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;
- (i) 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—

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- (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 M1 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

M1 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).

Waste acceptable at landfills for inert waste

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

(including excavated	17 01 03	Tiles and ceramics	
soil from contaminated	17 02 02	Glass	
sites)	17 05 04	Soil and stones	
20 – Municipal	20 01 02	Glass	Excluding topsoil, peat
wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions	20 02 02	Soil and stones	

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 M2 or a European site within the meaning of regulation 10(1) of the Conservation (Natural Habitats, &c.) Regulations 1994 M3.

Marginal Citations M2 1981 c. 69. M3 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 ≥ 5 metres;
 - (b) in a landfill for non-hazardous waste: $K \le 1.0 \times 10^9$ metre/second: thickness ≥ 1 metre:
 - (c) in a landfill for inert waste: $K \le 1.0 \times 10^7$ metre/second: thickness ≥ 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 collection and bottom sealing

Landfill category	Non-hazardous	Hazardous	
Artificial sealing liner	Required	Required	
Drainage liner ≥ 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 ^{FI}...
 - (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

F1 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.

[F2Temporary 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

F2 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.

TABLE 1

	Operational phase	After-care phase (3)
Leachate volume (²)	Monthly (1), (3)	Every six months
Leachate composition (2) (4)	Quarterly (1)	Every six months
Volume and composition of surface water (5)	Quarterly (1)	Every six months
Potential gas emissions and atmospheric Pressure (⁶) (CH ₄ , CO ₂ , O ₂ , H ₂ S, H ₂ etc)	Monthly (¹), (⁷)	Every six months (8)

Notes to Table 1

- (5) On the basis of the characteristics of the landfill site, SEPA may determine that these measurements are not required.
- (6) These measurements are related mainly to the content of the organic material in the waste.
- $(^{7})$ CH₄, CO₂, O₂ regularly, other gases as required, according to the composition of the waste deposited, with a view to reflecting its leaching properties.
- (8) 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.

⁽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.

⁽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).

⁽⁴⁾ 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.

(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.

TABLE 2

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

Notes to Table 2

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.

⁽⁹⁾ 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.

⁽¹¹⁾ 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.

TABLE 3

	Operating phase	After-care phase
Structure and composition of landfill body (12)	Yearly	
Settling behaviour of the level of the landfill body	Yearly	Yearly reading

Note to Table 3

[F3Specific 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 mg mercury/m³ 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

F3 Sch. 4 para. 7 inserted (1.8.2013) by The Landfill (Scotland) Amendment Regulations 2013 (S.S.I. 2013/222), regs. 1, **2**(7)

⁽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.

Regulation 20

TRANSITIONAL PROVISIONS

Existing landfills: transitional provisions	
F ⁴ 1	
Textual Amendments	
F4 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. — ^{F5} (1)	
(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.	/e
^{F5} (3)	
(4) In any case falling within sub-paragraph (1)(c), where an application for a waste manageme 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	
F5 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)	1
3. — ^{F6} (1)	
F6(2)	
(3) The operator of a landfill which is not classified as a landfill for hazardous waste shall on accept hazardous waste at that landfill on or after the relevant date in the circumstances specific in regulation 12(3)(c) and (4).	
Textual Amendments	
F6 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)	
^{F7} 4	
Textual Amendments	
F7 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)	,

Regulation 21

AMENDMENTS TO OTHER LEGISLATION

Amendment to the Environment Act 1995 M4

- 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 [F8EU] Treaties or any application for such an approval of consent, consideration or determination."

Textual Amendments

F8 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

M4 1995 c. 25.

Amendment to the Environmental Protection (Duty of Care) Regulations 1991 M5

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. M6".

Marginal Citations

M5 S.I. 1991/2839; relevant amendments were made by S.I. 2000/1973.

M6 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

F93	1			

Textual Amendments

F9 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 M7 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

M7 S.I. 1994/1056 to which there are amendments which are not relevant.

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