Office of the
Deputy Prime Minister
Creating sustainable communities

Minerals are essential for development and through that for our quality of life and creation of sustainable communities. Minerals planning ensures that the need for minerals by society and the economy is carefully balanced against the impacts of extraction and processing on people and the environment.

PLANNING

Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England

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Creating sustainable communities

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Office of the Deputy Prime Minister: London

Office of the Deputy Prime Minister
Eland House
Bressenden Place
London SW1E 5DU
Telephone 020 7944 4400
Website www.odpm.gov.uk

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ODPM Publications
PO Box 236
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Tel: 0870 1226 236
Fax: 0870 1226 237
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Minerals Policy Statements (MPSs) set out the policies and considerations that the Government expects Mineral Planning Authorities (MPAs) to follow in preparing minerals and waste development schemes as part of local development frameworks and in considering applications for minerals development. Minerals Policy Statement 2 (MPS2) states the principles to be followed in considering the environmental effects of mineral working and expands in appendices, on the need for community consultation and involvement and environmental management systems (EMSs). It is accompanied by separate technical Annexes on particular environmental effects, of which Annex 1 *Dust* and Annex 2 *Noise* are published alongside this MPS.

Contents

Minerals Policy Statement 2

Introduction

1. Minerals Policy Statement 2 (MPS2) sets out the policies and considerations in relation to the environmental effects of minerals extraction that the Government expects Mineral Planning Authorities (MPAs) in England to follow when preparing development plans and in considering applications for minerals development. It supersedes Minerals Planning Guidance Note 11 (MPG11) and should also assist mineral operators and their professional advisers in drawing up proposals for new or extensions to existing planning permissions, and help local communities and voluntary bodies when considering minerals policies in development plans and individual proposals for minerals development. While Regional Planning Bodies (RPBs) and the Mayor of London will need to be aware of the issue of mitigating the environmental effects of mineral working in framing the minerals elements of Regional Spatial Strategies (RSSs) and the Greater London Strategy, the requirements of this Statement are too detailed to be reflected in RSSs.
2. Exploitation of the UK's mineral resources contributes to the nation's prosperity and quality of life. The supply of essential materials for the construction, energy supply, manufacturing and other industries enables social and economic progress. Mineral working can be beneficial by providing employment, clearing areas of dereliction, dealing with instability and providing materials which allow redevelopment and the creation of sustainable communities and infrastructure. However, it also has impacts on the environment. Since minerals can only be worked where they are found, and as this may be in environmentally-sensitive or designated landscape areas and/or in close proximity to communities, the need to keep these impacts to an acceptable minimum in the planning and operating of extraction sites is a high priority. Where adverse environmental effects cannot be adequately controlled or mitigated through the design of proposals or the attachment of conditions, planning permission should be refused.
3. In this document, the term 'development plan' also refers to development documents prepared as part of local development schemes or minerals and waste development schemes under the Planning and Compulsory Purchase Act 2004.

SUSTAINABLE DEVELOPMENT

4. MPAs should incorporate the objectives of sustainable development in minerals planning. These objectives recognise the potential conflict between the exploitation of resources and environmental aims. In order to reconcile such conflicts, MPAs should aim to:
   - conserve minerals as far as possible, whilst ensuring an adequate supply to meet the needs of society;
   - ensure that the environmental impacts caused by mineral operations and the transport of minerals are kept to an acceptable minimum;
   - minimise production of waste and to encourage efficient use of materials, including appropriate use of high-quality materials, and recycling of waste;

- encourage sensitive working, restoration and aftercare practices during minerals extraction and to conserve or enhance the overall quality of the environment once extraction has ceased;
- safeguard the long-term capability of best and most versatile agricultural land, and conserve soil resources for use in a sustainable way; and
- protect areas of nationally-designated landscape or archaeological value, cultural heritage or nature conservation from mineral development, other than in exceptional circumstances where it has been demonstrated that the proposed development is in the public interest.

PURPOSE OF THIS GUIDANCE

5. This Statement sets out how MPAs should minimise any significant adverse environmental effects that may arise from minerals extraction by:
   - framing policies in development plans;
   - considering planning applications; and
   - considering reviews of planning consents under the provisions of the Environment Act 1995.

   In securing this aim, MPAs should liaise appropriately with Environmental Health Authorities (EHAs), relevant government agencies (i.e. the Environment Agency, English Nature, the Countryside Agency and the Health & Safety Executive), voluntary conservation and environmental groups (i.e. the Wildlife Trusts, The Royal Society for the Protection of Birds (RSPB) etc.), local communities, developers and minerals operators to secure improvements in the environmental performance of minerals extraction. Industries involving similar processes (i.e. aggregates recycling, construction and waste disposal etc.) should take into account relevant elements of this Statement in planning their own development proposals, in the expectation that they will be applied by planning authorities.

SCOPE AND STRUCTURE

6. This Minerals Policy Statement (MPS) comprises an overarching document, supported by technical annexes setting out policies and good practice[1] on specific environmental effects. This Statement provides policy on:
   - the planning considerations for the formulation of development plans, and decisions on individual planning applications and formulating planning conditions; and
   - environmental management systems (EMSs) and community relations.

1 Further guidance on good practice in relation to environmental effects of mineral working is available at www.goodquarry.com

7. Details on specific environmental effects are to be provided in Annexes to this Statement. Annexes 1 and 2 on *Dust* and *Noise* respectively, are published with this MPS. Further Annexes will be published, following consultation, as soon as practicable.

Planning Considerations

ENVIRONMENTAL IMPACT ASSESSMENT

8. An Environmental Impact Assessment (EIA) should ensure that the likely significant environmental effects of a proposed development are fully understood and taken into account before development is allowed to go ahead. Under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, as amended by the Town and Country Planning (Environmental Impact Assessment) (England and Wales) (Amendment) Regulations 2000, an EIA is mandatory for new mineral extraction sites and/or extensions to or reviews of permissions for existing sites of more than 25 hectares. Below this threshold, new sites and modifications to existing sites require an EIA if, without any mitigatory measures, they would be likely to have significant environmental effects. Criteria for assessing the need for EIA in Schedule 3 of the 1999 Town and Country Planning Regulations are based on the characteristics of the development, its location and the characterisation of the potential impact. Mineral working applications and reviews of old mineral permissions in or affecting the following designations (National Parks, the Broads, Areas of Outstanding Natural Beauty, World Heritage Sites, Scheduled Monuments, Sites of Special Scientific Interest and land to which Nature Conservation Orders apply and international conservation sites (e.g. those designated under the EU Habitats Directive or the Ramsar Convention on Wetlands)) should be subject to the most rigorous examination, normally including an Environmental Statement (ES), regardless of the size of the site. Guidance is given in DETR Circular 02/99 *Environmental Impact Assessment.*

9. An environmental assessment of an extension or a modification to an existing site should concentrate on the effects of the proposed modification, and take into account operations on the existing site affected by the modification. The assessment should consider if the modification could lead to a level of environmental impact that would be unacceptable for the site as a whole, or if the proposed extension would bring the perimeter of the site closer to existing communities (thereby changing the nature or degree of the impact on existing communities). Schedule 4 to the Regulations sets out the information that must be included in an ES for mineral development which requires an EIA.

DEVELOPMENT DOCUMENTS AND POLICIES

10. Policies and proposals in development plans have a key part to play in meeting the Government's objectives of ensuring that development and growth are sustainable. They should have regard to Planning Policy Statement 1 (PPS1)[2] *Delivering Sustainable Development* (2005) and Minerals Planning Guidance Note 1 (MPG1): *General Considerations and the Development Plan System* (1996) (currently under review) which

2 Planning Policy Statements (PPSs) and Minerals Policy Statements (MPSs) will eventually replace Planning Policy Guidance Notes (PPGs) and Minerals Policy Guidance Notes (MPGs), respectively. The MPS1 Consultation Paper *Planning and Minerals (and associated Good Practice Guidance)* is currently available and should be taken as material consideration alongside MPG1.

provide advice on planning policy for Local Planning Authorities (LPAs), MPAs and the minerals industry. When, as expected, MPG1 is replaced by Minerals Policy Statement 1 (MPS1), similar regard should be given to this successor document.

11. Development plan policies and proposals for minerals extraction and associated development should take into account:

- the impacts of mineral working, such as visual intrusion, dewatering, water pollution, noise, dust and fine particulates, blasting and traffic;
- the impacts on landscape, agricultural land, soil resources, ecology and wildlife, including severance of landscape and habitat loss, and impacts on sites of nature conservation, archaeological and cultural heritage value;
- the benefits such as providing an adequate supply of minerals to the economy and hence for society (including construction materials needed for the development of national infrastructure and the creation of sustainable communities), creating job opportunities, and the scope for landscape, biodiversity and amenity improvements through mineral working and subsequent restoration; and
- the methods of control through planning conditions or agreements to ensure that impacts are kept to an acceptable minimum.

12. Policies and proposals should take into account the level of existing activity and impacts, the duration and nature of proposals for new or further working, and the extent of impacts which a particular site, locality, community, environment or wider area of mineral working can reasonably be expected to tolerate over a particular or proposed period. With respect to an individual site, the effect of all relevant impacts (i.e. of noise, dust, traffic, on landscape etc.) should be considered objectively. Impacts that are acceptable individually should not be regarded as unacceptable in combination without a proper assessment. MPAs should also have regard where relevant to cumulative impacts of simultaneous and/or successive working of a number of sites in a wider area of commercially-viable deposits. These may affect communities and localities over an extended period, depending on the nature, age and size of the site(s) (see paragraphs 24–29).

13. Other development plan policies should ensure that development other than mineral extraction does not encroach on existing mineral operations, thus subjecting that development to a level of environmental impact that may be unacceptable and leading to complaints about the adequacy of planning conditions for the mineral operation concerned. Any consequent amendment to existing planning conditions could lead to loss of workable mineral and be subject to compensation provisions. (MPG1 refers to Mineral Consultation Areas to protect mineral reserves).

PRE-APPLICATION DISCUSSIONS

14. Proposals for mineral extraction can give rise to considerable concern in potential host communities because of the potential environmental impact that operations can have on a

locality. Before applications are submitted to an MPA for determination, developers should discuss their proposals with the relevant local authorities and any other organisations whose interests may be affected by the proposed development. They should consult the Environment Agency and/or the local authority as regulator in respect of any pollution control requirements. Issues such as noise, traffic, dust, blasting, drainage, access arrangements, working methods, pollution control, landscape, restoration, after-use and stability should be discussed with the appropriate bodies prior to making an application. Developers should consult the Environment Agency to evaluate the hydrological, chemical and ecological impact of any workings on groundwater and surface water supplies.

15. Developers should consult other local authority departments such as EHAs on noise and dust, and Highway Authorities on traffic. Where appropriate, they should consult the Department for Environment, Food and Rural Affairs (Defra), the Countryside Agency, English Nature, English Heritage, the Forestry Commission, and other parties with a material interest, over proposals to develop land in agricultural use or forestry or land of environmental, nature conservation, historic or archaeological importance.

16. In all cases, the MPA should obtain information from the operators and other interested parties about the likely environmental effects of proposals and how they are to be controlled. Operators should seek screening and scoping opinions from the MPA on the need for and content of ESs appropriate to the scale of the proposal and the sensitivity of its location.

CONSIDERATION OF APPLICATIONS

17. Applications which are in accordance with the relevant development plan should be allowed unless material considerations indicate otherwise. MPAs should have regard to all material considerations including the policies outlined in PPGs and MPGs, and their successor PPSs and MPSs. Developers should consider whether the development proposed would be in accordance with the development plan and, if not, whether other material considerations might be used to justify the development proceeding nonetheless. MPAs should take into account the full range of social, community, economic and environmental issues relevant to the planning decision.

18. When preparing the application and in proposing any necessary mitigation measures, the developer should demonstrate that any potential adverse effects have been properly and competently considered. Any adverse effects on local communities, environmental damage or loss of amenity must be kept to an acceptable minimum through the design of the proposals, including the use of planning obligation agreements where appropriate and the attachment of conditions. Where effective mitigation of unacceptable impact by those means is not possible, permission should be refused.

PLANNING CONDITIONS

19. The use of appropriate planning conditions may sufficiently mitigate any environmental effects so as to enable development to proceed where it might otherwise be necessary to refuse planning permission. The sensitive use of appropriate planning conditions, which address known and anticipated problems and concerns, can provide important environmental safeguards. In turn, they can influence the action that operators might take, such as entering into planning obligations and voluntary action such as good neighbours, which may be outside the scope of planning control. MPAs and developers and their advisers should have regard to the general advice on the use of planning conditions in DOE Circular 11/95 *The Use of Conditions in Planning Permission*, the advice on planning conditions specific to mineral permissions in Minerals Planning Guidance Note 2 (MPG2): *Applications, Permissions and Conditions* (1998) and the advice on planning obligations in DETR Circular 01/97 *Planning Obligations* and any subsequent advice that may be issued which updates and revises these documents.

20. MPAs should ensure planning conditions are enforceable. They must be precise, capable of being monitored (infringements must be detectable), defined sufficiently for breaches to be provable, necessary, relevant to planning and to the development, and reasonable.

The two principal types are:

- performance requirements; and
- the use of specific ameliorative measures.

Performance Requirements

21. Effective planning requires judgements based upon local circumstances and local objectives. MPAs should set out measurable performance requirements, such as noise or vibration limits, that make clear to operators what is expected of them so they can make their own decisions on the most cost effective way of meeting those criteria, while allowing outcomes to be monitored. MPAs should not specify methods for securing compliance that could inadvertently and unreasonably prejudice the flexibility of the operator's working methods and profitability. Performance requirements should usually be designed to:

- achieve a minimum environmental quality;
- limit degradation of the environment; and
- encourage improvement.

Model conditions are contained in the County Planning Officers' Society's *Good Practice Guide for Mineral Planning Conditions* (1995).

22. Monitoring is an essential feature of control over mineral extraction and advice is given in the Planning Officers' Society's *Good Practice Guide for Monitoring Minerals and Waste Management Sites* (1998). In many cases, periodic checks should be sufficient to identify

undesirable trends and allow action to be taken to avoid breaching planning conditions. MPAs should also have regard to the possibility in some situations of requiring the operator to provide accessible monitoring systems, and making audited reporting by the operator (e.g. under an EMS), a condition of the permission. Where appropriate, MPAs and operators should seek to reach planning agreements with owners of sensitive properties to ensure access for monitoring purposes. Advice on EMSs and environmental audits is provided in Appendix B.

Amelioration Measures

23. Precautionary ameliorative measures include wheel and body washing, sheeting of lorries prior to leaving a site, spraying of internal haul roads and the provision of visual barriers. These should be specified as planning conditions to mitigate adverse effects where there is difficulty in defining a performance criterion which can be readily monitored and enforced.

PROXIMITY OF MINERAL WORKINGS TO COMMUNITIES

24. MPAs should ensure that the adverse effects of mineral working on neighbouring communities are minimised. Increased public knowledge and awareness of the environmental, economic and social effects of mineral development means that the local community can actively participate in the decision-making process. Under the Planning and Compulsory Purchase Act 2004, MPAs are required to prepare a Statement of Community Involvement, which sets out their policy on involving their community in preparing Local Development Documents and consulting them on planning applications. The principles for involving the community in planning decisions are contained in the consultation papers published in February 2004 on PPS1 entitled *Creating Sustainable Communities* and *Community Involvement in Planning: The Government's Objectives.*

25. The prospect of a new mineral working can promise economic benefits or the opportunity of local redevelopment or regeneration to a community, but it can also raise fears such as damage or risks to the environment and human health. Involvement of the community and relevant stakeholders helps people understand what a mineral development will involve and how it will affect them. It enables the mineral developer and operator to identify concerns at an early stage, and to address them in planning and developing the project. Good practice on community consultation and involvement is set out in Appendix A.

26. Residents living close to mineral workings may be exposed to a number of environmental effects. MPAs must take particular care in respect of any conditions they attach to a grant of permission for working in proximity to communities. Where they judge that mitigation measures are not sufficient to safeguard the quality of the local environment, as experienced by neighbouring communities, refusal or restriction of the proposal may be appropriate. Dialogue should take place between MPAs, EHAs, operators and other stakeholders, especially in the local community, to determine appropriate mitigating measures, where these are feasible and would, if applied, allow the development to proceed.

27. The duration of the work can be a significant factor in determining the appropriate levels of control and mitigation. Sand and gravel workings and some opencast coal sites may be completed and restored within a few years, whereas a clay pit or a quarry producing aggregates or building stone may be operational for many years. The programme of work and/or the location of plant within the mineral working should take account of the proximity to occupied properties, as well as legitimate operational considerations. A programme of work should be agreed which takes account, as far as is practicable, of the potential impacts on the local community over the expected duration of operations.

28. In some circumstances (especially where workings will have an extended life), new or extended permissions for mineral extraction close to residential property may not provide adequate protection to nearby residents despite requirements for landscaping works such as bunds, screening and planting. In such cases, MPAs should consider the need to require adequate separation distances. MPAs should require a distance that is effective but reasonable, taking into account:

- the nature of the mineral extraction activity (including its duration);
- 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 amelioration measures that can be applied.

Working in proximity to residential property may be necessary where there are clear, specific achievable objectives such as the removal of instability and preparing land for subsequent development. Such working should be for a limited and specified period, without scope for extension.

29. Some minerals are concentrated in certain areas. For example, shallow coal deposits that can be worked by opencast extraction are found within the known coalfield areas and their locations are generally well documented. Situations may therefore arise where commercially-viable deposits will be concentrated in certain areas. There may be proposals for simultaneous operations over a relatively short period of time or phased operations at a succession of sites over a relatively longer period of time, with potential for cumulative impacts in the locality. Individual mineral workings can also generate multiple environmental impacts, such as noise and traffic, or traffic and dust, together with possible impacts on the landscape, water environment and habitats. In these circumstances, the MPA should consider both the need for long-term planning to avoid unnecessary sterilisation of resources, and how the combined impacts at individual sites and the cumulative impacts of further working of the mineral in a particular area can be reconciled with the need to protect localities and communities from unacceptable consequences of that working (e.g. by the number and timing of permissions, the phasing of workings and restoration, and the attachment of conditions to mitigate impacts).

Conclusion

30. This Statement and its Annexes reflect current good practice. It will be kept under review and may need updating to reflect changes in technology, environmental standards and future research. Meanwhile the First Secretary of State looks to all LPAs and to mineral operators to follow the policies it sets out. They should ensure that the environmental impacts of mineral workings are minimised and controlled, and foster good community relations between mineral developers and operators and those living close to mineral workings. Since this Statement aims to minimise the environmental impacts of mineral workings in accordance with generally-established principles of environmental protection that were previously contained in a range of guidance, the resource implications for local authorities should be low. As far as mineral operators are concerned, implementation of the policies in this Statement is a necessary investment to secure the environmental mitigation that will enable their development to proceed in accordance with best current practice.

31. The Annexes to this Statement cover best current practice for the various types of environmental impacts.

Appendices

Appendix A: Community Consultation and Involvement

A1. Good community relations require commitment from all those involved. Local communities need to be given accurate information about proposals, and mineral operators and developers should try to accommodate their legitimate concerns. MPAs are also required to prepare a Statement of Community Involvement, which sets out their policy for involving their community in preparing Local Development Documents and for consulting on planning applications.

A2. Operators should establish a good working relationship with the people with whom they will have to work with in the MPA, local community and, where appropriate, other relevant interest groups. MPAs can significantly assist in the integration of a minerals operation within the community e.g. by providing information on the working of the planning system as applied to mineral developments. Initial and understandable community fears about the effects on the environment can often be allayed by knowledge of what those effects will be and how the operator will handle them. Operators should aim to develop a good track record on the environment, on community consultation, and in responding to complaints. This is performance against which future project proposals can be judged. The following paragraphs provide checklists for the various parties involved.

A3. **Planning Authorities should:**

- consider the cumulative effect of previous minerals development and new proposals on the locality;
- avoid inappropriate non-mineral development and encroachment on the area around permitted or planned longer-term workings and the resulting avoidable sterilisation of significant reserves;
- encourage dialogue between operators and the community;
- encourage the establishment of local site liaison committees and enable officers and members to participate in them; and
- establish effective monitoring, i.e. for noise, dust, vibration and traffic impacts, and, where appropriate, take enforcement action.

A4. **Operators should be:**

- good neighbours by:
  - getting to know the neighbours, being concerned about them, understanding their problems and encouraging them to know the site personnel;
  - setting up regular, accessible liaison arrangements and providing information as freely as possible (e.g. holding open days);
  - running a tidy and efficient site;
  - promoting local lorry routing/parking and good driver schemes; and
  - participating in wider community activities e.g. through visiting local schools and societies.

- creating lines of communication by:
  - appointing a site liaison officer with a widely-publicised name and telephone number;
  - supporting a liaison committee where appropriate;
  - giving advance notice and explanation of activities that might cause complaint;
  - keeping systematic records of complaints and the remedial actions taken; and
  - following up complaints by personal visits and action.
- ensuring that site and transport staff are environmentally aware and trained to cope with the issues;
- not quibbling about reasonable complaints i.e. they should not rely on the letter of the law where there are obvious problems but strict culpability cannot easily be proved. Also, they should be prepared to be flexible;
- offering/providing non-monetary compensatory/mitigation measures where appropriate e.g. through planning obligations or by setting more demanding targets in its environmental management system;
- cooperating and avoiding being adversarial; and
- offering opportunities to see how operational (planning) conditions and mitigation measures have been effective elsewhere.

A5. **People living in proximity to mineral sites should:**

- get to know the operator by:
  - taking advantage of any approaches about site visits, other explanations, offers to set up local liaison committees;
  - trying to understand the operator's activities and problems without preconceptions;
  - listening as well as talking;
  - encouraging site personnel to visit them at home to discuss particular queries or concerns;
  - asking for a visit to the site or a similar one; and
  - speaking to people who have lived in the vicinity of similar workings.
- be specific when making complaints e.g. date, time, clear description; and
- seek opportunities to see how operational (planning) conditions and mitigation measures have been put into practice elsewhere.

Appendix B: Environmental Management Systems

B1. A primary aim of minerals planning is the mitigation and minimisation of the inevitable physical impacts of mineral extraction and processing. The limitation and mitigation of impacts on the environment has been a major issue for mineral development and operating companies for a long time. Many companies are now directing their attention towards their own environmental performance and the potential impacts of their operations. A competently-prepared and intelligently-used environmental management system (EMS) can assist operational management to meet both current and future environmental requirements and challenges. It is a quality assurance tool which can not only be used to measure a company's operations against environmental performance indicators. In the best examples, it is also a positive aid to good operational practice. It should never become an audit-driven paper chase not related to real world impacts.

B2. A well-implemented EMS should integrate environmental management into a company's daily operations, long-term planning and other quality management systems.

In particular, it should:

- assist a company to meet its own targets and compliance with regulatory requirements;
- provide a practical tool to enhance performance at all operational sites/processes;
- demonstrate trends in environmental performance over time to provide a focus on what is succeeding and where more could be achieved;
- improve a company's public image and improve relations with regulatory authorities; and
- allow greater control of operations and costs.

B3. In 1994, the British Standards Institute issued BS7750 *Specifications for Environmental Management Systems*. This was one of the first internationally-recognised environmental standards. It outlined the components of an EMS (see Box B1) and detailed specific requirements for each. These principles were reflected in and superseded by the standard ISO 14001 (1996) *Environmental Management Systems: Specification with Guidance for Use* of the International Organisation for Standardisation (ISO). The level of complexity and documentation necessary will be related to several factors, such as the site and the resources of the organisation. For small and medium-sized enterprises (SMEs), helpful guidance on the operation of non-certified systems of environmental management is provided through the British Standards Institution's *Project Acorn*[3] and through work funded by the Aggregates Levy Sustainability Fund on EMSs for SMEs.

B4. To work effectively, the EMS must be based on and be part of a company's daily routine. The site manager should demonstrate to all employees that the EMS is a vital element of the operation and that everyone must play their part in its implementation. Environmental awareness training should be included in the EMS so that employees can appreciate the

3 See website www.emea.bsi-global.com/sustainability/acorn for further details.

reasons for it, and how their inputs are used. Existing methods, reports and meetings should be reviewed and modified to include environmental considerations, so that new procedures are not required on top of existing ones.

B5. After initial implementation, the EMS will need to be evaluated and reviewed to ensure that deficiencies have been identified and corrected. Operations also change over time and the system needs to accommodate this. Periodic internal review is therefore necessary, as are arrangements for independent validation and audit.

Box B1 Suggested Components of a Fully-fledged EMS for Mineral Workings

An EMS for mineral working should contain the following elements:

- organisational commitment;
- corporate environmental policy;
- environmental impact assessment (EIA);
- community consultation and involvement;
- objectives and targets (corporate performance indicators);
- environmental management programme;
- documentation and records;
- operational emergency procedures;
- responsibility and reporting structure;
- training, awareness and competence;
- regulatory and legal compliance, and environmental performance review audits;
- emission and performance monitoring, and measurement.

B6. Environmental audit involves a systematic evaluation of evidence (verifiable information, records or statements of fact) to determine whether or not the EMS and the environmental performance it measures, conform to planned objectives, and whether or not the system is being implemented effectively, and is suitable to meet the organisation's environmental policies and objectives. Environmental audits can help the minerals industry improve its environmental responsibilities and demonstrate this to the community. Environmental audits help in assuring the accuracy and relevance of environmental monitoring. They also measure an organisation's environmental performance and encourage continual improvement.

Procedures included in an environmental audit record whether a company is meeting its environmental objectives in:

- pre-audit planning;
- site activities (interviews and inspections);
- gathering and evaluation of audit evidence;
- development of audit findings;
- recommendations, documentation and reporting of the findings; and
- audit follow-up (action plans, revisions etc.).

B7. Environmental audits also help mineral working companies demonstrate to regulatory authorities that they are complying with legislation, regulation and conditions contained in pollution control authorisations, discharge approvals and planning permissions.

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Environment Act 1995

Environmental Protection Act 1990

Pollution, Prevention and Control Act 1999

Pollution, Prevention and Control (England and Wales) Regulations 2000 (*the PPC Regulations*)

Air Quality Regulations 2000

Countryside and Rights of Way Act 2000

Council Regulation (EEC) No. 1836/93 of 29 June 1993 allowing participation by companies in the industrial sector in a Community eco-management and audit scheme

EC Directive on Integrated Pollution Prevention and Control (96/61/EC)

EC Water Framework Directive (2000/60/EC)

EC Air Quality Framework Directive (96/62/EC)

EC Groundwater Directive (80/68/EEC)

EC Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Directive 92/43/EEC) (*EU Habitat Directive*)

The Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar 2.2.1971, as amended 3.12.1982)

STANDARDS

BS7750 (1994) *Specifications for Environmental Management Systems* now cancelled and replaced by:
ISO 14001 (1996) *Environmental Management Systems: Specification with Guidance for Use*

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Minerals Policy Statement 2 (MPS2) states the principles to be followed in considering the environmental effects of mineral working. It is accompanied by separate Technical Annexes on particular environmental effects (Annex 1 *Dust* and Annex 2 *Noise* are published alongside this MPS).

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