EPA RIVER QUALITY SURVEYS: BIOLOGICAL

Biotic indices ("Q Values") reflect average water quality at any location as follows:

Q Value*	WFD Status	Pollution Status	Condition **
Q5, Q4-5	High	Unpolluted	Satisfactory
Q4	Good	Unpolluted	Satisfactory
Q3-4	Moderate	Slightly polluted	Unsatisfactory
Q3, Q2-3	Poor	Moderately polluted	Unsatisfactory
Q2, Q1-2,	Bad	Seriously polluted	Unsatisfactory

* These Values are based primarily on the relative proportions of pollution sensitive to tolerant macroinvertebrates (the young stages of insects primarily but also snails, worms, shrimps etc.) resident at a river site. The intermediate values (Q1-2, 2-3, 3-4 etc.) denote transitional conditions. The scheme mainly reflects the effects of organic pollution (i.e. de-oxygenation and eutrophication) but where a toxic effect is apparent or suspected the suffix '0' is added to the biotic index (e.g. Q1/0, 2/0 or 3/0). An asterisk after the Q value (e.g. Q3*) indicates something worthy of special attention, typically heavy siltation of the substratum.

** "Condition" refers to the likelihood of interference with beneficial or potential beneficial uses.

Also presented is a description of the exact location surveyed with relevant OS Grid Reference, WFD river water body code and relevant Local Authority.

Hydrometric Area 36

Name	Code
ABBEY	36A01
AGHACASHLAUN	36A03
AGHNACLIFFE STREAM	36A06
ANNADALE STREAM	36A05
ANNALEE	36A02
AVAGHON LAKE STREAM	36A07
BALLAGH	35B01
BALLAGHNATRILLICK	35B02
BALLINAGH	36B01
BAWNBOY	36B07
BLACKWATER (NEWTOWNGORE)	36B04
BLACKWATER (SWANLINBAR)	36B03
BRADOGE	35B07
BUNNOE	36B05
CAVAN	36C02
CONAWARY (UPPER)	36C11
CORNAVANNOGE	36C04
CULLIES	36C03
DERRADDA STREAM	36D07
DROMORE	36D02
DROWES	35D03
DRUMANE STREAM	36D04

Name	Code
DUFF	35D05
ERNE	36E01
FINN (MONAGHAN)	36F01
GLENANIFF	35G02
GREEEN LOUGH STREAM (CAVAN)	36G01
KILNALECK	36K02
KNAPPAGH	36K01
LAHEEN STREAM	36L02
LARAGH	36L01
LATSEY TRIB MADABAWN	36L04
LEAGHIN TRIB MADABAWN	36L74
LEGANAMER	36L79
LEGGA STREAM	36L03
LISDUFF 36	36L62
MADABAWN STREAM	36M02
MAGHERARNEY	36M01
MAGHERY	36M03
Major Lough Stream	36M08
OWENSALLAGH	36O01
RAG (CAVAN)	36R01
ROO	36R02
STRADONE	36S02
SWANLINBAR	36S01
TEMPLEPORT LAKE STREAM	36T01

Name	Code
Three Mile House Stream	36T63
Trib of Yellow Ballinamore	36Y03
WATERFOOT	36W03
WOODFORD (CAVAN)	36W01
YELLOW (BALLINAMORE)	36Y01

DROMORE

36D02

Date Surveyed (last survey year only): 16/10/23

Biological Quality Rating (Q Values)

Station Code	1971	1977	1980	1982	1984	1986	1989	1990	1993	1997	1998	2001	2004	2007	2010	2013	2014	2017	2019	2022	2023
RS36D020075										3	3	3	4	3-4	3-4	1-2*	3-4*	4	3	3-4	
RS36D020090							1	3	3-4	3-4	3-4	3	3-4		3-4	3-4		3-4	3-4	3-4	
RS36D020100	5	3	3-4	3	2	3-4	2	3				2-3							3-4	3-4	
RS36D020150			2	2	2	3	2	3	3	3-4	3-4		3	3-4	3-4	2-3		2-3	3-4	3-4	3-4
RS36D020300	4	2	3-4	3-4	3-4	3-4	3		3-4	3	3	3	3	3	3	3		3	2-3	3	
RS36D020400		4	3-4	3-4	3-4	3-4	3-4		3												
RS36D020500			4	4	3-4	3	3		3	3	3	3-4	3-4	3	3	3-4		3-4	3	3-4	
RS36D020600			4	3-4	3-4	3	3									3		3	3	3	
RS36D020700	4-5	2-3	3	4	3	3-4	3		3	3-4	3	3	3	3	3	3		3	3	3	
RS36D020800			4	4-5	4	4															
RS36D020900	4-5	4-5	4-5	4-5	4	4	3-4		4	4	4-5	4	4	3-4	3-4	4		4	4	4-5	
RS36D020905						4															
RS36D020910					1	4	3-4				3										

Most Recent Assessment:

One site was sampled on the Dromore river (0150) Br in Ballybay in 2023. The site was in unsatisfactory condition however it was close to the upper boundary and it did have 2 class A's present. Unfortunately, there was also a dominance of Gammarus at the site which is indicative of nutrient rich conditions and there was overlying silt present.

Station Details

Station Code	Station Location	WFD Waterbody Code	Easting	Northing	Local Authority
RS36D020075	Br SW of Bartley's Grove	IE_NW_36D020075	269058	324264	Monaghan County Council
RS36D020090	DROMORE - Br SE of Edenaferkin	IE_NW_36D020090	269552	322139	Monaghan County Council
RS36D020100	DROMORE - Br NE of Derryvalley Ho	IE_NW_36D020150	269807	321223	Monaghan County Council
RS36D020150	Br in Ballybay	IE_NW_36D020150	271702	320533	Monaghan County Council
RS36D020300	Balladian Br.	IE_NW_36D020300	269584	319747	Monaghan County Council
RS36D020400	DROMORE - Ballycoghill Br	IE_NW_36D020500	266001	317565	Monaghan County Council
RS36D020500	Ballynascarva Br	IE_NW_36D020500	264634	316399	Monaghan County Council
RS36D020600	New Br N of Clementstown	IE_NW_36D020600	259750	315153	Monaghan County Council
RS36D020700	Br. W. of Clementstown	IE_NW_36D020700	259269	314657	Cavan County Council
RS36D020800	DROMORE - Br N of Ashfield Lodge	IE_NW_36D020900	257584	313991	Cavan County Council
RS36D020900	Killycreeny Br (Mid)	IE_NW_36D020900	255719	313124	Cavan County Council
RS36D020905	DROMORE - Killycreeny Br (LHS)	IE_NW_36D020900	255715	313118	Cavan County Council
RS36D020910	DROMORE - Killycreeny Bridge (RHS)	IE_NW_36D020900	255709	313111	Cavan County Council

Appendix No. 14

Met Data

Clones 1978–2007 averages													
TEMPERATURE (degrees Celsius)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
mean daily max	7.2	7.8	9.7	12.1	15.1	17.4	19.2	18.8	16.6	13.1	9.8	7.6	12.9
mean daily min	1.6	1.6	3.0	4.2	6.5	9.5	11.4	11.1	9.2	6.6	3.9	2.3	5.9
mean temperature	4.4	4.7	6.4	8.1	10.8	13.4	15.3	15.0	12.9	9.9	6.8	5.0	9.4
absolute max.	14.8	16.3	16.9	21.5	25.9	29.3	30.5	28.3	25.3	20.1	16.9	14.8	30.5
min. maximum	-3.8	-0.4	2.3	0.0	0.0	10.1	10.7	11.3	10.7	6.2	1.6	-5.7	-5.7
max. minimum	12.0	11.3	11.0	12.1	13.4	16.9	18.7	18.0	17.1	15.4	12.7	12.6	18.7
absolute min.	-12.4	-7.3	-6.8	-3.8	-3.7	1.6	4.6	3.5	0.2	-4.5	-5.4	-11.0	-12.4
mean num. of days with air frost	9.4	8.5	5.0	2.5	0.4	0.0	0.0	0.0	0.0	1.1	4.2	7.4	38.4
mean num. of days with ground frost	17.0	15.0	13.0	11.0	6.0	1.0	0.0	0.0	2.0	5.0	12.0	15.0	97.0
mean 5cm soil	3.5	3.6	5.2	8.1	12.1	14.9	16.4	15.6	12.8	9.3	6.2	4.4	9.4
mean 10cm soil	4.0	4.0	5.3	7.7	11.1	14.0	15.6	15.1	12.7	9.6	6.7	4.9	9.2
mean 20cm soil	4.6	4.6	6.0	8.1	11.3	14.0	15.7	15.5	13.5	10.6	7.6	5.6	9.8
RELATIVE HUMIDITY (%)													
mean at 0900UTC	89.9	88.7	86.6	81.8	77.4	78.8	81.7	84.6	87.3	89.3	90.8	90.9	85.7
mean at 1500UTC	83.3	77.3	72.9	67.5	66.5	68.7	69.6	71.2	72.8	77.3	82.5	85.9	74.6
SUNSHINE (hours)													
mean daily duration	1.5	2.2	3.0	4.6	5.6	4.6	4.4	4.2	3.6	2.8	1.8	1.2	3.3
greatest daily duration	7.5	9.8	11.0	13.1	15.5	16.0	15.2	14.4	12.0	9.6	8.5	6.9	16.0
mean num. of days with no sun	12.1	8.3	6.0	3.8	2.2	2.6	2.2	2.8	4.0	6.9	10.3	13.2	74.3
RAINFALL (mm)													
mean monthly total	87.6	71.0	84.0	61.6	63.4	70.9	70.8	88.7	76.2	102.7	85.1	98.4	960.4
greatest daily total	30.0	26.9	34.0	23.5	37.7	38.1	50.3	74.6	27.1	43.8	33.1	31.9	74.6
mean num. of days with >= 0.2mm	20	17	20	16	16	17	18	18	18	20	19	19	218
mean num. of days with >= 1.0mm	15	12	15	12	12	12	13	13	13	15	14	15	161
mean num. of days with >= 5.0mm	6	5	6	4	4	5	4	5	5	7	6	7	64
WIND (knots)													
mean monthly speed	9.2	9.4	9.4	7.9	7.2	6.7	6.3	6.3	7.0	7.8	8.2	8.7	7.8
max. gust	70	81	69	61	53	50	53	49	57	62	60	72	61.4
max. mean 10-minute speed	46	51	41	34	35	31	30	29	37	37	35	44	37.5
mean num. of days with gales	0.6	0.4	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	2.2
WEATHER (mean no. of days with..)													
snow or sleet	4.9	4.7	3.8	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.6	2.6	18.0
snow lying at 0900UTC	2.8	1.1	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2	6.2
hail	0.8	1.6	2.8	2.3	1.3	0.1	0.1	0.0	0.1	0.6	0.4	0.8	10.8
thunder	0.1	0.1	0.1	0.1	0.8	1.0	0.5	0.8	0.1	0.1	0.0	0.1	3.8
fog	3.7	3.6	2.1	2.2	1.5	1.3	1.6	2.9	4.0	3.5	4.0	4.4	34.8

Appendix No. 15

Dept. of Agriculture – Minimum Specification for Screening belts for Farmyards and Farm Buildings – S 135

AN ROINN TALMHAÍOCHTA, IASCAIGH AGUS BIA
DEPARTMENT OF AGRICULTURE, FISHERIES AND FOOD

S 135
November 2008

MINUMUM SPECIFICATION FOR SCREENING BELTS AND SHELTER BELTS FOR FARMYARDS AND FARM BUILDINGS

The receiving of this specification does not imply approval of a grant application. However, if written approval is issued, then this specification becomes part of the contract between the applicant and the Department of Agriculture, Fisheries and Food.

This is a minimum specification. Where the word "SHALL" is used, then that standard (at least) must be followed in grant-aided buildings. Where a procedure is "RECOMMENDED", this is advice only on good practice.

Note that all references to other Department Specifications are to the current edition of that specification [available on the Department of Agriculture, Fisheries and Food Website (www.agriculture.gov.ie) under Farm buildings]. Similarly, references to Standards are to the current edition of the Irish, British or European Standard, as appropriate.

This specification describes the installation and maintenance of trees to screen or shelter a single farm building, or collection of buildings. **Screening** belts refer to rows or groups of trees planted to hide obtrusive buildings, or to soften their impact, particularly in scenic landscapes. **Shelter** belts may also screen buildings, but have the particular purpose of moderating strong winds around buildings and farmyards.

1. Safety

APPLICANT'S RESPONSIBILITY FOR SAFETY

Applicants are reminded that they have a duty under the Safety, Health, and Welfare at Work Act 2005 to provide a safe working environment on the farm, including farm buildings, for all people who may work on that farm. There is a further duty to ensure that any contractor, or person hired to do building work, provides and/or works in a safe environment during construction. It is the farmer's responsibility to provide a construction stage project supervisor.

SAFETY DURING CONSTRUCTION

Farmer/Applicant Responsibility: Certain construction dangers may be encountered in the course of building or conversion work. Neither the Minister or any official of the Department will be in any way liable for any damage, loss or injury to persons, animals or property in the event of any occurrence related to the development and the applicant shall fully indemnify the Minister or any official of the Minister in relation to any such damage, loss or injury howsoever occurring during the development works.

Dangers: If any or all of the work is undertaken by the applicant/farmer he/she should seek competent advice and undertake all temporary work required to ensure the stability of excavations, superstructure, stanchion foundations and wall foundations,

also to divert any drains, springs or surface water away from the works, and to guard against possible wind damage, or any other foreseeable risk.

Power lines: Farm buildings shall not be constructed under or nearer than 10m to an overhead power supply. If advice is required, or if power lines need to be diverted, it is the applicant's responsibility to contact, in writing, the local ESB supervisor before construction commences, and then to follow the ESB conditions.

Danger to children: It is the applicant's responsibility to prevent children from playing or spending time in the vicinity of any building work.

2. Design and Layout of Screening Belts

Factors which influence the layout and the design of a **screening belt** are:-

- The direction from which obtrusive buildings have the greatest impact. This would frequently be the public road, but could also be a scenic viewing place, a neighbouring house or houses, or even the applicant's farmhouse.
- The fact that buildings are on a height or on a ridge making them highly visible from a distance.
- The likely future development of the farmyard:
  Trees should not block any obvious or useful sites for possible new buildings.
- Possible root damage to structures. Trees should be set about 20 metres or more from buildings, yards, concrete tanks, silos, etc.
- Buildings on adjoining property. No belts of trees should be planted within 30 metres of neighbouring dwellings or farm buildings.

When trying to soften the impact of obtrusive buildings it is not necessary to surround buildings or yards completely. One or two stands of reasonably tall trees can entirely change the appearance of a farmyard, and integrate it into the landscape, even if some buildings remain visible.

A single row of trees is not an effective screen, and usually looks unnatural. Two to three rows of trees should normally be planted, though informal groups of trees can be just as effective. Very long straight lines of trees should, where possible, be avoided by introducing curves or breaks.

3. Design and Layout of Shelter Belts

Factors which influence the design and layout of a **shelter belt** are:-

- The direction of prevailing winds, and of winds, which are particularly strong because of "funnelling" along valleys or around hills.
- The position of buildings or structures, which particularly need shelter (calf or sheep houses, animal yards, etc.)
- Future development of the farm, and distance from existing buildings or neighbouring buildings, as above.

Shelter belts work best when they allow about 50% of the wind to pass through. The wind should be slowed rather than blocked as for instance, by Lawson Cypresses which simply cause turbulence. A mixture of species including spruces, pines, firs, and broad leaves will provide a naturally porous belt, providing good shelter.

Shelter belts should have about five or six rows of trees, though ten or more rows may be necessary where winds are very strongly funnelled. To be effective, shelter belts should extend in both directions well beyond the line of the structure(s) they are protecting.

Unless protection from strong south winds is essential, the area directly to the south of the building(s) should not be planted to ensure adequate sun and light.

4. Site Preparation

The site should be cleared of any scrub and furze and graded to blend with the immediate surroundings. As young trees establish more easily with some initial protection, all existing barriers such as hedges and stone walls should be retained, where possible.

5. What to Plant

The choice of species will be based on the following considerations:-

1. The suitability of different species for physical conditions on the site, i.e. -soil type, drainage, exposure etc.
2. The suitability of different species for the landscape. In general deciduous trees are more appropriate than most evergreens. Very narrow tall evergreens (Leyland and Lawson Cypresses) should not be used. They draw attention to buildings and look alien in the Irish landscape. The best indicator of the most suitable species for an area are the trees already grown there successfully and look well (see appendix attached).
3. For both screening and shelter a mixture of species is recommended. Generally one species should predominate at about, 60-70% of planting, with one or two other species, grouped irregularly, providing the remainder. A mixture of too many species should be avoided, as should the use of different species placed in a regular alternating pattern in a long row.

6. When to Plant

Planting is carried out when the trees are dormant from October to April. Autumn planting is preferred for deciduous trees, while Spring planting March/April is best for evergreens.

7. Handling and Planting

Ensure that all preparatory work is completed before the trees are delivered. Tree roots must never be allowed dry out. Weather permitting; planting should commence immediately the trees arrive.

8. Pit Planting

This method is used on dry mineral soils. The young tree is inserted in a hole 150mm x 150mm x 150mm to the depth it was in the nursery soil. The roots should be teased prior to careful back-filling.

9. Ploughing and Mounting

Here planting is done by making a slit on the inverted sod/ribbon and inserting the tree so that the roots are between the two grass layers.

10. Spacing

Trees are spaced at two metres apart each way. This works out at 2,500 trees per hectare.

11. Fertilizer

Areas enclosed as fields and previously used for intensive farming normally require no further fertilizer. Other poorer areas may require a dressing of 400 kg/ha of rock phosphate. Some midland sites may require 200kg/ha of potash. A top dressing of nitrogen is beneficial to sitka spruce as growth rate is slow.

12. Fencing

All stock must be completely excluded from the new plantings. Fences must conform to specification S148. They should be kept close to the edge of the plantation to reduce their obtrusive impact on the landscape. In order to protect the young trees the fence should consist of a minimum of three strands of barbed wire plus one metre high sheep wire.

13. Maintenance of Screening Belt

It is essential to control growth of grass and weeds around the young trees during the first four years. Unchecked vegetation growth will result in poor tree establishment. Grass and weeds can be controlled by treading or by the use of suitable herbicides. Failures should be replaced each year.

Note: Herbicides shall not be used in close proximity to watercourses, field margins or wildlife habitats.

14. Minimum and Maximum Planting Areas

This specification refers **only** to the screening or shelter of farm buildings and farmyards.

The **minimum** area of planting for which this specification shall be used is 0.2ha. The **maximum** area that will be grant-aided is 2ha.

Shelter belts to protect herds or crops, or other forestry plantings on the farm, come under the responsibility of the Forest Service of this Department.

General Guide to Tree Species for Irish Farm Conditions

NATIVE BROADLEAVES

SPECIES	OPTIMUM SITE	CHARACTERISTICS	TIMBER QUALITY	REMARKS
Pedunculate Oak *Quercus Robur*	Well-aerated deep fertile loams. Will do well on heavier soils	Slow growing, long lived tree once the climax vegetation over most of the country	Very high quality timber suitable for many uses. Subject to timber defects when grown on adverse soils	Major forest species. One of our few native broadleaved trees. Very high amenity value
Sessile Oak *Quercus Petraea*	Tolerates less rich and lighter textured soils than *Q. robur*	Oaks will not produce good timber on excessively drained or sandy soils	Reputedly slightly better timber than *Q. robur* but site should determine choice	Major forest species. Native to Ireland. Now designated as Irish national tree
Ash *Fraxinus Excelsior*	A very exacting species demanding good soil conditions, preferably sheltered, moist well-drained fertile loam soils	A fast growing species regarded as not being suitable for large scale planting	Very high quality timber. Suitable for veneer, furniture and implement handles. High shock resistance	Major forest species. Native tree. Its wide distribution belies the difficulty in producing good quality timber
Wild Cherry *Prunus Avium*	Fertile deep well-drained mineral soils. Preference for slightly acid soils but will do well on deep loams over limestone	Fast growing, light demanding, requiring considerable space. The only commercial broadleaved tree with attractive blossoms	Produces one of the most valuable furniture and veneer timbers with a reddish brown sheen. Also used for quality turnery products	Major forest species. Native tree. High quality timber production requires good silvicultural management. A very good farm forestry tree. May suffer from bacterial canker and aphid attack
Alder *Alnus spp*	Common alder is a very hardy accommodating species suitable for wet sites. Good wildlife species. Grey and Italian alders will tolerate and grow well on drier sites. Italian alder is has a preference for more alkaline sites	Fast growing nitrogen fixing tree. Suitable broadleaf for even the wettest sites	Durable general purpose timber with a course texture. Less used in recent times	Minor forest species. Common Alder is a native tree. Coppices freely and can be used in mixtures on very infertile sites. Valuable shelter tree
Birch *Betula spp*	Pioneer species suited to very acid soils and peats	Fast growing, hardy species, withstands exposure and frost well. Useful as a nurse crop in mixtures but must be kept under control or it will smother a slower growing tree species	Not regarded as a timber tree in Ireland. Is used for pulp in Scandinavia	Minor forest species. Native tree. Young trees coppice freely. May be used as a soil improver. Can be mixed into shelterbelts
Willow *Salis spp*	Useful species for wet sites and streamsides	Fast growing useful for conservation and amenity but rarely for timber production. Willow can be used in a variety of ways as a shelterbelt system	Willow rods are regularly used for basket-making and decorative craftwork	Minor forest species. Native tree. Willow is currently being intensively studies as a suitable species for Short Rotation Forestry (Biomass) as an energy source
Whitebeam *Sorbus Aria*	Most fertile mineral soils	Attractive amenity tree also suitable for shelter	Not a timber tree	Minor forest species. Native tree. Tolerant of exposed and coastal sites
Rowan *Sorbus Aucuparia*	Suitable for lowland and hill acidic sites. Will tolerate even alkaline sites	Hardy tree suitable for exposed sites. Widely used amenity tree	Not a timber tree	Minor forest species. Native tree. Offers good support for wildlife

NON-NATIVE BROADLEAVES

SPECIES	OPTIMUM SITE	CHARACTERISTICS	TIMBER QUALITY	REMARKS
Beech *Fagus Sylvatica*	Well drained, loamy, fertile soils with a preference for soils derived mainly from limestone	Tolerant of shade when young. Creates dense shade and suppresses ground vegetation as it reaches maturity	Excellent timber. Wide range of uses including veneer, furniture, flooring and panelling	Major forest species. Non-native tree. Benefits from a nurse on exposed sites. Useful for under-planting. Grey squirrels can be very destructive particularly to young beech
Sycamore *Acer Pseudoplatanus*	Prefers a moderately fertile free draining soil. Tolerant of calcareous soils	Fast growing tree that seeds easily. Withstands exposure and smoke pollution very well	Tough, durable, white timber with a range of uses. Figured sycamore is much sought after for veneer and furniture manufacture	Major forest species. Non-native tree. Grey squirrels can be very harmful. A windfirm tree. Rich in wildlife value. Valuable for shelter
Poplars *Populus* Hybrid clones	Very exacting species requiring deep, well drained moderately fertile sites	Very fast growing, light demanding tree. Some species susceptible to bacterial canker, select disease resistant clones only	Light hardwood timber with many uses. Suitable for veneer, furniture, joinery, plywood, palletwood and fruit boxes	Potentially major forest species. Non-native tree. Offers great prospects as Short Rotation Forestry species for pulpwood, paper and particle board
Red Oak *Quercus Rubra*	Grows well on poor sandy soils	A fast growing tree, less suited to heavy soils	Yields good pale reddish brown timber, straight grained and easy to cleave but not quite so strong as Q.robur	Minor forest species. Non-native tree. High amenity because of its red and russet colours in the autumn
Horse Chestnut *Aesculus Hippocastanum*	Thrives on all except waterlogged sites but has a preference for fertile soils	An excellent amenity tree used mainly for avenues or as a specimen tree	Timber is soft, weak and of limited use	Minor forest species. Non-native tree
Walnut *Juglans spp*	Deep, well drained, loam textured, moderately fertile soil. Suitable for well sheltered sites with a southerly aspect	J. nigra grows somewhat faster than J. regia but timber may not be as highly figured. Worth pruning to give a clean stem	Strong, tough elastic, high value timber. Valuable decorative timber much used for furniture and veneer	Potentially major forest species. Non-native tree. Abnormal growths called “burr walnut” are much sought after for veneer, an example of diseased or malformed wood being more valuable than healthy timber
Lime *Tilia spp*	Grows on a wide range of sites, but prefers moist fertile limestone soils	Relatively fast growing. Suitable for planting as an amenity tree. Attracts swarms of aphids in summertime causing sticky “honeydew” to cover foliage that drips off to ground vegetation	A very soft, light, white or yellow timber of limited use, although can be used for turnery and wood carving	Minor forest species. Non-native tree. Tree flowers are strongly scented and a great attraction for many insects and a rich source of nectar for bees
Norway Maple *Acer Platanoides*	Prefers a deep, moist, alkaline soil. Tolerates less fertile and drier sites than sycamore. Avoid exposed sites and frost hollows	Fast growing tree when young. An attractive amenity tree. Greenish yellow flower makes a beautiful sight in early spring. Brilliant red, green and gold coloured leaves in the autumn	Same as sycamore and used for similar purposes, but slightly inferior and not as attractively grained	Minor forest species. Non-native tree. Grey squirrel can be very damaging

CONIFERS

SPECIES	OPTIMUM SITE	CHARACTERISTICS	TIMBER QUALITY	REMARKS
Silka Spruce *Picea Sitchensis*	Prefers wet mineral soils and peats with previous agricultural use. Well suited to high rainfall areas. quite tolerant of exposed sites	Very fast growing tree. Avoid low rainfall areas, very dry and frost prone sites. Do not plant in single rows for shelter	Reasonably valuable whitewood. General-purpose timber known as "white deal". Used widely in the general building and construction industry	Major forest species. Non-native tree. An excellent pulpwood tree for paper, fibre and particle-board industries
Norway Spruce *Picea Abies*	Prefers less acid mineral soils and peats	Not as fast growing or as tolerant of poor sites and exposure as sikta. More suitable for planting in hollows than sikta, being more resistant to frost damage	Somewhat superior to sitka making it also suitable for joinery	Major forest species. Non-native tree. Good drainage is important to avoid windthrow. Poor wildlife tree because of its very dense shade. Suitable for shelter
Douglas Fir *Pseudotsuga Menziesii*	Prefers a moist deep well drained soil of moderate fertility	A fast grower on suitable sites. Ideally suited to sheltered valley slopes. Dislikes waterlogged and shallow soils	An excellent timber of good strength and quality, sometimes referred to as "Oregon pine" it is used for building, flooring, joinery and other uses. Much in demand for transmission poles	Major forest species. Non-native tree. Delayed thinning of crop may lead to windthrow. Poor wildlife value
Lodgepole Pine *Pinus Contorta*	Grows on the poorest of mineral and peat soils	A fast growing pioneering species. Withstands exposure better than most other species. Up to recent times was widely planted on even the most difficult of sites	A general-purpose timber, suitable for building, joinery and other uses	Minor forest species now. Non-native tree. Suffers greatly from "basal sweep" reducing the quality of the log. One of the best shelter tree species
Larch *Larix spp*	European larch prefers moist, well drained, moderately fertile loams while both Japanese and hybrid larch will tolerate a wider range of sites with a preference for high rainfall areas	Larches are strong, light demanding, deciduous conifers. First generation hybrid is normally faster growing than Japanese and both are faster than European	All larches produce dense valuable commercial timber which is both heavier and stronger than most other softwoods	Major forest species. Non-native tree. Larches have a high amenity and wildlife value. Produces light shade allowing ground vegetation
Scots Pine *Pinus Sylvestris*	Thrives on light textured or sandy soils. Tolerant of acid conditions. Avoid poorly drained or alkaline soils and exposure to coastal winds	A strong, light demanding slow growing tree. Can be used as a nurse species. Unsuitable for high elevations or shelter-belting	Good general-purpose softwood timber referred to as "red deal" in the trade. Suitable for construction, flooring, joinery and other uses	Major forest species. Once native but died out, now comes from imported sources. Regarded as the best conifer for both amenity and wildlife. Attracts insects, birds and red squirrels

CONIFERS

SPECIES	OPTIMUM SITE	CHARACTERISTICS	TIMBER QUALITY	REMARKS
Monterey Pine *Pinus Radiata*	Light to medium textured free draining loam soils. Can be used on infertile sandy soils. Not frost hardy	Very fast growing tree but often of poor coarse branched form. Requires careful attention to seed selection preferably from new Zealand. Early and heavy pruning helps to produce a worthwhile crop	Not much known about quality of Irish grown timber. Widely used general-purpose timber in southern hemisphere, New Zealand, Australia and Chile	Minor forest species. Non-native tree. A species with potential if quality seed stock can be produced. Suitable for shelterbelts in coastal areas
Western Red Cedar *Thuja Plicata*	Requires deep free draining fertile soil. Good on alkaline soils. Avoid poor or very acid soils and exposed sites	Shade tolerant moderately fast growing tree. Useful for under-planting	Produces a lightweight timber of moderate strength. Very durable in outdoor situations, suitable for greenhouses, decking and cladding	Minor forest species. Non-native tree. Regarded as good estate tree suitable for screens, mixtures and game cover
Western Hemlock *Tsuga Heterophylla*	Can tolerate acid mineral soils and the better peats. Suitable for low rainfall areas. Avoid planting on sites where previous conifer crop suffered from butt rots	Moderate growth rates. A strong shade bearer and excellent for under-planting. Probably best established under some shade	Good durable timber suitable for quality building purposes	Minor forest species. Non-native tree which has potential for greater use
Noble Fir *Abies Noblis*	Prefers well-drained mineral soils. Tolerates moderately acid soils and is less frost tender than other firs. Has a wide pH tolerance	A fast growing tree unsuitable for very poor and dry sites. Christmas tree production may require somewhat less fertile soils	Timber may be (unfairly) regarded a being of inferior quality. Now mostly grown for Christmas tree production and foliage	Minor forest species now developing multiple uses. Non-native tree. When grown for Christmas tree production need to be well managed to produce a compact well furnished tree
Corsican Pine *Pinus Nigra var. Maritima*	Wide range of soils from sands to heavy clays. Suitable for coastal areas	Moderate growth rates but a good tree for difficult areas such as exposed areas or sandy soil	Similar to scots pine but not quite as good	Minor forest species. Non-native tree. More resistant to smoke pollution than most conifers. Suitable shelter tree
Cupressus like species *Cupressus* *Chamaecyparis* *Cupressocyparis*	Tolerate a wide range of soils except very acid soils and raw peats	Moderate to fast growth rates but very poor stem form or coarse branching In most cases	General purpose softwood uses	Minor forest species. Non-native tree. Macrocarpa suitable for shelter in coastal areas. **Leyland and Lawson although widely used for shelter-belting and screening are in most cases in-appropriate and an intrusion in the landscape**

Appendix No. 16

Water Protection Plan Checklist

MONAGHAN LOCAL AUTHORITIES
Water Protection Plan Checklist

(To be accompanied by a Site Drainage Plan - Refer to Chapter 4 of Monaghan County Development Plan 2013-2019)

General Site and Water Body Details			
Planning Ref. No.	***N/A***	Applicant	***Declan Sullivan***
Townland	***Drumcreeghan***	Water Supply Source	***GWS***
X Co-ordinate [1]	***270975***	Y Co-ordinate [1]	***316146***
WMU [2]	IE_NW_Woodford	RWB [2]	Bowelk, Trib of Dromore and Erne
WB Status [2]	***Poor***	Objective [2]	***Restore 2027***
Groundwater Vulnerability [3]	***PI***	Aquifer Importance [3]	***E***
Proximity to nearest watercourse (culverted or open), wetland or lake (meters)			***c. 60 m***

Proposed Development Is the development entirely or part of one of the following? (tick)					
Domestic dwelling		Agricultural (cattle/dairy)		Industrial-food related	
Public Works		Agricultural (mushrooms)		Industrial-non food	
Housing		Agricultural (poultry)	***X***	Quarrying/extractive industries	
Institutional		Agricultural (piggery)		Transport related	
Commercial/Retail		Other agricultural – specify below		Filling station/Fuel depot	
Mixed Use Development				Other	

Waste Water Production and Treatment Method	
Domestic type waste waters	***N/A***
Waste waters produced from any trade, food, preparation or business [4]	***N/A***
Wheel wash, vehicle wash, cooling waters	***N/A***
Waste waters produced from quarrying etc [4]	***N/A***
Other waste waters [4]	***Soiled water applied to applicant's landholding as per SI 113 of 2022.***
Construction phase waste waters	
Frequently asked questions for septic tanks may assist in the "fit for purpose" assessment refer to http://www.monaghan.ie/en/services/environment/water/waterawareness/faqforseptictanks/	

Fuel or Outdoor Material Storage for Non Domestic Developments	
Number of fuel storage tanks existing or proposed on site?	***Gas Storage Tanks***
Are fuel storage tanks bunded [5]?	***N/A***
Detail liquid / feedstuffs / organic / chemical / waste oil storage on outdoor sites	***Under Ground mass concrete soiled water tank(s)***

Hard Surface and Open Yard Areas for Non Domestic Developments	
Footprint of proposed development including yard areas in m^2	***c. 0m2***
Is there potential for soiled yard areas from material, product waste or manure handling, fuel dispensing, silt and soil, yard washing etc.	***Yes***
If yes, are silt trap(s), interceptor(s), soiled water tanks or other control measures shown on drainage plan?	***Yes***
Has the use of SUDS (Sustainable Urban Drainage Systems – http://www.susdrain.org) been considered in the design of this development?	***Yes***

Development History – All Developments	
Have previous pollution prevention planning conditions been complied with [6]?	***Yes***
Does existing development have an up to date (as constructed) site drainage plan?	***Yes***
Is the existing/proposed development sewered or unsewered?	***N/A***
If unsewered, is the existing wastewater treatment system fit for purpose[7]?	***N/A***
Has the storm water drainage system been examined and/or surveyed for misconnections? (Information leaflet available from Environment Section)	***N/A***
Checklist of items to be included on Site Drainage Plan	
Location of lakes, watercourse, wells used for water supply, or karst features on or within 25m of domestic or 100m of non domestic development site	***Yes***
Location of all drainage outfall points	***Yes***
Foul water drainage system (in Red)	***Yes***
Storm water drainage system (in Blue)	***Yes***
Soiled yard area, soiled water drainage and management system, including silt traps, oil interceptor(s) and any SUDS facilities	***Yes***
Location of waste water treatment facilities	***N/A***
Location of fuel storage tank(s)	***(Gas)***
Stream/Lake/Wetland/Riparian Corridors	***N/A***
Footnotes and Useful Information	
[1] Projection in the Irish Grid	
[2] WMU, RWB, WB status. Objectives available on water maps at www.wfdireland.ie	
[3] Available in the public mapping section at www.gsi.ie	
[4] For information leaflets on Business Premises and Proper Use of Drains and information on discharge licensing see: http://www.monaghan.ie/contentv3/services/environment/formsguidesdocumentsdownlands/ http://www.monaghan.ie/contentv3/services/environemtn/water/waterawareness/leaftletsandguidelines/	
[5] Guidance: www.envirocentre.ie Best practice for Oil Storage (BPGCS05)	
[6] Has certification of installation for previously granted wastewater treatment system been required and if so has it been submitted.	
[7] Refer to EPA Guidance at: http://www.monaghan.ie/contentv3/services/environment/water/waterawareness/faqforseptictanks/ and http://www.monaghan.ie/contentv3/media/monaghanie/content/files/pdf/environment/Water Pollution&DrainageSystems.pdf	
[8] Refer to Water Body, Sensitive Waters and Sensitive Land Maps in Chapter 4 of the Monaghan County Development Plan 2013-2019	
Abbreviations	
WMU	Water Management Unit
RWB	River Water Body
WB Status	Water Body Status
IPPC	Integrated Pollution Prevention Control Licence
EIA	Environmental Impact Assessment

For Office Use: Sensitivity of Location	
Is the development located upstream of a high river quality site [8]?	
Is the development located within a good status waterbody [8]?	
Is the development located in the catchment of a water supply source [8]?	
Is the development located within the Source Protection Zone (SPZ) of a groundwater supply source [8]?	
Does the development require a discharge licence to surface or ground waters under the Water Pollution Acts?	
Risk to waters in relation to scale of development, previous planning/environmental history, IPPC or EIA aspects, site management and location in a sensitive area	

Applicant: Declan Sullivan

Agent: CLW Environmental Planners Date 25/09/2024

Appendix No. 18

Screening for Appropriate Assessment

Whitehill
Environmental

Noreen McLoughlin, MSc

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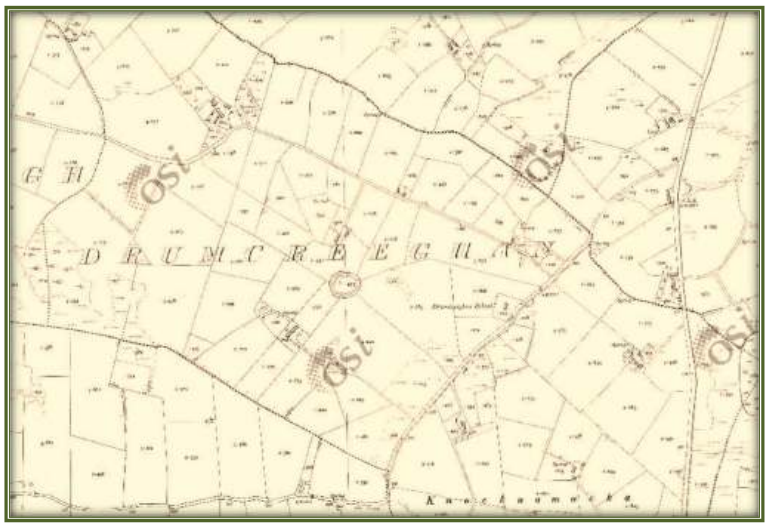
APPROPRIATE ASSESSMENT SCREENING REPORT FOR A PROPOSED DEVELOPMENT AT DRUMCREEGHAN, LATTON, CO MONAGHAN



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23 Farnham Street

August 2024

TABLE OF CONTENTS

1 INTRODUCTION

1.1 BACKGROUND

Article 6 of the EU Habitat's Directive (Council Directive 92/43/EEC) requires that all plans and projects be screened for potential impacts upon Special Areas of Conservation (SACs) or Special Protection Areas (SPAs). The aim of this screening process is to establish whether or not a full Appropriate Assessment of the proposed plan or project is necessary.

A comprehensive assessment of the potential significant effects of a proposed agricultural development (intensification of existing activities) in Drumcreeghan, Latton, Co. Monaghan on designated sites was carried out in August 2024 by Noreen McLoughlin, MSc, MCIEEM of Whitehill Environmental. This assessment allowed areas of potential ecological value and potential ecological constraints associated with this proposed development to be identified and it also enabled potential ecological impacts associated with the proposed development on designated sites to be assessed. It will allow Monaghan County Council, as the competent authority, to issue an Appropriate Assessment determination of the proposed development.

The location of the proposed development is within the Zone of Influence of sites designated under European Law. As such and in accordance with Article 6(3) of the EU Habitat's Directive (Council Directive 92/43/EEC) regarding Appropriate Assessment, this screening exercise for Appropriate Assessment was carried out in order to identify whether any significant impacts on designated sites are likely.

1.2 REGULATORY CONTEXT

RELEVANT LEGISLATION

The Birds Directive (Council Directive2009/147/EC) recognises that certain species of birds should be subject to special conservation measures concerning their habitats. The Directive requires that Member States take measures to classify the most suitable areas as Special Protection Areas (SPAs) for the conversation of bird species listed in Annex 1 of the Directive. SPAs are selected for bird species (listed in Annex I of the Birds Directive), that are regularly occurring populations of migratory bird species and the SPA areas are of international importance for these migratory birds.

The EU Habitats Directive (92/43/EEC) requires that Member States designate and ensure that particular protection is given to sites (Special Areas of Conservation) which are made up of or support particular habitats and species listed in annexes to this Directive.

Articles 6(3) and 6(4) of this Directive also call for the undertaking of an Appropriate Assessment for plans and projects not directly connected with or necessary to the management of, but which are likely to have a significant effect on any European designated sites (i.e. SACs and SPAs).

The Water Framework Directive (WFD) (2000/60/EC), which came into force in December 2000, establishes a framework for community action in the field of water policy. The WFD was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722 of 2003). The WFD rationalises and updates existing legislation and provides for water management on the basis of River Basin Districts (RBDs). RBDs are essentially administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (i.e. those covering the territory of more than one Member State) assigned to an international RBD. The aim of the WFD is to ensure that waters achieve at least good status by 2027 and that status does not deteriorate in any waters.

Appropriate Assessment and the Habitats Directive

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora – the 'Habitats Directive' - provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 - 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservation of an EU-wide network of sites known as *Natura 2000*. Natura 2000 sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive sets out the decision-making tests for plans or projects affecting Natura 2000 sites. Article 6(3) establishes the requirement for Appropriate Assessment:

"Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public."

Article 6(4) deals with the steps that should be taken when it is determined, as a result of appropriate assessment, that a plan/project will adversely affect a European site. Issues dealing with alternative solutions, imperative reasons of overriding public interest and compensatory measures need to be addressed in this case.

Article 6(4) states:

"If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member States shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest."

The Appropriate Assessment Process

The aim of Appropriate Assessment is to assess the implications of a proposal in respect of a designated site's conservation objectives.

The 'Appropriate Assessment' itself is an assessment which must be carried out by the competent authority which confirms whether the plan or project in combination with other plans and projects will have an adverse impact on the integrity of a European site.

Screening for Appropriate Assessment shall be carried out by the competent authority as set out in Section 177U(1) and (2) of the Planning and Development Act 2000 (as amended) as follows:

'(1) A screening for appropriate assessment of a draft Land use plan or application for consent for proposed development shall be carried out by the competent authority to assess, in view of best scientific knowledge, if that Land use plan or proposed development, individually or in combination with another plan or project is likely to have a significant effect on the European site.

(2) A competent authority shall carry out a screening for appropriate assessment under subsection (1) before—

(a) a Land use plan is made including, where appropriate, before a decision on appeal in relation to a draft strategic development zone is made, or

(b) consent for a proposed development is given.'

The competent authority shall determine that an Appropriate Assessment is not required if it can be excluded, that the proposed development, individually or in combination with other plans or project will have a significant effect on a European site.

Where the competent authority cannot exclude the potential for a significant effect on a European site, an Appropriate Assessment shall be deemed required.

Where an Appropriate Assessment is required, the conclusions of the Appropriate Assessment Report (Natura Impact Statement (NIS)) should enable the competent authority to ascertain whether the plan or proposed development would adversely affect the integrity of the European site. If adverse impacts on the integrity of a European site cannot be avoided, then mitigation measures should be applied during the appropriate assessment process to the point where no adverse impacts on the site remain. Under the terms of the Habitats Directive consent can only be granted for a project if, as a result of the appropriate assessment either (a) it is concluded that the integrity of any European sites will not be adversely affected, or (b) after mitigation, where adverse impacts cannot be excluded, there is shown to be an absence of alternative solutions, and there exists imperative reasons of overriding public interest for the project should go ahead.

Section 177(V) of the Planning and Development Act 2000 (as amended) outlines that the competent authority shall carry out the Appropriate Assessment, taking into account the Natura Impact Statement (amongst any other additional or supplemental information). A determination shall then be made by the competent authority in line with the requirements of Article 6(3) of the Habitats Directive as to whether the plan or proposed development would adversely affect the integrity of a European site, prior to consent being given.

2 METHODOLOGY

2.1 APPROPRIATE ASSESSMENT

This Statement of Screening for Appropriate Assessment (Stage 1) has been prepared with reference to the following:

- European Commission (2018). Managing Natura 2000 Sites: The Provisions of Article 6 of the 'Habitats' Directive 92/43/EEC.
- European Commission (2021). Assessment of Plans and Projects Significantly Affecting Natura 2000 sites: Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.
- European Commission (2006). Nature and Biodiversity Cases: Ruling of the European Court of Justice.
- European Commission (2007). Clarification of the Concepts of: Alternative Solution, Imperative Reasons of Overriding Public Interest, Compensatory Measures, Overall Coherence, Opinion of the Commission.
- Department of Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities.

The EC Guidance sets out a number of principles as to how to approach decision making during the process. The primary one is 'the precautionary principle' which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty.

When considering the precautionary principle, the emphasis for assessment should be on objectively demonstrating with supporting evidence that:

- There will be no significant effects on a Natura 2000 site;
- There will be no adverse effects on the integrity of a Natura 2000 site;
- There is an absence of alternatives to the project or plan that is likely to have an adverse effect to the integrity of a Natura 2000 site; and
- There are compensation measures that maintain or enhance the overall coherence of Natura 2000.

This translates into a four stage process to assess the impacts, on a designated site or species, of a policy or proposal.

The EC Guidance states that "each stage determines whether a further stage in the process is required". Consequently, the Council may not need to proceed through all four stages in undertaking the Appropriate Assessment.

The four-stage process is:

Stage 1: Screening – The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and considers whether or not these impacts are likely to be significant;

Stage 2: Appropriate Assessment – The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts;

Stage 3: Assessment of Alternative Solutions – The process which examines alternative ways of achieving objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site;

Stage 4: **Assessment where no alternative solutions exist and where adverse impacts remain –** An assessment of the compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project or plan should proceed.

In complying with the obligations set out in Articles 6(3) and following the guidelines described above, this screening statement has been structured as a stage by stage approach as follows:

- Description of the proposed project;
- Identification of the Natura 2000 sites close to the proposed development;
- Identification and description of any individual and cumulative impacts on the Natura 2000 sites likely to result from the project;
- Assessment of the significance of the impacts identified above on site integrity. Exclusion of sites where it can be objectively concluded that there will be no significant effects.

2.2 STATEMENT OF COMPETENCY

This AA Screening report was carried out by Noreen McLoughlin, BA, MSc, MCIEEM. Noreen has an honours degree in Zoology and an MSc in Freshwater Ecology from Trinity College, Dublin and she has been a full member of the Chartered Institute of Ecology and Environmental Management for over eighteen years. Noreen has over 20 years' experience as a professional ecologist in Ireland.

2.3 DESK STUDIES & CONSULTATION

Information on the site and the area of the proposed development was studied prior to the completion of this statement. The following data sources were accessed in order to complete a thorough examination of potential impacts:

- National Parks and Wildlife Service - Aerial photographs and maps of designated sites, information on habitats and species within these sites and information on protected plant or animal species, conservation objectives, site synopses and standard data forms for relevant designated sites.
- Environmental Protection Agency (EPA)- Information pertaining to water quality, geology and licensed facilities within the area;
- Myplan.ie – Mapped based information;
- National Biodiversity Data Centre (NBDC) – Information pertaining to protected plant and animal species within the study area;
- CLW Environmental Planners – Site plans, development description and information on potential emissions.
- Monaghan County Council – Information on planning history in the area for the assessment of cumulative impacts.

2.4 ASSESSMENT METHODOLOGY

The proposed development was assessed to identify its potential ecological impacts and from this, the Zone of Influence (ZoI) of the proposed development was defined. Based on the potential impacts and their ZoI, the Natura 2000 sites potentially at risk from direct, indirect or in-combination impacts were identified. The assessment considered all potential impact sources and pathways connecting the proposed development to Natura 2000 sites, in view of the conservation objectives supporting the favourable conservation condition of the site's Qualifying Interests (QIs) or Special Conservation Interests (SCIs).

The conservation objectives relating to each Natura 2000 site and its QIs/SCIs are cited generally for SACs as "to maintain or restore the favourable conservation condition of the

Annex I habitat(s) and/or Annex II species for which the SAC has been selected", and for SPAs "to maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA".

As defined in the Habitat's Directive, the favourable conservation status of a habitat is achieved when:

- Its natural range and area it covers within that range is stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future;

The favourable conservation status of a species is achieved when:

- The population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future;
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Where site-specific conservation objectives (SSCOs) have been prepared for a European site, these include a series of specific attributes and targets against which effects on conservation condition, or integrity, can be measured. Where potential significant effects are identified, then these SSCOs should be considered in detail.

3 SCREENING

3.1 DEVELOPMENT DESCRIPTION

Mr Declan Sullivan has indicated his intention to shortly apply to Monaghan County Council for planning permission for a development on his existing farm in Drumcreeghan, Latton, Co. Monaghan. Planning permission is being sought by the applicant for the intensification of the existing poultry rearing enterprise on the farm. There are two existing poultry houses on the farm which house 60,000 pullets. The applicant wishes to increase stock on the farm to 90,000 pullets. No additional construction works will be required. The proposed intensification will also require revisions to the existing EPA License which was issued in 2018 (P1065-01). An EIAR will also be submitted.

An extract from the planning drawings as submitted for a planning application granted on this farm in 2017 can be seen in Figure 1.

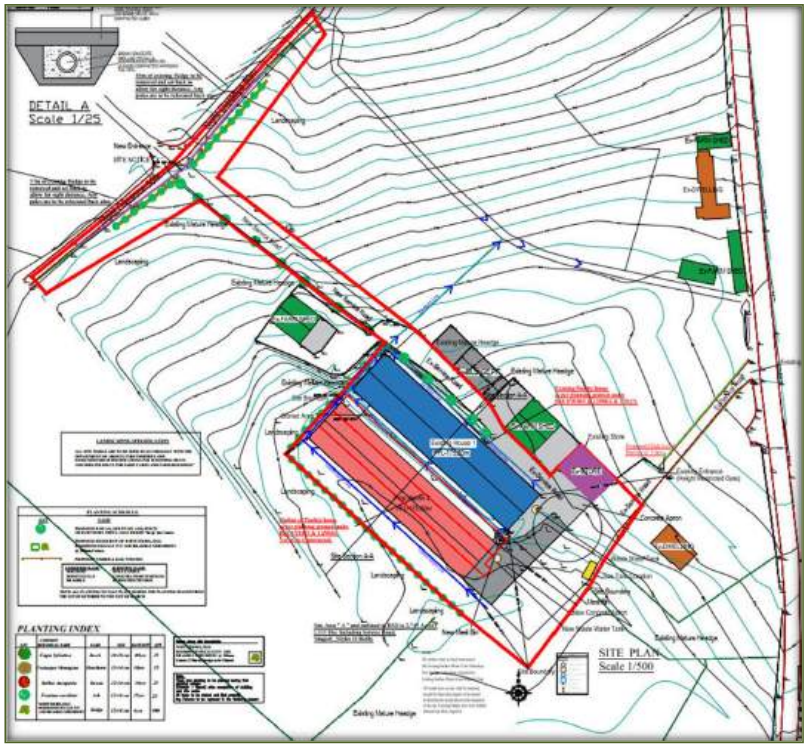


Figure 1 – Proposed Site Plan.

If approved, the farm will house 90,000 pullets. The operation of the farm will involve the rearing of the chickens from day olds over a period of approximately 16 weeks, to the point of laying. There will be approximately 2.5-3 cycles of per annum, with a break between batches during which time the cleaning of the houses and yards is carried out.

The spent poultry litter and manure will be removed from the farm by specialised contractors where it will be composted and used in the mushroom industry or it also may be used as an organic fertiliser in accordance with S.I. 113 of 2022. All records for the movement of fertiliser will be kept on site and presented to the Department of Agriculture, Food and Marine as requested. The operation of the farm and all its associated activities will continue in accordance with S.I. 113 of 2022.

S.I. 113 OF 2022

The European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022 provides a basic set of measures to ensure the protection of waters, including drinking water sources, against pollution caused by nitrogen and phosphorus from agricultural sources, with the primary emphasis being on the management of livestock manures and other fertilisers. The purpose of these Regulations is to give effect to Ireland's Nitrates Action Programme. This directive outlines measures that must be followed during the land-spreading of manure. These measures are summarised in the points below.

- The amount of livestock manure applied in any year to land on a holding, together with that deposited to land by livestock, shall not exceed an amount containing 170 kg nitrogen per hectare.
- The spreading of any organic fertiliser during certain times of the year is prohibited (The prohibited spreading period, generally between Mid-October and Mid-January).
- Farmers must keep within the overall maximum fertilisation rates for nitrogen and phosphorus.
- Farmers must have sufficient storage capacity to meet the minimum requirements of the regulations.
- All storage facilities must be kept leak proof and structurally sound.
- Records for the movement of fertilisers must be kept.
- Chemical fertilisers, livestock manure and other organic fertilisers, effluents and soiled water must be spread as accurately and as evenly as possible.
- An upward-facing splash plate or sludge irrigator on a tanker or umbilical system must not be used for the spreading of organic fertiliser or soiled water.
- Chemical fertilisers, livestock manure, soiled water or other organic fertilisers must not be spread when:
    - The land is waterlogged;
    - The land is flooded, or it is likely to flood;
    - The land is frozen, or covered with snow;
    - Heavy rain is forecast within 48 hours;
    - The ground slopes steeply and there is a risk of water pollution, when factors such as

surface run-off pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover are taken into account.

- Chemical fertilisers must not be spread on land within 2 metres of a surface watercourse.

Table 1 shows the buffer zones for various water bodies (lakes, rivers, wells etc.). Soiled water, effluents, farmyard manures or other organic fertilisers must not be spread inside these buffer zones.

Water Feature	Buffer Zone
Any water supply source providing 100m^3 or more of water per day, or serving 500 or more people	200m (or as little as 30m where a local authority allow)
Any water supply source providing 10m3 or more of water per day, or serving 50 people or more	100m (or as little as 30m where a local authority allows)
Any other water supply for human consumption	25m (or as little as 15m where a local authority allows)
Lake shoreline or a turlough likely to flood	20m
Exposed cavernous or karstified limestones features	15m
Any surface watercourse where the slope towards the watercourse exceeds 10%	10m
Any other surface waters	5m

Table 1 – Requirements for the Application of Fertilisers and Soiled Water as set out in S.I. 113 of 2022

Prior to its approval, a Natura Impact Statement was prepared for the Nitrates Action Programme (NAP) by RPS (2022). This Natura Impact Statement considered the potential of the measures proposed within the NAP to give rise to adverse effects on the integrity of European Sites, with regard to their qualifying interests, associated conservation status and the overall site integrity, alone and in combination with other relevant plans and programmes. The NIS concluded that the adoption of the NAP will not adversely affect the integrity of any European Site either alone or in combination with other relevant plans or programmes and subject to securing the mitigation measures prescribed in the NIS.

The applicant is fully aware of his obligations under S.I. 113 of 2022 and he will meet all the requirements under this Directive with the proposed application.

3.2 SITE LOCATION AND SURROUNDING ENVIRONMENT

The site in question is 1.11ha and it is located in a rural area within the townland of Drumcreeghan. Access to the site is via an existing entrance and access road into the farm, and this entrance is just off a local, third-class road. The site is 2.8km north-east of Latton and it is 4.2km south of Ballybay.

The land-use surrounding the site is predominantly agricultural and the main habitat in the lands surrounding the site is improved agricultural grassland. Other habitats represented in the area include semi-improved/neutral and wet grasslands, small areas of scrub and woodland, along with hedgerows, treelines and water courses. Site location maps can be seen in Figures 2 and 3, whilst an aerial photograph of the site and its surrounding habitats can be seen in Figure 4.

Figure 2 – Map showing the Location of the Proposed Development Site (Pinned)

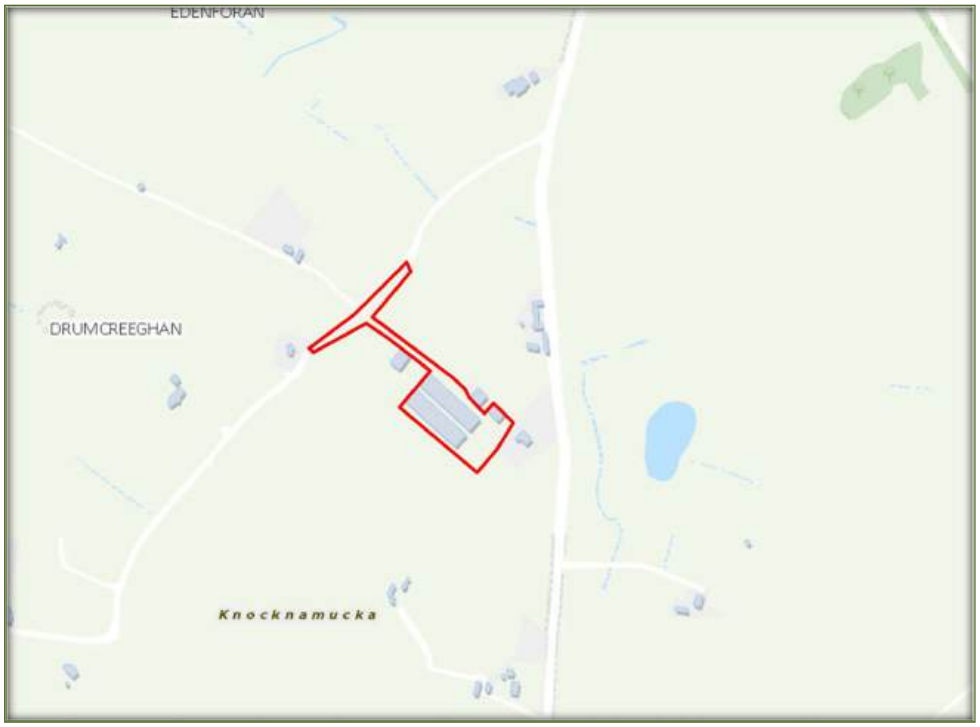


Figure 3 – Map showing the Location of the Proposed Development Site (Outlined in Red)

HABITATS WITHIN THE SITE

The application site does not lie within or adjacent to any area that has been designated for nature conservation purposes. The site encompasses the applicant's existing farm and the dominant habitat within it is Buildings and Artificial Surfaces. There are no habitats of biodiversity value within the site.

WATER FEATURES AND QUALITY

The application site is within the Erne Hydrometric Area (36) and Catchment (36), the Dromore Sub-Catchment (010) and Dromore Sub-Basin (040). There are no watercourses within or adjacent to the application site. The closest watercourse to the site is the Balladian Stream and this is 40m north of the application site. This stream rises in lands to the south-east of the application site. It flows in a northerly direction until its confluence with the Dromore River at a point approximately 3.5km north of the application site. The Dromore River is a tributary of the Annalee River.

The EPA have defined the ecological status of the Balladian Stream and its tributaries at points close to the application site as poor status. The Dromore River is also noted to be of poor ecological status. Under the requirements of the Water Framework Directive, this is unsatisfactory and good status should be achieved in these watercourses by the end of the current cycle of the WFD (2027).

Figure 4 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats © Google

3.3 NATURA 2000 SITES IDENTIFIED

In accordance with the guidelines issued by the Department of the Environment and Local Government, a list of Natura 2000 sites within 15km of the proposed development have been identified and described according to their site synopsis, qualifying interests and conservation objectives. In addition, any other sites further than this, but potentially within its zone of interest were also considered. The zone of impact may be determined by an assessment of the connectivity between the application site and the designated areas by virtue of hydrological connectivity, atmospheric emissions, flight paths, ecological corridors etc.

For significant effects to arise, there must be a potential impact facilitated by having a *source*, i.e., the proposed development and activities arising out of its construction or operation, a *receptor*, i.e., the European site and its qualifying interests and a subsequent *pathway* or *connectivity* between the source and receptor, e.g., a water course. The likelihood for significant effects on the European site will largely depend on the characteristics of the source (e.g., nature and scale of the construction works), the characteristics of the existing pathway and the characteristics of the receptor, e.g., the sensitivities of the Qualifying Interests (habitats or species) to changes in water quality.

There are no Natura 2000 designated sites within 15km of the application site. There are three designated sites within 25km of the site. These designated areas and their closest points to the proposed development site are summarised in Table 2 and a map showing their locations relative to the application site is shown in Figure 5. A full description of the sites can be read on the websites of the National Parks and Wildlife Service (www.npws.ie).

Site Name & Code	Distance	Qualifying Interests	Significant Effects?
Kilroosky Lough Cluster SAC 001786	23.2km north-west	• Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. • Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae • Alkaline fens • *Austropotamobius pallipes* (White-clawed Crayfish)	*No hydrological connectivity. Potential significant effects arising from atmospheric emissions will be considered further.*
Upper Lough Erne SPA UK9020071	23.8km west	• Whooper Swan *Cygnus cygnus*	*No hydrological connectivity. Potential significant effects arising*

			from atmospheric emissions will be considered further.
Magheraveely Mark Loughs SAC UK0016621	23.2km north-west	• Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp. • Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae • Alkaline fens • *Austropotamobius pallipes* (White-clawed Crayfish)	*No hydrological connectivity. Potential significant effects arising from atmospheric emissions will be considered further.*

Table 2 – Natura 2000 Sites Within 25km of the Proposed Site

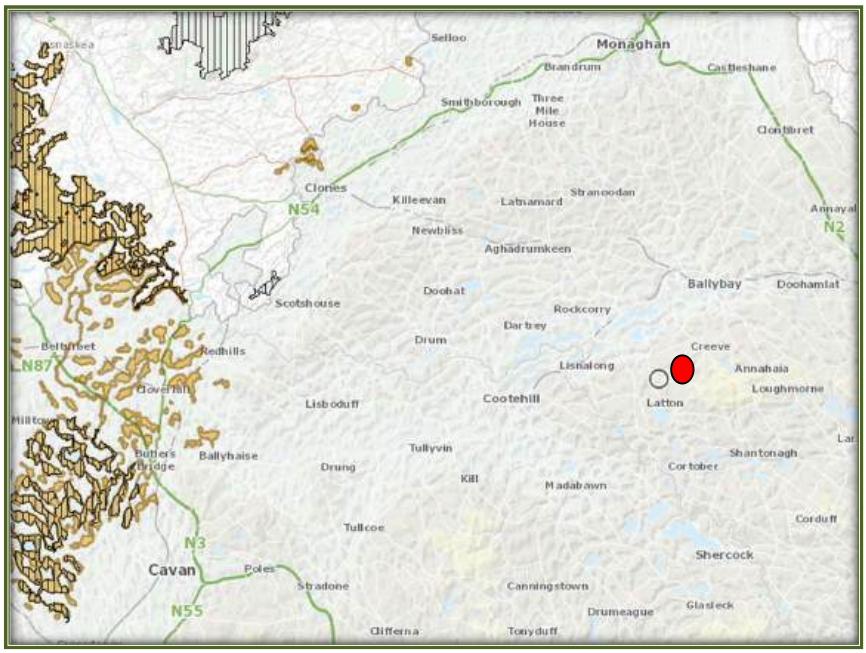


Figure 5 – The Application Site in relation to the Natura 2000 site (SACs - Brown Hatching, SPAs – Vertical Hatching)

3.4 IMPACT ASSESSMENT

The potential significant effects of the proposed development on the Natura 2000 sites within 20km will be considered further.

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on nearby Natura 2000 site:

The proposed development (increase in stock) at Drumcreeghan will have no significant effects upon the designated sites identified. There are no individual elements of the proposed project that are likely to give rise to negative impacts on these Natura 2000 sites. There will be no impacts upon designated habitats or species arising from the predicted increase in emissions from this facility. There is an adequate distance between the proposed development site and all designated areas to ensure that no direct impacts will occur.

There are other agricultural activities ongoing close to the current application site, therefore cumulative impacts arising from the operation of these farms together were considered. All farms, regardless of whether licensed by the EPA or not, are required to operate within the legalisation defined in S.I. 113 of 2022 regarding manure storage, minimisation of soiled water and general good agricultural practice, etc. Therefore, cumulative impacts arising from the combined operation of these activities with the proposed operation of the poultry farm at Drumcreeghan will be negligible.

The land-spreading of the poultry manure produced at the proposed facility has also been considered as part of this process. Records for the distribution and movement of all the manure produced will be kept on site and presented to the Department of Agriculture, Food and Marine if necessary. All organic fertilisers will replace the use of chemical fertiliser; therefore, there will be no overall increase in the amount of nutrients spread.

The wash water generated during the maintenance of the facility will be land-spread on the applicant's family lands. Land-spreading will only be done on areas of improved agricultural grasslands. The receipt lands are not adjacent to or connected to any Natura 2000 site. The use of these lands for land-spreading of water will have no impacts upon the integrity or conservation objectives of any Natura 2000 site. All land-spreading will be done in accordance with the Nutrient Management Plan for the farm and in accordance with S.I. 113 of 2022.

All farmers that receive the manure from the proposed farm will do so under the European Union (Good Agricultural Practice for the Protection of Waters) Regulations 2022. Upon the receipt of the manure, they will be informed of their obligation under this legalisation. Compliance with these regulations will minimise cumulative impacts as well as any impacts upon water quality.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the nearby Natura 2000 sites by virtue of:

Size and scale: Having regards to the small size and scale of the development in relation to the overall size of the Natura 2000 sites identified, then the likelihood of any direct, indirect or cumulative impacts upon this designated site is low.

Land-take: There will be no land-take from any designated site. There will be no interference with the boundaries of any designated site. There will be no loss of any undesignated priority habitats.

Distance from Natura 2000 site or key features of the site: There are three Natura 2000 sites within 25km of the application site. In this instance, having regards to the lack of hydrological connectivity, this distance is sufficient to ensure that significant effects upon these sites and their QIs will not arise.

Resource requirements (water abstraction etc.): No resources will be taken from any Natura 2000 site and there are no resource requirements that will impact upon any designated site.

Emissions: The increase in stock at this farm will not result in any direct emissions to the Natura 2000 sites identified. Clean surfaces waters will continue to be directed to soak pits or local watercourses via appropriate silt traps. Any associated land-spreading of the manure or wash water from this development will be done in accordance with S.I. 113 of 2022. This will minimise run-off from land into local watercourses.

As recommended by the EPA Guidance[1], in order to predict atmospheric emissions (ammonia and nitrogen) from the development of this facility, a SCAIL model (Simple Calculation of Atmospheric Impact Limits) was run by CLW Environmental Planners to determine the potential impacts on the closest designated sites. This model was run for the increase in stock only, i.e., 30,000, as the existing stock are included in the background SCAIL data. The figures are based on natural ventilation.

The SCAIL model predicted that the deposition of ammonia and nitrogen at the edge of the designated areas would be de-minimus and that there would be no significant effects upon the designated sites arising from emissions from the proposed development. A summary of the SCAIL data for all sites is provided in Appendix I.

In accordance with the EPA guidelines, as the process contribution from the proposed development is less than 1% of the critical load for both ammonia and nitrogen then significant effects upon the Natura 2000 sites within the Zone of Influence can be screened out. The EPA flowchart presented in Annex I of the Guidelines is presented in Appendix II, and this process confirms that based on Step 2 of this flowchart, this development can be screened out.

Excavation requirements: No construction works required.

In-Combination / Cumulative Impacts: The proposed application was considered in combination with other developments or proposed developments in the Drumcreeghan / Latton areas and the

[1] *Assessment of the Impact of Ammonia and Nitrogen on Natura 2000 Sites from Intensive Agriculture Installations. Environmental Protection Agency, 2023.*

surroundings townlands. There are no past or pending applications that could lead to cumulative impacts upon the Natura 2000 sites when considered in combination with this current application. Any future individual application that has the potential to impact upon a Natura 2000 site will be subject to Appropriate Assessment as required under Articles 6(3) of the Habitats Directive.

Transportation requirements: There will be no additional transportation requirements resulting from the proposed development and associated works that will have any impact upon the Natura 2000 sites identified.

Duration of construction, operation, decommissioning etc: Once construction begins, it should be complete within one year.

Describe any likely changes to the nearby Natura 2000 sites arising as a result of:

Reduction of habitat area: The proposed development lies outside the boundaries of the Natura 2000 sites identified in Section 3.3. There will be no reduction of designated habitat area or habitats used by any protected bird species. There will be no impacts upon the qualifying interest of any SAC / SPA.

Disturbance to key species: There will be no direct disturbance to any species listed in Annex I of the Birds Directive or Annex II of the Habitats Directive.

Habitat or species fragmentation: There will be no habitat or species fragmentation within any SAC or SPA. No ecological corridors between the proposed site and any designated area will be damaged or destroyed.

Reduction in species density: There will be no reduction in species density.

Changes in key indicators of conservation value (water quality etc.): There will be no negative impacts upon surface or ground water quality. There will be no negative impacts upon the water quality in any designated site.

Describe any likely impacts on the nearby Natura 2000 sites as a whole in terms of:

Interference with the key relationships that define the structure or function of the site: It is not considered likely that there will be any impacts on the key relationships that define the structure or function of the Natura 2000 sites identified.

Provide indicators of significance as a result of the identification of effects set out above in terms of:

Loss - Estimated percentage of lost area of habitat: None

Fragmentation: None

Disruption & disturbance: None

Change to key elements of the site (e.g. water quality etc.): None

3.5 FINDING OF NO SIGNIFICANT EFFECTS

Finding of No Significant Effects Report Matrix	
Name of project	Construction of a New Poultry House at Drumcreeghan, Latton, Co. Monaghan.
Name and location of Natura 2000 site	There are three Natura 2000 sites within 25km of the application site. In this instance, having regards to the lack of hydrological connectivity, this distance is sufficient to ensure that significant effects upon these sites and their QIs will not arise.
Description of project	A Small Scale Agricultural Development
Is the project directly connected with or necessary to the management of the site?	No
Are there other projects or plans that together with project being assessed could affect the site?	No
The Assessment of Significance of Effects	
Describe how the project is likely to affect the Natura 2000 site	Having regard to the location, nature and scale of the proposed development, it is considered that there is no potential for significant effects either from the proposed development on its own or in combination with other plans and projects.
Explain why these effects are not considered significant	Not applicable as there is no potential for negative impacts
Describe how the project is likely to affect species designated under Annex II of the Habitats Directive.	No impacts likely
Data Collected to Carry out the Assessment	
Who carried out the assessment	Noreen McLoughlin, MSC, MCIEEM. Consultant Ecologist
Sources of data	NPWS, EPA, National Biodiversity Data Centre, Monaghan County Council
Level of assessment completed	Stage1 Appropriate Assessment Screening
Where can the full results of the assessment be accessed and viewed	Full results included

4 APPROPRIATE ASSESSMENT CONCLUSION

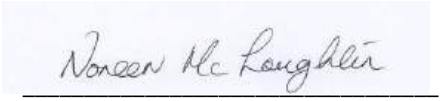
In accordance with Article 6(3) of the Habitats Directive, the relevant case law, established best practice and the precautionary principle, this AA Screening Report has examined the details of the project in relation to the relevant Natura 2000 sites within 15km of the application site.

At this stage of the AA process, it is for the competent authority, i.e., Monaghan County Council, to carry out the screening for AA and to reach one of the following determinations:

a) AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites;

b) AA of the proposed development is *not* required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.

It is of the opinion of the author that an AA of the proposed development is not required as it can be excluded, on the basis of objective information provided in this report, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European sites.



Noreen McLoughlin, MSc, MCIEEM.
Ecologist.

(PI Insurance details available on request)

Appendix I: SCAIL DATA AND ASSESSMENTS

AMMONIA

In order to predict atmospheric emissions of ammonia from facility at Moyle Beg, a SCAIL model (Simple Calculation of Atmospheric Impact Limits) was run by CLW Environmental Planners Ltd to determine the potential impacts of this farm on designated sites. In this instance a number of factors were taken into account, such as the use of natural ventilation. The results of the SCAIL outputs for ammonia are presented below. These figures are based on 30,000 birds (increase in stock).

Magheraveely Marl Loughs SAC UK				
Background NH_3	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
5.01 µg/m³	0.0016 µg/m³	5.0116 µg/m³	1µg/m³	0.16 %
Kilroosky Lough Cluster SAC				
Background NH_3	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
4.36 µg/m³	0.0016 µg/m³	4.3616 µg/m³	1µg/m³	0.16 %
Upper Lough Erne SPA				
Background NH_3	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
3.43 µg/m³	0.0015 µg/m³	3.4315 µg/m³	3 µg/m³	0.05 %

Ammonia Loadings Arising from Proposed Development on Natura 2000 Sites

NITROGEN LEVELS

The SCAIL results for the predicted deposition of nitrogen are presented in the table below. For the SACs, either the SCAIL critical loads or those defined by APIS (Air Pollution Information System) were used. For the SPAs, the SCAIL model cannot generate critical loads as SPAs are designated for species rather than habitats. Therefore, in this instance the main habitat of the site which is used by the protected birds was assumed to be that of its corresponding SAC habitats and the published critical loads of nitrogen for these habitats as defined by APIS or Van Dobben (2013) were used if available.

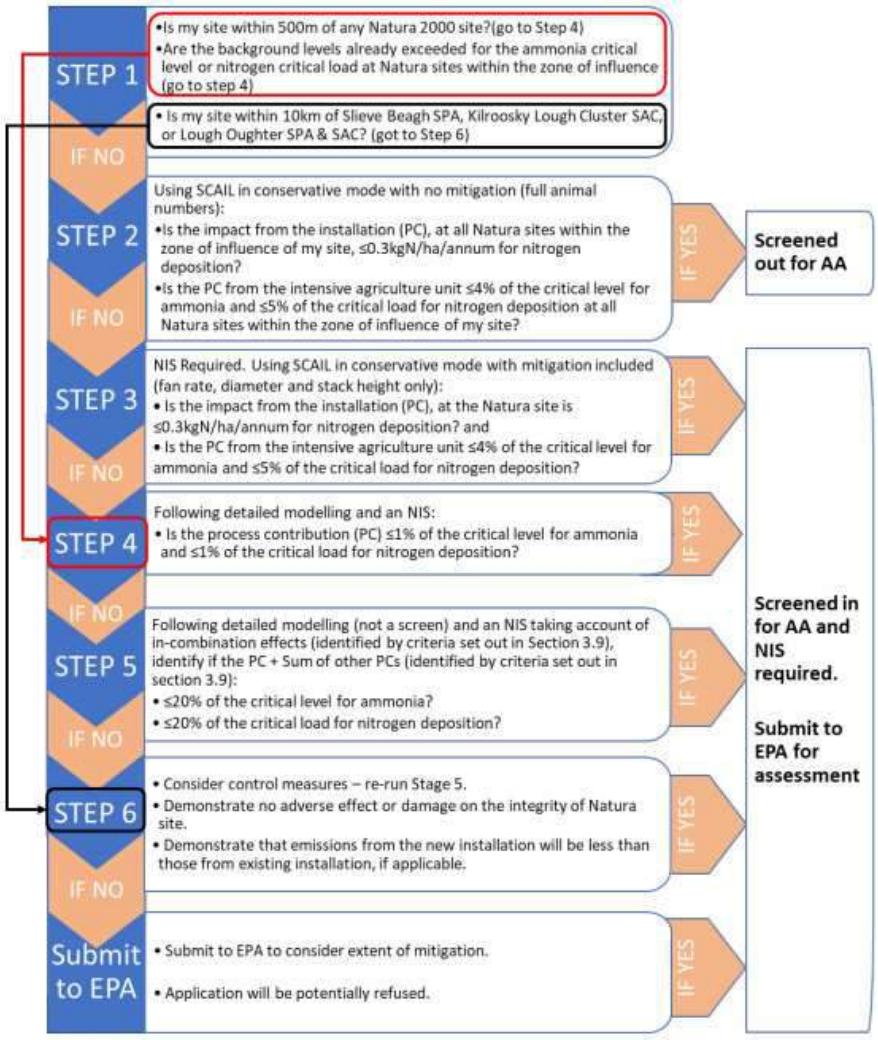
Magheraveely Marl Loughs SAC UK				
Background N	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
10.89 kg N/ha/yr	0.01 kg N/ha/yr	10.9 kg N/ha/yr	15 kg N/ha/yr (alkaline fen)	0.67%
			15-30 kg N/ha/yr (Calcareous fens with *Cladium mariscus*)	0.67% - 0.033%
			No CL available for Hard oligo-mesotrophic waters with Chara spp	-
Kilroosky Lough Cluster SAC				
Background N	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
9.97 kg N/ha/yr	0.01 kg N/ha/yr	9.98 kg N/ha/yr	15 kg N/ha/yr (alkaline fen)	0.67%
			15-30 kg N/ha/yr (Calcareous fens with *Cladium mariscus*)	0.67% - 0.033%
			No CL available for Hard oligo-mesotrophic waters with Chara spp	-

Upper Lough Erne SPA				
Background N	**Process Contribution**	**Total Conc.**	**Critical Load**	**% of CL Range**
10.89 kg N/ha/yr	0.01 kg N/ha/yr	10.9 kg N/ha/yr	No CL for SPAs	-

Nitrogen Loadings Arising from Proposed Development on Natura 2000 Sites

Appendix II: EPA FLOW CHART (2023)

Annex 1: Flow Chart



Page 12 of 12

Version 2.0 March 2023

Appendix No. 19

European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2022 – S.I. 113 of 2022

STATUTORY INSTRUMENTS.

S.I. No. 113 of 2022

EUROPEAN UNION (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2022

S.I. No. 113 of 2022

EUROPEAN UNION (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2022

I, DARRAGH O'BRIEN, Minister for Housing, Local Government and Heritage, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) and for the purpose of giving further effect to Directive 91/676/EEC of 12 December 1991[1] , Directive 2000/60/EC of 23 October 2000[2], Directive 2003/35/EC of 26 May 2003[3], Directive 2006/118/EC of 12 December 2006[4] and Directive 2008/98/EC of 19 November 2008[5] hereby make the following regulations:

[1] O.J. No. L 375/1, 31 December 1991.
[2] O.J. No. L 327/1, 22 December 2000.
[3] O.J. No. L 156/17, 25 June 2003.
[4] O.J. No. L 372/19, 27 December 2006.
[5] O.J. No. L 312/3, 22 November 2008.

Notice of the making of this Statutory Instrument was published in "Iris Oifigiúil" of 11*th March,* 2022.

EUROPEAN UNION (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2022

CONTENTS

PART 1

PRELIMINARY

Citation, commencement and application

1. (*a*) These Regulations may be cited as the European Union (Good Agricultural Practice for Protection of Waters) Regulations 2022.

(*b*) These Regulations shall apply to all holdings in the State.

(*c*) These Regulations shall apply to all movements of livestock manure in the State.

(*d*) These Regulations shall come into effect on 11th March 2022.

Purpose of Regulations

2. The purpose of these Regulations is to give effect to Ireland's Nitrates Action Programme pursuant to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural source.

Revocations

3. The European Union (Good Agricultural Practice for Protection of Waters) Regulations 2017, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2018, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2020, the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) (Nos. 2 and 3) Regulations 2020, and the European Union (Good Agricultural Practice for Protection of Waters) (Amendment) Regulations 2021 are hereby revoked.

Interpretation

4. (1) In these Regulations, save where the context otherwise requires—

"Act of 1992" means the Environmental Protection Agency Act, 1992 (No. 7 of 1992);

"Agency" means the Environmental Protection Agency established under section 19 of the Act of 1992;

"agriculture" includes the breeding, keeping and sale of livestock (including cattle, horses, pigs, poultry, sheep and any creature kept for the production of food, wool, skins or fur), the making and storage of silage, the cultivation of land, and the growing of crops (including forestry and horticultural crops);

"application to land", in relation to fertiliser, means the addition of fertiliser to land whether by spreading on the surface of the land, injection into the land,

placing below the surface of the land or mixing with the surface layers of the land but does not include the direct deposition of manure to land by animals;

"aquifer" means a subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow either a significant flow of groundwater or the abstraction of significant quantities of groundwater;

"biochemical oxygen demand" for the purposes of sub-article (2) (b) (i) means a 5 day biochemical oxygen demand test done in accordance with method ISO 5815-1:2003, International Organisation for Standardization, or any update of that method;

"chemical fertiliser" means any fertiliser that is manufactured by an industrial process;

"commonage" means a land parcel which is held by two or more persons in specified shares or jointly and originally purchased from the Irish Land Commission under the Land Purchase Acts, including land over which two or more persons have grazing rights or the right to take turf;

"dry matter" for the purposes of sub-article (2)(b)(ii) means a test for total solids done in accordance with method 2540B, Standard Methods for the Examination of Water and Wastewater, American Public Health Association, 21st Edition, 2005, or any update of that method;

"eligible area" in relation to a holding and the grassland stocking rate, means the eligible area of the holding or the grassland as appropriate excluding areas under farm roads, paths, buildings, farmyards, woods, dense scrub, rivers, streams, ponds, lakes, sandpits, quarries, expanses of bare rock, areas of bogland not grazed, areas fenced off and not used for production, inaccessible areas and areas of forestry (including Christmas trees), or required to be totally destocked under a Commonage Framework Plan;

"farmyard manure" means a mixture of bedding material and animal excreta in solid form arising from the housing of cattle, sheep and other livestock excluding poultry;

"fertiliser" means any substance containing nitrogen or phosphorus or a nitrogen compound or phosphorus compound utilised on land to enhance growth of vegetation and may include livestock manure, the residues from fish farms and sewage sludge;

"grass" means permanent grassland or temporary grassland (temporary implying leys of less than four years);

"grazing livestock" means cattle (with the exclusion of veal calves), sheep, deer, goats and horses.

"groundwater" means all water that is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;

"holding" means an agricultural production unit and, in relation to an occupier, means all the agricultural production units managed by that occupier;

"livestock" means all animals kept for use or profit (including cattle, horses, pigs, poultry, sheep and any creature kept for the production of food, wool, skins or fur);

"livestock manure" means waste products excreted by livestock or a mixture of litter and waste products excreted by livestock, even in processed form;

"local authority" means a city council or county council within the meaning of the Local Government Act, 2001 (No. 37 of 2001);

"local authority shared service" means common or combined services provided to more than one local authority, the provision of which (to the local authorities concerned) enables, assists or facilitates the carrying out of any administrative task or process necessary for or incidental to the performance of a function assigned under these regulations to local authorities.

"the Minister" means the Minister for Housing, Local Government and Heritage;

"the Nitrates Directive" means Council Directive 91/676/EEC of 12 December 1991 concerning the protection of waters against pollution caused by nitrates from agricultural sources;

"occupier", in relation to a holding, includes the owner, a lessee, any person entitled to occupy the holding or any other person having for the time being control of the holding;

"OSi" means Ordnance Survey Ireland established by Ordnance Survey Ireland Act, 2001 (No. 43 of 2001).

"organic fertiliser" means any fertiliser other than that manufactured by an industrial process and includes livestock manure, dungstead manure, farmyard manure, slurry, soiled water, silage effluent, spent mushroom compost, non-farm organic substances such as sewage sludge, industrial by-products and sludges and residues from fish farms;

"ploughing" includes ploughing and primary cultivation, excluding shallow cultivation carried out to encourage natural regeneration;

"relevant local authority" means the local authority in whose administrative area a farm holding or part of a farm holding is situated;

"river basin district" means a river basin district established by the European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003) or any amendment thereof in relation to the establishment of river basin districts;

"slurry" includes—

(*a*) excreta produced by livestock while in a building or yard, and

(*b*) a mixture of such excreta with rainwater, washings or other extraneous material or any combination of these, of a consistency that allows it to be pumped or discharged by gravity at any stage in the handling process but does not include soiled water;

"soil test" means a soil sample taken in accordance with the soil sampling procedure set out in Schedule 1 and analysed in accordance with that Schedule, at a laboratory that meets the requirements of the Minister for Agriculture, Food and the Marine for this purpose;

"soiled water" has the meaning assigned by sub-article (2);

"steep slope" means ground which has an average incline of 20% or more in the case of grassland or 15% or more in the case of other land;

"Teagasc" means the Agriculture and Food Development Authority established in September 1988 under the Agriculture (Research, Training and Advice) Act, 1988.

"tidal waters" includes the sea and any estuary up to high water mark medium tide and any enclosed dock adjoining tidal waters;

"waters" includes—

(*a*) any (or any part of any) river, stream, lake, canal, reservoir, aquifer, pond, watercourse, or other inland waters, whether natural or artificial,

(*b*) any tidal waters, and

(*c*) where the context permits, any beach, river bank and salt marsh or other area which is contiguous to anything mentioned in paragraph (a) or (b), and the channel or bed of anything mentioned in paragraph (a) which is for the time being dry, but does not include a sewer;

"watercourses" means any body of water that is marked on a modern 1:5,000 scale OSi map.

"waterlogged ground" means ground that is saturated with water such that any further addition will lead, or is likely to lead, to surface run-off;

and cognate words shall be construed accordingly.

(2) (*a*) In these Regulations "soiled water" includes, subject to this sub-article, water from concreted areas, hard standing areas, holding areas for livestock and other farmyard areas where such water is contaminated by contact with any of the following substances—

(i) livestock faeces or urine or silage effluent,
(ii) chemical fertilisers,
(iii) washings such as vegetable washings, milking parlour washings or washings from mushroom houses,
(iv) water used in washing farm equipment.

(*b*) In these Regulations, "soiled water" does not include any liquid where such liquid has either—

(i) a biochemical oxygen demand exceeding 2,500 mg per litre, or
(ii) a dry matter content exceeding 1% (10 g/L).

(*c*) For the purposes of these Regulations, soiled water which is stored together with slurry is deemed to be slurry.

(3) In these Regulations a reference to:—

(*a*) an Article, Part or Schedule which is not otherwise identified is a reference to an Article, Part or Schedule of these Regulations,

(*b*) a sub-article or paragraph which is not otherwise identified is a reference to a sub-article or paragraph of the provision in which the reference occurs, and

(*c*) a period between a specified day in a month and a specified day in another month means the period commencing on the first-mentioned day in any year and ending on the second-mentioned day which first occurs after the first-mentioned day.

(4) In these Regulations a footnote to a table in Schedule 2 shall be deemed to form part of the table.

PART 2

FARMYARD MANAGEMENT

Minimisation of soiled water

5. (1) An occupier of a holding shall take all such steps, as far as is practicable for the purposes of minimising the amount of soiled water produced on the holding.

(2) Without prejudice to the generality of sub-article (1), an occupier of a holding shall ensure, as far as is practicable, that—

(*a*) clean water from roofs and unsoiled paved areas and that flowing from higher ground on to the farmyard is diverted away from soiled yard areas and prevented from entering storage facilities for livestock manure and other organic fertilisers, soiled water, and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps and

(*b*) rainwater gutters and downpipes where required for the purposes of paragraph (a) are maintained in good working condition.

(3) The spreading of soiled water to land is prohibited between the following dates:

(*a*) Between 21st December and 31st December for all milk producers from 2022,

(*b*) Between 10th December and 31st December for all milk producers from 2023,

(*c*) Between 1st December and 31st December from 2024 onwards for all milk producers with the exception of winter/liquid milk[6] producers, and

(*d*) Between 1st December and 31st December from 1st January 2025 onwards for all milk producers including winter/liquid milk[1] producers

[6] Holdings that produce milk during the winter and hold a winter/liquid milk contract with their milk processor.

Collection and holding of certain substances

6. (1) Livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps arising or produced in a building or yard on a holding shall, prior to its application to land or other treatment, be collected and held in a manner that prevents the run-off or seepage, directly or indirectly, into groundwaters or surface waters of such substances.

(2) The occupier of a holding shall not cause or permit the entry to waters of any of the substances specified in sub-article (1).

Provision and management of storage facilities

7. (1) Storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps shall be maintained free of structural defect and be maintained and managed in such manner as is necessary to prevent run-off or seepage, directly or indirectly, into groundwater or surface water, of such substances.

(2) Storage facilities being provided on a holding shall—

(*a*) be designed, sited, constructed, maintained and managed so as to prevent run-off or seepage, directly or indirectly, into groundwater or surface water of a substance specified in sub-article (1), and

(*b*) comply with such construction specifications for those facilities as may be approved from time to time by the Minister for Agriculture, Food and the Marine.

(3) Storage facilities other than those referred to in sub-article (2) shall be of such construction and design and shall be maintained and managed in such a manner so as to comply with the requirements of sub-article (1) and article 6(2).

(4) In this article "storage facilities" includes out-wintering pads, earthen-lined stores, integrated constructed wetlands and any other system used for the holding or treatment of livestock manure or other organic fertilisers.

General obligations as to capacity of storage facilities

8. (1) The capacity of storage facilities for livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps on a holding shall be adequate to provide for the storage of all such substances as are likely to require storage on the holding for such period as may be necessary as to ensure compliance with these Regulations and the avoidance of water pollution.

(2) For the purposes of sub-article (1) an occupier shall ensure to have the storage capacity likely to be required during periods of adverse weather conditions when, due to extended periods of wet weather, frozen ground or otherwise, the application to land of livestock manure or soiled water is precluded.

(3) For the purposes of Articles 8 to 14, the capacity of storage facilities on a holding shall be disregarded insofar as the occupier does not have exclusive use of those facilities.

(4) For the purposes of Articles 10 to 14 the capacity of facilities required in accordance with these Regulations for the storage of manure from livestock of the type specified in Tables 1, 2 or 3 of Schedule 2 shall be determined by reference to the criteria set out in the relevant table and the rainfall criteria set out in Table 4 of that schedule and shall include capacity for the storage for such period as may be necessary for compliance with these Regulations of rain-water, soiled water or other extraneous water which enters or is likely to enter the facilities.

(5) The occupier of a holding shall only be eligible to avail of a derogation from the limits on the amount of livestock manure to be applied as specified in Article 20 if the capacity of storage facilities for livestock manure, effluent and soiled water on the holding is in accordance with Articles 8 and 9.

(6) Subject to sub-article (7), the spreading of all slurry must be applied by:

(*a*) 8th October from 2022;

(*b*) 1st October from 2023 onwards.

(7) Notwithstanding sub-article (6), slurry may be spread between 8th and 15th October in 2022, and between 1st and 15th October from 2023 in accordance with criteria to be published by the Minister, in consultation with the Minister for Agriculture, Food and the Marine, by 1st September 2022.

Capacity of storage facilities for effluents and soiled water

9. Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of—

(*a*) effluent produced by ensiled forage and other crops shall equal or exceed the capacity specified in Table 5 of Schedule 2,

(*b*) soiled water shall equal or exceed the capacity required to store all soiled water likely to arise on the holding during a period of 10 days,

(*c*) soiled water being provided on a holding shall equal or exceed the capacity required to store all soiled water likely to arise on the holding during a period of 15 days, and

(*d*) From 1st December 2023, a minimum of 3 weeks' storage capacity shall be in place on the holding and from 1st December 2024, a minimum of 4 weeks' storage capacity shall be in place on the holding except for winter/liquid milk producers where this storage must be in place by 1st December 2025.

Capacity of storage facilities for pig manure

10. (1) Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by pigs

shall, subject to sub-article (2) and Article 14, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of 26 weeks.

(2) The period specified in Schedule 3 shall, in substitution for that prescribed by sub-article (1), apply in relation to livestock manure produced by pigs on a holding where all the following conditions are met—

(*a*) the number of pigs on the holding does not at any time exceed one hundred pigs, and

(*b*) the holding comprises a sufficient area of land for the application in accordance with these Regulations of all livestock manure produced on the holding.

Capacity of storage facilities for poultry manure

11. (1) Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by poultry shall, subject to sub-article (2) and Article 14, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of 26 weeks.

(2) The period specified in Schedule 3 shall, in substitution for that prescribed by sub-article (1), apply in relation to livestock manure produced by poultry on a holding where all the following conditions are met—

(*a*) tillage or grassland farming is carried out on the holding,

(*b*) the number of poultry places on the holding does not exceed 2,000 places, and

(*c*) the holding comprises a sufficient area of land for the application in accordance with these Regulations of all livestock manure produced on the holding.

Capacity of storage facilities for manure from deer, goats and sheep

12. Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by deer, goats and sheep shall, subject to Article 14, equal or exceed the capacity required to store all such livestock manure produced on the holding during a period of six weeks.

Capacity of storage facilities for manure from cattle

13. Without prejudice to the generality of Article 8, the capacity of facilities for the storage on a holding of livestock manure produced by cattle shall, subject to Article 14, equal or exceed the capacity required to store all such livestock manure produced on the holding during the period specified in Schedule 3.

Reduced storage capacity in certain circumstances

14. (1) The capacity of facilities for the storage of livestock manure on a holding may, to such extent as is justified in the particular circumstances of the holding, be less than the capacity specified in Article 10, 11, 12 or 13, as appropriate, in the case of a holding where—

(*a*) the occupier of the holding has a contract providing exclusive access to adequate alternative storage capacity located outside the holding,

(*b*) the occupier has a contract for access to a treatment facility for live-stock manure, or

(*c*) the occupier has a contract for the transfer of the manure to a person registered under and in accordance with the European Communities (Transmissible Spongiform Encephalopathies and Animal By-products) Regulations 2008 (S.I. No. 252 of 2008) to undertake the transport of manure.

(2) Subject to sub-article (3), the capacity of facilities for the storage of live-stock manure may be less than the capacity specified in Article 12 or 13, as appropriate, in relation to—

(*a*) deer, goats or sheep which are out-wintered at a grassland stocking rate which does not exceed 130 kg nitrogen until 31st December 2024 and 100 kg nitrogen from 1st January 2025 onwards at any time during the period specified in Schedule 4 in relation to the application of organic fertiliser other than farmyard manure, or

(*b*) livestock (other than dairy cows, deer, goats or sheep) which are out-wintered at a grassland stocking rate which does not exceed 85 kg nitrogen at any time during the period specified in Schedule 4 in relation to the application of organic fertiliser other than farmyard manure.

The requirement for full storage for those holdings stocked between 100 kg N/ha and 130 kg N/ha applies from 1st January 2025.

(3) Sub-article (2) shall apply only in relation to a holding where all the following conditions are met—

(*a*) all the lands used for out-wintering of the livestock are comprised in the holding,

(*b*) the out-wintered livestock have free access at all times to the required lands,

(*c*) the amount of manure produced on the holding does not exceed an amount containing 130 kg of nitrogen per hectare per annum until 31st December 2024 and 100 kg of nitrogen per hectare per annum from 1st January 2025 onwards,

(*d*) severe damage to the surface of the land by poaching does not occur, and

(*e*) the reduction in storage capacity is proportionate to the extent of out-wintered livestock on the holding.

(4) In this article, a grassland stocking rate of 130 kg, 100 kg or 85 kg of nitrogen, as the case may be, means the stocking of grassland on a holding at any time by such numbers and types of livestock as would in the course of a year excrete waste products containing 130 kg, 100 kg or 85 kg of nitrogen, as the case may be, per hectare of the grassland when calculated in accordance with the nutrient excretion rates for livestock specified in Table 6 of Schedule 2.

PART 3

NUTRIENT MANAGEMENT

Interpretation, commencement etc

15. (1) In this Part, "crop requirement", in relation to the application of fertilisers to promote the growth of a crop, means the amounts and types of fertilisers which are based on the relevant tables in Schedule 2 to apply to soil for the purposes of promoting the growth of the crop having regard to the foreseeable nutrient supply available to the crop from the fertilisers, the soil and from other sources.

(2) The amount of nitrogen or phosphorus specified in Table 7 or 8 of Schedule 2, as the case may be, in relation to a type of livestock manure or other substance specified in the relevant table shall for the purposes of this Part be deemed to be the amount of nitrogen or phosphorus, as the case may be, contained in that type of manure or substance except as may be otherwise specified in a certificate issued in accordance with Article 32.

(3) The amount of nitrogen or phosphorus available to a crop from a fertiliser of a type which is specified in Table 9 of Schedule 2 in the year of application of that fertiliser shall, for the purposes of this Part, be deemed to be the percentage specified in that table of the amount of nitrogen or phosphorus, as the case may be, in the fertiliser.

(4) The amount of nitrogen or phosphorus available to a crop from an organic fertiliser of a type which is not specified in Table 9 of Schedule 2 shall be deemed to be the amount specified in the table in relation to cattle manure or, where supported by the necessary analysis, the amount of nitrogen estimated on the basis of the C:N ratio of the compost in accordance with Table 9A unless a different amount has been determined in relation to that fertiliser by, or with the agreement of, the relevant local authority or the Agency, as the case may be.

(5) A reference in this Part to the "nitrogen index" or the "phosphorus index" in relation to soil is a reference to the index number assigned to the soil in accordance with Table 10 or 11 of Schedule 2, as the case may be, to indicate the level of nitrogen or phosphorus available from the soil.

(6) From 11th March 2022, on holdings with grassland stocking rates of 130 kg nitrogen per hectare from grazing livestock manure (dairy cows and other bovines two years old and over) or above prior to export of livestock

manure from the holding, a maximum crude protein content of 15% is permissible in concentrate feedstuff fed to grazing livestock on the holding between 15th April and 30th September. Records of crude protein content of concentrate feedstuff shall be kept in accordance with Article 23(1)(j).

(7) On holdings with grassland stocking rates of 170 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding, a liming programme shall be prepared and must establish the following:-

(*a*) A calculation of liming requirements for each parcel to achieve optimum pH;

(*b*) A lime application programme for the farm.

(8) The stocking rate allowance for commonage land shall not exceed 50 kg organic nitrogen per hectare.

(9) Chemical fertiliser shall not be spread on commonage land.

Duty of occupier in relation to nutrient management

16. (1) An occupier of a holding shall take as far as is practicable all such steps for the purposes of preventing the application to land of fertilisers in excess of crop requirement on the holding.

(2) For the purposes of the determination of the grassland stocking rate in tables 12, 13A and 13B the previous calendar year's stocking rate data shall be used.

(3) (*a*) For the purposes of this article, the phosphorus index for soil shall be deemed to be phosphorus index 3 unless a soil test indicates that a different phosphorus index is appropriate in relation to that soil subject to paragraph (e).

(b) The soil test to be taken into account for the purposes of paragraph (a) in relation to soil shall, subject to paragraph (c), be the soil test most recently taken in relation to that soil.

(*c*) Where a period of four years or more has elapsed after the taking of a soil test, the results of that test shall be disregarded for the purposes of paragraph (a) except in a case where that soil test indicates the soil to be at phosphorus index 4.

(*d*) The phosphorus fertilisation rate for soils with more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions of paragraph (e).

(*e*) For the purposes of paragraph (d), soils shall be deemed to have an organic matter content of 20% as defined on a Teagasc-EPA Indicative Soils map unless otherwise determined in soil tests carried out in accordance with this article.

(*f*) From 11th March 2022 all occupiers of holdings that have a grassland stocking rate of 170 kg N/ha or above prior to export

of livestock manure, shall take soil tests and shall assume P index 4 until soil tests are taken. From 1st January 2023 all occupiers of holdings with a grassland stocking rate above 130 kg N/ha shall take soil tests and shall assume P index 4 until soil tests are taken. From 1st January 2023 all occupiers of holdings on all arable land shall take soil tests.

(4) Without prejudice to the generality of sub-article (1) and subject to sub-article (5), the amount of available nitrogen or available phosphorus applied to promote the growth of a crop specified in Table 12, 13A, 14, 15, 16, 17, 18, 19, 20 or 21 of Schedule 2 shall not exceed the amount specified in the table in relation to that crop having regard to the relevant nitrogen index or phosphorus index, as the case may be, for the soil on which the crops are to be grown. In the case of crops not identified in the tables listed above, fertilisers shall be applied in accordance with Teagasc guidance as approved by the Minister for Agriculture, Food and the Marine.

(5) Increased phosphorus build-up on grassland on farms with grassland stocking rates of 130 kg nitrogen per hectare and above shall only be permitted in accordance with the rates contained in Table 13B provided that the following conditions are met:

(*a*) Soil analysis is carried out for soil phosphorus and soil organic matter contents; Soils shall be deemed to have an organic matter content of 20% as defined on a Teagasc-EPA Indicative Soils map unless otherwise determined in soil tests carried out in accordance with this article.

(*b*) An occupier availing of the phosphorus build-up programme shall engage the services of a Department of Agriculture, Food and the Marine approved Farm Advisory System Advisor.

(*c*) A detailed farm nutrient plan for the holding shall be submitted in a format specified by the Minister for Agriculture, Food and the Marine.

(*d*) The occupier shall participate in an appropriate training programme specified by the Minister for Agriculture, Food and the Marine for the purpose of meeting the requirements of these regulations.

(6) In the case of a holding on which grazing livestock are held, the amount of available phosphorus supplied to the holding by concentrated feedstuff shall be the amount fed to such livestock in excess of 300 kg per 89 kg livestock manure nitrogen in the previous calendar year and the phosphorus content of such concentrated feedstuff shall, in the absence of a known phosphorus content or phosphorus content provided by the supplier, be deemed to be 0.5 kg phosphorus in respect of each 100 kg of such concentrated feedstuff.

(7) The nitrogen and phosphorus maximum limits in Tables 12, 13A and 13B are in addition to the nitrogen and phosphorus contained in grazing livestock manure produced on the holding.

PART 4

PREVENTION OF WATER POLLUTION FROM FERTILISERS AND CERTAIN ACTIVITIES

Distances from a water body and other issues

17. (1) Chemical fertiliser shall not be applied to land within 2m of any surface waters.

(2) Organic fertiliser or soiled water shall not be applied to land within—

(*a*) 200m of the abstraction point of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying $100m^3$ or more of water per day or serving 500 or more persons,

(*b*) 100m of the abstraction point (other than an abstraction point specified in paragraph (a)) of any surface waters, borehole, spring or well used for the abstraction of water for human consumption in a water scheme supplying $10m^3$ or more of water per day or serving 50 or more persons,

(*c*) 25m of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (a) or (b),

(*d*) 20m of a lake shoreline or a turlough likely to flood,

(*e*) 15m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),

(*f*) subject to sub-article (12), 5m of any surface waters (other than a lake or surface waters specified at paragraph (*a*) or (*b*)), or

(*g*) the distance specified in sub-article 2(f) shall be increased to 10m for a period of two weeks preceding and two weeks following the periods specified in Schedule 4.

(3) Notwithstanding the requirements of sub-articles (2)(a), (2)(b) and (2)(c), organic fertiliser or soiled water may be applied to land within:

(*a*) 30m from the abstraction point in the case of any surface waters, bore-hole, spring or well used for the abstraction of water for human consumption in a water scheme supplying $10m^3$ or more of water per day or serving 50 or more persons, or

(*b*) 15m from the abstraction point in the case of any borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified in paragraph (*a*),

where the provisions of sub-article (4) are complied with.

(4) Organic fertiliser or soiled water may only be applied to land in accordance with sub-article (3) where a local authority or Irish Water (as the case may be) has completed a technical assessment of conditions in the vicinity

of the abstraction point, including taking into account variation in soil and subsoil conditions, the landspreading pressures in the area, the type of abstraction, available water quality evidence and the likely risk to the water supply source and the local authority, in consultation with Irish Water, where relevant, has determined that the distance does not give rise to a risk to the water supply and a potential danger to human health.

(5) A local authority may, following consultation with Irish Water, where relevant, decide to apply the landspreading restriction to the upstream catchment area and to the close proximity downstream of the abstraction point in the case of any surface waters.

(6) A local authority may, in the case of any particular abstraction point and following consultation with the Agency and, where relevant, Irish Water, specify a greater distance than that specified in sub-articles (2) or (3) where, following prior investigations by Irish Water or the local authority (as the case may be), the local authority is satisfied that such distance is appropriate for the protection of waters being abstracted at that point. The distance so specified shall be determined by the local authority using an evidence-based approach which takes into account the natural vulnerability of the waters to contamination from land spreading, the potential risk to human health arising from the landspreading activity as well as the water quality evidence, including information on water quality trends.

(7) Notwithstanding the provisions of sub-articles (2), (3) and (6), a local authority shall, following prior investigations by Irish Water or the local authority (as the case may be) and following consultation with the Agency and, where relevant, Irish Water, specify an alternative distance, including a landspreading exclusion area where necessary, in the case of a water abstraction for human consumption in a scheme supplying $10m^3$ or more of water per day, or serving 50 or more persons, within a timeframe to be agreed with the Agency and, where relevant, Irish Water, where—

(*a*) on the basis of the results of monitoring carried out for the purposes of Article 7 of the European Communities (Drinking Water) Regulations 2014 (S.I. No. 122 of 2014), the quality of water intended for human consumption does not meet the parametric values specified in Part I of the Schedule of those Regulations or the quality of water constitutes a potential danger to human health, and it appears to the local authority following consultation with the Agency and, where relevant, Irish Water, that this is due to the landspreading of organic fertilisers or soiled water in the vicinity of the abstraction point, or

(*b*) investigations undertaken by Irish Water as part of the management of a water supply scheme indicate that the landspreading activity presents a significant risk to the drinking water supply or a potential danger to human health having regard to catchment factors in the vicinity of the abstraction point including but not limited to slope, vulnerability, and hydrogeology, the scale and intensity of land spreading pressures, the type of water supply source and water quality evidence, including information on water quality trends.

(8) A distance specified by a local authority in accordance with sub-articles (3), (5), (6) and (7) may be described as a distance or distances from an abstraction point, a hydrogeological boundary or topographical feature or as an area delineated on a map or in such other way as appears appropriate to the authority.

(9) In relation to sub-articles (6) and (7), "prior investigations" means, in relation to an abstraction point, an assessment of the susceptibility of waters to contamination in the vicinity of the abstraction point having regard to—

(*a*) the direction of flow of surface water or groundwater, as the case may be,

(*b*) the slope of the land and its runoff potential,

(*c*) the natural geological and hydrogeological attributes of the area including the nature and depth of any overlying soil and subsoil and its effectiveness in preventing or reducing the entry of harmful sub-stances to water, and

(*d*) where relevant, the technical specifications set out in the document "Groundwater Protection Schemes" published in 1999 (ISBN 1-899702-22-9) or any subsequent published amendment of that document.

(10) Where a local authority specifies a distance in accordance with either of sub-articles (3), (5), (6) or (7) the authority shall, as soon as may be—

(*a*) notify the affected landowners, Irish Water, the Agency and the Department of Agriculture, Food and the Marine of the distance so specified,

(*b*) send to the Agency a summary of the report of any investigations undertaken and the reasons for specifying the alternative distance,

(*c*) make an entry in the register maintained in accordance with Article 30(6), and

(*d*) publish and maintain on the local authority website an updated schedule of setback distances specified for each drinking water supply.

(11) The Agency may issue advice or direction to Irish Water or a local authority in relation to any requirements including requirements for technical assessments and prior investigations arising under sub-articles (2), (3), (4), (5), (6), (7), (8) or (9) and Irish Water or a local authority (as the case may be) shall comply with any such advice or direction given.

(12) Notwithstanding sub-article (2)(*f*), organic fertiliser or soiled water shall not be applied to land within 10m of any surface waters where the land has an average incline greater than 10% towards the water.

(13) Where farmyard manure is held in a field prior to landspreading it shall be held in a compact heap and shall not be placed within-

(*a*) 250m of the abstraction point of any surface waters or borehole, spring or well used for the abstraction of water for human

consumption in a water scheme supplying $10m^3$ or more of water per day or serving 50 or more persons,

(*b*) 50m of any other borehole, spring or well used for the abstraction of water for human consumption other than a borehole, spring or well specified at paragraph (a),

(*c*) 20m of a lake shoreline or a turlough likely to flood,

(*d*) 50m of exposed cavernous or karstified limestone features (such as swallow-holes and collapse features),

(*e*) 20m of any surface waters (other than a lake or surface waters specified at paragraph (a)).

(14) Organic fertiliser shall not be held in a field at any time during the periods specified in Schedule 4 as applicable to that substance.

(15) Silage bales shall not be stored outside of farmyards within 20m of surface waters or a drinking water abstraction point in the absence of adequate facilities for the collection and storage of any effluent arising.

(16) No cultivation shall take place within 2m of a watercourse identified on a modern 1:5,000 scale OSi mapping or better, except in the case of grassland establishment or the sowing of grass crops.

(17) Supplementary feeding points shall not be located within 20m of waters and shall not be located on bare rock.

(18) In the case of livestock holdings with grassland stocking rates of 170 kg nitrogen per hectare from livestock manure or above prior to export of livestock manure, bovine livestock shall not be permitted to drink directly from watercourses identified on the modern 1:5,000 scale OSi mapping or better. Where bovine livestock have direct access to watercourses on the holding, a fence shall be placed at least 1.5m from the top of the riverbank or water's edge (as the case may be). It will be permissible to move livestock across a watercourse to an isolated land parcel where necessary, provided that both sides of the watercourse are fenced.

(19) In the case of holdings identified in sub-Article 18, supplementary drinking points may not be located within 20m of surface waters.

(20) There shall be no direct runoff of soiled water from farm roadways to waters. The occupier of a holding shall comply with any specification for farm roadways specified by the Minister for Agriculture, Food and the Marine pursuant to this requirement.

(21) There shall be no direct runoff of soiled waters to waters resulting from the poaching of land on the holding.

(22) For late harvested crops and late harvested spring cereal crops, a minimum buffer of 6m shall be put in place to protect any intersecting watercourses.

Requirements as to manner of application of fertilisers, soiled water etc

18. (1) (*a*) Livestock manure, other organic fertilisers, effluents, soiled water and chemical fertilisers shall be applied to land in as accurate and uniform a manner as is practically possible.

(*b*) Low emission slurry spreading equipment must be used for the application of slurry on holdings with grassland stocking rates of :

i. 170 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding.

ii. 150 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2023.

iii. 130 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2024.

iv. 100 kg nitrogen per hectare from grazing livestock manure or above prior to export of livestock manure from the holding from 1st January 2025.

v. slurry produced by pigs on any holding from 1st January 2023.

(*c*) From 1st January 2023, low emission equipment shall be used to apply livestock manure to arable land or the livestock manure shall be incorporated within 24 hours.

(2) Organic and chemical fertilisers or soiled water shall not be applied to land in any of the following circumstances—

(*a*) the land is waterlogged;

(*b*) the land is flooded or likely to flood;

(*c*) the land is snow-covered or frozen;

(*d*) heavy rain is forecast within 48 hours, or

(*e*) the ground slopes steeply and there is a risk of water pollution having regard to factors such as surface runoff pathways, the presence of land drains, the absence of hedgerows to mitigate surface flow, soil condition and ground cover.

(3) A person shall, for the purposes of sub-article (2)(d), have regard to weather forecasts issued by Met Éireann.

(4) Organic fertilisers or soiled water shall not be applied to land—

(*a*) by use of an umbilical system with an upward-facing splashplate,

(*b*) by use of a tanker with an upward-facing splashplate,

(*c*) by use of a sludge irrigator mounted on a tanker, or

(*d*) from a road or passageway adjacent to the land irrespective of whether or not the road or passageway is within or outside the curtilage of the holding.

(5) Subject to sub-article (6), soiled water shall not be applied to land—

(*a*) in quantities which exceed in any period of 42 days a total quantity of 50,000 litres per hectare, or

(*b*) by irrigation at a rate exceeding 5 mm per hour.

(6) In an area which is identified on maps compiled by the Geological Survey of Ireland as "Extreme Vulnerability Areas on Karst Limestone Aquifers", soiled water shall not be applied to land—

(*a*) in quantities which exceed in any period of 42 days a total quantity of 25,000 litres per hectare, or

(*b*) by irrigation at a rate exceeding 3 mm per hour unless the land has a consistent minimum thickness of 1m of soil and subsoil combined.

(7) For the purposes of sub-article (6), it shall be assumed until the contrary is shown that areas so identified as "Extreme Vulnerability Areas on Karst Limestone Aquifers" do not have a consistent minimum thickness of 1m of soil and subsoil combined.

Periods when application of fertilisers is prohibited

19. (1) Subject to this article, the application of fertiliser to land is prohibited during the periods specified in Schedule 4.

(2) Sub-article (1) shall not apply in relation to the application to land of—

(*a*) soiled water, subject to Article 5(3), or

(*b*) chemical fertilisers to meet the crop requirements of Autumn-planted cabbage or of crops grown under permanent cover, or

(*c*) fertilisers whose application rate or usage rate is less than 1kg per hectare of available nitrogen or phosphorus.

Limits on the amount of livestock manure to be applied

20. (1) The amount of livestock manure applied in any year to land on a holding, together with that deposited to land by livestock, shall not exceed an amount containing 170 kg of nitrogen per hectare. The amount considered to be applied to commonage shall not exceed 50 kg of nitrogen per hectare.

(2) For the purposes of sub-article (1), the amount of nitrogen produced by livestock and the nitrogen content of livestock manure shall be calculated in accordance with Tables 6, 7 and 8 of Schedule 2 except in the case of pig manure or poultry manure where a different amount is specified in a certificate issued in accordance with Article 32 in relation to that manure.

(3) For the purposes of sub-article (1), the area of a holding shall be deemed to be the eligible area of the holding.

Ploughing and the use of non-selective herbicides

21. (1) Where arable land is ploughed between 1st July and 30th November the necessary measures, shall be taken within 14 days of ploughing to provide for emergence of green cover. A rough surface shall be maintained prior to a crop being sown in the case of lands ploughed between 1st December and 15th January.

(2) Where grassland is ploughed between 1st July and 15th October the necessary measures shall be taken within 14 days of ploughing to provide for emergence of green cover from a sown crop.

(3) Grassland shall not be ploughed between 16th October and 30th November.

(4) (*a*) When a non-selective herbicide is applied to arable land or to grassland in the period between 1st July and 30th November the necessary measures shall be taken to provide for the emergence, within 6 weeks of the application, of green cover from a sown crop or from natural regeneration.

(*b*) When a non-selective herbicide is applied to land after 15th October, the requirement in sub-article 4 (a) shall be reduced to 75% of the relevant cereal area where a contract is in place for seed crops or crops producing grain destined for human consumption which prohibits the application of a non- selective herbicide preharvest.

(5) Where green cover is provided for in compliance with this Article, the cover shall not be removed by ploughing or by the use of a non-selective herbicide before 1st December unless a crop is sown within two weeks of its removal.

(6) In the case of land which is ploughed in the course of a ploughing competition under the auspices of the National Ploughing Association, a temporary exemption applies in the form of an extension to the time period specified in sub-article (1) or (2) for establishment of green cover after the land is ploughed.

(7) Shallow cultivation or sowing of a crop must take place within 7 days of baling of straw post harvest. Where straw is chopped shallow cultivation or sowing a crop must take place within 7 days of harvest. In all circumstances, shallow cultivation or sowing of a crop must take place within 14 days of harvesting. In certain weather conditions, the Minister, in discussion with the Minister for Agriculture, Food and the Marine, may advise when this should not apply.

PART 5

GENERAL

General duty of occupier

22. (1) An occupier of a holding shall ensure compliance with the provisions of these Regulations in relation to that holding.

(2) An occupier of a holding shall comply with any advice and/or directions which may be issued from time to time for the purposes of these Regulations by the Minister, the Minister for Agriculture, Food and the Marine or the Agency.

Keeping of records by occupier

23. (1) Records shall be maintained for each holding which shall indicate—

(*a*) total area of the holding,

(*b*) eligible area of the holding,

(*c*) cropping regimes and their individual areas,

(*d*) livestock numbers and type,

(*e*) an estimation of the annual fertiliser requirement for the holding and a copy of any Nutrient Management Plan prepared in relation to the holding,

(*f*) quantities and types of chemical fertilisers moved on to or off the holding, including opening stock, records of purchase and closing stock,

(*g*) livestock manure and other organic fertilisers moved on to or off the holding including quantities, type, dates and details of exporters and importers, as the case may be, in a format specified by the Minister for Agriculture, Food and the Marine,

(*h*) the results of any soil tests carried out in relation to the holding,

(*i*) the nature and capacity of facilities on the holding for the storage of livestock manure and other organic fertilisers, soiled water and effluents from dungsteads, farmyard manure pits, silage pits or silage clamps, including an assessment of compliance with Articles 9 to 14,

(*j*) the quantities and types of concentrated feedstuff fed to grazing live-stock on the holding, and

(*k*) the location of any abstraction point of water used for human consumption from any surface waters, borehole, spring or well.

(2) Where fertiliser is used on a holding and a certificate of the type mentioned in Article 15 or 20 was issued in relation to that fertiliser in accordance with Article 32, a copy of the certificate shall be retained and be available for inspection on the holding for a period of not less than five years from the expiry of validity of the certificate.

(3) Records shall be prepared for each calendar year by 31st March of the following year and shall be retained for a period of not less than five years.

(4) Notwithstanding sub-paragraphs (1), (2) and (3), an occupier shall, where requested by the Minister, the Minister for Agriculture, Food and the Marine, a local authority or the Agency, provide such information as is requested relating to the movement of organic fertilisers on or off the holding.

False or misleading information

24. A person shall not compile information which is false or misleading to a material extent or furnish any such information in any notice or other document for the purposes of these Regulations.

Authorised person

25. (1) In this Article, "authorised person" means—

(*a*) a person who is an authorised person for the purposes of section 28 of the Local Government (Water Pollution) Act, 1977 (No. 1 of 1977), or

(*b*) a person appointed under sub-article (11) to be an authorised person for the purposes of these Regulations.

(2) An authorised person may for any purpose connected with these Regulations—

(*a*) enter and inspect any premises for the purposes of performing a function under these Regulations or of obtaining any information which he or she may require for such purposes,

(*b*) at all reasonable times, or at any time if he or she has reasonable grounds for believing that there is or may be a risk to the environment, or that an offence under these Regulations is being or is about to be committed, arising from the carrying on of an activity at a premises, enter any premises and bring onto those premises such other persons (including a member of the Garda Síochána) or equipment as he or she may consider necessary, or

(*c*) at any time if he or she has reasonable grounds for suspecting there may be a risk to the environment, or that an offence under these Regulations is being or is about to be committed, involving the use of any vehicle halt and board the vehicle and require the driver of the vehicle to take it to a place designated by the authorised person, and such a vehicle may be detained at that place by the authorised person for such period as he or she may consider necessary.

(3) An authorised person shall not enter into a private dwelling under this article unless one of the following conditions applies—

(*a*) the entry is effected with the consent of the occupier or

(*b*) the entry is authorised by a warrant issued under sub-article (7).

(4) Whenever an authorised person enters any premises or boards any vehicle, under this article, he or she may—

(*a*) take photographs and carry out inspections, record information on data loggers, make tape, electrical, video or other recordings,

(*b*) carry out tests and make copies of documents (including records kept in electronic form) found therein and take samples,

(*c*) monitor any effluent, including trade effluent or other matter, which is contained in or discharged from a premises,

(*d*) carry out surveys, take levels, make excavations and carry out examinations of depth and nature of subsoil,

(*e*) require that the premises or vehicle or any part of the premises or anything in the premises or vehicle shall be left undisturbed for a specified period,

(*f*) require information from an occupier of the premises of any occupant of the vehicle or any person employed on the premises or any other person on the premises,

(*g*) require the production of, or inspect, records (including records held in electronic form) or documents, or take copies of or extracts from any records or documents, and

(*h*) remove and retain documents and records (including documents held in electronic form) for such period as may be reasonable for further examination, which the authorised person, having regard to all the circumstances, considers necessary for the purposes of exercising any function under these Regulations.

(5) (*a*) An authorised person who, having entered any premises or boarded any vehicle pursuant to these Regulations, considers that a risk to the environment arises from the carrying on of an activity at the premises or involving the use of the vehicle, may direct the owner or occupier of the premises or the driver of the vehicle to take such measures as are considered by that authorised person to be necessary to remove that risk.

(*b*) If the owner, occupier or driver referred to in paragraph (a) fails to comply with a direction of an authorised person under this subsection, the authorised person may do all things as are necessary to ensure that the measures required under the direction are carried out and the costs incurred by him or her in doing any such thing shall be recoverable from the owner or occupier by him or her, or the person by whom he or she was appointed.

(6) A person shall not—

(*a*) refuse to allow an authorised person to enter any premises or board any vehicle or to bring any person or equipment with him or her in the exercise of his or her powers,

(*b*) obstruct or impede an authorised person in the exercise of any of his or her powers,

(*c*) give to an authorised person information which is to his or her know-ledge false or misleading in a material respect, or

(*d*) fail or refuse to comply with any direction or requirement of an authorised person.

(7) (*a*) Where an authorised person in the exercise of his or her powers under this Article is prevented from entering any premises, or if the authorised person has reason to believe that evidence related to a suspected offence under these Regulations may be present in any premises and that the evidence may be removed therefrom or destroyed, or if the authorised person has reason to believe that there is a significant immediate risk to the environment, the authorised person or the person by whom he or she was appointed may apply to the District Court for a warrant under this Article authorising the entry by the authorised person onto or into the premises.

(*b*) If, on application being made to the District Court under this Article, the District Court is satisfied, on the sworn information of the authorised person that he or she has been prevented from entering a premises, the Court may issue a warrant authorising that person, accompanied, if the Court deems it appropriate by another authorised person or a member of the Garda Síochána, as may be specified in the warrant, at any time or times within one month from the date of the issue of the warrant, on production if so requested of the warrant, to enter, if need be by force, the premises concerned and exercise the powers referred to in sub-article (4) or (5).

(8) An authorised person may, in the exercise of any power conferred on him or her by these Regulations involving the bringing of any vehicle to any place, or where he or she anticipates any obstruction in the exercise of any other power conferred on him or her by these Regulations, request a member of the Garda Síochána to assist him or her in the exercise of such a power and any member of the Garda Síochána to whom he or she makes such a request shall comply with this request.

(9) Any certificate or other evidence given, or to be given, in respect of any test, examination or analysis of any sample shall, in relation to that sample, be evidence, without further proof, of the result of the test, examination or analysis unless the contrary is shown.

(10) When exercising any power conferred on him or her by these Regulations an authorised person shall, if requested by any person affected, produce a certificate or other evidence of his or her appointment as an authorised person.

(11) A person may be appointed as an authorised person for the purposes of these Regulations by the Minister, the Minister for Agriculture, Food and the Marine or the Agency.

(12) In this article "premises" includes land whether or not there are any structures on the land.

Offences and related matters

26. (1) A person who contravenes a provision of Parts 2 to 5 and Schedule 5 of these Regulations, excluding Article 17(5), (6), (7), (10) and (11), is guilty of an offence and shall be liable—

(*a*) on summary conviction to a Class A fine or to imprisonment for a term not exceeding 3 months or both or,

(*b*) on conviction on indictment to a fine not exceeding €500,000 or to imprisonment for a term not exceeding one year or to both such fine and such imprisonment.

(2) Where an offence under these Regulations has been committed by a body corporate and it is proved to have been so committed with the consent or connivance of or to be attributable to any neglect on the part of any person who, when the offence was committed, was a director, manager, secretary or other officer of the body corporate, or a person purporting to act in any such capacity, that person, as well as the body corporate, is guilty of an offence and liable to be proceeded against and punished as if guilty of the first-mentioned offence.

(3) Where the affairs of a body corporate or unincorporated body are managed by its members, sub-article (2) shall apply to the acts and defaults of a member in connection with the functions of management as if such a member were a director or manager of the body.

(4) A prosecution for a summary offence under these Regulations may be taken by a local authority or the Agency.

(5) A prosecution for a summary offence may be taken by a local authority whether or not the offence is committed in the functional area of the authority.

(6) Where a court imposes a fine or affirms or varies a fine imposed by another court for an offence under these Regulations, prosecuted by the Agency or a local authority, it shall, on the application of the Agency or local authority concerned (made before the time of such imposition, affirmation or variation), provide by order for the payment of the amount of the fine to the Agency or local authority, as the case may be, and such payment may be enforced by the Agency or local authority, as the case may be, as if it were due to it on foot of a decree or order made by the court in civil proceedings.

(7) Where a person is convicted of an offence under these Regulations the court shall, unless it is satisfied that there are special and substantial reasons for not so doing, order that person to pay to the Agency or local authority concerned the costs and expenses, measured by the court, reasonably incurred by the Agency or local authority in relation to the investigation, detection and prosecution of the offence, including costs incurred in the taking of samples, the carrying out of tests, examinations and analyses and in respect of the remuneration and other expenses of employees, consultants and advisers.

(8) (*a*) Where a local authority has reason to believe that an offence has been or is being committed in relation to a holding the authority may by notice require the person who appears to the authority to be the occupier to provide such information as is specified in the notice in relation to the alleged offence and it shall be the duty of that person to provide such information within the time frame specified in the notice insofar as is known to him or her.

(*b*) A notice issued in accordance with paragraph (a) shall set out the provisions of Articles 22(1) and 24 and of sub-article (1).

(9) Where a local authority considers that an offence under these Regulations has been or is being committed in relation to a holding the authority shall take such enforcement measures as are warranted by the circumstances and as are necessary to ensure satisfactory compliance with these Regulations and which, save in the case of a trivial or insignificant offence or specific mitigating circumstances, shall include prosecution for the alleged offence.

(10) (*a*) Where on application by motion by the Agency or a local authority to the District Court, Circuit Court or the High Court, the court hearing the application is satisfied that a person has failed or is failing to comply with a provision of Parts 2 to 5 of these Regulations, the court may by order—

(i) direct the person to comply with the provisions,

(ii) make such other provision, including provision in relation to the payment of costs, as the court considers appropriate, and

(iii) make such interim or interlocutory order as it considers appropriate.

(*b*) An application for an order under this Article may be made whether or not there has been a prosecution for an offence under these Regulations in relation to the relevant failure of compliance and shall not prejudice the initiation of a prosecution for an offence under these Regulations in relation to the failure of compliance.

(11) The powers, duties and functions assigned to a local authority or the Agency by this Article are additional to, and not in substitution for, the powers, duties and functions assigned by the Local Government (Water Pollution) Acts 1977 and 1990 or any other statute.

(12) A local authority shall maintain a register of inspections undertaken of farm holdings and information received for the purposes of Article 26(8) and shall keep updated a record of all enforcement measures undertaken in accordance with the requirements of Article 26(9) and Article 29(6).

PART 6

FUNCTIONS OF PUBLIC AUTHORITIES

Minister for Agriculture, Food and the Marine

27. (1) The Minister for Agriculture, Food and the Marine shall carry out, or cause to be carried out, such monitoring and evaluation programmes in relation to farm practices as may be necessary to determine the effectiveness of measures being taken in accordance with these Regulations.

(2) The Minister for Agriculture, Food and the Marine shall, in relation to each year, make the overall results of monitoring and evaluations carried out in accordance with sub-article (1) available to the Agency, to the Minister and, on request, to a local authority.

(3) The Minister for Agriculture, Food and the Marine shall prepare and keep updated a register of all holdings and shall, on request, make a copy of the register available to the Minister, the Agency or a local authority.

(4) The Minister for Agriculture, Food and the Marine shall make available to the Minister, a local authority or the Agency a report of an inspection or inspections carried out for the purposes of these Regulations or upon written request other information in relation to any holding or holdings as the case may be where such transfer of data is necessary for the purposes of ensuring compliance with these Regulations.

(5) The Minister for Agriculture, Food and the Marine shall make available, upon written request, information in relation to any holding or holdings, as the case may be, where such transfer of data is necessary for the purposes of carrying out any functions set out in these regulations, including for the purpose of promoting compliance with these Regulations. Such information may be requested by the following:-

(*a*) the Minister,

(*b*) an individual local authority,

(*c*) a representative local authority under a local authority shared service established for the purpose of carrying out functions set out in these regulations including for the purpose of promoting compliance with these Regulations,

(*d*) Teagasc for the purpose of promoting compliance with these Regulations,

(*e*) the Agency.

(6) The Minister for Agriculture, Food and the Marine shall ensure compliance with the Data Sharing and Governance Act, No. 5 of 2019 in making available any information under sub-article (5) above.

Making and review of action programme by the Minister

28. (1) The Minister shall, following consultation with the Minister for Agriculture, Food and the Marine and other interested parties in accordance with this Article, prepare and publish not later than 31st December 2025 and every four years thereafter, a programme of measures (hereafter in this Article referred to as "an action programme") for the protection of waters against pollution from agriculture. An interim review of this action programme shall be undertaken by the Minister starting within the second year of the programme.

(2) An action programme required by sub-article (1) shall include all such measures as are necessary for the purposes of Article 5 of the Nitrates Directive and shall contain a review of the action programme most recently made for those purposes and of such additional measures and reinforced actions as may have been taken.

(3) The Minister shall ensure that all interested parties are given early and effective opportunities to participate in the preparation, review and revision of an action programme required by this Article and for this purpose shall—

(*a*) inform interested parties by public notices or other appropriate means including electronic media, in relation to any proposals for the preparation, review or revision of an action programme,

(*b*) make available to interested parties information in relation to the proposals referred to in paragraph (*a*) including information about the right to participate in decision-making in relation to those proposals,

(*c*) provide an opportunity for comment by interested parties before any decision is made on the establishment, review or revision of an action programme,

(*d*) in making any such decision, take due account of the comments made by interested parties and the results of the public participation, and

(*e*) having examined any comments made by interested parties, make reasonable efforts to inform those parties of the decisions taken and the reasons and considerations on which those decisions are based, including information on the public participation process.

(4) The Minister shall ensure that such reasonable time is allowed as is sufficient to enable interested parties to participate effectively.

(5) Where the Minister publishes any information in accordance with this Article, the Minister shall—

(*a*) do so in such manner as the Minister considers appropriate for the purpose of bringing that information to the attention of the public, and

(*b*) make copies of that information accessible to interested parties free of charge through a website or otherwise.

(6) The Minister shall specify by way of public notice on a website or otherwise the detailed arrangements made to enable public participation in the preparation, review or revision of an action programme, including—

(*a*) the address to which comments in relation to those proposals may be submitted, and

(*b*) the date by which such comments should be received.

(7) In this Article "interested parties" includes persons who—

(*a*) are carrying on any business which relies upon the water environment or which is affected, or likely to be affected, by the action programme, or

(*b*) are carrying on any activities which have or are likely to have an impact on water status, or

(*c*) have an interest in the protection of the water environment whether as users of the water environment or otherwise.

Agency

29. (1) The Agency shall prepare at four-yearly intervals a report in accordance with Article 10 of the Nitrates Directive and shall submit such report to the Minister.

(2) The Agency shall undertake a review of progress made in implementing these Regulations and shall submit a report to the Minister by 30th June 2025 and every four years thereafter with the results of that review and with recommendations as to such additional measures, if any, as appear to be necessary to prevent and reduce water pollution from agricultural sources.

(3) In preparing the reports required under sub-articles (1) and (2) the Agency shall consult with the Department of Agriculture, Food and the Marine and the co-ordinating local authority in each river basin district, and such other persons as it considers appropriate.

(4) The Department of Agriculture, Food and the Marine, the relevant local authorities and Irish Water shall provide the Agency with such information appropriate to their functions as may be requested by the Agency for the purposes of these Regulations.

(5) Each monitoring programme prepared by the Agency for the purposes of Article 10 of European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003) shall include provision for such monitoring as is necessary for the purposes of these Regulations.

(6) The Agency shall make recommendations and shall, where considered necessary, give directions to each local authority in relation to the monitoring and inspections to be carried out, or other measures to be taken, by the authority for the purposes of these Regulations. The Agency may revise such recommendations and directions at such times thereafter as the Agency considers appropriate.

(7) The powers, duties and functions assigned to the Agency by these Regulations are additional to, and not in substitution for, the powers, duties and

functions assigned to the Agency by section 63 of the Environmental Protection Agency Act, 1992 (No. 7 of 1992) or any other statute.

Local authorities

30. (1) A local authority shall carry out, or cause to be carried out, such monitoring of surface waters and groundwater at selected measuring points within its functional area as makes it possible to establish the extent of pollution in the waters from agricultural sources and to determine trends in the occurrence and extent of such pollution.

(2) A local authority shall carry out or cause to be carried out such inspections of farm holdings as is necessary for the purposes of these Regulations and shall aim to co-ordinate its inspection activities with inspections carried out by other public authorities.

(3) For the purposes of sub-article (2) a local authority shall aim to develop co-ordination arrangements with other public authorities with a view to promoting consistency of approach in inspection procedures and administrative efficiencies between public authorities and to avoid any unnecessary duplication of administrative procedures and shall have regard to any inspection protocol which may be developed by the Minister, following consultation with the Minister for Agriculture, Food and the Marine.

(4) A local authority shall, in the exercise of its functions for the purposes of these Regulations—

(*a*) consult to such extent as it considers appropriate with the Minister, the Minister for Agriculture, Food and the Marine, the Agency, Irish Water and such other persons as it considers appropriate, and

(*b*) have full regard to any recommendations made, and comply with any direction given, to the authority by the Agency in accordance with Article 29.

(5) A local authority shall follow any protocol established by the Minister for furnishing a report of an inspection or inspections to the Department of Agriculture, Food and the Marine and such other persons as it considers appropriate for the purposes of these Regulations where non-compliance has been detected.

(6) A local authority shall maintain a register of all prior investigations carried out by the local authority itself or by Irish Water within its jurisdiction, and distances specified, for the purposes of Article 17.

Compliance with Data Protection Acts

31. The provision of information by a local authority, the Agency or the Minister for Agriculture, Food and the Marine in accordance with Article 27, 29 or 30 of these Regulations shall not be a breach of the Data Protection Acts, 1988, 2003 and 2018.

Certificate in relation to nutrient content of fertiliser

32. (1) A certificate of the type specified in Article 15 or 20 may be issued by a competent authority where the authority is satisfied that the nutrient content of the fertiliser in question has been assessed on the basis of appropriate methodologies based on net farm balance and is as specified in the certificate.

(2) A certificate issued under this Article shall be valid for such period, not exceeding twelve months, as shall be specified in the certificate.

(3) In this Article "competent authority" means—

(*a*) the Agency in relation to fertiliser arising in an activity in relation to which there is in force a licence under Part IV of the Act of 1992, and

(*b*) the Minister for Agriculture, Food and the Marine in relation to any other fertiliser.

(4) Notice of the methodologies used for the purposes of sub-article (1) shall be notified to the European Commission by the competent authority.

Exemption for exceptional circumstances for research

33. (1) A temporary exemption from a requirement of these Regulations may be granted to a person by the Agency or the Minister for Agriculture, Food and the Marine in the case of exceptional circumstances relating to research.

(2) A temporary exemption for the purposes of sub-article (1) shall be granted by way of certificate issued to the person carrying out the research by the Agency or the Minister for Agriculture, Food and the Marine and shall be subject to such conditions, if any, as are specified in the certificate.

(3) A certificate issued for the purposes of this Article shall specify the nature, extent and duration of the exemption to which the certificate relates and a copy of the certificate shall be sent as soon as may be to the relevant local authority.

SCHEDULE 1

SOIL TEST

A soil test refers to the results of an analysis of a soil sample carried out by a soil-testing laboratory that meets the requirements of the Minister for Agriculture, Food and the Marine for this purpose.

The analysis for phosphorus and, where appropriate, organic matter content and soil pH, and the taking of soil samples shall be carried out in accordance with the procedures below.

Analysis for Phosphorus

The Morgan's extractable P test as detailed below shall be used to determine the Soil P Index. A review of this soil test methodology for phosphorus availability will be undertaken for the mid-term review of this programme.

Preparation of soil sample

The soil shall be dried at 40°C for at least 24 hours (longer if necessary to ensure complete drying) in a forced draught oven with moisture extraction facilities. It shall then be sieved through a 2 mm mesh screen to remove stones and plant debris. After thorough mixing, it shall be sub-divided to obtain a representative sample. Where large samples are received at the laboratory, the entire sample shall be dried and sieved prior to sub-sampling for analysis.

Morgan's extracting solution

Constituents:— 1,400 ml of 40% NaOH in approximately 15 litres of water. Add 1,440 ml of glacial acetic acid. Make up to 20 litres with water and adjust pH to 4.8. The pH of the solution must be checked regularly and adjusted as necessary before use. A volume ratio of one part sieved soil to five parts of solution must be used, e.g. 6 ml of the prepared soil sample is extracted with a 30 ml volume of Morgan's extracting solution. The sample shall be shaken for 30 minutes to get a suitable mix and permit intended reaction, after which it is filtered through a No. 2 Whatman filter paper into vials for analysis. The filtered extract shall be analysed using standard laboratory techniques.

Results shall be reported in mg per litre.

Analysis of organic matter

Organic matter content shall be determined by loss on ignition.

Place a quantity of the prepared soil sample in an oven for 16 hours at 105°C. Remove and cool in a desiccator. Put approximately 4g of this soil into a pre-weighed crucible and determine the weight of the soil (initial weight). Place in a muffle furnace at 500°C for 16 hours for ashing. Remove the crucible, cool in a desiccator and determine the weight of the ash (final weight).

The organic matter of the soil is the difference in weight between the initial and final weights expressed as a percentage of the initial weight.

Analysis of soil pH

Soil pH shall be determined by measuring pH in a soil:water suspension of 1:2 ratio. Place 10 ml of dried sieved soil and 20 mls of deionised water into a suitable container. Mix thoroughly and allow to stand for at least 10 minutes. Stir for 30 seconds, and allow to settle immediately before recording the pH on a meter calibrated using buffer solutions of pH 4.0 and 7.0

Soil Sampling Procedure

The soil sample shall be taken in accordance with the procedure as specified below:

(*a*) The sampling area shall not exceed 4 hectares. Exceptionally, where soil types and cropping of lands were similar during the previous five years, a sample area of up to 5 hectares shall be deemed acceptable.

(*b*) Separate samples shall be taken from areas that are different in soil type, previous cropping history, slope, drainage or persistent poor yields.

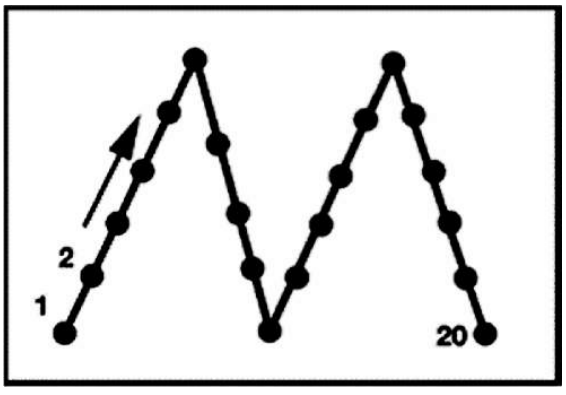
(*c*) Any unusual spots such as old fences, ditches, drinking troughs, dung or urine patches or where fertiliser or lime has been heaped or spilled shall be avoided.

(*d*) A field shall not be sampled for phosphorus until 3 months after the last application of any fertiliser containing this nutrient (chemical or organic).

(*e*) The sampling pattern shown in the figure below shall be followed. A soil core shall be taken to the full 100 mm depth. 20 cores shall be taken from the sampling area and placed in the soil container to make up the sample. Ensure the container is full of soil.

(*f*) The field and sample numbers shall be written/attached onto the soil container.

Figure 1: Sampling pattern



SCHEDULE 2

Article 8

CRITERIA AS TO STORAGE CAPACITY AND NUTRIENT MANAGEMENT

Table 1 Slurry storage capacity required for sows and pigs

Unit type	m^3/week[1]				
Water:meal ratio changing for finishers only	2.0:1	2.5:1	3.0:1	3.5:1	4.0:1
Breeding unit (per sow place)	-	-	-	-	0.174
Integrated unit (per sow place)	0.312	0.355	0.398	0.441	0.483
Finishing unit (per pig)	0.024	0.031	0.039	0.046	0.053

[1]An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks. Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 2 Slurry storage capacity required for cattle, sheep and poultry

Livestock type	m^3/week[1]
Dairy cow	0.33
Suckler cow	0.29
Cattle > 2 years	0.26
Cattle (18-24 months old)	0.26
Cattle (12-18 months old)	0.15
Cattle (6-12 months old)	0.15
Cattle (0-6 months old)	0.08
Lowland ewe	0.03
Mountain ewe	0.02
Lamb-finishing	0.01
Poultry — layers per 1000 birds (30% DM)	0.81

[1]An additional 200mm freeboard must be provided in all covered tanks and 300mm freeboard in all uncovered tanks. Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 3 Storage capacity required for dungstead manure

Livestock type	Solid fraction (m^3/week)	Seepage fraction (m^3 /week)[1]
Dairy cow	0.28	0.04
Suckler cow	0.25	0.03
Cattle > 2 years	0.23	0.02
Cattle (18-24 months old)	0.23	0.02
Cattle (12-18 months old)	0.13	0.01
Cattle (6-12 months old)	0.13	0.01
Cattle (0-6 months old)	0.07	0.01

[1]Allowance must also be made for net rainfall during the specified storage period for uncovered tanks.

Table 4 Average net rainfall during the specified storage period

County	Millimetres per week
Carlow	24
Cavan	27
Clare	32
Cork	37
Donegal	38
Dublin	17
Galway	34
Kerry	45
Kildare	18
Kilkenny	23
Laois	22
Leitrim	33
Limerick	26
Longford	23
Louth	20
Mayo	40
Meath	19
Monaghan	23
Offaly	20
Roscommon	26
Sligo	32
Tipperary	27
Waterford	31
Westmeath	21
Wexford	25
Wicklow	33

Article 9

Table 5 Storage capacity required for effluent produced by ensiled forage

Crop	Minimum storage requirement	(m^3/100 tonnes)
	Short Term Storage[1]	Full Storage
Grass	7	21
Arable silage	7	21
Maize	4	10
Sugar beet tops	15	50

[1]Only permitted where a vacuum tanker or an irrigation system is available on the holding.

Article 14 and 20

Table 6 Annual nutrient excretion rates for livestock

Livestock type	Total Nitrogen	Total Phosphorus
	kg/year	kg/year
Dairy cow[7] (2022 only)	89	13
Dairy cow band 1[8] (from 2023)	80	12
Dairy cow band 2[9] (from 2023)	92	13.6
Dairy cow band 3[10] (from 2023)	106	15.8
Suckler cow	65	10
Cattle (0-1 year old)	24	3
Cattle (1-2 years old)	57	8
Cattle > 2 years	65	10
Mountain ewe & lambs	7	1
Lowland ewe & lambs	13	2
Mountain hogget	4	0.6
Lowland hogget	6	1
Goat	9	1
Horse (>3 years old)	50	9
Horse (2-3 years old)	44	8
Horse (1-2 years old)	36	6
Horse foal (< 1 year old)	25	3
Donkey/small pony	30	5
Deer (red) 6 months — 2 years	13	2

[7] In 2022 the N excretion rate for the dairy cow is 89 kg N/ha and from 2023 onwards the N excretion rate will be determined by the milk yield per annum (for the 3 preceding years) as explained in footnote 8, 9 and 10

[8] <4,500 kg milk yield per annum

[9] 4,501 – 6,500 kg milk yield per annum

[10] >6,500 kg milk yield per annum

Deer (red) > 2 years	25	4
Deer (fallow) 6 months — 2 years	7	1
Deer (fallow) > 2 years	13	2
Deer (sika) 6 months — 2 years	6	1
Deer (sika) > 2 years	10	2
Breeding unit (per sow place)	35	8
Integrated unit (per sow place)	87	17
Finishing unit (per pig place)	9.2	1.7
Laying hen per bird place	0.56	0.12
Broiler per bird place	0.24	0.09
Turkey per bird place	1	0.4

Article 15 and 20

Table 7 Amount of nutrient contained in $1m^3$ of slurry

Livestock type	Total Nitrogen (kg)	Total Phosphorus (kg)
Cattle	2.4	0.8
Pig	4.2	0.8
Sheep	10.2	1.5
Poultry — layers 30% DM	13.7	2.9

For the purposes of calculation, assume that 1 m^3 = 1,000 litres = 1 tonne = 1000 kg.

Table 8 Amount of nutrients contained in 1 tonne of organic fertilisers other than slurry

Livestock type		Total Nitrogen (kg)	Total Phosphorus (kg)
Poultry manure	broilers/deep litter	28.0	6.0
	layers 55% dry matter	23.0	5.5
	turkeys	28.0	13.8
Dungstead manure (cattle)		3.5	0.9
Farmyard manure		4.5	1.2
Spent mushroom compost		8	1.5
Sewage sludge		Total nitrogen and total phosphorus content per tonne shall be declared by the supplier in accordance with the Waste Management (Use of Sewage Sludge in Agriculture) Regulations,1998 to 2001 and any subsequent amendments thereto and this must be submitted to the local authority.	
Dairy processing residues and other products not listed above		Total nitrogen and total phosphorus content per tonne based on certified analysis shall be provided by the supplier.	

Article 15

Table 9 Nutrient availability in fertilisers

Fertiliser	Availability (%)		
	Nitrogen	Phosphorus	
		Soil Index 1& 2	Soil Index 3 & 4
Chemical	100	100	100
Pig and poultry manure	50	50	100
Farmyard manure	30	50	100
Spent mushroom compost	20	50	100
Cattle and other livestock manure (including that produced on the holding)	40	50	100

Table 9A Nutrient availability in compost

Compost C:N ratio[1]	N availability (%)
<10	25
12.5	17.5
15.0	10
17.5	5.5
>20	0.0

[1]The determination of the C:N ratio shall be based on a methodology agreed with the Agency or the Minister for Agriculture, Food and the Marine

Table 10 Determining nitrogen index for tillage crops

Tillage crops that follow permanent pasture			
Nitrogen Index			
Index 1	Index 2	Index 3	Index 4
The 5th tillage crop following permanent pasture. For subsequent tillage crops use the continuous tillage table.	The 3rd or 4th tillage crop following permanent pasture. If original permanent pasture was cut only, use index 1.	The 1st or 2nd tillage crop following permanent pasture (see also Index 4). If original permanent pasture was cut only, use index 2.	The 1st or 2nd tillage crop following very good permanent pasture which was grazed only.
Continuous tillage: — crops that follow short leys (1-4 years) or tillage crops			
Previous crop			
Index 1	Index 2	Index 3	Index 4
Cereals Maize	Sugar beet Fodder beet Potatoes Mangels Kale Oil seed rape, Peas, Beans		
	Leys (1-4 years) grazed or cut and grazed		
	Swedes removed	Swedes grazed in situ	
Vegetables receiving less than 200 kg/ha nitrogen	Vegetables receiving more than 200 kg/ha nitrogen		

Table 11 Phosphorus index system

Soil phosphorus index	Soil phosphorus ranges (mg/l)	
	Grassland	Other crops
1	0.0-3.0	0.0-3.0
2	3.1-5.0	3.1-6.0
3	5.1-8.0	6.1-10.0
4	> 8.0	>10.0

Table 12 Annual maximum fertilisation rates of nitrogen on grassland

Grassland stocking rate[1]	Available Nitrogen[2]
(kg/ha/year)	(kg/ha)
≤130	114
131-170	185
Grassland stocking rate greater than 170 kg/ha/year[3, 4]	
171-210	254
211-250	225
>250	225[5]

[1]Total annual nitrogen (kg) excreted by grazing livestock averaged over the eligible grassland area (ha) (grazing and silage area). Stocking rate refers to grassland area only.

[2]The maximum nitrogen fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding. Where a derogation applies on the holding derogation rates apply based on stocking rate of the holding. For a new derogation applicant they may apply the derogation rate of 225 kg/ha for the 1st year only and from year 2 onwards must use rates as per stocking rate on the holding.

[3]This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170 kg nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted, in accordance with the Nitrates Directive).

[4] these fertilisation rates are only applicable where the fertiliser type specified by the Minister for Agriculture, Food and the Marine is used.

[5]The application of nitrogen from livestock manure (including that deposited by the animals themselves) to the eligible grassland area shall not exceed 250 kg nitrogen per hectare per year.

Table 13A Annual maximum fertilisation rates of phosphorus on grassland

Grassland stocking rate[1] (kg/ha/year)	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha) [2,3,6]			
<85	27	17	7	0
86-130	30	20	10	0
131-170	33	23	13	0
Grassland stocking rate greater than 170 kg/ha/year[4,5]				
171-210	36	26	16	0
211-250	39	29	19	0
>250	39	29	19	0

[1]Total annual nitrogen (kg) excreted by grazing livestock averaged over the eligible grassland area (grazing and silage area). Stocking rate refers to grassland area only.
[2]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions in Article 16(3)(*f*).
[3]Manure produced by grazing livestock on a holding may be applied to Index 4 soils on that holding in a situation where there is a surplus of such manure remaining after the phosphorus fertilisation needs of all crops on soils at phosphorus indices 1, 2 or 3 on the holding have been met by the use only of such manure produced on the holding.
[4]The maximum phosphorus fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.
[5]This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170 kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted in accordance with the Nitrates Directive).
[6]An additional 15 kg of phosphorus per hectare may be applied on soils at phosphorus indices 1, 2, or 3 for each hectare of pasture establishment undertaken.

Table 13B Annual maximum fertilisation rates of phosphorus on grassland adopting increased P build-up application rates

Grassland stocking rate[1] (kg/ha/year)	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha) [2,3,6]			
131-170	63	43	13	0
Grassland stocking rate greater than 170 kg/ha/year[4,5]				
171-210	66	46	16	0
211-250	69	49	19	0
>250	69	49	19	0

[1]Total annual nitrogen (kg) excreted by grazing livestock averaged over the eligible grassland area (grazing and silage area). Stocking rate refers to grassland area only.
[2]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions in Article 16(3)(*f*)..
[3]Manure produced by grazing livestock on a holding may be applied to Index 4 soils on that holding in a situation where there is a surplus of such manure remaining after the phosphorus fertilisation needs of all crops on soils at phosphorus indices 1, 2 or 3 on the holding have been met by the use only of such manure produced on the holding.
[4]The maximum phosphorus fertilisation of grassland shall not exceed that specified for stocking rates less than or equal to 170 kg/ha/year unless a minimum of 5% of the eligible area of the holding is used to grow crops other than grass or a derogation applies in respect of the holding.
[5]This table does not imply any departure from Article 20(1) which prohibits the application to land on a holding of livestock manure in amounts which exceed 170 kg Nitrogen per hectare per year, including that deposited by the animals themselves (or 250 kg in the case of a holding to which a derogation has been granted in accordance with the Nitrates Directive).
[6]An additional 15 kg of phosphorus per hectare may be applied on soils at phosphorus indices 1, 2, or 3 for each hectare of pasture establishment undertaken.

Table 14 Annual maximum fertilisation rates of available nitrogen on grassland (cut only, no grazing livestock on holding)

	Available nitrogen (kg/ha)
1st cut	112
Subsequent cuts	90
Hay	72

Table 15 Annual maximum fertilisation rates of phosphorus on grassland cut only

Phosphorus Index				
	1	2	3	4
	Available Phosphorus (kg/ha)[1,2,3]			
First cut	40	30	20	0
Subsequent cuts	10	10	10	0

[1]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils, subject to the provisions in Article 16(3)(*f*).
[2] The fertilisation rates apply to grassland where there is no grazing livestock on the holding.
[3]The fertilisation rates in this table apply to those areas of farms where hay or silage is produced for sale off the holding on farms stocked <85 kg grassland stocking rate.

Table 16 Maximum fertilisation rates of nitrogen on tillage crops

Crop	Nitrogen Index			
	1	2	3	4
	Available Nitrogen (kg/ha)			
Winter Wheat [1,2]	210	180	120	80
Spring Wheat [1,2]	160	130	95	60
Winter Barley [1]	180	155	120	80
Spring Barley [1,3]	135	100	75	40
Winter Oats[1]	145	120	85	45
Spring Oats[1]	110	90	60	30
Sugar Beet	195	155	120	80
Fodder Beet	195	155	120	80
Potatoes: Main Crop, >120 days[4]	250	190	170	140
Potatoes: Maincrop/seed, 90-120 days[4]	270	230	210	180
Potatoes: Early, 60-90 days[4]	210	170	150	120
Potatoes: Salad, <60 days[4]	140	120	100	60
Maize	180	140	110	75
Field Peas/Beans	0	0	0	0
Oil Seed Rape	225	180	160	140
Linseed	75	50	35	20
Swedes/Turnips	90	70	40	20
Kale	150	130	100	70
Forage Rape	130	120	110	90

[1]Where proof of higher yields is available, an additional 20 kg N/ha may be applied for each additional tonne above the following yields:
Winter Wheat — 9.0 tonnes/ha Spring Wheat — 7.5 tonnes/ha
Winter Barley — 8.5 tonnes/ha Spring Barley — 6.5 tonnes/ha
Winter Oats — 7.5 tonnes/ha Spring Oats — 6.5 tonnes/ha
The higher yields shall be based on the best yield achieved in any of the three previous harvests, at 20% moisture content.
[2]Where milling wheat is grown under a contract to a purchaser of milling wheat, an extra 30 kg N/ha may be applied.
[3]Where malting barley is grown under a contract to a purchaser of malting barley, an extra 20 kg N/ha may be applied where it is shown on the basis of agronomic advice that additional nitrogen is needed to address a proven low protein content in the grain.
[4]Length of growing season

Table 17 Maximum fertilisation rates of phosphorus on tillage crops

Crop	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha)[1]			
Winter Wheat [2,3,5]	45	35	25	0
Spring Wheat [2,3]	45	35	25	0
Winter Barley [2,3,5]	45	35	25	0
Spring Barley [2,3]	45	35	25	0
Winter Oats [2,3,5]	45	35	25	0
Spring Oats [2,3]	45	35	25	0
Sugar Beet	70	55	40	20
Fodder Beet	70	55	40	20
Potatoes: Main Crop	125	100	75	50
Potatoes: Early	125	115	100	50
Potatoes: Seed/Salad	125	115	100	85
Maize	70	50	40	20[4]
Field Peas	40	25	20	0
Field Beans	50	40	20	0
Oil Seed Rape	55	45	35	0
Linseed	35	30	20	0
Swedes/Turnips	70	60	40	40
Kale	60	50	30	0
Forage Rape	40	30	20	0

[1]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

[2]Where proof of higher yields is available, an additional 3.8 kg P/ha may be applied on soils at phosphorus 1, 2, or 3 for each additional tonne above a yield of 6.5 tonnes/ha. The higher yields shall be based on the best yield achieved in any of the three previous harvests, at 20% moisture content.

[3]Where pH is greater than or equal to 7, 20 kg P/ha may be applied on soils at phosphorus index 4.

[4]Must be incorporated prior to or during sowing.

[5] For winter cereals on soils of P index 1 and 2, 20 kg of the maximum P fertilisation rate may be applied up to 31st October, which must be incorporated prior to or during sowing.

Table 18 Maximum fertilisation rates of nitrogen on vegetable crops

Crop	Nitrogen Index				Maximum additional supplementation (Top dressing)
	1	2	3	4	
	Available Nitrogen (kg/ha)				
Asparagus (Establishment)	140	115	95	70	
Asparagus (After harvest)	0	0	0	0	70
Broad Beans	0	0	0	0	
French Beans	90	85	75	70	
Beetroot	140	125	105	90	
Brussels Sprouts	120	115	105	100	180
Spring Cabbage	50	35	15	0	250
Other Cabbage	150	135	115	100	100
Broccoli	120	115	100	90	120
Cauliflower (Winter and Spring)	75	50	25	0	150
Cauliflower (Summer and Autumn)	120	85	65	40	120
Carrots	90	70	40	0	
Celery	120	85	65	50	180
Courgettes	140	125	105	90	
Leeks	150	130	100	80	150
Lettuce	100	90	80	70	50
Onions	70	60	50	40	70
Scallions	90	80	70	60	60
Parsley	100	80	60	40	150
Parsnip	100	85	70	50	70
Peas (Market)	0	0	0	0	
Rhubarb	100	90	80	70	200
Spinach	140	125	105	90	100
Swede (Horticultural)	70	45	25	20	30
Swede (Transplanted crops)	90	60	30	0	

Table 19 Maximum fertilisation rates of phosphorus on vegetable crops

Crop	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha)[1]			
Asparagus (Establishment)	65	45	35	20
Asparagus (After harvest)	27	22	15	10
Broad Beans	65	45	35	20
French Beans	65	45	35	20
Beetroot	65	45	35	20
Brussels Sprouts	65	45	35	20
Spring Cabbage	65	45	35	20
Other Cabbage	65	45	35	20
Broccoli	65	45	35	20
Cauliflower (Winter and Spring)	65	45	35	20
Cauliflower (Summer and Autumn)	65	45	35	20
Carrots	65	45	35	20
Celery	88	65	55	28
Courgettes	65	45	35	20
Leeks	65	45	35	20
Lettuce	80	60	40	20
Onions	65	45	35	20
Scallions	65	45	35	20
Parsley	65	45	35	20
Parsnip	65	45	35	20
Peas (Market)	65	45	35	20
Rhubarb	65	45	35	20
Spinach	65	45	35	20
Swede (Horticultural)	70	60	45	35
Swede (Transplanted crops)	70	60	45	35

[1]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

Table 20 Annual maximum fertilisation rates of nitrogen on fruit/soft fruit crops

	Available Nitrogen (kg/ha)
Apples (Dessert)	125
Apples (Culinary)	125
Pears	50
Cherries	70
Plums	70
Blackcurrants	80
Gooseberries	40
Raspberries	60
Strawberries	50
Redcurrants	60
Loganberries	50
Blackberries	50

Table 21 Annual maximum fertilisation rates of phosphorus on fruit/soft fruit crops

	Phosphorus Index			
	1	2	3	4
	Available Phosphorus (kg/ha)[1]			
Apples (Dessert)	25	16	12	8
Apples(Culinary)	20	12	10	8
Pears	16	8	4	0
Cherries	16	8	4	0
Plums	16	8	4	0
Blackcurrants	20	16	12	8
Gooseberries	20	16	12	8
Raspberries	20	16	12	8
Strawberries	16	8	4	0
Redcurrants	20	16	12	8
Loganberries	20	16	12	8
Blackberries	20	16	12	8

[1]The fertilisation rates for soils which have more than 20% organic matter shall not exceed the amounts permitted for Index 3 soils.

SCHEDULE 3

Articles 10, 11, 13 and 16

STORAGE PERIODS FOR LIVESTOCK MANURE

1. The storage period specified for the purposes of Articles 10(2), 11(2), 13 and 16(5)(*b*) is—

(a) 16 weeks in relation to holdings in counties Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford, Wexford and Wicklow;

(b) 18 weeks in relation to holdings in counties Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath;

(c) 20 weeks in relation to holdings in counties Donegal and Leitrim, and

(d) 22 weeks in relation to holdings in counties Cavan and Monaghan.

1. Where 20% or more of a holding lies within one or more counties of higher storage requirement as specified in paragraph 1, the holding shall be deemed for the purposes of this Schedule to lie wholly within the county in relation to which the longest storage period is specified.

SCHEDULE 4

Articles 14, 17 and 19

PERIODS WHEN APPLICATION OF FERTILISERS TO LAND IS PROHIBITED

1.In counties Carlow, Cork, Dublin, Kildare, Kilkenny, Laois, Offaly, Tipperary, Waterford, Wexford and Wicklow, the period during which the application of fertilisers to land is prohibited in the period from—

(a) 15th September to 26th January in the case of the application of chemical fertiliser and not withstanding sub-paragraph (4)

(b) 8th October[11] to 12th January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding sub-paragraph (5)

(c) 1st November to 12th January in the case of the application of farmyard manure.

[11] From 1st January 2023 the date for beginning of prohibited period will be 1st October

2. In counties Clare, Galway, Kerry, Limerick, Longford, Louth, Mayo, Meath, Roscommon, Sligo and Westmeath, the period during which the application of fertilisers to land is prohibited is the period from—

(a) 15th September to 29th January in the case of the application of chemical fertiliser and not withstanding sub paragraph (4)
(b) 8th October[6] to 15th January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding sub-paragraph (5)
(c) 1st November to 15th January in the case of the application of farmyard manure.

3. In counties Cavan, Donegal, Leitrim and Monaghan, the period during which the application of fertilisers to land is prohibited is the period from—

(a) 15th September to 14th February in the case of the application of chemical fertiliser and not withstanding sub-paragraph (4)
(b) 8th October[6] to 31st January in the case of the application of organic fertiliser (other than farmyard manure) and not withstanding sub-paragraph (5)
(c) 1st November to 31st January in the case of the application of farmyard manure.

4. In relation to the prohibited periods for spreading chemical fertiliser, the Minister shall by 1st September 2022, following consultation with the Minister for Agriculture, Food and the Marine, publish criteria for the application of slurry from the 15th January. The spreading of all chemical fertiliser shall be in accordance with these criteria from the 15th January.

5. In relation to the commencement of the closed period for slurry application, the Minister shall by 1st September 2022, following consultation with the Minister for Agriculture, Food and the Marine, publish criteria for the application of slurry from 1st October to the 15th October. The spreading of all slurry shall be in accordance with these criteria from the 8th October to the 15th October 2022 and from 1st October to the 15th October in subsequent years.

GIVEN under my Official Seal,
9 March, 2022.

DARRAGH O’BRIEN,
Minister for Housing, Local Government and Heritage.

EXPLANATORY NOTE

(*This note is not part of the Instrument and does not purport to be a legal interpretation*)

These Regulations, which give effect to Ireland's Fifth Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources and include measures such as

- periods when land application of fertilisers is prohibited
- limits on the land application of fertilisers
- storage requirements for livestock manure, and
- monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.

The Regulations give further effect to several European Directives including Directives in relation to protection of waters against pollution from agricultural sources ("the Nitrates Directive"), dangerous substances in water, waste management, protection of groundwater, public participation in policy development and water policy (the Water Framework Directive).

The Regulations revoke the European Communities (Good Agricultural Practice for Protection of Waters) Regulations, 2017 and other subsequent amending regulations.

BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach díreach ó
FOILSEACHÁIN RIALTAIS,
BÓTHAR BHAILE UÍ BHEOLÁIN,
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Appendix No. 20

Construction and Environmental Management Plan

CLW Environmental Planners Ltd.

The Mews,
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Cavan,
Co. Monaghan

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Construction and Environmental Management Plan (C.E.M.P.)

For

Mr. Declan Sullivan

At

Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

23rd September 2024

Applicant:

Mr. Declan Sullivan
Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

Proposed Development:

planning permission for the intensification of use of 2 No. existing poultry houses together with all ancillary structures and site works associated with the above development on an existing poultry farm

Location:

Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

Background:

The following Construction and Environmental Management Plan (C.E.M.P.) has been completed in support of a planning application to Monaghan Co. Co. for the proposed development.

1. Introduction

CLW Environmental Planners Ltd. been commissioned to prepare this Construction Environmental Management Plan (CEMP) on behalf of Mr. Declan Sullivan, as Developer and Applicant for the proposed development of 3 No. Poultry house and associated works. Planning permission has been applied for the proposed developments and associated works on an existing poultry farm on agricultural lands at Drumcreeghan, Latton, Castleblayney, Co. Monaghan.

This CEMP has been prepared to communicate key planning and environmental obligations relating to the management of the construction phase of the Proposed Development. It comprises general measures and a series of discipline-specific measures that align with the proposed mitigation and monitoring measures described in the EIAR for the Proposed Development.

This CEMP is a 'live' document, which shall be updated by the Developer and the appointed construction contractor and/or overseeing engineer as the project is progressed. In particular, the CEMP will be updated to ensure the requirements of all relevant planning conditions are incorporated.

1.1 Objectives

This CEMP outlines the approach to the management and minimisation of environmental impacts during the construction phase, with the primary aim of avoiding, reducing or offsetting any adverse impacts. The CEMP serves as a consistent point of reference for environmental considerations throughout the construction period for the Main Contractor, developer and site engineer.

The Developer and the appointed Main Contractor are committed to undertaking the management and mitigation measures detailed in this CEMP.

1.2 Roles and Responsibilities

The anticipated roles and responsibilities of the key parties involved in the management of environmental issues during the construction works are set out in Table 1 below. Some roles have still to be finalised pending receipt of planning permission. However, it should be noted that all members of staff are responsible for ensuring the requirements of the CEMP and associated construction plans are followed.

Table 1: Roles and Responsibilities

Position	Name	Contact Details
Project Manager	TBC	TBC
Environmental Officer / Coordinator	Paraic Fay	C/O CLW Environmental Planners ltd.
Project Ecologist	Noreen McLoughlin	C/o Whitehill Environmental
Other Relevant Persons Demolition Contractor	TBC Harte Demolition Ltd.	TBC

Any changes in roles and responsibilities will be identified and clearly communicated to those affected.

The responsibilities of the **Project Manager / Site engineer** will include:

- Implement the CEMP and all associated management procedures and mitigation;
- To be the overall accountable person for the environmental compliance of the operations during the construction phase, including to ensure works are conducted in accordance with the relevant environmental requirements of the application and consent documentation and any other regulatory and contractual requirements;
- To ensure that relevant staff have received appropriate environmental training; and
- Manage the requirements of the CEMP during the course of the construction phase;
- Maintaining, inspecting and updating the CEMP and other relevant documents;
- Liaise with and provide advice to staff, sub-contractors and other relevant parties with regards to the environmental risks and controls for tasks;
- Monitor the performance of activities to ensure that identified risks and controls are implemented effectively;
- Undertake routine site inspections, initiate appropriate actions, and complete a weekly environmental inspection report;
- Management of the environmental monitoring programme including noise, dust, and provide status reports, as appropriate;
- Conduct environmental audits as required by the CEMP, to include audits of subcontractors and suppliers, as appropriate;
- Assist in the investigation and resolution of complaints and incidents;
- Documenting and maintain records of above audits, inspections and reports securely; and
- Notify the Project Manager or their appointed compliance representative of any deficiencies in the performance of the CEMP, so that necessary improvements can be implemented.

2. Site Location and Surrounding Environment

The site in question is 1.11ha and it is located in a rural area within the townland of Drumcreeghan. Access to the site is via an existing entrance and access road into the farm, and this entrance is just off a local, third-class road. The site is 2.8km north-east of Latton and it is 4.2km south of Ballybay.

The land-use surrounding the site is predominantly agricultural and the main habitat in the lands surrounding the site is improved agricultural grassland. Other habitats represented in the area include semi-improved/neutral and wet grasslands, small areas of scrub and woodland, along with hedgerows, treelines and water courses. Site location maps can be seen in Figures 1 and 2, whilst an aerial photograph of the site and its surrounding habitats can be seen in Figure 2.

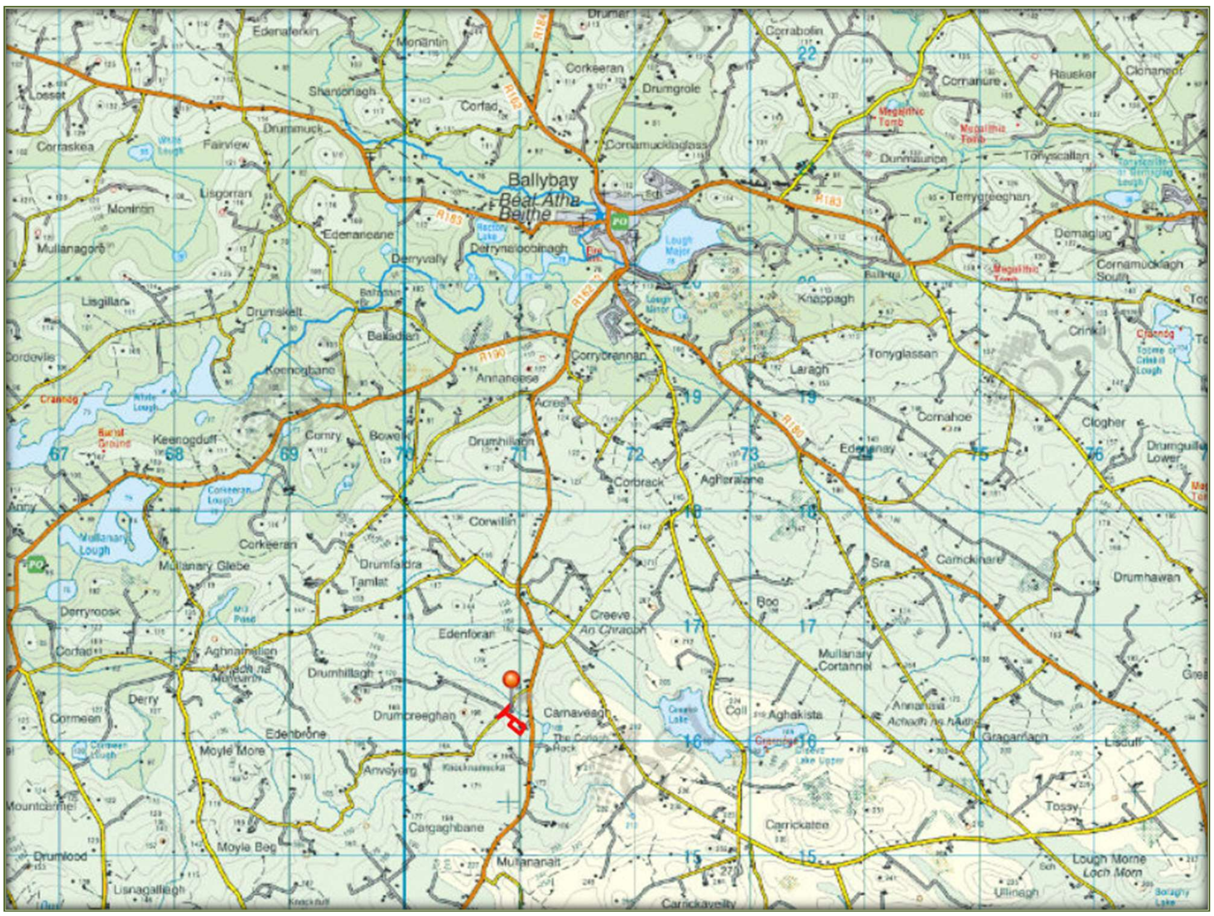


Figure 1 – Map showing the Location of the Proposed Development Site (Pinned)

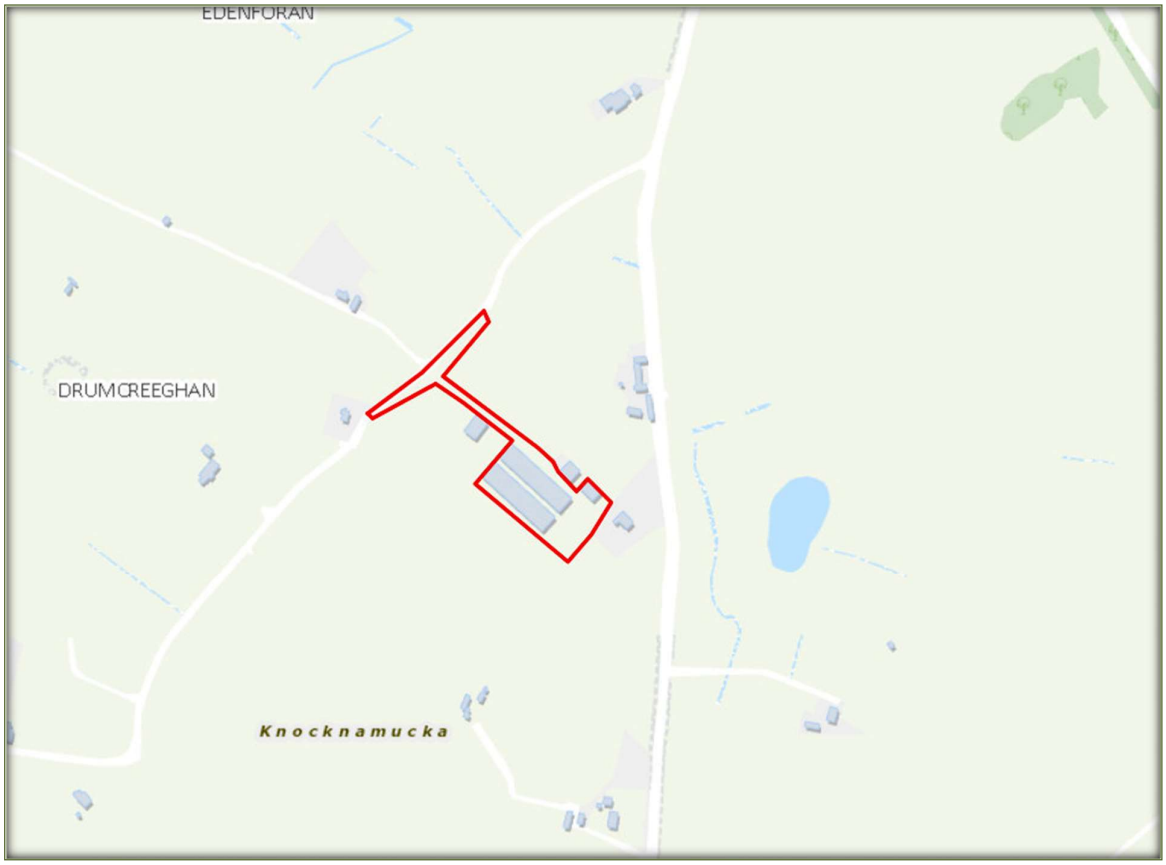


Figure 2 – Map showing the Location of the Proposed Development Site (Outlined in Red)

2.1 Habitats within the Site

The application site does not lie within or adjacent to any area that has been designated for nature conservation purposes. The site encompasses the applicant's existing farm and the dominant habitat within it is Buildings and Artificial Surfaces. There are no habitats of biodiversity value within the site.

2.2 Water Features and Quality

The application site is within the Erne Hydrometric Area (36) and Catchment (36), the Dromore Sub-Catchment (010) and Dromore Sub-Basin (040). There are no watercourses within or adjacent to the application site. The closest watercourse to the site is the Balladian Stream and this is 40m north of the application site. This stream rises in lands to the south-east of the application site. It flows in a northerly direction until its confluence with the Dromore River at a point approximately 3.5km north of the application site. The Dromore River is a tributary of the Annalee River.

The EPA have defined the ecological status of the Balladian Stream and its tributaries at points close to the application site as poor status. The Dromore River is also noted to be of poor ecological status. Under the requirements of the Water Framework Directive, this is unsatisfactory and good status should be achieved in these watercourses by the end of the current cycle of the WFD (2027).

Figure 3 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats © Google

3.0 Site Preliminaries / Site Safety

The proposed development is to be undertaken on existing poultry farm site.

The Project Supervisor Construction Stage (PSCS) will be responsible for Health and Safety on the site and the site health and safety statement should be referred to.

No specific high risk / hazardous issues were identified at the planning stage however specific care and attention should be given to;

- Overhead power lines
- Watercourses adjoining the site

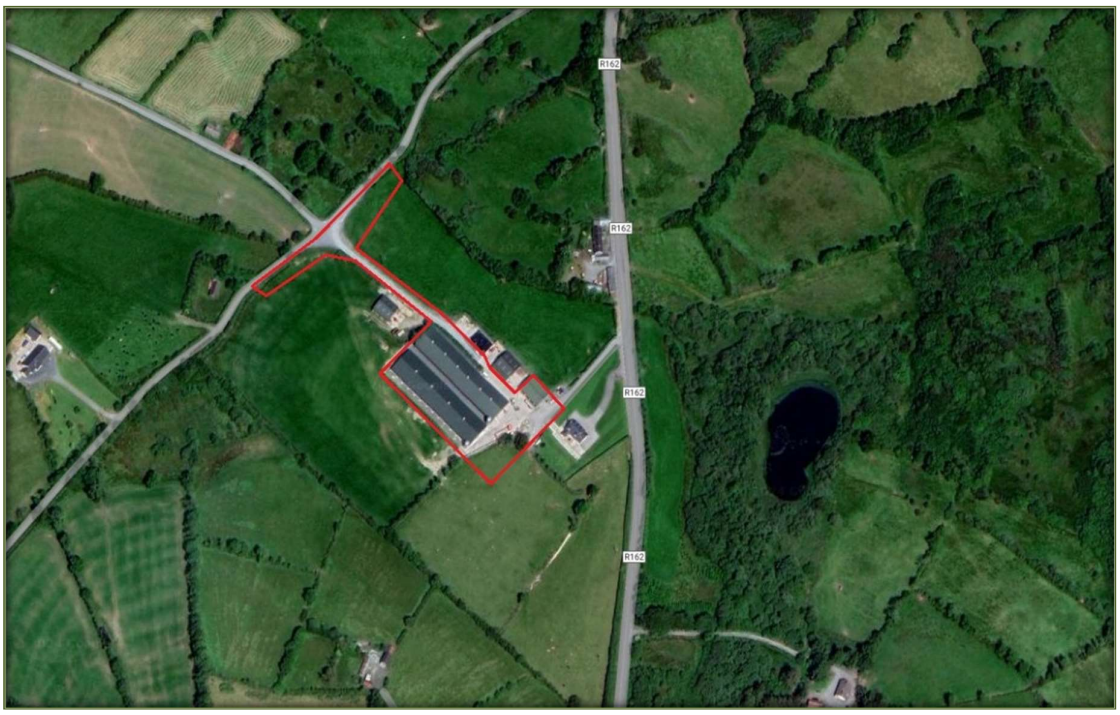


Figure 4 – Aerial Photograph of the Site (Outlined in Red) and its Surrounding Habitats © Google

4.0 Construction and Environmental Management Plan (C.E.M.P.) Objectives

The primary objective of this Construction and Environmental Management Plan (C.E.M.P.) is to ensure that the proposed works are carried out with minimal adverse impact on any sensitive receptor(s), including,

- The local environment.
- The local road network
- Local sensitive receptors (dwelling houses etc.)

The prevention of adverse impact can be minimized by;

- The proper and sequential scheduling of site activities.
- Proper management of on-site activities.

5.0 Construction and Environmental Management Plan (C.E.M.P.):

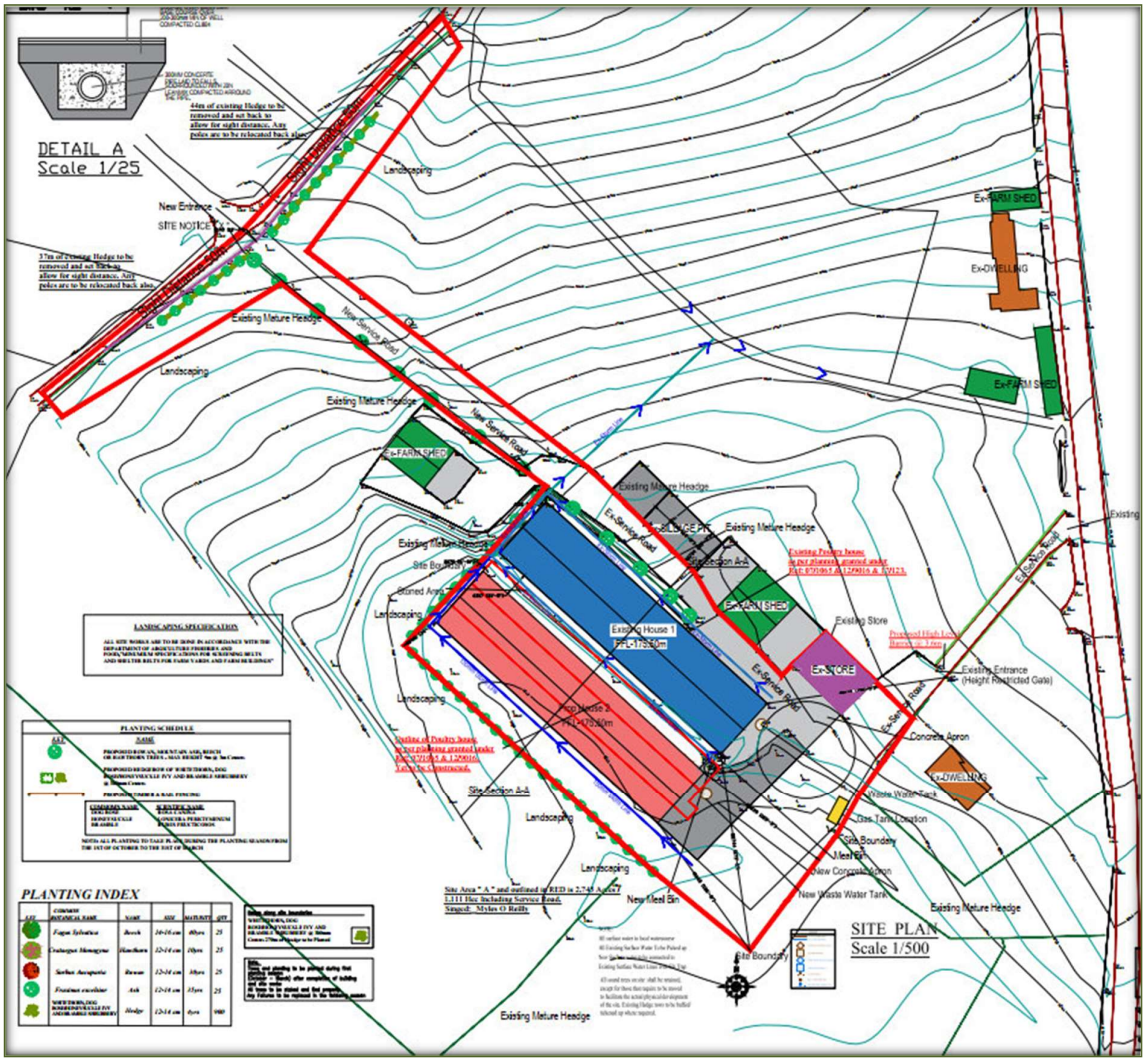
- ***5.1 Site Authorisation / Pre- Approvals***

The required authorisation (Planning permission) has been applied for. Planning permission has previously been obtained from Monaghan Co. Co. and an I.E. Licence has been granted by the E.P.A., for existing developments on site. All works are to be completed in accordance with the conditions of any planning permission. This Construction and Environmental Management Plan (C.E.M.P.) may be reviewed depending on any relevant conditions and/or requirements expressed therein.

No soil / soil & stone (Excl. purchased quarry stone) is to be imported onto the site and / or exported form the farm, therefore there are no additional Cert of Registration / Waste Permit requirements.

The elimination of the need for import/export of soil material will also prevent the introduction / exporting of any invasive species.

- ***SIte Plan as submitted/existing***



- ***5.2 Overall Site Management***

The Main Contractor / Developer / Engineer will emphasise the importance of good housekeeping during the development phase. Housekeeping is an important part of good environmental practice and it helps everyone to maintain a more efficient and safer site. The site should be tidy, secure, and have clear access routes that are well signposted. The appearance of a tidy, well managed site can reduce the likelihood of theft, vandalism or complaints.

The Main Contractor / Developer / Engineer will ensure that they:

- Adequately plan the site with designated area of materials and waste storage;
- Segregate different types of waste as it is produced and arrange frequent removal;
- Keep the Site and external areas clean and tidy;
- Ensure no wind blown litter or debris leaves the Site;
- Use covered skips and bins;
- Ensure that materials and plant storage areas are properly managed. Lightweight materials to be covered with sheeting and secured as required;
- Maintain haul routes in a clean and tidy condition;
- Ensure adequate space is given for the safe refuelling of site vehicles with appropriate protections in place for refuelling operations;
- Keep roads free from mud using a road sweeper; and
- Ensure the Site is secure.

Working Hours: The proposed typical working hours would be:

- 08:00hrs to 19:00 hours Monday – Friday; and
- 08:00hrs to 14:00 hours Saturday.

No work will be carried out on Sundays or bank holidays and the Site will remain secure when construction is not taking place. No work, or other activity that could reasonably be expected to cause annoyance to residents in the vicinity (including deliveries), will take place on site between 19:00 hours and 08:00 hours.

• *5.3 Site Clearance and Preparation / Enabling works.*

Site Entrance : The proposed site is to be accessed from an existing entrance onto the local road.

Site Preparation: As detailed in the planning drawings this is an existing developed site, with no additional site works required.

• *5.4 Development*

The proposed development is a typical agricultural poultry house refurbishment with no construction works required, and similar to the fit out previously carried out by the developer on the site. A significant proportion of the equipment requirements are prefabricated off-site and only require assembly/installation on site, this significantly reducing potential waste streams.

No significant hazardous waste streams will arise from the development to be completed.

- The applicant must follow the guidelines set out in the Department of Agriculture's *Explanatory Handbook for Good Agricultural Practice Regulations.*

- The applicant must ensure that any excavated soil is used / disposed of responsibly. Its disposal should not lead to the loss or damage of any natural or semi-natural habitats elsewhere. It should not be spread close to any local watercourse as it may result in an increase in the sediment load of that watercourse.

- Fuels, oils, greases and hydraulic fluids must be stored in bunded compounds well away from watercourses. Refuelling of machinery, etc., should be carried out in bunded areas. Stockpile areas for sands and gravel should be kept to a minimum size, well away from any drain or watercourse.

All ***wastes*** arising on the site are to be managed in accordance with the Construction Waste Management Plan.

All ***complaints*** (if any) received during construction to be recorded, documented and addressed in line with the complaints record sheet enclosed.

6.0 Mitigation Measures

In order to avoid any reductions in water quality in the area surrounding the proposed development, a number of good practice measures should be implemented and followed. Measures have also been suggested that will help to protect the local biodiversity of the surrounding area and to ensure the protection of local wildlife.

The primary parties responsible for the implementation of these measures include the applicant himself, the project manager and the site engineer.

In order to minimise emissions from the poultry facility at Drumcreeghan, Latton and in order to protect certain designated sites and species, a number of mitigation measures must be implemented / followed, that will help to protect the local biodiversity of the surrounding area and to ensure the protection of local wildlife. These are outlined below

- A dedicated soiled water tank is provided on site which will collect any soiled water associated with the washing of same. All soiled water will be applied to the lands farmed by the applicant's family in accordance with S.I. 113 of 2022, as amended.

- All roof water and uncontaminated storm water will discharge, to the local water course/storm water drainage system via the existing / proposed EPA Licenced emission points. These discharge point(s) will be visually inspected on a weekly basis for any signs of contamination i.e. visual and or odour, in line with the requirements of the existing E.P.A. Licence where applicable. Same will not be altered as a result of this development

- The existing / proposed developments have been designed so as to minimise the amount of soiled water generated on the farm. The area associated with the loading and unloading of birds and loading of manure leaving the proposed farm is / will be concreted with a dedicated soiled water storage tank provided, thus ensuring all soiled water is collected and that there is no possibility of contaminated storm water entering the clean storm water discharge system. Same will not be altered as a result of this development

- All potentially polluting liquids (fuels, disinfectants chemicals etc.) to be stored in an appropriately bunded area in line with E.P.A . Licence requirements.

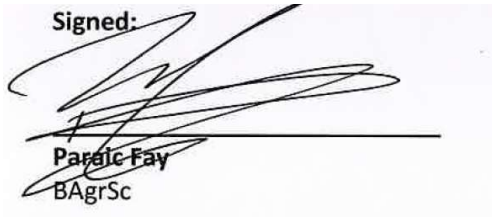
The applicant must follow;

- The requirements as detailed in S.I. 113 of 2022 and the guidelines set out in the Department of Agriculture's *Explanatory Handbook for Good Agricultural Practice Regulations.*
- *The requirements as detailed in the E.P.A. Licence (P1081-01) as issued to the farm.*
- *The Construction and Demolition Waste Management Plan as detailed in the EIAR.*
- *Guidelines on Protection of Fisheries During Construction works in and adjacent to Waters 2016.*

7.0 Conclusion:

Due to the nature of the proposed development, completion of an agricultural development, with no excavation/construction, and where a significant proportion of the equipment can be pre-fabricated off-site, there are no areas of significant concern with regard to the proposed development.

The measures as outlined in this proposed Construction and Environmental Management Plan (C.E.M.P.) will ensure that the activity is carried out in accordance with appropriate practices and ensuring no significant impact on the local environment.



Date: 26/09/2024

Appendix No. 1

Construction and Demolition Waste / Byproduct Management Plan.

CLW Environmental Planners Ltd.

The Mews,
23 Farnham Street,
Cavan,
Co. Cavan

Phone: 049-4371447/9
Fax: 049-4371451
E-mail: info@clw.ie

Resourse and Waste Management Plan

For

Proposed Development
On Existing Poultry Farm

At

Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

Date: 26th September 2024

Applicant:

Mr. Declan Sullivan,
Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

Proposed Development:

planning permission for the intensification of use of 2 No. existing poultry houses together with all ancillary structures and site works associated with the above development on an existing poultry farm

Location:

Drumcreeghan,
Latton,
Castleblayney,
Co. Monaghan.

Background:

The following Resourse and Waste Management Plan (RWMP) has been completed in accordance with the EPA, Best Practice Guidelines for the preparation of Resourse and Waste Management Plans for Construction and Demolition Projects, EPA 2021.

Introduction and Purpose of the RWMP.

The management of C&D waste on this site should reflect the waste management hierarchy, with waste prevention and minimisation being the first priority succeeded by reuse and recycling. The subsequent use of recycled materials in reconstruction works also reduces the quantities of waste which ultimately needs to be consigned to landfill sites.

In this phase of the development, the proposed development has is confined to one area of work for the purposes of this plan;

1. ~~Demolition of Existing Structures.~~ **Not Applicable**
2. ~~Site Development~~ **Not Applicable**
3. ~~Construction of poultry house, ancillary store and associated works.~~ **Not Applicable**
4. Removal of Internal Fixtures and fittings and Installation of new equipment.

Prevention of Waste:

The primary effort therefore should be to engage in waste prevention and reduce the amount of waste generated in the first place i.e. minimise the resources needed to do the job. Prevention is financially advantageous as it reduces the purchase of construction materials and reduces the need to remove wastes from the site.

The prevention of waste can be minimized by;

- Renovating existing buildings where appropriate.
- Re-using materials where appropriate.
- Re-cycling wastes where appropriate.
- Waste disposal as a last resort.

Renovation: which retains and repairs existing structural and decorative elements, with the introduction only where necessary of new items, contributes greatly to a reduction in C&D waste arising.

While the developments to be refurbished have been maintained through the years they now require a full (non structural) upgrade.

Reuse of Waste:

Material that is generated should be reused on site or salvaged for subsequent reuse to the greatest extent possible and disposal should only be considered as a last resort. Initiatives should be put in place to maximise the efficient use/reuse of materials. Innovative initiatives to avoid the need for disposal should be investigated.

Recycling of Waste:

In relation to the small volume of waste which cannot be used on site there are a number of established markets available for the beneficial use of this C&D waste:

Overall Management of C&D Waste on the Farm:

As this is a typical agricultural development, there are no waste streams with the potential for significant adverse environmental impact. The site owner, is experienced at carrying out similar development projects on this, or other farms, and will be responsible for the management of C & D waste from this farm. All external contractors to be used will be experienced with regard to poultry farm developments.

Equipment Removal Plan:

This phase of the proposed development will involve the removal of the internal fixtures and fittings from 2 No. Poultry Houses.

It is important to emphasise the potential for certain procedures to contribute to a reduction in excessive material wastage on site. The demolition of the buildings will be carried out in the following way;

1. Disconnection of services (E.S.B., Water etc.)

2. Identification, removal and segregation of any re-usable and/or saleable equipment/fixtures/fittings.

3. Removal of any remaining fixtures and fittings (incl. electrical) and segregation into recyclable and/or disposal.

4. Removal of Building superstructure and separation into timber, steel, rubble and other (insulation etc.).

5. Proper removal of same off-site to authorised sites via appropriately registered and authorised contractors.

Note: Designated skips/storage areas to be provided for different waste streams.

Site - Development Plan:

Not applicable as works to be contained within the existing structures.

Inatallation Plan:

It is important to emphasise the potential for certain purchasing procedures to contribute to a reduction in excessive material wastage on site. Examples include:

- ordering materials on an "as needed" basis to prevent oversupply;
- purchasing coverings, panelling or other materials in shape, dimensions and form that minimises the creation of excessive scrap waste on site;
- ensuring correct storage and handling of construction materials to minimise generation of damaged materials/waste
- ensuring correct sequencing of operations.

The proposed installation of replacement equipment in a regular shaped building, similar, and in some cases identical methods to that previously completed on this site and/or other similar poultry farms, will minimise the amount of waste material on the site. A significant amount of materials can be manufactured to the required size off site. In order to minimize wastage and other adverse impacts;

- All internal fixtures and fittings will be made to order off site and delivered to the site for installation.
- Any wastes that may arise on site will be appropriately stored, recycled where possible with any remaining wastes disposed of as previously outlined.

Construction and Demolition Waste Types and projected disposal/recovery routes:

- Metal and Electrical - To be removed, segregated and stored for re-use on the farm or recycling – McElvaney Waste and Recycling – **WCP/MH/5/0089/01**
- Fluorescent Tubes - McElvaney Waste and Recycling subsequently sent to Enva Ireland Ltd. **WCP-DC-08-1116-01**, Clonminam Industrial Estate, Portlaoise, Co. Laois.
- General Waste` - To be removed offsite by McElvaney Waste Recycling – **WCP/MH/5/0089/01**

**** All waste materials to be transported by the appointed, authorised and permitted contractor to approved sites as detailed in the accompanying Waste Collection Permit.***

Conclusion:

Due to the nature of the proposed development, i.e. agricultural refurbishment with no construction/site works there are no areas of significant concern with regard to the proposed development. The volume of waste emanating from the proposed works will be minimized by optimizing the construction process and pre-fabricating a significant proportion of the house off-site. The operator is greatly experienced at overseeing similar developments on this, and other poultry farms and will be in charge of the management of the construction waste management plan.

Appropriate records are to be maintained of all materials sent off site for recycling/disposal.

Signed:

Date: **26/09/2024**

Attachment No. 1 Waste Record Sheet

APPENDIX D RESOURCE AND WASTE INVENTORY TEMPLATE

LoW Code	Description	Volume Generated (tonnes)	Prevention (tonnes) (non-waste)	Reused (tonnes) (non-waste)	Recycled (tonnes) (waste)	Recovered[11] (tonnes) (waste)	Disposed (tonnes) (waste)	Unit Cost Rate (€/tonne)	Total Cost (€)
17 01 01	Concrete								
17 01 02	Bricks								
17 01 03	Tiles and Ceramics								
17 02 01	Wood								
17 02 02	Glass								
17 02 03	Plastic								
17 03 02	Bituminous Mixtures								
17 04 01	Copper, Bronze, Brass								
17 04 02	Aluminium								
17 04 03	Lead								
17 04 04	Zinc								
17 04 05	Iron and Steel								
17 04 06	Tin								
17 04 07	Mixed Metals								
17 04 11	Cables								
17 05 04	Soil and Stone								
17 06 04	Insulation Material								

11 Recovered here includes energy recovery, backfilling and other recovery.

LoW Code	Description	Volume Generated (tonnes)	Prevention (tonnes) (non-waste)	Reused (tonnes) (non-waste)	Recycled (tonnes) (waste)	Recovered[11] (tonnes) (waste)	Disposed (tonnes) (waste)	Unit Cost Rate (€/tonne)	Total Cost (€)
17 08 02	Gypsum								
17 09 04	Mixed C&D Waste								
17 01 06*	Mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing hazardous substances								
17 02 04*	Glass, plastic and wood containing or contaminated with hazardous substances								
17 03 01*	Bituminous mixtures containing coal tar								
17 04 09*	Metal waste contaminated with hazardous substances								
17 05 03*	Soil and stones containing hazardous substances								
17 06 05*	Construction materials containing asbestos								
	Other resources (non-waste materials) (specify as needed)								
	Other wastes (specify as needed)								