

We are surrounded by products made from minerals, which are present in all sorts of everyday items. But, as **Sarah Hannis** and **Emma Bee** explain, we cannot take for granted an inexhaustible supply of these essential raw materials.

Safeguarding mineral supplies

Minerals form an essential part of our everyday lives. When stepping into a ceramic-tiled bathroom and reaching for the toothpaste rich in fluor spar, it is easy to take these minerals for granted and overlook where they actually come from. Such minerals are non-renewable and can only be worked where they occur. Long-distance transport of bulky minerals such as construction aggregates is often uneconomic and can damage the environment; therefore, securing a viable supply as close as possible to construction work is crucial. It is essential that we use minerals in the most efficient and sustainable manner feasible, and that where possible we safeguard these resources for future generations.

Although our reliance on imported raw materials is growing, in the UK we remain fortunate in having access to indigenous onshore and offshore mineral resources which are vital to developing and sustaining our modern economy and lifestyle. However, as with other natural resources, these national assets must be carefully managed to ensure that supplies are secured to meet our own need for minerals with minimal environmental impact. The principles of sustainable development also provide the imperative that, where practicable, resources which might be needed by future generations are protected. One of the biggest threats to mineral resources is the risk of sterilisation from other development. If the resources that still remain in the ground are already built upon, extraction is very unlikely.

Protection of mineral resources from unnecessary sterilisation by other development has been a theme of the planning process since the 1947 Town and Country Planning Act. Despite

this support for the principle of mineral safeguarding, the guidelines remained open to interpretation resulting in an inconsistent approach by local planning authorities. In response to requests from planners and others for improved guidance on mineral safeguarding, we have initiated a research project to investigate the problem and suggest possible solutions. With support from the Aggregates Levy Sustainability Fund, we undertook the research in partnership with Somerset and Durham county councils, Mineral and Resource Planning Associates, and the Quarry Products Association. The conclusion was that, although most planning authorities had some form of mineral safeguarding policy, it varied widely in its effectiveness. On several occasions the process had proved ineffective at preventing the sterilisation of mineral resources.

The Department of Communities and Local Government published a revised planning policy for England, known as Mineral Policy Statement 1 (MPS1), in



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One of the biggest threats to mineral resources is the risk of sterilisation from other developments, such as housing. If there is an overriding need for non-mineral development within a Mineral Safeguarding Area an option for prior extraction of the mineral might be considered within development plan documents.

November 2006. Significantly, MPS1 includes a requirement for mineral planning authorities to define Mineral Safeguarding Areas (MSAs). These are



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areas in which a currently or potentially economic mineral deposit is deemed to exist. They must be defined using the best available geological knowledge of the area at the time. This may include geological maps, reports, borehole records, and consultation with industry or specialist advisors. MSAs are defined irrespective of other designations or land uses and have no presumption for extraction. They are designed to make the planning system aware of the presence of a mineral resource, in an attempt to safeguard our supplies for future generations.

It is the responsibility of all planners from the regional to the district level to incorporate MSAs into their planning documents and policies, so that industry, developers, and the public will be aware of these areas. Planning applications within an MSA can now be submitted with the knowledge that minerals are likely to be present. If there is an overriding need for non-mineral development within an MSA, an option for prior extraction of the mineral might be considered within development plan documents.

The BGS-led research project has produced a practical guide for English

planning authorities. The guide provides advice on safeguarding issues in general and on defining and implementing MSAs. Following an extended consultation process, a final version of the guide will be available for free download at www.mineralsUK.com.

Concerns in Wales regarding coal resources have prompted the Welsh Assembly Government to fund us

to develop a methodology based on a geographical information system (GIS). This can identify any potential shallow coal resources which should be safeguarded by local planning authorities. The methodology takes into account the proximity of the deposits to existing developments and other land-use areas. The outcome of this work was published in May 2007.

Minerals, both onshore and offshore, are one of the few national assets without statutory protection. Maybe, at some time in the future, our mineral resources will be awarded the same level of statutory protection as our ecological, landscape, agricultural, and cultural 'resources'. But until then, it is for mineral planning authorities to ensure that onshore mineral safeguarding is put into practice within the planning system. As a result of concerns over the security of supply and sustainability, the UK's regulatory authorities are taking a renewed interest in safeguarding issues which may mean that protecting our mineral resources is now an achievable goal.

For further information, contact:

Emma Bee, BGS Keyworth
Tel: +44(0)115 936 3044
e-mail: ebee@bgs.ac.uk



Mineral resources are vital to developing and sustaining our modern economy and lifestyle.