Chapter 14

Incidental Mineral Extraction and Borrow Pits



Borrow Pit used to construct the Newark Relief Road in the late 1980s. The pit is to be filled with sugar beet washings from an adjacent factory.

Introduction

14.1 Most mineral extraction normally takes place in established mines and quarries in order to sustain traditional needs and markets. There are, however, two situations where this may not be the case. Firstly, minerals may be extracted as an incidental part of another development including the working of other minerals. Secondly, they can be worked within a borrow pit in order to meet the temporary needs of a major construction project. The planning issues raised by each of these activities are considered in turn below.

Development Involving Incidental Mineral Extraction

- 14.2 In principle recovering minerals as an incidental element of another development proposal promotes sustainable development by helping conserve mineral resources that might otherwise be lost.
- 14.3 District Councils should advise the County Council on proposals, such as ornamental lakes and major built development, which involve the excavation and removal of significant quantities of soils, overburden and mineral. Failure to do so may result in planning permission being granted without taking into account potential mineral planning issues. Developers submitting proposals to District Councils are likewise encouraged to consult the County Council at the pre-application stage where they expect incidental minerals extraction to be necessary.
- 14.4 In most cases the planning application for the main development will be determined by the District Council, and, except where quantities are very small, the mineral extraction will need to take the form of a separate planning application to be determined by the County Council. In order to ensure that both proposals are compatible, it is important to consider both planning applications at the same time. Proposals for mineral extraction will need to comply with the provisions of Chapters 3 and 4 as appropriate. In particular, interim reclamation proposals must be included in the event of the primary development being delayed, or failing to be implemented.
- 14.5 Incidental mineral extraction is not precisely defined in terms of quantity of mineral worked or duration. It does not, however, apply to minerals development simply because it is small scale and short term. If mineral extraction is a significant reason for justifying or promoting the development, the proposal will need to be assessed against the relevant policies applicable to the mineral being worked.

POLICY M14.1 INCIDENTAL MINERAL EXTRACTION

Planning permission for the extraction of minerals as a necessary element of other development proposals on the same site will be granted provided that:

- (a) there are no unacceptable environmental or other impacts resulting from mineral extraction;
- (b) there are adequate interim reclamation measures to allow for possible delays or non-implementation of the primary development;
- (c) the mineral extraction is of a limited nature and short duration.

Irrigation Lagoons

- 14.6 Proposals to construct irrigation lagoons within agricultural land typically involve the extraction of around 30 50,000 tonnes of mineral in order to create a pond of about 1 hectare in extent. The mineral is usually taken off-site for processing at a nearby quarry. Whilst the development comprises little more than mineral extraction, providing there is evidence that there are genuine agricultural benefits then the mineral extraction can normally be regarded as incidental.
- 14.7 Sand and gravel deposits are technically very suited for this purpose because of the normally high water table level and relatively rapid recharge after the water is abstracted for irrigation. The cost of creating the lagoon is also likely to be offset by the value of the mineral. The main planning issues will generally comprise traffic during construction, the impact on archaeological sites, and the long term landscape impact of the lagoon. Wildlife impact is less likely to be an issue, as these lagoons tend to take place within arable fields.
- 14.8 Whilst the purpose of these lagoons is to provide irrigation, it is important that they are shaped and landscaped to blend in with and, where possible, enhance the landscape character of the area, including biodiversity. The standard rectangular reservoir should be avoided, as this will generally detract from the area.

POLICY M14.2 IRRIGATION LAGOONS

Proposals for mineral extraction to create irrigation lagoons will be permitted where:

- (a) there is satisfactory evidence that they will provide significant benefits to agricultural productivity;
- (b) they can be worked and reclaimed without any unacceptable environmental impacts;
- (c) the irrigation lagoon is landscaped and treated to maximise its potential for enhancing the landscape character and biodiversity.

Borrow Pits

- 14.9 The term 'borrow pit' is applied to a temporary mineral working supplying material for use solely in a specific construction project, particularly roads. Borrow pits are typically located next to the construction site, and in the ideal situation are soon backfilled with waste materials, such as soft clay, that often have to be removed from the construction area hence the material excavated is 'borrowed'. Normally, large quantities of material, mainly bulk fill, are required over a short time. For example, during construction of the Staythorpe 'C' Power Station, in 2000, over 72,000 tonnes of sand and gravel were supplied from two borrow pits.
- 14.10 With the exception of small borrow pits developed within the boundary of the highway construction sites, planning permission is required. Proposals for borrow pits will be treated in the same way as any other mineral extraction scheme. This means that borrow pits must be justified in terms of being the most suitable source of material to meet demand, and that appropriate environmental safeguards covering both working and reclamation are included (see Chapters 3 and 4).
- 14.11 Advance planning is essential to ensure that the borrow pit can be developed within the timescales required. For example, if archaeological remains are present these may require a full and lengthy investigation before any mineral can be extracted. Submitting proposals after contracts are let is unlikely to allow sufficient time to resolve such complications. Urgency of need cannot be an overriding factor in the treatment of archaeological remains and other similar environmental factors.
- 14.12 It is important to ensure that borrow pits only supply the construction project intended. Therefore in granting planning permission for borrow pits, the County Council will take appropriate measures to control access and routeing, and permission will be time limited to the life of the construction project.
- 14.13 In considering 'need', the quantities and specifications of materials required for the construction project will be assessed in the context of the level and location of existing permitted reserves. Minerals won from borrow pits contribute to the County's aggregate requirements and may help to avoid the use of better quality reserves from established quarries.
- 14.14 In general, it should usually be possible to meet requirements from local established quarries or from waste materials and the use of secondary aggregates. In such circumstances borrow pits can normally only be justified where they offer clear environmental gains over alternative sources of supply. For example, where borrow pits are adjacent to construction sites the most obvious environmental benefits will be the avoidance of heavy traffic on public highways. There will also be significant economic and energy savings because of the reduced haulage costs.

14.15 These short term gains could be offset if the borrow pit is not properly reclaimed, or it is inappropriately located. For example, a water area adjacent to a major highway may have limited recreational potential because of access problems and/ or traffic noise. Reclamation proposals must therefore accord with the objectives of Chapter 4, and where possible infilling with waste material from the construction project will normally be the preferred option.

POLICY M14.3 BORROW PITS

The County Council will only permit borrow pits where:

- (a) there are overriding environmental or other planning benefits compared to obtaining materials from alternative sources;
- (b) alternative materials of the required specification are unavailable in sufficient quantities;
- (c) they are contiguous with or close to the projects they are intended to serve;
- (d) they are time-limited to the life of the project and material is to be used only for the specified project;
- (e) proposals include appropriate reclamation measures which make full use of surplus spoil from the project.