

Order on Commercial Livestock, Livestock Manure, Silage, etc.¹⁾ (the Livestock Manure Order)

The following is laid down pursuant to sections 7, 7a, 13, 16, 19, subsection 5, sections 67, 73, 80, 90, 92, and 110, subsection 3 of the Environmental Protection Act, cf. Consolidated Act No. 879 of 26 June 2010 as amended by Act No. 484 of 11 May 2010 and Act No. 446 of 23 May 2012, and section 5, subsections 2 and 3, section 6, subsection 3, sections 63, 78, and 92 of the Act on Livestock Farming Environmental Approvals, cf. Consolidated Act No. 1486 of 4 December 2009 as amended by Act No. 484 of 11 May 2010, Act No. 553 of 1 June 2011 and Act No. 446 of 23 May 2012:

Chapter 1

Scope of the Order

Section 1. The rules in this Order apply to commercial livestock, including the production, storage and use of livestock manure.

Subsection 2. The rules also apply to property without commercial livestock if the property's usage or storage of livestock manure is equivalent to that of the production from a commercial livestock farm.

Subsection 3. The rules relating to degassed plant biomass, mineral fertiliser (commercial fertiliser), silage, residue water, and treatment of straw applies to companies covered by subsections 1 or 2 as well as companies registered in the Register of Fertiliser Accounts, cf. section 2 of the Act on Farms' Use of Fertiliser and Plant Cover.

Subsection 4. Ordinary pet shops, zoos, animal parks, animal hospitals, experiment rooms, export isolation stables/stalls and police livestock farms are exempt from the rules of this Order.

Subsection 5. Fur farms with carnivorous furred animals are not covered by the rules of chapters 2, 3 or 6 or section 23.

Section 2. The local council may lay down conditions that are more extensive than the provisions of this Order through approvals pursuant to Chapter 5 of the Environmental Protection Act pursuant to sections 10-12 or section 16 of the Act on Livestock Farming Environmental Approvals.

Subsection 2. The local council may issue an injunction that is more extensive than the provisions of this Order, including in connection with reassessments pursuant to Chapter 5 of the Environmental Protection Act or Chapter 4 of the Act on Livestock Farming Environmental Approvals.

Subsection 3. The rules of this Order do not apply to the extent that they conflict with provisions laid down or decisions made in other legislation in pursuit of the prevention and control of epizootics, zoonoses or harmful organisms.

Section 3. For the purposes of this Order, the following definitions apply:

- 1) Livestock manure: solid manure, separated liquid, slurry, and liquid manure from all domestic animals, including processed and degassed livestock manure as well as all mixtures of livestock manure and degassed plant biomass.
- 2) Solid manure: solid excrement and litter, as well as processed manure with a dry matter content of 12% or more.
- 3) Liquid livestock manure: separated liquid, slurry and liquid manure and all mixtures of solid manure with separated liquid, slurry and liquid manure as well as processed livestock manure with a dry matter content of less than 12% and nitrogen content of more than 0.3 kg/tonne.
- 4) Separated liquid: urine separated from solid manure.
- 5) Slurry: mixture of solid excrement and urine with or without litter.
- 6) Liquid manure: liquid that drains from solid manure during storage in the manure yard and rainwater that falls on the manure yard.
- 7) Silage effluent: liquid that drains from silage, including sugar beet waste and the like, during storage. This does not include liquid that is considered residue water.
- 8) Residue water: milk room effluent, water from the cleaning of products associated with livestock holding, feed teats, etc. of ordinary agricultural operations. In addition to this, residue water also includes fractions from processing plants with a dry matter content of less than 12% and nitrogen content of less than 0.3 kg/tonne. Liquid from silage sites with silage that does

¹⁾ This notice contains provisions that implement parts of Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources, OJ L 375, 1991, p. 1, last amended by Council Directive 2006/105/EC of 20 November 2006, OJ L 363, 2006, p. 368.

The Order has been notified as a draft in accordance with Directive 98/34/EC of the European Parliament and of the Council (the Information Procedure Directive) as amended by Directive 98/48/EC.

- not produce effluents, liquid exclusively collected from silage sites more than 1 month after loading the effluent silage, and water from the washing of poultry houses is to be regarded as residue water if the nitrogen content is below 0.3 kg/tonne.
- 9) Degassed manure: material remaining after production of biogas which utilises manure and any mixed plant biomass and waste, provided that the proportion of mixed waste does not entail application of the storage and usage rules in of the Order on Use of Waste for Agricultural Purposes (Sludge Order).
 - 10) Degassed plant biomass: remaining material after production of biogas which utilises plant biomass and any mixed waste, provided that the proportion of mixed waste does not entail application of the storage and usage rules in the Order on Use of Waste for Agricultural Purposes (Sludge Order).
 - 11) Plant biomass: organic matter formed by plant photosynthesis with the exception of plant biomass that is classified as waste.
 - 12) Processed manure: livestock manure or degassed plant biomass which has been processed in a processing plant, thereby creating products which are different from the original material as regards dry matter content (as a percentage), composition and the concentration of fertilisers.
 - 13) Participation in production contexts: an agricultural holding which has entered into a written agreement with one or more farms with cattle, sheep, or goats if the majority of the crops are allocated to and used for the farms with cattle, sheep, or goats.
 - 14) Livestock unit (LU): unit of calculation which, for every type of livestock, describes the number of animals per livestock unit on the basis of manure production ex storage. Calculations of an agricultural holding's total number of livestock measured in livestock units are made on the basis of the farm's livestock population distributed by livestock type and production method, cf. Annex 1.
 - 15) Agricultural holding: an operations unit used for agriculture, forestry, gardening, orchard, nursery, or similar agricultural production. The operations unit may comprise both owned and leased lands. The operations unit's lands may, but need not, be of compulsory agricultural use pursuant to the rules of the Agricultural Property Act.
 - 16) Deep litter: solid manure in which excreted urine and water wastage is absorbed by the manure through the continuous addition of straw or other dry matter.
 - 17) Compost: deep litter that is decomposed in the stable or manure yard. Deep litter is usually rated as compost if it has remained in a stable for an average of 3-4 months, or 1-2 months for poultry manure.
 - 18) Commercial livestock holding: a holding that is deemed commercial according to the Order on Environmental Regulation of Certain Activities.
 - 19) Mineral fertiliser (commercial fertiliser): inorganic fertiliser and urea that contains the primary nutrients N or P.
 - 20) Alarm system: system that can detect a sudden surface drop in the liquid livestock manure container and electronically notify the operator.
 - 21) Risk area: areas of terrain that slope at an average of greater than 6 degrees from the container towards watercourses or lakes with surface areas greater than 100 m².
 - 22) Terrain modification: terrain modification that can retain at least 25 m³ of liquid livestock manure.
 - 23) Barrier: barrier, possibly in the form of an earth bank, which at the least can retain the portion of the container's content that is located above ground.
 - 24) Saturated soil: soil in which running water can gather in cracks and fissures, even several hours after precipitation.
 - 25) Flooded soil: soil that is covered with standing water.
 - 26) Frozen bare soil: bare soil on which it is not possible to bring down livestock manure due to frost. Overnight surface frost is not classed as frozen soil if the soil thaws during the day.
 - 27) Frozen cultivated soil: cultivated soil is frozen until it has thawed to the full depth of the surface soil (at least 15 cm). Overnight surface frost is not classed as frozen soil if the soil thaws during the day.
 - 28) Snow-covered soil: an area in which over 90% of the soil is covered by more than 0.5 cm of snow.

Chapter 2

Location of livestock holdings

Section 4. The establishment of facilities and extension or modification of existing livestock holdings which entails increased pollution, is not permitted:

- 1) in existing or, according to the municipal plan, future urban areas or summer house areas;
- 2) in rural zone where the municipal plan has designated the relevant areas for housing, mixed residential and industrial purposes, or for public purposes with a view to dwellings, institutions, recreation, and the like;
- 3) at a distance of less than 50 metres from areas named in points 1 and 2; or
- 4) at a distance of less than 50 metres from a neighbouring residential dwelling.

Subsection 2. However, exemptions may be granted by the local council for riding stables and livery yards. Exemptions can be granted on special conditional terms for operation of the property, design of animal housing, manure yards, etc.

Section 5. The establishment, extension of and changes to dog kennels and other dog holdings with 5 or more adult dogs over 18 weeks is not permitted within the following distances:

- 1) 100 metres from neighbouring residential dwellings; or

2) 200 metres from existing or, according to the municipal plan, future urban areas or summer house areas as well as in rural areas where the municipal plan has designated the relevant areas for housing, mixed residential and industrial purposes, or for public purposes with a view to dwellings, institutions, recreation, and the like.

Subsection 2. However, the establishment, extension of and changes to dog kennels is not permitted at a distance of less than:

1) 200 metres from neighbouring residential dwellings; or

2) 300 metres from existing or, according to the municipal plan, future urban areas or summer house areas as well as in rural zone where the municipal plan has designated the relevant areas for housing, mixed residential and industrial purposes, or for public purposes with a view to dwellings, institutions, recreation, and the like.

Subsection 3. Where compliance with the distances specified in points 1 and 2 is not possible, the local council may, on application, grant exemptions from the distance requirements. Exemptions shall be accompanied by the condition that there is no obvious risk of significant pollution or nuisance to the surroundings.

Section 6. The establishment, extension of and changes to stables and other similar animal housing, as well as livestock manure containers and manure yards, is not permitted within the following distances:

1) 50 metres from public water supply facilities,

2) 25 metres from other water supply facilities,

3) 15 metres from watercourses (including drains) and lakes larger than 100 m²,

4) 15 metres from public roads and private roads,

5) 25 metres from food industry operations,

6) 15 metres from residential dwellings on the same property, or

7) 30 metres from adjoining properties.

Subsection 2. In addition, containers for liquid livestock manure storage must not be established within 100 metres of open water courses and lakes larger than 100 m².

Subsection 3. Silage storage facilities, silage containers, closed livestock manure containers and residue water containers shall comply with the distance requirements specified in subsection 1, nos. 1-5 and 7.

Subsection 4. Where compliance with the distances specified in subsections 1-3 is not possible, the local council may, on application, grant exemptions from the distance requirements. Exemptions shall be accompanied by the condition that there is no obvious risk of significant pollution or nuisance to the surroundings. The local council may order the facility in question to be located more appropriately in order to prevent obvious risk of significant pollution or nuisance to the surroundings.

Section 7. The establishment, extension of and changes to a livestock holding for grazing purposes is not permitted within the areas specified in section 4, subsection 1, nos. 1 and 2, or within the distances specified in section 4, subsection 1, nos. 3 and 4 (however, cf. subsection 2). The local council may grant exemptions from this. However, penned areas with grazing animals, without such facilities such as sheds, feeding troughs, and drinking troughs are not subject to the distance requirements of section 4, subsection 1, No. 4 (however, cf. No. 2).

Subsection 2. Penned areas with grazing animals are not subject to the distance requirements in section 4, subsection 1, no. 4 (however, cf. subsection 3). Facilities such as sheds, feeding troughs and drinking troughs must nevertheless comply with the distance requirements in section 4, subsection 1, no. 4.

Subsection 3. Livestock farms with more than 15 livestock units, which have pens for pigs from 35 kg, and where the pen has space for more than 15 pigs, are to be located more than 50 metres from the boundary of a neighbouring property that has a residential dwelling. If the neighbouring residential dwelling is more than 50 metres from the boundary, there must be a distance of at least 100 metres between the neighbouring residential dwelling and the pen so that the distance requirement is reduced correspondingly by the number of metres over 50 which the property lays from the pen.

Subsection 4. The distances in subsection 3 are measured from the edge of the pen to the nearest boundary point or neighbouring residential dwelling.

Subsection 5. The distance requirements in subsection 2, point 2 and subsection 3 can be waived if the neighbours located within the distances stipulated in section 4, subsection 1, no. 4 submit a written statement of permission to the local council

Chapter 3.

Design of stables, stalls, etc.

Section 8. Stables, stalls, etc. shall be designed in such a way that groundwater and surface water is not polluted. They shall have floors made of a durable material that is impermeable to moisture. The floors shall be constructed to resist the effects of animals and the tools used in the stalls. A system shall be established for appropriate drainage and collection of all liquid manure and residue water in accordance with the provisions of sections 22 and 23.

Chapter 4

Capacity of manure storage facilities

Section 9. On livestock farms or other agricultural holdings that store livestock manure or degassed plant biomass, storage capacity must be sufficient to ensure that land application may take place in accordance with the rules of Chapters 10 and 11

and that utilisation of the nutrient content of the livestock manure and degassed plant biomass fulfils the requirements of the Order of Farms' Use of Fertiliser and Plant Cover. However, the storage capacity of livestock manure must correspond to no less than six months' supply (however, cf. subsection 3).

Subsection 2. Sufficient storage capacity of livestock manure under subsection 1 will normally correspond to at least nine months' supply. This figure, however, is normally at least seven months' supply for cattle farms in which at least 2/3 of the livestock units are cattle and where the animals are outdoors in the summer grazing season.

Subsection 3. Supply is calculated as the quantity of livestock manure produced during the period in question on the basis of the animals being stabled, together with quantities otherwise supplied to the facility, including washing water and silage effluent. Manure stored in accordance with section 13 may be deducted from the calculation, however. Where special conditions prevail, such as beef cattle grazing outdoors for a substantial part of the year, the storage capacity must correspond at a minimum to the period in which the cattle are stabled.

Subsection 4. The capacity of facilities used solely for storage of silage effluent and residue water must be sufficient to ensure environmentally sound land application.

Subsection 5. The storage capacity requirement in subsection 1 can be fulfilled by means of written agreements regarding the delivery of livestock manure or degassed plant biomass for storage on another property or delivery to common biogas plants, manure treatment facilities or manure storage facilities. Such storage agreements must be valid for at least 5 years. The local council can lay down more detailed requirements on the wording of agreements.

Section 10. Where changes are made that influence the capacity, cf. section 9, a new calculation shall be submitted to the local council. Copies of agreements pursuant to section 9, subsection 5 shall also be submitted to the local council.

Chapter 5

Storage of solid manure

Section 11. Solid manure must be stored in manure yards designed in accordance with the provisions of section 12 or in closed containers placed in paved areas, with leak-tightness as specified in section 12, subsection 4, and with drainage to a manure effluent tank or the like (however, cf. section 13). Solid manure may also be stored in accordance with the rules in Chapter 7.

Subsection 2. In special cases, the local council may permit agricultural properties in villages to store solid manure in field stacks if it can be proven that manure cannot be stored near the animal housing facilities in an environmentally sound manner.

Subsection 3. A permit shall be accompanied by conditional terms in regard to location, design and operation of the field stack to prevent risks of groundwater pollution and discharge into watercourses (including drains), lakes larger than 100 m² and coastal waters. Field stacks shall comply with the distance requirements of section 8, subsection 1 in the Act on Livestock Farming Environmental Approvals.

Section 12. Manure yards shall be designed in such a way that surface water from surrounding areas and roofs cannot flow into the manure yard. Liquid manure shall be drained off through outlet pipes designed for that purpose, cf. Chapter 8.

Subsection 2. The side wall of the manure yard shall consist of a wall at least 1 metre high or a boundary layer at least 2 metres wide. The manure yard floor, boundary layer and the surface cover at the entrance to the manure yard shall be inclined at least 3 per cent towards the outlet.

Subsection 3. The local council can permit other forms of boundaries that result in equally safe collection of manure effluent, cf. section 13.

Subsection 4. Manure yard floors and side walls shall be made of durable materials that are impermeable to moisture and constructed in such a way that they can resist the effects of vehicles and tools used for filling and emptying as well as the stored manure itself.

Section 13. Compost with a dry matter content of at least 30% may notwithstanding section 11 be stored in the field. The stores shall comply with the distance requirements of section 8, subsection 1 in the Act on Livestock Farming Environmental Approvals and may not present risks of groundwater or surface water pollution.

Subsection 2. Compost may not be stored at the same location for longer than 12 months and the heaps may not be placed at the same location again for 5 years.

Subsection 3. The person responsible for the agricultural holding (operator) must keep annual records of the heaps. The records shall include information on storage periods and locations, e.g. via specifications on a map.

Section 14. Heaps (cf. section 11, subsection 2), deep litter, compost and processed manure with a dry matter content of 12% or more must be covered with water-tight material immediately after being placed in the field (however, cf. subsection 3).

Subsection 2. The same coverage requirement applies to types of solid manure other than those specified in subsection 1, with the exception of stores to which manure is added on a daily basis, e.g. stores of stall manure created in connection with traditional stall systems based on stall manure and separated liquid and potentially applied in a conical form.

Subsection 3. In connection with application, temporary stores of uncovered compost may be placed in the field for up to one week.

Chapter 6

Storage of silage and treatment of straw

Section 15. Effluent silage, including silage of beet tops, beet pulp, and non-wilted grass, shall be stored in silage sites or silage tanks.

Section 16. Silage sites must comply with the corresponding requirements of the provisions that apply to manure yards with a boundary layer in section 12. The requirements also apply to silage sites that store non-effluent silage (however, cf. subsection 3).

Subsection 2. Silage tank floors shall be made of a material that is impermeable to moisture. Additionally, they must be constructed of durable materials and be able to resist the impacts of the tank content itself and of filling and emptying. They must be designed in such a way that silage effluent can only drain off through outlets designed for this purpose, cf. Chapter 8.

Subsection 3. The requirements relating to the side walls, boundary layers, and drainage do not apply to silage sites that are used exclusively for the storage of silage packed in waterproof material (silage bales) if the area around the site is free from crop residues.

Section 17. Ammonia may not be used for treatment of straw.

Subsection 2. However, subsection 1 does not apply within regions demarcated by the Danish Meteorological Institute (DMI) which have more than 14 rainy days during weeks 31-33, weeks 32-34 or weeks 33-35, according to calculations and definitions produced by DMI. The Environmental Protection Agency announces online which municipalities are covered by subsection 1 in the current year.

Chapter 7

Storage of liquid livestock manure, silage effluent, degassed plant biomass, and residue water

Section 18. Containers for liquid livestock manure, silage effluent, degassed plant biomass and residue water shall be made of durable materials that are impermeable to moisture. The containers shall be appropriately dimensioned in relation to capacity in such a way that they can resist the impacts of stirring, covering and emptying.

Subsection 2. The local council shall order remedial measures, or possibly forbid operation of a facility, if the supervisory authority finds a likely risk of a container cracking, rupturing or similar.

Subsection 3. The supervisory authority may order specific measures to be taken if a container, as specified in subsection 1, is located in such a way that any malfunctions or accidents may entail serious damage to water supply facilities, watercourses, lakes larger than 100 m² or coastal waters.

Section 19. Liquid livestock manure storage containers that are located in a risk area, or within 100 metres or less of watercourses or lakes larger than 100 m², must be equipped with an alarm system.

Subsection 2. Liquid livestock manure storage containers that are located in a risk area and within 100 metres or less of watercourses or lakes larger than 100 m² must be equipped with a barrier, unless the container is decommissioned (cf. subsections 5 and 6).

Subsection 3. Liquid livestock manure storage containers that are located in a risk area and more than 100 metres from watercourses or lakes larger than 100 m² must have established terrain modification.

Subsection 4. The establishment of barriers (cf. subsection 2) shall comply with the conditions of Annex 2.

Subsection 5. Liquid livestock manure storage containers established prior to 15 February 2011 and covered by subsection 2 are to be decommissioned when they are 20 years of age, unless provided with barriers. However, the decommissioning must be done by 1 January 2017 at the earliest (cf. subsection 6).

Subsection 6. Liquid livestock manure storage containers covered by the 8-year legal protection (cf. section 40, subsection 1 of the Act on Livestock Farming Environmental Approvals) shall, subsection 5 notwithstanding, be decommissioned by the expiry of the legal protection period, at the earliest (however, cf. section 40, subsection 2 of the same Act).

Section 20. Containers for liquid livestock manure and degassed plant biomass shall be provided with a fixed covering such as a floating fabric membrane, tent roof or the like (however, cf. subsections 2-4). The use of ammonia-reducing actions on the liquid livestock manure (e.g. acidification), or other technology that is included on the technology list as a technology that can replace a fixed cover, is equivalent to the establishment of a fixed cover (however, cf. subsection 6).

Subsection 2. Containers used solely for storage of manure effluent, silage effluent or residue water are not subject to the cover requirement.

Subsection 3. The person responsible for the conditions need not comply with the cover requirement, cf. subsection 1, if a dense cover is established instead, such as a natural floating crust or other type of dense cover for the container (however, cf. subsections 5-7). The use of ammonia-reducing actions on the liquid livestock manure (e.g. floating tiles), or other technology that is included on the technology list as a technology that can replace floating crust, is equivalent to the establishment of floating crust.

Subsection 4. A prerequisite for invoking subsection is that the operator, as part of an internal monitoring system, regularly records in a logbook at least once a month, inter alia, the condition and leak-tightness of the floating crust or other impermeable cover of each individual container to substantiate the fact that there is a sufficiently dense crust or other

impermeable covering. The logbook shall be kept in accordance with instructions provided by the Environmental Protection Agency. However, commercial livestock holdings with 3 livestock units or less are not required to keep a logbook.

Subsection 5. However, containers for liquid livestock manure and degassed plant biomass that are established wholly or partially within the facility, or are less than 300 metres from the protected habitats specified in section 7 of the Act on Livestock Farming Environmental Approvals, must always be provided with a fixed cover, unless a different ammonia-reducing action is taken in accordance with subsection 1.

Subsection 6. Containers for liquid manure from pigs and carnivorous furred animals which are established less than 300 metres from a neighbouring residential dwelling must always be provided with fixed cover in the form of floating fabric membrane, tent cover or the like.

Subsection 7. If the supervisory authority finds the cover pursuant to subsection 3 to be inadequate, on two consecutive inspections within a period of three years, the supervisory authority shall order the person responsible for the condition to establish a fixed cover in accordance with subsection 1 (however, cf. subsection 8). Upon the first inspection in which the supervisory authority finds the cover pursuant to subsection 3 to be inadequate, the authority shall provide a written emphasis of the obligation to comply with the cover requirements of subsection 3 and indicate the legal consequences of failure to do so; cf. point 1. The supervisory authority shall set a reasonable deadline in the written emphasis, by which time the inadequate cover must be brought into compliance.

Subsection 8. If the violation of subsection is excusable, in certain special circumstances, and after a specific assessment, the supervisory authority may abstain from requiring fixed cover.

Section 21. Liquid livestock manure storage containers that are covered by section 20, subsection 3, and into which manure is pumped, must have submerged intake that is protected against backflow. Other filling systems shall be so designed that the floating crust remains intact.

Subsection 2. Liquid livestock manure storage containers must not have a throttle or the like connected to the pre-storage tank if the storage container's highest level is higher than that of the pre-storage tank.

Subsection 3. Pump tubes mounted on open liquid manure containers must swing over the container and lock into position or be provided with a shutoff valve to the pump tube or a similar arrangement when the pump is not in use and not supervised, such as at the end of the workday.

Subsection 4. Pump tubes mounted on closed liquid manure containers must be provided with a shutoff valve to the pump tube or a similar arrangement when the pump is not in use and not supervised, such as at the end of the workday.

Subsection 5. Pumps used for emptying liquid livestock manure containers shall be provided with a timer or similar arrangement which ensures that the amount of manure pumped from the container at once does not exceed the capacity of the slurry tanker. Pumping from one container to another container may be done without a timer if it can be ensured that leakage is avoided in another manner such as manual monitoring or an alarm system; cf. section 3, no. 20.

Subsection 6. Pumps must be provided with a switch which ensures that the pump cannot be started inadvertently. Electric pumps are to be switched off at the master control panel when not in use and not supervised, such as at the end of the workday. The switch must be locked or kept under locked conditions.

Chapter 8

Drain construction

Section 22. Drains from stables/stalls, manure yards, silage stocks, cesspools, and pump wells shall be run through impermeable closed pipes. Drains subject to pump pressure shall be constructed in such a way as to resist such pump-pressure impact. Drains with connected wells shall be installed by authorised sewerage contractors in accordance with the drain regulations of the Danish Construction Regulations.

Section 23. Drains from stables/stalls shall lead to liquid livestock manure containers.

Subsection 2. Residue water can be led to a liquid livestock manure container or to a separate container.

Section 24. Manure yards and silage sites shall be laid out to drain from the lowest point and in such a way that clogging is avoided. Drainage is designed and constructed according to DS 432 Drain System Standards. The drain shall lead to a container that meets the provisions of Chapter 7.

Chapter 9

Operation and maintenance

Section 25. Facilities for the storage of livestock manure, degassed plant biomass, silage effluent and residue water shall be emptied with sufficient frequency to prevent overflow.

Subsection 2. Where manure yards are enclosed by a boundary layer, said layer shall not be used for storage of manure. The manure yard shall generally be used so as to avoid any overflow of manure outside the manure yard and to prevent risks of such.

Subsection 3. Silage sites may not have silage placed on the boundary layer.

Section 26. The installations specified in Chapters 3-8 shall be cleaned and maintained, including protection against corrosion, so that the requirements of this Order are fulfilled at all times.

Chapter 10

Use of livestock manure, silage effluent, degassed plant biomass and residue water

Section 27. The nutrients in livestock manure, silage effluent, degassed plant biomass and residue water must only be applied to crops (however, cf. subsection 2). The crops must contain a nitrogen standard or normative standard for phosphorus and potassium in accordance with the Act on Farms' Use of Fertiliser and Plant Cover and the regulations pursuant to this Order.

Subsection 2. However, manure may be incinerated in environmentally approved facilities that can incinerate waste in accordance with the rules of the Danish Ministry of the Environment Order on Waste Incineration Facilities.

Section 28. Livestock manure and degassed plant biomass shall not be applied on land on Saturdays, Sundays or public holidays in areas closer than 200 metres to urban zones, summer house areas or rural zones which the municipal plan has designated for housing.

Subsection 2. Application of liquid livestock manure and degassed plant biomass may only be carried out by means of trailing hoses, trailing foot/shoe applicators, injection or by use of a technology that is covered by subsection 3.

Subsection 3. Application of liquid livestock manure on land without established crops to harvest, on fodder crops and on areas of seed grass for which no contract has been entered into with a seed-growing company regarding the delivery of seeds in the coming season is to be carried out by means of injection or by use of a technique or technology that allows the livestock manure to be treated before or during application, and which is listed on the Environmental Protection Agency's technology list as having the same ammonia volatilisation during application as does injection. Application can also be carried out with techniques other than injection if the livestock manure, prior to application, is processed by a technique or technology which is listed on the Environmental Protection Agency's technology list as having the same ammonia volatilisation during application as does injection. If a technique or technology other than injection is used, which according to the technology list does not have the same odour-reducing effect as injection, application must not be within 200 metres of existing urban zone, summer house zone or rural zone that the municipal plan has designated for housing.

Subsection 4. Application of liquid livestock manure or liquid livestock manure mixed with water may not be carried out by means of long-range sprinklers.

Subsection 5. Application of livestock manure, degassed plant biomass, silage effluent, and residue water may not give rise to unnecessary nuisances.

Subsection 6. However, application of liquid livestock manure on farms that are certified as organic under the Order on Organic Agricultural Production are exempt from the requirement of injection on fodder crops in subsection 3 during the period from 1 February to 1 May.

Section 29. Liquid livestock manure and degassed plant biomass shall not be applied to the soil from harvest (no later than 1 October) to 1 February. Exempted from this is application from harvest until 15 October on areas of seed grass for which a contract on delivery of seeds in the coming season has been entered into with a seed-growing company, and application from harvest to 1 October on the following areas:

- a) Established and overwintering fodder crops, including fields undersown with grass or clover grass sown no later than the spring sowing. However, the exemption does not include areas with maize undersown with grass or clover grass.
- b) Areas to be planted with winter rape in the winter to come.
- c) Areas of well-established green manure with yellow mustard or fodder radish prior to sugar beet, which is contracted by a sugar factory for delivery of sugar beets. The green manure does not have a nitrogen or phosphorus standard, is non-compulsory under the Ministry of Food, Agriculture and Fisheries rules, and is first desiccated or ploughed after 20 October.

Subsection 2. In the case of municipalities that are wholly or partly situated within regions demarcated by the Danish Meteorological Institute (DMI) which, between the beginning of week 30 and the end of week 38, have received a total of 30 per cent more precipitation than usual according to DMI statements for said period, and which have also received more precipitation than normal during the period of week 21 to week 38 according to DMI statements and definitions, liquid livestock manure can be applied until 15 October in the areas of the region(s) covered by subsection 1, points a and b, subsection 1 notwithstanding. The Environmental Protection Agency announces online which municipalities are covered by subsection 1 for the current year.

Subsection 3. Solid manure, silage effluent, and mineral fertiliser (commercial fertiliser) shall not be applied to the soil from 15 November to 1 February.

Subsection 4. From 1 September to 1 March, liquid livestock manure may not be applied to perennial crops that are not harvested annually.

Subsection 5. Silage effluent shall not be applied to the soil from harvest until 1 November, unless it is applied to areas under vegetation or areas to subsequently be planted with winter crops.

Section 30. Solid manure, and degassed plant biomass applied to areas without established crops to harvest shall be incorporated into the soil without delay and within 6 hours of application. If for unforeseeable reasons this cannot be done, the incorporation is to take place as soon as possible.

Subsection 2. Livestock manure, degassed plant biomass, silage effluent, residue water and mineral fertiliser (commercial fertiliser) may not be applied in such a way or on lands in such a way that it entails a risk of runoff into watercourses, drains, lakes larger than 100 m² and coastal waters. The application of livestock manure, degassed plant biomass, silage effluent, residue water or mineral fertiliser (commercial fertiliser) on land that is saturated, flooded, frozen or snow-covered is not permitted.

Subsection 3. Livestock manure, degassed plant biomass, and mineral fertiliser (commercial fertiliser) may not be applied on gradients that slope more than 6° towards watercourses, lakes larger than 100 m² or coastal waters within a distance of 20 metres from the mean sea level or mean water level of the watercourse, lake or coastal waters (however, cf. subsection 4).

Subsection 4. On slopes between 6° and 12°, subsection 3 does not apply to liquid livestock manure or degassed plant biomass:

- a) injected parallel to the nearby body of water, and
- b) liquid mineral fertiliser (commercial fertiliser).

Chapter 11

Harmony rules

Section 31. The total quantity of livestock manure and degassed plant biomass applied on an agricultural holding shall not exceed an amount corresponding to 1.4 livestock units per hectare per planning period (1 August-31 July) (however, cf. subsections 2-4).

Subsection 2. However, livestock manure produced on agricultural holdings with cattle, sheep or goats may be applied in quantities corresponding to 1.7 livestock units per hectare per planning period.

Subsection 3. On agricultural holdings where at least 2/3 of the livestock are cattle, livestock manure and degassed plant biomass may be applied in quantities corresponding to 2.3 livestock units per hectare per planning period. Compliance with the conditions specified in Annex 3 of this Order is required.

Subsection 4. A maximum of 170 kg N per hectare per planning period of livestock manure and degassed plant biomass may be applied on agricultural holdings covered by subsections 1 and 2. A maximum of 230 kg N per hectare per planning period of livestock manure and degassed plant biomass may be applied on agricultural holdings covered by subsection 3.

Subsection 5. Farms that participate in production contexts with farms specified in subsections 2 and 3 are also subject to these provisions; cf. section 3, subsection 1, no. 13. Authorised organic farms are not subject to the provisions in subsection 3.

Section 32. The quantities of livestock manure applied to land, cf. section 31, subsections 1-4, are calculated on the basis of the produced quantity corrected for store movements at the beginning and end of the planning period of 1 August to 31 July (cf. the Act on farms' use of fertilisers and plant cover) and the quantities supplied and received during the planning period; cf. section 33, subsection 1. Manure dropped by grazing animals is regarded as applied if dropped in areas which can be included in calculations as harmony areas, cf. subsection 2. Corrections for stock fluctuations shall be calculated on the basis of 100 kg N per livestock unit.

Subsection 2. Harmony area calculations are made for each planning period, cf. section 31. Areas to be deducted from this calculation are those with crops for which no fertilisation standard exists (cf. section 27) and those in which livestock manure may not be used or cannot be applied under normal circumstances. If there is a great distance from the harmony areas to the livestock manure storage facility, the supervisory authority may require evidence that the areas are actually included in the livestock manure distribution.

Section 33. If an agricultural holding has greater quantities of livestock manure available, including manure received from other farms, than the amount that can lawfully be applied to the farm's land (cf. sections 31 and 32), written agreements shall ensure that excess livestock manure is allocated to/for:

- 1) a registered business, cf. section 2 of the Act on Farms' Use of Fertiliser and Plant Cover,
- 2) a biogas plant,
- 3) a common plant,
- 4) a processing plant,
- 5) as processed livestock manure (cf. subsection 2),
- 6) an environmentally approved facility that can burn waste in accordance with the rules of the Order on Waste Incineration Facilities, or
- 7) export.

Subsection 2. Processed livestock manure declared under the Act on Farms' Use of Fertiliser and Plant Cover may be sold if this is reported in accordance with rules established pursuant to the Act on Farms' Use of Fertiliser and Plant Cover.

Subsection 3. The person responsible for a biogas plant, common plant, processing plant or incineration facility that receives or sells livestock manure and which is not registered in the Register of Fertiliser Accounts (cf. section 2 of the Act on Farms' Use of Fertiliser and Plant Cover) must report from whom the facility has received livestock manure or to whom the facility has delivered livestock manure in accordance with rules pursuant to the Act on Farms' Use of Fertiliser and Plant Cover.

Subsection 4. The allocated number of livestock units (cf. subsection 1) is calculated on the basis of the allocated quantities of nitrogen (cf. the Act on Farms' Use of Fertiliser and Plant Cover) such that the ratio between livestock units and nitrogen content corresponds to the relevant manure production, including the ratio between livestock units and nitrogen content of stock fluctuations. However, conversion into livestock units is to be carried out on the basis of a conversion factor where one

livestock unit corresponds to 100 kg N ex storage for livestock manure from common manure plants (common biogas plants and similar facilities).

Subsection 5. However, the ratio of livestock manure and degassed plant biomass, which may be applied at 1.4 livestock units per hectare, can be increased proportionally to 120 kg N ex storage under the following conditions:

- 1) the manure is processed by separation,
- 2) the total number of livestock units in the resulting fractions may not be altered relative to the number of livestock units prior to processing,
- 3) kgs of N per livestock unit may only be increased in the resulting fractions that have a lower concentration of organic nitrogen than the manure had prior to processing, and
- 4) no fraction may have a ratio of less than 40 kg N per livestock unit.

Section 34. The operator must be able to document compliance with the harmony rules of sections 31 and 32.

Subsection 2. Documentation in the form of a tenancy agreement shall include information on the size of the area as well as the names, addresses, and VAT nos. (CVR - Central Business Register No.) of the parties to the agreement, the start/end date or term of notice of the agreement's period of validity, and the date on which the agreement was entered into.

Subsection 3. Documentation in the form of an agreement (cf. section 33, subsections 1-2) shall include information as specified in the Order on Farms' Use of Fertiliser and Plant Cover.

Chapter 12

Notification rules

Section 35. Prior to the establishment, extension of or change to a facility referred to in sections 4-24, the local council shall be notified of such.

Subsection 2. The notification shall include construction drawings, etc., as specified in the Danish Construction Regulations, documentation that the requirements for strength, leak-tightness, and durability as specified in sections 4-24 of this Order will be fulfilled, and indications as to the location of the facility in relation to water supply facilities, water courses (including drains), lakes larger than 100 m², coastal waters, surrounding properties and buildings, and existing or, according to the municipal plan, future urban zone or summer house zone as well as zones that the municipal and/or local plan has designated for housing, mixed residential and industrial purposes, or for public purposes with a view to dwellings, institutions, and the like.

Subsection 3. The local council may decide that notification shall be on special forms.

Subsection 3. If the local council has not raised any objections within two weeks of receipt of the notification, then the building work can commence.

Subsection 5. If construction requires a permit under section 10 or approval under sections 11 or 12 of the Act on Livestock Farming Environmental Approvals (cf., subsection 1), the notification is considered to contain the application for said permit or approval.

Subsection 6. Building and construction may not commence before the local council has announced its decision on any objections that may have been raised.

Section 36. Prior to the establishment, extension of, or change to a livestock holding within an existing facility that is subject to sections 4-24, the local council shall be notified of such.

Subsection 2. The notification shall indicate the location of the facility in relation to water supply facilities, water courses (including drains), lakes larger than 100 m², coastal waters, surrounding properties and buildings and existing or, according to the municipal plan, future urban zone or summer house zone as well as zone that the municipal and/or local plan has designated for housing, mixed residential and industrial purposes, or for public purposes with a view to dwellings, institutions, and the like.

Subsection 3. The local council may decide that notification shall be on special forms.

Subsection 4. If the local council has not raised any objections within two weeks of receipt of the notification, then the establishment, extension, or change can commence.

Subsection 5. If the circumstances require a permit under section 10 or an approval under sections 11 or 12 of the Act on Livestock Farming Environmental Approvals (cf. subsection 1), the notification is considered to contain the application for said permit or approval.

Subsection 6. Establishments, extensions or changes may not commence before the local council has announced its decision on any objections that may have been raised.

Chapter 13

Administrative provisions

Section 37. Appeals against local council decisions pursuant to this Order may not be lodged with another administrative authority (however, cf. subsection 2).

Subsection 2. However, appeals against local council decisions in regard to livestock farms pursuant to section 4, subsection 2, section 5, subsection 3 and section 6, subsection 4, may be lodged in accordance with the rules in the Act on Livestock Farming Environmental Approvals

Section 38. The rules of Chapter 9 of the Environmental Protection Act and those of Chapter 5 of the Act on Livestock Farming Environmental Approvals apply to inspection, enforcement, etc., while the Danish AgriFish Agency performs inspections to ensure compliance with the rules of Chapter 11.

Section 39. The Environmental Protection Agency may approve the establishment of more specific operational regulations in the agricultural build sheets, including operational rules that deviate from the requirements of sections 4-34 as regards facilities, including animal housing. The construction and operation of facilities in compliance with the approved build sheet is legal.

Subsection 2. The Environmental Protection Agency may permit exemptions from the provisions in sections 4-34 in respect of projects for experiments, tests, development or demonstrations for the purpose of developing environmental technologies for livestock.

Section 40. The Environmental Protection Agency may change the Annexes to the Order.

Chapter 14

Penal sanctions

Section 41. Unless higher penalties are stipulated by other legislation, the following are to be penalised by fines

- 1) violation of the provisions of sections 7-10, section 11, subsection 1, sections 12-15, section 16, subsections 1-2, section 17, subsection 1, section 18, subsection 1, section 19, subsections 2-3, section 20, subsections 1 and 3-5, sections 21-26, section 27, subsection 1, section 28, subsections 1-5, section 29, subsections 1, 3 and 4-5, section 30, subsections 1-3, section 31, section 33, subsection 1, and section 34,
- 2) failure to comply with injunctions pursuant to section 18, subsections 2-3 and section 20, subsection 7,
- 3) commencement of building or construction or operation of one of the facilities specified in Chapters 3-8 in contravention of section 35 (cf. section 91, subsection 1, no. 5 of the Act on Livestock Farming Environmental Approvals),
- 4) establishment, extension of, changes to or operation of a livestock farm in contravention of section 36 (cf. section 91, subsection 1, no. 5 of the Act on Livestock Farming Environmental Approvals),
- 5) in contravention of sections 9 and 10, failure to submit information or accounts, preventing the supervisory authority from accessing updated accounts of manure deliveries, or disregard of wording requirements for agreements; cf. section 9, subsection 5,
- 6) establishment of facilities and animal housing, which under section 39 are exempt from compliance with the requirements of sections 4-34, in contravention of specifications given in the agricultural build sheets, or violation of established operational regulations, or
- 7) violation of the terms of exemptions and permits granted under section 4, subsection 2, section 5, subsection 3, section 6, subsection 3, section 11, subsection 2, and section 12, subsection 3.

Subsection 2. Criminal liability may be imposed on companies, etc. (legal persons) in accordance with the rules of Chapter 5 of the Penal Code.

Chapter 15

Entry into force and transitional provisions

Section 42. The Order enters into force on 1 August 2012.

Subsection 2. Order No. 1695 of 19 December 2006 on livestock farms and holdings of more than 3 livestock units, livestock manure, silage, etc. as amended by Order No. 1209 of 11 October 2007, Order No. 736 of 30 June 2008, Order No. 717 of 2 July 2009, Order No. 935 of 19 July 2010, Order No. 949 of 29 July 2010, Order No. 111 of 4 February 2011, Order No. 100 of 9 February 2011 and Order No. 114 of 11 February 2011, is repealed.

Subsection 3. Companies that have approval under Chapter 5 of the Environmental Protection Act or a permit/approval under sections 10-12 or section 16 of the Act on Livestock Farming Environmental Approvals upon entry into force of this Order will have the terms of said permit/approval replaced by the provisions of this Order to the extent that said provisions are more extensive than the terms of the permit/approval.

Subsection 4. Decisions made pursuant to the rules in subsection 2 and earlier Orders remain valid until such time as new decisions or other provisions are made pursuant to this Order, the Environmental Protection Act or the Act on Livestock Farming Environmental Approvals.

Subsection 5. Section 16, subsection 1, point 2 does not apply to facilities established prior to 1 August 2002.

Subsection 6. Section 20, subsection 7, point 1 does not apply if the first inspection, which found cover to be inadequate according to section 20, subsection 3, was made prior to 1 August 2012.

Subsection 7. Section 28, subsection 6 is repealed as of 1 May 2014.

Danish Ministry of the Environment, 28th of June 2012

Ida Auken

/Claus Torp

The annex contains the various conversion factors to be used in the calculation of livestock units; see Section 3 no. 14.

Part A-E is not included in the English version of the Order. These parts list the conversion factor for the previous years.

PART F

The conversion factors in this part are used for:

- a) Calculation of livestock units as regards the harmony rules from 1 August 2012.
- b) Calculation of livestock farm size expressed in livestock units for processing applications for, or appeal against, an authorisation under section 10 or approval under sections 11 and 12 of the Act on Livestock Farming Environmental Approvals, including in the consideration of remitted cases, if the application is submitted to the local council on 1 October 2012 or later.
- c) Assessment under Annexes 3 and 4 of Order No. 294 of 31 March 2009 on authorisations and approvals etc. of livestock farms for consideration of an application for, or appeal against, authorisation or approval of a livestock farm under sections 10, 11, 12 or approval of areas under section 16 of the Act on Livestock Farming Environmental Approvals, including in the consideration of remitted cases, if the application is filed with the local council on 1 October 2012 or later.

(The conversion factors have been determined on the basis of standard figures from 2008/2009 prepared by the Faculty of Agricultural Sciences (Jordbrugsvidenskabelige Fakultet) at Aarhus University. 1 livestock unit (LU) has been determined on the basis of 100 kg N ex storage per LU in the animal housing with the highest rate of nitrogen content in the livestock manure. However, outdated housing systems were not taken into account and for certain types of animals no account was taken of the fact that a small proportion are on deep litter. The fact that the mink industry will reduce nitrogen elimination by 15% by 2015 has been taken into account.)

Cattle		
Animal type	Unit	Number of units equal to 1 livestock unit
Dairy cows, heavy breed, not included breeding (9297 kg ECM**)	1 yearling	0.75
Dairy cows, Jersey, not included breeding (8395 kg ECM**)	1 yearling	0.88
Breeding, heifers and steers, 0-6 months, heavy breed	1 yearling	3.7
Breeding, heifers and steers, 0-6 months, Jersey and other smaller breeds*	1 yearling	5.0
Breeding, 6-27 months, heavy breed	1 yearling	2.0
Breeding, 6-25 months, Jersey and other smaller breeds*	1 yearling	2.7
Suckler cows, not included breeding, under 400 kg	1 yearling	2.3
Suckler cows, not included breeding, 400-600 kg	1 yearling	1.6
Suckler cows, not included breeding, over 600 kg	1 yearling	1.4
Bull calf, 0-6 months, heavy breed	1 produced animal	8.5
Bull calf, 6 months - slaughter (440 kg), heavy breed	1 produced animal	4.0
Bull calf, 0-6 months, Jersey and other smaller breeds*	1 produced animal	11.5
Bull calf, 6 months - slaughter (328 kg), Jersey and other smaller breeds*	1 produced animal	5.1
Stud bull, heavy breed	1 yearling	1.8
Stud bull, Jersey and other smaller breeds*	1 yearling	2.4

* An animal is defined as a Jersey cow if at least 87.5% of its genes come from Jersey. "Other smaller breeds" refers to Dexter, Galloway and Scottish Highland Cattle. In regard to these smaller breeds, 75% of the genes must come from these three breeds in total. In regard to conversion factors, the conversion factor for Jersey cattle and other smaller breeds cannot be used if the breed of the parents is not known for two generations back.

** Energy corrected milk (ECM)

1) Milk yields calculated as ECM**, which deviate from 9297 kg ECM (heavy breed) and 8395 kg ECM (Jersey), are to be corrected as follows:

Heavy breed:

The conversion factor is corrected such that the number of yearlings per LU is $1/(0.5738 + 0.0000817 * \text{kg ECM})$

Jersey:

The conversion factor is corrected such that the number of yearlings per LU is $1/(0.4429 + 0.0000826 * \text{kg ECM})$

Milk yield is the average annual production of ECM in kg from the production inspection. Herds outside the official production inspection, and which only include one breed, shall use delivered ECM per yearling * 1.055.

Herds outside the official production inspection, in which both Jerseys and large breeds are included, shall use 8395 and 9297 kg ECM respectively corrected by the following factor:

$(\text{Total ECM delivered} * 1.055)/(\text{number of Jersey yearlings} * 8397 + \text{number of large breed yearlings} * 9297)$

* ECM = energy corrected milk

2) Variant weight limits for bulls shall be corrected as follows:

Heavy breed:

- a) From birth to 6 months: 1530 kg body weight gain is calculated as 1 LU.
- b) From 6 months to slaughter: 880 kg body weight gain is calculated as 1 LU.

Jersey and other smaller breeds:

- a) From birth to 6 months: 1380 kg body weight gain is calculated as 1 LU.
- b) From 6 months to slaughter: 933 kg body weight gain is calculated as 1 LU.

The correction for bull calves older than 6 months is based on the production of bull calves from 6 months to slaughter and the correction for bull calves younger than 6 months is based on the production of bull calves from 0-6 months.

Where the exact weight is not known, the weight of animals up to and including 13 months of age is determined as follows:

Bulls, heavy breed: Weight at birth is 40 kg, body weight gain is 30 kg per month up until the age of 6 months, and 33 kg per month thereafter. Bulls from suckler cows are calculated as heavy breed.

Jersey bulls and other smaller breeds of bull: Weight at birth is 25 kg, body weight gain is 20 kg per month up until the age of 6 months, and 28 kg per month thereafter.

Stud bulls are calculated as bulls up to 440 kg for large-breed bulls and 328 kg for Jersey bulls and other smaller breeds of bull.

3) On farms where breeder cows and steers have a different age composition to the normal age composition of breeding cattle stock, the number of yearlings per LU is calculated based on the average age of breeders according to the following formulae:

- a) Breeders, heavy breed, 0-6 months: Yearlings per LU = $8.77/((\text{average age in months} * 0.146) + 1.93)$
- b) Breeders, heavy breed, 6-27 months: Yearlings per LU = $8.68/((\text{average age in months} * 0.146) + 1.93)$
- c) Breeders, Jersey and other smaller breeds, 0-6 months: Yearlings per LU = $9.02/((\text{average age in months} * 0.115) + 1.46)$
- d) Breeders, Jersey and other smaller breeds, 6-25 months: Yearlings per LU = $8.76/((\text{average age in months} * 0.115) + 1.46)$

The average age in months must be given as the average age throughout the entire planning period. A yearling is calculated as 365 feeding days. For the purpose of calculating the average age, breeders and steers older than 27 months (heavy breeds) or 25 months (Jersey and other smaller breeds) are included at the age of 27 months and 25 months respectively.

Pigs		
Animal type	Unit	Number of units equal to 1 livestock unit
Sows with piglets to weaning (4 weeks ~ 7.3 kg)	1 yearling	4.3
Piglets from 7.3 to 32 kg	1 produced animal	200
Slaughter pigs from 32 to 107 kg	1 produced animal	36

4) Breeding of gilts to replace breeding animals is normally included in the figure for "sows". That is to say, gilts count as sows from the first mating. Gilts are calculated as slaughter pigs until 107 kg.

- 5) Deviating weight for piglets and slaughter pigs shall be corrected as follows:
- Under 40 kg: 4940 kg body weight gain is calculated as 1 LU.
 - From 40 - 87 kg: 2910 kg body weight gain is calculated as 1 LU.
 - For weights greater than 87 kg: 2000 kg body weight gain is calculated as 1 LU.

6) If the weights deviate from 7.3 kg, the conversion factor for sows with piglets for weaning is adjusted as in 5). The adjustment is calculated based on the current number of suckling pig.

Poultry		
Animal type	Unit	Number of units equal to 1 livestock unit
Hens for egg production	1 yearling	166
Pullets for table egg production	1 produced animal	1400
Pullets for WPR (White Plymouth Rock)	1 produced animal	1100
Broilers, 30 days	1 produced animal	4200
Broilers, 32 days	1 produced animal	3700
Broilers, 35 days	1 produced animal	3000
Broilers, 40 days	1 produced animal	2200
Broilers, 45 days	1 produced animal	1700
Barn-reared broilers, 56 days	1 produced animal	2400
Organic broilers, 81 days	1 produced animal	1300
Turkeys, heavy breed, hens	1 produced animal	310
Turkeys, heavy breed, stags	1 produced animal	170
Ducks	1 produced animal	820
Geese	1 produced animal	270

7) For deviating slaughter ages of broilers in the range of 25-50 days, the number of broilers produced per LU is calculated as follows:

- For broilers under 32 days, the correction is 250 produced chickens per LU per day.
- For broilers between 32 and 35 days, the correction is 233 produced chickens per LU per day.
- For broilers between 35 and 40 days, the correction is 160 produced chickens per LU per day.
- For broilers and barn-reared broilers over 40 days, the correction is 100 produced chickens per LU per day.
- For organic broilers, the correction is 25 produced broilers per LU per day.

Other animal species:		
Animal type	Unit	Number of units equal to 1 livestock unit
Ewes with lambs, meat and dairy goats with kids	1 yearling/goat	7
Mohair goats with kids	1 yearling	8.7
Horses under 300 kg	1 yearling	4.7
Horses 300 kg - 499 kg	1 yearling	2.9
Horses 500 kg - 699 kg	1 yearling	2.3
Horses 700 kg and over	1 yearling	1.9
Mink, ferrets, etc.	1 yearling	34 ²

8) For animal types other than those specified in the Annex, conversions into livestock units are made with the following calculation methods (prioritised order):

- The N content of the produced manure, with 1 LU equivalent to 100 kg N ex storage for the housing system with the least possible nitrogen loss.
- Calculation of feed consumption, with 5000 feed units per LU.
- Calculation of the actual nutrient contents (an analysis with indication of quantities), with 100 kg N ex warehouse equivalent to 1 LU.

9) For manure from common manure plants (common biogas plants and similar facilities based on degassed plant biomass), conversion into LU shall be based on a conversion factor where LU is equivalent to 100 kg N ex storage.

Annex 2

The establishment of barriers, cf. section 19, subsection 2, shall comply with the following conditions of notification pursuant to section 35:

- 1) The barrier is to be established as an earth bank or bank of the same materials as the container around which it is built. The colours are to be the same as those of the container, or an earthen colour.
- 2) The distance between the container and the barrier foot may not exceed 20 metres. Barrier height may not exceed 1 metre below the height of the container above the terrain.
- 3) The barrier is placed no closer than 30 metres from adjoining properties.
- 4) No later than 31 December of the year after establishment of the barrier, hedges must be established around the barrier, or on the barrier itself if the barrier is an earth bank. The hedges shall consist of native broad-leaved species or shrubs.

Annex 3

The quantity of livestock manure applied on an agricultural holding may correspond to 2.3 livestock units per hectare per planning period (cf. section 31, subsection 3 of this Order) on the following conditions:

- 1) At the cattle farm 70% or more of the area which is available for livestock manure application shall be cultivated with beets, grass, or grass catch crops. Calculation of the area available is in accordance with section 32, subsection 2 of this Order.
- 2) Beets: forage beets.
Grass: permanent grass or grass in rotation.
Grass catch crops: grass undersown prior to or after harvest, no later than 1 August in spring barley, whole crop, green crop or silage maize.
Silage maize shall be undersown with grass no later than 1 August.
- 3) Livestock manure may not be applied between 31 August and 1 March on areas of grass that are ploughed during the same planning period. This shall be documented in the form of a dated statement signed by the operator.
- 4) Ploughing shall be followed by a nitrogen demanding crop; cf. the Act on Farms' Use of Fertiliser and Plant Cover that is in force at the time.
Grass in rotation may only be ploughed between 1 March and 1 June.
- 5) Grass catch crops may not be ploughed or desiccated before 1 March.
- 6) Leguminous and other nitrogen-fixing crops, such as red clover and white clover, may not be cultivated at the farm. However, this does not apply to clover grass with less than 50% clover.
- 7) Nitrogen and phosphorus analyses of soil in rotation shall be carried out at least once every 3 years per 5 hectares. Dated documentation for such analysis shall be available, for example, in the form of n-min calculations and soil analysis maps.
- 8) It must be reported no later than the electronic submission of the application for single payment, via www.virk.dk or www.naturerhverv.fvm.dk that the farm applies a quantity of livestock manure and a quantity of degassed plant biomass equivalent to 2.3 LU per hectare in the current planning period; cf. section 31, subsection 3 of this Order.