# Guidance for Planning Authorities on Drainage and Reclamation of Wetlands

*consultation draft*

**September 2011**



Comhshaol, Pobal agus Rialtas Áitiúil
Environment, Community and Local Government



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# Section 1

## Purpose and scope of guidelines

This guidance document is intended to be read in association with the new Planning and Development (Amendment) (No. 2) Regulations 2011 and to provide information to planning authorities and others in relation to existing and new legislative provisions regarding the consent processes, and in some cases, the requirement for environmental impact assessment (EIA), for specified types of agriculture-related development.

In particular, guidance is provided in relation to deciding whether drainage and reclamation of wetlands, despite being below the (new) threshold for permission or for mandatory EIA, could have significant effects on the environment and therefore would require a planning application and/or EIA, as the case may be.

The criteria for deciding whether the development would have significant effects on the environment are set out in the document, and practical examples of potentially significant adverse environmental impacts are also provided. Advice is also given in relation to where farmers (and other parties) can seek further information and assistance if required, and in relation to submitting an environmental impact statement with a planning application.

This guidance document is being issued in draft form to provide an opportunity for planning authorities, farming bodies and farmers as well as other interested parties to submit comments to the Department in advance of the guidelines being finalised and formally issued under section 28 of the Planning and Development Act. Any submissions on these guidelines should be forwarded to:

Mr. Conor O'Sullivan,
Planning and Housing (Finance and Policy Development),
Department of the Environment, Community and Local Government,
Custom House,
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by **Friday, 21 October 2011**.

# Section 2

# The Environmental Impact Assessment Directive and European Court of Justice Case C-66/06

## 2.1 Transposition of Environmental Impact Assessment Directive[1]

Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (commonly known as the Environmental Impact Assessment or EIA Directive), which was adopted in 1985 (with amendments in 1997, 2003 and 2007) requires that certain developments be assessed for likely environmental effects in advance of consent being granted.

Article 4(1) of the Directive requires that certain types of development/development above certain thresholds, listed in Annex I of the Directive, must be assessed in a systematic way for their environmental impacts before planning permission (or other forms of development consent) can be granted. Annex I of the of the Directive is re-stated in Schedule 5, Part 1 of the Planning and Development Regulations 2001 (as amended) and an application for consent for development under the Planning Acts and Regulations must be accompanied by an Environmental Impact Statement where it comes within Schedule 5, Part 1.

Development set out in Annex II of the Directive may also have the potential to cause significant effects on the environment and Article 4(2) of the Directive requires EU Member States to provide a statutory mechanism for deciding whether EIA is required through either a case-by-case examination or by setting specific thresholds or criteria. This decision process is known as "screening" for EIA. The Directive also provides that, when a case-by-case examination is carried out or thresholds or criteria are set, the relevant selection criteria set out in Annex III of the Directive must be taken into account. These criteria comprise

- the characteristics of the project (including the size, the cumulative impacts with other projects, the use of natural resources, the production of waste etc),
- the location of the project (including the relative abundance, quality and regenerative capacity of natural resources in the area, the absorption capacity of the natural environment) and
- the characteristics of the potential impact (including the magnitude and complexity of the impact and the probability of the impact.

Ireland decided to implement Article 4(2) by means of setting national thresholds and these were set out in Part 2, Schedule 5 of the Planning and Development Regulations 2001:

[1] Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC), as amended by Council Directive 97/11/EC of 3 March 1997, Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 and Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009.

accordingly, an application for permission or approval for development under the Planning Acts and Regulations must be accompanied by an Environmental Impact Statement where it comes within Schedule 5, Part 2.

The requirements of Annex III of the Directive are restated at Schedule 7 of the Planning Regulations, reproduced in *Appendix 1* to this document.

It was also provided in the Planning Regulations that, where an application for permission or approval for proposed development was of a type set out in Annex I or II (Part 5, Schedule I or II) although under the relevant threshold, and where the consent authority considered that, having regard to the matters set out in Schedule 7/Annex III, the proposed development would be likely to have a significant effect on the environment, the authority should require the submission of an environmental impact assessment.

### 2.2 European Court of Justice case C-66/06

In Case C-66/06, the European Court of Justice (ECJ) looked at Ireland's environmental impact assessment screening for certain categories of agriculture-related projects. The projects in question were those set out at Annex II 1(a), (b), (c) and (f) of the Environmental Impact Assessment Directive, i.e.

- Projects for the restructuring of rural land holdings;
- The use of uncultivated land or semi-natural areas for intensive agricultural purposes;
- Water management projects for agriculture, including irrigation and land drainage projects; and
- Intensive fish-farming installations.

The latter category relating to fish-farming has been resolved to the satisfaction of the Commission through the making of Aquaculture (Licence Application) (Amendment) Regulations 2010 (S.I. No 280/2010) and is not dealt with further in this guidance.

The position in relation to the activities 1(a), (b) and (c) referred to above, in the Planning Regulations was that activities, such as removal of field boundaries, field drainage, were exempted from planning by virtue of Class 11 of Schedule 2 of the Planning and Development Regulations 2001. Environmental impact assessment was required for such activities in accordance with Schedule 5, at the limits set out in the table below and the requirement for planning was triggered at these thresholds by virtue of Article 9(3) of the Planning Regulations.

| | **Current planning exemption threshold** | **Current mandatory EIA threshold** |
|---|---|---|
| **Restructuring of rural landholdings /removal of field boundaries** | 100 hectares | 100 hectares |
| **The use of uncultivated land or semi-natural areas for intensive** | 100 hectares | 100 hectares |

| | | |
|---|---|---|
| **agricultural purposes** | | |
| **Water management projects for agriculture including irrigation and land drainage projects** | 1,000 hectares, or 20 hectares of wetland | 1,000 hectares, or 20 hectares of wetland |

Exemptions in relation to such activities were also, of course, subject to provisions of Article 9 of the Regulations, including the provisions that no development was exempted if it would:

- require an environmental impact assessment (Article 9(1)(c));

- consist of or comprise the excavation, alteration or demolition (other than peat extraction) of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest, the preservation of which is an objective of a development plan, draft development plan or draft variation of the development plan (Article 9(1)(a)(vii);

- interfere with the character of a landscape, or a view or prospect of special amenity value or special interest, the preservation of which is an objective of a development plan (Article 9(1)(a)(vi);

- consist of the fencing or enclosure of any land habitually open to or used by the public during the 10 years preceding such fencing or enclosure for recreational purposes or as a means of access to any seashore, mountain, lakeshore, riverbank or other place of natural beauty or recreational utility (Article 9(1)(a)(x), or

- obstruct any public right of way(Article 9(1)(a)(xi).

Notwithstanding the above provisions, the decision of the ECJ in November 2008 was that Ireland's system of screening for environmental impact assessment in relation to these projects was over-reliant on size thresholds and failed to take adequate account of the matters set out in Annex III including such matters as proximity to environmentally sensitive sites.

The legislative reforms made on foot of the ECJ decision are set out in the two following sections.

# Section 3

# Legislative response to European Court of Justice judgment in Case C-66/06

### 3.1 Review undertaken with Department of Agriculture, Fisheries and Food

The decision of the ECJ has necessitated a major reduction in the thresholds, both for the mandatory carrying out of environmental impact assessment and for screening as to whether EIA is warranted. In preparing its response to this issue, the Department undertook extensive consultation with the Department of Agriculture, Fisheries and Food (DAFF). Following this consultation, it was agreed that some of the activities covered by 1(a) to 1(c) of Annex II, should not be classed as development for the purposes of the planning code and would be more appropriately regulated by the Department of Agriculture. Accordingly, it was decided to set up a new consent system under the Department of Agriculture for:

- Restructuring of rural landholdings (removal of field boundaries and land reclamation by means of re-contouring within the landholding);
- The use of uncultivated land or semi-natural areas for intensive agricultural purposes;
- Water management projects for agriculture, excluding drainage or reclamation of wetlands.

Information in relation to this new system is set out at Section 4, and also in separate guidance produced by the Department of Agriculture, Fisheries and Food.

In relation to drainage of wetlands, which is the only element of the activities covered by the judgment remaining within the planning system, the Planning Regulations have been amended as set out below.

### 3.2 Amendment of the Schedules to the Planning Regulations

Previously, planning applications for the drainage of wetlands were triggered only at the EIA exemption threshold set out in Schedule 5. The Planning and Development Regulations have now been amended to provide for new thresholds for both applications for planning permission and for environmental impact assessment. The table below sets outs these changes.

| 1(c) Drainage and/or reclamation of wetlands for the purpose of agriculture | | |
|---|---|---|
| **Mandatory ENVIRONMENTAL IMPACT ASSESSMENT** | **Previous threshold** | **New threshold** |
| Development consisting of drainage and/or reclamation of wetlands (including estuarine marshes or callows) | Above 20 ha | Above 2 ha |
| **Planning permission required (& screening for EIA)** | | |
| Development consisting of drainage and/or reclamation of wetlands (including estuarine marsh or callows) | Above 20 ha* | Above 0.1 ha |

* subject to Article 9 of the Planning and Development Regulations 2001, see under 2.2 above.

A definition of "wetlands" has been inserted into Article 5 of the Regulations as meaning:

> *"natural or artificial areas where biogeochemical functions depend notably on constant or periodic shallow inundation, or saturation, by standing or flowing fresh, brackish or saline water."*

(Guidance on this definition and a fuller description of the areas included in the definition are given in Section 6 of this guidance).

Class 11 of Schedule 2, Part 3 of the Planning and Development Regulations has been replaced by a provision which exempts drainage and/or reclamation of wetlands only up 0.1 of a hectare. This exemption is of course subject to Article 9 and to the amended section 4 which provides that no development will be exempted if it would require EIA.

In relation to the other elements of land development and activity formerly included in Class 11, the position is as follows. Removal of field boundaries and improvement of hill grazing by means of removal of boulders and land reclamation by means of land recontouring within the farm holding are transferred to the Department of Agriculture consent system and have therefore been removed from Class 11 and given a stand alone exemption from the requirement for planning, by means of an amendment to Article 8. The same applies in the case of field drainage, other than of wetlands. The following exemption categories have therefore been added to Article 8:

- Works consisting of field drainage for agriculture, other than drainage of wetlands,
- Land reclamation works consisting of re-contouring of land, including infilling of soil (but not waste material) within the farm holding, other than the reclamation of wetlands, and
- Works consisting of the removal for the purposes of agriculture of field boundaries consisting of stone walls or wire or post fences.

Schedule 5 of the Regulations – thresholds above which EIA is mandatory – has also been amended to provide for the new threshold of 2 ha for mandatory EIA for drainage of wetlands. This Schedule has been further amended to remove the references to restructuring of rural landholdings and to the use of uncultivated land or semi-natural areas for intensive agricultural purposes (transferred to the Department of Agriculture consent system) and to replace the reference to water management projects with a reference to drainage and/or reclamation of wetlands

Article 9(c) of the Planning Regulations provided that development would not be exempted development if it would require an environmental impact assessment (this is now provided in section 4 of the Planning and Development Act itself). Schedule 5, Part 2 (sub-threshold development – which outline the national thresholds for environmental impact assessment) has been amended to insert a new "No. 15" to explicitly provide that any development of a category specified in that part which does not exceed the relevant threshold set out, will require an environmental impact assessment, if it would be likely to have significant effects on the environment. While it was always clearly understood that, in the case of a planning application for sub-threshold development, an EIA was required if the development would be likely to have a significant effect on the environment (Articles 103 and 109), the effect of this amendment is to put beyond doubt that a relevant Annex II-type development requires planning permission, not only where it exceeds the thresholds in Schedule 2, but where it would be likely to have a significant effect on the environment.

Accordingly, where it is proposed, for example, to drain or reclaim a wetlands area of less than 0.1 hectares, that development will be exempted from the requirement to obtain planning permission only where it would not be deemed to have a significant adverse effect on the environment. Where it is deemed that the drainage of less than 0.1 hectares of wetlands would be likely to have a significant adverse effect on the environment, a planning application with an environmental impact assessment will be required.

Where a planning application is made, as will be required under the new thresholds for the drainage of wetlands, for example, 1 hectare of an estuarine marsh and such an application is not accompanied by an environmental impact statement, it will, of course, be a matter for the planning authority (in relation to a planning application) or An Bord Pleanála (in relation to a planning appeal) to assess whether the proposed development would be likely to have significant effects on the environment and, where the planning authority/Board consider that it would be likely to have such effects, to require an environmental impact statement to be submitted.

### 3.3 Amendment of Article 9 of the Planning Regulations

All the existing exceptions to the exempted development provisions set out in Article 9 have been retained, including the exception for development which would consist of or comprise the excavation, alteration or demolition of places, caves, sites, features or other objects of archaeological, geological, historical, scientific or ecological interest….the preservation of

which was an objective of a development plan, LAP etc., and this protection has been strengthened to the extent that the word "preservation" has been replaced by "preservation, conservation or protection").

Three further exceptions from the exemption have been added to the Regulations. No development will be exempt from the requirement to obtain planning permission if it would require

- an appropriate assessment under the Habitats Regulations (and a similar amendment is also being made to Section 4 of the Planning and Development Act 2000,
- would have a significant adverse impact on a Natural Heritage Area, or
- would adversely impact on a recorded monument.

and these three exceptions are not dependent on the site or monument being referred to in development plan (which the ECJ decision had identified as a weakness in the previous provisions).

In relation to archaeology, it should be noted, additionally, that all archaeological monuments are protected under the National Monuments Acts 1930 – 2004. The National Monuments Section of the Department of Arts, Heritage and the Gaeltacht (DAHG) keeps a record of all known monuments and sites. These form the Record of Monuments and Places (RMP). When the owner or occupier of a property, or any other person proposes to carry out, or to cause, or to permit the carrying out of any work at or in relation to a Recorded Monument, he or she is required to give notice in writing to the Minister for Arts, Heritage and the Gaeltacht two months before commencing that work. This time allows the National Monuments Section to advise on how the work may proceed in tandem with the protection of the monuments in question. For National Monuments in the ownership or guardianship of the Minister or a local authority or which are subject to a preservation order, the prior written consent of the Minister is required for any interference with the monument.

*Prime facie* exempted development in a Natura 2000 site, or in an Natural Heritage Area (NHA), may also be the subject of a notification from the Minister for Arts, Heritage and the Gaeltacht, specifying that it is an activity requiring consent from that Minister. The interface between this consent system and the planning system has also been clarified – this is detailed in section 5.

**3.4 Amendment of Articles 103 and 109 of the Planning Regulations**

These articles are being be amended to provide that, in deciding whether environmental impact assessment is required for sub-threshold development, the planning authority or the Board will consider the effect on a place, cave, site, feature or other object of ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan (or drafts of): this is in addition to the requirements to have regard to effects on European site, NHA etc. Amendments have also been inserted in these Articles to include specific reference to the giving of consideration to areas which have been proposed

but not formally been designated as Natural Heritage Areas (known as proposed NHAs), which are listed on the website of the National Parks and Wildlife Service ( www.NPWS.ie).

For ease of access and understanding, a consolidated version of the relevant sections of the Planning and Development Regulations as are now in force along with the text of Schedule 5, Parts I and II, has been included in Appendix 2 for reference.

# Section 4

# New Department of Agriculture, Fisheries and Food consent system and other relevant provisions

## 4.1 Application of new Regulations

The European Communities (Environmental Impact Assessment) (Agriculture) Regulations 2011 (S.I. No. 456 of 2011) apply to the following categories of farming activities:

- Restructuring of rural landholdings (removal of field boundaries and re-contouring of land by infill),
- The use of uncultivated land or semi-natural areas for intensive agricultural purposes, and
- Land drainage works on lands used for agriculture, excluding the drainage and reclamation of wetlands.

The Department of Agriculture, Fisheries and Food has prepared separate draft guidance in relation to these new regulations and these are available to view and download on the Department's website (add link).

## 4.2 Application for screening

Under the new consent system, an application for screening is required for the activities set out below, at the thresholds set out in the table below (schedule 1 of the Regulations). Activities which are below the thresholds set out in the table, but which may have a significant effect on the environment, a Natura 2000 site, a NHA or pNHA, a nature reserve or a recorded monument may also not proceed without a positive decision on a screening application or a consent.

**DAFF Thresholds for Screening Applications**

| Type of on-farm Activity | | Screening Required |
|---|---|---|
| Restructuring of rural land holdings | Area of lands to be restructured by removal of field boundaries | Above 5 hectares |
| | Length of field boundary to be removed | Above 500 metres |
| | Re-contouring (within farm-holding) | Above 2 hectares |
| Commencing to use uncultivated land or semi-natural areas for intensive agriculture | | Above 5 hectares |
| Land drainage works on lands used for agriculture, other than drainage and/or reclamation of wetlands | | Above 15 hectares |

When an application for screening (i.e. above the thresholds cited above) is received by the Minister for Agriculture, he or she will consider the application and where he or she considers that the proposed activity is not likely:

(a) to have significant effects on the environment,
(b) to have a significant effect on a European site,
(c) to impact adversely on a Natural Heritage Areas (NHA), a pNHA or a nature reserve, or
(c) to damage a recorded monument,

he or she will inform the applicant that the activity may proceed.

Where the Minister considers that the proposed activity is likely to have a significant effect on the environment, or on a Natura 2000 site, he or she will inform the applicant that the activity may not proceed without a consent given consequent to an application for consent accompanied by an environmental impact statement, or a Natura impact statement, as the case may be.

Where the Minister considers that the proposed activity is likely to have a significant effect on a NHA the Minister must consult with the Minister for Arts, Heritage and the Gaeltacht prior to making a decision on the application and must consider any views of that Minister, following which the Minister may decide that the activity may not proceed without a consent.

Where the Minister considers that the proposed activity would be likely to damage a monument, the Minister must consult with the Minister for Arts, Heritage and the Gaeltacht prior to making a decision on the application and must consider any views of that Minister, following which the Minister may decide that:

(a) the activity may proceed subject to any modifications that the Minister considers appropriate, or
(b) the activity may not proceed.

**4.3 Application for consent**

As stated above, an application for consent must be accompanied by an EIS or NIS where the Minister has specified that such is necessary. An application for consent must also be accompanied by an environmental impact statement in cases where the proposed activity exceeds the thresholds set out in the table below.

**DAFF Thresholds for Consent Applications**

| Type of on-farm activity | | Consent Required & Mandatory EIA |
|---|---|---|
| Restructuring of rural land holdings | Area of lands to be restructured by removal of field boundaries | Above 50 hectares |
| | Length of field boundary to be removed | Above 4 kilometres |
| | Re-contouring (within farm-holding) | Above 5 hectares |
| Commencing to use uncultivated land or semi-natural areas for intensive agriculture | | Above 50 hectares |
| Land drainage works on lands used for agriculture, other than the drainage and/or reclamation of wetlands | | Above 50 hectares |

The Minister will consult with other bodies as he/she considers appropriate in relation to an application for consent, including, in relation to heritage matters, the Minister for Arts, heritage and the Gaeltacht. Where an application for consent is made the Minister will arrange for public consultation in relation to the proposed activity.

In making a decision on an application for consent, the Minister will consider the following:

(*a*) any information relating to the application furnished by the applicant;
(*b*) any written submission or observation received under Regulation 11 or 12 or Part 5;
(*c*) any relevant environmental guidelines made by a Minister of the Government;
(*d*) any relevant policy of a Minister of the Government;
(*e*) any acts of the institutions of the European Union ;
(*f*) the requirements of the Regulations;
(g) any other legal requirements;
(*h*) any other matter that the Minister considers relevant, including the capacity of the applicant to carry out the activities.

The Minister may grant consent, with or without conditions or may refuse consent.

**4.4 Relevant Department of Agriculture, Fisheries and Food schemes**

It should be noted that there are a number of protections already in place, under the Department of Agriculture, in regard to the development referred to above.

<u>Single Payment Scheme</u>

- Farmers in receipt of direct payments under the Single Payment Scheme (SPS) must respect the various statutory management requirements (SMRs) set down in EU legislation (19 Directives and Regulations) on the environment, food safety, animal health and welfare, and plant health and must maintain all lands in good agricultural

and environmental condition (GAEC). In addition there is an obligation to ensure that there is no significant reduction in the amount of land under permanent pasture. Under GAEC designated NHAs, SACs, SPAs and other habitats protected under EU or National legislation may not be damaged or removed.

With effect from 2009, hedgerows and drains/ditches are designated as landscape features under GAEC and in general cannot be removed. A SPS applicant may only remove a hedgerow in exceptional circumstances (e.g. where it is necessary for farmyard expansion) and only then when a new hedgerow of equal length is planted in advance of removal of the old hedgerow on applicant's holding.

- Also, under statutory management five (SMR5) farmers may not carry out any activity or operation specified as a "notifiable action" in a notice of designation issued by the Department of Arts, Heritage and the Gaeltacht unless they have received consent for that activity from that Department or from another statutory authority or have the activity specified in a REPS/DAHG approved farm plan. Therefore, lands covered under 1 (b) that are designated are protected under cross compliance in addition to being protected under legislation.

- In general, the rate of on-farm inspection required for cross-compliance is 1% of those farmers applying under the SPS.

REPS Scheme

- Farmers participating in the REPs Schemes are required to implement 11 basic measures and other measures. Measure 4 of the core set of measures is *Retain Wildlife Habitats*. The habitats to be retained include certain grasslands (such as species rich grassland), peat lands and field boundaries/margins hedgerows and stonewalls. Any interference with habitats, other than in accordance with an agri-environmental plan or as part of an agreed plan could render the REPS applicant ineligible for the Scheme. All habitats have to be retained and certain practices are prohibited in habitats including afforestation, land improvement works including drainage, ploughing, re-seeding and recontouring.

- Measure 5 of Reps is *Maintain Farm and Field Boundaries.* Under this measure REPS participants must retain and maintain (in accordance with the REPS plan) all hedgerows and stone-walls on the farm. Removal of hedgerows is only permitted in extenuating circumstances (e.g. removal of hedgerows for road safety reasons) and a derogation from the Department of Agriculture, Fisheries and Food is required in such a case.

- Measure 7 of REPS is *Establish biodiversity buffer strips around features of historical and archaeological interes*t. All sites recorded on the Record of Monuments and Places, even where not visible, have to be protected by buffer strips. Activities such as

ground disturbance, excavation, building, afforestation or storage are not permitted within the buffer strip.

- Participants with land in designated target areas (Natural Heritage Areas, Natura 2000 sites) and commonages have to abide with the conditions applicable to these areas for which there are increased REPS payments

- Failure to comply with the requirements of REPS can lead to financial penalties being applied (e.g. breaches of Measure 4 can lead to a minimum penalty of 5% - 50%. Conservation / management practices pertaining to monuments/features in plan not adhered to under Measure 7 can lead to a deduction from payment of between 25%-50%).

- The rate of on-farm inspection for compliance with the terms of the REPS Scheme is 5%.

Agri-Environmental Options Scheme (AEOS) (relevant to uncultivated / semi-natural lands)

- This scheme, which replaces REPS, adopts a 'targeted' approach allowing farmers to select specific objectives from a list of environmental options. This approach is different to the 'whole farm' approach of REPS. Participants with land in designated target areas (Natural Heritage Areas, NATURA 2000 sites) and commonages have to abide with the conditions applicable to these areas.

- AEOS was launched on the March 30, 2010, receiving over 9,250 applications before the closing date of the May 17. A total of 4,555 availed of the species rich grassland option (53,200 ha) while 3,667 availed of the traditional hay meadow option (25,500 ha).

- The rate of on-farm inspection envisaged for AEOS is at least 5% of farmers accepted into the scheme.

# Section 5

## Ministerial consent system for European sites and NHAs

### 5.1 Ministerial consent – activities requiring consent

Where the Minister for Arts, Heritage and the Gaeltacht considers that certain activities could affect the integrity of a European site or an NHA, the Minister will have notified these activities to the landowner under Regulation 4(2) of the Habitats Regulations 1997 or section 16 or 18 of the Wildlife (Amendment) Act 2000 as activities requiring consent. See Appendix 3 for details on the different types of protected sites.

"Activities requiring consent" can include drainage and removal of field boundaries.

The Minister for Arts, Heritage and the Gaeltacht will also have the power under the new European Communities (Birds and Natural Habitats) Regulations to control activities outside European sites, where he or she considers that such activities are liable to affect such areas.

### 5.2 Ministerial consent: previous interface with the planning system

The previous position was that Article 9(1)(a)(vii) of the Planning Regulations provided that any development which would consist of or comprise the excavation, alteration or demolition of places, caves, sites, features or other objects of ecological interest, the preservation of which is an objective of a development plan, was not exempted development under planning regulations and therefore requires planning permission. Therefore, the previous position was that any that development which would affect a European site or a NHA[2] and which was an activity which has been notified by the Minister for Arts, Heritage and the Gaeltacht) as requiring consent, in theory required both planning permission and the consent of the Minister: however the Habitats Regulations had provided that where planning permission was obtained for the works in question, the consent of the Minister is not needed.

### 5.3 Ministerial consent: new interface with planning system and DAFF consent system.

As set out in Section 3 above, in relation to planning, it has now been provided in section 4 of the Planning and Development Act that no development in relation to which the planning authorities or the Board are the competent authorities for appropriate assessment will be exempted development if it requires an appropriate assessment. It has also been provided in the current Regulations that no development which would be likely to have a significant adverse effect on an NHA will be exempted development. As was also stated above, the protection in relation to archaeology has been strengthened in that it is now provided that no development which would adversely impact on a recorded monument is exempt from the requirement to obtain planning permission. It is envisaged under the new Birds and Natural Habitats Regulations (to be signed into law in mid-September), that when the Minister for

[2] Provided that the site was referenced in the development plan

Heritage is considering an application for consent for a notified activity under the Habitats Regulations or the Wildlife Acts and he/she forms the opinion that the activity is development within the meaning of the Planning Acts, is development for which the planning authority or the Board are the competent authority in relation to EIA or appropriate assessment (latter will not apply in case of NHAs), and is not exempted development because

- it would require an EIA because it is Annex 11 type development and would be likely to have significant effects on the environment, or
- it would require an appropriate assessment, because of its potential impact on a European site, or
- it could adversely impact on a NHA or pNHA, or
- it could adversely impact on a recorded monument, or
- of any other relevant provision in the Planning Acts in relation to exempted development,

the Minister will not make a decision on the application pending a reference to Board for a section 5 declaration as to whether the development is or is not development and is or is not exempted development.

Where the Board's decision is that the activity is development and is not exempted development, it will inform the Minister for Arts, Heritage and the Gaeltacht, who will give the applicant a copy of the Board's decision and inform the applicant that planning permission is required and that it would not be lawful to proceed without planning permission: in this case, the Minister will not make a decision on the application for consent. Where the Board decide that it is exempted development, the Minister for Arts, Heritage and the Gaeltacht may go ahead and make a decision in relation to the activity requiring consent.

Where the Minister for Arts, Heritage and the Gaeltacht is considering an application for consent for an activity requiring consent under the Habitats Regulations or the Wildlife Acts and where it appears to him/her that the activity requires the consent or a screening decision from the Minister for Agriculture, because:

- it would require an EIA because it is Annex 11 type development and would be likely to have significant effects on the environment, or
- it would require an appropriate assessment, because of its potential impact on a European site, or
- it could adversely impact on an NHA or nature reserve,
- it could adversely impact on a recorded monument,

the Minister for Arts, Heritage and the Gaeltacht will inform the applicant that a consent from the Minister for Agriculture is required and that it would not be lawful to proceed without such consent: the Minister for Arts, Heritage and the Gaeltacht may go ahead and make a decision in relation to the activity requiring consent.

# Section 6

# Determining whether drainage or reclamation of wetlands would have significant effects on the environment

### 6.1 Wetlands: definition and description

For the purpose of the Regulations and this Guidance document wetlands are defined as:

> *"natural or artificial areas where biogeochemical functions depend notably on constant or periodic shallow inundation, or saturation, by standing or flowing fresh, brackish or saline water".*

All definitions broadly agree on wetlands involving saturated soils that include the following Irish habitats:

- Lakes, reservoirs and ponds
- Turloughs
- Rivers and canals
- Swamps and marshes
- Floodplains that are permanently or periodically inundated with water (including callows)
- Peatlands (bogs, wet heath and fens)
- Wet woodlands
- Caves
- Cliffs
- Salt marshes
- Dune slacks and machairs
- Transitional waters (e.g. estuaries and lagoons)
- Inter-tidal or sub-tidal habitats (to 6 m below the lowest spring tide level).

While the above are summary categories, a more detailed listing of wetland habitat types based on Fossitt (2000) is given at Appendix 4. Relevant Habitats Directive Annex I habitats are listed at Appendix 5, while Appendix 6 lists the relevant Habitats Directive Annex II species.

It should be noted that the extraction of peat (i.e. turf cutting) does not come within the meaning of drainage or reclamation of wetlands and is therefore unaffected by the recent legislative changes. The planning exemption threshold of 10 hectares and the mandatory EIA threshold of 30 hectares still apply for the purposes of these activities, subject of course to the other provisions of the Act and regulations that any activity, even below the exemptions set out in legislation, is not exempt if it is considered that it could have a significant impact on the environment.

**6.2 Who decides whether a planning application/EIA is needed?**

Where the development proposed to be carried out is below the threshold for a planning application, it is a matter for the person who proposes to carry out the development to make an assessment in the first instance as to whether the development could potentially have a significant adverse effect on the environment. If the development could have a significant adverse effect on the environment, it is not exempt from the requirement to obtain planning permission. In assessing whether the development would be likely to have a significant adverse effect on the environment, the person concerned should consider the matters set out at 6.3 and 6.4 below.

As set out in section 2.1, no Annex II-type development which is below the thresholds set out above will be exempted development, if it would be likely to have significant effect on the environment, would require an appropriate assessment, or would come within any of the other exceptions to exempted development provisions set out in the Planning and Development Act or in Article 9 of the Regulations.

It is open to any person to refer to a planning authority a question as to whether any development is or is not exempted development. Any person who obtains a declaration from a planning authority may refer such declaration to An Bord Pleanála for a review. The Development Management Guidelines for Planning Authorities (June 2007) contain best practice advice in dealing with requests for declarations/referrals. Where it is decided that the development is not exempted, planning permission is required before it may be carried out.

It is an offence under section 151 of the Planning and Development Act 2000 to carry out development which is not exempted without planning permission.

Where a person is considering making a planning application for drainage or reclamation, including infilling, of wetlands which exceeds the limits for exempted development but which is below the EIA thresholds, and he or she considers that environmental impact assessment may be required because the development would be likely to have significant effects on the environment, it would be advisable for him/her to carry out a preliminary check as to whether EIA might be required as, if EIA is required, it may save time to submit an EIS with the planning application.

Where a planning application is received for development which exceeds the threshold for such an application, but does not exceed the threshold for mandatory EIA, it is the responsibility of the planning authority (or the Board in the case of an appeal) to assess whether the development would be likely to have a significant effect on the environment and to require the submission of an EIS where that is the case. In making such an assessment, and in deciding on a Section 5 application in relation to exempted development, planning authorities should consider the issues set out at 6.3 and 6.4 below.

It should also be noted that planning authorities and the Board, under the amended Articles 103 and 109 of the Planning and Development Regulations 2001-2011, are specifically required to consider, when deciding whether EIA is required in relation to a proposed development, the potential effect on:

(*a*) a European site,

(*b*) an area the subject of a notice under section 16(2)(*b*) of the Wildlife (Amendment) Act 2000 (No. 38 of 2000),

(*c*) an area designated as a natural heritage area under section 18 of the Wildlife (Amendment) Act 2000,

(*d*) land established or recognised as a nature reserve within the meaning of section 15 or 16 of the Wildlife Act 1976 (No. 39 of 1976) as amended by sections 26 and 27 of the Wildlife (Amendment) Act 2000,

(*e*) land designated as a refuge for flora or as a refuge for fauna under section 17 of the Wildlife Act 1976 as amended by section 28 of the Wildlife (Amendment) Act 2000,

(*f*) a place, site or feature of ecological interest, the preservation, conservation or protection of which is an objective of a development plan or local area plan, draft development plan or draft local area plan, or proposed variation of a development plan, for the area in which the development is proposed,

(*g*) a place or site which has been included by the Minister for Arts, Heritage and the Gaeltacht in a list of proposed Natural Heritage Areas published on the National Parks and Wildlife Service website,

the planning authority shall, in determining whether the development would or would not be likely to have significant effects on the environment, have regard to the likely significant effects of the development on such site, area, land, place or feature as appropriate.

Where EIA is required, it must conform to Annex IV of the EIA Directive, Schedule 6 of the Planning and Development Regulations 2001, reproduced as Appendix 7.

**6.3 Significant effects on the environment: general**

Planning authorities should continue to follow the advice given in the Department's 2003 guidelines when screening any application for sub-threshold development. The Environmental Impact Assessment (EIA) Guidance for Consent Authorities regarding Sub-threshold Development emphasised that even a small-scale project can have significant effects on the environment if it is located in an area of particular environmental sensitivity, and it provided

advice in relation to each of the criteria set out in Schedule 7 of the 2001 Regulations, which corresponds to Annex III of the Directive (Appendix 1 attached).

### 6.4 Environmental effects of drainage and reclamation of wetlands

To determine whether drainage or reclamation, including infilling, of a wetland might have significant effects on the environment, one must first identify the sites, habitats or species that have potential to be impacted by that drainage/reclamation. The sites, habitats and species that can be impacted by wetland drainage/reclamation will typically, but not exclusively, be or contain wetland habitat and species. As stated above, Appendix 4 lists the wetland habitats that fall within the definition used in this guidance, Appendix 5 lists the relevant Habitats Directive Annex I habitats, while Appendix 6 lists the relevant Habitats Directive Annex II species.

The key consideration is hydrological connectivity and the following impacts must be examined:

- The potential impacts within the footprint of the proposed development (e.g. of the drain or area of in-fill);
- The potential impacts in the immediate vicinity of the proposed development;
- The potential impacts up-gradient or upstream from the proposed development; and
- The potential impacts downstream of the proposed development.

It should also be noted that the last two impacts could occur at a significant distance from the proposed drain or area to be reclaimed. A key point is that the negative impacts of drains and reclamation may often extend very far beyond and cover a much greater area than the footprint of the development.

Once the habitats and species that have potential to be impacted by the proposed wetland drainage/reclamation have been identified, their importance and sensitivity of each must be assessed. A first step is the examination of how water influences the habitat or species in question.

As is clear from Section 6.1 above, the term wetland covers a wide spectrum of habitats, with significant variation among wetlands in soils and/or biological communities. The dependence on inundation or saturation with water is the linking factor across wetlands, however, how that water influences soils and/or biological communities differs among habitats and even sites.

Broadly, the influence of water on wetlands can be divided into aspects of <u>water quantity</u> and <u>water quality</u>:

1. *Water quantity* - water quantity influences soils and/or communities of a wetland through:
    a. flows,
    b. volumes,

c. timing,
d. duration,
e. frequency,

of inundation or saturation.

2. *Water quality* – or the physico-chemical characteristics of the water, can be divided into many parameters, however, frequently the most important are:
    a. PH levels,
    b. mineral composition (particularly calcium and magnesium),
    c. nutrients (phosphorus, nitrogen and potassium),
    d. metals (particularly iron and aluminium), and
    e. salinity.

    All of which may have key characteristics in terms of spatial and/or temporal variability.

The potential for the proposed drainage/reclamation to impact upon the key aspects of water quantity and quality that influence the identified wetland habitats and species must be assessed. A general point is that for many wetlands, especially those that are typically small in area, it only takes a short length of drain or a small area of infill to completely destroy the habitat.

Examples are provided below of how drainage and reclamation can impact upon wetland habitats. These examples illustrate the complexity of the impacts.

Assessment of impacts will always be site-specific and the location of the proposed development in relation to sensitive wetland habitats and species is key.

## 6.5 Examples of impact of drainage and reclamation on wetlands habitats

### *6.5.1: Non-hydrological impacts*

Drainage and reclamation, as with other developments, will have impacts within the footprint of the development. Examples include destruction of individuals or populations of rare plants and destruction of resting or feeding places of protected fauna. These impacts are direct, rather than hydrological and are not detailed in the following examples.

### *6.5.2 Impacts in the immediate vicinity of the proposed development*

Impact on seepages and springs is an example of impacts in the immediate vicinity of the proposed drain. Seepages and springs are frequently very small wetlands (<5 $m^2$) and can easily be destroyed through drainage and reclamation. Even a small drain can effectively divert all of the groundwater flow from the habitat, resulting in its loss. A number of Habitats Directive annexed habitats and species (e.g. Petrifying springs with tufa formation (Cratoneurion) (habitat 7220), *Saxifraga hirculus* (species 1528), *Vertigo geyeri* (species 1013)) are associated with spring/seepage wetlands. Petrifying springs are a priority habitat

type, potentially with many important sites yet to be discovered. Draining springs and seepages could also impact downstream water quality, depending on the relative contribution of the spring.

*6.5.3 Potential impacts up-gradient or upstream from the proposed development*

An example of potential impacts up-gradient or upstream from the proposed drain or reclamation is the impacts resulting from the excavation of a swallow hole. Swallow holes are frequently associated with the Habitats Directive, Annex I priority habitat turloughs. Turloughs are characterised by zones or mosaics of wetland vegetation, the species composition of each zone being largely determined by the annual duration of flooding. These wetlands flood with groundwater via springs and frequently empty via these same connections (known as estavelles) or swallow holes. Drainage or excavation of a swallow hole may be limited to an area of as little as 1 $m^2$, but can impact all of the associated wetland by reducing the duration of flooding across the vegetation zones.

Another example of such potential impacts is the negative effects of increasing the cross-sectional area and lowering the base of an existing drain towards the upper margin of a turlough. The purpose of such a proposal may be to "take the top off" or limit the extent and depth of flooding in the turlough, for example, to prevent flooding of a local road. By reducing the extent and depth of flooding, the proposed drainage would not only prevent flooding of the upper turlough margins, thereby eliminating the associated wetland vegetation, but also reduce the duration of flooding in all zones below the drain. The proposed drain would change the turlough's hydrology by re-directing flood water away from the wetland via a surface water drain, rather than allowing it to exit the wetland naturally via swallow holes to the groundwater. Consequently, changes to this marginal drain would result in significant impacts across the wetland as a whole. By diverting some of the groundwater flow through a surface water stream/drain, the proposal would also result increased flows in that surface water stream/drain and a consequent increased risk of flooding downstream. An alternative solution with a significantly smaller impact would be to raise the level of the local road.

Another case of impacts up-gradient or upstream from the proposed drain/reclamation is that arising from the extension of drains at the margins of bogs for the purposes of turf cutting. In such cases the extension can open a connection to a vein of permeable sub-soil underlying the bog and by tapping into this gravel layer, an outlet for the drainage water can be created, allowing greater volumes of water to be drained from the bog.. Even a small extension of drain can have a substantial impact in such cases e.g. causing subsidence to spread rapidly into the bog. The impacts can extend for hundreds of metres up-gradient of the drain. Subsidence leads to an increase in the slope of the bog surface, and stops active peat growth. The slope of a raised bog's surface is the critical factor determining the distribution of the Habitats Directive priority Annex I habitat active raised bogs, 7110.

*6.5.4 Potential impacts downstream of the proposed development*

Draining/reclaiming a wetland frequently impacts downstream wetlands through changing the latter's hydrology and water quality. Wetlands are areas that retain large quantities of water. Drainage and reclamation reduces a wetlands capacity to retain water and speeds up the run-off of water to downstream habitats, typically increasing the velocity and erosive power of that water, and changing seasonal patterns by increasing flood flows and decreasing flows during dry periods. Drainage also leads to decomposition of organic material in wetlands and the loss to downstream wetlands of dissolved and particulate organic carbon and nitrogen, amongst others. Water quality is also impaired through erosion of the drained wetland and along the beds and banks of the drain, resulting in increased suspended solids loads to downstream wetlands.

The potential impacts of drainage on the freshwater pearl mussel provide a good example. The freshwater pearl mussel is a rare and extremely sensitive invertebrate found in base-poor, oligo-trophic rivers. The species has suffered significant declines, with the main causes including pollution by fine sediments and nutrients. In the catchments of the 27 candidate SAC populations, agricultural drainage of wet grassland and peatland wetlands, leading to soil erosion and sedimentation of the mussels and their habitats, has been identified as a significant cause of decline. Cause and effect is notoriously difficult to quantify for such downstream impacts, however, in one particular example, drainage of a plot of wet grassland (approximately 4 ha) was believed to be responsible for a kill of one third of adult mussels extending for a distance of 1.5 km downstream of the site.

An example of the downstream impacts of wetland reclamation can be provided by the in-filling of a river floodplain. By reducing the floodplain storage capacity, the development diverts flood waters elsewhere. This can lead to increased flooding downstream of the area of in-fill, but also upstream, through 'backing-up' of the flood flows.

For further information on issues and considerations relating to wetlands, see also

- www.ramsar.org (Wetland Risk Assessment Framework and Wise Use Handbooks) and guidance relating to Appropriate Assessment:

- European Commission, 2002. *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*. Office for Official Publications of the European Communities, Luxembourg.

- DoEHLG (2009) Appropriate Assessment of Plans & Projects - Guidance for Planning Authorities. http://www.npws.ie/planning/appropriateassessment/.

# Section 7

# Monitoring and enforcement

## 7.1 Enforcement of planning control

Enforcement of planning control is a matter for the planning authorities which have substantial statutory obligations in this matter. A planning authority must issue a warning letter in relation to written complaints regarding unauthorised development, or other unauthorised development it becomes aware of (except in the case of trivial or minor development). There is also a statutory obligation to expeditiously carry out an investigation to decide whether unauthorised development is being carried out. In deciding whether development the subject of investigation/complaint is exempted development having regard to its effect on the environment (or on archaeology or on landscape) the planning authority is obliged to have regard not only to the provisions of the law but to statutory guidance issued by the Minister.

The planning authority is required to issue an enforcement notice or seek a court order injunction where it establishes that unauthorised development (other than development that is of a trivial or minor nature) has been or is being carried out, and the person who has carried out the development has not proceeded to remedy the position, unless there are compelling reasons for not doing so.

The Department of the Environment, Heritage and Local Government's Development Management Guidelines emphasise that the planning authority should note and report instances of unauthorised or non-compliant development observed during the course of routine site inspections and also advise that selective checks on specific sites be made where previous enforcement experience with certain developers may indicate the need for such.

It is an offence under section 151 of the Planning and Development Act 2000 to carry out development which is not exempted without planning permission. Such development is unauthorised development. The Planning Act provides for heavy penalties for unauthorised development with a maximum penalty for conviction on indictment of €12.7 million and 2 years' imprisonment, or both and for summary conviction of €5,000 or 6 months' imprisonment or both.

## 7.2 Enforcement and monitoring in relation to carrying out activities requiring consent in an SAC or NHA

The Wildlife Act 1976 (as amended – section 74 subsection (3A)) provides for penalties for unlawfully carrying out a notifiable action in an SAC or SPA or NHA as follows:

- on summary conviction, a fine not exceeding €1,905 or imprisonment for up to 12 months or both;
- on conviction on indictment a fine not exceeding €63,487 or to imprisonment for up to 2 years or both.

Under the draft Birds and Habitats Regulations, the penalties as they apply to SACs will increase as follows:

- on summary conviction, a class A fine (at present €5,000) or imprisonment for up to six months, or both;
- on conviction on indictment, to a fine not exceeding €500,000 or imprisonment for up to 3 years, or both.

# Appendix 1

Criteria for determining whether a development would or would not be likely to have significant effects on the environment

*ANNEX III of Environmental Impact Assessment Directive*

1. **Characteristics of projects**

The characteristics of projects must be considered having regard, in particular, to:

— the size of the project,

— the cumulation with other projects,

— the use of natural resources,

— the production of waste,

— pollution and nuisances,

— the risk of accidents, having regard in particular to substances or technologies used.

2. **Location of projects**

The environmental sensitivity of geographical areas likely to be affected by projects must be considered, having regard, in particular, to:

— the existing land use,

— the relative abundance, quality and regenerative capacity of natural resources in the area,

— the absorption capacity of the natural environment, paying particular attention to the following areas:

(a) wetlands;

(b) coastal zones;

(c) mountain and forest areas;

(d) nature reserves and parks;

(e) areas classified or protected under Member States' legislation; special protection areas designated by Member States pursuant to Directive 79/409/EEC and 92/43/EEC;

(f) areas in which the environmental quality standards laid down in Community legislation have already been exceeded;

(g) densely populated areas;

(h) landscapes of historical, cultural or archaeological significance.

3. **Characteristics of the potential impact**

The potential significant effects of projects must be considered in relation to criteria set out under 1 and 2 above, and having regard in particular to:

— the extent of the impact (geographical area and size of the affected population),

— the transfrontier nature of the impact,

— the magnitude and complexity of the impact,

— the probability of the impact,

— the duration, frequency and reversibility of the impact.

# Appendix 2

SCHEDULE 2 PART 3 of the Planning and Development Regulations 2001 (as amended)

*Exempted Development — Rural*

| *Column 1*<br>*Description of Development* | *Column 2*<br>*Conditions and Limitations* |
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| *Limited use for camping*<br>CLASS 1<br>Temporary use of any land for the placing of any tent, campervan or caravan or for the mooring of any boat, barge or other vessel used for the purpose of camping. | 1. Not more than one tent, campervan or caravan shall be placed within 100 metres of another tent, campervan or caravan at any time.<br><br>2. No tent, campervan, caravan or vessel shall remain on the land for a period greater than 10 days.<br><br>3. No tent, campervan, caravan or vessel shall be used for the storage, display, advertisement or sale of goods or for the purposes of any business.<br><br>4. No tent, campervan or caravan shall be placed on land within 50 metres of any public road unless the land is enclosed by a wall, bank or hedge, or any combination thereof, having an average height of not less than 1.5 metres. |
| CLASS 2<br>Temporary use of land by a scouting organisation for a camp. | The land shall not be used for such purposes for any period or periods exceeding 30 days in any year. |
| *Minor works and structures*<br>CLASS 3<br>Works relating to the construction or maintenance of any gully, drain, pond, trough, pit or culvert, the widening or deepening of watercourses, the removal of obstructions from watercourses and the making or repairing of embankments in connection with any of the foregoing works. | |
| CLASS 4<br>The construction, erection or maintenance of any wall or fence, other than a fence of sheet metal, or a wall or fence within or bounding the curtilage of a house. | 1. The height of the wall or fence, other then a fence referred to in paragraph 2, shall not exceed 2 metres.<br><br>2. The height of any fence for the purposes of deer farming or conservation shall not exceed 3 metres. |
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| *Minerals and petroleum prospecting*<br>CLASS 5<br>(a) The carrying out of works on any land for the purpose of minerals prospecting and the erection or placing on land of any structures required for that purpose, where the prospecting is carried out pursuant to and in accordance with the terms and conditions of a licence, lease or permission granted by the Minister for the Marine and Natural Resources under the Minerals Development Acts, 1940 to 1999.<br><br>(b) The carrying out of works on any land for the purpose of searching for petroleum and the erection or placing on land of any structures required for that purpose, where the searching is carried out pursuant to and in accordance with the terms and conditions of an exploration licence, a petroleum prospecting licence or a reserved area licence granted by the Minister for the Marine and Natural Resources under the Petroleum and Other Minerals Development Act, 1960 (No. 7 of 1960). | |
| *Agricultural Structures*<br>CLASS 6<br>Works consisting of the provision of a roofed structure for the housing of cattle, sheep, goats, donkeys, horses, deer or rabbits, having a gross floor space not exceeding 200 square metres (whether or not by extension of an existing structure), and any ancillary provision for effluent storage. | 1. No such structure shall be used for any purpose other than the purpose of agriculture.<br><br>2. The gross floor space of such structure together with any other such structures situated within the same farmyard complex or within 100 metres of that complex shall not exceed 300 square metres gross floor space in aggregate.<br><br>3. Effluent storage facilities adequate to serve the structure having regard to its size, use and location shall be constructed in line with Department of Agriculture, Food and Rural Development and Department of the Environment and Local Government requirements and shall have regard to the need to avoid water pollution.<br><br>4. No such structure shall be situated, and no effluent from such structure shall be stored, within 10 metres of any public road.<br><br>5. No such structure within 100 metres of any public road shall exceed 8 metres in height.<br><br>6. No such structure shall be situated, and no effluent from such structure shall be stored, within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or |

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| | building used for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof.<br><br>7. No unpainted metal sheeting shall be used for roofing or on the external finish of the structure. |
| CLASS 7<br>Works consisting of the provision of a roofed structure for the housing of pigs, mink or poultry, having a gross floor space not exceeding 75 square metres (whether or not by extension of an existing structure), and any ancillary provision for effluent storage. | 1. No such structure shall be used for any purpose other than the purpose of agriculture.<br><br>2. The gross floor space of such structure together with any other such structures situated within the same farmyard complex or within 100 metres of that complex shall not exceed 100 square metres gross floor space in aggregate.<br><br>3. Effluent storage facilities adequate to serve the structure having regard to its size, use and location shall be constructed in line with Department of Agriculture, Food and Rural Development and Department of the Environment and Local Government requirements and shall have regard to the need to avoid water pollution.<br><br>4. No such structure shall be situated, and no effluent from such structure shall be stored, within 10 metres of any public road.<br><br>5. No such structure within 100 metres of any public road shall exceed 8 metres in height.<br><br>6. No such structure shall be situated, and no effluent from such structure shall be stored, within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner and,<br>as may be appropriate, the occupier or person in charge thereof.<br><br>7. No unpainted metal sheeting shall be used for roofing or on the external finish of the structure.<br><br>8. Boundary fencing on any mink holding must be escape-proof for mink. |
| CLASS 8<br>Works consisting of the provision of roofless cubicles, open loose yards, self-feed silo or silage areas, feeding aprons, assembly yards, milking parlours or structures for the making or storage of silage or any other structures of a | 1. No such structure shall be used for any purpose other than the purpose of agriculture.<br><br>2. The gross floor space of such structures together with any other such structures situated within the |

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| similar character or description, having an aggregate gross floor space not exceeding 200 square metres, and any ancillary provision for effluent storage. | same farmyard complex or within 100 metres of that complex shall not exceed 300 square metres gross floor space in aggregate.<br><br>3. Effluent storage facilities adequate to serve the structure having regard to its size, use and location shall be constructed in line with Department of Agriculture, Food and Rural Development and the Department of the Environment and Local Government requirements and shall have regard to the need to avoid water pollution.<br><br>4. No such structure shall be situated, and no effluent from such structure shall be stored, within 10 metres of any public road.<br><br>5. No such structure within 100 metres of any public road shall exceed 8 metres in height.<br><br>6. No such structure shall be situated, and no effluent from such structure shall be stored, within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof.<br><br>7. No unpainted metal sheeting shall be used for roofing or on the external finish of the structure. |
| CLASS 9<br>Works consisting of the provision of any store, barn, shed, glass-house or other structure, not being of a type specified in class 6, 7 or 8 of this Part of this Schedule, and having a gross floor space not exceeding 300 square metres. | 1. No such structure shall be used for any purpose other than the purpose of agriculture or forestry, but excluding the housing of animals or the storing of effluent.<br><br>2. The gross floor space of such structures together with any other such structures situated within the same farmyard complex or complex of such structures or within 100 metres of that complex shall not exceed 900 square metres gross floor space in aggregate.<br><br>3. No such structure shall be situated within 10 metres of any public road.<br><br>4. No such structure within 100 metres of any public road shall exceed 8 metres in height.<br><br>5. No such structure shall be situated within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used |

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| | for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof.<br><br>6. No unpainted metal sheeting shall be used for roofing or on the external finish of the structure. |
| CLASS 10<br>The erection of an unroofed fenced area for the exercising or training of horses or ponies, together with a drainage bed or soft surface material to provide an all-weather surface. | 1. No such structure shall be used for any purpose other than the exercising or training of horses or ponies.<br><br>2. No such area shall be used for the staging of public events.<br><br>3. No such structure shall be situated within 10 metres of any public road, and no entrance to such area shall be directly off any public road.<br><br>4. The height of any such structure shall not exceed 2 metres. |
| CLASS 11<br>Development consisting of the carrying out of drainage and/or reclamation of wetlands | 1. The area to be affected shall not exceed 0.1 hectares.<br><br>2. Where development has been carried out within a farm holding under this class, the total area of any such development taken together with the area of any previous such development within the farm holding shall not exceed the limits set out in 1. above. |
| *Miscellaneous*<br>CLASS 12<br>Works consisting of the provision of a roofed structure for housing grey- hounds, having a gross floor space not exceeding 50 square metres (whether or not by extension of an existing structure), and any ancillary provision for effluent storage. | 1. No such structure shall be used for any purpose other than the keeping of greyhounds.<br><br>2. The gross floor space of such structure together with any other such structures situated within a premises or within 100 metres of that premises shall not exceed 75 square metres gross floor space in aggregate.<br><br>3. Effluent storage facilities adequate to serve the structure having regard to its size, use, location and the need to avoid water pollution shall be provided.<br><br>4. No such structure shall be situated, and no effluent from such structure shall be stored, within 10 metres of any public road.<br><br>5. No such structure within 100 metres of any public road shall exceed 8 metres in height. |

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| | 6. No such structure shall be situated, and no effluent from such structure shall be stored, within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof. |
| CLASS 13<br>Works consisting of the provision, for any purpose in connection with the keeping of greyhounds, of a roofless hard-surfaced yard, or of a roofless hard-surfaced enclosed area, having an area not exceeding 100 square metres (whether or not by extension of an existing yard or area) and any ancillary provision for effluent storage. | 1. The gross floor space of such structure or structures together with any other such structures situated within the same complex or within 100 metres of that complex shall not exceed 150 square metres gross floor space in aggregate.<br><br>2. Effluent storage facilities adequate to serve the structure having regard to its size, use, location and the need to avoid water pollution shall be provided.<br><br>3. No such structure shall be situated, and no effluent from such structure shall be stored, within 10 metres of any public road.<br><br>4. No such structure shall be situated, and no effluent from such structure shall be stored, within 100 metres of any house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof. |
| CLASS 16<br>Replacement of broadleaf high forest by conifer species. | The area involved shall be less than 10 hectares. |
| *Peat extraction*<br><br>CLASS 17<br>(a) Peat extraction in a new or extended area of less than 10 hectares.<br><br>(b) Peat extraction in a new or extended area of 10 hectares or more, where the drainage of the bogland commenced prior to the coming into force of these Regulations. | |
| *Renewable Technologies*<br>CLASS 18<br>(*a*) The construction, erection or placing within an agricultural holding of a structure for the | 1. The gross floor area of the structure shall not exceed 300 square metres. |

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| purposes of housing a (fully enclosed) Combined Heat and Power system. | 2. No such structure shall exceed 8 metres in height, or 40 metres in length.<br><br>3. No such structure shall be within:<br><br>(a) 10 metres of any public road.<br>(b) 100 metres of the nearest habitable house (other than the house of the person providing the structure) or any other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner, and, as appropriate, the occupier or person in charge thereof.<br><br>4. No such structure shall have more than 2 flues, neither of which shall exceed 16metres in height from ground level.<br><br>5. The diameter of any flue shall not exceed 1metre.<br><br>6. Noise levels must not exceed 43db(A) during normal operation, as measured at the party boundary.<br><br>7. Not more than one such structure shall be erected within the agricultural holding.<br><br>8. The structure shall be used for the purposes of housing a Combined Heat and Power unit only. |
| (*b*) The construction, erection or placing within an agricultural holding of a wind turbine. | 1. The turbine shall not be erected on or attached to a building or other structure.<br><br>2. The total height of the turbine shall not exceed 20 metres.<br><br>3. The rotor diameter shall not exceed 8 metres.<br><br>4. The minimum clearance between the lower tip of the rotor and ground level shall not be less than 3 metres.<br><br>5. The supporting tower shall be a distance of not less than:<br><br>(a) one and a half times the total structure height (including the blade of the turbine at the highest point of its arc) plus 1 metre from any party boundary.<br><br>(b) The total structure height (including the blade of the turbine at the highest point of its arc) plus: |

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| | (i) 5 metres from any non-electrical overhead cables,<br>(ii) 20 metres from any 38kV electricity distribution line,<br>(iii) 30 metres from the centreline of any electricity transmission line of 110kV or more.<br><br>6. The turbine shall not be located within:<br><br>(a) 100 metres of an existing wind turbine.<br><br>(b) 5 kilometres of the nearest airport or aerodrome, or any communication, navigation and surveillance facilities designated by the Irish Aviation Authority, save with the consent in writing of the Authority and compliance with any condition relating to the provision of aviation obstacle warning lighting.<br><br>7. Noise levels must not exceed 43db(A) during normal operation, as measured from the nearest habitable house.<br><br>8. Not more than one turbine shall be erected within the agricultural holding.<br><br>9. All turbine components shall have a matt, non-reflective finish and the blade shall be made of material that does not deflect telecommunication signals.<br><br>10. No sign, advertisement or object, not required for the functioning or safety of the turbine shall be attached to or exhibited on the wind turbine. |
| (c) The installation or erection on an agricultural structure, or within the curtilage of an agricultural holding, of solar panels (thermal collector or photo-voltaic). | 1. The total aperture area of any such panel, taken together with any other such panel previously placed on or within the said holding, shall not exceed 50 square metres or 50% of the total roof area, whichever is the lesser.<br><br>2. The distance between the plane of the wall and the panel shall not exceed 15cm.<br><br>3. The distance between the plane of a pitched roof and the panel shall not exceed 50cm.<br><br>4. The distance between the plane of a flat roof and the panel shall not exceed 2 metres.<br><br>5. The solar panel shall be a minimum of 50cm from the edge of the wall or roof on which it is mounted, or 2 metres in the case of a flat roof. |

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| | 6. The total aperture area of any wall-mounted panel or freestanding solar array shall not exceed 25 square metres.<br><br>7. Any equipment associated with the panels, including water<br>tanks, shall be located within the roof space of the building.<br><br>8. The height of a free-standing solar array shall not exceed 2 metres, at its highest point, above ground level.<br><br>9. No sign, advertisement or object, not required for the functioning or safety of the turbine shall be attached to or exhibited on the panels. |
| (d) The installation within an agricultural holding of a ground source heat pump system (horizontal and vertical) or air source heat pumps. | 1. The level of the ground shall not be altered by more than 1 metre above or below the level of the adjoining ground.<br><br>2. The total area of any air source heat pumps shall not exceed 10 square metres.<br><br>3. The air source heat pump shall be a minimum of 50cm from the edge of the wall or roof on which it is mounted.<br><br>4. Noise levels must not exceed 43db(A) during normal operation, as measured from the nearest habitable house.<br><br>5. Distances from party boundaries and from the foundations of any structure or building shall be maintained in line with the Sustainable Energy Ireland Renewable Energy Information Office Procurement Guidelines on Heat Pump Systems for the time being in force. |
| (e) The provision as part of a heating system boiler, including a boiler house, flues mounted on the boiler house, and overground fuel storage tank or structure. | 1. The gross floor space of the boiler house shall not exceed 20 square metres.<br><br>2. The capacity of the fuel storage tank or structure shall not exceed 75 cubic metres.<br><br>3. The height of a boiler house or fuel storage tank installed above ground level shall not exceed 3 metres.<br><br>4. The height of a flue mounted on a biomass unit shall not exceed 20 metres, measured from ground level. |

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| | 5. No more than 2 flues shall be erected.<br><br>6. Not more than one such structure shall be erected within the agricultural holding.<br><br>7. The diameter of any flue shall not exceed 1 metre.<br><br>8. The boiler house shall not be located within:<br><br>(a) 10 metres of any public road,<br><br>(b) 100 metres of the nearest habitable house (other than the house of the person providing the structure) or other residential building or school, hospital, church or building used for public assembly, save with the consent in writing of the owner and, as may be appropriate, the occupier or person in charge thereof.<br><br>9. Noise levels must not exceed 43db(A) during normal operation, as measured from the site boundary.<br><br>10. The fuel shall not include products derived from wood containing dangerous substances. |
| *Temporary Structures and Uses*<br>CLASS 19<br>The erection of a mast for mapping meteorological conditions. | 1. No such masts shall be erected for a period exceeding 15 months in any 24 month period.<br><br>2. The total mast height shall not exceed 80metres.<br><br>3. The mast shall be a distance of not less than:<br><br>(*a*) the total structure height plus:<br><br>(i) 5 metres from any party boundary,<br>(ii) 20 metres from any non-electrical overhead cables,<br>(iii) 20 metres from any 38kV electricity distribution lines,<br>(iv) 30 metres from the centrelines of any electricity transmission lines of110kV or more.<br><br>(*b*) 5 kilometres from the nearest airport or aerodrome, or any communication, navigation and surveillance facilities designated by the Irish Aviation Authority, save with the consent in writing of the Authority and compliance with any condition relating to the provision of aviation obstacle warning lighting.<br><br>4. Not more than one such mast shall be erected |

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| | within the site.<br><br>5. All mast components shall have a matt, non-reflective finish and the blade shall be made of material that does not deflect telecommunications signals.<br><br>6. No sign, advertisement or object, not required for the functioning or safety of the mast shall be attached to or exhibited on the mast. |
| *Rainwater Harvesting*<br>CLASS 20<br>Works consisting of the provision of a tank or tanks for the storage of rainwater collected from the roofs of agricultural buildings and any ancillary equipment to collect and distribute the rainwater. | 1. No such structure situated fully underground shall exceed 10 metres in length, 5 metres in width or 4 metres in depth.<br><br>2. No such structure that is totally or partially above ground shall exceed 5 metres in length, 5 metres in width or 4 metres in height.<br><br>3. All such structures shall have a solid, impervious roof.<br><br>4. No unpainted metal sheeting shall be used for roofing or on the external finish of the structure. |

## DEVELOPMENT FOR THE PURPOSES OF PART 10
## PART 1

1. A crude oil refinery (excluding undertakings manufacturing only lubricants from crude oil) or an installation for the gasification and liquefaction of 500 tonnes or more of coal or bituminous shale per day.

2. (a) A thermal power station or other combustion installation with a heat output of 300 megawatts or more.

   (b) A nuclear power station or other nuclear reactor including the dismantling or decommissioning of such a power station or reactor[1] (except a research installation for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load).

3. (a) All installations for the reprocessing of irradiated nuclear fuel.

   (b) Installations designed -

   - for the production or enrichment of nuclear fuel,
   - for the processing of irradiated nuclear fuel or high level radioactive waste,
   - for the final disposal of irradiated fuel,
   - solely for the final disposal of radioactive waste,
   - solely for the storage (planned for more than 10 years) of irradiated fuels or radioactive waste in a different site than the production site.

4. (a) Integrated works for the initial smelting of cast iron and steel.

   (b) Installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes.

5. An installation for the extraction of asbestos or for the processing and transformation of asbestos or products containing asbestos-

   (a) in case the installation produces asbestos-cement products, where the annual production would exceed 20,000 tonnes of finished products,

   (b) in case the installation produces friction material, where the annual production would exceed 50 tonnes of finished products, or

   (c) in other cases, where the installation would utilise more than 200 tonnes of asbestos per year.

6. Integrated chemical installations, i.e. those installations for the manufacture on an industrial scale of substances using chemical conversion processes, in which several units are juxtaposed and are functionally linked to one another and which are-

(a) for the production of basic organic chemicals,

(b) for the production of basic inorganic chemicals,

(c) for the production of phosphorous, nitrogen or potassium based fertilisers (simple or compound fertilisers),

(d) for the production of basic plant health products and of biocides,

(e) for the production of basic pharmaceutical products using a chemical or biological process,

(f) for the production of explosives.

7. A line for long-distance railway traffic, or an airport[2] with a basic runway length of 2,100 metres or more.

8. (a) Inland waterways and ports for inland waterway traffic which permit the passage of vessels of over 1,350 tonnes.

(b) Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes.

9. Waste disposal installations for the incineration, chemical treatment as defined in Annex IIA to Directive 75/442/EEC[3] under heading D9, or landfill of hazardous waste (i.e. waste to which Directive 91/689/EEC[4] applies).

10. Waste disposal installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9, of non-hazardous waste with a capacity exceeding 100 tonnes per day.

11. Groundwater abstraction or artificial groundwater recharge schemes, where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres.

12. (a) Works for the transfer of water resources between river basins, where this transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres per year.

(b) In all other cases, works for the transfer of water resources between river basins, where the multi-annual average flow of the basin of abstraction exceeds 2,000 million cubic metres per year and where the amount of water transferred exceeds 5 per cent of this flow.

In the case of (a) and (b) above, transfers of piped drinking water are excluded.

13. Waste water treatment plants with a capacity exceeding 150,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC[5].

14. Extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes per day in the case of petroleum and 500,000 cubic metres per day in the case of gas.

15. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres.

16. Pipelines with a diameter of more than 800mm and a length of more than 40km:
— for the transport of gas, oil, chemicals, and,
— for the transport of carbon dioxide ($CO_2$) streams for the purposes of geological storage, including associated booster stations.

17. Installations for the intensive rearing of poultry or pigs with more than-

(a) 85,000 places for broilers, 60,000 places for hens,
(b) 3,000 places for production pigs (over 30 kilograms), or
(c) 900 places for sows.

18. Industrial plants for the-

(a) production of pulp from timber or similar fibrous materials,
(b) production of paper and board with a production capacity exceeding 200 tonnes per day.

19. Quarries and open-cast mining where the surface of the site exceeds 25 hectares.

20. Construction of overhead electrical power lines with a voltage of 220 kilovolts or more and a length of more than 15 kilometres.

21. Installations for storage of petroleum, petrochemical, or chemical products with a capacity of 200,000 tonnes or more.

22. Any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex.

23. Storage sites pursuant to Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide[6].

24. Installations for the capture of $CO_2$ streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations covered by this Part, or where the total yearly capture of $CO_2$ is 1.5 megatonnes or more.

[1] Nuclear power stations and other nuclear reactors cease to be such an installation when all nuclear fuel and other radioactively contaminated elements have been removed permanently from the installation site.
[2] For the purposes of this Directive, 'airport' means airports which comply with the definition in the 1944 Chicago Convention setting up the International Civil Aviation Organization (Annex 14).
[3] OJ No L 194, 25.7.1975, p. 39. Directive as last amended by Commission Decision 94/3/EC (OJ No L 5, 7.1.1994, p.15).
[4] OJ No L 377, 31.12.1991, p. 20. Directive as last amended by Directive 94/31/EC (OJ No L 168, 2.7.1994, p.28).
[5] OJ No L 135, 30.5.1991, p.40. Directive as last amended by the 1994 Act of Accession.
[6] OJ No L 140, 5.6.2009, p.114.

## PART 2

*1. Agriculture, Silviculture and Aquaculture*

(c) Development consisting of the carrying out of drainage and/or reclamation of wetlands where more than 2 hectares of wetlands would be affected.

(d) (ii) Replacement of broadleaf high forest by conifer species, where the area involved would be greater than 10 hectares.

(iii) Deforestation for the purpose of conversion to another type of land use, where the area to be deforested would be greater than 10 hectares of natural woodlands or 70 hectares of conifer forest.

(e) (i) Installations for intensive rearing of poultry not included in Part 1 of this Schedule which would have more than 40,000 places for poultry.

(ii) Installations for intensive rearing of pigs not included in Part 1 of this Schedule which would have more than 2,000 places for production pigs (over 30 kilograms) in a finishing unit, more than 400 places for sows in a breeding unit or more than 200 places for sows in an integrated unit.

(f) Seawater fish breeding installations with an output which would exceed 100 tonnes per annum; all fish breeding installations consisting of cage rearing in lakes; all fish breeding installations upstream of drinking water intakes; other freshwater fish breeding installations which would exceed 1 million smolts and with less than 1 cubic metre per second per 1 million smolts low flow diluting water.

(g) Reclamation of land from the sea, where the area of reclaimed land would be greater than 10 hectares.

*2. Extractive Industry*

(a) Peat extraction which would involve a new or extended area of 30 hectares or more.

(b) Extraction of stone, gravel, sand or clay, where the area of extraction would be greater than 5 hectares.

(c) All extraction of minerals within the meaning of the Minerals Development Acts, 1940 to 1999.

(d) Extraction of stone, gravel, sand or clay by marine dredging (other than maintenance dredging), where the area involved would be greater than 5 hectares or, in the case of fluvial dredging (other than maintenance dredging), where the length of river involved would be greater than 500 metres.

(e) All geothermal drilling and drilling for the storage of nuclear waste material; drilling, other than test drilling, for water supplies, where the expected supply would exceed 2 million cubic metres per annum.

(f) All surface industrial installations for the extraction of coal, petroleum (excluding natural gas), ores or bituminous shale not included in Part 1 of this Schedule.

(g) All extraction of petroleum (excluding natural gas) not included in Part 1 of this Schedule.

(h) All onshore extraction of natural gas and offshore extraction of natural gas (where the extraction would take place within 10 kilometres of the shoreline) not included in Part 1 of this Schedule.

*3. Energy Industry*

(a) Industrial installations for the production of electricity, steam and hot water not included in Part 1 of this Schedule with a heat output of 300 megawatts or more.

(b) Industrial installations for carrying gas, steam and hot water with a potential heat output of 300 megawatts or more, or transmission of electrical energy by overhead cables not included in Part 1 of this Schedule, where the voltage would be 200 kilovolts or more.

(c) Installations for surface storage of natural gas, where the storage capacity would exceed 200 tonnes.

(d) Installations for underground storage of combustible gases, where the storage capacity would exceed 200 tonnes.

(e) Installations for the surface storage of fossil fuels, where the storage capacity would exceed 100,000 tonnes.

(f) Installations for industrial briquetting of coal and lignite, where the production capacity would exceed 150 tonnes per day.

(g) Installations for the processing and storage of radioactive waste not included in Part 1 of this Schedule.

(h) Installations for hydroelectric energy production with an output of 20 megawatts or more, or where the new or extended superficial area of water impounded would be 30 hectares or more, or where there would be a 30 per cent change in the maximum, minimum or mean flows in the main river channel.

(i) Installations for the harnessing of wind power for energy production (wind farms) with more than 5 turbines or having a total output greater than 5 megawatts.

(j) Installations for the capture of $CO_2$ streams for the purposes of geological storage pursuant to Directive 2009/31/EC from installations not covered by Part 1 of this Schedule.

*4. Production and processing of metals*

(a) All installations for the production of pig iron or steel (primary or secondary fusion) including continuous casting.

(b) Installations for the processing of ferrous metals-

(i) hot-rolling mills and smitheries with hammers, where the production area would be greater than 500 square metres,

(ii) application of protective fused metal coats, where the production area would be greater than 100 square metres.

(c) Ferrous metal foundries with a batch capacity of 5 tonnes or more or where the production area would be greater than 500 square metres.

(d) Installations for the smelting, including the alloyage, of non-ferrous metals, excluding precious metals, including recovered products (refining foundry casting etc.), where the melting capacity would exceed 0.5 tonnes or where the production area would be greater than 500 square metres.

(e) Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process, where the production area would be greater than 100 square metres.

(f) All installations for manufacture and assembly of motor vehicles or manufacture of motor-vehicle engines.

(g) Shipyards, where the area would be 5 hectares or more, or with capacity for vessels of 10,000 tonnes or more (dead-weight).

(h) All installations for the construction of aircraft with a seating capacity exceeding 10 passengers.

(i) Manufacture of railway equipment, where the production area would be greater than 100 square metres.

(j) Swaging by explosives, where the floor area would be greater than 100 square metres.

(k) All installations for the roasting and sintering of metallic ores.

*5. Mineral Industry*

(a) All coke ovens (dry coal distillation).

(b) All installations for the manufacture of cement.

(c) All installations for the production of asbestos and the manufacture of asbestos based products not included in Part 1 of this Schedule.

(d) Installations for the manufacture of glass, including glass fibre, where the production capacity would exceed 5,000 tonnes per annum.

(e) All installations for smelting mineral substances including the production of mineral fibres.

(f) Manufacture of ceramic products by burning, in particular roofing tiles, bricks, refractory bricks, tiles, stoneware or porcelain, with a production capacity exceeding 75 tonnes per day, or with a kiln capacity exceeding 4 cubic metres and with a setting density per kiln exceeding 300 kilograms per cubic metre.

*6. Chemical Industry (development not included in Part 1 of this Schedule)*

(a) Installations for treatment of intermediate products and production of chemicals using a chemical or biological process.

(b) All installations for production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides using a chemical or biological process.

(c) Storage facilities for petroleum, where the storage capacity would exceed 50,000 tonnes.

(d) Storage facilities for petrochemical and chemical products, where such facilities are storage to which the provisions of Articles 9, 11 and 13 of Council Directive 96/82/EC[6] apply.

*7. Food Industry*

(a) Installations for manufacture of vegetable and animal oils and fats, where the capacity for processing raw materials would exceed 40 tonnes per day.

(b) Installations for packing and canning of animal and vegetable products, where the capacity for processing raw materials would exceed 100 tonnes per day.

(c) Installations for manufacture of dairy products, where the processing capacity would exceed 50 million gallons of milk equivalent per annum.

(d) Installations for commercial brewing and distilling; installations for malting, where the production capacity would exceed 100,000 tonnes per annum.

(e) Installations for confectionery and syrup manufacture, where the production capacity would exceed 100,000 tonnes per annum.

(f) Installations for the slaughter of animals, where the daily capacity would exceed 1,500 units and where units have the following equivalents:-

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| 1 sheep | = | 1 unit |
| 1 pig | = | 2 units |
| 1 head of cattle | = | 5 units |

(g) All industrial starch manufacturing installations.

(h) All fish-meal and fish-oil factories.

(i) All sugar factories.

*8. Textile, leather, wood and paper industries*

(a) All installations for the production of paper and board not included in Part 1 of this Schedule.

(b) Plants for the pre-treatment (operations such as washing, bleaching, mercerisation or dyeing of fibres or textiles), where the treatment capacity would exceed 10 tonnes per day.

(c) Plants for the tanning of hides and skins, where the treatment capacity would exceed 100 skins per day.

(d) Cellulose-processing and production installations, where the production capacity would exceed 10,000 tonnes per annum.

*9. Rubber Industry*

Installations for manufacture and treatment of elastomer based products, where the production capacity would exceed 10,000 tonnes per annum.

*10. Infrastructure projects*

(a) Industrial estate development projects, where the area would exceed 15 hectares.

(b) (i) Construction of more than 500 dwelling units.

(ii) Construction of a car-park providing more than 400 spaces, other than a car-park provided as part of, and incidental to the primary purpose of, a development.

(iii) Construction of a shopping centre with a gross floor space exceeding 10,000 square metres.

(iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere.

(In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use.)

(c) All construction of railways and of intermodal transhipment facilities and of intermodal terminals not included in Part 1 of this Schedule which would exceed 15 hectares in area.

(d) All airfields not included in Part 1 of this Schedule with paved runways which would exceed 800 metres in length.

(dd) All private roads which would exceed 2000 metres in length.

(e) New or extended harbours and port installations, including fishing harbours, not included in Part 1 of this Schedule, where the area, or additional area, of water enclosed would be 20 hectares or more, or which would involve the reclamation of 5 hectares or more of land, or which would involve the construction of additional quays exceeding 500 metres in length.

(f) (i) Inland waterway construction not included in Part 1 of this Schedule which would extend over a length exceeding 2 kilometres.

(ii) Canalisation and flood relief works, where the immediate contributing sub-catchment of the proposed works (i.e. the difference between the contributing catchments at the upper and lower extent of the works) would exceed 100 hectares or where

more than 2 hectares of wetland would be affected or where the length of river channel on which works are proposed would be greater than 2 kilometres.

(g) Dams and other installations not included in Part 1 of this Schedule which are designed to hold water or store it on a long-term basis, where the new or extended area of water impounded would be 30 hectares or more.

(h) All tramways, elevated and underground railways, suspended lines or similar lines of a particular type, used exclusively or mainly for passenger transport.

(i) Oil and gas pipeline installations and pipelines for the transport of $CO_2$ streams for the purposes of geological storage (projects not included in Part 1 of this Schedule).

(j) Installation of over-ground aqueducts which would have a diameter of 1,000 millimetres or more and a length of 500 metres or more.

(k) Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dikes, moles, jetties and other sea defence works, where the length of coastline on which works would take place would exceed 1 kilometre, but excluding the maintenance and reconstruction of such works or works required for emergency purposes.

(l) Groundwater abstraction and artificial groundwater recharge schemes not included in Part 1 of this Schedule where the average annual volume of water abstracted or recharged would exceed 2 million cubic metres.

(m) Works for the transfer of water resources between river basins not included in Part 1 of this Schedule where the annual volume of water abstracted or recharged would exceed 2 million cubic metres.

*11. Other projects*

(a) All permanent racing and test tracks for motorised vehicles.

(b) Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule.

(c) Waste water treatment plants with a capacity greater than 10,000 population equivalent as defined in Article 2, point (6), of Directive 91/271/EEC not included in Part 1 of this Schedule.

(d) Sludge-deposition sites where the expected annual deposition is 5,000 tonnes of sludge (wet).

(e) Storage of scrap metal, including scrap vehicles where the site area would be greater than 5 hectares.

(f) Test benches for engines, turbines or reactors where the floor area would exceed 500 square metres.

(g) All installations for the manufacture of artificial mineral fibres.

(h) All installations for the manufacture, packing, loading or placing in cartridges of gunpowder and explosives or for the recovery or destruction of explosive substances.

(i) All knackers' yards in built-up areas.

*12. Tourism and leisure*

(a) Ski-runs, ski-lifts and cable-cars where the length would exceed 500 metres and associated developments.

(b) Sea water marinas where the number of berths would exceed 300 and fresh water marinas where the number of berths would exceed 100.

(c) Holiday villages which would consist of more than 100 holiday homes outside built-up areas; hotel complexes outside built-up areas which would have an area of 20 hectares or more or an accommodation capacity exceeding 300 bedrooms.

(d) Permanent camp sites and caravan sites where the number of pitches would be greater than 100.

(e) Theme parks occupying an area greater than 5 hectares.

*13. Changes, extensions, development and testing*

(a) Any change or extension of development already authorised, executed or in the process of being executed (not being a change or extension referred to in Part 1) which would:-

(i) result in the development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, and

(ii) result in an increase in size greater than –

- 25 per cent, or

- an amount equal to 50 per cent of the appropriate threshold,

whichever is the greater.

(b) Projects in Part 1 undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than 2 years.

(In this paragraph, an increase in size is calculated in terms of the unit of measure of the appropriate threshold.)

(c) Any change or extension of development being of a class listed in Part 1 or paragraphs 1 to 12 of Part 2 of this Schedule, which would result in the demolition of structures, the demolition of which had not previously been authorised, and where such demolition would be likely to have significant

effects on the environment, having regard to the criteria set out under Schedule 7.

14. *Works of Demolition*

Works of demolition carried out in order to facilitate a project listed in Part 1 or Part 2 of this Schedule where such works would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.

15. Any project listed in this Part which does not exceed a quantity, area or other limit specified in this Part in respect of the relevant class of development but which would be likely to have significant effects on the environment, having regard to the criteria set out in Schedule 7.

6 OJ No. L 10, 14.1.1997, p. 13.

# Appendix 3: Nature conservation sites

The three main types of protected sites are:

**Natural Heritage Area (NHA)**
The basic national designation for wildlife is the NHA. NHAs are areas of national importance for nature conservation including for habitats and species of plants and animals. NHAs may also be designated for geological and geomorphological features of national importance, area considered important for the habitats or species of plants and animals present.

To date, 75 raised bogs have been given legal protection, covering some 23,000 hectares. These raised bogs are located mainly in the midlands. A further 73 blanket bogs, covering 37,000 hectares, mostly in western areas, are also designated as NHAs. [Note there are other sites such as Creganna Marsh NHA and River Suck Callows NHA

Under the Wildlife (Amendment) Act 2000, NHAs are legally protected from damage from the date they are formally proposed for designation.

In addition, there are 630 proposed NHAs (pNHAs), which were identified on a non-statutory basis, but have not been statutorily proposed or designated. These sites are of known significance for wildlife and habitats but have yet to be evaluated and considered for designation. Some of the pNHAs are tiny, such as a roosting place for rare bats. Others are large – a woodland or a lake, for example. The pNHAs cover approximately 65,000 hectares. Together with designated nature conservation sites, they form part of the national ecological network, and act as stepping stones and corridors in line with Article 10 of the Habitats Directive.

Prior to statutory designation, pNHAs are subject to limited protection in the form of:

- Rural Environment Protection Scheme (REPS) and Agri-Environment Options Scheme (AEOS) plans which require conservation of pNHAs and which operate for a period of 5 years,
- Forest Service requirement for NPWS approval before afforestation grants are paid on pNHA lands, and
- Recognition of the ecological value of pNHAs by planning and licensing authorities.

**Special Area of Conservation (SAC)**
These are the prime wildlife conservation areas in Ireland, considered to be important on a European level as well as from a national viewpoint. Draft conservation management plans are available for many SACs.

The legal basis on which SACs are selected and designated is the EU Habitats Directive (as transposed into Irish law by the Habitats Regulations 1997). The Directive lists certain habitats

and species that must be protected within SACs. Irish habitats include raised bogs, blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, estuaries and sea inlets. The 25 Irish species which must be afforded protection include Salmon, Otter, Freshwater Pearl Mussel, Bottlenose Dolphin and Killarney Fern.

The areas chosen as SACs in Ireland cover an area of approximately 13,500 sq km. Roughly 53% is land, the remainder being marine areas or large lakes. The list of "candidate" SACs is largely complete; formal designation will take place in 2011/2012.

**Special Protection Area (SPA)**

The EU Birds Directive provides for a network of sites in all Member States to protect birds at their breeding, feeding, roosting and wintering areas. It defines species which are rare, in danger of extinction or vulnerable to changes in habitats and which need protection. There are 25 such species in Ireland, including Whooper Swans, Barnacle Geese, Hen Harriers and Kingfishers. SPAs are intended to safeguard the habitat of selected sites.

121 SPAs have been designated on land since 1985; 25 other sites enjoy legal protection and will shortly be designated as SPAs. It should be noted that many existing and proposed SPAs overlap with SACs.

For further details about these sites and implications for farmers, landowners and others, see the National Parks and Wildlife Service website:
www.npws.ie/en/ConservationSites/ImplicationsofSiteDesignation/

# Appendix 4

Wetlands in Ireland (after Fossitt (2000) but with some subtypes or qualifiers identified by '*')

***Freshwater wetlands***
Dystrophic lakes
Acid oligotrophic lakes
Limestone/marl lakes
Mesotrophic lakes
Eutrophic lakes
Turloughs
Reservoirs
Other artificial lakes and ponds
Eroding/upland rivers
Depositing/lowland rivers
Canals
Drainage ditches
Calcaleous springs
Non-calcareous springs
Reed and large sedge swamps
Tall-herb swamps
Marsh

***Marsh***
Marsh

***Heath and Dense Bracken***
Wet heath

***Peatlands***
Raised bog
Upland blanket bog
Lowland blanket bog
Eroding blanket bog
Rich fen and flush
Poor fen and flush
Transition mire and quaking bog

***Woodland and scrub***
Wet pedunculate oak-ash woodland*
Riparian woodland
Wet willow-alder-ash woodland
Bog woodland
Scrub*

***Exposed rock/disturbed ground***
Non-marine caves*

***Coastland***
Rocky sea cliffs (springs and seepages)*
Sea stacks and islets (springs and seepages)*
Sedimentary sea cliffs (springs and seepages)*
Lagoons and saline lakes
Tidal rivers
Lower salt marsh
Upper salt marsh
Dune slacks
Machair

***Marine littoral (intertidal)***
Exposed rocky shores
Moderately exposed rocky shores
Sheltered rocky shores
Mixed substrata shores
Sea caves
Sand shores
Muddy sand shores
Mud shores
Mixed sediment shores

***Sublittoral (subtidal)***
Exposed infralittoral rock
Moderately exposed infralittoral rock
Sheltered infralittoral rock
Exposed circalittoral rock
Moderately exposed circalittoral rock
Sheltered circalittoral rock
Infralittoral gravels and sands
Infralittoral muddy sands
Infralittoral muds
Infralittoral mixed sediments
Circalittoral gravels and sands
Circalittoral muddy sands
Circalittoral muds
Circalittoral mixed sediments

***Marine Water Body***
Open marine water
Sea inlets and bays
Straits and sounds
Estuaries

** Asterisk indicates only some examples or sub-types of the habitat are wetlands e.g. wet scrub*

# Appendix 5
# Relevant Habitats - Directive Annex I habitats

- 1110, Sandbanks which are slightly covered by sea water all the time
- 1130, Estuaries
- 1140, Mudflats and sandflats not covered by seawater at low tide
- 1150, Coastal lagoons
- 1160, Large shallow inlets and bays
- 1170, Reefs
- 1230, Vegetated sea cliffs of the Atlantic and Baltic coasts
- 1310, *Salicornia* and other annuals colonizing mud and sand
- 1330, Atlantic salt meadows (Glauco-Puccinellietalia maritimae)
- 1410, Mediterranean salt meadows (Juncetalia maritimi)
- 1420, Mediterranean and thermo-Atlantic halophilous scrubs (Sarcocornetea fruticosi)
- 2170, Dunes with *Salix repens ssp. argentea* (*Salix arenariae*)
- 2190, Humid dune slacks
- 21A0, Machairs (* in Ireland)
- 3110, Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)
- 3130, Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea
- 3140, Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.
- 3150, Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation
- 3160, Natural dystrophic lakes and ponds
- 3180, Turloughs
- 3260, Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation – UPLAND
- 3270, Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.p. vegetation
- 4010, Northern Atlantic wet heaths with *Erica tetralix* (FLUSHES ONLY)
- 6410, *Molinia* meadows on calcareous, peaty or clavey-silt-laden soils (Molinion caeruleae)
- 6430, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- 7110, Active raised bogs (LAGG AND SUPPORT FUNCTION)
- 7120, Degraded raised bogs still capable of natural regeneration (LAGG AND SUPPORT FUNCTION)
- 7130, Blanket bog (*active only) (FLUSHES ONLY)
- 7140, Transition mires and quaking bogs
- 7150, Depressions on peat substrates of the Rhynchosporion (WET HEATH ONLY)
- 7210, Calcareous fens with *Cladium mariscus* and species of the Caricion davallianae
- 7220, Petrifying springs with tufa formation (Cratoneurion)
- 7230, Alkaline fens
- 8310, Caves not open to the public
- 8330, Submerged or partly submerged sea caves
- 91D0, Bog woodland
- 91E0, Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae)

# Appendix 6

## Habitats Directive Annex II Species that are dependent on wetlands

| HD Species Code | *Species name* | Common name |
|---|---|---|
| 1013 | *Vertigo geyeri* | Whorl snail |
| 1014 | *Vertigo angustior* | Whorl snail |
| 1016 | *Vertigo moulinsiana* | Whorl snail |
| 1024 | *Geomalacus maculosus* | Kerry slug |
| 1029 | *Margaritifera margaritifera* | Freshwater pearl mussel |
| 1065 | *Euphydryas aurinia* | Marsh fritillary |
| 1092 | *Austropotamobius pallipes* | White-clawed crayfish |
| 1095 | *Petromyzon marinus* | Sea lamprey |
| 1096 | *Lampetra planeri* | Brook lamprey |
| 1099 | *Lampetra fluviatilis* | River lamprey |
| 1102 | *Alosa alosa* | Allis shad |
| 1103 | *Alosa fallax* | Twaite shad |
| 1106 | *Salmo salar* | Atlantic salmon |
| 1355 | *Lutra lutra* | Otter |
| 1393 | *Drepanocladus vernicosus* | Shining sickle moss |
| 1395 | *Petalophyllum ralfsii* | Petalwort |
| 1421 | *Trichomanes speciosum* | Killarney fern |
| 1528 | *Saxifraga hirculus* | Yellow marsh saxifrage |
| 1833 | *Najas flexilis* | Slender naiad |
| 1990 | *Margaritifera durrovensis* | Nore pearl mussel |

# Appendix 7

## Information to be contained in an EIS

*ANNEX IV of Environmental Impact Assessment Directive*

1. Description of the project, including in particular:
    - a description of the physical characteristics of the whole project and the land-use requirements during the construction and operational phases,
    - a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used,
    - an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc.) resulting from the operation of the proposed project.

2. An outline of the main alternatives studied by the developer and an indication of the main reasons for this choice, taking into account the environmental effects.

3. A description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the inter-relationship between the above factors.

4. A description[3] of the likely significant effects of the proposed project on the environment resulting from:
    - the existence of the project,
    - the use of natural resources,
    - the emission of pollutants, the creation of nuisances and the elimination of waste, and the description by the developer of the forecasting methods used to assess the effects on the environment.

5. A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.

6. A non-technical summary of the information provided under the above headings.

7. An indication of any difficulties (technical deficiencies or lack of knowhow) encountered by the developer in compiling the required information.

[3] This description should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project.