any halogens or any of the compounds mentioned in subparagraph (1)(f) (other than the treatment of water by chlorine).

(3) Unless falling within a description in any other paragraph of this Schedule, any production operation which uses, or is likely to result in the release of, hydrogen cyanide or hydrogen sulphide.

(4) Unless falling within a description in any other paragraph of this Schedule, the production of any compounds, or using or recovering any mixture (other than in the application of a glaze or vitreous enamel), containing any of the following substances or their compounds –

- (a) antimony,
- (b) arsenic,
- (c) beryllium,
- (d) gallium,
- (e) indium,
- (f) lead,
- (g) palladium,
- (h) platinum,
- (i) selenium,

- (j) tellurium,
- (k) thallium,
- (l) cadmium, or
- (m) mercury,

where the operation may result in the release into the air of any of those elements or their compounds or the release into water of any substance listed in column 1 of the Table set out in paragraph 31(7) in a quantity which, in any 12 month period, exceeds the background quantity by more than the amount specified in relation to that substance in column 2 of that Table.

(5) Unless falling within a description in any other paragraph of this Schedule, recovering any compound of, or engaging in any process of production which involves the use of, cadmium or mercury or of any compound of either of those elements or which may result in the release to air of either of those elements or their compounds.

(6) Any other operation (except the combustion or incineration of carbonaceous material as defined in paragraph 2(14)) which does not fall within a description in paragraphs 3, 4 or 5 and which may result in the release into the air of any acid forming oxide of nitrogen.

**Operations in relation to chemical fertiliser production.**

14. The production of phosphorous, nitrogen or potassium based fertilisers (simple or compound).

**Operations in relation to biocide production.**

15. The production of plant protection products and biocides.

**Operations in relation to pharmaceutical production.**

16. The production of pharmaceutical products, including intermediates.

**Operations in relation to explosives production.**

17. The production of explosives, other than as part of an operation described in any other paragraph of this Part.

**Manufacturing operations involving ammonia.**

18. Any operation for the manufacture of a chemical which may result in the release of ammonia into the air other than an operation in which ammonia is only used as a refrigerant.

**Operations in relation to storage of chemicals in bulk.**

19. (1) The storage, other than –
- (a) as part of an operation falling within a description in any other paragraph of this Schedule, or
  - (b) in a tank for the time being forming part of a powered vehicle,

of any substance listed in column 1 of the following Table 1, except where the total capacity of tanks used for storage is less than the amount specified in the corresponding entry in column 2 of that Table.

**Table 1**

<b>Column 1</b>	<b>Column 2</b>
Substance (in tonnes)	Amount (in tonnes)

Any one or more acrylates	20
Acrylonitrile	20
Anhydrous ammonia	100
Anhydrous hydrogen fluoride	1
Toluene di-isocyanate	20
Vinyl chloride monomer	20
Ethylene	8000

(2) In the table in subparagraph (1), "**acrylates**" means –

- (a) acrylic acids,
- (b) substituted acrylic acids,
- (c) esters of acrylic acids, and
- (d) esters of substituted acrylic acids.

**Interpretation of this Part.**

**20.** In this Part, "production" means the production by chemical or biological processing on an industrial scale of any listed substance or group of substances.

PART V  
OTHER OPERATIONS

**Operations in relation to paper, pulp and panel manufacturing.**

**21.** The production, in an industrial installation of –

- (a) pulp from timber or other fibrous materials,

- (b) paper or cardboard if the production capacity is more than 20 tonnes per day,
- (c) if the production capacity is more than 600 m<sup>3</sup> per day, one or more of the following wood-based panels-
  - (i) fibreboard,
  - (ii) orientated strand board, or
  - (iii) particleboard.

**Operations in relation to carbon activities.**

22. The production of carbon or hard-burnt coal or electro-graphite by means of incineration or graphitization.

**Tar and bitumen operations.**

23. (1) The distillation of tar or bitumen in connection with any process of manufacture where the carrying on of the operation 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 bitumen or, in aggregate, of both.

(2) An operation does not fall within subparagraph (1) where the process of manufacture is carried on in connection with any other operation falling within a description in another paragraph of this Schedule at the same location where that operation is carried on.

(3) The heating (but not distillation) of tar or bitumen in connection with any process of manufacture, where the carrying on of those activities

by the person concerned at the location in question is likely to involve a qualifying amount.

(4) The oxidation of bitumen by blowing air through it, at installations where there are no other operations described in this Schedule and where the carrying on of the activities by the person concerned at the location in question is likely to involve a qualifying amount.

(5) An operation does not fall within subparagraphs (3) or (4) if it falls within any other description of operation in this Schedule.

(6) In this paragraph –

**"qualifying amount"** means the use in any 12 month period of 5 tonnes or more of tar or bitumen or, in aggregate, of both, and

**"tar"** and **"bitumen"** include pitch.

**Operations in relation to coating, printing and textile treatments.**

**24.** (1) The pre-treatment of textile fibres or textiles by operations such as washing, bleaching, mercerisation or dyeing, where the treatment capacity is more than 10 tonnes per day.

(2) The surface treatment of substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, with a consumption capacity of more than 150 kilogrammes per hour or more than 200 tonnes per year (whichever is the lesser).

(3) Unless it is an operation falling within subparagraph (1) or (2), any operation (other than the repainting or respraying of, or of part of, an aircraft or

road or railway vehicle) for applying to a substrate, or drying or curing after such application, printing ink or paint or any other coating material as, or in the course of, a manufacturing operation, where the operation may result in the release into the air of particulate matter or of any volatile organic compound, and is likely to involve the use in any 12 month period at any location of –

- (a) 20 tonnes or more of any printing ink, paint or other coating material which is applied in solid form (other than in respect of an operation falling within paragraph 3(6)),
  - (b) 20 tonnes or more of any metal coating which is sprayed on in molten form,
  - (c) 25 tonnes or more of organic solvents in respect of any cold set web offset printing operation or any sheet fed offset litho printing operation, or
  - (d) 5 tonnes or more of organic solvents in respect of any operation other than one described in item (c).
- (4) The repainting or respraying of road vehicles or parts of them

if –

- (a) the operation does not fall within subparagraph (1) or (2),
- (b) may result in the release into the air of particulate matter or of any volatile organic compound, and

- (c) the carrying on of the operation by the person concerned at the location in question is likely to involve the use of 2 tonnes or more of organic solvents in any period of 12 months.
- (5) The repainting or respraying of aircraft or railway vehicles or parts of them if –
- (a) the operation may result in the release into the air of particulate matter or of any volatile organic compound, and
  - (b) the carrying on of the operation by the person concerned at the location in question is likely to involve the use in any period of 12 months of –
    - (i) 20 tonnes or more of any paint or other coating material which is applied in solid form,
    - (ii) 20 tonnes or more of any metal coating which is sprayed on in molten form, or
    - (iii) 5 tonnes or more of organic solvents.
- (6) In subparagraphs (3) to (5) –
- (a) the amount of organic solvents used in an operation is calculated using the formula  $A - B$ , where –
    - (i) A is the total input of organic solvents into the process, including both solvents contained in

coating materials and solvents used for cleaning or other purposes, and

- (ii) B is the amount of organic solvents that are removed from the process for re-use or for recovery for re-use.

(7) In this paragraph –

**"aircraft"** includes gliders and missiles,

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

**"organic solvent"** means any volatile organic compound which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, as a

–

- (a) cleaning agent to dissolve contaminants,
- (b) dissolver,
- (c) dispersion medium,
- (d) viscosity adjuster,
- (e) surface tension adjuster,
- (f) plasticiser, or

- (g) preservative, and

**"volatile organic compound"** means –

- (a) any organic compound having a vapour pressure of 0.01 kilopascal or more at 293.15K or having a corresponding volatility under the particular conditions of use, or
- (b) the fraction of creosote having a vapour pressure of 0.01 kilopascal or more at 293.15K.

**Operations in relation to the manufacture of dyestuffs, printing ink and coating materials.**

25. (1) The manufacture of dyestuffs if the activity involves the use of hexachlorobenzene and is carried out at an installation not falling within any other description in this Schedule.

(2) An operation, unless carried out at an installation described in any other part of this Schedule, involving –

- (a) the manufacture or formulation of any coating material (such as printing ink) containing, or involving the use of, an organic solvent, where the carrying on of the activity by the person concerned at the location in question is likely to involve the use of 100 tonnes or more of organic solvents in any 12 month period, or
- (b) the manufacture of a powder for use as a coating material where the installation has capacity to produce

200 tonnes or more of such powder in any 12 month period.

(3) In subparagraph (2), the amount of organic solvent used in an activity is calculated using the formula  $A - B$ , where –

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

(4) In this paragraph "**coating material**" and "**organic solvent**" have the same meanings as in paragraph 24.

**Operations in relation to timber.**

26. (1) The preservation of wood or wood products with chemicals, other than exclusively treating against sapstain, in an installation with a production capacity of more than 75 m<sup>3</sup> per day.

(2) The manufacture of wood products at any works, unless in connection with an operation described in paragraph 21(c), if the manufacture involves a relevant operation and the throughput of the works in any 12 month period is likely to exceed –

- (a) 10,000 m<sup>3</sup> in the case of works at which –
  - (i) wood is sawed but not otherwise subjected to a relevant operation, or

(ii) wood is subjected only to exempt operations, or

(b) 1,000 m<sup>3</sup> in any other case.

(3) In this paragraph, "**wood**" includes any product consisting wholly or mainly of wood.

(4) In subparagraph (2) –

**"exempt operations"** means a relevant operation where, if no sawing were carried on at the works, any such operation would be unlikely to result in the release into the air of any substances listed in paragraph 31(6) of this Schedule in a quantity which is capable of causing significant harm,

**"relevant operation"** means the sawing, drilling, sanding, shaping, turning, planing, shredding, curing or chemical treatment of wood,

**"throughput"** is calculated by reference to the amount of wood which is subjected to a relevant operation, provided that where wood is subject to two or more relevant operations at the same works no account is taken of the second or subsequent operation, and

**"works"** means any premises, such as a sawmill, on which a relevant operation is carried out on wood.

### **Operations involving rubber.**

27. (1) The manufacture of new tyres, other than remoulds or retreads, involving the use in any 12 month period of 50,000 tonnes or more of one or more of natural rubber, or a synthetic organic elastomer, or any substance mixed with rubber or such an elastomer.

(2) The mixing, milling or blending of natural rubber, or a synthetic organic elastomer, in which carbon black is used.

(3) Any operation which converts the product of an operation described in subparagraph (2) into a finished product, if related to an operation falling within that subparagraph.

**Operations involving treatment of animal and vegetable matter and food industries.**

28. (1) The tanning of hides and skins where the treatment capacity exceeds 12 tonnes of finished products per day.

(2) The slaughtering of animals in slaughterhouses with a carcass production capacity of more than 50 tonnes per day.

(3) The treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from –

(a) only animal raw materials (other than milk only) with a finished product production capacity of more than 75 tonnes per day,

(b) only vegetable raw materials with a finished product production capacity of more than—

(i) 300 tonnes per day, or

*Consolidated text*

- (ii) 600 tonnes per day where the installation operates for a period of no more than 90 consecutive days in any year,
- (c) animal and vegetable raw materials (other than milk only), both in combined and separate products, with a finished product production capacity in tonnes per day greater than –
  - (i) 75 if A is equal to 10 or more, or
  - (ii)  $300 - (22.5 \times A)$  in any other case,

where 'A' is the portion of animal material in percent of weight of the finished product production capacity.

(4) The treatment and processing of milk where the quantity of milk received is more than 200 tonnes per day (average value on an annual basis).

(5) The processing, storage or drying by heat of any part of a dead animal or of vegetable matter, unless it is an exempt operation, or an operation described in subparagraph (8), which may –

- (i) result in the release into the air of a substance referred to in paragraph 31(6) of this Schedule, or
- (ii) give rise to an offensive smell noticeable outside the premises in which the operation is carried on.

(6) The breeding of maggots in any case where 5 kilograms or more of animal or of vegetable matter or, in aggregate, of both are introduced into the process in any week.

(7) The ensiling or storage of dead fish or fish offal in plant capable of retaining volumes of –

- (a) less than or equal to 10m<sup>3</sup> of ensiled liquor,
- (b) more than 10m<sup>3</sup> and less than or equal to 50m<sup>3</sup> of ensiled liquor, or
- (c) more than 50m<sup>3</sup> of ensiled liquor.

(8) The treatment and processing of dry vegetable or dry vegetable and animal matter intended for the production of animal food products through drying by the application of heat and milling, unless it is an exempt operation, which may –

- (a) result in the release into the air of a substance referred to in paragraph 31(6) of this Schedule, or
- (b) give rise to an offensive smell noticeable outside the premises in which the operation is carried on.

(9) When calculating the weight of finished product for the purposes of subparagraph (3), the weight of packaging must be ignored.

(10) In this paragraph –

**"animal"** includes a bird or a fish,

**"ensiling"** means treatment by the application of acid or alkaline solutions for the purpose of rendering the material free from infectious disease or preventing the formation of offensive odours,

**"exempt operation"** means –

- (a) any operation carried out on a farm or agricultural holding, other than the manufacture of goods for sale,
- (b) the manufacture or preparation of food or drink for human consumption, but excluding –
  - (i) the extraction, distillation or purification of animal or vegetable oil or fat, otherwise than as an operation incidental to the cooking of food for human consumption,
  - (ii) any operation involving the use of green offal or the boiling of blood, except the cooking of food (other than tripe) for human consumption, or
  - (iii) the cooking of tripe for human consumption elsewhere than on premises on which it is to be consumed,
- (c) the fleshing, cleaning and drying of pelts of fur-bearing mammals,
- (d) any operation carried on in connection with premises used in connection with the business of killing, flaying

or cutting up animals, the flesh of which is not intended for human consumption, other than premises –

- (i) which are hunt kennels or other premises where the flesh is fed to animals,
  - (ii) used for diagnostic, educational or research purposes, or
  - (iii) where animals are cut up solely for the purpose of incineration,
- (e) any operation for the manufacture of soap not falling within a description in paragraph 12(1),
  - (f) the storage of vegetable matter otherwise than as part of any prescribed operation,
  - (g) the cleaning of shellfish shells,
  - (h) the manufacture of starch,
  - (i) the salting of hides or skins, unless related to any other prescribed operation,
  - (j) any operation for cleaning, and any related operation for drying or dressing, seeds, bulbs, corms or tubers,
  - (k) the drying of grain or pulses, or

- (l) any operation for the production of cotton yarn from raw cotton or for the conversation 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.

**Intensive farming.**

**29.** (1) The rearing of poultry or pigs intensively in an installation with more than –

- (a) 40,000 places for poultry,
- (b) 2,000 places for production pigs (over 30 kilograms), or
- (c) 750 places for sows.

(2) In this paragraph, **"poultry"** has the same meaning as in Article 2(1) of Council Directive 2009/158/EC of 30<sup>th</sup> November 2009<sup>m</sup> on animal health conditions governing intra-Community trade in, and import from, third countries of poultry and hatching eggs.

**Carbon capture and storage.**

**30.** (1) The capture of carbon dioxide streams from an installation for the purposes of geological storage unless –

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<sup>m</sup> OJ L347, 22.12.2009, p. 74.

- (a) the total intended storage is less than 100 kilotonnes,  
and
- (b) the storage is undertaken for research, development or testing of new products and processes.

PART VI

APPLICATION AND INTERPRETATION OF SCHEDULE 2

**Application and interpretation.**

31. (1) An operation does not fall within Parts I to V if –

- (a) it cannot result in the release into the air of a substance listed in subparagraph (6), or
- (b) there is no likelihood that it will result in the release into the air of any such substance except in a quantity such that –
  - (i) it is incapable of causing environmental pollution, or
  - (ii) its capacity to cause environmental pollution is insignificant.

(2) Subparagraph (1) does not apply to an operation which may give rise to an offensive smell noticeable outside the site where the operation is carried on.

(3) An operation does not fall within Parts I to V if it is –

*Consolidated text*

- (a) carried out in a working museum to demonstrate an industrial operation of historic interest,
- (b) carried out for educational purposes in a school, within the meaning of section 1(1) of the Education (Guernsey) Law, 1970<sup>n</sup>, or in a college of further education,
- (c) carried out at an installation or mobile plant (or part of such an installation or plant) used solely for –
  - (i) research operations,
  - (ii) development operations, or
  - (iii) the testing of new products and processes,
- (d) the running on or within a vehicle of an engine which propels any such vehicle, locomotive or vessel, or provides electricity for propulsion,
- (e) the running of an engine –
  - (i) in order to test it before it is installed, or
  - (ii) for the purposes of developing the engine.

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<sup>n</sup> Ordres en Conseil Vol. XXII, p. 318; there are amendments not relevant to this Ordinance.

(4) The use of a fume cupboard is not an operation falling within Parts I to V if the fume cupboard is used in a laboratory for research or testing and it is not –

- (a) a fume cupboard which is an industrial and continuous production operation enclosure, or
- (b) a fume cupboard in which substances or materials are manufactured.

(5) References in Parts I to V to related operations are references to separate operations being carried on by the same person on the same site.

(6) A reference in this Part or in any of Parts I to V to, or to the release into the air of, a substance listed in this subparagraph is a reference to any of the following substances –

- (a) oxides of sulphur and other sulphur compounds,
- (b) oxides of nitrogen and other nitrogen compounds,
- (c) oxides of carbon,
- (d) organic compounds and partial oxidation products,
- (e) metals, metalloids and their compounds,
- (f) asbestos (suspended particulate matter and fibres), glass fibres and mineral fibres,
- (g) halogens and their compounds,

*Consolidated text*

(h) phosphorus and its compounds, or

(i) particulate matter.

(7) A reference in Parts I to V to the table in this paragraph is a reference to the table below.

**Table**

<b>Column 1</b>	<b>Column 2</b>
Substance	Amount in excess of background quantity (in grams) in any 12 month period
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 (PCP) 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 (TBT) compounds	4 (expressed as TBT)
Triphenyltin (TPT) compounds	4 (expressed as TPT)
Trifluralin	20
Fenitrothion	2
Azinphos-methyl	2
Malathion	2
Endosulfan	0.5

(8) In the Table, where both Atrazine and Simazine are released, the figure for both substances in aggregate is 350 grammes.

(9) In this Schedule –

**"background quantity"** means, in relation to the release of a substance resulting from an operation, such quantity of that substance as is present in –

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

**"directly associated operation"** means in relation to an operation carried on in a stationary technical unit, any directly associated operation which has a technical connection with the operation carried on in the unit and which could have an effect on pollution,

**"installation"** means –

- (a) a stationary technical unit where one of more operations described in this Schedule are carried on, and
- (b) any other location on the same site where any directly associated operations are carried on,

and references to an installation include references to part of the same,

**"mobile plant"** means plant which is designed and intended to move or be moved regularly from place to place with a view to being reused at each place (or if not so designed capable of being, and intended to be, so moved),

**"organic compound"** means any compound containing carbon and one or more of hydrogen, halogens, oxygen, sulphur, phosphorus, silicon or nitrogen, with the exception of carbon oxides and inorganic carbonates and bicarbonates,

**"rated thermal input"** means 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"** has the meaning in the Law except that it does not include –

- (a) radioactive waste, or
- (b) any substance which is explosive within the meaning of the Explosives (Guernsey) Law, 1905<sup>o</sup>.

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<sup>o</sup> Ordres en Conseil Vol. III, p. 414; as amended by Ordres en Conseil Vol II, p.

(10) In this Part –

**"fume cupboard"** has the meaning given by British Standard BS EN 14175 on Fume Cupboards, and

**"vehicle"** means an aircraft, hovercraft, mechanically propelled road vehicle, railway locomotive, or vessel.

(11) Unless the context requires otherwise, expressions not defined in this Ordinance and used in Directive 2010/75/EU of the European Parliament and of the Council of 24<sup>th</sup> November, 2010<sup>P</sup> on industrial emissions (integrated pollution prevention and control) (Recast), have the same meaning for the purposes of this Schedule as they do for the purposes of that Directive.

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473, Vol. V, p. 30 and Vol. XV, p. 11; there are amendments not relevant to this Ordinance.

<sup>P</sup> OJ L334, 17.12.2010, p. 17.

SCHEDULE 3

Section 6

LIMITS ON EMISSIONS OF GRIT AND DUST FROM CHIMNEYS OF  
FURNACES

PART I

THE LIMITS IN PARTS II AND III AND THEIR CALCULATION AND  
APPLICATION

**Limits on emissions of grit and dust from certain furnaces.**

1. (1) The quantities of grit and dust emitted during any period from the chimney of a Part II furnace or a Part III furnace with a heat output or input which is within the highest and lowest values specified in column 1 of the table in the relevant Part of this Schedule must not exceed the quantities prescribed by that Part.

(2) For the purposes of this Schedule, where a chimney serves more than one furnace –

- (a) if it is a multiflue chimney, each flue must be treated as a separate chimney serving a separate furnace, and
- (b) in any other case, it must be treated as a single chimney serving a single furnace with a heat output or input equivalent to the aggregate of the heat outputs or inputs of the furnaces concerned,

but any part of the emission which comes from a furnace to which this Schedule does not apply must be disregarded.

(3) Where the rating of a Part II furnace or the heat input of a Part III furnace is a value intermediate between two adjacent values in column 1 of the

table in the relevant Part, the prescribed quantities referred to in subparagraph (1), in respect of the chimney of the furnace must be arrived at as follows –

- (a) by interpolating the intermediate value into column 1 of the relevant table in Part II or III between the two adjacent values ("**the two values**"),
- (b) by calculating the interval between the lower of the two values and the intermediate value as a proportion of the interval between the two values, carried to two places of decimals, and
- (c) by interpolating a figure, carried to two places of decimals, into column 2 or column 3, as the case may be, of the relevant table in Part II or III, against the intermediate value at the same proportionate interval between the quantities prescribed in that column against the two values.

**Schedule to apply in respect of periods of standard operation.**

2. This Schedule applies to a furnace in respect of any period during which the furnace is operating –

- (a) at or close to the loading to which it is subject for the greater part of its working time, or
- (b) at any higher loading to which it is regularly subject for a limited time (whether or not that loading exceeds its maximum continuous rating or designated heat input).

**Disapplication to incinerators etc.**

3. This Schedule does not apply to any appliance used to burn waste, whether solid or liquid, and whether or not the resulting heat is used for any purpose.

PART II  
FURNACES RATED BY HEAT OUTPUT

**Part II furnaces.**

1. **"Part II furnace"** means a furnace of –
  - (a) a boiler, or
  - (b) an indirect heating appliance in which the material heated is a gas or liquid,

and where any such furnace also falls within the definition of **"Part III furnace"**, it is to be treated as a Part II furnace.

**Heat output.**

2. The quantities of grit and dust which may be emitted from the chimney of a Part II furnace must be ascertained by reference to heat output, designated by the maximum continuous rating of the boiler or appliance in pounds of steam per hour (from and at 100 degrees C (212 degrees F)) or in thousands of British thermal units per hour.

**Quantities which may be emitted.**

3. (1) Subject to paragraph 4, the quantities of grit and dust, in pounds per hour, which may be emitted by the chimney of a Part II furnace the heat output of which is within the highest and lowest values specified in column 1 of the following table must not exceed –

*Consolidated text*

- (a) if the furnace burns solid matter, the quantities prescribed in column 2 against the value representing the output of that furnace, or
- (b) if the furnace burns liquid matter, the quantities prescribed in column 3 against that value.

<b>Maximum Continuous Rating in pounds of steam per hour (from and at 100°C. (212°F.)) or in thousands of British thermal units per hour</b>	<b>Maximum permitted quantities of grit and dust in pounds per hour</b>	
	<b>Furnaces burning solid matter</b>	<b>Furnaces burning liquid matter</b>
<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
<b>Value representing heat output</b>		
825	1.10	0.25
1,000	1.33	0.28
2,000	2.67	0.56
3,000	4.00	0.84
4,000	5.33	1.12
5,000	6.67	1.4
7,500	8.50	2.1
10,000	10.00	2.8
15,000	13.33	4.2
20,000	16.67	5.6
25,000	20.0	7.0
30,000	23.4	8.4
40,000	30	11.2
50,000	37	12.5
100,000	66	18
150,000	94	24
200,000	122	29

250,000	149	36
300,000	172	41
350,000	195	45
400,000	217	50
450,000	239	54.5
475,000	250	57

**Limitation on grit.**

4. In the case of a Part II furnace which burns solid matter, the prescribed quantities may not contain more than the following proportion of particles exceeding 76 microns in diameter –

- (a) 33 per cent where the maximum continuous rating does not exceed 16,800 pounds per hour of steam or 16,800,000 British thermal units per hour, or
- (b) 20 per cent in any other case.

PART III FURNACES  
FURNACES RATED BY HEAT INPUT

**Part III furnaces.**

1. Subject to paragraph 1 of Part II, the expression "**Part III furnace**" means a furnace –

- (a) of an indirect heating appliance, or
- (b) in which the combustion gases are in contact with the material being heated, but that material does not itself contribute to the grit and dust in the combustion gases.

**Heat input.**

2. The quantities of grit and dust which may be emitted from the chimney of a Part III furnace must be ascertained by reference to the designated heat input, expressed as British thermal units per hour.

**Quantities which may be emitted.**

3. Subject to paragraph 4, the quantities of grit and dust, in pounds per hour, which may be emitted by the chimney of a Part III furnace the heat input of which is within the highest and lowest values specified in column 1 of the following table must not exceed –

- (a) if the furnace burns solid matter, the quantities prescribed in column 2 against the value representing the heat input of that furnace, or
- (b) if the furnace burns liquid matter, the quantities prescribed in column 3 against that value.

Heat input in millions of British thermal units per hour	Maximum permitted quantities of grit and dust in pounds per hour	
	Furnaces burning solid matter	Furnaces burning liquid matter
Column 1	Column 2	Column 3
Value representing heat input		
1.25	1.1	0.28
2.5	2.1	0.55
5.0	4.3	1.1
7.5	6.8	1.7
10	7.6	2.2
15	9.7	3.3

*Consolidated text*

20	11.9	4.4
25	14.1	5.5
30	16.3	6.6
35	18.4	7.7
40	20.6	8.8
45	22.8	9.8
50	25	10.9
100	45	16
200	90	26
300	132	35
400	175	44
500	218	54
575	250	57

**Limitation on grit.**

4. In the case of a Part III furnace which burns solid matter, the prescribed quantities may not contain more than the following proportion of particles exceeding 76 microns in diameter –

- (a) 33 per cent where the designed heat input of the furnace does not exceed 25 million British thermal units, or
- (b) 20 per cent in any other case.

PART IV

INTERPRETATION OF SCHEDULE

1. In this Schedule –

**"indirect heating appliance"** means a heating appliance in which the combustion gases are not in contact with the material being heated,

**"maximum continuous rating"** is the hourly evaporation that can be maintained for 24 hours,

**"multiflue chimney"** means a chimney structure which for the whole or greater part of its vertical length carries separate flues from more than one furnace, and

**"Part II furnace"** and **"Part III furnace"** mean respectively a furnace described in Part II and a furnace described in Part III of this Schedule, being in either case a furnace to which section 6 applies.

SCHEDULE 4

Section 8(1)

FURNACES EXEMPT FROM SECTION 7 REQUIREMENTS IN RELATION TO  
ARRESTMENT PLANT

<b>1</b> <b>Description of exempt furnace</b>	<b>2</b> <b>Purpose</b>
<p><b>1.</b> Mobile or transportable furnaces</p>	<p>(a) providing a temporary source of heat or power during any construction work within the meaning of the Construction (Design and Management) Regulations, 2015<sup>q</sup>,</p> <p>(b) providing a temporary source of heat or power for investigation or research, or</p> <p>(c) providing heat or power for the purposes of agriculture.</p>
<p><b>2.</b> Furnaces, other than furnaces designed to burn solid matter at a rate of 0.989 tonne an hour (or 989 kg an hour) or more, which fall within any of the following descriptions and in which the matter being heated does not contribute to the emission of grit and dust-</p> <p>(a) furnaces burning liquid matter, gas, or liquid matter and gas,</p> <p>(b) hand-fired sectional furnaces designed to burn solid matter at a</p>	<p>Any purpose except the incineration of waste.</p>

<sup>q</sup> U.K. S.I. 2015/51; there are amendments not relevant to this Ordinance.

<p>rate of not more than 122 kg/m<sup>2</sup>/hour of grate surface,</p> <p>(c) magazine type gravity-fed furnaces de-signed to burn solid matter at a rate of not more than 122 kg/m<sup>2</sup>/hour of grate surface,</p> <p>(d) furnaces fitted with an under-feed stoker designed to burn solid matter at a rate of not more than 122 kg/m<sup>2</sup>/hour of the plan area of the combustion chamber,</p> <p>(e) furnaces fitted with a chain grate stoker designed to burn solid matter at a rate of not more than 122 kg/ m<sup>2</sup>/hour of grate surface, or</p> <p>(f) furnaces fitted with a coking stoker designed to burn solid matter at a rate of not more than 122 kg/m<sup>2</sup>/hour of the area covered by the fire bars excluding the solid coking plate.</p>	
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In this Schedule –

**"agriculture"** includes horticulture, fruit growing, seed growing, dairy farming and livestock breeding and keeping, the use of land as grazing land, meadow land, osier land, market gardens and nursery grounds, and the use of land for woodlands where that use is ancillary to the farming of land for

other agricultural purposes, and

**"kg/m<sup>2</sup>/hour"** means kilograms per hour per square metre.

SCHEDULE 5

Section 10(2)

REQUIREMENTS IN RELATION TO RECORDING OF EMISSIONS OF GRIT  
AND DUST FROM FURNACES OR BOILERS

**Installation and use of apparatus for the recording of emissions.**

1. (1) On the receipt of not less than 6 weeks written notice from the Director, requiring the installation and use of apparatus specified in subparagraph (2), the occupier must, within the period specified in the notice, take such steps as are reasonably necessary to install and put into use that apparatus to measure and record emissions.

(2) The apparatus is such apparatus as the Director may reasonably require, in accordance with best practice from time to time, for the making and recording of emissions of grit and dust emitted from the furnace or boiler.

(3) The occupier must maintain the apparatus, installed for the purposes of this paragraph, in good working order.

**Making and recording of measurements.**

2. (1) This paragraph applies when the requirements of paragraph 1 have been complied with or equipment the same or equivalent to that required in the written notice referred to in paragraph 1 is already installed.

(2) On the receipt of not less than 28 days written notice from the Director, requiring the occupier to make and record measurements referred to in subparagraph (3), the occupier must within the period specified in the notice make and record such measurements.

(3) The measurements are of emissions of grit and dust from the furnace or boiler made and recorded in accordance with such procedures and other requirements as the Director may reasonably require in accordance with best practice

from time to time.

(4) Before making any measurements to record emissions the occupier must give the Director not less than 48 hours' notice in writing of the date and time at which the occupier proposes to commence the same.

(5) The occupier must, in relation to each chimney to which this Schedule applies, keep a written record containing the following particulars –

- (a) the date on which any measurements of emissions were made,
- (b) where relevant, the number of furnaces or boilers discharging into the chimney on that date, and
- (c) the measurements in terms of pounds or kilogrammes per hour of grit and dust emitted and the percentage of grit contained in the solids emitted,

and must send a copy of such particulars to the Director within 14 days starting from the date of making of the measurements in respect of which the particulars are recorded.

(6) A notice served for the purposes of subparagraph (2) may require the making of measurements of emissions from time to time or at stated intervals but an occupier must not be required to make measurements of emissions in respect of any one chimney more than once in any period of 3 months unless in the opinion of the Director the true rates of emission of grit and dust cannot be determined without the making of further measurements.

BURNING OF WASTE ON LAND IN THE OPEN AIR-EXEMPTIONS

**Burning of waste in the course of small scale relevant events - general exemption.**

1. The burning of waste on land in the open air in the course of the lighting and burning of fires for use during small scale relevant events is exempt from the prohibition in section 19(1) if –

- (a) the burning of waste, is supervised by a responsible adult,
- (b) the fuel used is wood or dry plant matter,
- (c) the volume of waste burnt during the event does not exceed –
  - (i) three metres in height (at its highest point),
  - (ii) three metres in width (at its widest point), and
  - (iii) six cubic metres in total volume,
- (d) the waste burnt includes none of the following –
  - (i) waste white goods, cables, paint or paint tins,
  - (ii) mixed household waste, or

- (iii) any other description of waste the burning of which is likely to involve a risk of significant environmental pollution,
- (e) the burning of waste, whether continuous or intermittent, is carried on for no more than 24 hours, and
- (f) the burning of the waste does not result in the emission of dark smoke or other significant environmental pollution.

**Burning of waste in the course of small scale relevant events - discretion to exempt.**

2. The Director may by written notice exempt from the prohibition in section 19(1) the burning of waste on land in the open air in the course of the lighting and burning of fires for use during small scale relevant events where one or more of the conditions in items (a) to (e) of paragraph 1 have not been met, if –

- (a) the burning of the waste does not result in the emission of dark smoke or other significant environmental pollution, and
- (b) the holder of the event complies with such other conditions, specified in the written notice, as the Director considers necessary or expedient to reduce the risk of significant environmental pollution.

**Definition of small scale relevant events.**

3. In paragraphs 1 and 2, "**small scale relevant events**" means social, sporting, entertainment or similar events including –

- (a) camping activities,
- (b) outdoor parties or barbecues, and
- (c) events to celebrate designated occasions,

at which no more than 20 individuals are present.

**Burning of waste in the course of large scale relevant events-discretion to exempt.**

4. (1) The Director may by written notice exempt from the prohibition in section 19(1) the burning of waste on land in the open air in the course of the lighting and setting of fires for use during large scale relevant events, if –

- (a) the burning of the waste does not result in the emission of dark smoke or other significant environmental pollution, and
- (b) the holder of the event complies with such other conditions, specified in the written notice, as the Director considers necessary or expedient to reduce the risk of significant environmental pollution.

(2) In this paragraph "**large scale relevant event**" means social, sporting, entertainment or similar events including –

- (a) camping activities,
- (b) outdoor parties or barbecues, and

- (c) events to celebrate designated occasions,

at which more than 20 individuals are present.

**Material Considerations for discretionary exemptions.**

5. In determining whether or not to grant an exemption under paragraph 2 or 4 the Director must consider in particular –

- (a) the arrangements for the supervision of the burning of the waste,
- (b) the fuel to be used,
- (c) the volume and types of waste to be burnt,
- (d) the number of individuals for which the event is planned,
- (e) the period over which waste is to be burnt, and
- (f) whether or not the burning of the waste is likely to result in a risk of significant environmental pollution.

**Provisions applying to discretionary exemptions.**

6. An exemption granted under paragraph 2 or 4 –

- (a) may be granted to a person or a specified class of person,
- (b) may be granted subject to such terms or conditions as may be specified,

- (c) when granted to a particular class of persons, must be published, and
- (d) unless previously revoked in accordance with any term contained in the exemption, shall continue in force for such period as may be specified by or under the exemption.

**Definition of designated occasion.**

7. (1) In this Schedule, "**designated occasion**" means –

- (a) Guy Fawkes night,
- (b) New Year's Eve,
- (c) Liberation Day, or
- (d) such other occasion as the Director may by Order designate for the purposes of this paragraph.

(2) For the purposes of paragraphs 3(c) and 4(2)(c), events are only considered to be events to celebrate a designated occasion if the event commences no more than 48 hours before or after –

- (a) the date of the occasion being celebrated, or
- (b) where the occasion takes place over a period of more than one day, the beginning or end of that period.