CHAPTER 13

WASTE & ENVIRONMENTAL EMISSIONS

13.1 Introduction

The issue of waste management is recognised by Wicklow County Council as one of the most problematic areas of environmental management. Waste generation is directly linked to trends in consumption and output, reflecting population growth and household formation, the level of manufacturing, industrial and agricultural activity, and overall economic performance. The waste produced from the above activities can be quite diverse requiring consideration of a wide range of environmental, technical, economic and market related issues in order for it to be efficiently managed.

The Council strategies and policies on waste management as whole as already set out in the Wicklow Waste Management Plan 2006-2011, which forms part of the County Development Plan. This chapter will therefore only set out the strategies and objectives of the Council with regard to solid waste and 'waste' emissions to the environment, other than wastewater (which is addressed in Chapter 12), as they impact on land use decisions and applications for planning permission.

Strategy

To promote and facilitate best practice in prevention, re-use, recovery, recycling and disposal of all waste produced in the County in accordance with the Waste Management Hierarchy and the objectives of the Wicklow Waste Management Plan, the National Waste Prevention Programme (EPA 2009) and the National Hazardous Waste Management Plan.

13.2 Solid waste management

It is the policy of the Council, as set out in the Wicklow Waste Management Plan, to:

- prevent or minimise the production of waste in the first instance
- reduce, re-use and recycle to the maximum extent possible
- endeavour to recover energy from waste where possible
- ensure the efficient and safe disposal of any residual waste

The role of a land-use plan in the achievement of these objectives is somewhat limited, but it will play a role in guiding the location of new facilities and services that are necessary to implement the Wicklow Waste Management Plan

Solid waste management objectives

- WM1 To require all developments likely to give rise to significant quantities of waste, either by virtue of the scale of the development or the nature of the development (e.g. one that involves demolition) to submit a construction management plan, which will outline, amongst other things, the plan for the safe and efficient disposal of waste from the site.
- WM2 To require all new developments, whether residential, community, agricultural or commercial to make provision for storage and recycling facilities (in accordance with the standards set out in Section 13.8 of this chapter).
- WM3 To facilitate the development of existing and new waste recovery facilities and in particular, to facilitate the development of 'green waste' recovery sites.
- WM4 To facilitate the development of waste-to-energy facilities, particularly the use of landfill gas and biological waste.

- **WM5** To have regard to the Council's duty under Section 38 (1) of the 1996 Waste Management Act, to provide and operate, or arrange for the provision and operation of, such facilities as may be necessary for the recovery and disposal of household waste arising within its functional area.
- WM6 To facilitate the development of sites, services and facilities necessary to achieve implementation of the objectives of the Wicklow Waste Management Plan.

13.3 Hazardous Waste & Emissions

Hazardous wastes pose a greater risk to the environment and human health than non hazardous wastes and thus require a stricter control regime. Hazardous waste is generated by all sectors of Irish society, from large industry, to small businesses, households, schools and farms. It is for the most part managed by the professional hazardous waste industry and is treated appropriately and in accordance with legal requirements. A significant amount of hazardous waste is generated in County Wicklow, in the main due to the presence of the chemical and pharmaceutical industries. While the Local Authority does not directly manage waste generated by these private companies it does provide for civic amenity sites for the proper collection of small quantities of household hazardous waste.

Hazardous waste & emissions objectives

- **HW1** To facilitate the development of sites, services and facilities for the disposal of hazardous household wastes in accordance with the objectives of the Wicklow Waste Management Plan.
- HW2 To have regard to the "Major Accidents Directive" (European Council Directive 96/82/EC). This Directive relates to the control of major accidents involving dangerous substances with an objective to prevent major accidents and limit the consequences of such accidents. This policy will be implemented through Development Control, through specific control on the siting of new establishments and whether such a siting is likely to increase the risk or consequence of a major accident.

13.4 Litter & illegal dumping

The occurrence of illegal dumping and the amount of litter and street cleaning waste generated in the County has been falling. This can be attributed to the National Litter Campaign and increased public awareness. All such wastes are disposed of to landfill and therefore all efforts are required to continue to reduce this form of waste.

Litter & illegal dumping objectives

- **LT1** To facilitate the implementation of the County Litter Management Plan.
- **LT2** To proactively pursue enforcement and legal action against perpetrators of illegal dumping and 'fly tipping'.
- **LT3** To require all new potentially litter generating developments (such as shops, takeaways, pubs etc) to provide litter / cigarette bins on or directly adjoining the premises and to provide for the cleaning of the adjoining streetscape in accordance with the provisions of Part II Section 6 of the Litter Pollutions Act 1997 and 2003.

13.5 Emissions to air

The Environmental Protection Agency holds overall responsibility for the co-ordination and monitoring of air quality in accordance with EU air quality directives. Damaging emissions to air can take the form of pollutant gases (for example from car exhausts) and air borne particulars (such as dust).

Air emissions objectives

- AE1 To regulate and control activities likely to give rise to emissions to air (other than those activities which are regulated by the EPA).
- AE2 To require proposals for new developments with the potential for the accidental release of chemicals or dust generation, to submit and have approved by the Local Authority construction and/or operation management plans to control such emissions.
- **AE3** To require activities likely to give rise to air emissions to implement measures to control such emissions, to install air quality monitors and to provide an annual air quality audit.

13.6 Noise pollution

Noise pollution can be described as unwanted sound that disrupts the activity or balance of our daily lives. There are many sources of noise pollution, most of which are associated with urban development; road, rail and air transport; industrial, neighbourhood and recreational noise. In Ireland, the principal laws relating to noise are set out in Sections 106, 107, and 108 of Part VI of the Environmental Protection Agency (EPA) Act 1992. Under this legislation local authorities or the EPA are empowered to serve a notice requiring measures to be taken to limit or prevent noise. Wicklow County Council also has a role in the issuing of noise conditions as appropriate in planning permissions and in the enforcement of any planning permissions granted.

Noise pollution objectives

- **NP1** To enforce, where applicable, the provisions of the Environmental Protection Agency (EPA) Acts 1992 and 2003, and EPA Noise Regulations 1994.
- **NP2** To regulate and control activities likely to give rise to excessive noise (other than those activities which are regulation by the EPA).
- **NP3** To require proposals for new developments with the potential to create excessive noise to prepare a construction and/or operation management plans to control such emissions.
- **NP4** To require activities likely to give rise to excessive noise to install noise mitigation measures and monitors. The provision of a noise audit may also be required as appropriate.

13.7 Light pollution

While the use of artificial light has done much to safeguard and enhance our night-time environment, if it is not properly controlled, obtrusive light (commonly referred to as light pollution) can present physiological and ecological problems. Outdoor lighting, when misdirected towards public roads (light glare), can be a hazard to drivers. Light pollution, whether it keeps you awake through a bedroom window (light trespass) or impedes your view of the night sky (sky glow), is a form of pollution and could be substantially reduced without detriment to the lighting task.

Light pollution objectives

LP1 To require proposals for new developments with the potential to create light pollution or light impacts on adjacent residence to mitigate impacts (in accordance with the standards set out in Section 13.8 below).

13.8 Development Management Objectives

The design of all developments should integrate waste minimisation into the design process, whether that be through minimising the amount of excavation on a site or reusing excavated material or other materials already on the site into the new development. However, where wastes will still arise, the following requirements shall be adhered to.

13.8.1 Construction and demolition management

All construction sites shall be appropriately managed to ensure that environmental emissions are strictly controlled. This will be enforced by requiring (by planning condition) the agreement and implementation a 'construction and demolition management plan', which will set out detailed measures to manage waste arising from the construction activity. In drawing up such plans, developers should have regard to DoEHLG guidance publication 'Best Practice Guidelines on the preparation of Waste Management Plans for Construction and Demolition projects' (2006) as may be amended and revised. In particular, such plans will set out:-

- construction programme for the works
- hours of operation
- a traffic management plan
- noise and dust mitigation measures (including details of a truck wheel wash at the site entrance
- details of construction lighting

A Construction Manager will be required to be appointed to liase directly with the various sections of the Council.

13.8.2 Residential Developments

- The design and layout of all individual and multi house developments shall provide for on site waste storage (including recyclables) and composting facilities;
- For traditional housing layouts, this will normally require the inclusion of sufficient space to the side or rear of a dwelling for the storage of waste, including up to 4 wheelie bins (recyclables, glass, organic and residual waste);
- For terraced houses or courtyard type developments (i.e. those developments that include houses with either no / limited private gardens) and apartment developments, communal bin storage and composting areas shall be provided;
- Waste storage areas shall be designed and screened so as not to cause any adverse visual impact on the proposed complex.

13.8.3 Employment & commercial developments

- All commercial developers shall appraise themselves of their obligations under the Waste Management Acts and the Wicklow Waste Management Plan 2006-2011 (and any subsequent reviews) and show at application stage details of waste storage and other waste facilities necessary to meet these obligations. In particular, as appropriate to the type of development:
 - details of waste storage areas, including areas for the storage of recyclables shall be detailed. Such areas shall be suitably located and screened on site so as to minimise impacts on visual or residential amenity;
 - Developments likely to result in litter generation shall provide and manage litter bins on or immediately adjacent to the site;
 - Records of wastes arising / accidental emissions occurring shall be maintained and made available at any time at the request of the Local Authority.
- Where permission does not specify the exact processes to be carried out on a site (e.g. permission for a light industrial development with no specified users), written approval shall be obtained from the Planning Authority for the exact use before such use is commenced. Details shall be provided of effluents, waste products, materials to be used in the industrial process, toxic or hazardous by-products of the industrial process, together with details of the intended

means of disposing of effluents and waste materials and controlling toxic or hazardous byproducts.

13.8.4 Agriculture

 Agricultural wastes shall be managed in an environmentally sustainable manner in accordance with the principles set by the Rural Environment Protection Scheme, the Farm Waste Management Scheme and relevant EU and national legislation (in particular, the EC (Good Agricultural Practice for the Protection of Waters) Regulations).

13.8.5 Construction & Demolition Waste Facilities

Applications for the development of commercial waste disposal or recycling facilities catering for the disposal or reuse of inert clean soils, clay, sands, gravels and stones shall only be permitted at appropriate locations and shall be subject to the following:

- It shall be for the disposal of inert clean material only;
- There shall be a proven need for the proposed development;
- The proposed development shall be in accordance with the policies set out in the Wicklow Waste Management Plan 2006-2011;
- The proposed development shall not be located on lands that have a negative impact on the surrounding landscape or near a designated Natura 2000 site, or which interferes with a protected view or prospect, a public right of way, an existing or planned piece of strategic infrastructure, or an important tourist site;
- A development shall not be permitted if it has a detrimental impact on the amenity of adjoining residents, by reason of unacceptable levels of traffic, noise, dust, lighting or other impact resulting from the operation of the facility;
- A development shall not be permitted if it has a detrimental impact on the flora and fauna, ecology, ground and surface water, air quality, and geological/ archaeological heritage of the area;
- The development does not result in the creation of a significant traffic hazard and the road network is suitable and has the capacity for anticipated traffic levels.

It should be noted that this policy pertains to inert clean waste disposal facility only, and does not relate to any ancillary activities pertaining to the operation of sorting, manipulation and recycling of waste.

A detailed phasing programme for the importation of material, to include details of the volume of material to be included in each phase, cross sections of each phase of operation, the construction of slopes or banks in each phase, details for the seeding and capping of each phase, details pertaining to the impact on the landscape at each phase and landscaping details for the final phase of site restoration.

Where an Environmental Impact Assessment is required the applicant should liaise with the Council to scope the contents, concerns and issues to be addressed in any environmental impact statement to be prepared.

13.8.6 Air emissions

Dust

Any activities likely to give rise to dust emissions (e.g. construction activities, extractive industry) shall make suitable arrangements, and take precautionary measures, to suppress and control dust arising from the activity or the handling and transportation of materials. The deposition of dust on surrounding lands, or spillage onto public roads shall be prevented at all times.

 Dust levels emanating from any site shall not exceed 350 milligrams/square metre per day averaged over a continuous period of 30 days, measured as deposition of insoluble particulate matter, at any position along the site boundary.

Particulates

The concentration in ambient air of PM₁₀ at any sensitive / residential receptor shall not exceed the quantity specified in a schedule to the Air Quality Standards Regulations 2002, and which is not to be exceeded for the period and under the conditions specified in the schedule in relation to that pollutant.

13.8.7 Noise

- The noise level arising from any development shall not exceed 55 dB(A) Leq (1 hour) with a maximum peak of 65 dB(A) between 0800 to 1800 hours, Monday to Saturday inclusive, but excluding public holidays, when measured at the closest residence. At all other times the noise level shall not exceed 45 dB(A) Leq (1 hour) measured at the same locations. No pure tones should be audible at any time.
- As and when required by the Planning Authority, a survey of noise levels at monitoring stations on adjacent properties (to be agreed with the Planning Authority) shall be undertaken by an agreed professional (at the expense of the developer) and the results submitted to the Planning Authority within one month of such a request.

The results of such surveys shall include, inter alia:-

- (i) Type of monitoring, equipment used, sensitivity or calibration evidence, and the methodology of the survey.
- (ii) Prevailing climatic conditions at the time of the survey.
- (iii) The time interval over which the survey was conducted.
- (iv) What machinery was operating at the time of the survey.

13.8.8 Light

- Applications for permission which include the provision of new street lighting or significant on site / on building lighting shall be accompanied by a certificate from a suitably qualified professional in the field confirming that all lighting has been so positioned and designed to eliminate or mitigate impacts on adjoining properties, particular residences (light trespass) or on the night (sky glow). Regard shall be taken of Guidance *Notes for the Reduction of Light Pollution* (Institute of Lighting Engineers, 2000).
- All external lighting attached to buildings shall be cowled and directed away from the public roads and adjacent dwellings.
- To preserve the character of the night time landscape, roads in rural areas should use the minimum amount of lighting necessary, restricted to critical intersections. Passive measures, such as cat's eyes and reflectorised markings, should be preferred as night time safety guides.

13.8.9 Contaminated land

Applications for the development of sites where soil or groundwater contamination is evident or is known to have occurred, or sites where a previous or current activity is at high risk of causing contamination, shall be accompanied by such documentation and investigations as appropriate to identify the nature and extent of the contamination and necessary measures required to contain and redress previous contamination and to prevent new contamination.