



The Restoration and
Aftercare of Coal &
Aggregate Workings



**The Wales Planning
Policy Development
Programme**



The Wales Planning Policy Development Programme

This research project has been commissioned and undertaken as part of the Welsh Assembly Government's Wales Planning Policy Development Programme. The programme, originally established in 2000 under the title the Wales Planning Research Programme, is intended to meet the need for evidence based land use planning policy development within the context of the Welsh Assembly Government's principles and priorities.

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The Restoration and Aftercare of Coal & Aggregate Workings

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Key Objectives

- To focus on distinctive Welsh issues
- To support the development of planning policy
- To provide management information for land use planning policy development
- To develop best practice guidance.

In 2005 a quinquennial review of the research programme was carried out. This identified a number of recommendations including the renaming of the programme to enable not only the funding of planning research but the implementation of policy developed from it.

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Bibliographic reference

Harris, K., Higgs, J. and Thompson, A. (2009): *The Restoration and Aftercare of Coal and Aggregates Workings in Wales*. Report to the Welsh Assembly Government. Published by Capita Symonds Ltd., East Grinstead.

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Acknowledgements

This report represents output from research carried out by Capita Symonds Limited for the Welsh Assembly Government under research contract CAW09.

The authors would like to thank the Mineral Planning Authorities who contributed to the collation of information to support this research and also the planning officers, industry representatives and Welsh Assembly Government staff who attended meetings and supplied photographs.

Disclaimer

Whilst due consideration has been given to comments received from all the consultees and contributors, this report sets out the views of the authors alone. This publication and references within it to any methodology, process, service, manufacturer, or company do not constitute its endorsement or recommendation by the Welsh Assembly Government.

Inclusion of any sites in this report does not imply that access to a site is open or that a right of way exists. Prior consent for visits should always be obtained from the quarry operator or landowner (as appropriate) with full observance of any quarry safety requirements and procedures for visitors.

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EXECUTIVE SUMMARY

This research has collated information on the progress of restoration and aftercare at mineral extraction sites in Wales which have ceased, permanently or temporarily, the winning and working of minerals during the ten year period since the end of February 1999. The research has encompassed permissions relating to sand & gravel, hard rock aggregates, coal, slate and (in a small number of cases) other industrial minerals, which have expired; been certified as closed; been served with prohibition or suspension orders; or which have otherwise been inactive, during this period.

Through survey and discussions with Mineral Planning Authorities (MPAs), the research has collated information on the reasons for cessation of works, the degree of progress in restoration and aftercare at the sites (measured against compliance with conditions, where applicable), and the quality of restoration and aftercare that has taken place. Issues described by MPAs, in relation to restoration and aftercare, were also discussed with representatives of aggregate and opencast coal operators.

In the analysis of this information the study provides a national 'snapshot', the general state of restoration and aftercare at quarry sites in Wales along with estimates of the number of sites where restoration and aftercare planning conditions have been applicable and the extent to which these have been complied with. An estimate has also been obtained of the number of closed or inactive sites where restoration and aftercare remains a concern to the relevant MPAs.

48 of the 86 sites identified in this study were sites where the permission for working had expired, or which had permanently ceased working for some other reason, and where restoration and/or aftercare conditions should therefore have been implemented. 20 of these were reported not to have complied with restoration and/or aftercare conditions, either fully or in part, and 16 of these were still considered by the MPAs to be an issue. A further 16 of the 48 sites had been restored satisfactorily, and the remaining 12 were either in the process of restoration or aftercare with no issues yet identified, or still in discussion regarding the work required.

Across all of the 86 sites, around 73% are now no longer considered to have restoration or aftercare issues, leaving 27% that are still of concern to the MPAs. These include sites where no restoration or aftercare conditions are present (usually where Prohibition Orders have been imposed without conditions being attached), and others where the conditions have not been satisfactorily implemented or enforced, for a variety of reasons.

In summary, although guidance and legislation are available to ensure that suitable restoration conditions and/or legal agreements can be attached, and if necessary enforced, this study has shown that this is not always achieved in practice, for a variety of reasons.

A lack of resources and expertise (apparently for both the MPAs and operators), has figured as a reason for some of the outcomes seen. It appears that a lack of experience or confidence within some MPAs, and/or a lack of staff resources, has sometimes resulted in a failure to impose or to rigorously enforce appropriate conditions and legal agreements. In some cases the reluctance to do this may have been exacerbated by concerns about potential liabilities and legal challenges.

To improve the situation there is a need to improve the training, recruitment and retention of minerals planning staff within Unitary Authorities, and to ensure that they have easy access to all relevant guidance and support. Although relevant guidance does exist, it is not always accessible or up to date. In order to support MPAs in their restoration and aftercare duties, it may therefore be useful for the Welsh Assembly to produce (or commission) a summary guide to good practice drawing on these various sources and on new case studies in Wales. This should cover:

- the practical aspects of restoration and aftercare for different mineral working types;
- consideration of long term mineral restoration and after-use strategies in spatial planning (including local preferences for after-use type and diversity); and
- the use and enforcement of restoration and aftercare conditions, legal agreements and (where appropriate) restoration bonds.

Finally, where there has been inadequate restoration and/or after-care treatment at aggregate sites that are now closed, and there are no residual liabilities on the landowner to improve the situation, consideration should be given to the option of intervention using funding from the Welsh Aggregates Levy Sustainability Fund.

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1. INTRODUCTION

Background

Legislation

- 1.1 All mineral workings are required, under Schedule 5 of the Town and Country Planning Act 1990, to be subject to a condition as to the duration of the development. Schedule 5 also provides for conditions relating to the restoration and aftercare of mineral sites.
- 1.2 **Restoration conditions** are defined by Schedule 5 as those “*requiring that after operations for the winning and working of minerals have been completed, the site shall be restored by the use of any or all of the following, namely, subsoil, topsoil and soil-making material*”.
- 1.3 **Aftercare conditions** are defined by Schedule 5 as those which “*the mineral planning authority think fit requiring that such steps shall be taken as may be necessary to bring land to the required standard for whichever of the following uses is specified in the condition, namely -*
 - (i) *use for agriculture;*
 - (ii) *use for forestry; or*
 - (iii) *use for amenity*”.
- 1.4 Schedule 5 also specifies that an aftercare condition may either -
 - (a) specify the steps to be taken; or
 - (b) require that the steps be taken in accordance with a scheme approved by the mineral planning authority.
- 1.5 The steps that may be specified in an aftercare condition or an aftercare scheme may consist of planting, cultivating, fertilising, watering, draining or otherwise treating the land.
- 1.6 If restoration and aftercare proposals submitted by a mineral operator are considered to be inadequate, the MPA may refuse permission for extraction on those grounds. Where extraction is to be permitted, MPAs have the authority to monitor compliance and to use enforcement powers to see that conditions are adhered to. Where appropriate, restoration and/or aftercare requirements may be set out in legally binding agreements (planning obligations), under Section 106 of the 1990 Act. Where an operator fails to comply with restoration conditions or obligations despite enforcement action, the MPA may commission appropriate restoration work and reclaim the costs of doing so from the operator/landowner under Schedule 5, Part 1, Paragraph 6 of the Act. Beyond this, MPAs may also seek a financial guarantee or restoration bond¹ to ensure that a site can be reclaimed if the conditions are not complied with.
- 1.7 Legislation during the 1990s made provision for planning conditions on old mineral permissions to be brought up to modern standards, through the registration of Interim Development Order (IDO) sites and the Review of Old Mineral Permissions (ROMPs). In both cases, this enabled modern restoration conditions to be applied to active quarries (and to dormant sites before reactivation). However, this could only be achieved through a process of negotiation between MPAs and operators and, if new conditions were unreasonably to restrict the working rights of the operators, compensation would be payable to the operator. In practice, the conditions applied have therefore sometimes been less rigorous than would be expected for a new permission.
- 1.8 The IDO registration and ROMPs processes also resulted in a large number of old permissions being deemed to have expired, as a consequence of their former operators failing to register them during the required periods. In the case of the more recent ROMP process, that was within 3 months of the publication by MPAs of the “First” and “Second” lists of ROMP sites, in January 1996 and October 1998, respectively. A high proportion of

¹ Bonds, or financial guarantees, are required in relation to coal mines and opencast workings in South Wales under the Dyfed Act, 1987 and the Glamorgan Acts, 1987. Similar bonds may also be sought by MPAs in relation to other types of mineral extraction if there are concerns regarding the operator’s ability or willingness to comply with restoration and/or aftercare conditions

IDO and ROMP sites were therefore closed without full (or any) restoration work being carried out, during the latter part of the 1990s.

- 1.9 Enforcement powers held by MPAs include the serving of Planning Contravention Notices, Breach of Condition Notices, Enforcement Notices, Stop Notices and the initiation of High Court action.
- 1.10 In addition, Prohibition Orders (PO) can be served by an MPA to prohibit the resumption of minerals development where no extraction has taken place for over 2 years and is considered unlikely to do so to any significant degree. PO conditions can require clearance of the site of machinery and structures, compliance with existing conditions and restoration of the land.
- 1.11 An MPA may also use Discontinuance Orders, requiring the use of the land to be discontinued, where it is considered in the interests of planning to do so. This differs from other revocation and modification orders, as it can apply to sites where no planning permission exists (e.g. where development was begun prior to the Town and Country Planning Act 1947). They may also be used where enforcement action is not appropriate or as an efficient method of modifying the use of a large site which is subject to more than one planning permission.
- 1.12 Suspension Orders may also be served and these are used where Prohibition Orders would be inappropriate because the resumption of minerals extraction is likely, but where the rectification or mitigation of environmental problems is needed to preserve the amenities of the land while development is suspended.

Planning Policy and Advice

- 1.13 Minerals Planning Policy Wales (MPPW) (2001) provides the general policies for minerals extraction and describes the key principles and objectives to provide 'a sustainable pattern of mineral extraction by adhering to 5 key principles'. One of these relates directly to restoration and aftercare:

"To achieve a high standard of restoration and aftercare, and provide for beneficial after-uses when mineral working has ceased"

- 1.14 Afteruse is the *"ultimate use after mineral working for agriculture, forestry, amenity (including nature conservation), industrial or other development"*.
- 1.15 Both restoration and aftercare are included under the term 'reclamation' which refers to *"all operations that are necessary to return the land to an acceptable environmental condition for the resumption of the former land use or for a new use. These operations can take place during mineral extraction, including soil stripping and storage, and after extraction, including filling and contouring, or the formation of water areas"*.
- 1.16 Both aggregate and coal extraction have their own detailed advice documents which work to provide mechanisms for delivering the policy contained within MPPW. These documents are, respectively, Minerals Technical Advice Note (MTAN) 1: Aggregates (2004) and MTAN2: Coal (Jan 2009). They provide specific guidance for Mineral Planning Authorities (MPAs) and mineral operating companies regarding appropriate restoration and aftercare for aggregate and coal sites and the appropriate use of the planning system to achieve this.
- 1.17 MTAN1 states that for short term aggregate workings it is usual to attach a detailed set of conditions at the time permission is granted. For longer term mineral workings an outline set of conditions may be more appropriate, with requirements for the interim stages of development. MTAN2 notes that all planning conditions should be in accordance with the Welsh Office Circular 35/95 and that there is a need to build flexibility into agreed schemes to allow for variation as a result of unforeseen issues (such as geological uncertainties and climatic, environmental and land use changes during the lifetime of long permissions). Such flexibility, however, must not preclude or hinder successful restoration and aftercare. An aftercare period of at least 5 years is required by the MTANs for aggregate and coal sites.

Recent Trends in Restoration, Aftercare and After-Use

- 1.18 The preference for specific types of restoration and aftercare has changed over the years in response to growing environmental awareness, increasingly stringent environmental regulation, and increasing public engagement in the planning process. Together, these

various 'drivers' have pushed up the standards of restoration (as evidenced, for example by the Mineral Products Association² annual Restoration Awards and by the growing tendency for minerals applications to be couched in terms of proposals for land reclamation or environmental improvement (e.g. the Ffos-y-Fran opencast coal application in South Wales, and proposals for wetland habitat creation through sand & gravel extraction in river valleys).

- 1.19 As a consequence of this trend, the restoration conditions attached to existing 'modern' planning permissions may not always be in line with current expectations, and may even be in conflict with certain aspects of new or emerging legislation (e.g. relating to the Mining Waste Directive). Where changes are needed, MPAs may in some cases be able to negotiate these through periodic reviews, but where quarries are to be closed there is generally no obligation on the operator to do anything more than comply with the extant conditions.
- 1.20 A report³ into the effectiveness of aftercare provisions, was produced for the former DETR in 2000, focusing primarily on England, but also has relevance for Wales. A further report on the costs and benefits of financial guarantees and securities in the extractive industries⁴ was commissioned by the former ODPM in 2003, which also covered Wales. This found that the number of failures to restore sites because of the financial failure of the operator was limited, but there had been a small number of cases that had had significant local impacts and /or significant cost implications for the MPA.
- 1.21 Studies are periodically carried out of mineral workings, including their ongoing, completed and anticipated restoration, but the last such survey in Wales was carried out in 1988⁵. There is therefore a need to gain a clearer understanding of the current position regarding the restoration and aftercare of mineral sites within Wales, and of the issues involved, including the scale and pattern of success and failure and the potential scope and mechanisms for improvement.

Aim & Objectives

- 1.22 With reference to this requirement, the **aim** of this project (as set out in the specification for this research contract CAW09), was therefore to:

"...research and assemble a report for the planning policy branch, to advise the client on the extent and adequacy of restoration and aftercare in sites which have ceased, permanently or temporarily, the winning and working of minerals over the last 10 years".

- 1.23 The **objective** for the research was to:

"...assess, across Wales, planning permissions for minerals extraction which have ceased minerals working (either permanently or for a period of at least twelve months) to provide a national 'snapshot' of the current effectiveness of restoration and aftercare Conditions and whether or not they have been satisfactorily implemented".

- 1.24 The research was also **required** to:

"evaluate compliance with the Conditions, identify best practice and, where problems need to be addressed, set out what are the obstacles preventing satisfactory restoration".

Programme of Work

- 1.25 In order to meet the aim and objectives above, the project had essentially four parts:
- **Desk Study** - background research was carried out and criteria for identifying relevant sites was developed;
 - **Survey** - a survey was designed to collate information on the applicable mineral sites across all of the Unitary Authorities in Wales and issued to all MPAs;

² The Quarry Products Association (QPA) has recently merged with the British Cement Association (BCA) and The Concrete Centre to form the Mineral Products Association.

³ DETR (2000) Effectiveness of Aftercare Provisions for Minerals Workings.

⁴ ODPM (2003) The Costs and Benefits of Financial Guarantees and Securities in the UK Extractive Industry.

⁵ Survey of Land for Mineral Workings, 1988.

- **Consultation** - discussions were held with available MPAs that had relevant sites to further explore issues at the sites and to gather further data, and the RAWP Technical Secretaries were also consulted for a regional overview. Meetings were also held with one major aggregates producer and one major open cast coal operator, in order to obtain some insight into the industry's views;
- **Evaluation and Reporting** - the information gathered through the survey and the meetings was analysed and reported.

Scope of this Report

- 1.26 Chapter 2 introduces the methodology of the research, including the collection of data and the handling of confidentiality issues. Chapter 3 summarises the factual data obtained and Chapter 4 then provides some discussion relating to the underlying issues and explanations. The main conclusions of this research are given in Chapter 5.

2. METHODOLOGY

- 2.1 This chapter expands on the 'programme of work' in Chapter 1 to present the methods used in this research in addressing the aims and objectives of the project. This chapter also explains how confidentiality for certain authorities, sites, owners and operators has been maintained.

Criteria for Inclusion of Sites

- 2.2 This study has considered all sites with planning permissions for the winning or working of sand & gravel, hard rock aggregates, coal, slate or industrial minerals which have either: expired; been certified as closed; been served with prohibition or suspension orders; or which have otherwise been inactive for a period of at least 12 months at any time within the last 10 years, that is since the end of February 1999.
- 2.3 By definition, the requirement to focus on this period specifically *excludes* sites for which planning permission expired as a consequence of failing to be registered under the IDO or ROMP processes during the 1990s (see Chapter 1 for background on this). From February 1999 onwards, all active mineral workings should have been operating under relatively modern schemes of conditions which include provision for restoration and aftercare. Where any of these sites have since closed, the expectation is therefore that restoration work in accordance with the agreed planning conditions will have been put in place.
- 2.4 In the case of dormant permissions, although modern conditions are required to be agreed before further working can take place, the sites could be closed without restoration (unless such conditions were already attached to the existing permissions or the MPA served an appropriate Order). The closure of dormant sites may have occurred, for example, where an operator has 'surrendered' the permission (either unilaterally or as an offer linked to the granting of a new permission elsewhere); or where the MPA has imposed a Prohibition Order (PO), which may have had restoration and/or aftercare conditions attached.
- 2.5 In cases where dormant sites have closed or have been served POs, the sites have been included in this research as 'closed' or 'permissions revoked' in Chapter 3. Where they simply remain inactive, however, they have not been included in the analysis of the survey results, although some information on these sites and their issues has been obtained. Further consideration of issues relating to dormant sites is given in Chapter 4, along with a discussion of 'stalled' ROMPs (i.e. reviews which have begun but not reached agreement on new conditions).

Survey & Consultation

- 2.6 A main focus of this project was consultation with representatives of each of the Welsh Mineral Planning Authorities, which occurred through a survey and in discussion. The survey is provided for reference within Appendix A.
- 2.7 The survey was designed to collate information on the applicable mineral sites across all of the Unitary Authorities in Wales and was issued to all MPAs within the South Wales and North Wales Regional Aggregate Working Parties (RAWPs). For those sites which fit the project criteria, the survey looked to identify:
- the reasons for cessation of works;
 - the degree of progress in restoration and aftercare at the sites (measured against compliance with conditions, where applicable);
 - the satisfaction of the MPA as to the quality and completeness of restoration and aftercare that had taken place;
 - the use of enforcement action in relation to restoration and aftercare
 - the application and utilisation of financial guarantees for mineral sites

- 2.8 The survey included some general questions, which could be answered by all MPAs including those without sites that fit the criteria, to gain the recipients' views on:
- mineral operator approaches and attitudes towards to restoration and aftercare,
 - the quality and type of restoration and aftercare proposals currently being submitted (including those for ROMPs)
 - whether the MPA had any stalled ROMPs
 - whether the MPA had any dormant sites
 - the consideration given to serving suspension and/or prohibition orders in the future
- 2.9 In addition to the survey, detailed discussions were held with MPAs who had applicable sites and were available to be interviewed within the timescale of the project. Topics covered in the meetings followed the questions provided on the survey however, face-to-face contact allowed these matters to be discussed in more detail, providing case study examples of good and bad practice.
- 2.10 Responses were received (through meetings, telephone interviews and responses to the survey) from all 25 MPAs in Wales (including the 3 National Park Authorities). Of the 25 authorities, **18** (six in the North Wales RAWP and twelve in the South Wales RAWP) had mineral sites which matched the criteria for inclusion, as stated above. The remaining seven authorities (one in North Wales and six in South Wales) had no sites within these criteria, but all provided responses to the general questions.
- 2.11 Discussions were held with planning officers representing 14 of the 18 authorities which had sites within the project scope (five in North Wales and nine in South Wales). For the remaining four authorities, written survey responses were received.
- 2.12 The Technical Secretaries for both the North and South Wales RAWPs were also consulted as part of this work to gain a wider regional perspective on restoration and aftercare across Wales.
- 2.13 Discussions were held with a representative of the WAG Land Regeneration and Reclamation Team. The Technical Services Department (TSD), in which the team sits, has a statutory role⁶ in advising MPAs on the land use implications of all development proposals affecting agricultural lands (Graded 1, 2 and 3a and over 20 hectares). The department is also a statutory consultee on aftercare conditions for all sites that will be restored to agriculture (irrespective of their size or quality).
- 2.14 Meetings took place with one major aggregate producer and one major opencast coal operator, in Wales, in order to gain an insight into the industry's views on the topics previously raised by MPAs.

Confidentiality

- 2.15 Care was taken throughout the project to maintain an appropriate degree of confidentiality in the data, as requested by MPAs and operators. The disclosure of details relating to valid or expected revisions to planning permissions, operator name and the authority within which the site lies, has been avoided throughout this report, thereby providing anonymity. Where appropriate, sites are more generally identified according to their location in North or South Wales.

⁶ As described in Annex B of MTAN 1.

3. EXTENT OF RESTORATION & AFTERCARE

- 3.1 This chapter provides an assessment of the scale of restoration success/failure across Wales, on the basis of the information made available by the MPAs. It includes comments on the general state and quality of restoration and aftercare (as perceived by the MPAs), adherence to restoration and aftercare conditions, and enforcement of conditions.
- 3.2 A total of **86** sites meeting the criteria for inclusion in this study were identified in the survey responses provided by the MPAs. These were split equally between the North Wales and South Wales RAWP areas (43 sites in each). Although the full details of these sites remain confidential, outline information is provided in Appendix B.
- 3.3 The numbers provided below are considered to be indicative of the scale of the various issues under discussion, but cannot be regarded as absolute. Not all relevant sites will necessarily have been captured, and a small number of non-coal and non-aggregate sites are known to be included. Individual sites are sometimes included in more than one of the following discussion topics. For this reason, the totals given under each topic may add up to more than the overall number of sites .

General State of Restoration & Aftercare

- 3.4 The following text is presented as a general 'snapshot' of the extent to which restoration and aftercare has been carried out, depending on whether a site has a) completed excavations and closed (either fully or in part); b) has had the permissions removed either voluntarily or through prohibition, or; c) has experienced a period of temporary cessation of excavations under a current permission. Further details on the problems encountered and solutions employed that have contributed to the results presented below, are provided in Chapter 4.

Closed Sites

- 3.5 These are sites where either planning permission has expired or working has ceased due to the exhaustion of permitted reserves. In most of these cases, where restoration and aftercare conditions exist, these should have been implemented (including progressive restoration in phased working sites). The only exception to this is where further planning permissions have been sought to extend the quarry, in which case revised restoration schemes may have been proposed.
- 3.6 At least **44** sites were identified by MPAs as falling into this category (twenty-five sites in NWRAMP, nineteen sites in SWRAWP).
- 3.7 For **21** of these sites (seventeen in the north, four in the south) restoration and aftercare (where applicable) has been or is currently being carried out to the satisfaction of the MPA, with at least three outstanding examples of restoration being reported in the north.
- 3.8 For **7** other sites (three in NWRAMP, four in SWRAWP), either discussions were being held with the operator to secure appropriate restoration, or alternative restoration schemes had been submitted or were being explored.
- 3.9 For **16** sites (five in the NWRAMP, eleven in the SWRAWP) the MPAs reported that the operator or landowner had not fully completed restoration and/or aftercare. In two cases this was said to be due to the operator experiencing financial difficulties. In two other cases where the operator failed to complete restoration (for whatever reason) the financial bonds had been utilised, one of which was successful, the other unsuccessful as a result of the inadequate bond fund. On one of the 16 sites the bond cheques had reportedly 'bounced', and at another the bond was predicted by the MPA to be too small in the event that the operator continues to default on completion. In two cases restoration was reported to be genuinely problematic as a result of a lack of materials for restoration for one site, and a predicted lack of understanding of restoration requirements on the part of the landowner, in the other.
- 3.10 Out of 16 sites where non- or partial completion of restoration and aftercare had been an issue, almost 69% were in the SWRAWP, the majority of which were coal sites.

Permissions Revoked or Offered up

- 3.11 The MPAs identified a total of **25** sites in this category, of which 22 involved Prohibition Orders (POs) and the remaining three were sites for which permission had been given up

voluntarily by the operators. To put these figures into perspective, the Welsh Assembly Government has advised that 46 POs have actually been served across Wales during the period in question⁷.

- 3.12 Two of the 25 sites (one of which was given up by the operator in connection with the granting of another planning permission) have been actively restored to the satisfaction of the MPA. Eight more of the sites are reported to have regenerated naturally, again to the current satisfaction of the MPA. Indeed, in five of these cases, active restoration or intervention was considered inappropriate by the MPA.
- 3.13 For at least two of the 25 sites, no restoration has yet taken place and problems remain including health and safety and in finding a restoration style that can be completed effectively, although one site has been 'tidied up' by the operator. The restoration condition of the remaining sites in this category was not identified although it appeared that restoration/aftercare conditions had not been attached to the POs.

Inactive Sites

- 3.14 This group of sites includes those that are 'mothballed', intermittently working or have undergone other periods of temporary inactivity, but which, nevertheless, have valid planning permissions with modern conditions. (It does *not* include dormant sites where new conditions would need to be agreed before further working could take place – these are discussed more generally in the next chapter).
- 3.15 A total of **17** sites (six in the NWRAP, eleven in the SWRAP) were identified in this category by the MPAs, and most are reported to have caused concern regarding restoration and aftercare. Although these sites could be worked again, and the operators could therefore argue that restoration work is not yet required (except where conditions require progressive restoration), the MPAs are concerned that nothing may ever be done. Eight of the sites in this category were reported to have realistic options for future working (although at least one has naturally re-vegetated in the meantime), and several of these were regarded by the MPAs as forming an important part of the landbank which they would not want to see removed. The remaining nine sites in this category are considered by the MPAs to have little if any realistic prospects of re-opening. At least one of these has had restoration carried out for part of the site and seven others have begun to naturally re-vegetate or have completely re-vegetated. Enforcement action is being considered at two of the sites in order to improve the standard of restoration.

Adherence to Conditions

- 3.16 Of the 86 sites that met the criteria for inclusion in this survey, **59** (~66%) had conditions for restoration (and where applicable, aftercare) in force either before extraction stopped or subsequently (including those applied during the PO process and in reviews of old permissions). A further **22** sites were identified where no restoration and/or aftercare conditions had been applied (mainly as they were PO sites without conditions imposed, see paragraph 3.20) and for **5** sites, it was unclear from the MPA responses whether or not such conditions had been applied.
- 3.17 Some **48** of these 59 sites could theoretically have been expected to have met the imposed conditions (i.e. they were permanent rather than temporary closures, and restoration should, by now, have been completed). In practice, compliance with the restoration and aftercare conditions had occurred (to the satisfaction of the MPA) at only **16** of these 48 sites, although progress was satisfactorily being made at a further **5** sites.
- 3.18 Of the rest, **16** sites (equally spread between North and South Wales) had not complied with, or had only partly complied with restoration and/or aftercare conditions and fourteen of these were viewed to still be an issue by the MPA. In six of these cases, the conditions failed to be met or enforced due to complications caused by liquidation of the operator or subsequent sale of the land. At another **4** out of 48 sites, non compliance or partial compliance was not deemed to be of concern, generally due to subsequent natural revegetation and, in one case, subsequent unpermitted restoration and aftercare to a satisfactory standard.
- 3.19 At the remaining **7** of these 48 sites, the final outcome had not yet been reached: discussions were still in progress regarding the final restoration/afteruse type, or the

⁷ C. Warburton, Welsh Assembly Government, Pers. Comm., March 2009.

owner/operator had indicated they were considering alternatives; in some cases this was causing concern to the MPA due to the uncertainties involved.

- 3.20 Of the 22 sites without restoration and aftercare conditions, the majority are located in South Wales. For nineteen of these sites (seven in North Wales and twelve in South Wales) the decision had been made not to include conditions during review or the serving of a PO as it was considered unnecessary or inappropriate, given the natural regeneration that had already occurred or that was considered likely to occur. For another two of the 22 sites, restoration was in one case deemed not relevant due to a change of afteruse and in the other a restoration strategy had been put in place when the site was permitted, but an application with a consolidating restoration scheme (alongside further extraction) was thought to be likely to come forward. For the final site in this group of 22, there has been a difference of opinion between the MPA and CCW on whether future restoration, if it becomes possible, would be appropriate. Thus, in all but one of these cases where conditions had been absent, the MPA was satisfied with the current state of the sites.

Overall Results

- 3.21 Taking account of the various categories of success and failure outlined above, as perceived by the MPAs, of the 86 sites identified as meeting the criteria for inclusion in this survey, the final restoration and aftercare status was considered by the MPAs as no longer presenting a significant issue in a total of **63** cases (~73%).
- 3.22 For the remaining **23** sites (~27% of the total), of which ten are in the North and thirteen are in the South, the MPAs considered that restoration/aftercare problems of one sort or another still remain and it would seem that the planning system as implemented has failed to secure appropriate restoration and/or aftercare.

4. CONSULTATION RESULTS & DISSCUSSION

- 4.1 This chapter presents a synopsis of the issues described by MPAs and Industry representatives as having occurred at mineral sites in Wales. It also reports some solutions that have been used, or might be employed in the future, to achieve successful restoration and aftercare outcomes.

Planning Conditions

- 4.2 Some of the MPAs felt that restoration and aftercare conditions were too weak, even after review, making monitoring difficult and enforcement sometimes impossible. In terms of the detail of conditions, there is a difference of opinion between MPAs as to whether these should be open and flexible or more detailed and prescriptive, each type bringing with it its own particular problems. For the former type, the main difficulties lie in the fact that there may be scope for the operator to 'get away with' minimal effort, and a lack of detail on which to 'pin' enforcement action. More detailed requirements can, however, lead to restoration schemes which subsequently prove to be either unachievable (e.g. as a result of unforeseen geological conditions encountered while working) or undesirable (e.g. due to changes in legislation and/or MPA or local community preferences before completion) and would therefore require amendment.
- 4.3 Restoration of hard rock quarries to meet conditions was noted to be especially difficult, with MPAs giving examples of final landscaping being severely constrained by the availability of land at the edges of the sites and the conflict that setting such land aside causes with the requirements of the working operation. While MTAN 1 guides the consideration of restoration margins⁸, it was identified that having a realistic view of what could be achieved at sites that pre-date this advice was necessary.
- 4.4 For sites that had failed to satisfy the MPA, the main causes for complaint were part-completed, or poorly-completed works, drainage issues and compaction of soils.
- 4.5 On a more positive note, examples of success were noted to include the extension of statutorily and internationally designated sites, high quality stone walling and agricultural land, improvements to local amenity and contributions to local landscape distinctiveness and cultural heritage.
- 4.6 Progressive restoration, as required by MTAN 1 and MTAN 2⁹, was thought by some MPAs to be difficult to achieve in practice, yet others felt that it could have been easily achieved and at little cost at some sand and gravel sites. In the case of opencast coal, an industry representative considered progressive restoration to be unproblematic as long as the site was large enough to accommodate it.
- 4.7 Some MPAs noted that planning conditions, however robust, were often lacking in power, especially in cases where sites are sold on by operators before restoration or aftercare works have been fully completed, and where the new landowner claims to be unable to complete the outstanding work, either through a lack of funds and/or expertise. Such claims are not a valid excuse for failing to comply with conditions, however, since the purchasers should be fully aware (*caveat emptor*) of the liabilities that they are taking on. Some MPAs felt that Section 106 legal agreements may help to reinforce this message and that the use of restoration bonds would help to ensure that sufficient funding for restoration was available, even after sites are sold-on.
- 4.8 The coal industry representative felt that restoration conditions were generally realistic and achievable, although the detailed aftercare requirements sometimes needed to be modified, through negotiation, compared with the MPA's aspirations. Operators noted that there had been a trend, over time, of increasing diversity in aftercare and after-use requirements. For opencast coal sites, and for sand & gravel operations, where the duration of working is relatively short, this does not generally present a problem. In the case of hard rock quarries, however, which may be active over many decades, the issue of changing preferences or expectations for restoration and aftercare is one that needs to be recognised – either through more flexible conditions which allow for change, or through specific changes negotiated during periodic reviews, or through amending the conditions.

⁸ MTAN 1, paragraph 102

⁹ MTAN 1, paragraph 101 and MTAN 2, paragraph 216.

- 4.9 Where sites are to be restored to agriculture, MPAs in Wales are required to consult with the Welsh Assembly Government's Technical Services Department (TSD) before such conditions are imposed. The department provides guidance on appropriate conditions, and on monitoring compliance with conditions. However, consultations on detailed schemes, site working, restoration and aftercare are all at the discretion of the MPA and as a consequence the department's involvement varies across Wales.
- 4.10 It was noted in discussion on monitoring visits (see paragraph 4.19, onwards) that the expertise of the TSD had been very useful, and one planning officer commented on the realisation (as a result of a joint site visit) that identifying 'good' or 'bad' restoration requires much understanding that may be lacking in MPAs. In view of the current shortage of specialist expertise and staff resources among MPAs, the TSD clearly represents a vital source of restoration and aftercare expertise for planners with minerals responsibilities, both within and outside of the TSD's statutory functions.

Restoration & Aftercare Schemes

- 4.11 As noted above, there has been a general trend, over recent decades, of increasing diversity in restoration and aftercare requirements, linked to increasingly imaginative after-uses. Whereas the most common expectations in the past were for sites to be restored to agriculture (where possible) or forestry, there is now a growing interest in restoration for biodiversity and general nature conservation (including geodiversity). Such schemes are often favoured by MPAs and planning committees but less favoured by some landowners – perhaps because they provide limited if any opportunity for financial gain after quarrying has ceased.
- 4.12 In the coal industry, especially, substantial advances were noted by a representative to have been made in recent decades regarding the quality of restoration design and good practice, particularly regarding landform design, soil handling, drainage and avoidance of excessive compaction. However, not all initial schemes are achievable, one MPA reported that revised restoration plans at a major opencast site in South Wales fell short of the more ambitious restoration scheme originally proposed. The changes reflected, in part, the difficulties of reinstating watercourses in such a way as to maintain adequate control of erosion and sediment discharge from the site. This is a common difficulty where gradients are steep, and where the back filled restoration materials are more vulnerable to erosion than the original, undisturbed geological deposits which they replace. The prevention of erosion, in such cases, often necessitates the use of geo-textiles, gabion structures and/or oversized (cobble and boulder-sized) bed material. Even in well designed schemes such features can look out of place.
- 4.13 Restoration of sites to forms of development (residential, commercial or industrial) is often viewed with concern by planning committees, not least because mineral extraction is meant to be a 'temporary land use', after which the normal expectation¹⁰ is that it will be returned to rural land uses such as forestry, agriculture or amenity (including nature conservation). MPA officers are often more sympathetic to the idea of subsequent development, however, and some of them observed that this may be sometimes be the best way of ensuring that high quality restoration and beneficial after-use are achieved. One MPA noted that a rethink of how quarried land is classified may help (i.e. if it were to be classified as 'brownfield' rather than 'greenfield' land). Opposing views, however, are held that this would contradict the notion of quarrying being a temporary use of land, and would reduce the scope for quarries being restored for less lucrative (but increasingly important) biodiversity and nature conservation purposes. There is also uncertainty surrounding subsequent development as a result of the requirement for an additional planning permission to be gained.

¹⁰ That is, not requiring a separate planning permission, under the Town and Country Planning (General Permitted Development) Order 1995.



Examples of erosion control schemes at opencast coal sites in South Wales.



- 4.14 Several MPAs noted that despite the best intentions of some operators, once the period of aftercare has been completed, the aftercare work that has been achieved may be undone by the landowner, in order to manage the land in a different way. Although this has not often led to a significant change in the quality of land, MPAs felt that it may explain the reluctance seen in some operating companies to complete aftercare works to a standard that the landowner does not require.
- 4.15 In several cases where working has ceased, whether permanently or during a few years of inactivity, sites have naturally regenerated to a standard that the MPA has found acceptable – especially in the case of sand & gravel workings. In such cases, it may be detrimental to the resulting wildlife to impose formal restoration requirements, especially where protected species such as great crested newts, bats or certain types of fungi have flourished while the site was undisturbed. In other cases, however, natural regeneration has been accompanied by such things as informal recreation (e.g. motorbike scrambling) and/or unregulated tipping, and the sites may be hazardous to the public because of unstable slopes, quicksand or areas of deep water. In such cases, there is clearly a need for restoration to be carried out in order to achieve a more beneficial and safe condition.
- 4.16 MPAs provided two examples where natural regeneration had been agreed as part of the modern conditions. An important distinction needs to be made, however, between restoration and aftercare: although natural regeneration can in some cases be an acceptable alternative to formal aftercare schemes of planting etc., it will normally be important to ensure that the restoration work (i.e. the creation of suitable final landforms, the replacement of soils and the removal of buildings and other structures) has been completed. In such cases, the restoration work can be deliberately focused on the requirement for natural regeneration. This may include retaining steep (but stable) cliffs in places for peregrine falcons (in the case of hard rock quarries) or for sand martins (in the case of sand & gravel sites); creating a balance between areas above and below the final water table; and creating shallow gradients at the interface between the two, to provide shallow water margins which encourage greater biodiversity.
- 4.17 Optimisation of landform and soil conditions at a site, with advice from groups such as the Wildlife Trusts and the RSPB, may mean that more is gained than simply allowing nature to take its course. Such organisations may also be in a position to take on the long term management of sites that are restored for nature conservation purposes, thereby further

enhancing their biodiversity and amenity value. Considerable research on restoration design, for biodiversity and other after-uses, has been undertaken in England through the Aggregates Levy Sustainability Fund. A series of 'benchmark' reviews, published in 2008 provide useful introductions to this work and can be accessed at the 'sustainable aggregates' website¹¹.

- 4.18 The potential for strategic restoration and aftercare approaches was discussed with the MPAs and operator representatives. Such approaches are being implemented at sand & gravel sites in parts of eastern England (exemplified by Hanson's flagship reed-bed creation scheme at Needingworth in Cambridgeshire), and are currently being considered for hard rock quarrying in the Mendip Hills (Cuesta Consulting, 2009¹²). Although there are no examples as yet in Wales, the concept of strategic restoration policies was thought to be potentially beneficial, at least for aggregate sites. For coal sites, it was noted that because the sites are so large, site-specific schemes actually cover a large area anyway. For other sites, the often significant distance between them may mean that 'joined up' restoration across multiple sites (as in the Mendips concept) might not be appropriate, but strategic planning aimed at optimising the benefits to be gained from restoration may still be useful within a given area. Currently, local plans generally contain minimal reference to after-use on future mineral sites, although MTAN 1 states that development plans should provide guidance on which after-uses are acceptable for *existing* sites that may be reclaimed during the plan period.

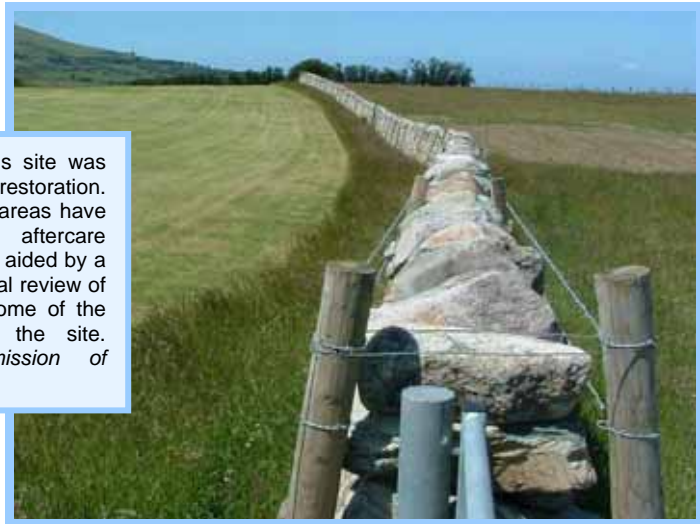
Monitoring

- 4.19 MPAs were generally aware that effective, regular monitoring is significant in ensuring operators adhere to their conditions and responsibilities. Some MPAs even felt that if operators were not prompted in this way, satisfactory restoration and aftercare might be less likely to occur and that conditions were therefore 'pointless'. However, not all authorities had been undertaking regular monitoring and generally for those that had not, a genuine lack of time to carry out the task had been noted.
- 4.20 Throughout many discussions on monitoring and enforcement, the current lack of resources and/or experience and knowledge in some authorities was reported. Some steps are being taken to remedy this through sub-regional groupings of MPAs where authorities that have the resources and expertise are carrying out some of the duties of other authorities on a contract basis. Although recognised as a potential solution, some authorities were wary of engendering a concentration of expertise in the 'lead' authorities, causing a negative feedback loop, meaning that even fewer resources (and therefore less expertise) would then be allocated to the other authorities.
- 4.21 Other issues encountered with monitoring included a lack of data from the operator to aid the task, most often as a result of conditions which are weak even though having been subject to review. It was also noted that restoration and aftercare was extremely difficult to enforce for some sites operating under older conditions, - especially those that have no completion dates.
- 4.22 One industry representative felt that both monitoring and enforcement (see below for further discussion) were generally effective, especially since the introduction of charges placed on the operator for monitoring. They noted that the standard varies greatly from one MPA to another and that examples of best practice, including regular quarterly visits, positive attitudes and understanding were to be seen in Neath Port Talbot and Bridgend. In addition to this regular monitoring, the operator was in favour of annual reviews and generally better communication.

¹¹ <http://www.sustainableaggregates.co.uk/>

¹² "An Ecosystems Approach to Long Term Minerals Planning in the Mendip Hills: Phase I: Initial Feasibility Study". Report to Somerset County Council and Natural England, by Cuesta Consulting Ltd. (47pp)

Sand and Gravel site, Gwynedd. This site was worked through phased extraction and restoration. A substantial portion of the worked out areas have been restored and issued with an aftercare compliance certificate. This process was aided by a full audit of aftercare, agreed in an annual review of operations. The image (right) shows some of the high standard dry-stone walling at the site. *Photograph reproduced with permission of Gwynedd County Council.*



- 4.23 There are good practice examples of regular contact being maintained with operator, alongside regular monitoring which has ensured a successful restoration project and the issue of aftercare compliance certificates¹³. Good practice has also been seen in aftercare where concerns such as drainage and soil profile have been resolved through on site discussions between the landowner, operator, WAG and the MPA, followed by decisive action to resolve any outstanding issues. Some MPAs have examples where sites have been tied by condition to regular review meetings and in a few cases this has been successful, with one having a full audit of aftercare agreed in an annual review of operations.

A55 Borrow Pits, Isle of Anglesey. The image shows a well-restored landform with agricultural afteruse, which has yielded significant silage crops since restoration. Successful restoration & aftercare achieved through a combination of on site discussions between all parties, regular monitoring and decisive action by the MPA and operator. *Photograph reproduced with permission of the Isle of Anglesey County Council.*



Enforcement

- 4.24 Overall, only two MPAs noted that they had taken enforcement action in relation to restoration at sites included in this study. Breach of Condition Notices, Planning Contravention Notices and Stop Notices have all been used to varying degrees of success.
- 4.25 In North Wales, two Breach of Condition Notices were served on the operator of one site in respect of restoration works, to secure the restoration of a haul road and extraction area which was prematurely abandoned due to the poor quality of the deposit. Both areas subject to the enforcement notice have now been restored to agricultural use to the satisfaction of the MPA, as well as an additional area of land at the southern extent of

¹³ Where an aftercare condition has been imposed and the complied with to the satisfaction of the MPA a certificate may be issued to that effect (TCPA, 1990)

workings which is currently in aftercare. The line of a further, southern haul road has been restored with biodiversity and landscape considerations as a priority objective.

- 4.26 In South Wales, enforcement action was taken when an independent operating company failed to submit restoration details and their contributions to a restoration guarantee bond lapsed. The site was served Enforcement and Stop Notices which resulted in negotiations between all parties in order to resolve the situation. The operator responded with an application for limited extraction and notified the authority that if they were unable to carry this out, then the company would suffer severe financial difficulties and would therefore have to abandon the site (leaving the MPA with an un-restored site and a reduced fund on which to draw for restoration). The MPA has since withdrawn the Enforcement and Stop Notices, to allow limited extraction in specific areas of the site. Recently a Breach of Condition Notice and an Enforcement Notice have been served at this site.
- 4.27 Enforcement action has been taken at two other opencast coal sites in South Wales. In both cases, the restoration and/or aftercare details had been partially submitted or with incomplete details. Although approved restoration and non-approved aftercare had been carried out on one site, particular issues were identified by the MPA with poorly completed river channel reinstatement. This site has since undergone redevelopment which has overtaken the prospect for further enforcement. At the other site, although the restoration (i.e. landform creation and replacement of soils) had been completed, some of the aftercare requirements, including the reinstatement of a minor road, had not been undertaken before the site was sold on for agricultural use.
- 4.28 Of those MPAs where no formal enforcement action has been taken, one commented that discussions have taken place where certain elements of restoration or aftercare have failed to be met initially and subsequently resolved through discussion and negotiation between the operator and MPA.
- 4.29 Specifically of concern to MPAs was their inability to prevent sites being sold on to other landowners before restoration and/or aftercare works have been completed. Legally, all planning conditions and legal agreements 'run with the land', and thus become the responsibility of the new landowner. Problems are reported to arise, however, when the new owner does not have the capacity to carry them out. MPAs noted some examples of this occurring at reportedly badly restored coal sites in South Wales (and similar problems have been seen where operators have gone into liquidation). Consultation with an opencast coal operator responsible for some of these sites revealed that restoration work had in all cases been completed but that, in two cases, the sites had been sold on before the remaining small amount of aftercare was completed. Subsequent landowners, it was reported, had been made aware of the outstanding aftercare obligations.
- 4.30 Enforcement to complete restoration and aftercare was noted to be difficult at sites where working had continued up to the completion date and where applications for extensions had been received. Enforcement has been successful for some sites however, and in one or two cases, simply the threat of enforcement has been enough to achieve changes in operator behaviour regarding restoration.
- 4.31 Some MPAs noted that if an enforcement case is lost the MPA is liable to pay costs. This highlights the need for the wording of the conditions being enforced to be clear and unambiguous, and for them to be fully in line with the guidelines set out in Circular 35/95. Where this is not the case, enforcement action may be deterred by the risk of incurring costs.

Financial Bonds & Guarantees

- 4.32 Financial guarantees may be required by MPAs to avoid the uncertainty of achieving adequate restoration and aftercare at mineral sites. These can be applied as a prerequisite to the granting of planning permission, or through a Section 106 legal agreement, or (in some authorities) as a condition attached to the planning permission. Many MPAs see bonds as useful 'levers' whether or not they are used.
- 4.33 Over the last decade, financial bonds are reported to have been attached to five opencast coal operations (all in South Wales), and in two of these cases the bonds had to be called upon to achieve the required restoration works. In both cases, this has been where the operator had financially collapsed prior to the completion of restoration and aftercare works. In one case this has been successful, however, for the other, the cost of restoration was greater than the bond provided for, and the standard of final restoration and aftercare has therefore been compromised.

- 4.34 In the case of some instalment type bonds (e.g. escrow) there has been a reported issue with completion of payments by the operator, where not enough money has accumulated up front and/or payments have been reported to 'bounce'. As a lesson learnt on these latter cases, the MPAs may, in future, be seeking a higher proportion of the bond as up-front payment. This was confirmed by the coal industry representative to be the case for a current application.
- 4.35 Restoration bonds have not yet been used in relation to aggregate sites, and the aggregates industry representative consulted in this study reported that they are strongly opposed by aggregate producers and the Mineral Products Association. However, as noted in para. 4.7, above, MPAs have suggested that bonds may be needed to avert the risk of problems where sites are sold on before permission expires, and at least one MPA in South Wales is contemplating their use in situations where there are concerns about the commercial viability of an applicant's proposal.
- 4.36 The coal industry representative agreed that bonds were necessary in the case of large scale opencast workings, although there were often disagreements as to their costing. MPAs noted that the bond value needs to adequately reflect the costs likely to be incurred in bringing in a contractor to complete the restoration work. This may be higher than the value attributed to such work by the original operator, using his own equipment and personnel.
- 4.37 No circumstances were reported where the MPA had, outside of the use of financial bonds, undertaken to fund restoration and aftercare at a site and then reclaimed the cost from the operator¹⁴.

Reviews of Old Mineral Permissions

- 4.38 The Review of Old Mineral Permissions (ROMP) is a statutory requirement under the environment act 1995, which applies to all minerals sites on a 15 year periodic review basis. Two thirds of MPAs (in both North and South Wales) confirmed they had sites which had undergone periodic reviews. Three of these authorities in North Wales had 17 Review sites between them. The six authorities that said they did not have any ROMP sites are all in South Wales.
- 4.39 ROMP Notices must be issued in time by the MPA to the operator (at least 12 months before the date of the review). If the issue date is missed, the site will not be required to undergo another review and the operators need only comply with the conditions agreed at the previous review. In many cases, this would result in the implementation of a relatively vague restoration concept. Once notified, the operators or owners must supply applications to the MPA with schemes of suggested conditions, or can request a postponement of the periodic review.
- 4.40 Reviews are known to have been missed in at least three authorities (all in the South), either as a consequence of the MPA failing to issue the notices on time (as a result of which subsequent reviews cannot be enforced), or as a consequence of the operators failing to submit their review schemes within the prescribed period (thereby causing the planning permission to lapse). Some MPAs suggested that the risk of them failing to notify operators on time could be averted, in future, by including review submission deadlines within the planning conditions. The legality of this, however, would need to be examined.
- 4.41 Half of the MPAs which had dealt with ROMPs confirmed that restoration proposals and schemes had been submitted as part of the review and it was generally agreed that those restoration plans were satisfactory in terms of quality. In cases where such conditions were not submitted by the operator, MPAs should have added these as part of the review process, but this study did not examine these. It was felt by one authority in North Wales that a more varied selection of restoration schemes is being put forward, including natural re-colonisation (particularly at limestone sites) and leisure and amenity based restoration concepts, as opposed to only the replacement of stripped overburden and soils, which was viewed as a more 'traditional' approach.
- 4.42 One South Wales authority commented that operators often prefer to present restoration concept drawings at the review, rather than specific detailed plans. This was acceptable to the MPA as they felt good practice is likely to change and improve over the period of permissions and more detailed schemes can then be agreed nearer to the time of

¹⁴ As provisioned by the Town and Country Planning Act, 1990.

implementation. It has been noted however, that if these subsequent plans restrict working more than was applied at the time of the original permission (because of revised requirements in restoration and aftercare), this may attract claims by the operator for compensation.

- 4.43 A handful of authorities believed that restoration proposals fell short of planners' aspirations for restoration and aftercare, although other environmental conditions involving, for example, hydrogeological modelling studies and archaeological surveys, more often adequately considered.
- 4.44 Some opinions were encountered concerning the length of the review period, where some felt this to be too long, causing many sites to exist in a perceived unfavourable state until the next review phase. Some MPAs offered that this could be overcome for sites undergoing review by condition and thus take account of any latest case law.
- 4.45 At least 20 stalled¹⁵ ROMPs were reported to exist within 9 MPAs, split almost equally between North and South Wales. All of these authorities have a minimal number each, with the exception of one MPA in North Wales where there is a significantly higher number of stalled Initial Reviews.
- 4.46 It is either unknown or confirmed not to be the case that these ROMPs have been stalled due to issues surrounding restoration or aftercare proposals or conditions directly. In three cases the Reviews have been delayed due to hydrogeological complications and in another two instances the problems have surrounded ecological issues.
- 4.47 Three of these authorities noted the lack of backing, by way of legislation, which would prevent Reviews being stalled for long periods of time when a 'stalemate' situation arises; this often occurs where the MPA cannot progress the Review (and therefore update conditions where necessary) as it is waiting for information such as Environmental Statements or the outcome of surveys and assessments from the operator, particularly if the operator has mothballed the site for a period of time.

Dormant Sites

- 4.48 Of the 17 MPAs that responded with relevant sites, 13 reported the existence of dormant sites within their boundary, and those authorities are almost evenly split between the two regions. Most of the MPAs which reported the numbers of qualifying sites had only a small number of dormant sites each, with the exception of two authorities in South Wales which have a significantly higher number.
- 4.49 The number of sites reported during this study as having been served POs within the last 10 years is given in Chapter 3 and on the whole, the MPAs concerned felt that previous POs had been relatively easy to serve. For some MPAs, where further POs could be served, there is concern regarding the financial risks associated with the Orders if they are contested. An authority in North Wales commented that, despite having a number of dormant sites where POs may be justified, these are likely to be contentious and could cause a lot of work for the MPA, even if dealt with one at a time, with a real danger of their staff resources being overwhelmed to deal with the volume of work involved.
- 4.50 Where there were no immediate proposals by the MPA to serve POs on sites this was generally because the MPA felt that the sites were an important part of the landbank¹⁶ for that mineral type. One MPA commented that for sites with long permissions (until 2042) that are unlikely to work, while they would like to use POs, they are content that these sites may re-vegetate naturally in the meantime.
- 4.51 For one quarry where a PO has been served and restoration conditions attached (and are still 'live'), compliance has proved problematic due to the lack of materials for re-profiling and the physical shape of the void. For one first review site with restoration conditions, restoration has been achieved satisfactorily.
- 4.52 Not one of the MPAs across Wales reported issuing a Suspension Order (SO) relating to a mineral permission. Two authorities in North Wales reported that they had considered of using them but advice from 'nervous' lawyers was not to, given the liability for

¹⁵ A ROMP is 'stalled' when the initial review of conditions (under Schedule 13 of the Environment Act 1995) has not been determined or, for a new permission, where they were submitted prior to the EIA Regulation amendments in 2000.

¹⁶ Landbank refers to the amount in tonnes of *permitted* reserves in an authority or region.

compensation and a potentially very costly public inquiry if the SO is objected to by the operator.



Coastal Granite Sites, Gwynedd. These example sites were served Prohibition Orders in 2003/04. No restoration conditions were attached to these orders, as active restoration was thought to be inappropriate, given the sensitive location within the Llŷn Area of Outstanding Natural Beauty and Heritage Coast. This action also minimises the potential for compensation claims to be made against the MPA. For some of these coastal sites, minimal restoration works have been completed, including the removal of structures. Sites of Special Scientific Interest, Special Areas of Conservation and Scheduled Ancient Monuments exist in some of the formerly permitted areas. *Photograph reproduced with permission of Gwynedd County Council.*

General Attitudes

- 4.53 Nine of the responding MPAs felt that there has been a change of attitude towards progressive restoration and restoration conditions by operators over the last 10 years. Six of the authorities that expressed this opinion, all of which are in South Wales, reported that the change had been a negative one and was particularly related to opencast coal sites. The majority of these MPAs felt that a lack of staff experienced in restoration and aftercare planning and implementation within the operating companies concerned, has led to decreased knowledge and understanding in this area of work, often resulting in incomplete, poor quality work on site. Some authorities also expressed their concern with operators increasingly focusing resources towards active and forthcoming sites, rather than allowing for financial and staff resourcing to deal with the reclamation of sites once working has ceased.
- 4.54 While one operator noted that they had no in-house expertise and that consultants were used, they also noted a similar thinning of MPA resources and expertise. This operator was not hopeful for the future on this front.
- 4.55 MPAs occasionally cited a lack of restoration expertise within the companies as a reason for alleged failure to achieve agreed restoration and aftercare plans. They also suggested that a company attitude of wanting to achieve maximum financial gain may be to blame. MPAs expressed the view that there should be a more clearly defined mechanism for taking account of what they perceive to be an operator's poor track record, when determining subsequent mineral applications from a particular company. However, MTAN 2 does strongly encourage operators of coal sites to ensure that as much of an existing site is restored and released to aftercare as possible prior to extensions and, for minor extensions at coal sites, it notes that the operator's track record should be a specific point of consideration for the MPA. Clearly, in implementing this guidance, allowance must be made for changes in management or ownership within a particular company, which may lead to significant differences in attitude and behaviour compared with that shown previously.
- 4.56 Of the three MPAs who felt that a positive attitude change had come about, two were in North Wales and one in the South. These authorities reported that progressive restoration has become much more visible in recent submissions and that more comprehensive schemes were being received. It was noted that it may be significant that the schemes are more frequently written by consultants than the operators themselves.
- 4.57 The remaining 13 responding authorities (roughly even between north and south) felt that they had seen little change in operators' approach and attitudes towards restoration. The majority of these MPAs remarked on the variance in attitude that can be seen between

companies, drawing different comparisons between members of the Mineral Products Association and smaller independent operators, and within these groupings.

- 4.58 One or two examples were encountered where the operator had voluntarily competed works, outside of those conditioned or had gifted the land to the local community or Wildlife Trust.
- 4.59 In discussions with MPAs it became apparent that, for sand and gravel quarries especially, where active restoration has not occurred for one reason or another, MPAs are often satisfied with the natural regeneration and in one or two cases this has even been seen as the most appropriate form of restoration, even being written into the planning conditions in one case.
- 4.60 The record of industrial heritage that some un-restored hard rock sites provide, and the contribution towards geodiversity and geoconservation of some remaining benches (sometimes becoming locally designated nature sites) was seen to be positive for some areas. In one case in North Wales this was reported as a 'useful' role for a site to have at the very least.
- 4.61 Operator representatives did not feel that there had been general change in attitude to restoration, aside from the preference towards more diverse end-uses.

Alternative Funding for Restoration & Aftercare

- 4.62 In discussions with MPAs the problem of 'legacy' quarries (those for which no obligations for restoration and aftercare remain nor are enforceable), was raised. Where there has been inadequate restoration of former aggregate quarries that fit this study's criteria but where no conditions can be enforced, there may be possibilities of securing restoration work through the Aggregates Levy Sustainability Fund (ALSF)¹⁷.
- 4.63 The Fund in Wales does not currently specifically invite applications for such work, but does invite applications for projects which address the legacy of *old* minerals permissions and MTAN 1 notes that applications may be made to the fund for supporting future management of sites with an amenity after-use. The fund has a number of other aims which could be met, if current problem sites were included. These projects might look to provide solutions for sites where bond amounts have not been enough to secure satisfactory restoration, where robust conditions had been absent or in any other instance where the planning system has been applied to the best of its (contemporary) abilities but issues still remain. By ensuring that the fund was used in circumstances where all reasonable effort had been made under the provisions of the planning system or where no obligations remained, this type of initiative might be appropriate.
- 4.64 Funds held by the Mineral Products Association and the British Aggregates Association for restoration also exist however, some planning officers were of the opinion that these has been rarely used, and that the funds are, in any case, too small to provide any worthwhile improvements.

¹⁷ For information on the ALSF in Wales see:
<http://new.wales.gov.uk/topics/housingandcommunity/grants/voluntary/aggregateslevy/?lang=en>

5. CONCLUSIONS & RECOMMENDATIONS

- 5.1 This study has provided an insight into some of the issues surrounding restoration and aftercare for mineral sites identified by MPAs as falling within the criteria for inclusion in this review. The large majority of these sites were aggregate quarries and opencast coal sites. The survey has provided a 'snapshot' of the current picture regarding the state of restoration and aftercare at these sites, providing rough estimates of the number of sites that have closed in the last 10 years, the reason for their closure and adherence to conditions, where applicable. It must be emphasised that, in view of the very limited timescale for the survey and discussion meetings, the figures and opinions obtained should be treated as indicative, rather than absolute findings.
- 5.2 Most (44) of the 86 identified sites falling within the criteria for inclusion in this survey have done so because they have been closed or are phased closures of sites. Around a fifth (17) of the total number of sites were included on the basis of having temporarily ceased working and 25 sites have had permissions removed.
- 5.3 48 of the 86 sites identified in this study were sites where the permission for working had expired, or which had permanently ceased working for some other reason, and where restoration and/or aftercare conditions should therefore have been implemented. 20 of these were reported not to have complied with restoration and/or aftercare conditions, either fully or in part, and 16 of these were still considered by the MPAs to be an issue. A further 16 of the 48 sites had been restored satisfactorily, and the remaining 12 were either in the process of restoration or aftercare with no issues yet identified, or still in discussion regarding the work required
- 5.4 Across all of the 86 sites, around 73% are now no longer considered by the MPA to have restoration or aftercare issues, leaving 27% that are identified as still being of concern to the MPA. These include sites where no restoration or aftercare conditions are present (usually where Prohibition Orders have been imposed without conditions being attached), and others where the conditions have not been satisfactorily implemented or enforced, for a variety of reasons.
- 5.5 Overall, it appears that sites which still present issues to MPAs are in the minority, but for some the problems are difficult to solve, including the lack of enforceable conditions, operator financial troubles (leading to the sale of land or inadequate restoration through insubstantial bonds) and landowner issues.
- 5.6 As a result of experience with sites where restoration and/or aftercare has been a concern, the use of financial bonds is recommended by MPAs, especially of the type which require a greater upfront payment and where an MPA is concerned about an operators past attitude to restoration and aftercare.
- 5.7 In sites where restoration and aftercare is now deemed to be of no issue this has generally related to active restoration through a variance of successful monitoring and enforcement, backed by robust conditions, a positive attitude of the operator and good communications between all parties. It is however, also related in some cases, to an acceptance by MPAs of the standard of restoration achieved through unaided natural revegetation over time and of reasonable delays in completion of extraction or anticipation of new details to be submitted.
- 5.8 The question of whether the re-vegetation at some of these 'non-issue' sites is actually acceptable is interesting, however. Without looking at these sites in detail and estimating what improvements might otherwise have been achieved, it is difficult to identify if the sites have actually 'failed' in restoration and aftercare terms. Either way, it appears that MPAs are largely unconcerned by them.
- 5.9 Where restoration and aftercare conditions have not previously existed or have not been robust, the periodic reviews have offered an opportunity to remedy this, although issues still surround stalled ROMPS and meeting review deadlines (by both the MPA and operator). Good practice here can be seen in writing the review submission timescale into the original conditions, but this will not help to avoid missed reviews for older sites.
- 5.10 In summary, although guidance and legislation are available to ensure that suitable restoration conditions and/or legal agreements can be attached, and if necessary enforced, this study has shown that this is not always achieved in practice, for a variety of reasons.

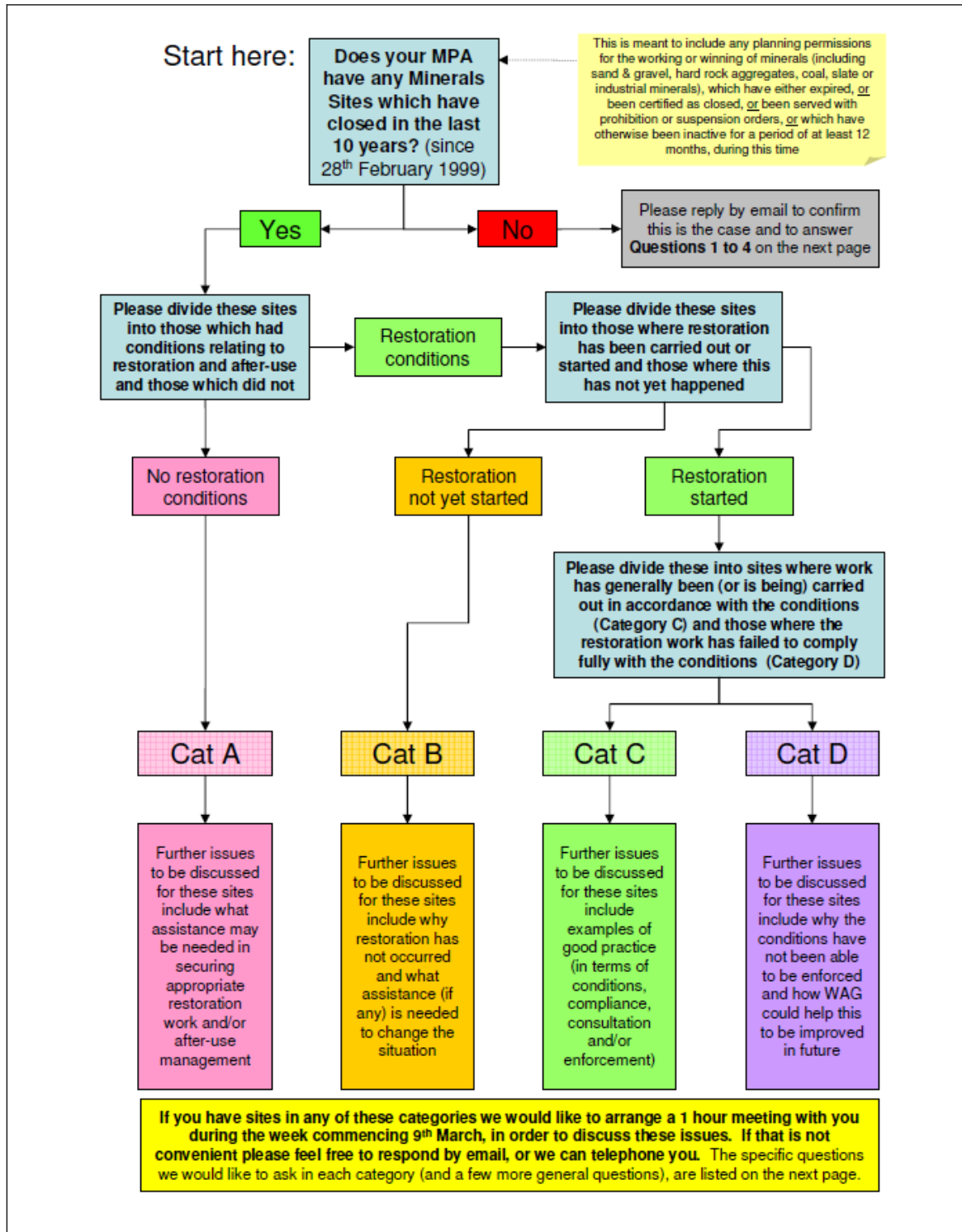
- 5.11 A lack of resources and expertise (apparently for both the MPAs and operators), has figured as a reason for some of the outcomes seen. It appears that a lack of experience or confidence within some MPAs, and/or a lack of staff resources, has sometimes resulted in a failure to impose or to rigorously enforce appropriate conditions and legal agreements. In some cases, the reluctance to do this may have been exacerbated by concerns about potential liabilities and legal challenges. The risk of such challenges may be high where the original conditions were vague or unjustified. It should be emphasised, however, that an MPA cannot lawfully avoid specifying conditions that are necessary to protect the environment (so long as they are fully justified) for fear of potential compensation claims.
- 5.12 To improve the situation in future years there is therefore a need to improve the training, recruitment and retention of minerals planning staff within Unitary Authorities, and to ensure that they have easy access to all relevant guidance and support.
- 5.13 The first of these issues has been identified in a number of previous studies in Wales (and in England) and is in urgent need of improvement. In the short term, pooling of MPA resources and/or outsourcing of work to consultants is already being considered as a temporary solution. In the case of restoration and aftercare, the TSD land reclamation specialists also provide an important resource for MPAs to draw upon, over and above their statutory roles. Continued and perhaps increased use of this service by MPAs should therefore be encouraged (depending on the department's resource capacity).
- 5.14 Regarding the issue of guidance on restoration and aftercare, such material does exist within a plethora of research publications and other sources, but is not always accessible or up to date. In order to support MPAs in their restoration and aftercare duties, it may be useful for the Welsh Assembly to produce (or commission) a summary guide to good practice drawing on these various sources and on new case studies in Wales. This should cover:
- the practical aspects of restoration and aftercare for different mineral working types;
 - consideration of long term mineral restoration and after-use strategies in spatial planning (including local preferences for after-use type and diversity); and
 - the use and enforcement of restoration and aftercare conditions, legal agreements and (where appropriate) restoration bonds.
- 5.15 Finally, where there has been inadequate restoration and/or after-care treatment at aggregate sites that are now closed, and there are no residual liabilities on the landowner to improve the situation, consideration should be given to the option of intervention using funding from the Welsh Aggregates Levy Sustainability Fund.

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APPENDIX A - SURVEY

MPA Survey, Page 1 of 2



MPA Survey, Page 2 of 2

General Questions

NOTE: We will not make reference to any specific sites in our report to WAG, and you may therefore refer to them as 'site X' etc if you prefer. However, it may help us to understand the issues if we know which sites you are referring to.

1. **Have you noticed any general change of attitude by operators in your area over the last 10 years regarding progressive restoration and restoration conditions?** If so, what are your observations?
2. **With regard to ROMP reviews, are satisfactory proposals for restoration generally coming forward?** For example, are they comparable to the conditions you would expect to impose on a new application?
3. **Are there any ROMP initial reviews that are still stalled?** If so, please provide details.
4. **Has your MPA taken any enforcement action in relation to restoration?** Has enforcement been recommended to your authority and if so, has this been pursued?
5. **Has your MPA issued any Suspension Orders relating to mineral permissions?** If so, please give brief details of how this has affected restoration.
6. **Does your MPA have any dormant sites? If so, have you considered the use of Prohibition Orders?** If so, have restoration conditions been implemented?
7. **Have any extant permissions been surrendered by operators?** (e.g. as part of negotiations over a new permission). If so please give brief details of how this has affected restoration.

Questions relating to sites in Category A
(where there were no restoration conditions)

8. **Why were there no restoration conditions?** (e.g. old dormant permissions which closed before undergoing a ROMPs Initial Review)
9. **Are any of these sites in need of restoration work and/or after-use management if funding could be found?** (e.g. via ALSF or through re-development). If so, please provide brief details.

Questions relating to sites in Category B
(where restoration conditions existed but were not implemented at all)

10. **Why were the restoration conditions not implemented?**
11. **How might the situation be improved in future?** (e.g. what are the obstacles to implementation?)

Questions relating to sites in Category C
(where restoration conditions were fully implemented)

12. **Do any of these sites provide examples of good practice in terms of:**
 - a) **The quality of the restoration and after-use conditions used**
 - b) **The attitude of the operator in complying with the conditions**
 - c) **Consultation with stakeholders and/or local communities in choosing preferred restoration and/or after-use options**
 - d) **Successful enforcement action by the MPA**

(If so, in each case, please provide brief details)

Questions relating to sites in Category D
(where restoration conditions were only partially implemented)

13. **Why were the restoration, after-care and/or after-use conditions not fully implemented?**
14. **What outstanding work is required and what is needed to achieve this?**
15. **More generally, how might the situation be improved or avoided in future?**

APPENDIX B - SITE DATA

Data Summary Table

Surveyed Sites	Number of Sites	% of Total Sites
Total number of sites fitting criteria	86	
<i>Number of sites meeting criteria because they were:</i>		
Closed	44	51.2
Permissions revoked/offered up	25	29.1
Inactive	17	19.8
<i>Adherence to Conditions</i>		
Sites for which conditions had been applied	59	68.6
Sites for which no conditions had existed	22	25.6
Sites where application of conditions was not known	5	5.8
Sites where conditions should have already been implemented	48	55.8
Sites where conditions have been complied with	16	18.6
Sites where conditions have not been complied with	16	18.6
<i>Remaining issues as perceived by the MPA</i>		
Total number of sites still thought to be of issue	23	26.7
Total number of sites thought not to be of issue	63	73.3
Sites where conditions have not been applied with and are still thought to be an issue	14	16.3
Other Sites		
Stalled ROMPs	9	at least 20
Dormant Sites	13	<i>Not requested</i>