## 2003 No. 319

# WATER AND SEWERAGE

# The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003

 Made - - - - - 30th June 2003

 Coming into operation
 21st July 2003

The Department of the Environment, in exercise of the powers conferred on it by Article 14 of the Water (Northern Ireland) Order 1999(a) and of every other power enabling it in that behalf, hereby makes the following Regulations:

## Citation and commencement

1. These Regulations may be cited as the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (Northern Ireland) 2003 and shall come into operation on 21st July 2003.

## Interpretation

2.—(1) In these Regulations –

"animal" means any animal or bird bred or on agricultural land for the production of food, wool, skin or fur or for other farming purposes;

"construct" includes install;

"EEA State" means a State which is a Contracting Party to the Agreement on the European Economic Area signed at Oporto on 2nd May 1992, as adjusted by the Protocol signed at Brussels on 17th March 1993;

"farm" means land occupied as a unit for agricultural purposes;

"forage crop" means any crop grown as food for animals;

"fuel oil" means oil intended for use as a fuel for the production of heat or power but does not include oil intended for use exclusively as a fuel for heating a farmhouse or other residential premises on a farm and which is stored separately from other oil;

"reception pit" means a pit used for the collection of slurry before it is transferred into a slurry storage tank or for the collection of slurry discharged from such a tank;

"relevant substance" means -

- (a) slurry:
- (b) any crop which is being made, or has been made, into silage; and
- (c) fuel oil;

"silage" means any forage crop which is being, or has been, conserved by fermentation or preservation (including the use of additives), or both, and which is intended for consumption by animals;

"silage effluent" means -

- (a) effluent produced from any forage crop which is being made, or has been made, into silage; and
- (b) a mixture consisting wholly of or containing such effluent, rain or water coming from a silo, silage effluent collection system or drain;

"silo" means any structure used for making or storing silage;

"slurry" means -

- (a) excreta including any liquid fraction, produced by animals whilst in a yard or building;
- (b) a mixture containing such excreta; or
- (c) rainwater, seepage or washings containing or consisting of such excreta from a building or yard used by animals or from any structure in which dung or slurry is stored

of a consistency that allows it to be pumped or discharged by gravity at any stage in the handling process;

"slurry storage system" means –

- (a) a slurry storage tank;
- (b) any reception pit and any effluent tank used in connection with the slurry storage tank; and
- (c) any channels and pipes used in connection with the slurry storage tank, any reception pit or any effluent tank;

"slurry storage tank" includes a lagoon, pit (other than a reception pit) or tower used for the storage of slurry.

- (2) In these Regulations, any requirement for a silo, slurry storage system, fuel storage tank or any other product to comply with a specified standard shall be satisfied by compliance with:
  - (a) a relevant standard or code of practice of a national standards body or equivalent body of any EEA State; or
  - (b) any relevant international standard recognised for use as a standard by any EEA State; or
  - (c) a technical specification or code of practice which, whether mandatory or not, is recognised for use as a standard by a public authority of any EEA State

in so far as the standard, code of practice, international standard or technical specification in question enables the pollution prevention objectives pursued by the present Regulations to be met in an equivalent manner.

## Making and storage of silage

- **3.**—(1) Subject to regulation 7, a person shall not have custody or control of any crop which is being made into silage or of any silage which is being stored unless
  - (a) it is kept in a silo in relation to which the requirements of Schedule 1 are satisfied or which is an exempt structure by virtue of regulation 6; or
  - (b) it is compressed in the form of bales which are wrapped and sealed within impermeable membranes (or are enclosed in impermeable bags) and are stored at least 10 metres from any waterway.
- (2) A person having custody or control of any crop which is being or has been made into silage in the manner described in paragraph (1)(b) shall not open or remove the wrapping of any bales within 10 metres of any waterway.

#### Storage of slurry

- **4.**—(1) Subject to paragraph (2), a person having custody or control of slurry shall store it in a slurry storage system in relation to which the requirements of Schedule 2 are satisfied or which is an exempt structure by virtue of regulation 6.
- (2) Paragraph (1) shall not apply to slurry while it is stored temporarily in a tanker with a capacity not exceeding 18,000 litres which is used for transporting slurry on roads or about a farm.

## Storage of agricultural fuel oil on farms

- **5.**—(1) Subject to paragraph (2), a person shall not have custody or control of fuel oil on a farm unless it is stored
  - (a) in a fuel storage tank within a storage area in relation to which the requirements of Schedule 3 are satisfied;
  - (b) in drums within such a storage area;
  - (c) temporarily in a tanker used for transporting fuel oil on roads or about the farm; or
  - (d) in a fuel storage tank which is an exempt structure by virtue of regulation 6; or
  - (e) in an underground fuel storage tank.
- (2) Paragraph (1) shall not apply if the total quantity of fuel stored on the farm does not exceed 1,250 litres.

#### **Exemptions**

- $\mathbf{6.}\;\;\mathrm{A\;silo},\;\mathrm{slurry\;storage\;system}$  or fuel storage tank is for the time being an exempt structure if -
  - (a) it was used before 21st July 2003 for the purpose of making silage, storing slurry or, as the case may be, storing fuel oil;
  - (b) where it was not used before 21st July 2003 for that purpose, it was constructed before that date for such use; or
  - (c) a contract for its construction was entered into before 21st July 2003 or its construction was commenced before that date and in either case was completed before 1st December 2003

and it has not ceased to be an exempt structure by virtue of regulation 8(1).

- 7.—(1) Subject to paragraph (2), regulation 3 shall not apply where a person makes bulk bagged silage on a farm in bags which
  - (a) are made of 1000 gauge polyethylene or material of at least equivalent impermeability and durability;
  - (b) are kept sealed to prevent the escape of silage effluent; and
  - (c) incorporate a facility designed to enable the safe removal of excess effluent when present.
- (2) A person shall not be entitled to rely on the exemption conferred by paragraph (1) unless that person stores any bags in which silage is being made or stored at a place at least 10 metres from any waterway.
- (3) A person having custody or control of any crop which has been made into silage in the manner described in paragraph (1) shall not open or empty any bag in which silage has been made within 10 metres of any waterway.

## Loss of exemption

- **8.**—(1) A structure to which the circumstances set out at regulation 6(a) apply shall cease to be an exempt structure if
  - (a) any requirement of a notice under regulation 9(1) is not complied with within the period stated in the notice; or

- (b) it is substantially enlarged; or
- (c) it is substantially reconstructed, unless, in the opinion of the Department, the risks of pollution will be reduced by such works.
- (2) Any reference in paragraph (1) to the period stated in a notice is to that period as extended if it has been extended under regulation 9(5) and any reference in that paragraph to a requirement of a notice is to that requirement as modified if it has been modified under regulation 9(5).

#### Notice requiring works etc.

- **9.**—(1) The Department may serve notice on any person, who has custody or control of any relevant substance in circumstances in which these Regulations apply, requiring that person to carry out such works, take such precautions or take such other steps as are specified in the notice and which, in the opinion of the Department, are appropriate, having regard to any requirements of these Regulations in relation to that substance, for reducing to a minimum any significant risk of pollution of water in a waterway or underground strata arising from the custody or control of that substance.
- (2) The notice shall specify or describe the works, precautions or other steps which the person is required to carry out or take, state the period within which any such requirement is to be complied with and inform him of the effect in relation to the notice of regulation 10.
- (3) Any period for compliance stated in the notice shall be such period as the Department may consider reasonable in the circumstances, but no period shall end earlier than on the expiry of the period of 28 days beginning on the day on which the notice is served.
- (4) The works, precautions or other steps as may be specified or described in the notice may include the requirement to establish and implement any measures or procedures contained in the Code of Good Agricultural Practice for the Prevention of Pollution of Water and published by the Department of Agriculture and Rural Development.
  - (5) The Department may at any time –
  - (a) withdraw the notice;
  - (b) extend the period for compliance with any requirement of the notice;
  - (c) with the consent of the person on whom the notice is served, modify the requirements of the notice.

#### Appeals against notices

**10.** A person may appeal by notice in writing to the Water Appeals Commission against any decision by the Department under regulation 9 within 28 days from the date on which notice of the decision of the Department is given to him.

#### **Notification requirements**

11. A person who proposes to have custody or control of any relevant substance which is to be kept or stored on a farm in a silo, slurry storage system or, as the case may be, fuel storage area constructed, substantially enlarged or substantially reconstructed on or after 21st July 2003 shall serve notice on the Department specifying the type of structure to be used and its location at least 28 days before it is to be used for such purpose.

#### **Offences**

- **12.** A person who contravenes regulation 3(1), 3(2), 4(1), 5(1), 7(3) or 11 shall be guilty of an offence and liable
  - (a) on summary conviction, to imprisonment for a term not exceeding three months or to a fine not exceeding £20,000 or to both;
  - (b) on conviction on indictment, to imprisonment for a term not exceeding two years or to a fine or to both.

Sealed with the Official Seal of the Department of the Environment on 30th June 2003.

(L.S.) Felix Dillon

A senior officer of the Department of the Environment

## SCHEDULE 1

#### Regulation 3(1)(a)

#### REQUIREMENTS FOR SILOS

- 1. The requirements which have to be satisfied in relation to a silo are that –
- (a) it complies with the following provisions; or
- (b) it is designed and constructed in accordance with the standard on cylindrical forage tower silos published by the British Standards Institution and numbered BS 5061: 1974.
- 2. The base of the silo shall, where the silo has retaining walls made other than of earth, extend beyond those walls and shall in all cases be provided with channels so constructed as to collect any silage effluent which may escape from the silo and adequate provision shall be made for the drainage of that effluent from the channels to an effluent tank through a channel or pipe.
  - 3.—(1) Subject to sub-paragraph (2), the capacity of the effluent tank –
  - (a) in the case of a silo with a capacity of less than 1500 cubic metres, shall be not less than 3 cubic metres for each 150 cubic metres or part thereof of silo capacity;
  - (b) in the case of a silo with a capacity of 1500 cubic metres or more, shall be not less than 30 cubic metres plus 1 cubic metre for each 150 cubic metres or part thereof of silo capacity in excess of 1500 cubic metres.
- (2) The effluent collection system associated with silos may, with the agreement of the Department, incorporate a system of pumps and sumps, together with detailed sizing, pumping and management requirements, designed to reduce the capacity of the effluent tank.
- 4. The base of the silo, the base and walls of its effluent tank and channels and the walls of any pipes shall be impermeable.
- 5. The base and any walls of the silo, its effluent tank and channels and the walls of any pipes shall, so far as reasonably practicable, be resistant to attack by silage effluent and, where the walls are made of earth, they shall be lined with an impermeable membrane.
- 6. No part of the silo, its effluent tank or channels or any associated pipes shall be situated within 10 metres of any waterway.
  - 7. If the silo has retaining walls –
  - (a) the retaining walls shall be capable of withstanding minimum wall loadings calculated on the assumptions and in the manner indicated by paragraph 15.6.1 to 15.6.3 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502: Part 22: 1993;
  - (b) the silo shall at no time be loaded to a depth exceeding the maximum depth consistent with the design assumption made in respect of the loadings of the retaining walls; and
  - (c) notices shall be displayed on the retaining walls in accordance with paragraph 9 of the Code of Practice referred to in sub-paragraph (a).
- 8. Subject to paragraph 9, the silo, its effluent tank and channels and any pipes shall be designed and constructed so that with proper maintenance they are likely to satisfy the requirements of paragraphs 2 to 5 and, if applicable, 7(a) for a period of at least 20 years.
- 9. Where any part of an effluent tank is installed below ground level, it shall be designed and constructed in accordance with the Code of Practice referred to in paragraph 7(a) so that with proper maintenance it is likely to satisfy the requirements of paragraphs 4 and 5 for a period of at least 20 years.

#### SCHEDULE 2

Regulation 4(1)

## REQUIREMENTS FOR SLURRY STORAGE SYSTEMS

- 1. The requirements which have to be satisfied in relation to a slurry storage system are as follows.
- 2. The base of the slurry storage tank, the base and walls of any effluent tank, channels and reception pit and the walls of any pipes shall be impermeable.

- 3. The base and walls of the slurry storage tank, any effluent tank, channels and reception pit and the walls of any pipes shall be protected against corrosion in accordance with paragraph 7.2 of the Code of Practice on Buildings and Structures for Agriculture published by the British Standards Institution and numbered BS 5502: Part 50: 1993.
- 4. The base and walls of the slurry storage tank and any reception pit shall be capable of withstanding characteristic loads calculated on the assumptions and in the manner indicated by paragraph 5 of that Code of Practice.
- 5.—(1) Any facilities used for the temporary storage of slurry before it is transferred to a slurry storage tank shall have adequate capacity to store the maximum quantity of slurry which (disregarding any slurry which will be transferred directly into a slurry storage tank) is likely to be produced on the premises in any two day period or such smaller capacity as the Department may agree in writing is adequate to avoid any significant risk of pollution of a waterway.
- (2) Where slurry flows into a channel before discharging into a reception pit and the flow of slurry out of the channel is controlled by means of a sluice, the capacity of the reception pit shall be adequate to store the maximum quantity of slurry which can be released by opening the sluice.
- 6.—(1) Subject to sub-paragraph (2), the slurry storage tank shall have adequate storage capacity for the likely quantities of slurry produced from time to time on the premises in question having regard to
  - (a) the proposed method of disposal of the slurry (including the likely rates and times of disposal);
  - (b) the matters mentioned in sub-paragraph (3).
- (2) Where it is proposed to dispose of the slurry on the premises by spreading it on the land, nothing in sub-paragraph (1) shall require the tank to have a greater storage capacity than is adequate, having regard to the matters mentioned in sub-paragraph (3) to store the maximum quantity of slurry which is likely to be produced in any continuous four month period.
  - (3) The matters to which regard is to be had under sub-paragraphs (1) and (2) are –
  - (a) the storage capacity of any other slurry storage tank on the premises in question;
  - (b) where moist soil conditions dictate that slurry should not be disposed of by means of spreading on land as it could not be fully absorbed;
  - (c) the likely quantities of rainfall (including any fall of snow, hail or sleet) which may fall or drain into the slurry storage tank during the likely maximum storage period;
  - (d) the need to make provision for not less than 750 millimetres of freeboard in the case of a tank with walls made of earth and 300 millimetres of freeboard in all other cases; and
  - (e) soil quality in the vicinity of the slurry storage tank.
- 7. No part of the slurry storage tank or any effluent tank, channels or reception pit shall be situated within 10 metres of any waterway.
- 8. The slurry storage tank and any effluent tank, channels, pipes and reception pit shall be designed and constructed so that with proper maintenance they are likely to satisfy the requirements of paragraphs 2 to 4 for a period of at least 20 years.
- 9. Where the walls of the slurry storage tank are not impermeable, the base of the tank shall extend beyond its walls and shall be provided with channels designed and constructed so as to collect any slurry which may escape from the tank and adequate provision shall be made for the drainage of the slurry from the channels to an effluent tank through a channel or pipe.
- 10.—(1) Subject to sub-paragraph (2), where the slurry storage tank, any effluent tank or reception pit is fitted with a drainage pipe, there shall be two valves in series on the pipe and each valve shall be capable of stopping the flow of slurry through the pipe and shall be kept shut and locked in that position when not in use.
- (2) Sub-paragraph (1) does not apply in relation to a slurry storage tank which drains through the pipe into another slurry storage tank of equal or greater capacity or where the tops of the tanks are at the same level.
- 11. In the case of a slurry storage tank with walls which are made of earth, the tank shall not be filled to a level which allows less than 750 millimetres of freeboard, and in all other cases the tank shall not be filled to a level which allows less than 300 millimetres of freeboard.

## SCHEDULE 3

Regulation 5(1)

## REQUIREMENTS FOR FUEL OIL STORAGE AREAS

- 1. The requirements which have to be satisfied in relation to a fuel oil storage area are as follows.
- 2. The fuel oil storage area shall be surrounded by a bund capable of retaining within the area –
- (a) in a case where all the fuel oil within the storage area is contained in one fuel storage tank, a volume of fuel oil not less than 110 per cent of the capacity of the tank;
- (b) in a case where all the fuel oil within the storage area is contained in more than one fuel storage tank, a volume of fuel oil not less than whichever is the greater of
  - (i) 110 per cent of the capacity of the largest tank within the storage area; and
  - (ii) 25 per cent of the total volume of such oil which could be stored in tanks within the area;
- (c) in any other case, a volume of fuel oil not less than whichever is the greater of
  - (i) 110 per cent of the capacity of the largest container within the storage area; and
  - (ii) 25 per cent of the total volume of such oil at any time stored within the area.
- 3. The bund and the base of the storage area shall be impermeable and shall be designed and constructed so that with proper maintenance they are likely to remain so for a period of at least 20 years.
  - 4. Every part of any fuel storage tank shall be within the bund.
- 5. Any tap or valve permanently fixed to the tank through which fuel oil can be discharged to the open shall also be within the bund, shall be so arranged as to discharge vertically downwards and shall be shut and locked in that position when not in use.
- 6. Where fuel from the tank is discharged through a flexible pipe which is permanently attached to the tank -
  - (a) it shall be fitted with a tap or valve at its end which closes automatically when not in use; and
  - (b) it shall be kept locked in a way which ensures that it is kept within the bund when not in use.
- 7. No part of the fuel oil storage area or the bund enclosing it shall be situated within 10 metres of any waterway.

#### **EXPLANATORY NOTE**

(This note is not part of the Regulations.)

These Regulations require persons with custody or control of a crop being made into silage, livestock slurry or certain fuel oil to carry out works and take precautions or other steps for preventing pollution of waterways for the purposes of Part II of the Water (Northern Ireland) Order 1999.

The Regulations provide exemptions from their requirements and for loss of exemptions in certain circumstances. They also confer a right of appeal to the Water Appeals Commission for Northern Ireland and provide that contravention of certain regulations is a criminal offence.

The Regulations have been notified to the European Commission and the other Member States in accordance with Directive 98/34/EC of the European Parliament and of the Council (O.J. No. L204, 21.7.98, p. 37) as amended by Directive 98/48/EC of the European Parliament and of the Council (O.J. No. L217, 5.8.98, p. 18).

Copies of the Code of Good Agricultural Practice for the Prevention of Pollution of Water, referred to in the Regulations, may be obtained from the Department of Agriculture and Rural Development by the following means:

By post from: Countryside Management Division, DARD, Annexe D, Dundonald

House, Upper Newtownards Road, BELFAST BT4 3SB

Website: www.dardni.gov.uk

Copies of the documents published by the British Standards Institute, referred to in the Regulations, may be obtained on request from any of the sales outlets of the British Standards Institute by the following means:

By post from: Customer Services, British Standards Institute, 389 Chiswick High

Road, LONDON W4 4AL

By telephone: 020 8996 9000 / Fax: 020 8996 7001

By Email: info@bsi-global.com

Website: www.bsi-global.com – please note that copies of the documents are

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