This Scottish Statutory Instrument supersedes S.S.I. 2003/208 and is being issued free of charge to all known recipients of that instrument.

SCOTTISH STATUTORY INSTRUMENTS

# 2003 No. 235

# **ENVIRONMENTAL PROTECTION**

The Landfill (Scotland) Regulations 2003

Coming into force in accordance with article 1(1)

The Scottish Ministers, in exercise of the powers conferred by section 2 of the Pollution Prevention and Control Act 1999 <sup>M1</sup> (the "1999 Act"), having in accordance with section 2(4) of the 1999 Act consulted the Scottish Environment Protection Agency, such bodies or persons appearing to them to be representative of the interests of local government, industry, agriculture and small businesses respectively, and such other bodies and persons as they consider appropriate, and having by order made by statutory instrument <sup>M2</sup> designated Directive 99/31/EC<sup>M3</sup> ("the Landfill Directive") as a relevant directive for the purposes of paragraph 20(2)(c) of Schedule 1 to the 1999 Act, hereby make the following Regulations, a draft of which has in accordance with section 2(8) of the 1999 Act been laid before, and approved by a resolution of, the Scottish Parliament:

Marginal Citations

- M1 1999 c. 24; the functions of the Secretary of State were transferred to the Scottish Ministers by virtue of section 53 of the Scotland Act 1998 (c. 46), as read with section 5(3) of the said Act of 1999.
- M2 S.S.I. 2003/185.
- **M3** O.J. No. L 182, 16.7.99, p.1.

# PART I

#### PRELIMINARY

#### Citation, commencement and extent

**1.**—(1) These Regulations may be cited as the Landfill (Scotland) Regulations 2003 and shall come into force on the day after the day on which they are made (hereinafter referred to as "the relevant date").

(2) These Regulations extend to Scotland only.

#### Interpretation

**2.**—(1) In these Regulations–

[<sup>F1</sup>"the 2012 Regulations" means the Pollution Prevention and Control (Scotland) Regulations 2012;]

[<sup>F2</sup>"Batteries Directive" means Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators[<sup>F3</sup>, as last amended by [<sup>F4</sup>Directive (EU) 2018/849]<sup>F5</sup> of the European Parliament and of the Council];]

[<sup>F6</sup> battery" means any source of electrical energy generated by direct conversion of chemical energy and consisting of one or more primary battery cells (non-rechargeable) or one or more secondary battery cells (rechargeable; an accumulator), but does not include—

- (a) equipment connected with the protection of essential security interests, arms, munitions and war material, with the exclusion of products that are not intended for specifically military purposes, or
- (b) equipment designed to be sent into space,]

"biodegradable waste" means any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, paper and cardboard.

[<sup>F7</sup>"European Waste Catalogue" means the list of wastes set out in Commission Decision 2000/532/EC establishing a list of wastes, [<sup>F8</sup>as last amended by Commission Decision 2014/995/EU,]]

[<sup>F9</sup>"hazardous waste" means any waste which is special waste in terms of regulation 2 of the Special Waste Regulations 1996 <sup>F10</sup>,]

"holder" means the producer of waste or the person who is in possession of it;

[<sup>F11</sup>"industrial battery" means any battery or battery pack which is—

- (a) designed exclusively for industrial or professional uses;
- (b) used as a source of power for propulsion in an electric vehicle;
- (c) unsealed but is not an automotive battery; or
- (d) sealed but is not a portable battery;

"inert waste" means waste which-

- – does not undergo any significant physical, chemical or biological transformations;
- does not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and
- has insignificant total leachability and pollutant content and ecotoxicity of its leachate are insignificant and, in particular, does not endanger the quality of any surface water or groundwater;

"isolated settlement" means a settlement -

- (a) with no more than 500 inhabitants per municipality or settlement and no more than 5 inhabitants per square kilometre; and
- (b) where the distance to the nearest urban agglomeration with at least 250 inhabitants per square kilometre is not less than 50km, or with difficult access by road to those nearest agglomerations, due to harsh meteorological conditions during a significant part of the year;

"landfill" means a landfill to which these Regulations apply (see regulations 3 and 4);

 $[^{F12}$  Landfill Directive" means Council Directive 1999/31/EC on the landfill of waste $[^{F13}$ , as last amended by  $[^{F14}$ Directive (EU) 2018/850 of the European Parliament and of the Council $]^{F15}$ , as read with Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to that Directive;]

"landfill gas" means any gas generated from landfilled waste;

"landfill permit" means the permit which is required by [<sup>F16</sup>the 2012 Regulations] for the carrying out of the disposal of waste in a landfill;

"leachate" means any liquid percolating through deposited waste and emitted from or contained within a landfill;

F17

[<sup>F18</sup>"municipal waste" means—

- (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture,
- (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households,

but does not include waste from production, agriculture, forestry, fishing, septic tanks and sewage network and treatment, including sewage sludge, end-of-life vehicles or waste generated by construction and demolition activities,]

"non-hazardous waste" means waste which is not hazardous waste;

"operator" has the meaning given by regulation 2(1) of [<sup>F16</sup>the 2012 Regulations];

[<sup>F19</sup>"portable battery" means any battery or battery pack which—

- (a) is sealed;
- (b) can be hand-carried by an average natural person without difficulty; and
- (c) is neither an automotive battery nor an industrial battery;]

"relevant authorisation" means, in relation to a landfill, the landfill permit or waste management licence for the time being in force in relation to the landfill;

"relevant waste acceptance criteria" means, in relation to a landfill, the waste acceptance criteria set out in Schedule 2 which apply to the class of landfill to which that landfill belongs;

"treatment" [<sup>F20</sup>, except in relation to waste batteries,] means physical, thermal, chemical or biological processes (including sorting) that change the characteristics of waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery;

[<sup>F21</sup>"waste" has the same meaning as in section 75(2)(a) of the Environmental Protection Act 1990 <sup>F22</sup> as read with section 75A of that Act,]

[<sup>F23</sup>"Waste Directive" means Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, as last amended by [<sup>F24</sup>Directive (EU) 2018/851 of the European Parliament and of the Council]<sup>F25</sup>,]

"waste management licence" means a waste management licence within the meaning of Part II of the Environmental Protection Act 1990<sup>F26</sup>...

 $^{F27}(1A)$  In relation to batteries and subject to regulation 2(1), expressions defined in Article 3 of the Batteries Directive have the same meanings in these Regulations as in that Directive.]

<sup>F28</sup>(1B) Expressions not defined in paragraph (1) and used in these Regulations and in the Landfill Directive have the same meaning as in that Directive.]

(2) In these Regulations, unless the context otherwise requires, any reference to-

- (a) a numbered regulation or Schedule is a reference to the regulation in, or Schedule to, these Regulations bearing that number; and
- (b) a numbered paragraph is a reference to the paragraph in that regulation or Schedule bearing that number in the regulation or Schedule of which that paragraph forms part.]]

#### **Textual Amendments**

- **F1** Words in reg. 2(1) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), **Sch. 11 para. 11(2)(a)** (with reg. 71)
- F2 Words in reg. 2(1) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(2)(a) (with regs. 8-10)
- F3 Words in reg. 2(1) inserted (28.2.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(2)(a)
- F4 Words in reg. 2(1) substituted (4.12.2020) by The Waste (Miscellaneous Amendments) (Scotland) Regulations 2020 (S.S.I. 2020/314), regs. 1(1), 4(2)(a)
- **F5** OJ L 150, 14.6.2018, p.93.
- F6 Words in reg. 2(1) substituted (31.12.2020) by The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, 9(2)(a); 2020 c. 1, Sch. 5 para. 1(1)
- F7 Words in reg. 2(1) substituted (8.6.2015) by The Waste (Meaning of Hazardous Waste and European Waste Catalogue) (Miscellaneous Amendments) (Scotland) Regulations 2015 (S.S.I. 2015/188), regs. 1(1), 4(a)
- F8 Words in reg. 2(1) substituted (28.2.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(2)(b)
- **F9** Words in reg. 2(1) substituted (31.12.2020) by The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, **9(2)(b)**; 2020 c. 1, Sch. 5 para. 1(1)
- **F10** S.I. 1996/972, amended by regulation 7 of these regulations. Previous relevant amending instrument is S.S.I. 2004/112.
- **F11** Words in reg. 2(1) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(2)(b) (with regs. 8-10)
- F12 Words in reg. 2(1) inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(2)(a)(i)
- F13 Words in reg. 2(1) inserted (28.2.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(2)(c)
- **F14** Words in reg. 2(1) substituted (4.12.2020) by The Waste (Miscellaneous Amendments) (Scotland) Regulations 2020 (S.S.I. 2020/314), regs. 1(1), **4(2)(b)**
- **F15** OJ L 150, 14.6.2018, p.100.
- F16 Words in reg. 2(1) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 11 para. 11(2)(b) (with reg. 71)
- F17 Words in reg. 2(1) omitted (28.2.2019) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(2)(d)
- **F18** Words in reg. 2(1) substituted (4.12.2020) by The Waste (Miscellaneous Amendments) (Scotland) Regulations 2020 (S.S.I. 2020/314), regs. 1(1), **4(2)(c)**
- **F19** Words in reg. 2(1) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(2)(c) (with regs. 8-10)

- **F20** Words in reg. 2(1) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(2)(d) (with regs. 8-10)
- **F21** Words in reg. 2(1) substituted (31.12.2020) by The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, **9(2)(c)**; 2020 c. 1, Sch. 5 para. 1(1)
- F22 1990 c.43, relevant amending instrument is S.S.I 2011/226.
- **F23** Words in reg. 2(1) substituted (28.2.2019) by The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), **12(2)(e)**
- F24 Words in reg. 2(1) substituted (4.12.2020) by The Waste (Miscellaneous Amendments) (Scotland) Regulations 2020 (S.S.I. 2020/314), regs. 1(1), 4(2)(d)
- **F25** OJ L 150, 14.6.2018, p.109.
- **F26** Words in reg. 2(1) omitted (1.8.2013) by virtue of The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(2)(a)(iii)
- F27 Reg. 2(1A) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(3) (with regs. 8-10)
- F28 Reg. 2(1B) inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(2)(b)

#### Application of regulations

**3.**—(1) Subject to regulation 4, these Regulations apply to landfills.

(2) Subject to paragraphs (3) and (4), for the purposes of this regulation a landfill is a waste disposal site for the deposit of the waste onto or into land.

- (3) Landfills include-
  - (a) subject to paragraph (4), any site which is used for more than a year for the temporary storage of waste; and
  - (b) any internal waste disposal site, that is to say a site where a producer of waste is carrying out its own waste disposal at the place of production.
- (4) Landfills do not include-
  - (a) any facility where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere;
  - (b) any site where waste is stored as a general rule for a period of less than three years prior to recovery or treatment; or
  - (c) any site where waste is stored prior to disposal for a period of less than one year.

#### Cases where regulations do not apply

- **4.** These Regulations do not apply to–
  - (a) the spreading of sludges (including sewage sludges and sludges resulting from dredging operations) and similar matter on the soil for the purposes of fertilisation or improvement;
  - (b) the use of suitable inert waste for redevelopment, restoration and filling-in work or for construction purposes;
- [<sup>F29</sup>(ba) waste which falls within the scope of the Management of Extractive Waste (Scotland) Regulations 2010;]
  - (c) the deposit of–
    - (i) non-hazardous dredging sludges alongside the bank or towpath of a small waterway from which they have been dredged where that activity falls within the exemption

from waste management licensing in paragraph 25 of [<sup>F30</sup>Schedule 1 to the Waste Management Licensing (Scotland) Regulations 2011];

- (ii) non-hazardous sludges in surface waters, including the bed and its sub-soil;
- (d) any landfill which finally ceased to accept waste for deposit before 16th July 2001.

#### **Textual Amendments**

- F29 Reg. 4(ba) inserted (1.4.2010) by The Management of Extractive Waste (Scotland) Regulations 2010 (S.S.I. 2010/60), regs. 1(1), 3(4) (with regs. 4, 5)
- **F30** Words in reg. 4(c)(i) substituted (27.3.2011) by The Waste (Scotland) Regulations 2011 (S.S.I. 2011/226), reg. 1(1), Sch. para. 11

#### Location

5. A planning permission under the Town and Country Planning (Scotland) Act 1997<sup>M4</sup> may be granted for a landfill only if the requirements of paragraph 1(1) of Schedule 3 to these Regulations have been taken into consideration.

Marginal Citations M4 1997 c. 8.

#### Exemptions from certain provisions of regulations

- 6. The provisions of these Regulations specified in Schedule 1 shall not apply to-
  - (a) a landfill site on an island which on the date these Regulations come into force has remaining landfill capacity, and which-
    - (i) is the only landfill on the island;
    - (ii) is used exclusively for the disposal of waste generated on that island; and
    - (iii) is for non-hazardous or inert wastes with a total capacity not exceeding 15,000 tonnes or with an annual intake not exceeding 1,000 tonnes,

until the total capacity of that landfill site has been used; and

(b) a landfill site for non-hazardous or inert waste in isolated settlements provided that site is used for the disposal of waste generated only by that isolated settlement.

### List of sites

- 7. SEPA shall-
  - (a) prepare a list of all sites that fall within Regulation 6, no later than 16th April 2003 and send that list to Scottish Ministers; and
  - (b) for each site, by 16th July 2003 and thereafter at least annually, carry out visual inspections of waste at the point of deposit to ensure that only non-hazardous waste from the relevant island or isolated settlement is accepted at it.

#### Extension of categories of landfill subject to the 2000 Regulations etc.

#### **Textual Amendments**

**F31** Reg. 8 revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 12 (with reg. 71)

# PART II

#### LANDFILL PERMITS

#### **Classification of landfills**

9. Before granting a landfill permit, SEPA shall classify the landfill as a-

- (a) landfill for hazardous waste;
- (b) landfill for non-hazardous waste; or
- (c) landfill for inert waste,

and shall ensure that the classification is stated in the landfill permit.

#### Conditions to be included in landfill permits

**10.**—(1) A landfill permit shall include conditions specifying the list of defined types, and the total quantity, of waste authorised to be deposited in the landfill.

(2) A landfill permit shall also include appropriate conditions-

- (a) specifying requirements for-
  - (i) preparations for the landfill, and the carrying out of, landfilling operations;
  - (ii) monitoring and control procedures, including contingency plans and indicator parameters as set out in paragraph 4 of Schedule 4;
- (b) ensuring that the financial provision or its equivalent required by [<sup>F32</sup>regulation 18(4)(b) of the 2012 Regulations] is maintained until the permit is surrendered in accordance with those Regulations;
- (c) ensuring that the landfill is operated in such a manner that the necessary measures are taken to prevent accidents and to limit their consequences; and
- (d) requiring the operator to report to SEPA, at such period as SEPA may require, and in any event annually-
  - (i) the types and quantities of waste disposed of; and
  - (ii) the results of the monitoring programme required by regulations 16 and 17.
- (3) A landfill permit shall also include-
  - (a) appropriate conditions for ensuring compliance with the requirements of the following provisions of these Regulations–
    - (i) Schedule 3 (general requirements for all landfills);
    - (ii) regulation 11 (prohibition of acceptance of certain wastes at landfills);
    - (iii) regulation 12 (waste which may be accepted in the different classes of landfill);
    - (iv) regulation 13 (costs of disposal of waste in landfills);
    - (v) regulation 14 (waste acceptance procedures);
    - (vi) regulation 15 (initial site inspections by SEPA);

(vii) regulation 16 (control and monitoring of operational landfill sites); and

(viii) regulation 17 (closure and after care procedures for landfills); and

<sup>F33</sup>(aa) .....

- (b) such other conditions as appear appropriate to SEPA, including in particular conditions giving effect to-
  - (i) any requirement imposed by [<sup>F34</sup>[<sup>F35</sup>assimilated] law] or national legislation; and
  - (ii) in the case of landfills falling within paragraph (a) of Part A of Section 5.2 of Part 1 of Schedule 1 to [<sup>F36</sup>the 2012 Regulations], the principle that energy should be used efficiently.

(4) The provisions of these Regulations mentioned in paragraph (3)(a) above impose obligations directly on an operator of a landfill (rather than through the conditions of a landfill permit) only to the extent specified in paragraph 3 of Schedule 5.

#### **Textual Amendments**

- F32 Words in reg. 10(2)(b) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 11 para. 11(3) (with reg. 71)
- **F33** Reg. 10(3)(aa) omitted (31.12.2020) by virtue of The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, **9(3)(a)**; 2020 c. 1, Sch. 5 para. 1(1)
- **F34** Words in reg. 10(3)(b)(i) substituted (31.12.2020) by The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, **9(3)(b)**; 2020 c. 1, Sch. 5 para. 1(1)
- F35 Word in reg. 10(3)(b)(i) substituted (1.1.2024) by The Retained EU Law (Revocation and Reform) Act 2023 (Consequential Amendments) (Scotland) Regulations 2023 (S.S.I. 2023/374), reg. 1(1), sch. 2 para. 3(2)
- **F36** Words in reg. 10(3)(b)(ii) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 11 para. 11(4) (with reg. 71)

#### Permits relating to storage of metallic mercury

#### **Textual Amendments**

F37 Reg. 10A omitted (28.2.2019) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(3)

#### Prohibition of acceptance of certain wastes at landfills

11.-(1) The operator of a landfill shall not accept any of the following types of waste at the landfill-

- (a) any waste in liquid form (including waste waters but excluding sludge);
- (b) waste which, in the conditions of landfill, is explosive, corrosive, oxidising, flammable or highly flammable;
- (c) hospital and other clinical wastes which arise from medical or veterinary establishments and which are infectious;

- (d) chemical substances arising from research and development or teaching activities, such as laboratory residues, which are new or not identified, and the effects of which on man or on the environment are not known;
- (e) as from 16th July 2003, whole used tyres other than-
  - (i) tyres used as engineering material;
  - (ii) bicycle tyres; and
  - (iii) tyres with an outside diameter above 1400mm;
- (f) as from 16th July 2006, shredded tyres other than-
  - (i) bicycle tyres; and
  - (ii) tyres with an outside diameter above 1400mm;
- [<sup>F38</sup>(fa) as from 1st January 2010, waste industrial or automotive batteries;]
- [<sup>F39</sup>(fb) as from 1st January 2014, waste which has been collected and transported in accordance with section 34(2I) of the Environmental Protection Act 1990;
  - (fc) as from [<sup>F40</sup>31 December 2025], biodegradable municipal waste;]
  - (g) any waste which does not fulfil the relevant waste acceptance criteria.

(2) The operator of a landfill shall ensure that the landfill is not used for landfilling waste which has been diluted or mixed solely to meet the relevant waste acceptance criteria.

 $[^{F41}(2A)$  Sub-paragraph (1)(fa) does not prohibit the acceptance of residues of any batteries that have undergone both treatment and recycling, provided that the treatment and recycling—

- (a) used best available techniques, in terms of the protection of health and the environment; and
- (b) complied, as a minimum, with [<sup>F42</sup>[<sup>F43</sup>assimilated] law], in particular as regards health and safety and waste management.]

[<sup>F44</sup>(2B) Paragraph (1)(a) does not prohibit the temporary storage for more than one year at a landfill of metallic mercury that is considered a waste <sup>F45</sup>...]

(3) For the purposes of this regulation, waste is-

[<sup>F46</sup>"biodegradable municipal waste" if it consists of municipal waste that is also biodegradable waste, but does not include waste—

- (i) that is treated, and either—
  - (aa) respiration activity after a static respiration test is less than 10 milligrams of oxygen for each gram of dry material; or
  - (bb) dynamic respiration over one hour is less than 1000 milligrams of oxygen for each kilogram of volatile solids;
- (ii) that is incinerated, and the total organic carbon content is less than 5%]

"corrosive" if it consists of substances and preparations which may destroy living tissue on contact;

"explosive" if it consists of substances and preparations which may explode under the effect of flame or which are more sensitive to shocks or friction than dinitrobenzene;

"flammable" if it consists of liquid substances and preparations having a flash point equal to or greater than 21°C and less than or equal to 55°C;

"highly flammable" if it consists of-

(a) liquid substances and preparations having a flash point below 21°C (including extremely flammable liquids);

- (b) substances and preparations which may become hot and finally catch fire in contact with air at ambient temperature without any application of energy;
- (c) solid substances and preparations which may readily catch fire after brief contact with a source of ignition and which continue to burn or to be consumed after removal of the source of ignition;
- (d) gaseous substances and preparations which are flammable in air at normal pressure; or
- (e) substances and preparations which, in contact with water or damp air, evolve highly flammable gases in dangerous quantities;

"infectious" if it consists of substances containing viable micro-organisms or their toxins which are known or reliably believed to cause disease in man or other living organisms;

"oxidising" if it consists of substances and preparations which exhibit highly exothermic reactions when in contact with other substances, particularly flammable substances.

[<sup>F47</sup>(3A) For the purposes of paragraph (2B), metallic mercury is considered a waste if it is mercury—

- (a) that is no longer used in the chlor-alkali industry;
- (b) gained from the cleaning of natural gas;
- (c) gained from non-ferrous mining and smelting operations; or
- (d) extracted from cinnabar ore in the European Union as from 15th March 2011.]

[<sup>F48</sup>(4) In this regulation, a reference to the total organic carbon content of waste is a reference to the total amount of carbon bound in organic compounds in the waste.]

#### **Textual Amendments**

- **F38** Reg. 11(1)(fa) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(4)(a) (with regs. 8-10)
- **F39** Reg. 11(1)(fb)(fc) inserted (17.5.2012) by The Waste (Scotland) Regulations 2012 (S.S.I. 2012/148), regs. 1(1), 4(2)(a)
- **F40** Words in reg. 11(1)(fc) substituted (4.12.2020) by The Waste (Miscellaneous Amendments) (Scotland) Regulations 2020 (S.S.I. 2020/314), regs. 1(1), **4(3)**
- **F41** Reg. 11(2A) inserted (6.7.2009) by The Waste Batteries (Scotland) Regulations 2009 (S.S.I. 2009/247), art. 1(1), reg. 7(4)(b) (with regs. 8-10)
- F42 Words in reg. 11(2A)(b) substituted (31.12.2020) by The Environment (EU Exit) (Scotland) (Amendment etc.) Regulations 2019 (S.S.I. 2019/26), regs. 1, 9(4); 2020 c. 1, Sch. 5 para. 1(1)
- F43 Word in reg. 11(2A)(b) substituted (1.1.2024) by The Retained EU Law (Revocation and Reform) Act 2023 (Consequential Amendments) (Scotland) Regulations 2023 (S.S.I. 2023/374), reg. 1(1), sch. 2 para. 3(3)
- F44 Reg. 11(2B) inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(5)(a)
- F45 Words in reg. 11(2B) omitted (28.2.2019) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), 12(4)
- **F46** Words in reg. 11(3) inserted (17.5.2012) by The Waste (Scotland) Regulations 2012 (S.S.I. 2012/148), regs. 1(1), 4(2)(b)
- F47 Reg. 11(3A) inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(5)(b)
- **F48** Reg. 11(4) inserted (17.5.2012) by The Waste (Scotland) Regulations 2012 (S.S.I. 2012/148), regs. 1(1), **4(2)(c)**

#### Waste which may be accepted in the different classes of landfill

**12.**—(1) The operator of a landfill shall ensure that the landfill is only used for landfilling waste which is subject to prior treatment unless–

- (a) it is inert waste for which treatment is not technically feasible; or
- (b) it is waste other than inert waste and treatment would not reduce its quantity or the hazards which it poses to human health or the environment.

(2) The operator of a landfill for hazardous waste shall ensure that only waste which fulfils the waste acceptance criteria in paragraphs 1 and 2 of Schedule 2 is accepted at the landfill.

(3) The operator of a landfill for non-hazardous waste shall ensure that the landfill is only used for landfilling–

- (a) municipal waste;
- (b) non-hazardous waste of any other origin which fulfils the waste acceptance criteria in paragraphs 1 and 3(b) of Schedule 2; and
- (c) stable, non-reactive hazardous waste (such as that which is solidified with leaching behaviour equivalent to that of non-hazardous waste referred to in sub-paragraph (b)) and which fulfils the waste acceptance criteria in paragraphs 1 and 3(a) of Schedule 2.

(4) Where hazardous waste of the type described in paragraph (3)(c) is disposed of at a landfill for non-hazardous waste, the operator shall ensure it is not deposited in cells used or intended to be used for the disposal of biodegradable non-hazardous waste.

(5) The operator of a landfill for inert waste shall ensure that the landfill is only used for landfilling inert waste which meets the waste acceptance criteria in paragraphs 1 and 4 of Schedule 2.

#### Costs of disposal of waste in landfill

**13.** The operator of a landfill shall ensure that the charges the operator makes for the disposal of waste in its landfill covers all of the following–

- (a) the costs of setting up and operating the landfill;
- (b) the costs of the financial provision required by [<sup>F49</sup>regulation 18(4)(b) of the 2012 Regulations]; and
- (c) the estimated costs for the closure and after-care of the landfill site for a period of at least 30 years from its closure.

#### **Textual Amendments**

**F49** Words in reg. 13(b) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), **Sch. 11 para. 11(3)** (with reg. 71)

#### Waste acceptance procedures

14.—(1) The operator shall visually inspect the waste at the entrance to the landfill and at the point of the deposit and shall be satisfied that it conforms with the description provided in the documentation submitted by the holder.

(2) The operator shall, in accordance with such procedures as are specified by SEPA, test waste to establish whether it corresponds to the description in the accompanying documents, and if representative samples are taken for analysis, the operator shall retain the samples and results of any analysis for at least one month.

(3) The operator shall keep a register showing-

- (a) the quantities of waste deposited;
- (b) its characteristics;
- (c) its origin;
- (d) the date or dates of its delivery;
- (e) the identity of the producer or, in the case of municipal waste, the collector; and
- (f) in the case of hazardous waste, its precise location on the site.

(4) The information required to be kept under paragraph (3) shall be made available to SEPA on request.

(5) The operator on accepting each delivery of waste shall provide a written receipt to the person delivering it.

(6) Where waste is not accepted at a landfill the operator shall inform SEPA of that fact as soon as reasonably possible, and in any event within 7 days.

#### Initial site inspections by SEPA

**15.**—(1) The operator of a landfill shall not commence disposal operations before SEPA has inspected the site in order to ensure that it complies with the relevant conditions of the landfill permit.

(2) Nothing in paragraph (1) in any way reduces the obligations of the operator to comply with the conditions of the permit.

#### Control and monitoring of operational landfill sites

**16.**—(1) The following requirements shall apply to landfill sites from the start of the operational phase until definitive closure.

(2) The operator shall carry out the control and monitoring procedures set out in Schedule 4.

(3) Where the procedures required by paragraph (2) reveal any significant adverse environmental effects, the operator shall notify SEPA as soon as reasonably possible.

(4) Where it receives a notification of significant adverse environmental effects in accordance with paragraph (3), SEPA shall determine the nature and timing of corrective measures that are necessary and shall require the operator to carry them out.

- (5) The operator shall report to SEPA on the basis of aggregated data-
  - (a) on its request; and
  - (b) in any event at least once a year,

the results of monitoring and on such other matters which SEPA requires to demonstrate compliance with the conditions of the landfill permit or to increase knowledge of the behaviour of waste in landfill.

(6) The operator shall ensure that quality control of-

- (a) analytical operations of control and monitoring procedures; and
- (b) analyses of representative samples taken in accordance with regulation 14(2)

is carried out by competent laboratories.

#### Closure and after care procedures for landfills

17.—(1) The following closure and after-care procedures shall apply to all landfill sites.

- (2) The procedures may relate to the closure of the whole of the landfill or part of it.
- (3) The closure procedure shall begin-

- (a) when the relevant conditions specified in the landfill permit are satisfied;
- (b) when SEPA approves the initiation of the closure procedure following a request from the operator; or
- (c) by a reasoned decision of SEPA which shall be set out in a closure notice served on the operator by SEPA in accordance with Regulation 18.
- (4) A landfill shall not be definitely closed until-
  - (a) such reports as may be required by SEPA have been submitted to it by the operator; and
  - (b) SEPA-
    - (i) has assessed all the reports submitted by the operator;
    - (ii) has carried out a final on-site inspection; and
    - (iii) has notified the operator by notice in writing served on the operator that it approves the closure.
- (5) Following definite closure of a landfill, after care procedures shall ensure that-
  - (a) the operator remains responsible for the maintenance, monitoring and control for such period as SEPA determines is reasonable, taking into account the time during which the landfill could present hazards;
  - (b) the operator notifies SEPA of any significant adverse environmental effects revealed by the control procedures and takes the remedial steps required or approved by SEPA; and
  - (c) the operator is responsible for monitoring and analysing landfill gas and leachate from the landfill and the groundwater regime in its vicinity in accordance with Schedule 4 for as long as SEPA considers that the landfill is likely to cause a hazard to the environment.

(6) Notwithstanding [<sup>F50</sup>regulations 48 and 50 of the 2012 Regulations] (requirements on surrender or revocation of permits), SEPA shall not accept any application for complete or partial surrender of the landfill permit, or revoke it in whole or in part, for as long as SEPA considers that the landfill (or the relevant part of it) is likely to cause a hazard to the environment.

(7) The operator shall not be relieved from liability under the conditions of the landfill permit by reason of SEPA's approval of closure under paragraph (4)(b)(iii).

#### **Textual Amendments**

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F50 Words in reg. 17(6) substituted (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 11 para. 11(5) (with reg. 71)
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#### **Closure Notices**

**18.**—(1) Where SEPA has taken a reasoned decision under regulation 17(3)(c), it shall serve a closure notice under this regulation ("a closure notice") on the operator of the landfill.

- (2) A closure notice shall-
  - (a) state SEPA's reasons for requiring initiation of the closure procedure;
  - (b) specify the steps the operator is required to take to initiate the procedure;
  - (c) the period within which they must be taken; and
  - (d) the date after which waste may not be accepted on the site.
- (3) SEPA may withdraw a closure notice at any time.

# PART III

### MISCELLANEOUS

#### Offences

19.—(1) It is an offence for a landfill operator to contravene–

- (a) regulation 11 or 14 in each case as applied by paragraph (3)(1)(a) of Schedule 5;
- (b) regulation 12 (1) or (2) as applied by paragraph 3(1)(b) of Schedule 5; or
- (c) paragraph 3(3) of Schedule 5.

(2) A person who is guilty of an offence under paragraph (1) is liable-

- (a) on summary conviction, to a fine not exceeding [<sup>F51</sup>£40,000] or to imprisonment for a term not exceeding six months or to both, and
- (b) on conviction on indictment, to a fine or imprisonment for a term not exceeding five years or both.
- $[^{F52}(3)$  where an offence under this regulation committed-
  - (a) by a body corporate, is committed with the consent or connivance of, or is attributable to any neglect on the part of, a person who-
    - (i) is a director, manager or secretary of the body corporate; or
    - (ii) purports to act in any such capacity; or
  - (b) by a Scottish partnership, is committed with the consent or connivance of, or is attributable to any neglect on the part of, a person who-
    - (i) is a partner; or
    - (ii) purports to act in that capacity,

that person as well as the body corporate or Scottish partnership is guilty of the offence and is liable to be proceeded against and punished accordingly.]

(4) Where the affairs of a body corporate are managed by its members, paragraph (3) applies in relation to the acts and defaults of a member in connection with that member's functions of management as if that member were a director of the body corporate.

(5) Where the commission by any person of an offence under this regulation is due to the act or default of some other person, that other person may be charged with and convicted of the offence by virtue of this paragraph whether or not proceedings for the offence are taken against the first-mentioned person.

#### **Textual Amendments**

- F51 Sum in reg. 19(2)(a) substituted (28.10.2004) by Antisocial Behaviour etc. (Scotland) Act 2004 (asp 8), s. 145(2), Sch. 2 para. 8; S.S.I. 2004/420, art. 3, Sch. 1
- **F52** Reg. 19(3) substituted (1.7.2003) by The Landfill (Scotland) Amendment Regulations 2003 (S.S.I. 2003/343), regs. 1(1), 4

#### **Transitional Provisions**

20. Schedule 5 (which contains transitional provisions) has effect.

#### Amendments

**21.** Schedule 6 (which makes amendments to other legislation) has effect.

St Andrew 213 s House, Edinburgh

*ROSS FINNIE* A member of the Scottish Executive

#### SCHEDULE 1

Regulation 6

# PROVISIONS OF THESE REGULATIONS FROM WHICH LANDFILLS FALLING WITH REGULATION 6 ARE EXEMPT

- (a) Regulation 10 (conditions to be included in landfill permits) paragraph (2)(a)(ii) in so far as it relates to paragraph 4 of Schedule 4;
- (b) Regulation 10(2)(b);
- (c) Regulation 10(2)(d)(ii) in so far as it relates to regulation 16(2) and (6);
- (d) Regulation 10(3)(a)(i) in so far as it relates to paragraphs 3 and 4 of Schedule 3;
- (e) Regulation 10(3)(a)(iii) in so far as it relates to-
  - (i) regulation 12(2)
  - (ii) regulation 12(3)(b);
  - (iii) regulation 12(3)(c); and

(iv) 12(5);

in so far as they relate to paragraph 1 of Schedule 2;

- (f) Regulation 10(3)(a)(iv);
- (g) Regulation 10(3)(a)(v) except as it relates to regulation 14(3)(a);
- (h) Regulation 10(3)(a)(vii) in so far as it relates to regulation 16(2) and 16(6);
- (i) Regulation 12(2), 12(3)(b), 12(3)(c) and 12(5) (waste which may be accepted in the different classes of landfill) in so far as they relate to paragraph 1 of schedule 2;
- (j) Regulation 13 (costs of disposal of waste in landfill);
- (k) Regulation 14(1), (2), (3)(b) (f), (4) and (5) (waste acceptance procedures);
- (l) Regulation 16(2) and (6) (control and monitoring of operational landfill sites);
- (m) Regulation 19(1)(a) as it relates to regulation 14(1), (2), (3)(b)-(f), (4) and (5);
- (n) Regulation 19(1)(b) in so far as it relates to regulation 12(2) as it relates to paragraph 1 of Schedule 2;
- (o) Schedule 2 (national waste acceptance criteria) paragraph (1);
- (p) Schedule 3 (general requirements for all landfills) paragraphs (3) and (4);
- (q) Schedule 4 (minimum monitoring procedures for landfills);
- (r) Schedule 5 (existing landfills: transitional provisions), paragraph 3(1)(a)(ii) except as it relates to regulation 14(3)(a).

#### SCHEDULE 2

Regulations 2 and 12

#### WASTE ACCEPTANCE CRITERIA

#### Criteria for acceptance of waste which apply to all kinds of landfill

1.—(1) The following criteria shall apply to the acceptance of waste at any landfill.

(2) Waste may only be accepted at a landfill provided its acceptance would not compromise the protection-

- (a) of the surrounding environment, in particular groundwater and surface water;
- (b) of the protection of environmental protection systems such as liners and leachate treatment systems;
- (c) of the protection of the desired waste-stabilisation processes within the landfill; and
- (d) against human health hazards.

#### Additional criteria for acceptance of waste at landfills for hazardous waste

- 2. Waste may only be accepted at a landfill for hazardous waste if-
  - (a) it is listed on the Hazardous Waste List of the European Waste Catalogue <sup>M5</sup> or has similar characteristics to those so listed; and
  - (b) its total content or leachability-
    - (i) does not present a short term occupational risk or an environmental risk; and
    - (ii) would not prevent the stabilisation of the landfill within its projected lifetime taking account of its after care period following closure.

#### **Marginal Citations**

M5 Council Decision 2000/532/EC (O.J. L 226, 6.9.2000 p.3) as amended by Council Decisions 2001/118/ EC (O.J. L 47, 16.2.2001, p.32) and 2001/119/EC (O.J. L 203, 28.7.2001, p.18).

#### Additional criteria for acceptance of waste at landfills for non-hazardous waste

- 3. Waste may only be accepted at a landfill for non-hazardous waste if it is-
  - (a) listed on the Hazardous Waste List of the European Waste Catalogue or has similar characteristics to those so listed and its deposit at the landfill otherwise meets the requirements of regulation 12(3)(c) and (4); or
  - (b) any other waste listed on the European Waste Catalogue or has similar characteristics to those so listed.

#### Additional criteria for acceptance of waste at landfills for inert waste

**4.** Waste may only be accepted at a landfill for inert waste if it is listed in the following Table or it otherwise falls within the definition of inert waste in regulation 2(1).

European Waste Catalogue Chapter	European Waste Catalogue Code	Description	Exclusions
10 – Wastes from thermal processes	10 11 03	Waste glass based fibrous materials	
15 – Waste packaging; absorbents, wiping cloths, filter materials and protective clothing not otherwise specified	15 01 07	Glass packaging	
17 – Construction and demolition wastes	17 01 07 17 01 02	Concrete Bricks	Excluding topsoil, peat

Waste acceptable at landfills for inert waste

(including excavated<br/>soil from contaminated<br/>sites)17 01 03<br/>17 02 02<br/>17 05 0420 - Municipal<br/>wastes (household<br/>waste and similar<br/>commercial, industrial<br/>and institutional<br/>wastes) including<br/>separately collected<br/>fractions20 01 02<br/>02 02

Tiles and ceramics Glass Soil and stones Glass Soil and stones

Excluding topsoil, peat

#### SCHEDULE 3

Regulations 5 and 10(3)(a)(i)

#### GENERAL REQUIREMENTS FOR ALL LANDFILLS

#### Location

- 1.--(1) The location of a landfill must take into consideration requirements relating to-
  - (a) the distances from the boundary of the site to residential and recreational areas, waterways, water bodies and other agricultural or urban sites;
  - (b) the existence of groundwater, coastal water or nature protection zones in the area;
  - (c) the geological or hydrogeological conditions in the area;
  - (d) the risk of flooding, subsidence, landslides or avalanches on the site; and
  - (e) the protection of the natural or cultural heritage in the area.
- (2) A landfill permit may be issued for the landfill only if-
  - (a) the characteristics of the site with respect to the requirements in sub-paragraph (1), or
  - (b) the corrective measures to be taken,

indicate that the landfill does not pose a serious environmental risk.

(3) In this paragraph "nature protection zone" means land which has been notified under section 28 of the Wildlife and Countryside Act 1981 <sup>M6</sup> or a European site within the meaning of regulation 10(1) of the Conservation (Natural Habitats, &c.) Regulations 1994 <sup>M7</sup>.

#### Marginal Citations M6 1981 c. 69.

M7 See S.I. 1994/2716.

#### Water control and leachate management

**2.**—(1) Subject to sub-paragraphs (2) and (3), appropriate arrangements shall be made having regard to the characteristics of the landfill and prevailing meteorological conditions in order to -

- (a) control rainwater entering the landfill body;
- (b) prevent surface water or groundwater from entering into landfilled waste;

(c) collect contaminated water and leachate and treat it to the appropriate standard so it can be discharged.

(2) Arrangements need not be made in accordance with sub-paragraph (1)(c) if SEPA decides that the landfill poses no potential hazard to the environment in view of its location and the kinds of waste to be accepted at the landfill.

(3) This paragraph does not apply to inert landfills.

#### Protection of soil and water and leachate collection and sealing systems

3.—(1) The landfill must be situated and designed so as to –

- (a) provide the conditions for prevention of pollution of the soil, groundwater or surface water; and
- (b) ensure efficient collection of leachate as and when required by paragraph 2.

(2) Soil, groundwater and surface water is to be protected by the use of a geological barrier combined with-

- (a) a bottom liner during the operational phase of the landfill; and
- (b) a top liner following closure and during the after-care phase.

(3) The geological barrier shall comply with the requirements of sub-paragraph (4) and shall also provide sufficient attenuation capacity to prevent a potential risk to soil and groundwater.

(4) The landfill base and sides shall consist of a mineral layer which provides protection of soil, groundwater and surface water at least equivalent to that resulting from the following permeability and thickness requirements–

- (a) in a landfill for hazardous waste:  $K \le 1.0 \times 10^9$  metre/second: thickness  $\ge 5$  metres;
- (b) in a landfill for non-hazardous waste:  $K \le 1.0 \times 10^9$  metre/second: thickness  $\ge 1$  metre;
- (c) in a landfill for inert waste:  $K \le 1.0 \times 10^7$  metre/second: thickness  $\ge 1$  metre.

(5) Where the geological barrier does not meet the requirements of sub-paragraph (4) naturally, it may be completed artificially and reinforced by other means giving equivalent protection, but in any such case a geological barrier established by artificial means must be at least 0.5 metres thick.

(6) A leachate collection and sealing system to ensure that leachate accumulation at the base of the landfill is kept to a minimum must also be provided in any hazardous or non-hazardous landfill in accordance with the following table:

Leachate	coli	lection	and	bottom	sealin	g
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Landfill category	Non-hazardous	Hazardous	
Artificial sealing liner	Required	Required	
Drainage liner $\ge 0.5$ metres	Required	Required	

(7) Where the potential hazards to the environment indicate that the prevention of leachate formation is necessary, surface sealing may be required taking account of the following guidelines:-

Landfill category	Non-hazardous	Hazardous
Gas drainage layer	Required	Not required
Artificial sealing liner	Not required	Required
Impermeable mineral layer	Required	Required

Drainage layer > 0.5 metres	Required	Required
Top soil cover > 1 metre	Required	Required

(8) The requirements of sub-paragraphs (3) to (7) may be reduced to an appropriate extent if on the basis of an assessment of environmental risks  $^{F53}$ ... –

- (a) it has been decided in accordance with paragraph 2 that the collection and treatment of leachate is not necessary; or
- (b) it is established that the landfill poses no potential hazard to soil, groundwater or surface water.

#### **Textual Amendments**

**F53** Words in Sch. 3 para. 3(8) omitted (28.2.2019) by virtue of The Environment, Food and Rural Affairs (Miscellaneous Amendments and Revocations) (Scotland) Regulations 2018 (S.S.I. 2018/391), regs. 1(1), **12(5)** 

#### **Gas control**

**4.**—(1) Appropriate measures must be taken in order to control the accumulation and migration of landfill gas.

(2) Landfill gas must be collected from all landfills receiving biodegradable waste and the landfill gas must be treated and, to the extent possible, used.

(3) The collection, treatment and use of landfill gas under sub-paragraph (2) must be carried on in a manner which minimises damage to or deterioration of the environment and risk to human health.

(4) Landfill gas which cannot be used to produce energy must be flared.

#### Nuisances and hazards

**5.**—(1) Measures must be taken to minimise the nuisances and hazards arising from the landfill in relation to–

- (a) emissions of odours and dust;
- (b) wind-blown materials;
- (c) noise and traffic;
- (d) birds, vermin and insects;
- (e) formation of aerosols; and
- (f) fires.

(2) The landfill must be equipped so that dirt originating from the site is not dispersed onto public roads and the surrounding land.

#### Stability

**6.**—(1) The placement of waste must ensure stability of all the waste on the site, and associated structures, and in particular must avoid slippages.

(2) Where an artificial barrier is used, the geological substratum must be sufficiently stable, taking into account the morphology of the landfill, to prevent settlement that may cause damage to the barrier.

#### Site security

7.—(1) The landfill must be secured to prevent free access to the site.

(2) The gates of the landfill must be locked outside operating hours.

(3) The system of control and access to each facility must contain a programme of measures to detect and discourage illegal dumping in the facility.

#### [<sup>F54</sup>Temporary storage of metallic mercury

**8.**—(1) The temporary storage of metallic mercury for more than one year must comply with the requirements in sub-paragraphs (2) to (7).

- (2) Metallic mercury must be stored separately from other waste.
- (3) Containers of metallic mercury must-
  - (a) be stored in collecting basins suitably coated so as to be free of cracks and gaps and impervious to metallic mercury; and
  - (b) have a containment volume adequate for the quantity of mercury stored.
- (4) The storage site must—
  - (a) be provided with engineered or natural barriers that are adequate to protect the environment against mercury emissions; and
  - (b) have a containment volume adequate for the total quantity of mercury stored.
- (5) The storage site floor must—
  - (a) be covered with mercury-resistant sealants; and
  - (b) have a slope and a collection sump.
- (6) The storage site must be equipped with a fire protection system.
- (7) Storage must be arranged in a way that ensures that all containers are easily retrievable.]

#### **Textual Amendments**

F54 Sch. 3 para. 8 inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(6)

#### SCHEDULE 4

Regulations 16(2) and 17(5)(c)

#### MINIMUM MONITORING PROCEDURES FOR LANDFILLS

#### **Application of this Schedule**

- 1. This Schedule sets out minimum procedures for monitoring to be carried out to check-
  - (a) that waste has been accepted for disposal only if it fulfils the relevant waste acceptance criteria;
  - (b) that the processes within the landfill proceed as required;
  - (c) that environmental protection systems are functioning fully as intended; and
  - (d) that the conditions of the landfill permit are fulfilled.

#### Emission data: water, leachate and gas control

**2.**—(1) Samples of leachate or surface water (if present) must be collected at representative points.

(2) Sampling and measuring of the volume and composition of any leachate must be performed separately at each point at which leachate is discharged from the site.

(3) Monitoring of surface water (if present) shall take place at at least two points, one upstream from the landfill and one downstream.

(4) Gas monitoring must be carried out for each section of the landfill and representative samples must be collected and analysed in accordance with Table 1.

(5) A sample of leachate and water representative of the average composition, shall be taken for monitoring purposes in accordance with Table 1.

	<b>O</b> perational phase	After-care phase ( <sup>3</sup> )
Leachate volume ( <sup>2</sup> )	Monthly $(^1)$ , $(^3)$	Every six months
Leachate composition $\binom{2}{4}$	Quarterly ( <sup>1</sup> )	Every six months
Volume and composition of surface water ( <sup>5</sup> )	Quarterly ( <sup>1</sup> )	Every six months
Potential gas emissions and atmospheric Pressure ( <sup>6</sup> ) (CH <sub>4</sub> , CO <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> S, H <sub>2</sub> etc)	Monthly ( <sup>1</sup> ), ( <sup>7</sup> )	Every six months ( <sup>8</sup> )

TABLE 1
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Notes to Table 1

 $(^{1})$  Longer intervals may be allowed if the evaluation of data indicates that they would be equally effective. For leachates, the conductivity must always be measured at least once a year.

 $\binom{2}{2}$  These do not apply where leachate collection is not required under paragraph 2(1)(c) of Schedule 3.

 $(^3)$  The frequency of sampling may be adapted on the basis of the morphology of the landfill waste (in tumulus, buried, etc) (but only if SEPA considers that the conditions of the landfill permit should allow for it).

(<sup>4</sup>) The parameters to be measured and substances to be analysed vary according to the composition of the waste deposited. They must be specified in the conditions of the landfill permit and reflect the leaching characteristics of the wastes.

(<sup>5</sup>) On the basis of the characteristics of the landfill site, SEPA may determine that these measurements are not required.

(<sup>6</sup>) These measurements are related mainly to the content of the organic material in the waste.

 $(^{7})$  CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub> regularly, other gases as required, according to the composition of the waste deposited, with a view to reflecting its leaching properties.

(<sup>8</sup>) Efficiency of the gas extraction system must be checked regularly.

#### **Protection of groundwater : Sampling**

**3.**—(1) The sampling measurements must be sufficient to provide information on groundwater likely to be affected by the discharge from the landfill, with at least one measuring point in the groundwater inflow region and two in the outflow region.

(2) The number of measurements referred to in sub-paragraph (1) may be increased on the basis of a specific hydrogeological survey on the need for an early identification of accidental leachate release in the groundwater.

(3) Sampling must be carried out in at least three locations before the filling operations in order to establish reference values for future sampling.

#### **Protection of groundwater : Monitoring**

4.—(1) The monitoring of groundwater shall be carried out in accordance with Table 2.

(2) The parameters to be analysed in the samples taken must be derived from the expected composition of the leachate and the groundwater quality in the area.

(3) In selecting the parameters for analysis the mobility in the groundwater zone must be taken into account.

(4) Parameters may include indicator parameters in order to ensure an early recognition of change in water quality. The recommended parameters are pH, TOC, phenols, heavy metals, fluoride, As, oil/hydrocarbons.

	<b>Operational phase</b>	After-care phase
Level of groundwater	Every six months ( <sup>9</sup> )	Every six months ( <sup>9</sup> )
Groundwater composition	Site-specific frequency ( <sup>10</sup> ), ( <sup>11</sup> )	Site-specific frequency ( <sup>10</sup> ), ( <sup>11</sup> )

TABLE 2

Notes to Table 2

(<sup>9</sup>) If there are fluctuating groundwater levels, the frequency must be increased.

 $(^{10})$  The frequency must be based on the possibility for remedial action between two samplings if a trigger level is reached, i.e. the frequency must be determined on the basis of knowledge and the evaluation of the velocity of groundwater flow.

(<sup>11</sup>) When a trigger level is reached (see paragraph 5), verification is necessary by repeating the sampling. When the level has been confirmed, a contingency plan set out in the landfill permit conditions must be followed.

#### **Protection of groundwater : Trigger levels**

**5.**—(1) Significant adverse environmental effects, as referred to in regulations 16(3) and 17(5)(b), should be considered to have occurred in the case of groundwater, when an analysis of a groundwater sample shows a significant change in water quality.

(2) The level at which the effects referred to in sub-paragraph (1) are considered to have occurred ("the trigger level") must be determined taking account of the specific hydrogeological formations in the location of the landfill and groundwater quality.

(3) The trigger level must be set out in the conditions of a landfill permit whenever possible.

(4) The observations must be evaluated by means of control charts with established control rules and levels for each downgradient well.

(5) The control levels must be determined from local variations in groundwater quality.

#### Topography of the site: data on the landfill body

**6.** The topography of the site and settling behaviour of the landfill body shall be monitored in accordance with Table 3.

#### TABLE 3

	<b>Operating</b> phase	After-care phase
Structure and composition of landfill body ( <sup>12</sup> )	Yearly	
Settling behaviour of the level of the landfill body	Yearly	Yearly reading
Note to Table 3		

Note to Table 3

 $(^{12})$  Data for the status plan of the concerned landfill: surface occupied by waste, volume and composition of waste, methods of depositing, time and duration of depositing, calculation of the remaining capacity still available at the landfill.

### [<sup>F55</sup>Specific requirements for metallic mercury

7.—(1) The temporary storage of metallic mercury for more than one year must comply with the requirements in sub-paragraphs (2) to (7).

(2) A continuous mercury vapour monitoring system ("the system") with a sensitivity of at least  $0.02 \text{ mg mercury/m}^3$  must be installed in the storage site.

- (3) The system must—
  - (a) include sensors positioned at ground level and head level;
  - (b) include a visual and acoustic alert system; and
  - (c) be maintained annually.

(4) The storage site and the containers must be visually inspected by a person authorised by SEPA at least once a month.

(5) The operator of the landfill must on a leak being detected—

- (a) immediately take all necessary action to avoid any emission of mercury to the environment and restore the safety of the storage of the mercury; and
- (b) treat the leak as having significant adverse environmental effects for the purposes of regulation 16.

(6) Emergency plans and adequate protective equipment suitable for handling metallic mercury must be available on site.

(7) The operator must retain for 3 years after termination of storage of metallic mercury—

- (a) the acceptance certificate;
- (b) all documents relating to the keeping, monitoring and inspection of the mercury during storage; and
- (c) all records concerning the destocking, dispatch, destination and intended treatment of the mercury.

(8) In this paragraph, "acceptance certificate" means the certificate for the purposes of the first paragraph of Point C of Section 6 of Annex II of the Landfill Directive that must accompany a metallic mercury container on acceptance at the landfill.]

#### **Textual Amendments**

F55 Sch. 4 para. 7 inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, 2(7)

#### SCHEDULE 5

Regulation 20

#### TRANSITIONAL PROVISIONS

#### **Existing landfills : transitional provisions**

**Textual Amendments** 

F56 Sch. 5 para. 1 revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 12 (with reg. 71)

(2) In any case falling with in sub-paragraph (1)(b), the waste management licence shall have effect on or after the relevant date as if it were a landfill permit.

<sup>F57</sup>(3) .....

(4) In any case falling within sub-paragraph (1)(c), where an application for a waste management licence is also outstanding on the relevant date there shall be no obligation on SEPA to determine the application for a waste management licence.

#### **Textual Amendments**

**F57** Sch. 5 para. 2(1)(3) revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), **Sch. 12** (with reg. 71)

**3.**—<sup>F58</sup>(1) .....

(3) The operator of a landfill which is not classified as a landfill for hazardous waste shall only accept hazardous waste at that landfill on or after the relevant date in the circumstances specified in regulation 12(3)(c) and (4).

#### **Textual Amendments**

**F58** Sch. 5 para. 3(1)(2) revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 12 (with reg. 71)

#### **Textual Amendments**

**F59** Sch. 5 para. 4 revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), Sch. 12 (with reg. 71)

#### SCHEDULE 6

Regulation 21

#### AMENDMENTS TO OTHER LEGISLATION

#### Amendment to the Environment Act 1995 M8

1. In section 41(2) of the Environment Act 1995 after subsection (f) there is added-

"(g) any other approval, consent, consideration or determination carried out by the Agency relating to any obligations of the United Kingdom under the [<sup>F60</sup>EU] Treaties or any application for such an approval of consent, consideration or determination."

Textual Amendments

**F60** Words in Instrument substituted (22.4.2011) by The Treaty of Lisbon (Changes in Terminology) Order 2011 (S.I. 2011/1043), arts. 2, **3-6**, 8-10

Marginal Citations M8 1995 c. 25.

#### Amendment to the Environmental Protection (Duty of Care) Regulations 1991<sup>M9</sup>

**2.** In regulation 2(2)(a) (contents of transfer notes) of the Environmental Protection (Duty of Care) Regulations 1991 after "identify the waste to which it relates" there is inserted " by reference to the appropriate six-digit codes in the European Waste Catalogue.<sup>M10</sup>".

#### **Marginal Citations**

M9 S.I. 1991/2839; relevant amendments were made by S.I. 2000/1973.

 M10 Council Decision 2000/532/EC (O.J. L 226, 6.9.2000, p.3) as amended by Council Decisions 2001/118/ EC (O.J. L 47, 16.2.2001, p.1), 2001/119/EC (O.J. L 47, 16.2.2001 p.32) and 2001/573/EC (O.J. L 203, 28.7.2001, p.18)

#### Amendment to the 2000 Regulations

<sup>F61</sup>3.

#### **Textual Amendments**

**F61** Sch. 6 para. 3 revoked (7.1.2013) by The Pollution Prevention and Control (Scotland) Regulations2012 (S.S.I. 2012/360), reg. 1(2), **Sch. 12** (with reg. 71)

#### **The Waste Management Licensing Regulations 1994**

4.—(1) the Waste Management Licensing Regulations 1994<sup>M11</sup> are amended as follows.

- (2) In regulation 3 (relevant offences), after sub-paragraph (o) there is inserted-
  - "(p) regulation 19(1) of the Landfill (Scotland) Regulations 2003."
- (3) In regulation 10(1) (registers),

- (a) in sub-paragraph (f) after "(whether or not in relation to a licence)" there is inserted " or regulation 19(1) of the Landfill (Scotland) Regulations 2003 ";
- (b) after subparagraph (o) there is inserted-
  - "(p) all particulars of any conditioning plan or notification as referred to in subparagraph 1(3)(b) or (5)(3)(a) of Schedule 5 to the Landfill (Scotland) Regulations 2003;
  - (q) all particulars of any notice of a decision under paragraph 1(3) of Schedule 5 to the Landfill (Scotland) Regulations 2003;
  - (r) all particulars of any notification or report required before definitive closure of a landfill under regulation 17(4) of the Landfill (Scotland) Regulations 2003.".

#### **Marginal Citations**

M11 S.I. 1994/1056 to which there are amendments which are not relevant.

#### **EXPLANATORY NOTE**

#### (This note is not part of the Regulations)

These Regulations set out a pollution control regime for landfills for the purpose of implementing Council Directive 99/31/EC on the landfill of waste ("the Landfill Directive") in Scotland. Landfills have previously been subject to either the Waste Management Licensing Regulations 1994 or the Pollution Prevention and Control (Scotland) Regulations 2000 ("the 2000 Regulations") (which in turn implemented Council Directive 96/61/EC concerning integrated pollution prevention and control ("the IPPC Directive")).

Part I of the Regulations sets out the preliminary provisions. Regulation 2 provides definitions for the purposes of the Regulations. "Waste" is defined by reference to controlled waste within the meaning of section 75(4) of the Environmental Protection Act 1990 as amended for the purposes of these regulations by paragraph 88 of Schedule 22 to the Environment Act 1995 by S.S.I. []. The effect of this amendment is to import all waste which is set out in the new Schedule 2B to the Environment Act 1995 into the definition of controlled waste. One of the main changes which will be effected by this amendment is to import agricultural waste into the scope of these Regulations. Regulation 3 sets out the scope of the Regulations (subject to the certain exceptions contained in regulation 4). Regulation 5 requires planning authorities to take the location requirements of these Regulations into consideration when granting planning permission.

Regulation 6 sets out the requirements for landfill sites which will be exempt from the provisions of these regulations set out in Schedule 1. Regulation 7 requires SEPA to maintain a list of those landfill sites which are exempt.

Regulation 8 amends the 2000 Regulations so that all landfills covered by these Regulations are Part A installations for the purposes of those Regulations and therefore require a permit under those Regulations. The powers to set conditions in permits under the 2000 Regulations are disapplied for landfills as alternative powers are included in these Regulations.

Part II deals with landfill permits. Regulation 9 requires SEPA to classify landfills as landfills for hazardous waste, non-hazardous waste or inert waste respectively. Regulation 10 sets out the requirements for conditions to be incorporated in landfill permits. These include conditions for ensuring compliance by landfill operators with the relevant requirements of these Regulations

which are set out in remaining regulations in this Part and Schedules 2 (waste acceptance criteria), 3 (general requirements) and 4 (monitoring procedures).

Regulation 11 prohibits the acceptance of certain types of waste at landfills and regulation 12 sets out waste which may be accepted in the different classes of landfill. Regulation 13 deals with the costs of disposal of waste in landfill and provides for the operator of a landfill to ensure that the charges which are made by the operator cover certain defined costs, including aftercare. Regulation 14 lists the waste acceptance procedures which the operator of a landfill site must carry

out including a visual inspection, tests, keeping a register of certain information. It also places an obligation on an operator to inform SEPA in the event waste is not accepted at a landfill. Regulation 15 prevents an operator commencing disposal operations before SEPA has inspected the site to ensure that it complies with the relevant conditions of the landfill permit and regulation 16 lists the control and monitoring procedures which the operator must ensure are carried out from the start of the operational phase until closure.

Regulation 17 provides for closure and after care procedures for landfills which may related to the whole or part of the landfill. Regulation 18 provides for closure notices which may be used by SEPA to initiate closure of landfills.

Part III of these Regulations contains miscellaneous provisions. Regulation 19 creates offences where waste is accepted contrary to the requirements which apply directly to landfill operators under paragraph 3 of Schedule 5. Regulation 20 gives effect to the transitional provisions in Schedule 5 and regulation 21 gives effect to the amendments contained in Schedule 6. Schedule 5 contains transitional provisions for existing landfills. It sets up a procedure for operators of landfills that will remain operational after the relevant date to bring their operations into compliance with the relevant requirements of these Regulations. Sites which cannot comply will be closed, while the remainder will be granted new permits in accordance with these Regulations as soon as possible within a transitional period up to either 31st March 2007 or 16th July 2009 depending on the size of the landfill.

Schedule 6 makes amendments to other legislation. An amendment is made to section 41 of the Environment Act 1995 so as to enable SEPA to make any charges relating to the carrying out of its functions under these Regulations. Amendments are also made to the 2000 Regulations and the Waste Management Licensing Regulations 1994 (which cover those landfills previously not subject to the 2000 Regulations) to deal with the introduction of the requirements of these Regulations. Amendments are also made to the "fit and proper person" test applied by regulation 4 of the 2000 Regulations relating to arrangements an operator has to have in place to ensure the landfill is properly managed and financed.

A regulatory impact assessment has been prepared and copies can be obtained from Miss Fiona Mackay, SEPA Sponsorship and Waste Unit, Waste Regulation Team, 1-J(N) Victoria Quay, Edinburgh, EH6 6QQ.

These Regulations replace the Landfill (Scotland) Regulations 2003 (S.S.I. 2003/208) as those Regulations were a nullity.

## Status:

Point in time view as at 01/01/2024.

### Changes to legislation:

There are currently no known outstanding effects for the The Landfill (Scotland) Regulations 2003.