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**Humber Environmental Managers' Forum presents**

## **THE PRACTICAL APPLICATION OF ENVIRONMENTAL IMPACT ASSESSMENT**

### **A CONFERENCE FOR THE INTERNATIONAL YEAR FOR BIODIVERSITY**

Thursday 8 July 2010, CATCH, Stallingborough

#### **SUMMARY**

In addition to these notes, the presenters PowerPoint Slides are available on the Humber INCA and Humber Chemical Focus websites:

[www.humberinca.co.uk](http://www.humberinca.co.uk)

[www.humberchemical.co.uk](http://www.humberchemical.co.uk)

#### **1 Introduction**

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2010 is the **International Year for Biodiversity**. One of its aims is to draw attention to the claim that sixth great extinction of species in the geological record may be in progress. This results from the destruction of habitats by deforestation, intensive agriculture, drainage of wetlands, pollution and urbanisation. The **Ecological Services** on which we depend are becoming degraded - nutrient cycling; soil formation; atmospheric and water regulation; plant pollination; genetic diversity; food, timber fibre, fuel, chemical and medicine products; and opportunities for recreation, along with cultural and ethical value.

The message is, 'think global, act locally' and **Environmental Impact Assessment (EIA)** is an approach that can help. It was introduced in the 1960s and has been a statutory requirement for specified types of development in Europe and the UK since the late 1980s. It is not just the direct impact on plants and animals but also about controlling all types of pollution and nuisance, protecting human health, safeguarding the beauty of the landscape and cultural features. EIA is not just amount minimising adverse effects of development but also identifying opportunities for enhancement.

EIA is now joined by **Strategic Environmental Analysis (SEA)**, **Habitats Regulations Assessment/Appropriate Assessment** for European wildlife sites and **Sustainability Appraisal**. These requirements for appraisal pose questions such as:

- Is all this analysis improving decision making or is it just delaying making difficult decisions?

- Have we appropriate data and technical information on which to base assessments?
- Are some alleged claims of a 'lack of data' an excuse for not making controversial decisions?

## 2 What are EIA, SEA, AA...?

**Colin Holm, Natural England**

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The International Association for Impact Assessment (IAIA) defines an environmental impact assessment as:

*"The process of **identifying, predicting, evaluating and mitigating** the biophysical, social, and other relevant effects of development proposals prior to major decisions being taken and commitments made"*

The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, which has two schedules setting out the developments for which an EIA is required:

- 'Schedule 1 projects', for which EIA is required in every case;
- 'Schedule 2 projects', for which EIA is required only if the particular project in question is judged likely to give rise to significant environmental effects.

EIA is undertaken at the planning permission (or equivalent authorisation) stage. It covers impacts on flora and fauna, land use, water management, human health, pollution, nuisance, traffic and transport, landscape and the cultural environment. The purpose is to:

- Predict problems
- Find ways to avoid such problems
- Enhance beneficial effects to the environment.

Key stages are the initial scoping and the preparation of an Environmental Statement.

**Strategic Environmental Assessment (SEA)** covers plans, programmes and policies; it should streamline the more detailed EIAs of some projects. SEA is a process involving the setting of objectives, scoping, description of the baseline environmental condition, evaluation of alternatives, consultation on the environmental report and the publication of the finalised report; this latter does not require formal approval. Monitoring of the actual effects of the implementation of the plan, etc. is also required.

Plans or projects that could 'significantly' affect the integrity of conservation objectives European sites for birds and habitats (such as the Humber Estuary, Humberhead peatlands and River Derwent ings) require a **Habitats Regulations Assessment**, which incorporates the **Appropriate Assessment**. This procedure is a 'yes' or 'no' test. A no result should result on a rethink of the project, although an application can be made to the Secretary of State for Defra where there is thought to be an 'Imperative Reason of Over-riding Public Interest' (IROPI).

**3 A Local Authority Prospective**  
**Andrew Taylor, North Lincolnshire Council**  
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It is important that the need for undertaking an EIA is identified early in the development of a project. A screening exercise is valuable with discussions with the planning authority, environmental regulators and, in the case of the Humber area, organisations such as Humber INCA. Failure to act early or conform to the procedures can lead to serious delay in gaining planning, or an equivalent, permission. EIA should be an interactive process with the other stages in the formulation of a project and should have a genuine assessment of alternatives for sites, site layouts, processes and the phasing of construction, for example to avoid breeding birds or bird migration.

The statutory bodies will indicate the type of environmental data required for the assessment, which may be available from biological or archaeological records or require survey work by the developer. In some cases this may require a work over the appropriate season or the whole year and so planning ahead is important. Mitigation or environmental enhancement measures should be appropriate to the geography of the area, for example tree planting would be wrong what should be a heathland habitat.

Done sensibly EIA, with the Environmental Statement as a single and accessible compilation (not a 'paper chase'), should not be a bureaucratic exercise but beneficial to the local environment and community.

It is recognised that there can be conflicts between different desired environmental objectives, including wildlife and archaeology.

**4 A Consultant's Experience**  
**Richard Lowe, URS**  
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Experiences were discussed from gaining approvals for biomass power stations, including a 49MW plant on a brownfield site at Billingham, which burns waste wood. The organisation determining applications depends on the capacity of the station; those for <50MW are determined by local authorities while larger installations are consented nationally, currently by the Integrated Planning Commission.

To date the authorisation of the smaller scale plants is mostly less time consuming. Issues that need to be taken into account include links to the transport network, eg the proximity to ports and railways, availability of cooling water and flood risks. In addition to planning applications, environmental permits are required from the Environment Agency. In addition to the control of emissions account will be taken of fuel proposed and opportunities for combined heat and power.

Consultation with stakeholders and the public is vital and must be seen to consider the comments and concerns received. A website is useful.

In discussion the perception of some people was mentioned that food prices could rise or shortages result from the conversion of farmland to non-food crops.

## Planning and EIA – Potential Risks and their Mitigation

Potential Risk	Mitigation
<ul style="list-style-type: none"><li>• Ecology surveys required, delaying the EIA preparation</li><li>• Objections to choice of fuel (eg waste, imported biomass)</li><li>• Potential flood risk identified</li></ul>	<ul style="list-style-type: none"><li>• Plan ahead. Don't miss breeding seasons</li><li>• Meet stakeholders regularly. Prepare sustainability assessment</li><li>• Prepare Flood Risk Assessment. Justify not using alternative locations. Offer mitigation</li></ul>
<ul style="list-style-type: none"><li>• Local air quality concerns</li></ul>	<ul style="list-style-type: none"><li>• Robust assessment. Use appropriate stack height</li></ul>
<ul style="list-style-type: none"><li>• Concern over thermal impacts</li></ul>	<ul style="list-style-type: none"><li>• Robust assessment. Consider air cooling.</li></ul>

In discussion the perception of some people was mentioned that food prices could rise because of farmland being given over to non-food crops.

### 5 Case Study: Croda's Wind Turbine in Hull

**Nick Hart, Croda**

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Croda has a programme of reducing its energy costs and environmental impacts. Work was first undertaken to improve energy efficiency at the Hull plant. In 2005 the decision was made to assess the feasibility of a wind turbine. This became operational in 2009 and, at a height of 125m, is now a prominent feature on the City's skyline. The negotiation of a link to the grid not too far from the site was vital for the economics of the project.

Survey and investigatory work included the possible impacts on noise, visual appearance, flickering light, bird strike, aviation, ecology, ground conditions for piling and, interferences with telecommunications such as TV and the radio links of the emergency services. The planning consent has 28 conditions. The bird surveys after the turbine became operational showed no significant mortalities. The transport of the parts of the tower, nacelle, generator and the turbines to the site required careful routing around the city and temporary road closures (on a Sunday).

The project has a 4 to 5 year payback and reduces energy bills by 33% to 40%. Surplus electricity generated is sold to the Grid. Another benefit was the interest of the site's staff and the enhancement of their morale.

### 6 Baseline Ecological Surveys for EIA: The South Humber Bank

**Darren Clarke, Humber INCA**

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Humber INCA is a 'not for profit' partnership between industry, local authorities, environmental regulators and voluntary conservation organisations. Since its establishment in 2002 aid is provided to its members with nature conservation issues associated with developments and site management.

Land on the South Humber Bank is allocated for Port related development in North and North East Lincolnshire plans. This is a sensitive area for wildlife, particularly for birds being beside the Humber European Marine Site, and is also largely in a flood risk area. There were proposals for a range of industrial developments but little background environmental data/information available for the area for environmental assessments. To counter this deficit and assure that appropriate, quality-controlled data is available, funding to manage the South Humber Bank Ecological Surveys project was received by Humber INCA from Yorkshire Forward with matching contributions from the Councils and Environment Agency.

The work undertaken includes wintering and migratory bird surveys (approx. 5,000 records), breeding bird surveys (approx. 3,000 records), Phase 1 Habitat Survey by aerial photograph interpretation, and protected species surveys for water voles and badgers. Data are available from the local record centres for:

- Developers and their consultants for preparing Environmental Impact Assessments;
- Local authorities for screening planning applications and preparing strategic planning documents;
- Conservation bodies monitoring the status of the Estuary's wildlife.

Currently work is being carried out to identify strategic mitigation areas for wintering birds. The intention is that these areas will be allocated in the forthcoming Local Development Frameworks (LDFs) for both North and North East Lincolnshire Councils. This is necessary in order to ensure that the LDFs can meet the requirements of the Appropriate Assessment under the Habitats Regulations.

This approach should mean that future development proposals in the area are much easier to deal with as the often complicated discussions relating to the cumulative impacts on the Special Protection Area for Birds (SPA) should effectively have been dealt with in advance. Discussions are ongoing between local authorities, major landowners and conservation bodies to identify areas where mitigatory habitats could be created. Once these have been identified a framework will be developed to allow developers to 'buy into' these mitigation areas in order to balance the impacts of their developments.

Future surveys will be needed to ensure that decisions continue to be made in possession of accurate data and also to ensure that there is at worst no negative effect on the estuary's bird populations and conservation status.

Think early about ecology, this is 'business critical information', particularly for development near to the Humber, which is one of the prime estuarine wildlife sites in Europe.

"Working together works".

**See next page for further information on EIA.**

## **Further Information**

Directive 97/11/EC of 3 March 1997 (amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment)

Directive 2001/42/EC (the SEA Directive) 'on the assessment of the effects of certain plans and programmes on the environment'

Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999

Conservation of Species and Habitats Regulations 2010 - replaced The Conservation (Natural Habitats, &c.) Regulations 1994

## **Communities and Local Government guidance ([www.communities.gov.uk](http://www.communities.gov.uk)):**

'Environmental Impact Assessment: A guide to the procedures'

'A Practical Guide to the SEA Directive'

'Sustainability Appraisal of Regional Spatial Strategies and Local Development Documents'

Planning for the Protection of European Sites: Appropriate Assessment - Guidance for Regional Spatial Strategies and Local Development Documents

## **Summary prepared by:**

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