



THE SCOTTISH OFFICE

Development Department

National Planning Policy Guideline

NPPG 4

LAND FOR MINERAL WORKING

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planning series:

- **National Planning Policy Guidelines (NPPGs)** provide statements of Government policy on nationally important land use and other planning matters, supported where appropriate by a locational framework.
- **Circulars** which also provide statements of Government policy, contain guidance on policy implementation through legislative or procedural change.
- **Planning Advice Notes (PANs)** provide advice on good practice and other relevant information.

Statements of Government policy contained in NPPGs and Circulars may, so far as relevant, be material considerations to be taken into account in development plan preparation and development control.

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policy context

1. Minerals¹ are an important national resource. The construction of roads, housing, schools, commercial and industrial buildings all depend to varying degrees on the supply of aggregates. Coal remains a significant energy mineral and other minerals are of importance to particular industries such as the chemical industry and the extraction of North Sea oil. They therefore make an essential contribution to the nation's prosperity by meeting industry's need for raw materials, creating employment opportunities, often in remote rural areas, and assisting the balance of payments through exports and import substitution.

2. The economic importance of minerals was recognised in the Government's Environment White Paper, "This Common Inheritance" (Cm 1200, September 1990). The White Paper also acknowledged that the extraction process can often be disruptive and have a significant environmental impact. Even when operations have ceased, without care and adequate controls, there may be a legacy of derelict or contaminated land.

3. In the recent publication "Sustainable Development: The UK Strategy" (Cm 2426, HMSO January 1994), the Government has indicated that it wishes to see indigenous mineral resources developed within its broad objectives of promoting economic growth, assisting the creation and maintenance of employment and protecting the environment. For the economic well being of the country, it is essential that there is an adequate and steady supply of minerals to meet the needs of the community and that economic growth is not hindered. At the same time, the Government recognises that mineral extraction can have a significant environmental impact, and often takes place in areas of attractive countryside.

4. However, minerals can only be worked where they are found and in some locations strong conflicts of interest and controversy may arise. The Government recognises that the need to work the resource must be reconciled with care for the environment in order to attain sustainable development, particularly in relation to the natural² and built heritage³ and existing communities.

5. The planning system has an important role in providing a framework within which sound decisions on mineral development proposals can be taken. This National Planning Policy Guideline (NPPG) indicates the considerations which planning authorities should take into account when preparing development plan policies and when determining planning applications. It also defines the factors which the Secretary of State will have in mind when considering mineral policies in development plans, and when considering applications for planning permission which come before him on call-in or appeal. These factors are also relevant to developers, who must play their part by adopting best practice techniques and aiming to be good neighbours.

policy guidelines: general principles

Sustainable Development and the Need for Mineral Working

6. The Environment White Paper stated that sustainable development "means living on the Earth's income rather than eroding its capital. It means keeping the consumption of renewable natural resources within the limit of their replenishment. It means handing down to successive generations not only man-made wealth such as buildings, roads and railways, but also natural wealth..." In addition it requires a commitment to minimising the depletion of non-renewable resources. This is developed further in the Government's "Sustainable Development Strategy". Therefore:

- **The Government supports the principle of sustainable development and is making it an integral part of its domestic and international policies.**

7. In the context of sustainable development, the process of mineral extraction poses particular difficulties. It is an activity which can never be reversed. Sustainability therefore becomes an issue of whether the man-made wealth created from minerals, both for present and future generations, justifies the consumption of these finite natural resources and the environmental disruption involved. Clearly mineral developments will be more sustainable if proper consideration is given to need and alternative sources and every effort is made, both during and after extraction, to minimise the adverse effects on the overall quality of the environment in the longer term. A sustainable framework for mineral extraction is set out in the "Sustainable Development Strategy" :-

- **To conserve minerals as far as possible, while ensuring an adequate supply to meet the needs of society for minerals.**
- **To minimise production of waste and to encourage efficient use of materials, including appropriate use of high quality materials and recycling of wastes.**
- **To encourage sensitive working practices during minerals extraction and to preserve or enhance the overall quality of the environment once extraction has ceased.**
- **To protect designated areas of critical landscape or nature quality from development, other than in exceptional circumstances where it has been demonstrated that development is in the public interest.**

8. The Environment White Paper indicated that enough land must be found to provide for all our needs - homes, jobs, shops, food, transport, fuel, building materials and recreation. The level of minerals production is a consequence of customer demand in response to these needs and is therefore essentially a matter for market forces. Successive governments have recognised that there should be an adequate and steady supply of minerals available to respond to

demand. The determination of the best means of meeting the demands of the market is not an objective of the planning system: such decisions are best left to the commercial judgement of the minerals industry. Planning decisions should be based on the planning merits of particular proposals in the context of the policies and proposals in the development plan.

9. Reliance on primary minerals to satisfy this demand is subject to re-evaluation as increased use of secondary sources (recycled materials currently disposed of as waste) evolves. However, the contribution from primary minerals will predominate for the foreseeable future. Nevertheless, in accordance with the principles of sustainable development, the Government wishes to reduce the rate of consumption of these finite primary mineral resources by encouraging the use of recycled alternatives, whenever this is practical and economically viable. For example, it may be possible, in some cases, to reduce the demand for construction aggregates by using suitable waste materials as a substitute.

10. Current Government sponsored research⁴ is investigating the problems and opportunities associated with the greater use of recycled materials as alternatives to primary aggregates for construction, including the problem of overspecification. The Government looks to the construction industry to recognise the desirability of using recycled material and institute measures voluntarily to reduce the demand for primary aggregate production. It also proposes to establish a baseline against which increased use of recycled materials can be measured. This will enable a review to be undertaken in due course to assess the contribution from recycled materials. However, such changes in the pattern of aggregate use cannot be brought about either quickly or by means of the planning system alone.

11. The planning system has a key role to play in establishing a framework within which the often competing needs of the economy and the environment can be met. In particular, development plans should aim to safeguard the quality of the natural and built heritage while guiding developers and mineral operators to locations where mineral extraction or recycling is likely to be permitted, subject to current environmental and amenity standards being met. They should set out clearly the policies against which such proposals will be assessed.

12. When developing their framework for mineral working, planning authorities should seek through their policies and decisions:

- **to provide positively for the working of mineral resources to meet society's needs through the identification of preferred areas for mineral extraction;**
- **to safeguard deposits of minerals from permanent development that would prevent or hinder their subsequent extraction;**
- **to protect areas of importance to natural and built heritage from inappropriate mineral development;**
- **to achieve improved operating standards and sensitive working practices during the extraction period, in order to reduce the impact of mineral extraction;**

- to achieve a high standard of restoration and aftercare, and provide for beneficial after-uses when mineral working has ceased;
- to facilitate the recycling and re-use of material in waste tips and construction wastes where this is environmentally acceptable.

locational considerations

Safeguarding Mineral Deposits

13. The location of minerals is determined by geology and it is important to ensure that access to deposits, which may be of commercial interest, is safeguarded. The extent of mineral resources should be understood, not just in terms of quality and location, but also in relation to environmental constraints. Safeguarding does not necessarily indicate acceptance of working. However, deposits considered unacceptable for working under today's technology may be acceptable with future technology. Policy should therefore be based on the following principles:

- **Mineral resources are finite and care must be taken to safeguard those deposits which are or may be of commercial interest against other types of permanent development which would either sterilise them or be a serious hindrance to their extraction.**
- **Other development proposals should be phased wherever possible in order that sufficient opportunities are allowed for mineral extraction.**

Constraints on mineral extraction

14. In general the planning system should seek to facilitate mineral extraction, provided that current environmental and amenity standards are met. However, in certain areas mineral extraction may be inconsistent with other priorities, such as conservation of the natural and built heritage and green belts.

- **The working of mineral resources should be reconciled with the protection of important environmental assets and other interests.**

15. Environmental assessment is an important technique for ensuring that the likely effects of new development are fully understood and taken into account before the development is allowed. Where a proposed mineral working development is likely to have significant effects on the environment, the Town and Country Planning (Environmental Assessment) (Scotland) Regulations 1988 (the EA Regulations) require the potential effects to be systematically evaluated in a formal environmental assessment. Further guidance is set out in SDD Circular 13/1988.

Conservation of the Natural Heritage

16. While recognising the importance of mineral working, the Government is firmly committed to the protection of the environment. In the more fragile and sensitive areas where landscape and nature conservation has international or national status, protection is achieved through a number of designations, which seek to sustain the character and diversity of Scotland's countryside including its wildlife habitats. Individual designations provide protection for different purposes. Proposals for mineral working will therefore have differing potential effects depending on the purpose of the designation as well as the type and scale of mineral working proposed. But, in general, sites for mineral working are less likely to be acceptable in designated areas than in non-designated areas.

International Designations

17. Proposals likely to affect significantly those areas classified or proposed for classification under the EC Directive on the Conservation of Wild Birds (Special Protection Areas, SPAs) or under the EC Directive on Flora, Fauna and Habitats (Special Areas of Conservation, SACs) will be covered by the Town and Country Planning (Habitats) Regulations 1994. As a matter of policy, the Government considers that similar treatment should be afforded to sites designated under the Ramsar Convention 1975 relating to Wetland Sites of International Importance.

Accordingly within these areas:

- **Mineral development will only be allowed in the most exceptional circumstances, and these are only likely to arise where it can be demonstrated conclusively:**
- **that the development will not adversely affect the habitats or species being safeguarded, or,**
- **that there is an overriding national interest in allowing development to take place, and no reasonable alternative.**

National Designations

18. Within national areas of landscape and nature conservation interest, Government policy seeks to protect, wherever possible, the environmental assets represented by the designations. While mineral extraction is not prohibited, development proposals must be reconciled with conservation interests. Accordingly, the Government believes that particular care should be taken in assessing all development proposals located in or affecting such areas; and that the criteria for allowing development to proceed are only likely to be met in exceptional circumstances. Protection is further afforded through the consultation and notification procedures involving Scottish Natural Heritage and the Secretary of State.

19. Environmental designations of national importance include all National Scenic Areas (NSAs), National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs) not classed as SPA or SACs, Environmentally Sensitive Areas (ESAs), Natural Heritage Areas (NHAs) and Regional Parks.

Accordingly, within these areas:

- **Mineral extraction should only be permitted where**
 - **it can be demonstrated that the underlying objectives and overall integrity of the designated area will remain largely unaffected; or**
 - **any adverse effects on the environmental qualities for which the site has been designated are outweighed significantly by the national benefits that could accrue from the mineral extraction.**

20. Consideration of all proposals in such areas should also normally include an evaluation, based on information supplied by the developer, covering:

- the reasons for working the particular mineral resource, including the market requirement for the mineral in question;
- reasonable consideration of the main alternatives from which the same market could be served;
- the potential impact of the development on the national and local economy, including any national benefits that could be realised.

National benefits could include the public interest in securing economic developments of national importance, or employment creation and balance of payments considerations.

21. It is for the developer to explain any special circumstances that may justify an exception to the Government's normal policies to protect the best of Scotland's nationally important natural heritage. The precise nature of the evaluation is a matter

of judgement to be decided between the developer and the planning authority in the light of individual circumstances. The information in support of the evaluation should be proportionate both to the importance of the particular designation and to the nature and scale of the development proposed. An environmental assessment will normally also be required (see paragraph 15 and Annex A).

Conservation of the Built Heritage

22. The Government is committed to the preservation of important features of the nation's built heritage for the benefit of future generations. Policy should be based on the following principle:

- **Regard must be had to the statutory obligations on developers undertaking works likely to affect a scheduled monument, listed building and/or conservation area and their settings.**

The effects of mineral working on features of the built heritage should be minimised and wherever possible avoided. Where works involve the

demolition of a building in a conservation area or a listed building, listed building consent will be required. Proposals affecting a scheduled monument under the Ancient Monuments and Archaeological Areas Act 1979 require the prior written consent of the Secretary of State.

23. Mineral working may damage or destroy structures and remains of archaeological interest, hitherto unrecorded or not afforded the protection of scheduled monument status under the Ancient Monuments and Archaeological Areas Act 1979. In cases where unscheduled monuments are likely to be affected and to take account of the possibility of unrecognised archaeology, the guidance contained in NPPG 5 "Archaeology and Planning" and the advice in the related PAN should be followed. The CBI Code of Practice for Mineral Operators⁵ is also available.

24. The importance and value of historic gardens and designed landscapes⁶ to the built heritage is now recognised. As well as being of interest in their own right, they may provide the setting for listed buildings and/or contribute to the character and significance of conservation areas. Developments likely to affect such areas are subject to consultation with Historic Scotland and Scottish Natural Heritage. Therefore:

- Consideration should be given to the likely impact of mineral workings on historic gardens or designed landscapes and their settings.

Green Belts

25. The purposes of green belts and Government policy is set out in SDD Circular 24/1985. The Secretary of State attaches great importance to the need to preserve and enhance green belts and the need to establish confidence in their permanence. Some green belts are extensive in area and not all parts of them are of the highest landscape quality. Mineral working already takes place in parts of them, although this should not necessarily be seen as a precedent for future working. Accordingly:

- **Mineral working is generally incompatible with green belt objectives unless it can be demonstrated that:**
 - **the development would not be conspicuous; and**
 - **the site can be restored to an appropriate green belt use and standard agreed by the planning authority.**

In addition to meeting these tests, it would also be helpful in the consideration of any proposal for mineral working, if:

- **the working of the mineral and subsequent restoration would result in the removal of dereliction/land instability or lead to drainage improvement; or**
- **involved the removal of minerals that would otherwise be sterilised.**

26. There should be no conspicuous mineral developments which would prejudice the visual amenity of the green belt. Significant weight

should therefore be given to how any proposed mineral working will sit in the landscape. Restoration should be to a high standard and contribute (together with suitable after-uses) to the improvement and "greening" of the green belt. Other relevant considerations will include any positive benefits that may arise in terms of removal of blight and dereliction and improving degraded parts of the green belt, improvement to drainage or, improvement to ground stability or the removal of a mineral resource which would otherwise be sterilised.

27. However, where a mineral working proposal is likely to cause demonstrable harm to a green belt (for example, through its prominence in relation to main communication routes, its impact on good quality environment or its prominence in the landscape), and these impacts cannot be mitigated satisfactorily, then these considerations may outweigh the economic benefits of the proposed development.

Agricultural Land

28. The Government's policy as set out in SDD Circular 18/87 is that, when considering the allocation of land for development and in deciding any application for planning permission affecting agricultural land, the agricultural implications must be considered together with the environmental, cultural and socio-economic aspects. Policy should be based on the following principle:

- **Prime quality land should be protected against permanent development or irreversible damage.**

29. Such land is a national resource and is therefore protected from irreversible development. Mineral deposits may lie beneath both prime quality agricultural land and other categories. The feasibility of restoring land to a high standard, the demand for valuable raw materials for industry, and the contribution which such a development might make to the rural economy, together with the current pressure to reduce agricultural output, may, in appropriate circumstances, offer an opportunity to remove valuable minerals and have the site restored in anticipation of an improvement in the demand for agricultural production.

Other Areas

30. Outwith areas safeguarded by national and international designations, planning authorities may wish to identify, with appropriate justification in their development plans, other environmentally significant areas. These areas may be important locally and, although mineral extraction proposals which fall within them will need to be given careful consideration, the degree of outright protection they will require will not normally be as high as that given to national or international designations. All mineral developments, however, require the most rigorous of controls and environmental standards to apply.

Tourism and Recreation

31. Given the Government's overall policies for the countryside generally, it will be important that mineral extraction does not harm

countryside interests to an unacceptable extent. This applies whether or not a particular area of the countryside enjoys special protection. In many areas of Scotland tourism and recreation are activities that support local economies, which to varying degrees depend on the quality of the environment. Where this is the case, the likely impact of any mineral extraction proposals on such other local economic activity will be a relevant consideration. However, in some cases recreation and tourist facilities can be an acceptable after-use for sites once working has ceased and can benefit from other after-uses such as nature conservation or from environmental improvement schemes.

Proximity to Settlements

32. Proximity of mineral workings to nearby housing, towns or villages may in some circumstances create particular local difficulties. Provided the potential disturbance and impacts can be mitigated satisfactorily, this need not automatically prevent development. In such circumstances, it will be important that the detailed proposals, including access arrangements, take fully into account the implications of people living nearby. Where approval for mineral working is given, regular liaison between the developers and residents could be helpful in some circumstances. Development plans can also assist by setting out the criteria to be adopted in reducing the impacts to a satisfactory level.

operational considerations

Site Conditions

33. At both the application and operational stages, the acceptability of mineral working will depend on the control exercised by the planning authority over certain operational aspects⁷. The nature of control required will vary according to the character of the site, the extraction proposals, adjacent land uses, and the guidance set out in development plans. The highest standard appropriate to the circumstances should always be required. Accordingly:

- **Policies for the control of mineral development should take into account the amenity of local communities and the sensitivity of the locality as set out in development plans. Policies should seek to minimise the impact of mineral extraction on the environment.**

34. The main factors to be considered are visual intrusion, noise, blasting and vibration, dust, pollution of water courses and transport issues⁸. Apart from visual intrusion, these considerations are also covered by other legislation specifically related to pollution control. Planning authorities should not therefore seek to control, through planning measures, matters that are the proper concern of the pollution control authority, except where planning interests can be clearly distinguished. It is intended that these matters should be covered more fully in related Planning Advice Notes to be issued later. A brief description of each is given in the following sections.

Visual Impact

35. Visual disturbance can arise from intrusion in the landscape, the form of site working, creation of overburden mounds during extraction and the presence of plant and mobile machinery. This disturbance cannot always be eliminated, but it can be reduced:

- by locating mineral operations in landscapes where the landform and other features enable operations to be carried out inconspicuously;
- by the optimum design and layout of the operation including the method of working, location of buildings, connection with the transport network, location of storage and disposal of waste material;
- by agreeing a phased extraction programme over the longer term; it may often be found that the appearance of the operation can be enhanced if the obvious place to open a face is not selected, but workings commence well within the site, thus maximising the benefit of undisturbed ground between the operator and the public;
- where appropriate, by tree planting in sufficient mass to provide dense and rapid growth. Where pockets of woodland or forest exist, consideration should be given to retaining these for their screening value and some potential to act as dust filters, although in the latter context their intrinsic amenity and ecological qualities may be reduced;
- by a restoration and aftercare programme agreed to include early restoration of those areas most in public view.

Noise

36. Noise on site, arising from blasting, drilling, crushing, the operation of machines and fixed plant and the transporting of materials, should be controlled so that it does not become a major source of disturbance off site. Unless trees are dense and mature they form little barrier to noise and it is preferable to have a ridge, baffle mound or other solid feature between a mineral operation and nearby settlements.

Dust

37. Dust problems may arise through the handling of overburden and minerals, and the movement of plant and vehicles over worked areas. The severity of the problem will vary according to the type of mineral being extracted, time of year and day, moisture in the soil, temperature, humidity and wind direction. Key measures which can be applied, where appropriate, include surfacing of haulage roads with tarmac or concrete, dampening of haulage roads in dry weather, and ensuring vehicles using public roads undergo wheel washing before leaving the sites and are sheeted. In some cases it may be necessary to take additional preventative measures during periods of high wind.

37A Government sponsored research, Do Particulates from Opencast Coal Mining Impair Children's Respiratory Health?, was published in December 1999. This recommends a framework to guide the assessment of the implications of opencast coal proposals on National Air Quality Standards. The research findings have been endorsed by the Committee on the Medical Effects of Air Pollutants, the panel of independent experts which advises the UK Health Departments on these matters. The research concluded that increases in particle concentrations close to opencast coal sites was not due to the release of coal particles but was more likely caused by earth moving and excavation activities common to all mineral workings. In the circumstances, planning authorities and the industry should, as a minimum, adopt the researchers' assessment framework in drawing up and considering proposals for new surface mineral workings or extensions or modifications to existing sites. In doing so, use should be made of information collected by local authorities in undertaking their responsibilities for Local Air Quality Management. They should also continue to take account of developing good practice.

Watercourses and Groundwater

38. There is a substantial body of legislation in relation to water supply, pollution and land drainage. If they find their way into watercourses or groundwater, suspended solids and acidic drainage, in even small amounts or concentrations, can be harmful to fluvial habitats. The production of some metalliferous minerals, for example gold, may involve processes potentially hazardous to water quality. There is a need to take into account the requirement to protect the quality of groundwater, watercourses and supplies in accordance with UK and EC legislation.

Transportation

39. The transportation of minerals from the extraction site to markets may have significant environmental consequences. The Government's aim is to conserve energy and reduce the emissions of greenhouse gases from transport. Accordingly:

- **New developments should be guided to locations which reduce journeys and distance and thereby contribute to reducing energy consumption and pollution.**

While it is not likely to be feasible to make significant changes in the transport arrangements for existing workings, new workings provide an opportunity for greater account to be taken of the interaction between transport and planning. In appropriate circumstances operators may therefore be able to minimise disturbance by opting for alternatives to road transport. Under the Railway Act 1974, section 8 (Freight Facility) grants may be available in appropriate cases.

40. Rail or sea transport will not always be feasible or economical. Frequently minerals will have to be transported by road, particularly to serve local markets. Planning authorities should guide new developments to locations which reduce journeys and distance. By the same token operators will also wish to demonstrate that they have full regard both to energy efficiency and the environmental effects on routes to be used by lorries.

41. Transportation costs and the location of resources in relation to markets in Scotland, especially for aggregates, suggest that minerals generally will be transported by road, leading in specific areas to an increase in heavy vehicle movements and possibly problems of noise and dirt. The provision of new or improved accesses is a matter to be considered as part of the planning application and subject to planning conditions but while mineral operators can offer to restrict lorries to particular routes, planning conditions cannot control the right of passage over public highways. Where particular problems arise in relation to the use of highways, these may be controlled more appropriately using the powers in the Roads (Scotland) Act 1984 or other statutes. Guidance on the powers of the Roads (Scotland) Act 1984 is given in SDD Circular 38/1984.

Restoration, Aftercare and After-Use

42. Policy should be based on the following principle:

- **Once mineral working has ceased, the land should be made suitable for other uses at the earliest opportunity and this can be facilitated by progressive restoration over the life of the operation.**

An important aim of Government policy is to ensure that land does not become derelict in the first place. There is an ongoing programme of Government sponsored research to address this issue⁹. Mineral working has often, by reason of its nature, scale, duration and location, more impact on the environment than many other forms of development. In some cases the effects may be only temporary (eg opencast coal extraction) but in others (eg hard rock quarries) the effects are more long term. Restoration, aftercare and after-use are important and integral parts of the mineral planning system to ensure that workings do not leave a legacy of dereliction. Land taken for mineral operations should be restored to an acceptable and beneficial after-use as soon as possible after working has ceased. Successful restoration will often depend on the proper stripping and storage of soils separately from other materials, and other appropriate working practices. Wherever possible the working of a site should be phased to enable early restoration of that part of the site where mineral working has ceased. Consideration should also be given to maintaining and, where appropriate, reinstating rights of way.

43. The cost of meeting this requirement and other acceptable environmental standards falls on the industry in line with the "polluter pays" principle. In the case of new mineral developments, the requirement for restoration should be established when planning permission is being considered, taking into account the benefits that can be achieved, including reducing the impact of the development. The principles of restoration should be settled at the time planning permission is granted, although for longer term workings it may be sensible for details to be agreed at a later but clearly defined stage or date. The information should however be sufficiently detailed for a realistic view to be taken of the after-use intended, including phasing of progressive restoration and the final landform and landscape intended.

44. Planning authorities should consider the scope for environmental improvement when preparing development plans and

assessing applications. In some cases the restoration of mineral workings with a relatively short life, such as opencast coal working, may provide an opportunity to bring about environmental improvement, for example by the subsequent restoration of previously derelict sites, earlier than would otherwise have been the case. Environmental benefits may also be obtained through the disposal of waste consistent with policies for the safe disposal of such materials. The provision of open space may be appropriate in other cases.

45. The responsibility for deciding on the intended after-use of a mineral working rests jointly with the applicant, the landowner and the planning authority. Within the framework of national policies there is a wide range of possible options for suitable after-use, including agriculture, amenity and recreation, forestry and nature conservation purposes.

46. Where agriculture or forestry is the proposed after-use, The Scottish Office Agriculture and Fisheries Department (SOAFD) or the Forestry Commission (FC) can provide advice and guidance to planning authorities on the appropriateness of the intended after-use and on suitable aftercare conditions. Depending on the type of "recreation" or "amenity" proposed, in addition to SOAFD and FC, advice may be sought from the Scottish Sports Council, Scottish Natural Heritage, the Scottish Tourist Board and a number of specialist voluntary organisations.

47. Often the mineral sought will be found in association with other minerals and a relevant consideration will be the extent to which the extraction of the primary mineral from a site would facilitate the efficient and economic working of other secondary minerals on the same site. This can avoid both the subsequent necessity for reworking the site and wasteful restoration and, in doing so, minimise the environmental disturbance arising from duplicate working on the same site. Where this is not possible restoration should have regard to the potential for working at some future date.

additional policy guidelines for individual minerals

48. The following paragraphs provide additional guidance on some of the main minerals or groups of minerals which planning authorities in Scotland are likely to have to consider and to which they should have regard when preparing development plans and considering planning applications. Minerals not referred to in this section are subject to the general principles above.

Aggregate Minerals

49. The demand for aggregates arises from construction and development activity such as building, civil engineering and roads projects. Total aggregate production in Scotland in 1992/10 was 33.6 million tonnes, of which 21.9 million tonnes was crushed rock and 11.7 million tonnes sand and gravel. Eighty nine per cent of Scottish aggregate production is used within

Scotland, 78 per cent remaining within the region of origin. Estimated reserves with planning permission of crushed rock and sand and gravel were 754 million tonnes and 122 million tonnes respectively, equivalent to 42 years' and 13 years' production at 1989 levels of production¹¹. Such figures however should be treated with caution especially with respect to quality of material and proximity to the main market areas.

50. At present the main sources of aggregates are land-won sand and gravel and crushed rock. Until such time as renewables and recycling reduces the need for primary aggregates, it is essential to the economic health of the country that the construction industry is provided with an adequate and steady supply of the minerals it needs. In Scotland, for the foreseeable future, construction aggregate is likely to come primarily from traditional land-won sources. Since road access and related transport costs require working in relatively close proximity to the main urban markets, workings more than 30 miles from the main markets will not generally be attractive to the industry and will conflict with Government objectives for reducing energy consumption. In considering the release of land for aggregates working, the lead times which are necessary before any mineral extraction can become fully productive should also be taken into account.

51. Planning authorities should also aim to maintain a landbank - a stock of planning permissions for the winning and working of minerals. This enables the aggregates supply industry to respond speedily to increases in demand. The period of the landbank reflects the lead time that may be involved in obtaining planning permission and bringing a site into full production.

- **Planning authorities should provide for an adequate and steady supply of aggregate for the construction industries, with a landbank in permitted reserves equivalent to at least 10 years' extraction at all times for an appropriate local market area.**
- **In several instances market areas overlap local authority boundaries and joint working between planning authorities will be necessary.**

Secondary Aggregate Minerals

52. There is only limited use at present of mineral and construction wastes as alternatives to primary aggregates. Waste materials arise from a number of sources, much as a legacy of past mining and other industrial activity (eg colliery and shale bings, blast-furnace and steel slags), others as a result of current activity (eg pulverised fuel ash from power stations, demolition and construction wastes and road asphalt plantings, much of which is currently disposed of in landfill sites).

53. The use of suitable mineral and construction wastes as aggregates or in other building materials is sound environmental practice and should be encouraged and facilitated wherever practicable. Increased utilisation of such wastes, while not foreseen as a major source of supply, could reduce the demand for naturally occurring aggregates and at the same time remove existing dereliction and contribute towards sustainable development. However, it should be noted that reworking mineral wastes and recycling demolition and construction wastes may raise many of the problems associated with traditional mineral workings.

- **Planning policies should provide for the reworking of mineral waste deposits and the recycling of demolition and**

construction wastes. The latter may require the identification of areas for their storage and processing.

Marine Dredged Minerals

54. The use of marine dredged sand and gravel has not contributed to the supply of aggregates in Scotland to date but the potential to do so exists. Marine dredging can reduce the pressure to work land of environmental value and can often enable aggregates to be landed at wharves close to the point of demand. Such extraction is not subject to control under Town and Country Planning legislation. Proposals are subject to the "government view" procedure which is co-ordinated by The Scottish Office Environment Department. If this view is favourable, licences are granted by the Crown Estate. Dredging of sand and gravel may be acceptable, provided it can be done without unacceptable damage to sea fisheries and the marine environment or the stability of the coastline. The operation of the "government view procedure" is currently under review.

Coastal Superquarries

55. Coastal superquarries can be defined broadly as those capable of producing 5 million tonnes or more of crushed aggregate per annum (mtpa) with reserves of at least 150 million tonnes, where the transport of the aggregate to the market is by sea. Although only one exists in the UK at present, at Glensanda, Loch Linnhe (currently operating at about 5 mtpa but with consent to increase to 15 mtpa), such developments could, over time, have the potential to contribute a greater proportion of the UK's overall supply of construction aggregate, with the possibility of additional output for export outwith the UK. A further proposal at Lingarabay, Harris, is the subject of a current planning application.

56. The concept of superquarries was first suggested in 1976-77^{12,13}, and subsequent research has examined this concept in more detail¹⁴. Based on a theoretical output of 5 mtpa for each, research undertaken in 1992¹⁵ speculated that there might be scope to develop between 15 and 20 coastal quarries in Western Europe. It concluded that most of these could be in Norway but with a smaller number in Spain and around 5 in Scotland.

57. In terms of the UK market, such developments would mainly contribute to the supply of aggregates to the net importing regions of England, particularly the South East. Because of the nature of such operations, it is not anticipated that they would contribute to the Scottish domestic aggregate market, although in certain conditions, for example temporary lack of markets elsewhere, they could. However the extent to which market demand is likely to match that potential is far from clear. On the one hand, wider European needs could increase demand for exported Scottish minerals; on the other hand, developments elsewhere, such as in Norway and Spain, could significantly diminish such demand in Scotland, particularly if they were able to meet the needs of the English market. Similar uncertainties arise because of the considerable costs and long lead times which industry is likely to face in bringing such quarries on stream.

58. In addition, the identification of potential locations in Government sponsored publications and research¹²⁻¹⁶ has been mainly

on technical and geological grounds. It does not therefore imply a predisposition on the part of Government to favour such developments in those areas in the absence of detailed complementary assessment of planning and environmental matters.

59. In practice, proposals likely to come forward in Scotland will be largely dependent on market conditions, the extent to which industry is willing to undertake such investment and the identification of acceptable sites. It is therefore unlikely that superquarries will develop in significant numbers over the next 15 years, although that will not preclude the possibility of proposals being brought forward. Certainly, as far as the English market is concerned, it appears that traditional sources are likely to continue to provide most of the supply well into the next century.

60. Carefully sited large coastal quarries can offer a number of significant attractions:

- In remote rural areas, they can contribute significantly to the local economy, particularly in terms of direct and indirect employment. Given the size and likely life of the quarries, these local employment opportunities could prove important, stretching over several generations.
- The establishment of the quarry and associated shipping facilities may enable other related and non-related activities to take place.
- The combination of coastal quarrying and good marine access lends itself to sea transport and the potential of economic benefits to the UK from associated exports.
- The impact on the surrounding area of a large scale quarry can be substantially less in relation to the tonnage of material gained than that of a number of smaller operations of equivalent output.
- The remoteness of the rural areas concerned, in itself, means that fewer people are likely to be directly affected.
- Sea transport avoids impact on the surrounding landward areas and associated transport infrastructure.
- The consistency of certain rock types, and in particular granites, allows for deeper working, yields high quality aggregate and results in very low levels of associated wastage.

61. These attractions must, however, be weighed against a number of potentially significant disadvantages:

- Developments in the wrong locations or inadequately controlled could impact significantly on the natural and built heritage of Scotland; not only in relation to environmental designations of national and international importance, but generally.
- Conflict may arise with other important economic activities such as tourism and fishing, for both the national and local economy.
- They may interfere with the legitimate interests of the local community, whether in terms of more traditional patterns of work or disrupted lifestyles and social cohesion.
- The cumulative impact of more than one quarry in a particular area is likely to present considerable difficulties.

62. Given their potential size and scale, superquarries are likely to have significant impacts on their locations, where development does take place. In recognising the complex economic, environmental and social issues involved, the Government believes that a cautious approach is required to the further development of coastal superquarries. The Government's strategy is to provide a national framework for any such developments, enforced through normal planning procedures and development control, in conjunction with broad locational guidance, an upper limit on superquarry numbers, and periodic reviews of policy. Under section 18A of the 1972 Act, as inserted by section 58 of the Planning and Compensation Act 1991, development plans now also provide an increasingly effective medium for enforcing such an approach.

63. Depending on the individual circumstances, further superquarry proposals could prove acceptable, but in the period to 2009 the Government believes that such developments should be strictly limited, and controlled and monitored with particular care. Thereafter, the scope for further developments, in the longer term, will be dependent on the way in which the market for superquarries develops and on a detailed evaluation of any initial developments.

64. On the basis of previous geological and technical research, the Government believes that it would be reasonable to constrain superquarry numbers (including Glensanda) to 4 in the period up to 2009. This constitutes a limit, rather than a target conferring any presumption in favour of proposals up to that number. The Government also believes that such developments should be geographically dispersed and that it is reasonable and beneficial to stipulate search areas accordingly.

65. The Government believes that this approach will enable the Scottish coastline, valued both for its natural heritage and scenery, to continue to be safeguarded, together with the associated tourist benefits. At the same time, it provides opportunities for localised economic benefits to be dispersed throughout a number of remote rural areas where development is judged to be environmentally acceptable.

66. Building on the information already available, development plans have a key role in guiding the location of additional coastal

superquarries. The criteria for the selection of these locations should therefore include:

- suitable rock and sheltered marine access;
- minimal impact on natural and built heritage designations;
- minimal impact on tourist, fishing and other local interests;
- contained, localised visual impact of the workings leading to a restricted impact on the wider landscape;
- potential benefits to local communities;
- dispersed locational pattern throughout Scotland.

67. Given the existing development at Glensanda, the Government's preference for a dispersed geographical pattern, and the other criteria identified in paragraphs 64 and 66, indicate that suitable sites for superquarries may be found on the north coast of Highland Region, in the Shetland Islands and in the Western Isles. Further investigation should therefore be concentrated in these search areas. Planning authorities should consider suitable locations and, where appropriate, their incorporation in development plans. However, such searches will only be able to consider the environmental implications in broad terms. Development plan policies should therefore indicate that the acceptability or otherwise of a particular proposal will depend on the individual circumstances of the proposal; and that decisions can only be taken following the preparation of an environmental assessment by the developer, which addresses the significant environmental effects with respect to a specific proposal at a specific site.

68. Where proposals fall outwith the preferred areas, but are in locations identified in development plans approved by the Secretary of State as alternatives to the preferred search areas, then an environmental assessment in support of a planning application should, among other matters, address the issues identified in paragraph 66 above. Other proposals falling outwith the search areas and not part of an approved development plan will require particular justification given the Government's overall cautious approach. They are likely to be considered less favourably than those falling within. In addition to the environmental assessment, information covering the matters set out in paragraph 20 should also be provided, even where such proposals are outwith national designations. This will allow the developer to explain any special circumstances that may justify considering an exception to the Government's normal policy on coastal superquarries.

69. Notwithstanding the assumption that coastal superquarry developments are likely to involve extraction of at least 5 mtpa, it is possible that proposals below that figure may raise many of the related issues. In recognising the sensitivities associated with coastal quarrying, and in addition to any existing directions requiring notification of planning applications, the Secretary of State therefore wishes to be notified of all coastal quarry proposals with a planned

extraction of 2 million tonnes per annum or more which the planning authority is minded to approve.

70. In summary, the development of a limited number of large scale quarries at coastal and sea loch locations has the potential to contribute to meeting demands for aggregate outwith Scotland; to contribute to the local Scottish economy and UK balance of payments; and to assist in sustaining communities in remoter rural areas where opportunities for economic development are limited. Particular attention must, however, be given to the environmental implications and concerns arising from the development. Accordingly:

- In the light of the demand for aggregates from outwith Scotland, the Government supports in principle the development of up to 4 coastal exporting superquarries in Scotland, provided environmental and socio-economic considerations are fully addressed.
- Highland Regional Council, Shetland Island Council and Western Isles Council should, within the search areas identified in paragraph 67, consider identifying opportunities for coastal quarries without significant detrimental environmental or socio-economic effects. Preferred locations should be included in Structure Plans and specific sites in Local Plans.
- Planning applications for coastal quarries of 2 mtpa or more, which the planning authority is minded to approve, should be notified to the Secretary of State.
- The nature and extent of any such developments in Scotland should be controlled and monitored with particular care. Each development approved should be subject to an annual environmental audit prepared by the developer, to a format set by the local authority, and agreed by Central Government, and copied to both.

The policy outlined above will be reviewed in the light of any future developments.

Non-aggregate Construction Minerals

71. Scotland also contains a number of non-aggregate construction minerals (eg limestone for cement, brick clay, dimension stone and slate). The opportunities to work these will depend on the combination of geological, environmental and economic factors.

72. Dimension stone is used for new buildings, architectural cladding and the restoration of historic buildings. In some cases, it is quarried from geological locations that are very restricted in occurrence. Working and processing, often intermittent and over long periods, may involve smaller acreage and lower production rates than other mineral operations.

73. Limestone for cement-making purposes is limited and, apart from the current workings at Dunbar, there is only one alternative source in Scotland, at Beith. This is currently safeguarded through the Strathclyde Structure Plan.

- The limestone resource at Beith should continue to be safeguarded against permanent development in order to meet the longer term need for cement making purposes.

Coal

74. Deep mined coal production has reduced significantly from 8.7 million tonnes in 1977 to 3.2 million tonnes in 1992 while opencast coal production has increased progressively from 2.4 million tonnes in 1977 to 5.0 million tonnes in 1992.

75. Coal remains an important energy mineral in Scotland and while overall production has declined, particularly from deep mining, there are important markets in the short/medium term from industrial and other users. The reserves suitable for economic working by deep mining methods are now considerably reduced but there remain large resources of shallow coal deposits capable of being worked by opencast methods in the Central Belt, and the Ayrshire Coalfield extending into Dumfries and Galloway.

- **The level of deep mined and opencast coal output will be determined by market forces and production should be facilitated only where it can be undertaken in an environmentally acceptable way.**
- **The Government's approach to the continued mining of coal is based on the premise that the same environmental standards should apply to the coal industry as to other mineral operators and developers.**

76. Opencast coal production is economic and can compete in the market place with alternative fuels. Such mining will always have an impact on a locality and appropriate environmental controls are vital to the acceptability of opencast coal working. There may, however, be cases where the impact would be such that development should not be permitted.

77. Opencast mining is a temporary use of land which often lasts no more than a few years. There is now considerable expertise and experience in restoring worked sites to a high standard which can produce landscape improvements, particularly in the clearance of derelict sites or despoiled land, in terms of consolidation of sites suitable for permanent development, as well as other improvements to the quality of the site. There may also be economic benefits, such as the low resource cost of the coal; the grade and quality of coal produced; contribution to local employment; as well as other benefits, such as the avoidance of sterilisation of reserves or the extraction of other minerals from the site in the same operation.

78. These factors will be relevant when planning authorities are making a judgement on individual planning applications. However, it will be necessary to ensure that the national interest in developing the resource is reconciled with the need to protect existing communities and the environment. The applicant will therefore need to show how any detrimental environmental effects can be mitigated.

- **Planning authorities, through discussions with opencast coal producers on their future programmes, should**

identify, in development plans, preferred areas for opencast coal extraction.

Oil and Gas

79. There is continuing commercial interest in exploration for and development of onshore oil and gas. Relevant national policy considerations are set out in SDD Circular 12/86. Government policy is to encourage exploration for, and production of, the country's own oil and gas reserves. Home produced oil and gas have important contributions to make to the country's balance of payments. There is also an emerging interest in coal bed methane extraction.

- **The planning system should facilitate developments in support of the economic extraction of onshore oil and gas reserves consistent with good oil field practice and with due regard to environmental considerations.**

Peat

80. Domestic peat cutting has been traditional in many areas of Scotland for a long time. Commercial peat cutting is essentially different in nature and scale and presents particular environmental and developmental concerns. Peat is cut commercially, principally for horticultural uses, but also for fuel and in whisky making. Workings are to be found in most areas of Scotland, with significant concentrations in West Central Scotland, Dumfries and Galloway and the Highlands.

81. Unlike traditional hand cutting for domestic use, modern commercial peat extraction is large scale and mechanised and can present a significant conflict with nature conservation and archaeological interests. Under the EC Habitats Directive, active raised and blanket bogs are classed as "priority habitats", which means that a selection of pristine examples are likely to be designated as Special Areas of Conservation (SACs). Sites thus designated will not normally be acceptable for development, except in exceptional circumstances (see paragraph 17). As the extent and location of peat bog SACs are not yet known, planning authorities should consult SNH before granting or extending permission for commercial extraction.

82. At the same time, peat extraction represents an important source of rural jobs, and so planning authorities should begin to identify in their development plans, in consultation with SNH and HS, those peat bogs of low conservation/archaeological value which might be suitable for future extraction. Combined with designation under the EC Habitats Directive, this identification of extraction sites, will enable the peat industry and conservation interests to see clearly which areas have been set aside for habitat conservation and which are suitable for development.

83. The Peat Producers Association (PPA) have produced a code of practice to ensure that the conservation interest in peat bogs is protected; however, this applies only to operators within the PPA. The government is currently reviewing the policy on peat extraction and Scottish Natural Heritage is in the process of producing a Scottish Peatlands Inventory. Meanwhile:

- **Planning authorities should consult Scottish Natural Heritage and Historic Scotland on all proposals for the**

commercial extraction of peat, irrespective of existing designations, for their respective nature conservation and archaeological interest.

- **Planning authorities should identify in their development plans, in consultation with Scottish Natural Heritage and Historic Scotland, those areas of low conservation/archaeological interest which might be suitable for future development.**

Metalliferous and other Specialised Minerals

84. Scotland contains a wide range of metalliferous minerals, some of which are currently being worked. In other cases the private sector is establishing whether, in the light of world trends, there are reserves which at some future date can be worked economically. Metalliferous minerals are scattered widely in the remote rural areas, with a concentration in the Central Highlands extending into Argyll and Bute, often in areas of high landscape value and nature conservation interest.

85. Metalliferous mining shares most of the characteristics associated with mineral extraction generally. However there are some characteristics typically associated with metalliferous mineral deposits. They are usually found in the remoter rural areas often valued for the landscape and nature conservation importance and in low concentrations, thus giving a high proportion of extraction and processing wastes which may have potential to cause localised heavy metal pollution and other problems. In balancing the economic need for such metalliferous minerals against environmental concerns, particular attention should therefore be paid to pollution control aspects. The Scottish Office has published research¹⁷ into the environmental consequences of non-ferrous metalliferous mineral extraction and processing.

86. There are other minerals worked in various parts of the country, such as talc, industrial sands, clays and shale and fireclays. Some are worked singly, others such as clays are frequently worked in association with coal. In several cases economic resources occur in only a very limited number of localities (eg talc and industrial sands).

87. Although the UK has to rely on imports for many of these minerals, indigenous resources are not insignificant. Some metalliferous minerals give rise to strategic and economic considerations both nationally and internationally, for example barytes, of importance to the North Sea oil industry. The Department of Trade and Industry will provide information on the "national significance" of such minerals. The British Geological Survey and the minerals industry have undertaken extensive research to identify other areas with potential for development. The areas with potential are mainly found in remoter areas valued for their landscape quality and scenery.

- **Planning authorities should safeguard resources of metalliferous and other specialised minerals against permanent development and should provide for their working, subject to the principles set out earlier in this guideline.**

action required

88. The continued working of minerals should be within a framework, provided by national policy and development plans, which seeks to accommodate the objectives of both economic development and conservation. To emphasise the importance of the development plan system, section 18A of the 1972 Act, as inserted by section 58 of the Planning and Compensation Act 1991, redefines the status to be accorded to development plans in making any determination under planning legislation. This provision adds weight to the relevance of development plans for reaching decisions on all planning applications and appeals. Accordingly, it will be increasingly important that plans incorporate relevant and robust policies for all types of development likely to arise within the plan area. Development plans should therefore be reviewed in order to provide an up to date and relevant framework for informed and sensitive decision-making on individual applications, with regard to the following guidance.

Structure Plans

89. Structure plans should include policies which express the planning authorities' strategy for mineral working. This strategy should recognise that national and local requirements for minerals need to be met and provide for their working in a positive way. Mineral working cannot simply be dismissed as an unwelcome environmental intrusion and nuisance. Due weight must be given to the need for the resources, contributions to local employment and the wider economic benefits.

- **It should be recognised that mineral working is an important economic activity in its own right albeit with significant environmental constraints.**

90. The reasoned justification for the minerals policies in the plan should indicate how these policies relate to other structure plan policies. Policies for minerals should take fully into account nationally and internationally important environmental and socio-economic factors set out in this NPPG in addition to any aspects of local significance that may be included.

91. With regard to the strategic aspects of settlement policy in the more sensitive rural areas and locations in close proximity to existing built-up areas, policies should set out the criteria to be adopted in restricting development or in reducing the impacts to a satisfactory level. Policies which rule out all forms of mineral working will not normally be appropriate. Where environmental factors suggest that mineral working is likely to cause insuperable difficulties, the policy should identify the nationally or internationally important resources or environmental feature to be safeguarded against inappropriate development.

92. Structure plan policies for mineral working should:

- safeguard mineral deposits from development which would inhibit their subsequent extraction;

- define preferred areas for mineral working, in relation to other strategic priorities and subject to detailed evaluation in local plans or individual applications;
- define areas where, because of environmental and other considerations, proposals to work minerals are likely to prove difficult to reconcile with other policy considerations;
- set the framework for local plans including priorities for development control.

Local Plans

93. Where planning authorities consider that the policies and proposals for mineral development need detailed expression or application to specific sites in the light of the mineral resources in a particular area, local plans should be reviewed and mineral policies incorporated dealing with a comprehensive range of matters. This should include the relationship to national and structure plan policies, as well as other policies and proposals within the local plan. In appropriate circumstances they should identify sites for safeguarding and future working (including currently approved sites). Where this is not feasible, more broadly defined areas of search should be set out which provide a guide to the industry as to the broad locations or criteria which indicate the circumstances where extraction might be permitted.

94. Local plans should also include policies to ensure, at the stage when planning permission is granted, that the land from which minerals have been extracted or on to which mineral wastes have been deposited, is restored to facilitate a beneficial after-use. The preferred types of reclamation and after-use will depend on the characteristics of the mineral deposit, nature of the excavation and availability of fill material, as well as the general characteristics and planning policies for the area.

95. Authorities may also wish to include policies in their plans on the siting of ancillary operations such as the processing of excavated materials. These operations can have a significant local environmental impact, for example in terms of visual intrusion and noise, but there may be operational reasons why the ancillary activities should take place close to the site where the mineral is worked.

96. Local plans should, where appropriate, include policies and identify areas which:

- **safeguard mineral deposits from development which would inhibit their subsequent working;**
- **consider, where appropriate, rephasing other development to enable mineral working to take place;**
- **indicate sites, or define areas of search, where planning authorities would favour mineral working;**
- **indicate sites or areas where other considerations are likely to militate against mineral working;**

- **guide developers on the amelioration of significant environmental effects;**
- **encourage the removal of all minerals in a single operation from any site where this is economically feasible;**
- **provide for the reclamation of sites to beneficial after-use;**
- **provide an explicit development control framework;**
- **provide for regular monitoring and the preparation of environmental audits;**
- **provide for the re-use of materials in waste tips and construction wastes.**

97. Local plans should provide the framework for development control by specifying the criteria against which individual applications for planning permission will be determined. These would include:

- impact of extraction and processing and the implications for pollution, employment, agriculture, nature conservation, landscape, cultural heritage and built up areas;
- location with respect to other workings in the vicinity;
- restoration, aftercare and after-use requirements and
- the use of relevant and enforceable conditions and where appropriate, section 50 agreements.

98. Departmental advice has been that planning authorities should concentrate their local plan efforts on the preparation and adoption of comprehensive local plans. Where this has been achieved, it may be appropriate now to consider the preparation of minerals subject plans for areas of significant mineral resources.

Development Control

99. Development control provides a positive instrument by which the conflicting claims on land for mineral working and other surface uses can be examined and reconciled to the fullest possible extent. Environmental assessment enables mineral extraction proposals, likely to have a significant effect on the environment, to be examined in detail. In seeking to reconcile mineral working with other development, as well as environmental and conservation interests, the following factors are particularly relevant when assessing individual applications for planning permission. They should be addressed, where appropriate, in the environmental assessment and conditions attached to planning permissions:

- methods of working,
- hours of working,
- fit in the landscape,
- transportation,
- potential pollution,
- restoration, aftercare and after-use.

Planning authorities will need to make a balanced judgement on each application taking into account development plan policies, the applicant's case for the proposed development, the environmental implications of carrying it out and other material considerations.

100. Where there are sound planning objections to a particular proposal, the applicant will need to show how these can be overcome or how any detrimental environmental effects can be mitigated, where appropriate advancing any material arguments which might outweigh objections to the proposed development eg environmental benefits such as the clearance of dereliction or the improvement to the stability of the site. The greater these benefits are the stronger the environmental objections would need to be to deny permission. For its part the minerals industry will need to demonstrate that it has considered these potential effects when preparing planning applications.

101. When a planning authority decides that a formal environmental assessment is not warranted, because the project will not give rise to significant environmental effects, it is still open to them to use their powers under article 13 of the General Development Procedure Order to request environmental information. In such circumstances, the list of topics included in Schedule 3 to the EA Regulations may provide a useful guide (see Annex A).

102. Where a planning authority propose to grant planning permission for a mineral working application that raises specific issues of national importance (eg proposals which would affect SSSIs), they may be required to notify the Secretary of State who may call-in the application for his own determination. The circumstances requiring such notification are summarised in Annex B to this NPPG.

Review of Mining Sites

103. Section 251A of the 1972 Act places on planning authorities a general duty to review the mining sites within their area¹⁸. Where the planning authority consider that revised operating or restoration conditions are required, they may modify or revoke planning permissions. The planning authority may also make orders requiring the discontinuance of a use of land, prohibiting the resumption of mineral working when it has ceased, and suspending mineral working. These powers have not been used for a variety of reasons. The Government is currently reviewing the operation of this aspect of the Act.

Environmental Monitoring

104. It is a well established technique within the planning system to monitor the impacts of development on the environment, particularly where the latter is sensitive to change. Environmental management is also an integral part of environmental codes being adopted by many sectors of industry in recognition of the public concern for better safeguards for the environment as a whole¹⁹.

When granting or renewing planning permissions, planning authorities should provide for:

- **regular monitoring and the preparation of environmental audits by the operator, the content and frequency of which should be specified by the planning authority.**

The audit results should be discussed with the planning authority and where appropriate agreement reached on any remedial measures required to be taken by the mineral operator in order to safeguard the environment of the site and the surrounding area.

notes

105. This NPPG replaces the National Planning Guideline, "Aggregate Working" (published in 1977) and the Land Use Summary Sheet No. 8 "Aggregate Working", which are now withdrawn. It also supersedes the planning guidance in the National Planning Guideline, "Priorities for Development Planning (paras 42-43 on aggregate working) (published in 1981), and the guidance in SDD Circular 4/1984 (Opencast Coal) which is now cancelled.

106. Enquiries about the content of this guideline should be addressed to Brian Spiers (031-244-4248). Further copies and a list of current NPPGs and planning circulars may be obtained from Room 6/84, New St Andrew's House, Edinburgh EH1 3TG (031-244-4082).

Advice on good practice is available in Planning Advice Notes from Room 5/87, New St Andrew's House (031-244-4219).

annex A

The Environmental Assessment (Scotland) Regulations 1988: Schedule 3

Environmental Statements

1. An environmental statement comprises a document or series of documents prepared by the applicant providing, for the purpose of taking into consideration environmental information in respect of a proposed development, the information specified in paragraph 2 of the Regulations (referred to in this Schedule as "the specified information").
2. The specified information is:
 - a. a description of the proposed development, comprising information about the site and the design and size or scale of the proposed development;
 - b. the data necessary to identify and assess the main effects which that development is likely to have on the environment;
 - c. a description of the likely significant effects, direct and indirect, on the environment of the proposed development, explained by reference to its possible impact on:
 - A. human beings;
 - B. flora;
 - C. fauna;
 - D. soil;
 - E. water;
 - F. air;
 - G. climate;
 - H. the landscape;
 - I. the inter-action between any of the foregoing;
 - J. material assets;
 - K. the cultural heritage.
 - d. where significant adverse effects are identified with respect to any of the foregoing, a description of the measures envisaged in order to avoid, reduce or remedy those effects; and

- e. a summary in non-technical language of the information specified above.
3. An environmental statement may include, by way of explanation or amplification of any specified information, further information on any of the following matters:
 - a. the physical characteristics of the proposed development, and the land-use requirements during the construction and operational phases;
 - b. the main characteristics of any production processes proposed, including the nature and quality of the materials to be used;
 - c. the estimated type and quantity of expected residues and emissions (including pollutants of water, air or soil, noise, vibration, light, heat and radiation) resulting from the proposed development when in operation;
 - d. (in outline) the main alternatives if any studied by the applicant, appellant or authority and an indication of the main reasons for their choice, taking into account the environmental effects;
 - e. the likely significant direct and indirect effects on the environment of the proposed development which may result from:
 - i. the use of natural resources;
 - ii. the emission of pollutants, the creation of nuisances, and the elimination of waste;
 - f. the foregoing methods used to assess any effects on the environment about which information is given under subparagraph e. ; and
 - g. any difficulties such as technical deficiencies or lack of know-how, encountered in compiling any specified information. In paragraph e. "effects" includes secondary, cumulative, short, medium and long-term, permanent, temporary, positive and negative effects.
4. Where further information is included in an environmental statement pursuant to paragraph 3, a non-technical summary of that information shall also be provided.

annex B

Notification of Planning Applications to the Secretary of State

1. SDD Circular 29/1988 sets out the circumstances in which planning applications should be notified to the Secretary of State. Planning applications for mineral working do not in themselves automatically raise notifiable issues, but in the following circumstances mineral planning applications should be notified once the planning authority has decided to grant planning permission:

1.1 developments involving use of 2 hectares or more of prime quality agricultural land (class 1, 2 or 3.1 Land Capability Classification, Macaulay Land Use Research Institute) where the development would be contrary to a local plan which has been adopted or no local plan has been adopted or approved, or where an officer of DAFS (now SOAFD) has been consulted and advised against granting permission, or no such officer has been consulted.

1.2 developments affecting a Site of Special Scientific Interest which has been notified to the planning authority by the NCC (now SNH) as a site of national or international importance and where SNH had advised against granting of planning permission.

1.3 developments affecting sites reserved for high technology activities, large scale industry or petrochemical development or in the vicinity of a major hazard.

1.4 developments affecting trunk roads and special roads where the Secretary of State has advised against granting of planning permission or has recommended conditions which the planning authority do not propose to attach to the planning permission.

1.5 developments contrary to approved structure and local plans, which the planning authority consider to be significant departures.

2. SDD Circular 20/80, as amended by 9/87, sets out the arrangements for controlling developments in National Scenic Areas. Amongst the categories of development in which the Secretary of State can intervene are:

2.1 all non-residential developments (including mineral extraction) of more than 0.5 hectares where the Countryside Commission for Scotland (now SNH) have advised against granting of planning permission and the planning authority propose to give planning permission against SNH advice.

3. SOEnD is in the process of amending and consolidating the various notification directions. In the meantime, an amendment to the 1988 Direction has now been made to cover coastal quarries capable

of achieving a production output of 2 million tonnes or more per annum, The Town and Country Planning (Notification of Applications) (Scotland) Amendment Direction 1994. (See paragraphs 69 and 70 of NPPG 4.)

references

1. "Minerals" are defined to include "all substances of a kind ordinarily worked for removal by the underground or surface working" (Section 275 of the Town and Country Planning (Scotland) Act 1972).
2. "The Natural Heritage" is defined to include the flora and fauna of Scotland, its geological and physiographic features, its natural beauty and amenity (SOEnD Circular 4/1993).
3. "The Built Heritage" is defined as ancient monuments and archaeological sites and landscapes; historic buildings; parks and gardens; and designed landscapes. (Historic Scotland: Annual Report 1992-93).
4. Government sponsored research published or in preparation:
 - Aggregates in Construction - current practice, scope for substitution and intensity of use (in preparation)
 - High Specification Aggregates for Road Surfacing Materials. Travers Morgan 1993.
 - Appraisal of Specifications for Aggregates/Bulk Construction Materials (in preparation)
 - Recycling of Demolition and Construction Wastes in the UK (in preparation)
 - Occurrence and Utilisation of Mineral and Construction Wastes. HMSO 1991
 - Efficient use of Aggregate and Bulk Construction Materials. BRE 1993.
5. Archaeological Investigations Code of Practice for Mineral Operators in Scotland. CBI 1993.
6. "An Inventory of Gardens and Designed Landscapes in Scotland". A report by Land Use Consultants to Countryside Commission for Scotland and Historic Buildings and Monuments Directorate, SDD, July 1987.
7. Environmental Effects of Surface Mineral Workings. HMSO 1992.
8. Government sponsored research has been published, is currently under way or is proposed on the following:
 - Environmental costs/benefits of aggregate extraction (proposed)
 - Hydrogeology and Mineral Workings (proposed)
 - Environmental effects of Blasting at Surface Mineral Workings (in preparation)

- Environmental effects of Dust from Surface Mineral Workings (in preparation)
- The effects of Traffic Associated with Mineral Working Sites (proposed)

Visual impact of Surface Mineral Workings (proposed)

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