Guidance

Minerals

Guidance on the planning for mineral extraction in plan making and the application process.

From:

Department for Levelling Up, Housing and Communities and **Ministry of Housing, Communities & Local Government**

Published

17 October 2014

Contents

Where plans are being prepared under the transitional arrangements set out in Annex 1 to the revised National Planning Policy Framework, the policies in the previous version of the framework published in 2012 will continue to apply, as will any previous guidance which has been superseded since the new framework was published in July 2018. If you'd like an email alert when changes are made to planning guidance please subscribe.

Minerals overview

What are mineral resources and why is planning permission required?

Mineral resources are defined as natural concentrations of minerals or, in the case of aggregates, bodies of rock that are, or may become, of potential economic interest due to their inherent properties. They make an essential contribution to the country's prosperity and quality of life. Details of existing minerals, their location, and uses can be found through Mineral planning factsheets produced by the British Geological Survey. Planning for the supply of minerals has a number of special characteristics that are not present in other development:

- minerals can only be worked (ie extracted) where they naturally occur, so location options for the economically viable and environmentally acceptable extraction of minerals may be limited. This means that it is necessary to consider protecting minerals from non-minerals development and has implications for the preparation of minerals plans and approving non-mineral development in defined mineral safeguarding areas;
- working is a temporary use of land, although it often takes place over a long period of time;
- working may have adverse and positive environmental effects, but some adverse effects can be effectively mitigated;
- since extraction of minerals is a continuous process of development, there is a requirement for routine monitoring, and if necessary, enforcement to secure compliance with conditions that are necessary to mitigate impacts of minerals working operations; and
- following working, land should be restored to make it suitable for beneficial after-use.

Since some minerals permissions last for many years, there may be a need to carry out periodic reviews of the planning conditions attached to that permission to help ensure that the sites operate to continuously high working and environmental standards. Section 97 of Part II of Schedule 5 and Schedule 9 to the Town and Country Planning Act 1990 establish a range of orders for mineral planning authorities to control minerals development.

The mineral planning authority is the county council (in 2-tier parts of the country), the unitary authority, or the national park authority.

Minerals extraction may only take place if the operator has obtained both planning permission and any other permits and approvals. These include permits from bodies such as the Environment Agency, and licenses from Natural England and, in relation to coal resources, the Coal Authority.

Paragraph: 001 Reference ID: 27-001-20140306

Revision date: 06 03 2014

Minerals safeguarding

What is the purpose of safeguarding mineral resources?

Since minerals are a non-renewable resource, minerals safeguarding is the process of ensuring that non-minerals development does not needlessly prevent the future extraction of mineral resources, of local and national importance.

Paragraph: 002 Reference ID: 27-002-20140306

Revision date: 06 03 2014

What steps should mineral planning authorities take to safeguard mineral resources?

Mineral planning authorities should adopt a systematic approach for safeguarding mineral resources, which:

- uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources;
- consults with the minerals industry, other local authorities (especially district authorities in 2-tier areas), local communities and other relevant interests to define Minerals Safeguarding Areas;
- sets out Minerals Safeguarding Areas on the policies map that accompanies the local plan and define Mineral Consultation Areas; and

- adopts clear development management policies which set out how proposals for non-minerals development in Minerals Safeguarding Areas will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource. This may include policies that encourage the prior extraction of minerals, where practicable, if it is necessary for non-mineral development to take place in Minerals Safeguarding Areas and to prevent the unnecessary sterilisation of minerals.

Detailed advice on mineral safeguarding may be found in the British Geological Survey report Mineral safeguarding in England: good practice advice.

Paragraph: 003 Reference ID: 27-003-20140306

Revision date: 06 03 2014

Is it appropriate to safeguard mineral resources in designated areas and urban areas?

Safeguarding mineral resources should be defined in designated areas and urban areas where necessary to do so. For example, safeguarding of minerals beneath large regeneration projects in brownfield land areas can enable suitable use of the mineral and stabilisation of any potentially unstable land before any non-minerals development takes place.

Paragraph: 004 Reference ID: 27-004-20140306

Revision date: 06 03 2014

What is the role of the district council, as the local planning authority, in safeguarding minerals?

Whilst district councils are not mineral planning authorities, they have an important role in safeguarding minerals in 3 ways:

- having regard to the local minerals plan when identifying suitable areas for non-mineral development in their local plans. District

councils should show Mineral Safeguarding Areas on their policy maps;

- in those areas where a mineral planning authority has defined a Minerals Consultation Area, consulting the mineral planning authority and taking account of the local minerals plan before determining a planning application on any proposal for non-minerals development within it; and
- when determining planning applications, doing so in accordance with development policy on minerals safeguarding, and taking account of the views of the mineral planning authority on the risk of preventing minerals extraction.

Paragraph: 005 Reference ID: 27-005-20140306

Revision date: 06 03 2014

Why should planning authorities safeguard existing, planned and potential storage, handling and transport sites?

Planning authorities should safeguard existing, planned and potential storage, handling and transport sites to:

- ensure that sites for these purposes are available should they be needed; and
- prevent sensitive or inappropriate development that would conflict with the use of sites identified for these purposes.

In areas where there are county and district authorities, responsibility for safeguarding facilities and sites for the storage, handling and transport of minerals in local plans will rest largely with the district planning authority. Exceptions will be where such facilities and sites are located at quarries or aggregate wharves or rail terminals.

Planning authorities should consider the possibility of combining safeguarded sites for storage, handling and transport of minerals with those for processing and distribution of recycled and secondary aggregate. This will require close co-operation between planning authorities.

Paragraph: 006 Reference ID: 27-006-20140306

Revision date: 06 03 2014

Planning for minerals extraction

How should mineral planning authorities identify locations for minerals development?

Mineral planning authorities are encouraged to plan for minerals extraction using Ordnance Survey-based proposals maps and relevant evidence provided by the minerals industry and other appropriate bodies. Further information on the preparation of local plans can be found at the Local Plans section of the guidance.

This approach will allow mineral planning authorities to highlight areas where mineral extraction is expected to take place, as well as managing potentially conflicting objectives for use of land.

Paragraph: 007 Reference ID: 27-007-20140306

Revision date: 06 03 2014

How should mineral planning authorities plan for minerals extraction?

Mineral planning authorities should plan for the steady and adequate supply of minerals in one or more of the following ways (in order of priority):

1. Designating Specific Sites – where viable resources are known to exist, landowners are supportive of minerals development and the proposal is likely to be acceptable in planning terms. Such sites may also include essential operations associated with mineral extraction;
2. Designating Preferred Areas, which are areas of known resources where planning permission might reasonably be anticipated. Such areas may also include essential operations associated with mineral extraction; and/or
3. Designating Areas of Search – areas where knowledge of mineral resources may be less certain but within which planning

permission may be granted, particularly if there is a potential shortfall in supply.

National Park Authorities are not expected to designate Preferred Areas or Areas of Search given their overarching responsibilities for managing National Parks.

Furthermore, in exceptional circumstances, such as where a local authority area is largely made up of designated areas such as Areas of Outstanding Natural Beauty, it may be appropriate for mineral planning authorities to rely largely on policies which set out the general conditions against which applications will be assessed.

In planning for minerals extraction, mineral planning authorities are expected to co-operate with other authorities

Paragraph: 008 Reference ID: 27-008-20140306

Revision date: 06 03 2014

Why should mineral planning authorities seek to designate Specific Sites as a priority?

Designating Specific Sites in minerals plans provides the necessary certainty on when and where development may take place. The better the quality of data available to mineral planning authorities, the better the prospect of a site being designated as a Specific Site.

Paragraph: 009 Reference ID: 27-009-20140306

Revision date: 06 03 2014

Under what circumstances would it be preferable to focus on extensions to existing sites rather than plan for new sites?

The suitability of each proposed site, whether an extension to an existing site or a new site, must be considered on its individual merits, taking into account issues such as:

- need for the specific mineral;

- economic considerations (such being able to continue to extract the resource, retaining jobs, being able to utilise existing plant and other infrastructure), and;
- positive and negative environmental impacts (including the feasibility of a strategic approach to restoration).
- the cumulative impact of proposals in an area.

Paragraph: 010 Reference ID: 27-010-20140306

Revision date: 06 03 2014

Assessing environmental impacts from minerals extraction

How and when are the details of any significant environmental impacts best addressed?

Significant environmental impacts are best addressed through consideration of an Environmental Statement which will have to accompany nearly all planning applications for new mineral working. Statutory regulators must be consulted as part of the Environmental Impact Assessment process. This ensures that the mineral planning authority has sufficient information on all environmental matters at the time the planning decision is made.

Paragraph: 011 Reference ID: 27-011-20140306

Revision date: 06 03 2014

What is the relationship between planning and other regulatory regimes?

The planning and other regulatory regimes are separate but complementary. The planning system controls the development and use of land in the public interest and, as stated in paragraphs 204 and 170 of the National Planning Policy Framework, this includes ensuring that new development is appropriate for its location – taking account of the effects (including cumulative effects) of pollution on health, the natural environment or general amenity, and

the potential sensitivity of the area or proposed development to adverse effects from pollution.

In doing so the focus of the planning system should be on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than any control processes, health and safety issues or emissions themselves where these are subject to approval under regimes. Mineral planning authorities should assume that these non-planning regimes will operate effectively.

Paragraph: 012 Reference ID: 27-012-20140306

Revision date: 06 03 2014

What are the environmental issues of minerals working that should be addressed by mineral planning authorities?

The principal issues that mineral planning authorities should address, bearing in mind that not all issues will be relevant at every site to the same degree, include:

- noise associated with the operation
- dust;
- air quality;
- lighting;
- visual impact on the local and wider landscape;
- landscape character;
- archaeological and heritage features (further guidance can be found under the Minerals and Historic Environment Forum's Practice Guide on mineral extraction and archaeology;
- traffic;
- risk of contamination to land;
- soil resources;
- geological structure;
- impact on best and most versatile agricultural land;
- blast vibration;
- flood risk;
- land stability/subsidence;

- internationally, nationally or locally designated wildlife sites, protected habitats and species, and ecological networks;
- impacts on nationally protected landscapes (National Parks, the Broads and Areas of Outstanding Natural Beauty);
- nationally protected geological and geo-morphological sites and features;
- site restoration and aftercare;
- surface and, in some cases, ground water issues;
- water abstraction.

Paragraph: 013 Reference ID: 27-013-20140306

Revision date: 06 03 2014

What issues are for other regulatory regimes to address?

Since minerals extraction is an on-going use of land, the majority of the development activities related to the mineral operation will be for the mineral planning authority to address. However, separate licensing, permits or permissions relating to minerals extraction may be required. These include:

- permits relating to surface water, groundwater and mining waste, which the Environment Agency is responsible for issuing;
- European Protected Species Licences, issued by Natural England (where appropriate), and;
- a licence for any extraction of coal, or of any mineral which passes through the coal seam, will need to be granted by the Coal Authority.

There may also be additional consents, such as stopping up rights of way or temporary road orders which must be obtained.

Hydrocarbon extraction will involve other regulations.

Paragraph: 014 Reference ID: 27-014-20140306

Revision date: 06 03 2014

How should mineral operators seek to minimise the impact of development upon properties and the local environment in close proximity to mineral workings?

Minerals operators should look to agree a programme of work with the mineral planning authority which takes into account, as far as is practicable, the potential impacts on the local community and local environment (including wildlife), the proximity to occupied properties, and legitimate operational considerations over the expected duration of operations.

Paragraph: 015 Reference ID: 27-015-20140306

Revision date: 06 03 2014

What are the environmental impacts of mineral extraction from building stone quarries?

Mineral planning authorities should recognise that, compared to other types of mineral extraction, most building stone quarries are small-scale and have a far lower rate of extraction when compared to other quarries. This means that their local environmental impacts may be significantly less. Such quarries often continue in operation for a very long period, and may be worked intermittently but intensively ("campaign working"), involving stockpiling of stone.

Paragraph: 016 Reference ID: 27-016-20140306

Revision date: 06 03 2014

How should mineral planning authorities assess the cumulative impact of minerals development?

Some parts of a mineral planning authority area may have been subjected to successive mineral development (such as aggregate extraction or surface coal mining) over a number of years. Mineral planning authorities should include appropriate policies in their minerals local plan, where appropriate, to ensure that the cumulative impact of a proposed mineral development on the community and the environment will be acceptable. The cumulative impact of mineral

development is also capable of being a material consideration when determining individual planning applications.

Paragraph: 017 Reference ID: 27-017-20140306

Revision date: 06 03 2014

Are separation distances/buffer zones appropriate?

Separation distances/buffer zones may be appropriate in specific circumstances where it is clear that, based on site specific assessments and other forms of mitigation measures (such as working scheme design and landscaping) a certain distance is required between the boundary of the minerals extraction area and occupied residential property.

Any proposed separation distance should be established on a site-specific basis and should be effective, properly justified, and reasonable. It should take into account:

- the nature of the mineral extraction activity;
- the need to avoid undue sterilisation of mineral resources,
- location and topography;
- the characteristics of the various environmental effects likely to arise; and
- the various mitigation measures that can be applied.

Paragraph: 018 Reference ID: 27-018-20140306

Revision date: 06 03 2014

Noise emissions

How should minerals operators seek to control noise emissions?

Those making mineral development proposals, including those for related similar processes such as aggregates recycling and disposal of construction waste, should carry out a noise impact assessment, which should identify all sources of noise and, for each source, take account of the noise emission, its characteristics, the proposed

operating locations, procedures, schedules and duration of work for the life of the operation, and its likely impact on the surrounding neighbourhood.

Proposals for the control or mitigation of noise emissions should:

- consider the main characteristics of the production process and its environs, including the location of noise-sensitive properties and sensitive environmental sites;
- assess the existing acoustic environment around the site of the proposed operations, including background noise levels at nearby noise-sensitive properties;
- estimate the likely future noise from the development and its impact on the neighbourhood of the proposed operations;
- identify proposals to minimise, mitigate or remove noise emissions at source;
- monitor the resulting noise to check compliance with any proposed or imposed conditions.

Paragraph: 019 Reference ID: 27-019-20140306

Revision date: 06 03 2014

How should mineral planning authorities determine the impact of noise?

Mineral planning authorities should take account of the prevailing acoustic environment and in doing so consider whether or not noise from the proposed operations would:

- give rise to a significant adverse effect;
- give rise to an adverse effect; and
- enable a good standard of amenity to be achieved.

In line with the Explanatory Note of the Noise Policy Statement for England, this would include identifying whether the overall effect of the noise exposure would be above or below the significant observed adverse effect level and the lowest observed adverse effect level for the given situation. As noise is a complex technical issue, it may be appropriate to seek experienced specialist assistance when applying this policy.

Paragraph: 020 Reference ID: 27-020-20140306

Revision date: 06 03 2014

What are the appropriate noise standards for mineral operators for normal operations?

Mineral planning authorities should aim to establish a noise limit, through a planning condition, at the noise-sensitive property that does not exceed the background noise level (LA90,1h) by more than 10dB(A) during normal working hours (0700-1900). Where it will be difficult not to exceed the background level by more than 10dB(A) without imposing unreasonable burdens on the mineral operator, the limit set should be as near that level as practicable. In any event, the total noise from the operations should not exceed 55dB(A) LAeq, 1h (free field). For operations during the evening (1900-2200) the noise limits should not exceed the background noise level (LA90,1h) by more than 10dB(A) and should not exceed 55dB(A) LAeq, 1h (free field). For any operations during the period 22.00 – 07.00 noise limits should be set to reduce to a minimum any adverse impacts, without imposing unreasonable burdens on the mineral operator. In any event the noise limit should not exceed 42dB(A) LAeq,1h (free field) at a noise sensitive property.

Where the site noise has a significant tonal element, it may be appropriate to set specific limits to control this aspect. Peak or impulsive noise, which may include some reversing bleepers, may also require separate limits that are independent of background noise (eg Lmax in specific octave or third-octave frequency bands – and that should not be allowed to occur regularly at night.)

Care should be taken, however, to avoid any of these suggested values being implemented as fixed thresholds as specific circumstances may justify some small variation being allowed.

Paragraph: 021 Reference ID: 27-021-20140306

Revision date: 06 03 2014

What type of operations may give rise to particularly noisy short-term activities and what noise limits may be appropriate?

Activities such as soil-stripping, the construction and removal of baffle mounds, soil storage mounds and spoil heaps, construction of new permanent landforms and aspects of site road construction and maintenance.

Increased temporary daytime noise limits of up to 70dB(A) LAeq 1h (free field) for periods of up to 8 weeks in a year at specified noise-sensitive properties should be considered to facilitate essential site preparation and restoration work and construction of baffle mounds where it is clear that this will bring longer-term environmental benefits to the site or its environs.

Where work is likely to take longer than 8 weeks, a lower limit over a longer period should be considered. In some wholly exceptional cases, where there is no viable alternative, a higher limit for a very limited period may be appropriate in order to attain the environmental benefits. Within this framework, the 70 dB(A) LAeq 1h (free field) limit referred to above should be regarded as the normal maximum.

An explanation of the technical terms used in this section can be found at the end of this guidance.

Paragraph: 022 Reference ID: 27-022-20140306

Revision date: 06 03 2014

Dust emissions

How should mineral operators seek to minimise dust emissions?

Where dust emissions are likely to arise, mineral operators are expected to prepare a dust assessment study, which should be undertaken by a competent person/organisation with acknowledged experience of undertaking this type of work.

There are 5 key stages to a dust assessment study:

- establish baseline conditions of the existing dust climate around the site of the proposed operations;
- identify site activities that could lead to dust emission without mitigation;

- identify site parameters which may increase potential impacts from dust;
- recommend mitigation measures, including modification of site design
- make proposals to monitor and report dust emissions to ensure compliance with appropriate environmental standards and to enable an effective response to complaints.

Paragraph: 023 Reference ID: 27-023-20140306

Revision date: 06 03 2014

Stages of the dust assessment study

Paragraph: 024 Reference ID: 27-024-20140306

Revision date: 06 03 2014

Stage 1: Establish existing baseline conditions

Existing ambient conditions should be recorded over a period sufficient to identify seasonal variations in the range of existing conditions which naturally exist (ideally by a dust-monitoring programme). The assessment should take into account the principal existing dust sources (other than the site) such as air pollution from urban and industrial areas, existing mineral operations, agricultural activities and construction activities.

The location of residential areas, schools and other dust-sensitive land uses should be identified in relation to the site, as well as proposed or likely sources of dust emission from within the site.

The assessment should explain how topography may affect the emission and dispersal of site dust, particularly the influence of areas of woodland, downwind or adjacent to the site boundary, and of valley or hill formations in altering local wind patterns.

The assessment should explain how climate is likely to influence patterns of dispersal by analysing data from the UK Meteorological Office or other recognised agencies on wind conditions, local rainfall and ground moisture conditions.

Paragraph: 025 Reference ID: 27-025-20140306

Revision date: 06 03 2014

Stage 2: Identify site activities that could lead to dust emission without mitigation

Potential dust sources should be identified and their potential to emit dust assessed with respect to the duration of the activity or the potential of dust to become airborne.

Paragraph: 026 Reference ID: 27-026-20140306

Revision date: 06 03 2014

Stage 3: Identify site parameters which may increase potential impacts from dust

This brings together information collected in Stages 1 and 2 with information on sensitive land uses around the site in order to understand how these uses could be affected by dust. Computer modelling techniques can be used to understand how dust could disperse from a site. Alternatively, a more qualitative approach, relying on professional judgement, could be used to bring together the data collected in Stages 1 and 2.

Paragraph: 027 Reference ID: 27-027-20140306

Revision date: 06 03 2014

Stage 4: Recommend mitigation measures and site design modifications

Measures to control dust should be specified and described in terms of their potential to reduce dust and consequent impacts.

Paragraph: 028 Reference ID: 27-028-20140306

Revision date: 06 03 2014

What facilities are sensitive or less sensitive to dust emissions?

The relationship of the activities within mineral workings to surrounding land uses will vary from site to site. Since the nature of those land uses varies, so will their sensitivity to dust. Some environmental features may also be sensitive to dust.

Paragraph: 029 Reference ID: 27-029-20140306

Revision date: 06 03 2014

What additional dust control measures might be necessary?

Additional measures to control fine particulates (PM10) to address any impacts of dust might be necessary if, within a site, the actual source of emission (eg the haul roads, crushers, stockpiles etc) is in close proximity to any residential property or other sensitive use. Operators should follow the assessment framework for considering the impacts of PM10 from a proposed site.

Paragraph: 030 Reference ID: 27-030-20140306

Revision date: 06 03 2014

When should this additional assessment be carried out?

The actual cut-off point for consideration of additional assessments for individual proposals will vary according to local circumstances (such as the topography, the nature of the landscape, the respective location of the site and the nearest residential property or other sensitive use in relation to the prevailing wind direction and visibility).

Paragraph: 031 Reference ID: 27-031-20140306

Revision date: 06 03 2014

Site Assessment flow chart

[Site assessment flow chart]

PDF, 200 KB, 1 page

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Request an accessible format.

Paragraph: 032 Reference ID: 27-032-20140306

Revision date: 06 03 2014

Quarry-slope stability

What factors should be considered in assessing quarry-slope stability?

The consideration of slope stability that is needed at the time of an application will vary between mineral workings depending on a number of factors, eg depth of working; the nature of materials excavated; the life of the working the length of time interim slopes are expected to be in place; and the nature of the restoration proposals.

Appraisal of slope stability for new workings should be based on existing information, which aims to:

- identify any potential hazard to people and property and environmental assets and assess its significance, and;
- identify any features which could adversely affect the stability of the working to enable basic quarry design to be undertaken.

Paragraph: 033 Reference ID: 27-033-20140306

Revision date: 06 03 2014

Charging for site visits

Can mineral planning authorities charge for site visits?

Under the Town and Country Planning (Fees for Applications, Deemed Applications, Requests and Site Visits) (England) Regulations 2012, mineral planning authorities can charge for a

maximum of 8 site visits for monitoring site operations within any 12 month period where the site is operational, or one visit in other circumstances. Additional site visits may be undertaken but they cannot be charged.

Paragraph: 034 Reference ID: 27-034-20140306

Revision date: 06 03 2014

What powers do mineral planning authorities have to enforce mineral permissions?

There are a range of powers available to mineral planning authorities to take enforcement action in respect of breaches of planning control. These are set out principally in Part VII of the Town and Country Planning Act 1990. These powers include the power under section 196A for the mineral planning authority to enter land and buildings in connection with their enforcement functions.

Paragraph: 035 Reference ID: 27-035-20140306

Revision date: 06 03 2014

Restoration and aftercare of minerals sites

Who is responsible for restoration and aftercare of minerals sites?

Responsibility for the restoration and aftercare of mineral sites, including financial responsibility, lies with the minerals operator and, in the case of default, with the landowner.

Paragraph: 036 Reference ID: 27-036-20140306

Revision date: 06 03 2014

When should site restoration and aftercare be considered?

The most appropriate form of site restoration to facilitate different potential after uses should be addressed in both local minerals plans,

which should include policies to ensure worked land is reclaimed at the earliest opportunity and that high quality restoration and aftercare of mineral sites takes place, and on a site-by-site basis following discussions between the minerals operator and the mineral planning authority

Paragraph: 037 Reference ID: 27-037-20140306

Revision date: 06 03 2014

What are the key stages that must be considered when considering restoration and aftercare conditions?

Restoration and aftercare of mineral sites involves a number of key stages, which mineral planning authorities should take into account as appropriate when preparing restoration and aftercare conditions:

1. stripping of soils and soil-making materials and either their storage or their direct replacement (ie 'restoration') on another part of the site;
2. storage and replacement of overburden;
3. achieving the landscape and landform objectives for the site, including filling operations if required, following mineral extraction;
4. restoration, including soil placement, relief of compaction and provision of surface features;
5. aftercare.

Paragraph: 038 Reference ID: 27-038-20140306

Revision date: 06 03 2014

When should proposals for land restoration and aftercare be submitted to the mineral planning authority?

The minerals operator should submit the proposals as part of the planning application (section 72 and Schedule 5 of the Town and Country Planning Act 1990 advise on the conditions which may be imposed on the grant of planning permission for development consisting of the winning and working of minerals).

Paragraph: 039 Reference ID: 27-039-20140306

Revision date: 06 03 2014

How much detail on restoration and aftercare should be provided with the planning application?

The level of detail required on restoration and aftercare will depend on the circumstances of each specific site including the expected duration of operations on the site. It must be sufficient to clearly demonstrate that the overall objectives of the scheme are practically achievable, and it would normally include:

- an overall restoration strategy, identifying the proposed afteruse of the site;
- information about soil resources and hydrology, and how the topsoil/subsoil/overburden/soil making materials are to be handled whilst extraction is taking place;
- where the land is agricultural land, an assessment of the agricultural land classification grade; and
- landscape strategy.

Where working is proposed on the best and most versatile agricultural land the outline strategy should show, where practicable, how the methods used in the restoration and aftercare enable the land to retain its longer term capability, though the proposed after-use need not always be for agriculture.

Restoration may, in some cases, need to be undertaken in phases so as to minimise local disturbance and impacts.

Paragraph: 040 Reference ID: 27-040-20140306

Revision date: 06 03 2014

How should the mineral planning authority ensure that applicants will deliver sound restoration and aftercare proposals?

Mineral planning authorities should secure the restoration and aftercare of a site through imposition of suitable planning conditions and, where necessary, through planning obligations.

Paragraph: 041 Reference ID: 27-041-20140306

Revision date: 06 03 2014

How must mineral planning authorities frame planning conditions for restoration and aftercare?

Conditions must be drafted in such a way that, even if the interest of the applicant applying for permission is subsequently disposed of, the requirements for restoration and aftercare can still be fulfilled, whether by a new operator or in the case of default, by the land-owner.

The exact planning conditions should be framed with the intended after-use in mind, and will vary according to the:

- characteristics of the individual site;
- intended after-use;
- type of mineral to be worked;
- method of working;
- timescale of the working;
- general character of, and planning policies for the area.

In framing planning conditions, mineral planning authorities should seek to have ‘progressive’ or ‘rolling’ restoration and aftercare to minimise the area of land occupied at any one time by the mineral working. This is unless doing so would be likely to adversely affect the standard of reclamation achieved, or would be impractical having regard to the type of operation and nature of the site.

Paragraph: 042 Reference ID: 27-042-20140306

Revision date: 06 03 2014

How detailed should restoration and aftercare planning conditions be for short-term extraction?

For mineral extraction sites where expected extraction is likely to last for a short period of time, it is usually appropriate for the mineral planning authority to impose a detailed set of planning conditions relating to restoration and aftercare as part of the planning permission.

Paragraph: 043 Reference ID: 27-043-20140306

Revision date: 06 03 2014

How detailed should restoration and aftercare planning conditions be for long-term extraction?

For mineral extraction sites where expected extraction is likely to last for many years, early agreement on the details of at least the later stages of aftercare may not be appropriate. In such cases, it would still be appropriate:

- for the applicant to provide a general outline of the final landform and intended after-use;
- for the mineral planning authority to agree at the outset outlines of requirements covering the main stages of reclamation of a site (eg filling, restoration and aftercare), together with detailed schemes for stripping and storage of soil materials

The level of detail provided by the applicant to the mineral planning authority must be sufficient to clearly demonstrate that the overall objectives of the scheme are practically achievable.

Planning conditions for proposals with a longer term duration should:

- normally require the submission of a detailed scheme or schemes for restoration and aftercare, for agreement, by some specific stage towards the end of the life of the permission;
- where progressive reclamation is to be carried out, require submission of schemes for agreement from time to time as appropriate.

Paragraph: 044 Reference ID: 27-044-20140306

Revision date: 06 03 2014

What are the possible forms of afteruse following mineral extraction?

There are many possible uses of land once minerals extraction is complete and restoration and aftercare of land is complete. These include:

- creation of new habitats and biodiversity;
- use for agriculture;
- forestry;
- recreational activities;
- waste management, including waste storage; and
- the built environment, such as residential, industrial and retail where appropriate.

Some former mineral sites may also be restored as a landfill facility using suitable imported waste materials as an intermediate stage in restoration prior to an appropriate after use.

Paragraph: 045 Reference ID: 27-045-20140306

Revision date: 06 03 2014

Is planning permission required for any forms of afteruse?

Separate planning permission is likely to be required for most forms of afteruse, except:

- agriculture and forestry;
- uses for which planning permission is granted under a Local Development Order;
- nature conservation and informal recreation which do not involve substantial public use.

Applications for afteruse will usually be decided by the district planning authority but in some instances, and depending on the type of afteruse, responsibility will rest with the mineral planning authority.

Paragraph: 046 Reference ID: 27-046-20140306

Revision date: 06 03 2014

How should mineral planning authorities deal with any concerns about funding of site restoration or aftercare?

Mineral planning authorities should address any concerns about the funding of site restoration principally through appropriately worded planning conditions.

Paragraph: 047 Reference ID: 27-047-20140306

Revision date: 06 03 2014

When is a financial guarantee justified?

A financial guarantee to cover restoration and aftercare costs will normally only be justified in exceptional cases. Such cases, include:

- very long-term new projects where progressive reclamation is not practicable, such as an extremely large limestone quarry;
- where a novel approach or technique is to be used, but the minerals planning authority considers it is justifiable to give permission for the development;
- where there is reliable evidence of the likelihood of either financial or technical failure, but these concerns are not such as to justify refusal of permission.

However, where an operator is contributing to an established mutual funding scheme, such as the Mineral Products Association Restoration Guarantee Fund or the British Aggregates Association Restoration Guarantee Fund, it should not be necessary for a minerals planning authority to seek a guarantee against possible financial failure, even in such exceptional circumstances.

Paragraph: 048 Reference ID: 27-048-20140306

Revision date: 06 03 2014

How and when should minerals planning authorities seek a financial guarantee?

Mineral planning authorities should seek to meet any justifiable and reasonable concerns about financial liabilities relating to the restoration of the site through agreeing a planning obligation or voluntary agreement at the time a planning permission is given.

Paragraph: 049 Reference ID: 27-049-20140306

Revision date: 06 03 2014

Aftercare conditions

What is the purpose of aftercare conditions?

Aftercare conditions are required to ensure that, following site restoration, the land is brought up to the required standard which enables it to be used for the intended afteruse.

Paragraph: 050 Reference ID: 27-050-20140306

Revision date: 06 03 2014

What is the appropriate form of aftercare conditions?

Mineral planning authorities may impose aftercare conditions in one of two ways:

- at the time of granting planning permission, specifying detailed steps to be taken; or
- through a planning condition which requires an aftercare scheme to be submitted by the applicant or other appropriate person for approval.

Paragraph: 051 Reference ID: 27-051-20140306

Revision date: 06 03 2014

What are the limitations imposed on aftercare conditions?

There are several limitations imposed on aftercare conditions, as follows:

- they may only be imposed on permissions in conjunction with a restoration condition;
- they may only be imposed in relation to land which is to be used for agriculture, forestry or amenity (including biodiversity) following minerals working;
- they can require only planting, cultivating, fertilising, watering, draining or otherwise treating the land;
- they can only start following compliance with a restoration condition and the mineral planning authority cannot require any steps to be taken after the end of a 5 year aftercare period without the agreement of the minerals operator (Schedule 5 of the Town and Country Planning Act 1990 sets out the conditions relating to mineral working).

Paragraph: 052 Reference ID: 27-052-20140306

Revision date: 06 03 2014

How do aftercare conditions apply where progressive restoration takes place?

Where sites are subject to progressive restoration, the aftercare period for each part of the site will begin once the restoration condition for the relevant part of the site has been met.

Paragraph: 053 Reference ID: 27-053-20140306

Revision date: 06 03 2014

Who must a mineral planning authority consult before imposing aftercare conditions?

The mineral planning authority must consult Natural England (if the proposed restoration is for agriculture) or the Forestry Commission (if the restoration is for forestry use).

Paragraph: 054 Reference ID: 27-054-20140306

Revision date: 06 03 2014

When should an aftercare scheme be submitted for approval by the mineral planning authority?

An aftercare scheme should be submitted to the mineral planning authority at least 6 months prior to the start of aftercare on all or part of the mineral site.

Paragraph: 055 Reference ID: 27-055-20140306

Revision date: 06 03 2014

What information is required from a mineral operator to secure a successful aftercare scheme?

The mineral planning authority should seek to ensure that the operator provides:

- an outline strategy of commitments for the 5 year aftercare period (or longer if agreed between the applicant and the mineral planning authority); and
- at the start of aftercare, and in each year of the aftercare period, a review of the previous years' management and a detailed programme for the forthcoming year.

Paragraph: 056 Reference ID: 27-056-20140306

Revision date: 06 03 2014

What should be contained in an outline strategy?

The outline strategy should broadly outline the steps to be carried out in the aftercare period and their timing within the overall programme. These should include, as appropriate:

- timing and pattern of vegetation establishment;
- cultivation practices;
- secondary treatments;
- drainage;
- management of soil, fertility, weeds etc;
- irrigation and watering.

A map should accompany the outline strategy, identifying clearly all areas subject to aftercare management, with separate demarcation of areas according to differences in the year of aftercare and proposed management. Where a choice of options is retained this should be made clear together with criteria to be followed in choosing between them.

Paragraph: 057 Reference ID: 27-057-20140306

Revision date: 06 03 2014

What should be included in the detailed programme?

The detailed programme should:

- elaborate on the outline strategy for work to be carried out in the forthcoming year;
- confirm that steps already specified in detail in the outline strategy will be carried out as originally intended;
- include any modifications to original proposals eg due to differences between actual and anticipated site conditions.

Paragraph: 058 Reference ID: 27-058-20140306

Revision date: 06 03 2014

Landscape strategy

What should be included in a landscape strategy?

A site-specific landscape strategy to accompany applications for either a new site or any significant extension to an existing working site should include:

- defining the key landscape opportunities and constraints;
- considering potential directions of working, significant waste material locations, degrees of visual exposure etc;
- identifying the need for additional screening during operations;
- identifying proposed afteruses and options for the character for the restored landscape

Paragraph: 059 Reference ID: 27-059-20140306

Revision date: 06 03 2014

Planning for aggregate minerals

This section is comprised of:

- The Managed Aggregate Supply System
- Local Aggregate Assessments
- Aggregate Working Parties
- The role of the National Aggregate Co-ordinating Group
- Aggregate Landbanks

The Managed Aggregate Supply System

What is the Managed Aggregate Supply System?

The Managed Aggregate Supply System seeks to ensure a steady and adequate supply of aggregate mineral, to handle the significant geographical imbalances in the occurrence of suitable natural aggregate resources, and the areas where they are most needed. It requires mineral planning authorities which have adequate resources of aggregates to make an appropriate contribution to national as well as local supply, while making due allowance for the need to control any environmental damage to an acceptable level. It also ensures that areas with smaller amounts of aggregate make some contribution towards meeting local and national need, where that can be done sustainably.

The Managed Aggregate Supply System works through national, sub-national and local partners working together to deliver a steady and adequate supply of aggregates, as follows:

- at local level, mineral planning authorities are expected to prepare Local Aggregate Assessments, to assess the demand for and supply of aggregates;
- at sub-national level, mineral planning authorities belong to and are supported by Aggregate Working Parties, who produce fit-

for-purpose and comprehensive data on aggregates covering specific geographical areas; and

- at national level, there exists the National Aggregate Co-ordinating Group, who monitor the overall provision of aggregates in England.

A key additional tool which underpins the working of the Managed Aggregate Supply System is the aggregate landbank, which is principally a monitoring tool and the main basis for the mineral planning authority to consider whether to review the local plan.

Paragraph: 060 Reference ID: 27-060-20140306

Revision date: 06 03 2014

Local Aggregate Assessments

What is a Local Aggregate Assessment?

A Local Aggregate Assessment is an annual assessment of the demand for and supply of aggregates in a mineral planning authority's area.

Paragraph: 061 Reference ID: 27-061-20140306

Revision date: 06 03 2014

What should a Local Aggregate Assessment contain?

A Local Aggregate Assessment should contain 3 elements:

- a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information;
- an analysis of all aggregate supply options, as indicated by landbanks, mineral plan allocations and capacity data eg marine licences for marine aggregate extraction, recycled aggregates and the potential throughputs from wharves. This analysis should be informed by planning information, the aggregate industry and other bodies such as local enterprise partnerships; and

- an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation. It should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.

Paragraph: 062 Reference ID: 27-062-20140306

Revision date: 06 03 2014

What are the supply options on which Local Aggregate Assessments should be based?

Local Aggregate Assessments should consider all aggregate supply options, including the following:

- recycled aggregates, including from construction, demolition and excavation waste;
- secondary aggregates, whose sources come from industrial wastes such as glass (cullet), incinerator bottom ash, railway ballast, fine ceramic waste (pitcher) and scrap tyres; and industrial and minerals by-products, notably waste from china clay, coal and slate extraction and spent foundry sand. They can also include hydraulically-bound materials;
- marine aggregates from The Crown Estate. Information will cover the areas licensed by the Marine Management Organisation for marine sand and gravel dredging and, as they are prepared over time, Marine Plans;
- imports into and exports out of the mineral planning authority area. The mineral planning authority must capture the amount of aggregate that it is importing and exporting as part of its Assessment (this will usually be captured through the 4 yearly Aggregate Minerals Survey); and
- land-won resources, including landbanks and site specific allocations.

Paragraph: 063 Reference ID: 27-063-20140306

Revision date: 06 03 2014

Can mineral planning authorities prepare a Local Aggregate Assessment solely on the basis of a 10 year average supply?

Local Aggregate Assessments must also consider other relevant local information in addition to the 10 year rolling supply, which seeks to look ahead at possible future demand, rather than rely solely on past sales. Such information may include, for example, levels of planned construction and housebuilding in their area and throughout the country. Mineral Planning Authorities should also look at average sales over the last 3 years in particular to identify the general trend of demand as part of the consideration of whether it might be appropriate to increase supply.

Paragraph: 064 Reference ID: 27-064-20140306

Revision date: 06 03 2014

What sources of information are there to assist in the preparation of Local Aggregate Assessments?

Sources of information include, but are not limited to:

- the Annual Minerals Raised Inquiry Survey, which sets out sales of each type of mineral in Great Britain;
- the 4-yearly Aggregate Minerals Surveys on the sales, movement, consumption and permitted reserves of aggregate minerals;
- local data on the arisings of and recovery/disposal routes of Construction and Demolition waste, including inert waste used to restore mineral sites. This includes data available from the Environment Agency;
- the Annual Report of the Aggregate Working Party, which sets out sales of aggregates, aggregate mineral reserves, local information on Construction and Demolition waste, secondary aggregates, and planning permissions;
- any Annual Monitoring Reports prepared by mineral planning authorities setting out the effectiveness of mineral policy and providing information to be used in reviewing and preparing new policies;
- published National and Sub National Guidelines on future aggregates provision; and

- data and information on mineral resources held by the British Geological Survey and the Crown Estate.

Paragraph: 065 Reference ID: 27-065-20140306

Revision date: 06 03 2014

Should the Local Aggregate Assessment separately consider the need for different types of aggregate?

For some types of aggregate (such as high quality polished stone value, concreting sand and building sand), it will be necessary to carry out a separate assessment for different types of aggregate in preparing a Local Aggregate Assessment. This is critical to ensure that the quality of aggregate is appropriate for its intended use, since not all aggregates can be used for all construction purposes.

Paragraph: 066 Reference ID: 27-066-20140306

Revision date: 06 03 2014

Does each minerals planning authority have to prepare a local aggregate assessment?

A mineral planning authority must either prepare a Local Aggregate Assessment on its own or jointly with one or more other minerals planning authority if it wishes.

Even if there is no aggregate extraction in a mineral planning authority area, a Local Aggregate Assessment is required if that area produces, imports or exports aggregate, (including secondary or recycled aggregate) or has an aggregate wharf. However, in such circumstances there may be benefits in preparing one jointly with other mineral planning authorities.

Paragraph: 067 Reference ID: 27-067-20140306

Revision date: 06 03 2014

What is the purpose of the national and sub-national guidelines published by government?

The latest national and sub-national guidelines published by the government are the National and regional guidelines for aggregates provision in England 2005 to 2020.

The government's national and sub-national guidelines serve 2 purposes:

- they seek to provide an indication of the total amount of aggregate provision that the mineral planning authorities, collectively within each Aggregate Working Party, should aim to provide; and
- they will provide individual mineral planning authorities, where they are having difficulty in obtaining data, with some understanding or context of the overall demand and possible sources that might be available in their Aggregate Working Party area.

Although these guidelines should be considered on this basis and not as rigid standards, they are nonetheless capable of being a material consideration when determining the soundness of minerals plans and in making decisions on individual planning applications.

Paragraph: 068 Reference ID: 27-068-20140306

Revision date: 06 03 2014

Should Aggregate Working Parties simply meet the total set out in the Sub-National Guidelines?

The basis for the provision of the supply of aggregates is through the Local Aggregate Assessment. Mineral planning authorities may decide, collectively, to plan for more or less than set out in the Guidelines based on their Local Aggregate Assessment. Such provision must be supported by robust evidence and be properly justified, having regard to local and national need.

Paragraph: 070 Reference ID: 27-070-20140306

Revision date: 06 03 2014

Can mineral planning authorities simply use figures apportioned from the sub-national guidelines by the Aggregate Working Party as a substitute for Local Aggregate Assessments?

Individual mineral planning authorities must prepare Local Aggregate Assessments (either on their own or jointly with other mineral planning authorities), although in those areas where apportionment of the land-won element has already taken place, those figures may be used as an indicator as to how much should be planned for.

Paragraph: 071 Reference ID: 27-071-20140306

Revision date: 06 03 2014

Aggregate Working Parties

What are Aggregate Working Parties?

Aggregate Working Parties are technical advisory groups of mineral planning authorities and other relevant organisations covering specific geographical areas who work together to:

- produce fit-for-purpose and comprehensive data on aggregate demand and supply in their area; and
- provide advice to individual mineral planning authorities and to the National Aggregate Co-ordinating Group.

Paragraph: 071 Reference ID: 27-071-20140306

Revision date: 06 03 2014

Who are the members of Aggregate Working Parties?

Membership should comprise each mineral planning authority, aggregate industry representation and the Marine Management Organisation where necessary. Other organisations are allowed to attend at the discretion of the Working Party.

Each mineral planning authority should belong to an Aggregate Working Party. However, in order to allow each authority to deal best with its own local issues, the authority should align itself with neighbouring and other authorities with whom it considers

appropriate. Mineral planning authorities should not feel compelled to work within imposed geographical boundaries, nor to work on the basis of former government office region boundaries.

Paragraph: 072 Reference ID: 27-072-20140306

Revision date: 06 03 2014

What is the role of each Aggregate Working Party?

The role of each Aggregate Working Party is three-fold:

- to consider, scrutinise and provide advice on the Local Aggregate Assessment of each mineral planning authority in its area;
- to provide an assessment on the position of overall demand and supply for the Aggregate Working Party area, including whether, in its view, the area is making a full contribution towards meeting both national and local aggregate needs. This assessment should be based on local aggregate assessments and should be informed by other economic data. It should also include an indication of emerging trends of demand in the Aggregate Working Party area; and
- to obtain, collect and report on data on minerals activity in their area. This includes annual data on sales, permissions and mineral reserves in their area, and data on recycled and secondary sources.

Paragraph: 073 Reference ID: 27-073-20140306

Revision date: 06 03 2014

What are the working arrangements for each Aggregate Working Party?

It will be for each Aggregate Working Party to decide on the Chairman and frequency of meetings. Each Aggregate Working Party should operate in a transparent manner, with all minutes of meetings and annual reports being made publicly available.

Paragraph: 074 Reference ID: 27-074-20140306

Revision date: 06 03 2014

Does belonging to an Aggregate Working Party mean that the mineral planning authority fulfils the requirements of the Duty to cooperate?

Active membership of the Aggregate Working Party will help mineral planning authorities demonstrate compliance with the Duty to cooperate, but is not sufficient in itself to fulfil the Duty.

Paragraph: 075 Reference ID: 27-075-20140306

Revision date: 06 03 2014

Does the mineral planning authority have to accept the advice of the Aggregate Working Party on a suitable Local Aggregate Assessment figure?

The mineral planning authority does not have to be bound by the advice of the Aggregate Working Party, but the views of the Aggregate Working Party are capable of being a material consideration in making decisions on individual planning applications, and should be taken into account in preparing mineral plans.

Paragraph: 076 Reference ID: 27-076-20140306

Revision date: 06 03 2014

The role of the National Aggregate Co-ordinating Group

What is the role of the National Aggregate Co-ordinating Group?

The purpose of the National Aggregate Co-ordinating Group is to monitor the overall provision of aggregates in England, and to provide timely advice to government and individual Aggregate Working Parties. Its specific activities include:

- monitoring annual reports produced by each Aggregate Working Party, with particular scrutiny of the landbank position;
- examining any significant difference between individual Aggregate Working Party reports and the relevant National and Sub-National Guideline figure, in order to understand the

reason for such a difference, and whether it raises issues of concern about ensuring a steady and adequate provision of aggregates in England. The National Aggregate Co-ordinating Group should share its findings with both the individual Aggregate Working Party and government as necessary; and

- providing guidance to government on future National and Sub-National requirements for aggregates supply. This will include whether, and when, it needs to review National and Sub-National guidelines for aggregate provision in England.

Paragraph: 077 Reference ID: 27-077-20140306

Revision date: 06 03 2014

Who belongs to the National Aggregate Co-ordinating Group?

The National Aggregate Co-ordinating Group comprises of representatives from each Aggregate Working Party, as well as from key government departments and other organisations as deemed appropriate by the Department for Communities and Local Government.

Paragraph: 078 Reference ID: 27-078-20140306

Revision date: 06 03 2014

Should Aggregate Working Parties take account of the advice of the National Aggregate Co-ordinating Group?

The advice of the National Aggregate Co-ordinating Group to each Aggregate Working Party should be taken into account in preparing mineral plans. Their advice is capable of being a material consideration in making decisions on individual planning applications.

Paragraph: 079 Reference ID: 27-079-20140306

Revision date: 06 03 2014

Aggregate Landbanks

What are landbanks of aggregate mineral reserves?

Landbanks of aggregate mineral reserves, or aggregate landbanks, are principally a monitoring tool to provide a mineral planning authority with early warning of possible disruption to the provision of an adequate and steady supply of land-won aggregates in their particular area.

Aggregate landbanks should be used principally as a trigger for a mineral planning authority to review the current provision of aggregates in its area and consider whether to conduct a review of the allocation of sites in the plan. In doing so, it may take into account the remaining planned provision in the minerals local plan.

Paragraph: 080 Reference ID: 27-080-20140306

Revision date: 06 03 2014

Why do we have different aggregate landbanks for crushed rock and sand and gravel?

Separate landbanks are required for crushed rock and sand and gravel because they partly serve different markets and have different site infrastructure requirements. In general, quarries producing rock aggregates will need a longer security of reserves to justify capital investment in, for example, crushing equipment.

Paragraph: 081 Reference ID: 27-081-20140306

Revision date: 06 03 2014

How do I use aggregate landbanks?

Aggregate landbanks are an essential component of planning decision-making:

- they are the basis on which the level of provision of new areas for aggregate extraction should be calculated when preparing local mineral plans;
- they are an important means of assessing when a mineral planning authority should review the current provision of aggregates in its area; and consider whether to conduct a review of allocation of sites in its local minerals plan; and

- for decision-making, low landbanks may be an indicator that suitable applications should be permitted as a matter of importance to ensure the steady and adequate supply of aggregates.

Paragraph: 082 Reference ID: 27-082-20140306

Revision date: 06 03 2014

How and when do I calculate aggregate landbanks?

Aggregate landbanks should be recalculated each year. The length of the aggregate landbank is the sum in tonnes of all permitted reserves for which valid planning permissions are extant, divided by the annual rate of future demand based on the latest annual Local Aggregate Assessment.

In calculating landbanks, the term permitted reserve includes current non-working sites but excludes those sites where mineral working cannot take place until there has been a review of the planning conditions attached to their planning permission.

Paragraph: 083 Reference ID: 27-083-20140306

Revision date: 06 03 2014

Is a landbank above the minimum level justification to refuse planning permission?

There is no maximum landbank level and each application for minerals extraction must be considered on its own merits regardless of the length of the landbank. However, where a landbank is below the minimum level this may be seen as a strong indicator of urgent need.

There are a number of reasons why an application for aggregate minerals development is brought forward in an area where there exists an adequate landbank. These could include:

- significant future increases in demand that can be forecast with reasonable certainty;

- the location of the consented reserve is inappropriately located relative to the main market areas;
- the nature, type and qualities of the aggregate such as its suitability for a particular use within a distinct and separate market; and
- known constraints on the availability of consented reserves that might limit output over the plan period.

Paragraph: 084 Reference ID: 27-084-20140306

Revision date: 06 03 2014

Should mineral planning authorities maintain separate landbanks for different types of aggregate?

Where there is a distinct market for a specific type or quality of aggregate (such as high specification rock, or sand used for concrete or sand for asphalt), a separate landbank calculation based on provision to that market may be justified for that material or those materials. This is because materials of different physical properties and quality are often needed to meet different end uses, and the scope to substitute one aggregate material for another can be limited.

Paragraph: 085 Reference ID: 27-085-20140306

Revision date: 06 03 2014

Planning for industrial minerals

How should mineral planning authorities plan for industrial minerals?

Mineral planning authorities should recognise that there are marked differences in geology, physical and chemical properties, markets and supply and demand between different industrial minerals, which can have different implications for their extraction. These include:

- geology influencing the size of an industrial mineral resource, how it may be extracted and the amount of mineral waste generated;

- the fact that markets are based on the consistent physical and/or chemical properties of each mineral. Different uses can require different specifications, and industrial minerals are often not interchangeable in use;
- the potential for the quality of a mineral extracted from a single site varying considerably. This may require multiple extraction faces within one quarry, or supplies of specific feedstock from several different quarries, to enable blending of lower specification material with that of higher grade. Alternatively, it may result in only a small proportion being suitable for specific industrial end-uses, with remaining minerals occasionally being used for alternative purposes such as aggregates;
- industrial minerals being essential raw materials for a wide range of downstream manufacturing industries. Their economic importance therefore extends well beyond the sites from which they are extracted;
- some industries are dependent on several industrial minerals. The loss of supply of one mineral could create difficulties for manufacturers even if the other minerals remain available.

Paragraph: 086 Reference ID: 27-086-20140306

Revision date: 06 03 2014

What are stocks of permitted reserves for industrial minerals?

Stocks of permitted reserves are a monitoring tool to aid decision-making on planning applications at existing industrial minerals sites. They should be used as an indicator to assess when further permitted reserves are required at an industrial minerals site.

Paragraph: 087 Reference ID: 27-087-20140306

Revision date: 06 03 2014

How and when should the required stock of permitted reserves for industrial minerals be calculated?

Stocks of permitted reserves should be calculated when a planning application is submitted to extract the mineral (through either a site extension or a new site) or when new capital investment is proposed.

The overall amount required should be directly linked to the scale of capital investment to construct and operate the required facility (such as a cement plant or brick factory).

Paragraph: 088 Reference ID: 27-088-20140306

Revision date: 06 03 2014

Would existing stocks of permitted reserves provide justification to refuse planning permission?

Each application for minerals extraction must be considered on its own merits, regardless of the current stock of permitted reserves. However, low stocks of permitted reserves to justify capital investment may be seen as a strong indicator of urgent need.

Paragraph: 089 Reference ID: 27-089-20140306

Revision date: 06 03 2014

How do you calculate the required stock of permitted reserves for silica sand sites?

The required stock of permitted reserves for each silica sand site should be based on the average of the previous 10 years sales. The calculations should have regard to the quality of sand and the use to which the material is put.

Paragraph: 090 Reference ID: 27-090-20140306

Revision date: 06 03 2014

Should mineral planning authorities allow time extensions to extract peat from existing sites?

Mineral planning authorities should consider time extensions to existing peat sites on a case-by-case basis. Such applications are

likely to come through seeking a variation of a planning condition. The National Planning Policy Framework requires the impacts from proposals such as that on climate change and biodiversity, to be fully considered, which are likely to constrain the circumstances by which any permission might be forthcoming. Instances where an extension might be necessary may include to allow sufficient time to extract further small quantities of peat, and the subsequent proper restoration of the land.

Paragraph: 224 Reference ID: 27-224-20141017

Revision date: 17 10 2014

Planning for hydrocarbon extraction

This section is comprised of:

The phases of onshore hydrocarbon extraction

What are conventional and unconventional hydrocarbons?

Hydrocarbon extraction covers both conventional and unconventional hydrocarbons.

Conventional hydrocarbons are oil and gas where the reservoir is sandstone or limestone.

Unconventional hydrocarbons refers to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs.

As an emerging form of energy supply, there is a pressing need to establish – through exploratory drilling – whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas and coalbed methane present to facilitate economically viable full scale production.

Paragraph: 091 Reference ID: 27-091-20140306

Revision date: 06 03 2014

What are the phases of onshore hydrocarbon extraction?

There are 3 phases of onshore hydrocarbon extraction: exploration, testing (appraisal) and production.

Paragraph: 092 Reference ID: 27-092-20140306

Revision date: 06 03 2014

When is planning permission required for the extraction of hydrocarbons?

Planning permission is required for each phase of hydrocarbon extraction, although some initial seismic work may have deemed planning consent under Part 17 of Schedule 2 to the Town and Country Planning (General Permitted Development) (England) Order 2015.

Paragraph: 093 Reference ID: 27-093-20150415

Revision date: 15 04 2015 See previous version.

Can a single planning application cover more than one phase of extraction?

Applications are able to cover more than one phase of extraction. The operator will need to provide all relevant information, including environmental information, to support the full extent of the application.

Paragraph: 094 Reference ID: 27-094-20140306

Revision date: 06 03 2014

What is the exploratory phase of hydrocarbon extraction?

The exploratory phase seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys, exploratory drilling and, in the case of shale gas, hydraulic fracturing.

Paragraph: 095 Reference ID: 27-095-20140306

Revision date: 06 03 2014

What geological data will operators collect before carrying out any exploratory drilling?

It is a matter for individual operators to determine how much preliminary data is necessary before undertaking exploratory drilling. However, preliminary data which the operator might obtain to consider the most appropriate locations for exploratory drilling include:

- existing geological and other relevant data to gather information about rock formations under the earth's surface;
- information from earlier drilling for oil, water, coal or other minerals and mining or quarrying activities;
- information on aquifers and groundwater resources; seismic reflection, gravity and magnetic surveys and remote sensing data eg satellite photographs, and results of previous seismic surveys.

Paragraph: 096 Reference ID: 27-096-20140306

Revision date: 06 03 2014

Why carry out seismic surveys?

Seismic surveys are essential to understand the structure under the earth's surface and be able to predict the depths of the key target formations. Operators will often wish to conduct new surveys with the latest technology, even where previous survey data exists. Among other things, this helps to determine the most promising target for drilling.

Paragraph: 097 Reference ID: 27-097-20140306

Revision date: 06 03 2014

How long does exploratory drilling last?

For conventional hydrocarbons, exploration drilling onshore is a short-term, but intensive, activity. Typically, site construction, drilling and site clearance will take between 12 to 25 weeks.

For unconventional hydrocarbons exploratory drilling may take considerably longer, especially if there is going to be hydraulic fracturing and, in the case of coalbed methane, removing water from the coal seam.

Paragraph: 098 Reference ID: 27-098-20140306

Revision date: 06 03 2014

What is the appraisal phase of hydrocarbon extraction?

The appraisal phase takes place following exploration when the existence of oil or gas has been proved, but the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited.

Paragraph: 099 Reference ID: 27-099-20140306

Revision date: 06 03 2014

What does the appraisal phase involve?

The appraisal phase can take several forms including additional seismic work, longer-term flow tests, or the drilling of further wells. This may involve additional drilling at another site away from the exploration site or additional wells at the original exploration site. For unconventional hydrocarbons it may involve further hydraulic fracturing followed by flow testing to establish the economic viability of the resource and its potential productive life. Much will depend on the size and complexity of the hydrocarbon reservoir involved.

Paragraph: 100 Reference ID: 27-100-20140306

Revision date: 06 03 2014

What is the production phase of hydrocarbon extraction?

The production phase normally involves the drilling of a number of wells. This may be wells used at the sites at the exploratory and/or appraisal phases of hydrocarbon development, or from a new site. Associated equipment such as pipelines, processing facilities and temporary storage tanks are also likely to be required.

Paragraph: 101 Reference ID: 27-101-20140306

Revision date: 06 03 2014

How will any additional sites for appraisal or production be determined?

Any additional sites, following exploration, will be selected by the operator taking account of what they have learnt or discovered through previous phases. In doing so, they should take also account of their ability to access the resource whilst seeking to minimise or avoid any adverse environmental and amenity issues.

Paragraph: 102 Reference ID: 27-102-20140306

Revision date: 06 03 2014

What is the production life of an oil or gas field?

Production life of an oil or gas field can be up to 20 years, possibly more. When production ceases, the facilities should be dismantled and the sites restored to their former use, or, in some circumstances, an appropriate new use.

Paragraph: 103 Reference ID: 27-103-20140306

Revision date: 06 03 2014

How mineral planning authorities plan for hydrocarbon extraction

In what areas can hydrocarbon extraction take place?

The exploratory, appraisal or production phase of hydrocarbon extraction can only take place in areas where the Department of Energy and Climate Change have issued a licence under the Petroleum Act 1998 (Petroleum Licence). The Department of Energy and Climate Change produce a regularly updated Wallmap displaying current fields and licences detailing those areas currently under licence.

Paragraph: 104 Reference ID: 27-104-20140306

Revision date: 06 03 2014

How should mineral planning authorities plan for hydrocarbon extraction?

Mineral planning authorities are encouraged to make appropriate provision for hydrocarbons in local minerals plans through:

- use of published data on information on the location of conventional and unconventional hydrocarbons, for example, the Department of Energy and Climate Change's Oil and Gas: onshore exploration and production pages;
- use of ordnance survey based policies maps; and
- available data on existing wells (also available on the Department of Energy and Climate Change's Oil and Gas: onshore exploration and production pages.

This approach will allow mineral planning authorities to highlight areas where proposals for hydrocarbon extraction may come forward, as well as managing potentially conflicting objectives for use of land.

Paragraph: 105 Reference ID: 27-105-20140306

Revision date: 06 03 2014

What are mineral planning authorities expected to include in their local plans on hydrocarbons?

Where mineral planning authorities consider it is necessary to update their local plan and they are in a Petroleum Licence Area, they are expected to include the following:

- Petroleum Licence Areas on their policies maps;
- Criteria-based policies for each of the exploration, appraisal and production phases of hydrocarbon extraction. These policies should set clear guidance and criteria for the location and assessment of hydrocarbon extraction within the Petroleum Licence Areas.

Paragraph: 106 Reference ID: 27-106-20140306

Revision date: 06 03 2014

Can mineral planning authorities include site-specific locations in their local plans?

Existing hydrocarbon extraction sites should be identified in local plans, through the local plan site allocation process, where appropriate, and mineral planning authorities may include specific locations should the onshore oil and gas industry wish to promote specific sites.

Paragraph: 107 Reference ID: 27-107-20140306

Revision date: 06 03 2014

Should mineral planning authorities be safeguarding areas for the extraction of hydrocarbons?

There is normally no need to create mineral safeguarding areas specifically for extraction of hydrocarbons given the depth of the resource, the ability to utilise directional drilling and the small surface area requirements of well pads.

Paragraph: 108 Reference ID: 27-108-20140306

Revision date: 06 03 2014

The planning application process

What is the role of planning in obtaining permissions for drilling wells?

Planning permission is one of the main regulatory requirements that operators must meet before drilling a well, for both conventional and unconventional hydrocarbons. A flow chart setting out the process for drilling an exploratory well, and how these regulatory regimes interact, is set out at Annex B, and explained in more detail through the Regulatory Roadmap: Onshore oil and gas exploration in the UK regulation and best practice practice guidance published by the Department of Energy and Climate Change in December 2013.

Paragraph: 109 Reference ID: 27-109-20140306

Revision date: 06 03 2014

Who are the key regulators for hydrocarbon extraction?

The key regulators for hydrocarbon extraction are:

a. Department of Energy and Climate Change – issues Petroleum Licences, gives consent to drill under the Licence once other permissions and approvals are in place, and have responsibility for assessing risk of and monitoring seismic activity, as well as granting consent to flaring or venting;

b. Mineral planning authorities – grant permission for the location of any wells and wellpads, and impose conditions to ensure that the impact on the use of the land is acceptable;

c. Environment Agency – protect water resources (including groundwater aquifers), ensure appropriate treatment and disposal of mining waste, emissions to air, and suitable treatment and manage any naturally occurring radioactive materials; and

d. Health and Safety Executive – regulates the safety aspects of all phases of extraction, in particular responsibility for ensuring the appropriate design and construction of a well casing for any borehole.

Paragraph: 110 Reference ID: 27-110-20140306

Revision date: 06 03 2014

What other bodies may be involved in the process of consenting hydrocarbon extraction?

Other bodies which may be involved in the consenting of the process include:

a. the Coal Authority, whose permission will be required should drilling go through a coal seam;

b. Natural England, who may need to issue European Protected Species Licences in certain circumstances;

c. the British Geological Survey, who need to be notified by licensees of their intention to undertake drilling and, upon completion of drilling, must also receive drilling records and cores; and

d. Hazardous Substances Authorities, who may need to provide hazardous substances consents.

There may also be additional consents and orders, such as stopping up rights of way or temporary road orders, which must be obtained.

Paragraph: 111 Reference ID: 27-111-20140306

Revision date: 06 03 2014

What hydrocarbon issues can mineral planning authorities leave to other regulatory regimes?

Some issues may be covered by other regulatory regimes but may be relevant to mineral planning authorities in specific circumstances. For example, the Environment Agency has responsibility for ensuring that risk to groundwater is appropriately identified and mitigated. Where an Environmental Statement is required, mineral planning authorities can and do play a role in preventing pollution of the water environment from hydrocarbon extraction, principally through controlling the methods of site construction and operation, robustness of storage facilities, and in tackling surface water drainage issues.

There exist a number of issues which are covered by other regulatory regimes and mineral planning authorities should assume that these regimes will operate effectively. Whilst these issues may be put before mineral planning authorities, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies. However, before granting planning permission they

will need to be satisfied that these issues can or will be adequately addressed by taking the advice from the relevant regulatory body:

- Mitigation of seismic risks –the Department of Energy and Climate Change is responsible for controls, usually through the licence consent regime, to mitigate seismic risks. Seismic assessment of the geology of the area to establish the geological conditions, risk of seismic activity and mitigation measures to put in place is required by the Department of Energy and Climate Change for all hydraulic fracturing processes;
- Well design and construction – the Health and Safety Executive are responsible for enforcement of legislation concerning well design and construction. Before design and construction operators must assess and take account of the geological strata, and fluids within them, as well as any hazards that the strata may contain;
- Well integrity during operation – under health and safety legislation the integrity of the well is subject to examination by independent qualified experts throughout its operation, from design through construction and until final plugging at the end of operation;
- Operation of surface equipment on the well pad – whilst planning conditions may be imposed to prevent run-off of any liquid from the pad, and to control any impact on local amenity (such as noise), the actual operation of the site's equipment should not be of concern to mineral planning authorities as these are controlled by the Environment Agency and the Health and Safety Executive;
- Mining waste – the Environment Agency is responsible for ensuring that extractive wastes do not harm human health and the environment. An environmental permit is required for phases of hydrocarbon extraction and this will require the operator to produce and implement a waste management plan;
- Chemical content of hydraulic fracturing fluid – this is covered by the environmental permit as operators are obliged to inform the Environment Agency of all chemicals that they may use as part of any hydraulic fracturing process;
- Flaring or venting of any gas produced as part of the exploratory phase will be subject to Department of Energy and Climate

Change controls and will be regulated by the Environment Agency. Mineral planning authorities will, however, need to consider how issues of noise and visual impact will be addressed;

- Final off-site disposal of water – Water that comes back to the surface following hydraulic fracturing may contain naturally occurring radioactive materials. Whilst storage on-site and the traffic impact of any movement of water is of clear interest to local authorities, it is the responsibility of the Environment Agency to ensure that the final treatment/disposal at suitable water treatment facilities is acceptable
- Well decommissioning/abandonment – following exploration, the well is likely to suspended and abandoned for a period of time. Health and Safety Legislation requires its design and construction that, so far as reasonably practicable, there is no unplanned escape of fluids from it. The mineral planning authority is responsible for ensuring the wells are abandoned and the site is restored.

Paragraph: 112 Reference ID: 27-112-20140306

Revision date: 06 03 2014

Development management procedures

What role do statutory and non-statutory consultees have at the pre-application stage?

Statutory consultees for planning applications play an important role at the pre-application stage of hydrocarbon extraction since they will be involved in providing advice to the mineral planning authority on a formal planning application. In the case of hydrocarbon extraction, relevant non-statutory consultees such as the Health and Safety Executive also play an important role. Pre-application discussions with statutory and relevant non-statutory consultees may also provide prospective operators with an opportunity to share information that may be relevant to obtain other permits and licences. The Environment Agency strongly recommends that prospective operators undertake pre-planning and pre-permitting discussions with them.

Also see the guidance on Making an application.

Paragraph: 113 Reference ID: 27-113-20140306

Revision date: 06 03 2014

Should planning performance agreements be used for hydrocarbon extraction?

Mineral planning authorities and operators should seriously consider planning performance agreements where they consider the size and complexity of any proposed extraction justifies such an agreement being drawn up.

Paragraph: 114 Reference ID: 27-114-20140306

Revision date: 06 03 2014

What information should be included on a location plan for oil and gas extraction?

The location plan should include all land necessary to carry out the proposed development (eg land required for access to the site from a public highway, visibility splays, landscaping, car parking and open areas around buildings) and should identify sufficient roads and/or buildings on adjoining land to ensure that the exact location of the application site is clear. A distinction should be made in the location plan between those areas where surface works are proposed and those where only underground operations are proposed to take place. The location plan should identify the surface area of the application site by edging it clearly with a red line. A dotted red line should edge the likely extent (including length and direction) of any lateral boreholes. The underground area should be indicated even where it is within the area of the surface workings.

A blue line should be drawn around any other land owned or controlled by the prospective minerals operator, close to or adjoining the surface area of the application site. At the exploratory stage, the location plan should identify indicative underground zones where lateral drilling and hydraulic fracturing (if applicable) may take place.

At the appraisal or production stage the location plan should also show the area where extraction of oil and gas is likely to take place, using a shaded red area.

A location plan should be based on an up-to-date map and wherever possible scaled to fit onto A4 or A3 size paper.

Also see the guidance on Making an application.

Paragraph: 115 Reference ID: 27-115-20140306

Revision date: 06 03 2014

What issues should mineral planning authorities include on their local list for exploration of hydrocarbons?

Mineral planning authorities should normally expect to include on their local list those issues for which they are, or may be responsible, for assessing, when dealing with planning applications for exploratory hydrocarbon development. This list should be consistent with the spirit of this guidance.

Paragraph: 116 Reference ID: 27-116-20140306

Revision date: 06 03 2014

What constitutes an application for an exploratory well?

The precise nature of what is included in an application for exploration will depend in part on the applicant. The applicant and the Department of Energy and Climate Change will already have agreed a work programme which might include acquisition of seismic data and one or more exploratory wells as part of the exploration licence application.

All exploratory phases will involve drilling vertically downwards, perhaps including directional drilling. However, the exploratory phase may include horizontal drilling once the appropriate rock formation is reached, and for unconventional hydrocarbons – hydraulic fracturing.

Paragraph: 117 Reference ID: 27-117-20140306

Revision date: 06 03 2014

Can vertical and horizontal drilling, including hydraulic fracturing, be included in one application for exploratory drilling?

As far as it is practical to do so, any application for exploratory drilling should cover as much of the exploratory activity as possible, including the likely number of wellheads and extent of drilling, to avoid further planning applications at a later date.

Paragraph: 118 Reference ID: 27-118-20140306

Revision date: 06 03 2014

Environmental Impact Assessment

When is an Environmental Impact Assessment required for hydrocarbon extraction?

The mineral planning authority should consider whether any proposal for onshore oil and gas extraction requires an Environmental Impact Assessment.

Applications for the exploratory and appraisal phases are likely to fall under paragraph 2 of Schedule 2 to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. An Environmental Impact Assessment is therefore required if the project is likely to have significant environmental effects. A flow chart summarising the screening process is set out under the National Planning Practice Guidance for Environmental Impact Assessment. Whilst all applications must be assessed on a case-by-case basis, it is unlikely that an Environmental Impact Assessment will be required for exploratory drilling operations which do not involve hydraulic fracturing. However, when considering the need for an assessment, it is important to consider factors such as the nature, size and location of the proposed development (selection criteria for screening Schedule 2 development are set out in Schedule 3 to the Regulations).

Applications for the production phase are also likely to fall under paragraph 2 of Schedule 2 to the 2011 Regulations, in which cases they should be screened for likely significant effects, but applications where more than 500 tonnes of oil or 500,000 cubic metres of gas will be extracted per day may fall under Schedule 1, in which case an Environmental Impact Assessment is mandatory.

Paragraph: 119 Reference ID: 27-119-20140306

Revision date: 06 03 2014

Should mineral planning authorities take account of the environmental effects of the production phase of hydrocarbon extraction at the exploration phase?

Individual applications for the exploratory phase should be considered on their own merits. They should not take account of hypothetical future activities for which consent has not yet been sought, since the further appraisal and production phases will be the subject of separate planning applications and assessments.

When determining applications for subsequent phases, the fact that exploratory drilling has taken place on a particular site is likely to be material in determining the suitability of continuing to use that site only insofar as it establishes the presence of hydrocarbon resources.

Paragraph: 120 Reference ID: 27-120-20140306

Revision date: 06 03 2014

Can information used in complying with other regulatory regimes be used to inform an environmental statement?

Information prepared as part of the high level environmental risk assessment or the preparation of the environmental permit (where required) may be used to inform, or be included as part of the environmental statement.

Paragraph: 121 Reference ID: 27-121-20140306

Revision date: 06 03 2014

What is the area that an Environmental Impact Assessment must cover?

An Environmental Impact Assessment must cover the geographical area where the impacts occur, both above and below ground. This is likely to be a broader area than the application area.

Paragraph: 122 Reference ID: 27-122-20140306

Revision date: 06 03 2014

What are the legal obligations on mineral planning authorities and operators with regard to European sites designated under the Birds or Habitats Directives and Sites of Special Scientific Interest?

Guidance on the law affecting European sites and Sites of Specific Scientific Interest is being prepared by the Department for Environment, Food and Rural Affairs and will replace the advice previously set out in Circular 06/05: Biodiversity and Geological Conservation.

Paragraph: 123 Reference ID: 27-123-20140306

Revision date: 06 03 2014

Determining the planning application

Do mineral planning authorities need to assess demand for, or consider alternatives to oil and gas resources when determining planning applications?

Mineral planning authorities should take account of government energy policy, which makes it clear that energy supplies should come from a variety of sources. This includes onshore oil and gas, as set out in the government's Annual Energy Statement published in October 2013.

Paragraph: 124 Reference ID: 27-124-20140306

Revision date: 06 03 2014

How should National Parks, the Broads, Areas of Outstanding Natural Beauty and World Heritage Sites plan for unconventional hydrocarbons?

In considering applications for unconventional hydrocarbon development in National Parks, the Broads and Areas of Outstanding Natural Beauty, mineral planning authorities should give great weight to conserving their landscape and scenic beauty. These areas have the highest status of protection in relation to landscape and scenic

beauty, and the conservation of wildlife and cultural heritage in these areas should be given great weight.

Where applications represent major development, planning permission should be refused in National Parks, the Broads and Areas of Outstanding Natural Beauty except in exceptional circumstances and where it can be demonstrated they are in the public interest. The assessment that needs to be carried out, including any detrimental effect on the environment, such as the noise and traffic which may be associated with hydraulic fracturing, is set out in paragraph 172 of the National Planning Policy Framework.

World Heritage Sites are heritage assets of the highest significance. Where a proposed development for unconventional hydrocarbons would lead to substantial harm to or loss of a World Heritage Site, mineral planning authorities should refuse consent unless wholly exceptional circumstances apply. The test to be considered by mineral planning authorities is set out in paragraph 184 of the National Planning Policy Framework.

Where appropriate, planning conditions can be imposed to ensure that development is made acceptable in planning terms before it can proceed.

Paragraph: 223 Reference ID: 27-223-20140728

Revision date: 28 07 2014

How should planning authorities seek to mitigate the environmental effects of mineral extraction?

Mineral planning authorities should use appropriate planning conditions, having regard to the issues for which they have responsibility, to mitigate against any adverse environmental impact. Some examples of model conditions covering various areas that may be associated with exploration of hydrocarbons are attached at Annex C.

Paragraph: 125 Reference ID: 27-125-20140306

Revision date: 06 03 2014

Are separation distances or buffer zones acceptable?

Above ground separation distances are acceptable in specific circumstances where it is clear that, based on site specific assessments and other forms of mitigation measures (such as working scheme design and landscaping) a certain distance is required between the boundary of the minerals site and the adjacent development.

Paragraph: 126 Reference ID: 27-126-20140306

Revision date: 06 03 2014

Aftercare and restoration

How will the mineral planning authority ensure that applicants will deliver sound restoration and aftercare proposals?

Mineral planning authorities will ensure the proper restoration and aftercare of a site through imposition of suitable planning conditions and, where necessary, through section 106 Agreements. For hydrocarbon extraction sites where expected extraction is likely to last for a short period of time, it is appropriate for the mineral planning authority to impose a detailed set of planning conditions as part of the planning application.

Also see guidance on Who is responsible for the restoration and aftercare of minerals sites?.

Paragraph: 127 Reference ID: 27-127-20140306

Revision date: 06 03 2014

Annex A: Shale Gas, coalbed methane and underground coal gasification

What is shale gas?

Shale gas is methane found in rocks deep below the earth's surface which had previously been considered too impermeable ('tight') to allow for economic recovery (See Figure 1 below).

Paragraph: 128 Reference ID: 27-128-20140306

Revision date: 06 03 2014

What is hydraulic fracturing?

Hydraulic fracturing is the process of opening and/or extending existing narrow fractures or creating new ones (fractures are typically hairline in width) in gas or oil-bearing rock, which allows gas or oil to flow into wellbores to be captured.

Paragraph: 129 Reference ID: 27-129-20140306

Revision date: 06 03 2014

How does the hydraulic fracturing process work?

During hydraulic fracturing, a mixture of water, sand and possibly some chemical additives is pumped under pressure down a borehole into the rock unit. The sand is used to prop the fractures open to increase gas extraction.

The borehole is lined with a steel casing and cement and a “perforating gun” is used to create perforations to allow the hydraulic fracturing fluid to be injected into the rock.

Plugs may be used to divide the well into smaller sections (termed stages). Stages are fractured sequentially, beginning with the stage furthest away. After the hydraulic fracturing is done, such plugs can be drilled through and the well is depressurised.

In this way, the system is designed to be a closed loop, so that when the high pressure is removed, the hydraulic fracturing fluid returns to the surface for treatment and storage. The flowback water also may contain salts and other dissolved minerals from the shale rock formation. Estimates vary on what percentage of the hydraulic fracturing fluid returns to the surface: from 25-75%. This wide range is explained by differences in the properties of the shale and its response to the hydraulic fracturing.

Paragraph: 130 Reference ID: 27-130-20140306

Revision date: 06 03 2014

Figure 1: Shale gas extraction

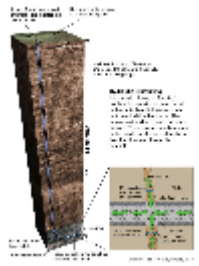

Figure 1: Shale gas extraction

PDF, 167 KB, 1 page

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Request an accessible format.

Source: British Geological Survey

Paragraph: 131 Reference ID: 27-131-20140306

Revision date: 06 03 2014

What is coalbed methane?

Coalbed methane is methane that is extracted from unworked coal seams. The Coal Authority have produced an interactive map viewer which provides information on the location of coalfields in England.

Paragraph: 132 Reference ID: 27-132-20140306

Revision date: 06 03 2014

How is coalbed methane extracted?

Extraction of coalbed methane is usually from one of two sources:

- drilling vertically into a coal seam (making use of pre-existing fracture patterns); or more likely
- directional drilling along a coal seam

In some cases the coals may be fractured to improve flow rates; the well is then pumped to remove water and lower the pressure within the seam to allow release of methane.

Paragraph: 133 Reference ID: 27-133-20140306

Revision date: 06 03 2014

At what depths is coalbed methane likely to be extracted?

Extraction is likely to be achievable between 200 and 1,500 metres, depending on the coal permeability and other issues. At shallower depths the gas pressure in the coal is likely to be insufficient, while at depths greater than 1,500 metres the pressure of the overlying strata is likely to have reduced coal permeability restricting the flow of methane.

Paragraph: 134 Reference ID: 27-134-20140306

Revision date: 06 03 2014

What is the appropriate distance for the spacing of coalbed methane wells?

The usual spacing of vertical coalbed methane wells is one for every 500 to 1,000 metres, though directional drilling of a number of wells from a single surface location offers one way of reducing the number of surface drill sites and pipelines.

Paragraph: 135 Reference ID: 27-135-20140306

Revision date: 06 03 2014

How does coalbed methane affect the ability to extract the coal?

Extracting coalbed methane does not detrimentally affect the physical properties of coal, or prevent it from being worked at a later date.

Paragraph: 136 Reference ID: 27-136-20140306

Revision date: 06 03 2014

What are the key factors to consider when considering coalbed methane exploration/production?

There are 2 main factors to consider:

- unlike underground coal mining, extraction of coalbed methane does not cause subsidence of the land surface;
- removing the water is commonly required to initiate gas production. Such de-watering can take an extended period of time.

Paragraph: 137 Reference ID: 27-137-20140306

Revision date: 06 03 2014

What is Underground Coal Gasification?

Underground Coal Gasification is a process involving controlled combustion of coal seams beneath the ground and the recovery of the resulting gases. The coal can be accessed by carefully controlled directional drilling of several wells that penetrate the coal seam for an appropriate distance.

Paragraph: 225 Reference ID: 27-225-20141017

Revision date: 17 10 2014

How many wells are required for Underground Coal Gasification?

Underground Coal Gasification requires a minimum of 2 wells:

- An access well to inject steam and air or oxygen to trigger and maintain the combustion of the seam
- A production well which recovers the resulting gas-water vapour mixture to the surface for treatment.

Sometimes a separate ignition well is drilled, through which a small amount of gas is injected to initiate combustion.

Paragraph: 226 Reference ID: 27-226-20141017

Revision date: 17 10 2014

What is the surface footprint for Underground Coal Gasification projects?

The surface footprint depends on the scale of the proposal. It is likely to consist of:

- a minimum of one drilling pad
- facilities to provide steam and possibly oxygen to regulate the combustion reaction
- facilities to process the product gas (these could be located off site and the product gas transported to them via pipeline)

Larger schemes would likely contain several drill pads but could share the other necessary facilities.

Paragraph: 227 Reference ID: 27-227-20141017

Revision date: 17 10 2014

How do Underground Coal Gasification projects extend beyond the initial area?

Once all the coal along the length of the access well(s) has combusted, the development would have to move along the same coal seam or exploit another seam above or below the one previously combusted.

Paragraph: 228 Reference ID: 27-228-20141017

Revision date: 17 10 2014

Where synthetic gas (syngas) produced from Underground Coal Gasification is used for power generation, will an element of carbon capture and storage need to apply?

It is the UK government's policy, set out in the Overarching National Policy Planning statement for Energy (EN1), that any new coal-fired power station should demonstrate that it is "carbon capture ready" before planning consent may be given. This requirement applies to any new power station that uses coal as a fuel, whether directly in a pulverised coal power station or indirectly in an Integrated Gasification Combined Cycle plant. For an Integrated Gasification Combined Cycle plant, the policy will apply regardless of where the syngas is generated, whether that is at an on-site or off-site gasification unit. Consistent with this we will expect this requirement to apply where

underground coal gasification is used to produce syngas for power generation.

New power stations that use fossil fuel or fuel produced from fossil fuel, as in gasification, will also be subject to the Emissions Performance Standard. The Standard, introduced through provisions of the Energy Act 2013, recently came into force and places a limit on the amount of carbon dioxide emissions that new fossil fuel power stations can emit.

Paragraph: 229 Reference ID: 27-229-20141017

Revision date: 17 10 2014

Annex B: Outline of process for drilling an exploratory well

Figure 2: outline of process for drilling an exploratory well

PDF, 346 KB, 1 page

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Request an accessible format.

Paragraph: 138 Reference ID: 27-138-20140306

Revision date: 06 03 2014

Annex C: Model planning conditions for surface area

Ground and surface water

The boreholes must be constructed so as to prevent uncontrolled discharge of artesian groundwater to surface, and to prevent uncontrolled discharge of water or contamination into or between individual aquifers or different geological formations.

Any oils, fuels, lubricants or other liquid materials shall be located on an impervious base and/or within an impervious bunded area or purpose made self-bunding tanks so as to prevent any discharge or spillage into any watercourse, land or underground strata. Spill kits shall also be located in appropriate locations around the Site and utilised in the event of any accidental discharge/spillages.

No ground or surface water contaminated by oil, grease or other pollutants used on or in connection with the site operations shall be discharged into any ditch or watercourse.

Paragraph: 139 Reference ID: 27-139-20140306

Revision date: 06 03 2014

Visual intrusion and landscaping

No development shall be commenced until a scheme providing full details of site landscaping works has been submitted to, and approved in writing, by the local planning authority. Such a scheme shall include a planting plan and schedule of plants noting species, plant sizes and proposed numbers/densities. Thereafter the approved landscaping scheme shall be implemented in full.

Any trees or shrubs planted or retained in accordance with this condition which are removed, uprooted, destroyed, die or become severely damaged or diseased within 5 years of planting shall be replaced within the next planting season.

Paragraph: 140 Reference ID: 2a-140-20140306

Revision date: 06 03 2014

Noise control and monitoring

Prior to the commencement of the drilling operations hereby permitted, a detailed noise monitoring scheme shall be submitted to, and approved in writing by the mineral planning authority. The scheme shall include the locations and times for noise monitoring to be carried out commencing from the start of drilling operations.

Noise monitoring shall thereafter be carried out in accordance with the approved noise monitoring scheme and the results of the each noise monitoring exercise shall be submitted to the mineral planning authority within 7 days of the monitoring being carried out. Noise monitoring shall commence within 12 hours of drilling commencing.

In the event that noise monitoring indicates that noise levels have exceeded the maximum permitted noise level, drilling operations shall cease within [x] hours and until such time that further noise mitigation measures which shall be firstly approved in writing by the mineral planning authority have been installed and employed within the site.

All plant and machinery shall be adequately maintained and silenced in accordance with the manufacturer's recommendations at all times.

Paragraph: 141 Reference ID: 27-141-20140306

Revision date: 06 03 2014

Dust and air quality

Prior to the commencement of the drilling operations hereby permitted, a detailed dust management plan shall be submitted to, and approved in writing by the mineral planning authority.

No activity hereby permitted shall cause dust to be emitted so as to adversely affect adjacent residential properties and/or other sensitive uses and/or local environment. Should such an emission occur, the activity shall be suspended until a revised dust management plan is submitted and approved by the mineral planning authority.

Paragraph: 142 Reference ID: 27-142-20140306

Revision date: 06 03 2014

Lighting

Prior to the commencement of development, details of proposed lighting, including siting, height, design and position of floodlights, shall be submitted to and approved in writing to the local planning authority. The lighting shall be implemented in accordance with these details and no other form of floodlighting shall be implemented on the

application site without the prior written approval of the local planning authority.

Paragraph: 143 Reference ID: 2a-143-20140306

Revision date: 06 03 2014

Soils

Prior to the construction of the drilling pad all available topsoil shall be stripped from the site and shall be stored in separate mounds within the site for use in the restoration of the site. The soils shall only be stripped when they are in a dry and friable condition.

All topsoil and subsoil mounds shall be graded and grass seeded within one month of the first planting season and thereafter retained in a grassed, weed free condition throughout the duration of the development pending their use in the restoration of the site.

Paragraph: 144 Reference ID: 27-144-20140306

Revision date: 06 03 2014

Protected species and wildlife habitats

Prior to the commencement of development, a method statement for the protection of wildlife, flora and fauna during construction and during operation of the facility shall be submitted to and approved in writing by the mineral planning authority.

No later than one year before the decommissioning of the site, an ecological survey shall take place to establish the presence, or otherwise, of any protected species on the site within the site boundary and immediately outside. The survey and measures for the protection of and minimisation of disturbance during the decommissioning phase shall be submitted to the mineral planning authority for approval in writing. The development shall be implemented strictly in accordance with approved details of protection.

Paragraph: 145 Reference ID: 27-145-20140306

Revision date: 06 03 2014

Restoration and after care

Within (time to be specified) months of the certification in writing by the local planning authority of the completion of restoration, as defined in this permission, a scheme and programme for the aftercare of the site shall be submitted to the local planning authority for approval in writing.

The scheme and programme shall contain details of the following:

a. maintenance and management of the restored site to promote its agricultural, forestry or amenity use.

b. weed control where necessary.

c. measures to relieve compaction or improve drainage.

d. an annual inspection to be undertaken in conjunction with representatives of the mineral planning authority to assess the aftercare works that are required in the following year.

or within 3 months of the date of this permission a detailed restoration and year aftercare scheme shall be submitted for the written approval of the mineral planning authority. The scheme shall include details of the following:

a. treatment of the borehole;

b. soil remediation and reinstatement measures along with details of proposed grass seed mixes;

c. the removal of all building, plant, equipment, machinery, fencing, temporary surfacing materials from the Site and access track not required for the purpose of restoration and aftercare;

d. a 5 year aftercare programme.

The Site shall be restored in accordance with the approved restoration scheme and the Site thereafter managed in accordance with the approved 5 year aftercare programme. The aftercare period shall commence from the date that the local planning authority confirms that the restoration works have been carried out and fully implemented in accordance with approved details.

Paragraph: 146 Reference ID: 27-146-20140306

Revision date: 06 03 2014

Annex D: Underground storage of natural gas

Are all proposals for underground storage of gas handled by the mineral planning authority?

Mineral planning authorities in England will be responsible for determining underground gas storage proposals in their areas which:

a. have an expected working capacity below 43 million standard cubic metres; or

b. have an expected maximum flow rate below 4.5 million standard cubic metres per day.

Applications for storage projects above this size, are dealt with under the Planning Act 2008 (see section 1.8 of the National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4)), and must be made to the Secretary of State for Energy and Climate Change.

Paragraph: 230 Reference ID: 27-230-20141017

Revision date: 17 10 2014

Who are the key regulators for underground gas storage?

The key regulators for underground gas storage are:

- Health and Safety Executive, who regulate safety during the design, construction, operation and decommissioning of underground gas storage sites. They are also responsible for regulating the safety of pipelines connecting to the storage facility and, where the proposal is to use a depleted oil or gas reservoir, for ensuring the appropriate design and construction of a well casing for any borehole.
- Environment Agency, who are responsible for protecting water resources (including groundwater aquifers), ensuring the

appropriate treatment and disposal of waste arising from the construction and operation of the site, and air emissions;

- Mineral planning authorities, who grant permission for the location of those gas storage surface activities for which they hold planning responsibility. They are also responsible for ensuring geological integrity given the risks of subsidence and other impact on the use of land;
- Hazardous substances authorities, who are usually local planning authorities, who may need to provide hazardous substances consents; and
- Department of Energy and Climate Change who, if the thresholds referred to in paragraph 7 above are met, are the decision-making authority for applications for Development Consent Orders under the Planning Act 2008. If sought by the developer, a Development Consent Order might also include powers of compulsory acquisition and directions that planning permission and hazardous substances consent are deemed to be granted. Where the proposal is to use a depleted oil and gas reservoir, the applicant must also submit a field development plan to the Department of Energy and Climate Change for approval.

Paragraph: 231 Reference ID: 27-231-20141017

Revision date: 17 10 2014

What sort of underground structures might be suitable for the storage of natural gas?

There are a number of types of underground structures suitable for storing gas, created both as the result of human activity or through natural causes. Each has distinct physical characteristics which are likely to govern the deliverability and operational ranges and thus the economic viability of a particular storage type.

Typical types of storage include:

- depleted hydrocarbon (gas, or less commonly oil) reservoirs – using the pre-existing suitable, well-investigated geological structure that has been proven to retain hydrocarbons over millions of years. Large volumes of gas are pumped in through

wells and when needed later, are withdrawn through these wells;

- halite (rock salt) deposits – cavities (or caverns) are created within thick underground rock salt deposits and are able to effectively confine gases pumped into the void. These voids can be excavated by conventional underground mining, or more commonly, by drilling a borehole into the salt and pumping fresh water down to dissolve the salt, forming brine which is then extracted by pumping;
- lined rock caverns (including those created from mining minerals) – these are small volume storage facilities generally constructed in regions lacking suitably developed halite deposits or porous and permeable strata, and where the lining is usually constructed from concrete and steel; and
- unlined rock caverns – the storage of some forms of hydrocarbons in mined voids is possible in certain rock types other than salt, for example storage of liquid petroleum gas in chalk.

Paragraph: 232 Reference ID: 27-232-20141017

Revision date: 17 10 2014

What depths are suitable for underground storage of natural gas?

There is no set depth that is suitable for underground gas storage, since much will depend on the nature of suitable geological strata and works required to prevent leakage of gas into surrounding strata. For example:

- storage in mined rock caverns lined with sheet steel supported by concrete can be as low as 100 to 200 metres below the surface;
- storage in former salt caverns or former oil reservoirs will generally be at depths between around 200 metres and 700 metres; whilst
- storage in onshore depleted hydrocarbon fields currently takes place at depths between around 400 and 1,000 metres, with some proposals involving depths of 1,300 to 2,300 metres.

Paragraph: 233 Reference ID: 27-233-20141017

Revision date: 17 10 2014

What are the key considerations for exploring the suitability of underground gas storage facilities?

The key factors to consider when evaluating the potential for underground storage of gas include:

- the integrity of the geological structure and proposed works such that there is no possibility of uncontrolled gas escape;
- results of advanced modelling of likely gas pressure regimes and behaviour, since these will control the pressures and amounts of gas that can be stored and recovered, and the rates of injection and withdrawal of gas;
- the number and locations of wells required for effective use of the facility; and
- surface considerations, including any infrastructure required to support the storage facility and the movement of gas to and from the facility.

The suitability for each type and location of underground gas facility will depend on detailed site investigation and characterisation studies that are likely to be required to prove the integrity of the proposed storage location.

Paragraph: 234 Reference ID: 27-234-20141017

Revision date: 17 10 2014

What information should be provided to planning authorities to help them make an informed decision on the suitability of the local geology?

Planning authorities should expect the applicant to provide a detailed geological assessment to demonstrate the suitability of the geology at the site for the type of underground gas storage proposed. For example:

- for porous rock, a depleted or partially depleted oil or gas field, the applicant's geological assessment should determine the suitability of the rocks for underground gas storage;
- for salt cavities, the geological assessment should demonstrate the integrity of overlying strata and the risk of collapse of the salt cavern. The assessment should also cover issues such as salt thickness, salt purity, the ability of the site to store the proposed quantity of gas, and other factors which will affect the design of the salt cavern. The assessment should also cover the long term integrity of the strata after decommissioning or closure of the storage facility.

In determining the geological integrity of underground storage facilities, planning authorities should liaise closely with the Health and Safety Executive and the Environment Agency given their role in preventing major accidents involving hazardous substances and in limiting the consequences of any accident to people and the environment.

Paragraph: 235 Reference ID: 27-235-20141017

Revision date: 17 10 2014

Planning for coal extraction

How are environmental impacts of surface coal mining proposals assessed?

The environmental impacts of coal extraction should be considered in the same way as for other minerals. However, both coal operators and mineral planning authorities must have regard to the environmental duty placed on them under section 53 of the Coal Industry Act 1994 when preparing and determining planning applications.

Paragraph: 147 Reference ID: 27-147-20140306

Revision date: 06 03 2014

What specific issues should mineral planning authorities consider for underground mining?

Underground coal mining can raises additional issues to surface coal mining which mineral planning authorities may need to consider. These include: the potential effects of subsidence, including the potential hazard of old mine workings; the treatment and pumping of underground water; monitoring and preventative measures for potential gas emissions; and the method of disposal of colliery spoil.

Paragraph: 148 Reference ID: 27-148-20140306

Revision date: 06 03 2014

Minerals planning orders

What are minerals planning orders?

Section 97 of, Part II of Schedule 5 and Schedule 9 to the Town and Country Planning Act 1990 establish a range of orders by which minerals planning authorities can control minerals development, some of which apply to all development and others which apply only to minerals extraction. These can be used by minerals planning authorities to:

- revoke a planning permission for minerals development, (where the permission to carry out development is removed);
- modify a planning permission (where the terms of a planning permission are amended);
- discontinue or modify use of land for minerals extraction;
- prohibit resumption of minerals planning permissions;
- suspend a planning permission.

Section 100 and Schedule 9 to the Town and Country Planning Act 1990 also give the Secretary of State default powers to make certain orders.

Paragraph: 149 Reference ID: 27-149-20140306

Revision date: 06 03 2014

When should minerals planning orders be used?

The use of an order will depend on the circumstances of the individual case and the working status of the site. Where mineral planning authorities do decide to make an order they must have regard to the development plan and to any other material considerations. In most circumstances compensation is payable.

Orders should be considered as an action of last resort where discussions with the owner and operator have been unable to resolve the problem. However, operators may voluntarily agree that certain permissions may be modified or given up, in which case, the mineral planning authority should issue a Prohibition Order.

Paragraph: 150 Reference ID: 27-150-20140306

Revision date: 06 03 2014

Can mineral planning authorities use orders as an alternative to periodic reviews of minerals planning conditions or enforcement powers?

Mineral planning authorities should not use their order making powers as a substitute for, or to supplement, periodic reviews of minerals planning conditions. Nor should orders be used as a substitute for planning enforcement powers. However, there may be exceptional circumstances in between periodic reviews, or prior to the first review, where a material change in circumstances makes it unacceptable for the development to continue under the existing conditions.

Paragraph: 151 Reference ID: 27-151-20140306

Revision date: 06 03 2014

Modification and Revocation Orders

When can Modification and Revocation Orders be used?

Modification and Revocation Orders may only be made before buildings or operations have been completed or a change of use has

occurred. In the case of minerals development an order can only be made before minerals development begins or in respect of uncompleted parts of the minerals development. For example, aftercare conditions can only be imposed before soils have been replaced and restoration conditions satisfied.

Paragraph: 152 Reference ID: 27-152-20140306

Revision date: 06 03 2014

Can a Modification/Revocation Order come into effect without being confirmed by the Secretary of State?

The Secretary of State needs to confirm a Modification or Revocation Order before it can come into effect unless all the following conditions are met:

- the order applies to full rather than outline planning permission;
- the owner and occupier of the land and all those who in the mineral planning authority's opinion will be affected by the order have informed the mineral planning authority in writing that they do not wish to object to it;
- the mineral planning authority has advertised the making of the order in the prescribed manner and sent a copy of the advertisement to the Secretary of State within 3 days of the publication of the advertisement;
- the Secretary of State has not received any objections, and;
- the original planning permission was not granted or deemed to have been granted by the Secretary of State (see section 99 of the Town and Country Planning Act 1990).

Paragraph: 153 Reference ID: 27-153-20140306

Revision date: 06 03 2014

What happens if anyone objects to a notice?

Where there is an objection, the views of the person will be heard by a Planning Inspector. This can be through a local inquiry, a hearing or written representations depending on the circumstances (see section 98 of the Town and Country Planning Act 1990).

Paragraph: 154 Reference ID: 27-154-20140306

Revision date: 06 03 2014

Discontinuance Orders

What are Discontinuance Orders?

Discontinuance Orders are orders that require changes to the use of land for minerals development. Such an order may:

- stop the use of land for minerals development;
- impose additional conditions on its continuing use;
- require buildings or works to be altered or removed; and/or
- require that any plant or machinery used for minerals development should be altered or removed.

Paragraph: 155 Reference ID: 27-155-20140306

Revision date: 06 03 2014

Why use a Discontinuance Order?

Typical circumstances when a Discontinuance Order may be appropriate include:

- where minerals development began in breach of planning control but where enforcement action is not appropriate; or
- where it represents the most effective method of modifying the use (eg to ensure the restoration) of a large site which is subject to more than one planning permission.

Paragraph: 156 Reference ID: 27-156-20140306

Revision date: 06 03 2014

Can a Discontinuance Order impose aftercare conditions?

Aftercare conditions may be imposed by a Discontinuance Order if the order also imposes, or the minerals site is already subject to, planning conditions which require restoration of the site.

Paragraph: 157 Reference ID: 27-157-20140306

Revision date: 06 03 2014

Who can confirm a Discontinuance Order?

A Discontinuance Order must be confirmed (with or without any modifications) by the Secretary of State in order to come into effect regardless of whether or not there is a local inquiry, hearing or written representation.

Paragraph: 158 Reference ID: 27-158-20140306

Revision date: 06 03 2014

Prohibition Orders

What are Prohibition Orders?

Prohibition Orders are orders whose purpose is to make it absolutely clear that minerals development has stopped and cannot resume without a fresh planning permission, and to secure the restoration of the land.

This type of order can also impose other requirements including removal of machinery, compliance with existing planning conditions, and any restoration conditions (see paragraph 3(3) of Schedule 9 to the Town and Country Planning Act 1990).

Paragraph: 159 Reference ID: 27-159-20140306

Revision date: 06 03 2014

When can a Prohibition Order take effect?

A Prohibition Order may only take effect if confirmed by the Secretary of State, with or without any modifications (see paragraph 4 of Schedule 9 of the Town and Country Planning Act 1990).

Paragraph: 160 Reference ID: 27-160-20140306

Revision date: 06 03 2014

Can a Prohibition Order apply to more than one planning permission?

A Prohibition Order can encompass any number of permissions which apply to the land or site(s) to which it relates.

Paragraph: 161 Reference ID: 27-161-20140306

Revision date: 06 03 2014

What conditions must be met before a Prohibition Order can be made?

A Prohibition Order may only be made where it appears to the mineral planning authority that minerals development has occurred but has permanently ceased.

Paragraph: 162 Reference ID: 27-162-20140306

Revision date: 06 03 2014

How will a mineral planning authority know if minerals development has permanently ceased?

A mineral planning authority may assume that minerals development has permanently ceased only when:

- no minerals development has occurred to any substantial extent at the site for at least 2 years, and;
- it appears to the mineral planning authority, on the evidence available to them at the time when they make the order, that resumption to any substantial extent at the site is unlikely (see paragraph 3(2) of Schedule 9 of the Town and Country Planning Act 1990).

Paragraph: 163 Reference ID: 27-163-20140306

Revision date: 06 03 2014

Can a mineral planning authority grant a fresh planning permission for extraction on a site subject to a Prohibition Order?

A mineral planning authority may grant a fresh planning permission for extraction on a site subject to planning permission, but they must first revoke the Prohibition Order. This does not require confirmation by the Secretary of State. A new planning permission would be required to enable minerals development to be resumed (see paragraph 4(8) of Schedule 9 of the Town and Country Planning Act 1990).

Paragraph: 164 Reference ID: 27-164-20140306

Revision date: 06 03 2014

How will mineral planning authorities decide whether resumption of minerals working may take place?

A mineral planning authority's decision whether resumption of minerals working may take place will depend on the circumstances of the case, including the scale of the minerals operation and past levels of minerals production.

Mineral planning authorities would need to weigh up evidence supplied by the operators/owners on:

- the pattern and programme of their operations including forecasts of trends in
- production and markets for their products;
- the quality and quantity of workable mineral; and,
- whether there is a real genuine intention to work the site.

In the event of a planning inquiry the mineral planning authority will need to be able to demonstrate that their decision to make an order is a reasonable one in the light of such issues and all other material considerations.

Paragraph: 165 Reference ID: 27-165-20140306

Revision date: 06 03 2014

Can a Prohibition Order impose aftercare conditions?

A Prohibition Order can impose aftercare conditions if the order also imposes, or the site in question is already subject to, restoration conditions.

Paragraph: 166 Reference ID: 27-166-20140306

Revision date: 06 03 2014

Suspension Orders

What is a Suspension Order?

A Suspension Order is a holding measure which restricts the resumption of minerals development for a period of time at a site where work is temporarily suspended, before either the resumption of development or the making of a prohibition order. It does not and cannot prevent the recommencement of minerals development.

Paragraph: 167 Reference ID: 27-167-20140306

Revision date: 06 03 2014

When should a Suspension Order be used?

Suspension Orders should be used to deal with environmental problems arising at sites where minerals development has been temporarily suspended, but the mineral planning authority believes that an operator intends to resume working in the foreseeable future.

Paragraph: 168 Reference ID: 27-168-20140306

Revision date: 06 03 2014

When can Suspension Orders take effect?

Suspension Orders can only take effect once they are confirmed, with or without modifications, by the Secretary of State.

Paragraph: 169 Reference ID: 27-169-20140306

Revision date: 06 03 2014

What can a Suspension Order cover and not cover?

A Suspension Order may require steps to be taken for the protection of the environment, including measures to preserve the amenities of the area in which the land is situated, to protect it from damage or to prevent deterioration in the condition of the land while development is suspended. Examples of this include the removal of plant or equipment or tidying up the site; the provision of fencing and other safety measures (if existing powers in other legislation prove insufficient).

A Suspension Order may not include restoration or aftercare conditions.

Paragraph: 170 Reference ID: 27-170-20140306

Revision date: 06 03 2014

By when must actions covered by a Suspension Order be taken?

Actions covered by a Suspension Order must be carried out by the date specified by the mineral planning authority.

Paragraph: 171 Reference ID: 27-171-20140306

Revision date: 06 03 2014

What is a Supplementary Suspension Order?

A Supplementary Suspension Order is a further order which may be made to take account of changing circumstances after a Suspension Order has come into force.

Paragraph: 172 Reference ID: 27-172-20140306

Revision date: 06 03 2014

When can a Supplementary Suspension Order be used?

Circumstances which might warrant a Supplementary Suspension Order include:

- delays in resumption of minerals development, to secure the site for a further period of time;

- additional or alternative steps are needed to protect the environment; or
- resumption of development is sooner than anticipated. Supplementary Suspension Orders must be confirmed by the Secretary of State except when they revoke a Suspension Order or a previous Supplementary Suspension Order and do not require that any fresh steps be taken to protect the natural environment.

Paragraph: 173 Reference ID: 27-173-20140306

Revision date: 06 03 2014

When should Suspension Orders and Supplementary Suspension Orders be reviewed?

Suspension Orders and Supplementary Suspension Orders should be reviewed at intervals of not more than 5 years, to ensure that they do not remain in force indefinitely without the mineral planning authority considering what other action to take (see paragraph 9 of Schedule 9 to the Town and Country Planning Act 1990).

Paragraph: 174 Reference ID: 27-174-20140306

Revision date: 06 03 2014

How does minerals development recommence on land subject to a Suspension Order?

The operator must notify the mineral planning authority in advance of the intended date of restarting minerals development, and the mineral planning authority must revoke the order within 2 months of the date that working has resumed to a substantial extent.

If the mineral planning authority does not revoke the order, the operator may apply to the Secretary of State for its revocation and either the operator or the mineral planning authority may request a hearing prior to the decision being made.

Paragraph: 175 Reference ID: 27-175-20140306

Revision date: 06 03 2014

Compensation payable when a mineral planning order is used

When is compensation payable when these minerals planning orders are used, and to whom?

Minerals planning orders may attract compensation by the mineral planning authority to the operator if they are confirmed by the Secretary of State and a valid claim is made (see the Town and Country Planning (Compensation for Restrictions on Mineral Working and Mineral Waste Depositing) Regulations 1997).

Paragraph: 176 Reference ID: 27-176-20140306

Revision date: 06 03 2014

Who pays out compensation when an order is confirmed by the Secretary of State?

Any compensation is paid by the mineral planning authority when an order is confirmed by the Secretary of State.

Paragraph: 177 Reference ID: 27-177-20140306

Revision date: 06 03 2014

Review of minerals planning conditions

What minerals sites are subject to review of minerals planning conditions?

There are 2 categories of sites which are subject to reviews of minerals planning conditions:

1. dormant sites, where planning permission was granted between 21 July 1943 and 22 February 1982, but where extraction has yet to take place. Most of these sites had few, if any, operating and restoration conditions attached to them. These may include the few remaining Interim Development Orders which were granted between 21 July 1943 and 1 July 1948 (see section

22 of and Schedule 2 to the Planning and Compensation Act 1991); and

2. those sites where minerals extraction is taking place, but whose permission will last for many years. In such circumstances, a periodic review of the conditions attached to the original planning permission can help ensure that the sites operate to continuously high working and environmental standards. Legislation setting out how these periodic reviews should be carried out can be found at section 96 of and Schedule 14 to the Environment Act 1995, and section 10 of and Schedule 3 to the Growth and Infrastructure Act 2013.

Paragraph: 178 Reference ID: 27-178-20140306

Revision date: 06 03 2014

What are the main steps to be followed in reviewing minerals planning conditions?

The main steps to be followed in reviewing minerals conditions, including for dormant sites, is set out in this flowchart showing the overview of review of mineral planning conditions.

Paragraph: 179 Reference ID: 27-179-20140306

Revision date: 06 03 2014

Dormant sites

When can dormant sites start development?

Minerals development cannot lawfully commence until the applicant has submitted an application for appropriate minerals conditions and conditions have been agreed by the mineral planning authority. An application for conditions may need to be accompanied by an Environmental Statement under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.

Paragraph: 180 Reference ID: 27-180-20140306

Revision date: 06 03 2014

Who can apply for the determination of new conditions for Interim Development Order sites?

Those entitled to apply for the determination of new conditions for Interim Development Order sites are:

- the freeholder of any part of the land to which the permission relates;
- the tenant of any part of the land to which the permission relates with more than 7 years lease left to run; or
- any person who is entitled to an interest in any minerals in the land to which the permission relates.

Paragraph: 181 Reference ID: 2a-181-20140306

Revision date: 06 03 2014

What happens if a site crosses minerals planning authority boundaries?

Mineral planning authorities only have administrative responsibility for land within their administrative area. An existing permission which straddles an administrative boundary must be treated as 2 (or more) permissions. Planning authorities should co-ordinate their approach and where necessary make arrangements to discharge any of their relevant functions jointly.

Paragraph: 182 Reference ID: 27-182-20140306

Revision date: 06 03 2014

What is the procedure for applying for approval of conditions?

Applications for approval of conditions must be made on an official form obtainable from the mineral planning authority and must be accompanied by the appropriate certificates that the necessary publicity, notification and certification requirements have been complied with.

Paragraph: 183 Reference ID: 27-183-20140306

Revision date: 06 03 2014

What happens if more than one person applies?

If there is more than one person eligible to apply and each makes a separate application, the mineral planning authority must treat all the applications as a single application served on the date on which the latest application was made. It must notify each applicant of receipt of the applications and their determination separately. Where the mineral planning authority has already determined an application, then no further applications may be made by any person.

Paragraph: 184 Reference ID: 27-184-20140306

Revision date: 06 03 2014

How should mineral planning authorities handle permissions where the Interim Development Order covers only part of a working site?

If the Interim Development Order covers only part of a working site, then mineral planning authorities are still required to review the conditions. However, there will be a need to impose fewer conditions in certain circumstances, for example:

- where an applicant can demonstrate that a 'dormant' permission has been active in recent years;
- that operations have been only temporarily suspended, and;
- that the imposition of full modern conditions would fundamentally affect the economic viability of the operation.

In deciding what conditions to apply, mineral planning authorities should take account of any later planning permissions for winning and working or depositing of mineral waste on adjacent land which forms part of the same planning unit, and to later planning permissions or consents.

Paragraph: 185 Reference ID: 27-185-20140306

Revision date: 06 03 2014

Are there any restrictions on planning conditions that may be imposed as part of the review of planning conditions?

There are 3 main restrictions on planning conditions that may be imposed as part of the review of planning conditions:

- all conditions must meet the policy tests, be necessary and should not affect the economic viability of the operation (eg conditions which restrict the total quantity of mineral for extraction).
- all final applications must include a condition that the winning and working of minerals or depositing of mineral waste must cease not later than 21 February 2042, except where the original permission is already time-limited (see Schedule 2 to the Planning and Compensation Act 1991 and Schedule 13 of the Environment Act 1995); and
- conditions may be used to withdraw any outstanding permitted development rights only if there are exceptional and sound planning reasons for doing so.

Paragraph: 186 Reference ID: 27-186-20140306

Revision date: 06 03 2014

Is compensation payable for imposing updated planning conditions on dormant sites?

Compensation is not payable for imposing updated planning conditions on dormant sites.

Paragraph: 187 Reference ID: 27-187-20140306

Revision date: 06 03 2014

Can the applicant appeal the imposition of conditions?

The applicant can appeal the imposition of conditions on dormant sites as part of a periodic review if the applicant considers that the conditions imposed are unreasonable.

Paragraph: 188 Reference ID: 27-188-20140306

Revision date: 06 03 2014

Coverage and frequency of periodic reviews

What sites are subject to periodic reviews of planning permissions?

All mining sites, including any extensions to sites granted after the initial minerals planning permission, are subject to periodic reviews of planning permissions. Mineral planning authorities can review mining sites with a single permission or the aggregate of 2 or more permissions.

Paragraph: 189 Reference ID: 27-189-20140306

Revision date: 06 03 2014

How should reviews apply where there is more than one minerals permission on the same site?

Different operators on a mining site are encouraged to co-ordinate with each other to facilitate a single review of the site. This may require preparation of a single Environmental Statement.

Paragraph: 190 Reference ID: 27-190-20140306

Revision date: 06 03 2014

How should satellite sites be treated?

Some minerals operations rely on a number of ‘satellite’ sites serving a central processing facility. Some of these sites may be active, whilst others may be held in reserve to be brought into production as the market dictates or as other sites are worked out. Whether or not such satellite sites should be regarded as one minerals site or several different minerals sites will depend upon a number of factors, such as:

- their location;
- their distance from each other and from the central processing facility;
- whether it is clear that the various sites form part of a co-ordinated approach to ensure the sustainability of the processing facility;

- the date of the relevant planning permissions (because these will determine in which phase a site falls to be reviewed or whether it is subject to initial review at all); and
- whether it makes sense to review them all at the same time or separately.

Mineral planning authorities should justify their approach for treating satellite sites. In doing so, they should not separate permissions so as to ensure that some land is classified as a dormant site when the sensible approach is to treat the various permissions as a single operation, albeit separated by some distance.

Paragraph: 191 Reference ID: 27-191-20140306

Revision date: 06 03 2014

How frequently should reviews take place?

There is no fixed period when periodic reviews should take place so long as the first review is no earlier than 15 years after planning permission is granted or, in the case of an old permission, 15 years of the date of the initial review. Any further reviews should be at least 15 years after the date of the last review (see section 10 of, and Schedule 3 to, the Growth and Infrastructure Act 2013).

Mineral planning authorities should usually only seek a review of planning conditions when monitoring visits have revealed an issue that is not adequately regulated by planning conditions, which the operator has been made aware of and has not been able to address.

See the form for application for determination of conditions.

Paragraph: 192 Reference ID: 27-192-20140306

Revision date: 06 03 2014

What conditions are in place until a review is completed?

Operators at sites where extraction is taking place can continue to work under the existing planning conditions that apply to the planning permission(s), until the new conditions are finally decided.

Paragraph: 193 Reference ID: 27-193-20140306

Revision date: 06 03 2014

What types of conditions will be appropriate?

The appropriate types of conditions to impose will vary on each particular case, but regard should be had to all material planning conditions including:

- type of mineral;
- nature and extent of existing working;
- the location of the site;
- the length of time that minerals extraction has taken place at the site;
- land quality and proposed after-use; and
- the availability of suitable restoration materials.

Paragraph: 194 Reference ID: 27-194-20140306

Revision date: 06 03 2014

Can a periodic review of conditions cover ancillary mining development?

Ancillary mining development which is covered by a review of minerals planning conditions includes development:

- granted deemed planning consent under Part 17 of Schedule 2 to the Town and Country (General Permitted Development) (England) Order 2015;
- that would normally be granted deemed planning consent under Part 17, but where the original permitted rights have been withdrawn; or
- granted consent as part of a planning permission for minerals extraction or the depositing of mineral waste.

The review should exclude certain development from its scope. These include on-site cement works and brickworks, as well as any off-site remote processing plants. It should also exclude processing plant at a

mine or quarry where winning and working has ceased but the plant is continuing to process material from other active mines or quarries.

Paragraph: 195 Reference ID: 27-195-20150415

Revision date: 15 04 2015 See previous version

What can new conditions for ancillary mining development cover?

New conditions for ancillary mining development following a review can:

- withdraw permitted development rights for future ancillary development, where there are exceptional and sound planning reasons for doing so;
- impose conditions regulating the future operation of existing ancillary development;
- require the removal of ancillary development from the site only as part of a restoration condition once mining operations ceased.

Paragraph: 196 Reference ID: 27-196-20140306

Revision date: 06 03 2014

What should new conditions for ancillary mining development not cover?

New conditions cannot require the removal of ancillary development which:

- is clearly related to the planning permission; and
- may need to continue operating, or is capable of continuing to operate, after minerals extraction has ceased.

Paragraph: 197 Reference ID: 27-197-20140306

Revision date: 06 03 2014

Is a condition relating to subsequent infilling as a landfill site covered by any review?

A condition relating to subsequent infilling as a landfill site is covered by any review so long as it is part of the same permission as that for the minerals extraction.

Paragraph: 198 Reference ID: 27-198-20140306

Revision date: 06 03 2014

How do mineral planning authorities start the process of reviewing planning conditions?

The process for reviewing planning conditions start when the mineral planning authority serves written notice on owners of land or the operator. This should be at least 12 months before the review date set by the mineral planning authority (see paragraphs 2A, 4 and 12 of Schedule 14 to the Environment Act 1995).

The mineral planning authority should send a reminder notice to the applicant if it has not received an application for review of conditions within 8 weeks of the review date.

Paragraph: 199 Reference ID: 27-199-20140306

Revision date: 06 03 2014

Can minerals operators or landowners apply for a delay in reviewing the planning conditions?

A landowner or minerals operator may apply to the mineral planning authority for postponement of the date specified in the written notice for submission of new conditions within 3 months of the date the notice was served.

Such requests for postponement should be on the grounds that the existing planning conditions are satisfactory, and, if accepted, mineral planning authorities are encouraged to postpone reviews for 10 to 15 years.

Paragraph: 200 Reference ID: 27-200-20140306

Revision date: 06 03 2014

What information should minerals operators or landowners provide if they want to submit an application to postpone a review of their planning conditions?

Paragraph 5 of Schedule 14 to the Environment Act 1995 requires that an application for postponement of a review of planning conditions should contain the following information:

- the existing planning conditions in relation to the site;
- the reasons why the minerals operator or landowner considers that the conditions to be satisfactory; and
- the date which the minerals operator or landowner wishes to be substituted for the review date.

Paragraph: 201 Reference ID: 27-201-20140306

Revision date: 06 03 2014

How long does the mineral planning authority have to decide whether to accept a postponement of a review of minerals conditions?

Mineral planning authorities have 3 months to decide whether to accept, accept but modify the date proposed by the minerals operator or landowner, or refuse the application for postponing a review of minerals planning conditions. The minerals planning authority must set out its reasons in writing.

Should the mineral planning authority fail to give written notice of a decision within 3 months, then the application for postponing the review of planning conditions is deemed to have been approved.

Paragraph: 202 Reference ID: 27-202-20140306

Revision date: 06 03 2014

Are there any requirements to publicise a review of minerals permissions?

There is no statutory requirement on mineral planning authorities to publicise an application for a review of conditions where the minerals development is not subject to an Environmental Impact Assessment.

Reviews where an Environmental Impact Assessment is required are subject to public consultation arrangements.

Paragraph: 203 Reference ID: 27-203-20140306

Revision date: 06 03 2014

How long does the mineral planning authority have to determine the permission?

The minerals planning authority has a period of 3 months to determine the permission if no Environmental Statement is required except where a different time period is agreed in writing between the mineral planning authority and the applicant. Should it fail to give written notice of a decision within this period, the application and the conditions the application proposes are deemed to have been approved (see Schedule 14 to the Environment Act 1995). Where an Environmental Statement is required, the mineral planning authority has 16 weeks to determine an application. If it does not determine the application within this date, however, the application and conditions are not automatically approved. The applicant may appeal to the Secretary of State to determine these conditions after this time.

Paragraph: 204 Reference ID: 27-204-20140306

Revision date: 06 03 2014

Should mineral planning authorities issue screening opinions along with their notice to carry out a review?

Wherever possible mineral planning authorities should issue screening opinions as to whether the remaining permitted minerals development (ie the whole of the remaining development for which permission has been granted, not just the development taking place over the forthcoming 15 years) requires Environmental Impact Assessment at the same time as sending to operators advance notice of a review.

Paragraph: 205 Reference ID: 27-205-20140306

Revision date: 06 03 2014

How much of the site area is covered by a review of minerals conditions?

Where an Environmental Statement is required, environmental information is required for the whole minerals site covered by that permission before new operating conditions can be determined.

Paragraph: 206 Reference ID: 27-206-20140306

Revision date: 06 03 2014

Why are there automatic suspensions?

Where the site is 'stalled' owing to the lack of an adequate Environmental Statement or information, automatic suspensions are in place to give the operator notice that it needs to provide the information or else the mineral planning authority may serve a prohibition notice.

Paragraph: 207 Reference ID: 27-207-20140306

Revision date: 06 03 2014

What is the procedure for finalising stalled minerals conditions reviews?

Environmental Statements must provide an up-to-date assessment of the likely significant environmental effects of the whole of the remaining permitted development over the lifetime of the permission(s). It should therefore reflect current and future planned minerals development, up-to-date policy requirements and also take account of any changes in site boundaries since the application was submitted

Paragraph: 208 Reference ID: 27-208-20140306

Revision date: 06 03 2014

Are the timescales for preparing an Environmental Statement of submitting further information fixed?

The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 allow discretion for the minerals planning authority or Secretary of State to extend the period for submission of a new Environmental Statement.

Additional time should only be granted where there is a clear and limited timescale and the minerals planning authority is convinced that no environmental harm will result from the delay.

Paragraph: 209 Reference ID: 27-209-20140306

Revision date: 06 03 2014

When should a mineral planning authority consider making a Prohibition Order?

Mineral planning authorities are under a duty to make a Prohibition Order where:

- a site has been suspended for 2 years for failure to provide an Environmental Statement or relevant information; and
- it considers that the tests for issuing a Prohibition Order are met.

There are unlikely to be many cases in which, after 2 years' suspension, the mineral planning authority would not be acting rationally in assuming that working had permanently ceased.

Paragraph: 210 Reference ID: 27-210-20140306

Revision date: 06 03 2014

When can the applicant appeal against the determination of conditions by the mineral planning authority?

The applicant can appeal against the determination of conditions by the mineral planning authority if:

- the conditions determined by the mineral planning authority are different from those submitted by the applicant, and the applicant considers them unreasonable in any respect;

- the applicant disagrees with any conclusion by the mineral planning authority that there would be an impact on economic viability but that compensation is not payable.

The appeal must be lodged within 6 months of notice of the decision. Use this form: Appeals to the Secretary of State mineral site / mining site Environment Act 1995.

Paragraph: 211 Reference ID: 27-211-20140306

Revision date: 06 03 2014

When can the applicant not appeal against the decision of the mineral planning authority?

The applicant cannot appeal against a decision by the mineral planning authority that the imposition of new conditions would not restrict working rights.

Paragraph: 212 Reference ID: 27-212-20140306

Revision date: 06 03 2014

Can the applicant claim compensation as a result of any reviews of planning conditions?

The applicant can claim compensation as a result of any reviews of planning conditions where:

- the mineral planning authority determines conditions different from those submitted by the applicant; and
- The effect of new conditions, other than restoration or aftercare conditions, is to prejudice adversely to an unreasonable degree either the economic viability of the operation or the asset value of the site, taking account of the expected remaining life of the site.

The extent of compensation payable is restricted by the Town and Country Planning (Compensation for Restrictions on Mineral Working and Mineral Waste Depositing) Regulations 1997.

Paragraph: 213 Reference ID: 27-213-20140306

Revision date: 06 03 2014

What steps should the minerals planning authority take if it considers that the review of conditions would impact on working rights?

Mineral planning authorities should discuss the proposed conditions with the operator who should provide information about the economic viability of the operation and asset value of the site. In the light of that information, the mineral planning authority should either moderate the restriction or they must issue a separate notice and be prepared for a compensation claim.

Paragraph: 214 Reference ID: 27-214-20140306

Revision date: 06 03 2014

Automatic suspensions

When does an automatic suspension apply?

Automatic suspension applies if:

- the timescales set by the mineral planning authority (or the Secretary of State) for either confirmation of acceptance that an Environmental Statement is required is not met; or
- the provision of an Environmental Statement or further information (including any extended period as agreed in writing) is not met.

Paragraph: 215 Reference ID: 27-215-20140306

Revision date: 06 03 2014

What is the effect of an automatic suspension?

Minerals extraction must cease until the Environmental Statement or further information is provided.

Paragraph: 216 Reference ID: 27-216-20140306

Revision date: 06 03 2014

Flowchart and forms relating to review of mineral planning conditions

- Flowchart: Overview of review of mineral planning conditions
- Form: Appeals to the Secretary of State mineral site / mining site Environment Act 1995
- Form: Application for determination of conditions to which a mineral site/mining site is to be subject / Application for determination of conditions for mineral site/mining site
- Form: Application for determination of conditions to which interim development order permission (old mining permission) is to be subject application for determination of conditions on an interim development order permission

Overview of review of mineral planning conditions

Flowchart: overview of review of mineral planning conditions

PDF, 637 KB, 1 page

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Request an accessible format.

Paragraph: 217 Reference ID: 27-217-20140306

Revision date: 06 03 2014

Appeals to the Secretary of State mineral site / mining site Environment Act 1995

Official form for appeals to the Secretary of State mineral site/mining site Environment Act 1995

PDF, 27.5 KB, 3 pages

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Paragraph: 218 Reference ID: 27-218-20140306

Revision date: 06 03 2014

Application for determination of conditions to which a mineral site/mining site is to be subject / Application for determination of conditions for mineral site/mining site

Paragraph: 219 Reference ID: 27-219-20140306

Application for determination of conditions to which a mineral site/mining site is to be subject / Application for determination of conditions for mineral site/mining site

PDF, 30.1 KB, 5 pages

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Revision date: 06 03 2014

Application for determination of conditions to which interim development order permission (old mining permission) is to be subject / Application for determination of conditions on an interim development order permission

Application for determination of conditions to which interim development order permission (old mining permission) is to be subject / Application for determination of conditions on an interim development order permission

PDF, 27.4 KB, 4 pages

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Paragraph: 220 Reference ID: 27-220-20140306

Revision date: 06 03 2014

Definitions/terms used in the minerals guidance

- Aftercare – operations necessary to maintain restored land in a condition necessary for an agreed afteruse to continue.
- Afteruse – the use that land, used for minerals working, is put to after restoration.
- Aggregate minerals – minerals which are used primarily to support the construction industry including soft sand, sand and gravel, and crushed rock.
- Asset value of the site is value of the remaining minerals in the ground for which planning permission exists and stockpiled material, together with the land, buildings and fixed plant and machinery. The key test is whether a significant quantity of workable material would be lost relative to the amount of workable material in the site for which planning permission exists.
- Best and most versatile agricultural land – land in grades 1, 2 and 3a of the Agricultural Land Classification.

- Directional drilling – non-vertical wells which begin with slanted but straight holes often used for mineral exploration and to avoid surface obstacles. Wells may also begin vertically but progressively build angle to intercept the hydrocarbon reservoir in a longer section than can be achieved by vertical drilling. Such non-vertical wells can be deployed radially from a single well pad.
- Economic viability in the context of review of mineral permissions means the ability of a site to produce sufficient revenue to cover all of its operating costs (including finance costs and depreciation) and produce an appropriate return on capital. The key test is the extent to which the further restrictions imposed by new conditions would cause extra operating costs or restrict revenue to the extent that economic viability would be prejudiced adversely to an unreasonable degree.
- Flow-testing – various tests to determine the hydrocarbon flow potential from the well, the reservoir characteristics and the nature of the hydrocarbons and other fluids present, often performed at different levels in a well.
- Industrial minerals – minerals which are necessary to support industrial and manufacturing processes and other non-aggregate uses. These include minerals of recognised national importance including: brickclay (especially Etruria Marl and fireclay), silica sand (including high grade silica sands), industrial grade limestone, cement raw materials, gypsum, salt, fluorspar, tungsten, kaolin, ball clay and potash.
- Minerals Consultation Area – a geographical area, based on a Mineral Safeguarding Area, where the district or borough council should consult the Mineral Planning Authority for any proposals for non-minerals development
- Minerals development means development consisting of the winning and working of minerals or involving the depositing of mineral waste.
- Minerals Safeguarding Area – an area designated by a Mineral Planning Authority which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development
- Mining site refers to the land to which a minerals permission relates, which may include the total area of land to which 2 or

more planning permissions for minerals development relates if the mineral planning authority considers it desirable.

- Permitted reserves – sites where planning permission has been granted for development but where extraction has still to take place or is not yet completed. It may cover the whole or part of a site.
- Restoration – the return of land following mineral extraction to an acceptable condition, whether for resumption of the former land use or for a new use.
- Reclamation Plans – plans which indicate how the restoration and aftercare of the site is to be integrated with the working scheme, and demonstrate the suitability of the proposals of the proposed after-use.
- Temporarily suspended is when minerals development has not been carried out to any substantial extent for at least twelve months but it appears that a resumption of operations is likely.
- Well pad – A pad is a location for siting the wellheads for a number of horizontal, directional or vertically drilled wells.
- Winning a mineral means making the mineral available or accessible to be removed from land.
- Working a mineral means to remove it from its position in or under the land.

Paragraph: 221 Reference ID: 27-221-20140306

Revision date: 06 03 2014

Technical noise terms

- Background noise level: The A-weighted sound pressure level of the residual noise at the assessment with no operation occurring at the proposed site, defined in terms of the LA90,T.
- Decibel (dB): A unit of level derived from the logarithm of the ratio between the value of a quantity and a reference level. For sound pressure level the reference quantity is 20 micro-pascals, the threshold of hearing (0 dB). 140 dB(A) is the threshold of pain. dB(A): Decibels measured on a sound level meter incorporating a frequency weighting (A weighting) which differentiates between sounds of different frequency (pitch) in a

similar way to the human ear. Measurements in dB(A) broadly agree with people's assessment of loudness.

- Free Field: An external sound field in which no significant sound reflections occur (apart from the ground).
- LA90,T: The "A weighted" noise level exceeded for 90 per cent of the specified measurement period (T).
- LAeq,T: The "A weighted" equivalent continuous sound level – the sound level of a notionally steady sound having the same energy as the actual fluctuating sound over the same time period (T).
- Lmax: The highest noise level recorded during a noise event or measuring period. The time weighting should be stated.

Paragraph: 222 Reference ID: 27-222-20140306

Revision date: 06 03 2014

Published 17 October 2014