

**2010 No. 639**

**WATER, ENGLAND**

**The Water Resources (Control of Pollution) (Silage, Slurry and  
Agricultural Fuel Oil) (England) Regulations 2010**

<i>Made</i>	- - - -	<i>4th March 2010</i>
<i>Laid before Parliament</i>		<i>10th March 2010</i>
<i>Coming into force</i>	- -	<i>6th April 2010</i>

The Secretary of State makes the following Regulations in exercise of the powers conferred by sections 92 and 219(2)(d) to (f) of the Water Resources Act 1991(a).

**Citation, commencement and application**

1. These Regulations—

- (a) may be cited as the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010;
- (b) apply to England only; and
- (c) come into force on 6th April 2010.

**Interpretation**

2.—(1) In these Regulations—

“construct” includes install;

“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 stored separately from other oil;

“livestock” means—

- (a) animals kept for the production of food or wool, or
- (b) birds kept for the production of food;

“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;

“silage” includes a crop being made into silage;

“silage effluent” means effluent from silage or a crop being made into silage;

“silo” means a structure used for making or storing silage;

“slurry” means liquid or semi-liquid matter composed of—

- (a) excreta produced by livestock while in a yard or building (including that held in wood chip corrals); or
- (b) a mixture wholly or mainly consisting of livestock excreta, livestock bedding, rainwater and washings from a building or yard used by livestock,

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

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

(2) A reference in these Regulations to a slurry storage system includes a slurry storage tank and—

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

(3) A requirement in these Regulations for a silo or slurry storage tank to conform to a British Standard (in whole or in part) is satisfied if the silo or tank conforms to a standard or specification that provides an equivalent level of protection and performance and is recognised for use in a member State, Iceland, Liechtenstein, Norway or Turkey.

### **Making or storage of silage**

3.—(1) Subject to paragraph (3), a person who has custody or control of silage that is being made or stored must ensure that—

- (a) the silage is kept in a silo that satisfies the requirements of Schedule 1; or
- (b) subject to paragraph (4), the silage is compressed into bales that—
  - (i) are wrapped and sealed into impermeable membranes, or enclosed in impermeable bags; and
  - (ii) are stored at least 10 metres from any inland freshwaters or coastal waters that effluent escaping from the bales could enter; or
- (c) if the silage is a crop being made into field silage (that is, silage made on open land by a method different from the baling method referred to in paragraph (b)) or silage that is being stored on open land—
  - (i) the Agency is given notice of the place where the silage is to be made or stored at least 14 days before the place is first used for that purpose; and
  - (ii) the place is at least 10 metres from any inland freshwaters or coastal waters, and at least 50 metres from the nearest relevant abstraction point of any protected water supply source that silage effluent could enter if it escaped.

(2) For paragraph (1)(c)(ii), a water supply source is a protected water supply source if—

- (a) any relevant water abstraction from the source is licensed under Part II of the Water Resources Act 1991; or
- (b) the person making or storing the silage was aware of the source’s location—
  - (i) before the making of the silage began; or
  - (ii) if the silage was made elsewhere, before it was stored on the land in question.

(3) Paragraph (1) does not apply to silage while it is stored temporarily in a container, trailer or vehicle in connection with its transport about the farm or elsewhere.

(4) A person who has custody or control of any crop which is being, or has been, made into silage in the manner described in paragraph (1)(b) must not open or remove the wrapping of a bale within 10 metres of any inland freshwaters or coastal waters which silage effluent could enter as a result.

(5) In this regulation—

- (a) “relevant water abstraction” means the abstraction of water for use for—

- (i) human consumption, or
  - (ii) domestic purposes (within the meaning given by section 218 of the Water Industry Act 1991(a)) other than human consumption, or
  - (iii) manufacturing food or drink for human consumption; and
- (b) “water supply source” means inland freshwaters or ground waters from which a relevant abstraction is made or licensed to be made.

### **Storage of slurry**

4.—(1) Subject to paragraph (2), a person having custody or control of slurry must store it only in a slurry storage system that satisfies the requirements of Schedule 2.

(2) Paragraph (1) does not apply to slurry while it is stored temporarily in a tanker that is used for transporting slurry on roads or about a farm.

### **Storage of fuel oil on farms**

5.—(1) Subject to paragraph (2), a person who has custody or control of fuel oil on a farm must ensure that it is stored—

- (a) in a fuel storage tank within a storage area or facility that satisfies the requirements of Schedule 3;
- (b) in drums within such a storage area; or
- (c) in an underground fuel storage tank.

(2) Paragraph (1) does not apply—

- (a) to the temporary storage of fuel oil in a tanker used for transporting fuel oil on roads or about a farm; or
- (b) where the total quantity of fuel oil stored on the farm does not exceed 1,500 litres.

### **Exemptions**

6.—(1) Subject to paragraph (2), these Regulations do not apply to a silo, slurry storage system or fuel storage tank—

- (a) which, before 1st March 1991, was being used for the purpose of making silage, storing slurry or, as the case may be, storing fuel oil;
- (b) where it was not used before 1st March 1991 for that purpose, it was constructed before that date for such use; or
- (c) in relation to which—
  - (i) a contract for its construction, substantial enlargement or substantial reconstruction was entered into before 1st March 1991, or
  - (ii) such work was commenced before that date, and
 and in either case the work was completed before 1st September 1991.

(2) These Regulations apply to a silo, slurry storage system or fuel storage tank meeting the requirements of paragraph (1) if any requirement of a notice under regulation 7 is not complied with within the period stated in the notice.

(3) Any reference in paragraph (2) to the period stated in a notice is to that period as extended if it has been extended under regulation 7(5)(b) or by virtue of regulation 8(6) and any reference in those paragraphs to a requirement of a notice is to that requirement as modified if it has been modified under regulation 7(5).

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(a) 1991 c.56.

### **Notice requiring works etc.**

7.—(1) The Agency may serve, on a person who has custody or control of silage, slurry or fuel oil or is responsible for the silo, slurry storage system or fuel oil storage tank, in circumstances in which these Regulations apply, a notice (“regulation 7 notice”) requiring the person to carry out works, or take precautions or other steps, specified in the notice.

(2) The works, precautions or other steps must be, in the opinion of the Agency, appropriate, having regard to the requirements of these Regulations, for reducing to a minimum any significant risk of pollution of controlled waters.

(3) The notice must—

- (a) specify or describe the works, precautions or other steps that the person is required to carry out or take;
- (b) state the period within which any such requirement is to be complied with; and
- (c) inform the person of the effect of regulation 8.

(4) The period for compliance stated in the notice is—

- (a) 28 days; or
- (b) such longer period as is reasonable in the circumstances.

(5) The Agency may at any time (including a time after the period for compliance has ended)—

- (a) withdraw the notice;
- (b) extend the period for compliance with any requirement of the notice; or
- (c) with the consent of the person on whom the notice is served, modify the requirements of the notice.

(6) The Agency must withdraw the notice, extend the period for compliance, or modify the requirements of the notice if so directed by the Secretary of State under regulation 8(5).

### **Appeals against regulation 7 notices**

8.—(1) A person served with a regulation 7 notice may, within the period of 28 days beginning on the day after the date on which the notice is served (or such longer period as the Secretary of State allows), appeal to the Secretary of State against the notice.

(2) An appeal under this regulation must be made by the appellant serving notice on the Secretary of State.

(3) The notice must contain or be accompanied by a statement of the grounds of appeal.

(4) Before determining an appeal under this regulation, the Secretary of State must, if requested to do so by the appellant or the Agency, afford them an opportunity of appearing before and being heard by a person appointed by the Secretary of State for the purpose.

(5) On determining an appeal under this regulation, the Secretary of State may direct the Agency to—

- (a) withdraw the regulation 7 notice;
- (b) modify any of its requirements;
- (c) extend the period for compliance with any requirement; or
- (d) dismiss the appeal.

(6) The period for compliance with a regulation 7 notice against which an appeal has been made is, subject to any direction under paragraph (5), extended so that it expires on the date on which the Secretary of State finally determines the appeal or, if the appeal is withdrawn, the date on which it is withdrawn.

### Notice of construction etc

9. A person who proposes to have custody or control of silage, slurry or fuel oil that is to be kept or stored on a farm in a silo, slurry storage system or fuel storage area constructed, substantially enlarged or substantially reconstructed on or after the date these Regulations come into force must give the Agency notice specifying the type of structure to be used and its location at least 14 days before the structure is to be used for such keeping or storage.

### Offences and penalties

10.—(1) A person who contravenes regulation 3(1) or (4), 4(1), 5(1) or 7(1) of these Regulations is guilty of an offence and liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum;
- (b) on conviction on indictment, to a fine.

(2) A person who contravenes regulation 9 is guilty of an offence and liable on summary conviction to a fine not exceeding level 2 on the standard scale.

### Revocations

11. The following statutory instruments are revoked in so far as they relate to England—

- (a) The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991(a);
- (b) The Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Amendment) Regulations 1997(b).

4th March 2010

*Huw Irranca-Davies*  
Parliamentary Under Secretary of State  
Department for Environment, Food and Rural Affairs

## SCHEDULE 1

Regulation 3(1)(a)

### REQUIREMENTS FOR SILOS

1. The requirement to be satisfied in relation to a silo is that it complies with the following provisions of this Schedule.

2. The base of the silo must—

- (a) extend beyond any walls of the silo;
- (b) be provided at its perimeter with channels designed and constructed so as to collect any silage effluent that escapes from the silo; and
- (c) have adequate provision for the drainage of that effluent from those channels to an effluent tank through a channel or pipe.

3. The capacity of the effluent tank must not be less than—

- (a) in the case of a silo with a capacity of less than 1,500 cubic metres, 20 litres for each cubic metre of silo capacity; and

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(a) S.I. 1991/324.

(b) S.I. 1997/547.

- (b) in the case of a silo with a capacity of 1,500 cubic metres or more, 30 cubic metres plus 6.7 litres for each cubic metre of silo capacity in excess of 1,500 cubic metres.

4.—(1) The base of the silo must be —

- (a) designed in accordance with the code of practice for design of concrete structures for retaining aqueous liquids published by the British Standards Institution and numbered BS 8007: 1987(a); or
- (b) constructed using appropriate hot-rolled asphalt in accordance with the code of practice for selection and use of construction materials published by the British Standards Institution and numbered BS 5502:Part 21: 1990(b).

(2) The base of the silo, the base and walls of its effluent tank and channels and walls of any pipes must be impermeable.

5. The base and walls of the silo, its effluent tank and channels and the walls of any pipes must, so far as reasonably practicable, be resistant to attack by silage effluent.

6. No part of the silo, its effluent tank or channels or any pipes may be situated within 10 metres of any inland freshwaters or coastal waters into which silage effluent could enter if it were to escape.

7. If the silo has retaining walls—

- (a) the retaining walls must be capable of withstanding minimum wall loadings calculated on the assumptions and in the manner indicated by paragraphs 15.6 of the code of practice on buildings and structures for agriculture published by the British Standards Institution and numbered BS 5502: Part 22: 2003(c);
- (b) the silo must 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 must be displayed on the retaining walls in accordance with paragraph 18 of that code of practice.

8. Subject to paragraph 9, the silo, its effluent tank and channels and any pipes must be designed and constructed so that with proper maintenance they are likely to continue to satisfy the requirements of paragraphs 2 to 5 and, if applicable, paragraph 7(a) for at least 20 years.

9. If any part of an effluent tank is below ground level, the tank must be designed and constructed so that it is likely to continue to satisfy the requirements of paragraphs 4 and 5 for at least 20 years without maintenance.

## SCHEDULE 2

Regulation 4

### REQUIREMENTS FOR SLURRY STORAGE SYSTEMS

1. The requirements 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, must 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, must be protected against corrosion in accordance with paragraph 7 of the code of practice on buildings and structures for agriculture published by the British Standards Institution and numbered BS 5502: Part 50: 1993(d).

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(a) Publication date: 30th October 1987. ISBN 0-580-16134-X.

(b) Publication date: 31st December 1990. ISBN 0-580-18348-3.

(c) Publication date: 10th June 2003. ISBN 0-580-38654-6.

(d) Publication date: 15th April 1993. ISBN 0-580-22053-2.

**4.** The base and walls of the slurry storage tank and of any reception pit must be capable of withstanding characteristic loads calculated on the assumptions and in the manner indicated by paragraph 5 of the code of practice on buildings and structures for agriculture published by the British Standards Institution and numbered BS 5502: Part 50: 1993.

**5.—(1)** Any facilities used for the temporary storage of slurry before it is transferred to a slurry storage tank must have adequate capacity to store—

- (a) the maximum quantity of slurry that (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
- (b) a lesser capacity that the Agency agrees in writing is adequate to avoid any significant risk of pollution of controlled waters.

(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 must be adequate to hold the maximum quantity of slurry that can be released by opening the sluice.

**6.—(1)** Subject to sub-paragraph (2), the slurry storage tank must have adequate storage capacity for the likely quantities of slurry produced from time to time on the premises in question, taking into account—

- (a) the proposed method of utilising the slurry, and the likely rates and times of utilisation; and
- (b) the matters mentioned in sub-paragraph (3).

(2) If it is proposed to utilise the slurry on the premises by spreading it on the land, the tank need not have a greater storage capacity than is adequate, taking into account the matters mentioned in sub-paragraph (3), to hold the maximum quantity of slurry likely to be produced in any four month period.

(3) The matters to be taken into account for sub-paragraphs (1) and (2) are—

- (a) the storage capacity of any other slurry storage tank on the premises;
- (b) the likely quantities of rainfall (including snow, hail or sleet) that may fall or drain into the slurry storage tank during the likely maximum storage period; and
- (c) the need to provide at least 750 millimetres of freeboard in the case of a tank with walls made of earth and 300 millimetres of freeboard in all other cases.

**7.** No part of the slurry storage tank or any effluent tank, channels or reception pit may be situated within 10 metres of any inland freshwaters or coastal waters into which slurry could enter if it were to escape unless precautions are taken that the Agency agrees in writing are adequate to avoid any significant risk of pollution of controlled waters.

**8.** The slurry storage tank and any effluent tank, channels, pipes and reception pit must be designed and constructed so that with proper maintenance they are likely to continue to satisfy the requirements of paragraphs 2 to 4 for at least 20 years.

**9.** If the walls of the slurry storage tank are not impermeable, the base of the tank must—

- (a) extend beyond the walls;
- (b) be provided with channels designed and constructed so as to collect any slurry that escapes from the tank;
- (c) have adequate provision for the drainage of the slurry from those channels to an effluent tank through a channel or pipe.

**10.—(1)** Subject to sub-paragraph (3), if the slurry storage tank or any effluent tank or reception pit is fitted with a drainage pipe there must be two valves in series on the pipe with each valve separated from the other by a minimum distance of 1 metre.

(2) Each valve must be capable of shutting off the flow of slurry through the pipe and must be kept shut and locked in that position when not in use.

(3) Sub-paragraph (1) does not apply in relation to a slurry storage tank that drains through the pipe into another slurry storage tank if the other tank is of equal or greater capacity or if the tops of the tanks are at the same level.

**11.** In the case of a slurry storage tank with walls made of earth the tank must not be filled to a level that allows less than 750 millimetres of freeboard.

## SCHEDULE 3

Regulation 5(1)

### REQUIREMENTS FOR FUEL OIL STORAGE AREAS

- 1.** The requirements to be satisfied in relation to a fuel oil storage area are as follows.
- 2.** The storage area must be surrounded by a bund capable of retaining within the area—
  - (a) if there is only one fuel storage tank within the area and fuel oil is not otherwise stored there, a volume of fuel oil not less than 110 per cent of the capacity of the tank;
  - (b) if there is more than one fuel storage tank within the area and fuel oil is not otherwise stored there, a volume of fuel oil not less than the greater of—
    - (i) 110 per cent of the capacity of the largest tank within the area; or
    - (ii) 25 per cent of the total volume of such oil which could be stored in the tanks within the area;
  - (c) if there is no fuel storage tank within the area, a volume of fuel oil not less than 25 per cent of the total of such oil at any time stored within the area;
  - (d) in any other case, a volume of fuel oil not less than the greater of—
    - (i) 110 per cent of the capacity of the fuel storage tank or, as the case may be, of the largest tank within the area;
    - (ii) if there is more than one fuel storage tank within the area, 25 per cent of the total volume of such oil that could be stored in the tanks within the area; or
    - (iii) 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 area must be—
  - (a) impermeable to water and oil; and
  - (b) designed and constructed so that they are of sufficient strength and structural integrity so that with proper maintenance they are likely to remain so for at least 20 years.
- 4.** Every part of any fuel storage tank must be within the bund.
- 5.** Any tap or valve permanently fixed to the fuel storage tank through which fuel oil can be discharged to the open must—
  - (a) also be within the bund;
  - (b) be so arranged as to discharge vertically downwards; and
  - (c) be shut and locked in that position when not in use.
- 6.** If fuel from the tank is delivered through a flexible pipe that is permanently attached to the tank, the pipe must be—
  - (a) fitted with a tap or valve at its end that closes automatically when not in use; and
  - (b) locked in a way that ensures that it is kept within the bund when not in use.
- 7.** No part of the fuel storage area or the bund enclosing it may be situated within 10 metres of any inland freshwaters or coastal waters that fuel oil could enter if it were to escape.

## EXPLANATORY NOTE

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

The Regulations revoke and replace the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (S.I. 1991/324) (as amended) in so far as they relate to England.

The Regulations have been notified to the European Commission in accordance with the European Parliament and Council Directive 98/34/EC laying down a procedure for the provision of information in the field of technical standards and regulations (OJ No L 204, 21.7.98, p37), as amended.

Regulation 3 requires any person who has custody or control of silage that is being made or stored to keep such silage in silos that meet the requirements of Schedule 1 and to take precautions and other steps for preventing pollution of waters.

Regulations 4 and 5 require any person who has custody or control of slurry or fuel oil to store such slurry or fuel oil in a slurry storage system or fuel storage tank that meets the requirements of Schedules 2 or 3.

Regulation 6 provides exemptions from the requirements of the Regulations for silo, slurry storage systems and fuel storage tanks.

Regulations 7 and 8 allow the Environment Agency to serve a notice requiring the carrying out of works or precautions to be taken for reducing the risk of pollution to controlled waters and provide an appeal process against such notices.

Regulation 9 requires the Environment Agency to be notified of certain works to a silo, slurry storage system or fuel storage area.

Regulation 10 provides that contravention of certain regulations is a criminal offence.

The Regulations update the standards applicable to the design and construction of silos and slurry storage systems.

Copies of the documents published by the British Standards Institution referred to in the Regulations may be obtained from any of the sales outlets of the British Standards Institution, by post from the British Standards Institution, Customer Services, 389 Chiswick High Road, London, W4 4AL, by telephone on 020 8996 9001, or by email to [orders@bsi-global.com](mailto:orders@bsi-global.com).

A full impact assessment has not been produced for this instrument as no impact on the private and voluntary sectors is foreseen.

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STATUTORY INSTRUMENTS

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**2010 No. 639**

**WATER, ENGLAND**

The Water Resources (Control of Pollution) (Silage, Slurry and  
Agricultural Fuel Oil) (England) Regulations 2010

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