



Comhshaol, Oidhreacht agus Rialtas Áitiúil
Environment, Heritage and Local Government



10 November 2008

Our Ref: E2008/135
Your Ref: WO248-01

Ms Ann Kehoe
Office of Climate, Licensing & Resource Use
EPA
Johnstown Castle Estate
Co. Wexford

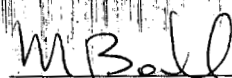
Re: Waste Licence Application – Oxigen Environmental Ltd. At Corranure, Cootehill Road, Cavan

A Chara,

We refer to the application for a waste licence at the above-mentioned location. Outlined below are the nature conservation recommendations of the Department of the Environment, Heritage and Local Government.

It is noted that the proposed development is situated in the catchment of the Lough Oughter and Associated Loughs Special Area of Conservation site code no. 00007. A copy of the relevant site synopsis is enclosed for your information. EPA guide lines and standards should apply in this case.

Mise le meas


Mary Boothman
Development Applications Unit

Environmental Protection
Agency
12 NOV 2008



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SITE SYNOPSIS

SITE NAME: LOUGH OUGHTER AND ASSOCIATED LOUGHS

SITE CODE: 000007

Lough Oughter and its associated loughs occupy much of the lowland drumlin belt in north and central Cavan between Upper Lough Erne, Killeshandra and Cavan town. The site is a maze of waterways, islands, small lakes and peninsulas including some 90 inter-drumlin lakes and 14 basins in the course of the Erne River. The area lies on Silurian and Ordovician strata with Carboniferous limestone immediately surrounding.

This site is a candidate Special Area of Conservation for natural eutrophic lakes and bog woodland, two habitats listed on Annex I of the E.U. Habitats Directive and for the otter, a species listed on Annex II of the same Directive. The site also contains areas of dry woodland, marsh, reedbed and wet pasture.

Drainage within the area is inefficient and the water levels prone to natural fluctuation as a result. The regularly flooded areas still accommodate a variety of specialist plant species such as Amphibious Bistort (*Polygonum amphibium*) and Marsh Foxtail (*Alopecurus geniculatus*), as well as rarer species such as Needle Spike-Rush (*Eleocharis acicularis*) and Lesser Marshwort (*Apium inundatum*).

The lakes and basins are shallow, and the water well mixed and nutrient rich (eutrophic). The aquatic flora is varied with several pondweed species such as Blunt-leaved Pondweed (*Potamogeton obtusifolius*), Shining Pondweed (*Potamogeton lucens*), Broad-leaved Pondweed (*Potamogeton natans*), Reddish Pondweed (*Potamogeton alpinus*) and Various-leaved Pondweed (*Potamogeton gramineus*). Typical in the zone of aquatic plants are Yellow Water-lily (*Nuphar lutea*), Canadian Pondweed (*Elodea canadensis*), Mare's Tail (*Hippuris vulgaris*), Water Milfoil (*Myriophyllum spicatum*), Brooklime (*Veronica beccabunga*), Water Dropwort (*Oenanthe spp.*) and Starwort (*Callitriche sp.*). The aquatic community includes species of limited distribution in Ireland such as the Duckweed species *Lemna gibba* and *Spirodela polyrhiza*.

Around much of the shoreline there are well developed swamp and marsh communities, typically with a zone of Bulrush (*Schoenoplectus lacustris*) in front of a zone of Common Reed (*Phragmites australis*) which is in turn backed by a more species rich zone of sedges, grasses and herbs, particularly Bottle Sedge (*Carex rostrata*), Common Sedge (*Carex nigra*), Creeping Bent (*Agrostis stolonifera*), Meadowsweet (*Filipendula ulmaria*), Marsh Helleborine (*Epipactis palustris*), Water Plantain (*Alisma plantago-aquatica*), Rough Horsetail (*Equisetum hyemale*), Water Horsetail (*Equisetum fluviatile*) and Wild Angelica (*Angelica sylvestris*). Less widespread species also occur on the wet lake margins; species such as Water Dock (*Rumex hydrolapathum*), Greater Water-parsnip (*Sium latifolium*), Cowbane (*Cicuta virosa*), Tufted Sedge (*Carex elata*), Water Soldier (*Stratiotes aloides*), Arrowhead

(*Sagittaria sagittifolia*), Flowering Rush (*Butomus umbellatus*) and Greater Spearwort (*Ranunculus lingua*) may be locally prominent.

There are many variations on this typical zonation of sheltered shores with species such as Reedmace (*Typha* spp.), Branched Bur-Reed (*Sparganium erectum*) and Reed Canary-grass (*Phalaris arundinacea*) gaining local prominence. More exposed shores lack the extensive swamp zones, here smaller species such as Common Spike Rush (*Eleocharis palustris*) can be found.

Level, wet pastures tend to be dominated by Creeping Bent (*Agrostis stolonifera*) and Rush species (*Juncus* sp.) with a scattering of marshland and wet grassland plants such as Marsh Marigold (*Caltha palustris*), Water Forget-me-not (*Myosotis scorpiodes*) and Yellow Iris (*Iris pseudacorus*). Soft Rush (*Juncus effusus*) is most abundant with frequent Hard Rush (*Juncus inflexus*) and Sharp-Flowered Rush (*Juncus acutiflorus*) and less widespread Conglomerate Rush (*Juncus conglomeratus*) also occurring.

Where a general lack of grazing pressure or a particular slope has allowed it, deciduous woodland has re-established itself behind the reedbeds. Two species of Willow (*Salix caprea* and *Salix cinerea*) are common constituents along with Alder (*Alnus glutinosa*), Downy Birch (*Betula pubescens*), Hazel (*Corylus avellana*) and Hawthorn (*Crataegus monogyna*). Along submerged margins Alder and Willow are most commonly found with a flooded understorey typically containing Reed Canary-grass, Meadow Sweet, Yellow Flag and in places Tufted Sedge (*Carex elata*) and Greater Tussock Sedge (*Carex paniculata*). Downy Birch occurs along lake edges and also forms stands of wet woodland on cutover bog with varying degrees of wet and dry peat. Purple Moor-grass (*Molinia caerulea*), Marsh Cinquefoil (*Potentilla palustris*) and Bog Moss (*Sphagnum* sp.) occur in areas with pools and dry areas. Where there is dry peat, Bracken (*Pteridium aquilinum*), Bramble (*Rubus fruticosus* agg.) and Gorse (*Ulex* sp.) occur under the Birch canopy. Birch dominated wood is also found in association with Ling Heather (*Calluna vulgaris*) bog.

In areas of wet bog with good *Sphagnum* cover, bog woodland has developed. Downy Birch characterises this habitat; other typical species include Purple Moor-grass (*Molinia caerulea*) and Bottle Sedge (*Carex rostrata*).

Dry broad-leaved woodland is characterised by Ash (*Fraxinus excelsior*), Hazel, Holly (*Ilex aquifolium*) and Oak (*Quercus* spp.) while shrubs include Blackthorn (*Prunus spinosa*), Spindle (*Euonymus europaeus*) and Guelder Rose (*Viburnum opulus*). The Red Data Book species Bird Cherry (*Prunus padus*) has also been recorded from the site. The clayey soils have a characteristic flora, including Wood Avens (*Geum urbanum*), Wood Sorrel (*Oxalis acetosella*), Primrose (*Primula vulgaris*), Herb Robert (*Geranium robertianum*) and Wood Sedge (*Carex sylvatica*).

The site supports a substantial population of water birds including internationally important numbers of Whooper Swan (average peak 231) and nationally important numbers of Tufted Duck (average peak 247) and Cormorant (average peak 130) as well as important numbers of species such as Greenland White-fronted Goose, Great Crested Grebe, Wigeon, Teal and Pochard. Lapwing, Snipe and Golden Plover also

utilise the wet grassland areas. Wildfowl Sanctuaries exist at Inchin Lough, Derrygid Lough, Farnham Lough, Derrybrick Lough, Derrinishbeg Lough and Annagh Lough. Part of the site is designated an SPA under the EU Birds Directive.

Otter, a species listed on Annex II of the E.U. Habitats Directive occurs at the site. Irish Hare has also been recorded. Both of these species are listed in the Irish Red Data Book and are legally protected under the Wildlife Act 1976.

The main threats to the quality of the site are water polluting activities such as run-off from fertiliser and slurry application and sewage discharge which have raised the nutrient status of some lakes to hypertrophic. Housing and boating developments are on the increase, adjacent to and within the site respectively. There is also significant fishing and shooting pressure on and around the lakes. Increased afforestation has resulted in some loss of wetland habitat and also loss of feeding ground for wintering birds such as Greenland White-fronted Geese.

The Lough Oughter area contains important examples of two habitats listed on Annex I of the E.U. Habitats Directive and supports a population of the Annex II species, otter. The site as a whole is the best inland example of a flooded drumlin landscape in Ireland and has many rich and varied biological communities. Nowhere else in the country does such an intimate mixture of land and water occur over a comparable area, and many of the species of wetland plants, some considered quite commonplace in Lough Oughter and its associated loughs, are infrequent elsewhere.

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27.11.2002