WASTE WATER AND SEWAGE TREATMENT



A typical sewage treatment works.

INTRODUCTION

8.1 Waste water and sewage is a distinct waste group. Every individual and business produces waste water, most of which has to be treated before it can be released back into the environment. Responsibility for the provision of sewage treatment facilities and infrastructure in Nottinghamshire lies with three water companies. The majority of the County is served by Severn Trent Water Ltd, but in the east there is an area covered by Anglian Water Ltd, and in the north west, an area covered by Yorkshire Water Ltd.

Existing Facilities

8.2 There are over 30 sewage works in Nottinghamshire which vary greatly in size and capacity. Capacity is quoted in terms of population equivalents composed of the number of people within the catchment area combined with the estimated output from industrial and commercial premises. Stoke Bardolph sewage treatment works, with a population equivalent capacity of over 456 thousand, is the largest within the County, receiving waste water and sewage from most of Greater Nottingham. The treated water is discharged into the River Trent under a discharge consent issued by the Environment Agency. The consent is issued subject to specific water quality standards being met. In addition, much of the sewage sludge produced during treatment is injected into the land, comprising part of Severn Trent Water's Stoke Bardolph Farm. A proportion of the sewage sludge is also converted into biogas on site.

Future Requirements

- 8.3 Built development proposals place increasing pressures on the capacity of the existing sewage treatment system. This in turn may lead to the need to develop new sewage treatment works, or to expand and renew existing works. This situation is reinforced by the introduction of more stringent water quality standards.
- 8.4 Sewerage undertakers have extensive rights to carry out development without the need to obtain planning permission under the General Permitted Development Order 1995.¹ Considerable development, involving large items of plant and machinery (excluding buildings), and repairs to sewers, can be carried out within existing operational sites without the submission and approval of a planning application. However, the WPA is usually consulted and efforts are made by the water companies to work in partnership with the local community wherever possible. New sewage treatment works will require planning permission. In some instances an Environmental Statement will be required, depending on the size, nature and location of the development proposed. (See Chapter 3, para 3.7).

Parts 10 and 16 of Article 2 to the Town and Country Planning (General Permitted development) Order 1995, S.I. 1995 No. 418.

8.5 The likely impacts of sewage treatment works are those from offensive odours, flies, as well as visual intrusion. Therefore, sewage treatment works need to be relatively remote from residential areas and located on the edge of settlements.

POLICY W8.1

PROPOSALS FOR NEW WASTE WATER AND SEWAGE TREATMENT WORKS, OR EXTENSIONS AND RENEWAL OF EXISTING FACILITIES WILL BE PERMITTED UNLESS THERE ARE ANY UNACCEPTABLE ENVIRONMENTAL IMPACTS.

In addition, the water companies operate a "cordon sanitaire" policy, which seeks to influence the type of development which might take place within a certain distance of a sewage works. The "cordon sanitaire" is a site specific limit ranging from 25 to 400 metres, which varies according to the type of processes carried out, the size of works, industrial effluents involved, landuse around the site, any anticipated extensions and site topography. This helps to minimise the impacts of odour and flies. A number of District Local Plans contain policies which reinforce the "cordon sanitaire" principle.