#### 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
    - (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(1); 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(2).
- (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(3);
    - (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.

1

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<sup>(2)</sup> Publication date: 31st December 1990. ISBN 0-580-18348-3.

<sup>(3)</sup> Publication date: 10th June 2003. ISBN 0-580-38654-6.

**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(4).
- **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

<sup>(4)</sup> Publication date: 15th April 1993. ISBN 0-580-22053-2.

- (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.

Changes to legislation:
There are currently no known outstanding effects for the The Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010.