

## 11 MINERALS

### List of policies:

- M1 Availability of Mineral Resources
- M2 Criteria for Defined Mineral Workings
- M3 Criteria for New Mineral Workings
- M4 Safeguarding Mineral Reserves
- M5 Secondary Aggregates and Recycled Materials
- M6 Aggregate Wharves
- M7 Oil and Gas Exploration
- M8 Restoration and Aftercare
- M9 Minerals Sites

### Minerals Facts

- Minerals can only be worked where they occur.
- Nearly all current mineral extraction is within the designated AONB.
- 50% of gravel aggregates are obtained from marine dredging.
- The Island is self-sufficient in most minerals.
- Some crushed rock is imported from the mainland.
- Emphasis is increasingly placed on using recycled materials.
- Oil and gas exploration is ongoing on land and offshore.

### Introduction

#### National Context

11.1 It is the intention of the Mineral Planning Authority to identify sites where mineral supplies may be obtained for the planned period, even though site working may continue beyond the planned period. The plan identifies those areas of land which are thought to contain workable deposits of minerals and to be subject to the least environmental constraints sufficient to meet demand.

11.2 National planning guidance for aggregates provision is contained in Minerals Planning Guidance: Guidelines for Aggregates Provision in England (MPG6) dated April 1994. The purpose of the MPG is to advise Mineral Planning Authorities and the industry on what needs to be done to ensure that the construction industry continues to receive an adequate and steady

supply of material at the best balance of social, environmental and economic cost, through full consideration of all resources and the principles of sustainable development.

11.3 Paragraphs 9 and 10 of MPG6 state:

9. The Government wishes to see indigenous mineral resources developed within its broad objectives of encouraging competition, promoting economic growth, and assisting the creation and maintenance of employment. The Government believes that for the economic well being of the country it is essential that the construction industry continues to receive an adequate and steady supply of aggregates so that it can meet the needs of the community and foster economic growth.

10. At the same time, the Government

recognises that aggregates extraction can have a significant environmental impact and often takes place in areas of attractive countryside. The Government White Paper This Common Inheritance (Cmnd 1200) stresses the importance of combining economic growth with care for the environment in order to attain sustainable development.

11.4 Paragraph 4.9 of PPG7 states that:

Applications for new mineral workings, or extensions to existing works, in ACNBs must be subject to the most rigorous examination. If permission is granted, it should be subject to appropriate standards of operation, restoration and aftercare.

11.5 MPG6 advises that future supplies of aggregates are likely to become increasingly constrained in terms of the areas of the country where they can acceptably be worked and that a number of alternative supply sources have been considered. However, it goes on to state that the availability of such materials may be restricted, especially in the early part of the period to which the MPG applies.

11.6 Paragraph 25 of MPG6 states:

The Government recognises that over the period of this Guidance Note a substantial proportion of aggregates demand will need to be met from the traditional sources. But alternatives are expected to make an increasing contribution to supply. So that options for future supply from alternative sources are not foreclosed by long term land won provision, the Government has concluded that provision should be made now for the period to 2006 only.

11.7 It goes on to state in paragraph 26 that:

.... a broad objective of this Guidance Note is to reduce the proportion of supply from primary land won sources in England from 83% to 74% by 2001 and 68% by 2006.

11.8 A key methodology to reduce the supply from primary land won sources is to increase the amount of recycled materials

used. Paragraph 58 states that Mineral Planning Authorities:

.... should also make provision in their development plans for the appropriate local apportionment of the Regional Guidelines for the local authority area in question. This will provide an indication of the likely demand but the apportionment figure should not be regarded as inflexible.... The provision to be made in each plan will need to be justified not only in relation to this Guidance, but also in relation to all other relevant considerations affecting planning for the area.

11.9 Paragraph 63 states:

Mineral Planning Authorities should therefore include policies in their development plans which provide for the maintenance of a landbank. Landbanks should be maintained for all aggregate minerals. In the case of sand and gravel Mineral Planning Authorities should aim to maintain a landbank for an appropriate local area, sufficient for at least 7 years extraction, unless exceptional circumstances prevail. A longer period may be appropriate for crushed rock.

#### Regional Context

11.10 The MPG contains in Annexe A Regional Guidelines for Aggregates Provision in England. The following extracts are particularly pertinent to this plan:

#### Current patterns of supply and production

A3.1. In 1989, the last year for which Aggregate Minerals survey information is available, the South East produced almost 40% of its aggregates consumption, 4% of which is from crushed rock sources, 24% from land sourced sand and gravel and an assumed 10% from secondary/recycled material. The remaining 63% of consumption was met from: imported crushed rock (42%); marine dredged sand and gravel (18%); and imports of

sand and gravel from adjoining regions (3%). 5% of sand and gravel production and 9% of crushed rock production was exported to other regions.

#### Future demand

11.11 A3.2. Over the 15 year period to 2006 there is likely to be a demand from within the region for approximately 1270mt of aggregate materials. Other regions are likely to make demands on the region for an additional 30mt of primary aggregates.

#### Guidelines for land won primary aggregates

11.12 A3.3. On the basis of the anticipated demand in the region and demands from other regions the South East will need to produce 450mt of aggregate material from primary land-won sources within the region. 420mt of this is anticipated to be sand and gravel and 30mt crushed rock. About 7% of the sand and gravel production is anticipated to be exported, principally to the South West region. Mineral Planning Authorities in the region should make provision in their development plans for 420mt of sand and gravel and 30mt of crushed rock over the period 1992-2006.

11.13 In 1989 SERPLAN produced a document, RPC 1446, entitled the Apportionment of the Production of Aggregates in the South East to 2006. No figure was given for the Isle of Wight and therefore calculations in the UDP for the landbank for aggregates will, as far as possible, be calculated using an average of the production over the 3 year period 1992 - 95.

11.14 In the Regional Planning Guidance for the South East (RPG 9) of March 1994 it is stated that minerals are an important element in the economy of the South East, but their extraction can have a significant environmental effect. It goes on to state that development plans should indicate general

locations within which mineral working will be acceptable or not acceptable, consistent with the policies set out in the Regional guidance. They should ensure that a sufficient stock of permitted reserves is maintained for all aggregate minerals and the aim should be to provide for a release of land to maintain a stock of permissions for an appropriate local area.

11.15 It goes on, however: In the several AONBs in the Region, mineral development proposals, except those of a minor nature, should be subject to the most rigorous examination, and should demonstrate clearly that they are in the public interest.

11.16 In para 4.46 the RPG advises that:

The South East relies on imports of construction aggregates, mostly crushed rock, to provide almost a quarter of its present needs. An additional 20% of the Region's aggregates demand is met from landings of marine dredged sand and gravel. Mineral planning authorities should, jointly or individually in their development plans, make every effort to identify, safeguard and, where appropriate, make provision for suitable locations for marine wharves to receive imported and marine dredged aggregates. Suitable locations will be those where there are no unacceptable environmental impacts and where any prejudicial effects on other land uses or development opportunities can be minimised.

11.17 On the question of secondary and recycled aggregates it states that these make an important contribution to construction in the Region and policies should be developed to encourage their use where there are environmental benefits to be gained and for the location of recycling plants

#### Future Provision of Sand and Gravel

11.18 In 1989, the former Isle of Wight County Council employed consultants C & C Mineral Planning Services to provide information on the demand for minerals on the Island and alternative sources of supply, to enable the Council as Mineral Planning Authority to assess how much land would be required for mineral extraction to the year 2006 (excluding hydrocarbons and peat

extraction) and adopt suitable policies in Structure and Local Plans.

11.19 Since the C & C Study suggested a future annual demand in the order of 530,000 tonnes per annum, further information has been received from the Island operators which suggest a significant drop in both demand and production of aggregates on the Island. The current suggested future demand based on recent past production and imports shows a future requirement (based on annual average consumption over at least the last three years) in the order of some 340,000 tonnes per annum - a reduction of some 36%. This equates to figures for the South East Region which show a reduction of marine dredged sand and gravel of 29.3% between 1989 and 1995 and of land-won sand and gravel sales of 38.2%. It is therefore unrealistic to calculate a future requirement based on the C & C figures at the present time.

11.20 Due to the differences in the periods of the figures presented to the Minerals Planning Authority by the operators, ranging from a 3 year to an 11 year figure, and due to the need to protect the confidentiality of individual operators, the figures in this section of the plan will be based on aggregated calculated annual averages.

11.21 It is acknowledged that due to the costs of transportation to and from the Island, the Isle of Wight will not be an exporter of aggregates and will continue to need to import crushed rock and marine sand and gravel, together with a proportion of land-won sand and gravel, continuing the established trend.

11.22 The C & C Report confirmed that there is a correlation in the Island between

the consumption of minerals and the local building industry and based the future demand figures on an average housing completion rate of 610 dwellings per annum, reaching the requirement of 530,000 tonnes per annum. Since 1989, the average housing completion rate has been about 560 dwellings per annum. Although there has been a slight reduction in the projected house building rate of about 8%, this does not equate directly to the 36% reduction in consumption of aggregates. This must, in part be due to the import of concrete blocks onto the Island, the lack of major infrastructure and building projects and the increase in the use of timber framed house construction techniques.

11.23 Future major infrastructure projects cannot be accurately assessed at this time and crushed stone from the Island's limestone quarry could well be required in the future which would add to the current extraction figures. The only major infrastructure project envisaged at the moment is that of Southern Water Services and estimates of demand for that project are not yet available. Insofar as highway works are concerned, no major schemes are planned and an estimate of 20,000 tonnes of imported material is required and about 300 tonnes of Island gravel per annum. Over the next 10 years in coastal defence works, an estimate of some 150,000 tonnes of imported rock armourstone, 25,000 m<sup>3</sup> of chalk, 200,000 m<sup>3</sup> of aggregate for beach nourishment and 25,000 tonnes of aggregate for concrete will be required.

11.24 Current advice states that development plans should include policies for the maintenance of a 7 year land bank for sand and gravel, although this will in part be dependant on the minerals industry putting

Table of Average Annual Supply of Aggregates

Average annual consumption of Island won chalk	63,455 tonnes per annum (a)
Average annual consumption of Island won sand and gravel	114,882 tonnes per annum (b)
Average annual consumption of imported land-won aggregates	50,000 tonnes per annum (c.)
Average annual consumption of marine dredged sand and gravel	115,912 tonnes per annum (d)
Therefore total average Island production of aggregates	178,337 tones per annum (a+b)
Total consumption of aggregates	334,249 tonnes per annum (a+b+c+d)

Chalk reserves with planning permission	1,125,000 tonnes	Therefore reserves sufficient for 19 years
Limestone reserves (subject to Environment Act submission)	670,000 tonnes	Operators estimate annual output of 50,000 tonnes, therefore reserves sufficient for 13 years
Sand and gravel reserves with planning permission	2,364,430 tonnes	Therefore based on current extraction rates, reserves sufficient for 21 years
Reserves from additional suggested sites	1,520,000 tonnes	Therefore based on current extraction rates sufficient for 13 years

### Objectives:

The objectives of this section are as follows:

- o to ensure the best and most efficient use of the Island's resources;
- o to promote recycling and importing of material as opposed to further extraction;
- o to minimise the impact of mineral extraction on sensitive areas;
- o to ensure future needs are met in the most environmentally acceptable way.

### Availability of Mineral Resources

*M1 Land banks for sand and gravel will be maintained at levels which will ensure provision until the end of the Plan period, through extension to existing workings and phased extraction in appropriate locations.*

forward applications for extraction in the right places at the right time.

11.25 Because of the physical separation from the mainland, a self contained market has been created for materials extracted on the Island, which due to the high transport costs, means exporting to the rest of the region is uneconomic. The periodic importing of specific materials for larger Island projects will continue, particularly where reserves are not present (ie rock).

11.26 As well as land won material, the coastal areas around the Island also provide marine dredged sand and gravel, some of which assists in providing for the Island market, however, much of the marine dredged material goes to meet the wider regional requirements on the mainland.

11.27 In all cases where extraction is proposed applications for approval will be expected to show appropriate community and environmental benefits and effective restoration of the site. The Council has

### Criteria for Defined Mineral Workings

*M2 Proposals for mineral workings will be approved subject to full regard being given to the following criteria prior to a decision being made:*

- a the effect which any proposed workings and restoration will have on the landscape;
- b the conservation status of the site and the potential effect of the proposal on flora and fauna, geological, geomorphological and archaeological remains and Ancient Monuments;
- c the amount and quality of any agricultural land affected;
- d proposals for restoration to a condition suitable for an appropriate after use;
- e access and traffic management schemes;
- f the scale and lifespan of the operation;

- g the effect of the proposal on groundwater supplies and land drainage;*
- h the direct effects on adjacent residents and properties, for example, of noise and dust;*
- l the effects on countryside and coastal recreation.*

identified suitable sites to meet the demand for a similar proportion as at present of land won aggregates, taking into account the need to import certain materials and the Government's intention to reduce reliance on traditional land won sources consistent with the aims of sustainable development and to reduce the proportion of supply on a national basis from 83% at present, to 74% by 2001 and 68% by 2006.

11.28 Appropriate conditions will also be applied to control any off-site impact, and could include measures such as wheel washing of vehicles to prevent material being dragged or spilled on roads.

11.29 The Council has endeavoured to show that it can provide for land won materials within its area from the sites specified in Appendix E. Therefore there is no need to permit other sites which would have

#### Criteria for New Mineral Workings

*M3 Other than allocations sites the Council will only approve additional mineral workings where an overriding need can be shown, and provided the development will not have an unacceptable adverse effect on any of the following:*

- a Areas of Outstanding Natural Beauty;*
- b designated sites of Nature Conservation, geological and geomorphological interest;*
- c the best and most versatile agricultural land, except where this can be restored to its original standard;*
- d historic landscapes, parks and gardens;*
- e sensitive aquifer protection zones;*
- f ground water supplies and land drainage;*
- g adjacent residents and properties, through noise and dust;*
- h countryside and coastal recreation.*

a detrimental effect on matters of acknowledged importance unless the need for such minerals can be demonstrated to override the objections. If the development involves the use of agricultural land and the site can be restored to agricultural use following extraction, the Council will seek the restoration of the land to the same

agricultural land classification as before the extraction took place.

11.30 It is established National policy that unworked mineral deposits should be safeguarded and to this end the Council will ensure that valuable identified reserves are not sterilized by inappropriate development

#### Safeguarding Mineral Reserves

*M4 The Council will make every effort to safeguard identified mineral resources from unnecessary sterilisation by other types of development which could be a hindrance to their extraction. In cases where development could result in sterilisation the Council will, where appropriate, encourage the prior extraction of the mineral.*

either on the land or adjoining.

environmental effect of mineral extraction and the need for aggregates from elsewhere, as much use as possible should be made of

11.31 In order to minimise the

#### Secondary Aggregates and Recycled Materials

*M5 The Council supports and encourages the use of secondary aggregates and recycled materials and planning permission will be granted for their importing, reworking and processing, subject to there being no unacceptable adverse environmental impact from such development.*

secondary or substitute aggregate materials. The recycling of construction and demolition waste is seen as being of significance for use as aggregate materials, therefore it reduces the need for both tipping space and for primary aggregates.

11.32 At present there is only one mineral site with a recycling facility, that at Knighton

Sandpit, which, in the period June 1995 to June 1996, produced in excess of 10,000 tonnes of crushed demolition concrete for roads, car parks and building oversite works.

11.33 Landings of marine dredged sand and gravel are expected to increase over the next decade and improvements may be needed within existing wharves to

#### Aggregate Wharves

*M6 The Council will seek to safeguard and will permit the improvement, modernisation and extension of imported and marine aggregates wharves at the following locations provided that the development would not result in increased disturbances, visual intrusion, and are acceptable in highway access terms.*

- a West Medina, Stag Lane, Newport;*
- b PD Fuels Depot, Medina Wharf, Arctic Road, Cowes;*
- c Kingston, East Cowes.*

accommodate this. Although Blackhouse Quay, Newport is an existing facility, due to its location it is not considered appropriate for extension to increase capacity. There is currently a site at Benbridge Harbour which provides for the screening and processing of material dredged from the harbour and the Council recognises the continued need for this important ancillary function of the Harbour Authority in its statutory duty of maintaining a clear and navigable channel.

11.34 A high proportion of the Island's

supply of gravel aggregates is from marine dredged material, which is unloaded at specific quays within the River Medina. These depots also contain treatment plants for the grading and sorting of gravel and sand to meet specific orders. In addition these facilities can also be used for the importing/exporting of other bulk goods such as grain.

11.35 The Government's policy is that exploration for oil and gas should be encouraged so as to determine the extent of

#### Oil and Gas Exploration

*M7 Proposals for exploration, appraisal and production of oil and gas on land or water will be approved if they would not significantly affect:*

- a Areas of Outstanding Natural Beauty and Heritage Coast;*
- b designated sites of nature conservation, geological and geomorphological interest;*
- c Ancient Monuments or other sites of archaeological importance;*
- d a Listed Building or Conservation Area;*
- e Historic Parks or Gardens;*
- f a potable ground-water abstraction source;*
- g a built-up area;*
- h the best and most versatile agricultural land.*

national reserves and that these should be exploited on land or in territorial waters. Any drilling on land requires planning permission from the Council, as do any associated works, although there is no control beyond the Council's administrative boundary.

11.36 The Council will support proposals for the exploration for, and the production of, oil and gas reserves except in certain sensitive

areas. When considering a planning application to explore or produce oil and/or gas, full regard must be given to conservation of the environment including designated Areas of Outstanding Natural Beauty and Heritage Coast and Sites of Special Scientific or general ecological interest. The Council intends to ensure that the value of the environment, including landscape and ecology, is not impaired by oil and gas

exploration and production.

11.37 With regard to oil and gas exploration beyond the Council's administrative area attention should be drawn to the document entitled Policy Towards Offshore Exploration and Production produced in December 1993 by the Standing Conference on Oil and Gas Development in the English Channel. The

Restoration and Aftercare

*M8 The Council will ensure through appropriate means, the satisfactory restoration, aftercare and after use of the mineral site to the highest practicable standard.*

some other appropriate use if the land cannot be restored to its original state. This will involve the agreement of an acceptable restoration scheme which can be implemented both physically and financially through condition, legal agreement or planning obligation before consent for the mineral development is granted. In granting planning permission for mineral working, the Council will consider the applicant's proposals for reclamation of the site and attach conditions according to:

- 1 the characteristics of the individual site;
- 2 the intended after use;
- 3 the type of mineral to be worked;
- 4 the method of working;
- 5 the general character of the area.

Minerals Sites

*M9 Planning applications for mineral extraction will be approved at sites listed in Appendix E.*

Conference comprises all local authorities with coastline onto the Channel and therefore the document's policies are endorsed by the Council.

11.38 Mineral workings will inevitably have an impact on the landscape and when workings finish there is the possibility to provide for nature conservation, recreation or

11.39 The type of mineral and method of working will determine, to a considerable extent, the options for reclamation and after use of a site. Considerations will include the depth of excavation, relationship to the water table, nature and volume of waste generated on-site or imported as backfill, topography, wildlife habitats on or adjoining the site. The majority of mineral workings are likely to be reclaimed for agriculture, forestry or amenity use. All planning permissions for mineral working are now subject to a time limit condition and when setting conditions for reclamation, it will be important to have regard to this. Where a mineral extraction is to precede a planned development, the proposed after use may be a relevant factor in determining the duration of the permission.