CHAPTER 2

A STRATEGY FOR SUSTAINABLE WASTE MANAGEMENT

The main strategy of the Plan is to reduce the current dependence on disposal and encourage more sustainable options for managing waste. These include recycling, incineration and composting. This conforms to the Government's strategy, as set out in "This Common Inheritance", "Sustainable Development the UK Strategy" and "Waste Strategy 2000".

INTRODUCTION

The Rio Earth Summit

2.1 In 1992, the United Nations Conference on Environment and Development, the "Earth Summit", was held at Rio de Janeiro, Brazil. This was in response to growing concerns about the impacts of human activity, both on our own quality of life and on the ability of the planet to sustain us and other species.

Local Agenda 21

2.2 At Rio, over 150 nations, including the UK, endorsed a document called Local Agenda 21, which sets out how countries can work towards sustainable development. Sustainable development can be defined as "development which meets our needs without compromising the ability of future generations to meet their needs". Sustainable development seeks to integrate environmental, economic and social factors with a strong community consensus.

2.3 Actions to achieve sustainable development on a local level forms a key part of the overall strategy. The part of the strategy aimed at the role of local authorities in collaboration with the community is called Local Agenda 21.

2.4 The County and City Councils are committed to the principle of sustainable development[1]. The main strategy of this Plan is to reduce the current dependence on disposal and encourage more sustainable options for managing waste. These include recycling, incineration and composting. This conforms to the Government's strategy built on the principles of Local Agenda 21[2].

THE GOVERNMENT'S STRATEGY

2.5 Government policy on sustainable development is set out in “A Better Quality of Life - A Strategy for sustainable development for the United Kingdom” (May 1999). This document looks at all levels of environmental concern and highlights the importance of adopting strategies for sustainable development. Building on this principle, policy on waste management is given in the new national waste strategy, ‘Waste Strategy 2000’. This sets wide-reaching targets for reducing the proportion of controlled waste going to landfill and the contribution to be made by alternative methods of waste management including reduction, recycling, composting and energy recovery. These targets are designed to meet the stringent requirements of the European Landfill Directive[3] . The Strategy confirms a change to the waste hierarchy, signalled in draft versions, by further tiering the ‘recovery’ category to give preference to the recovery of materials over energy recovery where practical.

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1 *Responding to Rio, NCC 1997.*

2 *Making Waste Work, “A Strategy for Sustainable Waste Management in England and Wales”, HMSO 1995.*

3 *Council of the European Union Directive on the Landfill of Waste (1999/31/EC).*

2.6 Guidance on waste management issues is given in PPG10 "Planning and Waste Management"[4] which replaces waste management guidance formerly contained in PPG23 "Planning and Pollution Control". The remaining pollution control elements of PPG23 are currently under review and may be of general relevance to planning controls over waste management facilities. RPG8 sets out the regional position and is currently being reviewed with revised guidance expected in 2002.

2.7 PPG 10, paragraph 17, sets out the need for regional self sufficiency in waste management and disposal, and provides guidance on setting up Regional Technical Advisory Bodies (RTABs). More detailed advice on their role is given in Annex B. These Bodies should advise existing Regional Planning Boards (RPBs) by assembling relevant data and providing advice on options and strategies for dealing with the waste that needs to be managed within each region.

2.8 The above documents are material considerations in the drawing up and implementation of this Plan's Strategy. The weighting they are given depends on the stage of preparation and adoption, in accordance with guidance in PPG 1.

THE PLAN'S STRATEGY - 4 KEY OBJECTIVES

2.9 Four main objectives to achieve sustainable development can be identified. These are: protecting the environment; using resources efficiently; controlling pollution and increasing public awareness and involvement.

A. PROTECTING THE ENVIRONMENT

2.10 Protection of the environment can be achieved by the planning system and other controls and incentives. The Waste Local Plan can aid the protection of the environment by:

(a) directing harmful development away from sensitive areas, such as the Green Belt, vulnerable aquifers, floodplains, ground and surface water, residential areas, the historic built environment, designated wildlife and nature conservation sites (including Sites of Importance for Nature Conservation) and other areas of land, watercourses, wetlands and lakes supporting important habitats and species;

(b) minimising the impact upon people and the environment by limiting noise and light disturbance, for example, by controlling the hours of working;

(c) minimising the impact on the surrounding environment and local landscape, for example, by the requirement for landscape treatment previously agreed during the planning application process;

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4 *Planning Policy Guidance Note 10 'Planning and Waste Management' 1999.*

(d) minimising environmental pollution, for example, through legal agreements over the long-term monitoring of landfill gas and leachate;

(e) requiring proper reclamation of disposal sites, for example, by requiring progressive reclamation, and ensuring suitable after-uses;

(f) minimising the consumption of materials and energy by promoting and encouraging waste reduction, re-use and recycling, and by encouraging the use of alternative forms of transport and minimising the numbers of journeys by road, where this represents the Best Practicable Environmental Option.

2.11 Chapters 3 and 4 of this Plan give detailed land-use policies in relation to environmental protection and reclamation. This includes policies on matters such as noise, visual impact, protection of aquifers, transport, nature conservation, archaeology, phasing, landfill gas, after-use, aftercare and a range of other important issues. Chapters 5 - 10 contain policies which identify areas of search, allocations and criteria for assessing future waste management proposals. These policies should also direct development away from sensitive areas.

2.12 This approach accords with government advice given in PPG 10. This states that where new or replacement facilities are proposed, preferred locations should be identified. Where specific locations are not known, waste local plans should identify 'areas of search' within which waste management facilities might be acceptable on planning grounds, or criteria against which applications can be considered. PPG 10 states that the identification of specific sites is the best way that the planning system can make provision for future waste management facilities, but, if this is not possible, waste local plans should justify why this approach has not been followed. The allocation of sites and the identification of areas of search will aid the establishment of an "integrated and adequate network of waste disposal plants" (Paragraph 9, EU Landfill Directive).

B. EFFICIENT USE OF RESOURCES

Hierarchy of Waste Management Options

2.13 The efficient use of resources can be achieved by using raw materials prudently, increasing energy efficiency, recycling and reducing waste at source. The Government's strategy for sustainable waste management is based upon a hierarchy of preferred options (see Table 2.1).

2.14 The primary goal is to reduce waste at source. Priority should be given to minimising the hazardous components of waste, and certain hazardous materials may need to be eliminated entirely from the waste source. Waste can be reduced by altering established practices, for example, by reducing excessive packaging of supermarket goods. Treatment can also reduce both the quantity of waste and level of hazardous materials.

TABLE 2.1

HIERARCHY OF WASTE MANAGEMENT OPTIONS

- REDUCTION
- RE-USE
- RECOVERY

  Recycling, Composting, Energy Recovery
- DISPOSAL

Source – Waste Strategy 2000 (DETR)

N.B. Waste Strategy 2000 indicates that, within the recovery category, proposals for incineration are not expected to be considered before recycling and composting options have been considered.

2.15 The secondary goal is re-use, for example re-treading tyres or re-using bottles. The tertiary goal of recovery can also bring significant environmental benefits, through materials recycling, composting, and energy recovery from waste, for example through combined heat and power incinerators or the utilisation of landfill gas to produce heat and electricity (see Glossary for definitions). None of these are automatically preferred to any other, although government does not expect incineration with energy recovery to be considered before opportunities for recycling and composting have been explored.

2.16 At the bottom of the hierarchy is disposal, as the least attractive waste management option. The emphasis here must be on ensuring that disposal achieves high environmental standards, and that other benefits are achieved, for example by reclaiming mineral voids and returning land to beneficial use, and the utilisation of landfill gas to produce heat and electricity.

2.17 Waste Strategy 2000 advises that the waste hierarchy should guide waste policy but will not always indicate the most sustainable option for particular waste streams. It is important to recognise that all the waste hierarchy options have a place in a sustainable waste strategy and that landfill, although at the bottom of the hierarchy, is still considered to be a sustainable waste management option. For example, landfill can bring environmental benefits to derelict or degraded sites as described above.

2.18 Structure Plan Review Policy 12/1 provides strategic guidance in relation to the hierarchy of waste management options. The role of the Waste Local Plan is limited in its ability to alter established practices which generate waste. For example, measures to reduce or recycle packaging would require government legislation. The Plan cannot force waste management companies to provide alternative facilities to disposal, nor can it make industry and the public reduce the quantity and type of waste they generate. However,

the Waste Local Plan has an important role in promoting the waste management hierarchy including reduction, recycling, re-use, recovery and disposal, and by making adequate provision for a full range of facilities. This can be achieved through consultation with the public by the County, City and District Councils, and through providing a sound and sustainable approach to the elements of waste planning that the Plan can influence.

2.19 An important role of the Plan is to indicate that permission will only be granted for waste management proposals which represent the most sustainable options judged against the hierarchy of waste management options, the 'Best Practicable Environmental Option' and the 'Proximity Principle' as set out below.

Best Practicable Environmental Option

2.20 The waste management hierarchy is an overall guiding principle but it would be too simplistic to assess proposals solely against their function and position within this hierarchy. For example, it would be counter productive to recycle waste if doing so had greater impact on the environment than disposal. A sensible decision on whether to recycle must take account of many factors, including the availability of raw materials, the energy consumption in collecting and processing, and the effect of releases to land, water and air. This can be achieved through appraisal of the proposal by using the 'Best Practicable Environmental Option' (BPEO) principle.

2.21 BPEO was defined by the Royal Commission on Environmental Pollution as *"the outcome of a systematic consultative and decision making procedure which emphasises the protection and conservation of the environment across land, air and water. The BPEO procedure establishes, for a given set of objectives, the option that provides the most benefit or least damage to the environment as a whole, at acceptable cost, in the long term as well as in the short term [5]".*

The Proximity Principle

2.22 Government guidance in relation to the "proximity principle" is given in PPG10. This guidance states that "Waste should generally be managed as near as possible to its place of production, because transporting waste itself has an environmental impact". This leads to a more sustainable system of waste management. Waste creators are encouraged to take more responsibility, first by requiring them to consider the effects of managing and disposing of the waste they create, and secondly, to avoid the environmental implications of transporting waste over long distances wherever possible. If it is not feasible to provide a management facility near to the waste source, then a more environmentally acceptable form of transport, such as rail or water transport should be used where it is economically feasible.

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5 *Royal Commission on Environmental Pollution 12th Report, Best Practicable Environmental Option, Cmd 310; DoE 1988.*

~~POLICY W2.1~~

~~**WASTE MANAGEMENT PROPOSALS WILL ONLY BE PERMITTED WHERE THEY REPRESENT THE BEST PRACTICABLE ENVIRONMENTAL OPTION, BASED ON A HIERARCHY WITHIN WHICH THE ORDER OF PREFERENCE IS:**~~

- ~~**REDUCTION**~~
- ~~**RE-USE**~~
- ~~**RECOVERY – COMPOSTING & RECYCLING**~~
- ~~**RECOVERY – ENERGY FROM WASTE**~~
- ~~**DISPOSAL WITH ENVIRONMENTAL BENEFITS**~~

Regional Self-Sufficiency

2.23 PPG 10 states that most waste should be treated or disposed of within the region in which it is produced. It also recognises that waste management solutions, in accordance with BPEO principles, may sometimes need to cross WPA or regional boundaries, and that, in some circumstances, acceptable options for the local management of some types of waste may not be available. In Annex B, the Guidance Note provides detailed advice on the question of developing regional strategies for waste management and the role of Regional Technical Advisory Bodies.

2.24 RPG8 also advises that increasing amounts of waste will be produced in the region and that Structure and Waste Local Plans should identify sufficient sites or areas of search to meet demand. Waste disposal is presently the main method of dealing with the Region's waste. However, other options, such as incineration, should also be considered.

2.25 In accordance with the above advice, the Waste Local Plan considers the need for adequate numbers and geographical spread of facilities for recycling, recovery, treatment, waste transfer stations and waste disposal in Nottinghamshire (see Chapters 5-10) and makes future provision in the form of small areas of search, allocations and criteria. The Plan also identifies areas where a shortfall of permitted waste disposal capacity exists.

C. CONTROLLING POLLUTION

2.26 Pollution, such as atmospheric emissions and water contamination, can be controlled through effective regulation and clear standards. The Environment Agency (see Para 1.20) is the main body responsible for achieving this objective.

2.27 Whilst pollution controls fall outside the scope of the Waste Local Plan, the Plan does contain policies which take account of the environmental pollution impacts associated with waste management (see Chapter 3).

D. PUBLIC AWARENESS & INVOLVEMENT

2.28 Encouraging greater public involvement and making information available is an important factor in implementing the Plan. The Waste Local Plan has a key role to play, because it is a public document and sets out the future of waste management for Nottinghamshire. As part of the Plan's consultation stages, the public has the right to comment and make representations on proposals in the Plan, which as a result may be modified.

2.29 The Plan cannot, however, achieve more sustainable waste management on its own. If waste reduction, re-use and recycling are to increase, public education and commitment will be essential at all levels. This includes promotion and consultation by the Government, Local Authorities, the Industry and other organisations, as well as a change of attitude by the public towards waste management. Major fiscal and regulatory changes would also be required.