BULRUSH HORTICULTURE LTD

NON-TECHNICAL SUMMARY
CAMAGH BOG
COUNTY WESTMEATH
July 2013
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ACKNOWLEDGEMENTS

The Environmental Impact Statement and Non-Technical Summary have been prepared by MARENCO Environmental Consultants in association with:
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Hugh Morrison Chartered Architect – Landscape and Visual
Pentland MacDonald – Hydrology, Hydrogeology & Soils
1.0 Background Information

1.1 This Non-Technical Summary accompanies an Environmental Impact Statement (EIS) prepared on behalf of Bulrush Horticulture for submission to the Environmental Protection Agency (EPA).

1.2 The EIS is being prepared on behalf of Bulrush Horticulture Limited for submission to the EPA as part of an Integrated Pollution Prevention Control (IPPC) Licence application in regard to the Company’s operations at Camagh Bog, County Westmeath (National Grid Reference (NGR): E241250, N275614). Bulrush Horticulture is one of the leading growing media and bark suppliers in the UK and Ireland. The Company supply high specification substrates for both professional commercial growers and amateur hobby gardeners. Bulrush Horticulture has been trading since 1979 and continues to be at the forefront of researching and developing high specification substrates for both professional commercial growers and amateur hobby gardeners and is a fully owned subsidiary company of Pindstrup Mosebrug A/S. Pindstrup was established in Denmark in 1905 and at present is one of the largest producers of premium quality substrates in the world.

1.3 In 1991, Bulrush Horticulture was the first manufacturer of substrates in the world to be awarded the ISO9000 quality management standard (BS EN ISO 9001:2008). In 2003 Bulrush Horticulture attained ISO14001:2004 the International environmental management standard which covers both the factory, head office and a number of the peat harvesting sites throughout Ireland.

1.4 Clover Peat Products Ltd, whose registered office is c/o WhintneyMoore, Wilton Park House, Dublin 2 (Company number 130649) owns Camagh Bog, County Westmeath. The site had planning permission granted for a moss processing plant in 1989. Bulrush Horticulture has operated the site for Clover Peat Products since 2003 and in 2006 the Company purchased a shareholding in Clover Peat Products.

1.5 Once Bulrush Horticulture began operating the site the drainage works were altered and settlement facilities developed to attain the standards laid down in Bulrush Horticulture’s procedures. These procedures have been developed over time to meet the requirements of Government regulators, Company policy and planning conditions relating to the Company’s sites in Northern Ireland. These procedures have been further refined in order to meet the ISO14001:2004 International environmental management standard which the Company adheres to. All the management procedures which Bulrush Horticulture employs on their own sites have been implemented on the Camagh site.

1.6 Bulrush Horticulture is required to apply to the EPA for an Integrated Pollution Prevention Control (IPPC) Licence under Class 1.4, “The extraction of peat in the course of business which involves and area exceeding 50 hectares”, of the Environmental Protection Agency Acts, 1992 and 2003. Bulrush Horticulture submitted an IPPC Licence application to the EPA in regard to the operations at the Camagh Bog site in March 2011. The registration number for this IPPC application is
1.7 Following submission of the IPPC Licence application the EPA determined that in accordance with the provisions of Section 87(1) (i) b of the EPA Acts 1992 to 2012 and the European Union (Environmental Impact Assessment) (Integrated Pollution Prevention and Control) (No. 2) Regulations 2012 that the application must be made subject to an Environmental Impact Assessment (EIA). Following further consultation with EPA the process of scoping the EIA was initiated in March 2013.

1.8 Bulrush Horticulture commissioned MARENCO Environmental Consultants to prepare the EIS at the request of EPA under the provisions of Section 87(1) (i) b of the EPA Acts 1992 to 2012 and the European Union (Environmental Impact Assessment) (Integrated Pollution Prevention and Control) (No. 2) Regulations 2012.

1.9 The purpose of this assessment is to establish areas of potential environmental impact in relation to Bulrush Horticulture’s on-going operations at Camagh Bog, County Westmeath and to determine appropriate mitigation proposals should any potential environmental impacts be identified.

1.10 A scoping exercise involving consultations with the appropriate Statutory Organisations and other bodies as agreed with the EPA was undertaken. This assessed the aspects of the environment considered most likely to be affected by the operations at Camagh Bog. Assessment of the potential environmental impacts, together with recommendations and appropriate mitigation measures envisaged to offset any adverse effects, are presented in succeeding sections.

1.11 The scoping exercise identified the following environmental aspects as most susceptible to potential impact:
- Archaeology
- Landscape & Visual
- Flora & Fauna
- Hydrology & Hydrogeology

1.12 The site location and main aspects of the operations are illustrated in Figure 1.1.1 Site Location and Figure 1.1.2 Site Operations.

2.0 Site Setting & Operations

2.1 Camagh Bog is located approximately 2.5 km north west of Coole Village and 7 km north west of Castlepollard, County Westmeath. A part of the site boundary lies within 300 m of the River Inny due west and approximately 7 km north of Lough Derravaragh, a Special Protection Area (SPA). The site adjoins commercial forest plantations to the east, west and south and cutover bog/rough grassland to the north, across a public road.
Figure 1.1.1 - Site Location
2.2 There are a number of significant National and International designated conservation areas located within 5 km of the site including NHAs, proposed NHAs, SACs and SPAs. These include the following:
- Lough Derravaragh SPA (Site Code 004043); NHA (Site Code 000684)
- Lough Kinale & Derragh Lough SPA (Site Code 004061); NHA (Site Code 000985)
- Hill of Mael & The Rock of Curry pNHA (Site Code 000681)
- Lough Sheelin pNHA (Site Code 000987)
- Lough Bane pNHA (Site Code 001721)
- Moneybeg & Clareisland Bogs SAC (Site Code 002340)

2.3 The nearest designated site is the Hill of Mael & The Rock of Curry (pNHA) which lies over 2 km to the north east of the operational site boundary. Lough Kinale & Derragh Lough lies approximately 4 km north of the site. Whilst Lough Derravaragh to the south, Moneybeg & Clareisland Bogs and Lough Sheelin all to the north all lie over 5 km distant from the operational site boundary.

2.4 The site is located in a rural setting comprising a combination of agricultural land under grazing, forestry and peat extraction. In regard to the latter activity there are a number of companies involved in peat extraction locally in addition to Bulrush Horticulture including Bord Na Mona, Westland Horticulture, Harte Peat, Abbeylara Peat and Irish Midland Peat. Bord Na Mona is by far the largest operator both on a local and national scale. When compared against the total peat lands in production within a 7 km radius of the site, Camagh Bog constitutes significantly less than 5% of the total peat land in production.

2.5 There are only a few scattered residential dwellings in proximity to the site boundary (i.e. within 1 km). The nearest neighbour is approximately 150 m east of the site boundary along the minor road which forms the northern site boundary. This neighbour is screened from the site activities by a stand of woodland/forestry. The next nearest residential dwelling is approximately 200 m north of the site along a minor access road.

2.6 There are a several river systems in association with the site which all form part of the River Inny catchment area (Figure 1.1.1 Site Location). The Monkstown Stream flows north approximately 100 m east of the eastern site boundary. The Monkstown Stream then turns north east for approximately 1 km before entering the River Glore. The River Glore flows north west from its confluence with the Monkstown Stream for approximately 1.5 km before entering the River Inny at a point approximately 1 km north of the northern site boundary. The River Inny flows south, at times within 300 m of the western site boundary, for approximately 7 km before entering Lough Derravaragh.

2.7 Camagh Bog has been used for fuel turf for many years prior to planning permission being granted for the factory to be set up in 1989. Around this period sod cutting commenced and the bog was extensively drained. After a number of years cutting
sod peat, the site was converted to harvesting peat for the mushroom casing industry. The site was then purchased by Clover Peat Products and drainage systems aligned to produce four distinct quadrants and silt ponds added to allow for milled peat production. The site has been in milled peat production since 2000. Bulrush Horticulture has operated the site for Clover Peat Products since 2003 and in 2006 the Company purchased a shareholding in Clover Peat Products.

3.0 Legislative Policy & Guidance Documents

3.1 Bulrush Horticulture is required to apply to the EPA for an Integrated Pollution Prevention Control (IPPC) Licence under Class 1.4, “The extraction of peat in the course of business which involves and area exceeding 50 hectares”, of the Environmental Protection Agency Acts, 1992 and 2003. Bulrush Horticulture submitted an IPPC Licence application to the EPA in regard to the operations at the Camagh Bog site in March 2011. The registration number for this IPPC Licence application is P0974-01. All documentation associated with this application is available for viewing on the EPA website www.epa.ie under the registration number.

3.2 Following discussions with the EPA, subsequent to the submission of the IPPC Licence application, Bulrush Horticulture received a letter from the EPA requesting additional information in connection with the application under Article 11 (2) (b) (ii) of the EPA (Licensing) Regulations 1994 to 2008. A formal response to the information requests from the EPA was provided in an Additional Information document submitted to the EPA in May 2013. This documentation is also available for viewing on the EPA website www.epa.ie under the registration number.

3.3 Following submission of the IPPC Licence application the EPA determined in January 2013 that in accordance with the provisions of Section 87(1i) b of the EPA Acts 1992 to 2012 and the European Union (Environmental Impact Assessment) (Integrated Pollution Prevention and Control) (No. 2) Regulations 2012 that the application must be made subject to an Environmental Impact Assessment (EIA). Following further consultation with EPA the process of scoping the assessment was initiated in March 2013.

3.4 A number of IPPC, EIA and topic-specific guidance documents were used in preparing this Environmental Impact Statement.

4.0 Needs & Options

4.1 The exploitation of peatlands has been occurring in Ireland for over 400 years predominantly as a fuel resource which remains the greatest use today. Over 3 million tonnes of milled peat are used annually for power generation and a further 1.2 to 1.5 million tonnes is burned in either sod or briquette form, virtually all for domestic consumption. Bord na Mona is the dominant peat producer in Ireland harvesting approximately 4 million tonnes per year.
4.2 The annual average production of horticultural peat from Irish peat bogs is estimated to be approximately 2.5 million cubic metres. Bord na Mona is by far the largest producer of horticultural peat dominating the market, with a number of medium sized companies (<10), around 30 smaller producers and estimated to be a few hundred small semi-agricultural producers. (Data for the above was sourced from the Irish Peatland Conservation Council and Bord na Mona websites).

4.3 Horticultural peat production forms an important component of the Irish economy with estimates of several thousand people employed within the sector and supporting sectors. Many of these are within the rural economy providing access to jobs in the rural, often isolated, areas of the country. Bulrush Horticulture themselves employ over 100 people within the business approximately 20-30% of these are in the Republic of Ireland. In addition there is a significant uptake of seasonal workers through the harvesting season.

4.4 Camagh Bog has been used for fuel turf for many years prior to planning permission being granted for the factory to be set up in 1989. The site has been in milled peat production since 2000.

4.5 Unlike with a new project, consideration of alternative options is limited. Bulrush Horticulture has made significant investment into operations at Camagh Bog since the initial involvement in 2003 both in terms of the site, the operational practices employed and the operational equipment. The site itself has been extensively worked for many years and the operational area is fully exposed. The availability of suitable sites within Ireland is extremely limited. Bulrush Horticulture’s own Environmental Policy Statement places restrictions upon the business regarding site selection and sourcing of materials, policies which are fully integrated into the Company’s management practices and philosophy. The issues discussed above mean that alternative options are restricted and not as applicable as would be the case if the operations were still in the design and site selection phase.

4.6 Many of Bulrush Horticulture’s customers, consisting of both professional commercial growers and amateur hobby gardeners, still consider peat as an essential component in modern horticulture, whilst recognising the need to develop alternative substrates. The peat free substrate market has continued to expand over recent years. Bulrush Horticulture has since the early 1990s investigated a large number of materials, which could either, be used as peat dilutents or as components of totally peat free mixes. The Company is committed to agreed targets of peat reduction wherever possible at the request of customers and in response to market drivers.

4.7 Bulrush Horticulture’s stated aim is to continue to lead innovation and excellence in solutions in the growing media sector of the horticultural industry. The Company continues to plan for the future and as such has a research and development team that is working on the challenge to find viable peat alternatives.

4.8 Bulrush Horticulture has a number of ongoing projects in this area but most high profile has been the development of Forest Gold Plus. Forest Gold Plus is a
sustainable, timber derived alternative to peat originating from sustainably managed forests. The Company has product ranges which include peat based, reduced peat and peat free composts which will cover the spectrum of uses required by amateur and professional growers. Today approximately 30% of Bulrush Horticultures raw materials are from non-peat sources, an area which has seen significant growth over the last 10 years. This growth is expected to continue into the future with the further development of peat reduced and peat free mixes. However, in the short to medium term there will remain a need for peat derived products as the alternative market continues to develop.

4.9 Bulrush Horticultures Environmental Policy Statement requires the Company too specifically:

- Ensure peat production sites are managed in a way which minimises any potential damage to the surrounding countryside and facilitates rehabilitation of the site after extraction has ceased.
- Leave a minimum of 0.5 m of peat to facilitate rehabilitation.
- Establish appropriate aftercare arrangements in consultation with interested parties.

5.0 Assessment of Environmental Impact

5.1 The Environmental Impact Statement presents an assessment of the current and potential future environmental implications of the project, and offers suitable mitigation recommendations where appropriate.

5.2 The matters to be considered for inclusion are outlined below:

- Human Beings
- Fauna and Flora
- Soils
- Water
- Air
- Climate
- Landscape
- Cultural Heritage
- Material Assets

5.3 Consultation with the relevant Statutory Consultees as part of the scoping exercise determined the respective assessments to be undertaken in relation to each aspect identified above.

5.4 The preparation of the Environmental Impact Statement was undertaken between March and June 2013 and represents a balanced, comprehensive consideration of the potential implications of the proposed development.

5.5 All relevant aspects were considered in undertaking the assessment which involved the following key aspects:

- Discussions undertaken with relevant statutory and non-statutory consultees,
- Baseline studies and specific impact assessment of environmental aspects have been carried out by competent and experienced professionals
• Positive social, economic and environmental benefits have been clearly identified
• Where potential adverse impacts have been identified, appropriate mitigation measures are presented

5.6 The foregoing sections provide a synopsis of the site operations and assess the social and economic context. The succeeding sections present the assessment of potential impacts in relation to individual environmental aspects and where necessary provides relevant recommendations and mitigation measures.

6.0 Archaeology

6.1 A desktop survey was undertaken to identify any known sites of archaeological importance within the project area, extending to a 2 km radius surrounding the site. Coupled with this, a site inspection was also undertaken to identify any previously unknown or unrecorded archaeological features, which may exist within the area of the project.

6.2 The desktop survey revealed that no known sites of archaeological significance were identified within the site. Eight sites were identified within the wider study area all categorised as of ‘Local/Regional’ importance. The archaeological impact assessment indicates that no physical impact will be placed upon the known archaeological sites within the 2 km study area. These monuments, located within the wider study area, provide an indication that there has been human activity in this area in antiquity.

6.3 Given the archaeological potential of the environs, a series of archaeological mitigation initiatives are proposed to be undertaken in conjunction with the project. These include agreed working practices; archaeological training of site personnel and the adoption of such measures within the formal EMS operated by Bulrush Horticulture.

7.0 Landscape & Visual

7.1 A Landscape and Visual Assessment was undertaken to assess the potential positive and negative effects of the project on landscape character and visual amenity. The study considered the current site operation to be the baseline for appraisal. All aspects of production will remain largely at their current magnitudes with the exception of a modest reduction in the levels of the current extraction footprint of around 3-5 m over the next 20-25 years.

7.2 The study area is at the northwest extent of Westmeath. The SEA Environmental Report for Westmeath County Development Plan 2008-2014 states:

‘Westmeath has a variety of landscapes but the most prominent one can be described as a 'undulating pattern of low hills, patches of woodland and bog, with many lakes nestling in shallow valleys' Mountains are almost absent;
the highest point is at 280 metres on the Hill of Mullagmeen in the extreme north of the County.

7.3 The extraction site comprises approximately 108 Ha made up of 94 Ha of existing operational area, two concrete hard-standings for loading and refuelling and a non-productive heathland area of 14 Ha with woodland perimeter. Settlement ponds are located at the four main corners of the site. The main access to the extraction site is by a lane through a 185 m deep woodland screen belt off the R396 road.

7.4 Views are of a gently undulating agricultural landscape containing shallow drumlins, pasture, hedgerow grid and woodland areas, both mature and recently harvested and with peat extraction areas visible from minor roads. In the immediate site locality farmsteads are present but not in significant density.

7.5 The desk top study suggested the following main receptors of visual impacts which were investigated on site:
   i. residents of Dwelling A
   ii. travellers on the R396
   iii. travellers on the minor road north of the site
   iv. agricultural, forestry and peat extraction operatives on adjacent sites

7.6 Baseline study conclusions
The high value landscape elements are sufficiently distant from the development so as to be largely unaffected. The remaining landscape elements have either moderate or low sensitivities and medium to low values.

7.7 The ‘do nothing outcome’
If the licensing application is unsuccessful, excavation will cease giving rise to negative impacts on employment levels in the local economy.

7.8 Conclusions of the potential landscape impact assessment
No significant primary effects on the landscape were found to arise from the proposed development.
   • One secondary effect was identified, which was not significant.
   • Two cumulative effects were identified, which were not significant.
   • There are no significant effects on the landscape, rendering the development acceptable.

7.9 Conclusions of the potential visual impact assessment
   • Effects on the visual amenity arise largely through intrusion rather than obstruction.
   • The visual envelope is modest.
   • The site is only visible to any extent from the minor road along its northern boundary.
   • Adverse visual impacts will increase Slightly during the proposed 20-25 year extraction period (Medium Term) arising from the changing site levels.
Colouring and form will remain unchanged. After restoration planting has matured, this colour contrast of the site with the greater agricultural landscape arising from the red/brown hues of the peat will diminish, along with the adverse effects, to Slight levels.

- There are no significant visual effects, rendering the development acceptable.

7.10 Mitigation

Compensation
Compensation arises after restoration in that the resulting landscape will be of higher quality and value than that surveyed in the baseline study.

Avoidance of impacts
The continuation of the existing operation is a more sustainable use of land than developing a green field site.

Reduction of impacts
Bulrush Horticulture will undertake the provision of perimeter screen planting as necessary to maintain the sites low level of visibility in the local landscape.

Remediation
opportunities for rehabilitation will only begin to arise after 15 years or so, when the shallower areas are worked out. Rehabilitation offers a platform of possibilities including forestry, agricultural use, regeneration of a heather moorland for sport and restoration of a peatland or wetland habitat through the control of the water table. It would be rash to predict the priorities which will apply in 20-25 years when decisions will have to be taken. However, the restoration concepts outlined demonstrate how the peat extraction site can be restored to woodland or heathland habitat ensuring no long term adverse impacts will arise.

8.0 Flora & Fauna

8.1 The objective of this section is to describe and evaluate the existing flora and fauna of the site within the ownership boundary, to provide an assessment of the impact of peat extraction works on flora and fauna and, where possible, put forward mitigation measures to reduce their impact.

8.2 A desk top study was carried out to examine whether any records of protected species or designated areas exist, on or adjacent to the application site. The following organisations contacted for consultation:

- NPWS Applications Unit and database of Protected Areas e.g. SAC, SPA.
- BirdWatch Ireland.

8.3 A Habitat Survey and Breeding Bird Survey of Camagh Bog was undertaken on 22nd April 2013. Habitats were classified according to the Heritage Council’s ‘A Guide to Habitats in Ireland’ (Fossitt 2000) and plant and bird species lists were prepared.
8.4 Bird survey methods were based on a modified Brown and Shepherd methodology for birds of moorland/peatland (Brown and Shepherd 1993) and Common Bird Census Methodology techniques (Marchant 1983) using visual sightings and auditory identification of songs and calls. The survey was designed to record all breeding birds but specifically focused on Species of Conservation Concern i.e. Annex 1 Bird Directive 79/409/EEC and Red-Listed species in Birds of Conservation Concern in Ireland (BOCCI).

8.5 Mammal species were also noted and were identified by observations of tracks and droppings or through direct sightings. Suitable habitat was searched for evidence of badger activity.

8.6 No rare or protected plant species was recorded in any of the habitats mapped (Flora Protection Order 1999, Webb 1977).

8.7 Bird species were typical of the habitat types recorded. With the exception of Golden Plover all are regarded as common and widespread within Ireland. Golden Plover are red listed as a BOCCI and appear on Annex I of the EU Birds Directive 2009/147/EC. Their main conservation concern is as a breeding species. Golden Plover are not breeding on site. The activity of peat extraction provides no threat to these birds.

8.8 Swallows are summer visitors and require buildings for nest sites. They are associated with the factory buildings for this reason. The removal of buildings/sheds will result in loss of nest sites. There are no plans to demolish buildings. The Swallow is amber listed, a bird of medium conservation concern in Ireland.

8.9 No designated areas for nature conservation are located within 2 km of the project area. Lough Derravaragh SPA (site code 4043) connects to the River Inny, which receives drainage from Camagh Bog and could potentially be affected by peat silt entering the waterway. Camagh Bog is situated approximately 7 km north of Lough Derravaragh.

8.10 Best Practices are in operation at Camagh Bog with water discharges managed accordingly and under constant review. Bulrush Horticulture take the management of site discharges seriously and invest significant time and resources in ensuring discharges are managed effectively. Substantial information has been supplied already as part of the IPPC Licence application process indicating the extent of operational controls that are applied to the management of site discharges and suspended solid emissions in particular.

8.11 Mitigation measures are proposed to enhance the existing habitat. These include eradicating Rhododendron shrubs; managing water levels within the old ponds to conserve existing species and allow colonisation of new species and maintaining the vegetation strips to provide a ‘wildlife corridor’.

8.12 Peat extraction at Camagh Bog is unlikely to impact on flora and fauna recorded during the field survey. The mitigation proposed will enhance the existing habitat.
Current operations will maintain the ‘status quo’ and, therefore, not result in any loss of either habitat or species. There are no plans to extend peat extraction into new areas.

8.13 Peat extraction will not have an impact on designated sites (SAC, SPA) in the wider area provided water discharge operations comply with current legislation.

9.0 Hydrology, Hydrogeology & Soils

9.1 This section assesses the proposed continued peat extraction at Camagh Bog with regard to its impact upon soils, geology, surface water bodies and groundwater. The aim of this assessment is to evaluate potential impacts and propose appropriate mitigation. In addition to desktop research, consultation and site visit, surface and groundwater samples were collected and analysed.

9.2 Underlying solid geology comprises Carboniferous bedrock. Geological Survey of Ireland (GSI) indicates that the Carboniferous bedrock beneath the site would be categorised as a ‘Locally Important Aquifer’ with the Lucan Formation being considered to be ‘generally moderately productive’. In regards to drift geology and soils as expected, given the use of the site, continuous peat deposits occupy the entire Camagh Bog site.

9.3 GSI considers the groundwater vulnerability across the entire Camagh Bog site to be ‘Low’. This reflects the peat’s capacity to minimise infiltration to underlying groundwater resources. The minor amounts of groundwater contained within the peat stratum would not be considered a resource. With regard to potential groundwater contamination, the site and surrounding area would not be considered to present any significant groundwater contamination sources.

9.4 No sites of geological or geomorphological interest were identified within 2 km of the site. The nearest such sites will not be impacted by site operations. In order to ensure the continued geological context of the site, a peat layer of at least 0.5 m in thickness will be retained at completion of the extraction operations.

9.5 In order to further mitigate the risk to groundwater resources from any on-site oil and fuel storage, Bulrush Horticulture operates a strict environmental management system (EMS) based upon ISO14001 at all its sites. The EMS identifies the refuelling of plant machinery and the handling and storage of oils and fuels as potentially polluting activities. Consequently, several procedures have been developed to address these issues including:

1. Bunds & Oil Tank Inspection Procedure
2. Reducing the Risk of Oil/Chemical Contamination Procedure
3. Oil and Fuel Storage Procedure
4. Emergency Procedure

9.6 The EMS also ensures that all Bulrush Horticulture personnel undergo emergency response training and that spill kits and clean up materials are available. Continued
adherence to the EMS procedures will ensure that any negligible risk to groundwater quality is fully mitigated throughout the duration of on-site activities.

9.7 There are five surface water discharge points (SW1, SW2, SW3a, SW3b and SW4) which are routinely monitored. The drainage system (including the receiving settlement ponds) is strictly controlled to minimise the generation of sediment and to maximise the removal of suspended solids and other contaminants prior to discharge to surrounding surface waters.

9.8 Bulrush Horticulture operates numerous measures to mitigate the risk posed by suspended solids and prevent their release to the surface water environment. In the first instance, a stringent Company imposed discharge limit of 35 mg/l (in accordance with the EPA BATNEEC Guidance Note Class 1.4 Extraction of Peat) is applied to all five discharges. As an element of Best Practice Bulrush Horticulture currently voluntarily imposes this BATNEEC Guidance Note limit on site operational discharges whilst the IPPC Licence application is pending.

9.9 Regular sampling is undertaken to ensure the continued efficacy of the settlement system is carried out and a suspended solids concentration of 25 mg/l triggers investigation and remediation in order to ensure the Company imposed BATNEEC limit of 35 mg/l is not exceeded.

9.10 Ammonia is an inherently elevated natural constituent of water from peat bogs. The contribution from the site discharges to the ammonia loading in the local river systems is low. Furthermore, given the historic abstraction of peat from Camagh Bog it is noted that background concentrations in the rivers already include the contribution from Camagh Bog and consequently, the continued extraction of peat is unlikely to result in any further deterioration of water quality with respect to the ingress of ammonia.

9.11 It is considered that if the continued abstraction of peat from the Camagh Bog site progresses in strict adherence to the Bulrush Horticulture environmental management system; and continues to apply the currently adopted stringent controls on site drainage; the proposed operations should have a negligible impact upon the wider soil, groundwater and surface water environments.

10.0 Air & Noise

10.1 As a component of the IPPC Licence application process an assessment was made of the atmospheric emissions (air) and noise impacts from the existing activities. These assessments were incorporated into the supporting documentation supplied with the IPPC Licence application and are available for viewing on the EPA website [www.epa.ie](http://www.epa.ie) under the registration number P0974-01.

10.2 Established EMS procedures exist within the Bulrush Horticulture management system to address air and noise emissions including a policy of identifying potentially sensitive receptors in order to effectively control emissions.
10.3 Dust and other fugitive emissions from the Bulrush Horticulture operations at Camagh Bog will continue to have a negligible impact on the receiving environment.

10.4 The main sources of noise generation are from the harvesting machinery and ancillary plant i.e. agricultural tractor units, etc. activities which primarily occur out on the bog. No static plant is in use only mobile operational plant units. Noise levels generated tend to be similar to that produced during agricultural field operations. The tractor units in use at Camagh are identical to agricultural plant units; a number of which are employed in the district for agricultural purposes.

10.5 No significant impacts from noise will arise from the operations at Camagh Bog.

11.0 Summary

11.1 This Environmental Impact Statement considers the potential significant environmental impacts associated with the project.

11.2 Specific assessments have been undertaken in respect of archaeology, landscape and visual, flora and fauna and hydrology/hydrogeology/soils. Where potential impacts have been identified, appropriate management and mitigation measures have been presented and will be incorporated into procedures and operational methodologies to minimise or eliminate such impacts.

11.3 Bulrush Horticulture has sought to adopt best practice throughout all aspects of the design of the site and site operations. Bulrush Horticulture will conduct and control their activities and operations in such a manner so as to minimise, or eliminate where possible, the environmental impacts associated with the development. It is Bulrush Horticulture’s intention to act upon and implement the recommendations and mitigation measures presented in this Environmental Impact Statement from the outset.