

**Appendix K**  
*Newland –  
response to  
minerals plan*



K



Tufa dams in Slade Brook SSSI

**RESPONSE BY  
NEWLAND PARISH COUNCIL**

**TO THE**

**GLOUCESTERSHIRE COUNTY COUNCIL  
2016 DRAFT MINERALS LOCAL PLAN**

**In respect of proposed Allocation 01 - Preferred  
Area at Stowe Hill / Clearwell**

## INDEX TO SECTIONS

- 1 ENVIRONMENTAL IMPACTS
- 2 SOCIAL IMPACTS
- 3 HIGHWAYS IMPACTS
- 4 ECONOMIC IMPACTS
- 5 HISTORY & ARCHAEOLOGY
- 6 NEED
- 7 SECONDARY MATERIALS
- 8 DUTY TO CO-OPERATE
- 9 STATUTORY FRAMEWORK
- 10 DOWNGRADING OF SAFEGUARDS
- 11 ENFORCEMENT & MONITORING
- 12 OTHER ISSUE
- 13 PUBLIC OPINION
- 14 CONCLUSION

**Whilst acknowledging the county's obligations (NOT a compulsion) to contribute to the regional and national demand for crushed rock Newland Parish Council objects to the proposed Preferred Area in Allocation 01 (Stowe Hill / Clearwell quarries).**

## **1. ENVIRONMENTAL IMPACTS**

### **1.1 NATURAL ENVIRONMENT**

#### **1.1.1 IRREVERSIBLE DAMAGE TO SLADE BROOK SSSI**

The first objection is on the grounds that any development within the Preferred Area will cause devastating, permanent and irreversible damage to the Slade Brook SSSI which cannot be adequately avoided, mitigated or repaired. The SSSI is nationally important for its active tufa-forming stream system.

You will be aware that a planning application by Breedon Aggregates England Ltd to expand into the Preferred Area is currently pending a decision. The area which is the subject of this planning application is exactly the same as the proposed Preferred Area in Allocation 01, consequently objections raised to this planning application are equally valid in respect of the dMLP.

Objections to the planning application have been submitted by:

- Natural England
- The Environment Agency
- CPRE
- Public Health England
- Forest of Dean District Council
- St Briavels Parish Council
- Coleford Town Council
- Lydney Town Council
- Forest of Dean and Wye Valley Tourism

Natural England's is a non-departmental public body whose purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development. It has responsibility for ensuring that England's unique natural environment including its flora and fauna, land and seascapes, geology and soils are protected and improved. It is a statutory consultee in the planning system for certain planning applications relating to Sites of Special Scientific Interest (SSSI) and best and most versatile agricultural land.<sup>1</sup>

Natural England takes a proportionate, risk based and solutions focussed approach to its planning advice and seeks to enable sustainable development by advising on the avoidance and mitigation for impacts on the natural environment through the use of planning conditions or obligations, and on appropriate enhancement measures.

A copy of the response by Natural England<sup>2</sup> is attached but we would highlight the following points from that report which relate directly to the Slade Brook:

- "Natural England **objects** to the proposed development on the grounds that the application ... is likely to damage or destroy ... the Slade Brook SSSI ... through significant and irreversible damage that cannot be adequately avoided, mitigated or repaired"
- "the majority, and potentially the whole of the proposed extension area is in the catchment of the Slade Brook springs"
- "the removal of soil and epikarst [would lead to] limestone dissolution ... impacting on the water chemistry of Slade Brook;
- "limiting the quarry depth does not provide adequate mitigation..."
- "Quarrying in this area has the potential to release large amounts of suspended sediment which would cover the Slade brook tufa"

<sup>1</sup> <https://www.gov.uk/government/organisations/natural-england>

<sup>2</sup> Letter dated 3/8/2016 from Natural England to GCC as a response to planning application 15/0119/FDMAJM

- “Any accidental release of pollutants poses risk of impacts to the SSSI”
- “Long term monitoring of the aquifer and of Slade Brook is not considered to provide mitigation ... monitoring may simply serve to confirm that change has taken place and the system has been damaged, possibly irreversibly.”

NPPF 118 is quite clear that “if significant harm ... cannot be avoided, adequately mitigated or ... compensated for, then planning permission should be refused.”

Natural England has stated categorically that that there **will** be serious and irreversible effects on the Slade Brook SSSI and that these **cannot** be mitigated

The dMLP Policy DM05 states that

- “Minerals development proposals will be permitted where it can be demonstrated that adverse impacts on the quality and quantity of water resources can be avoided and / or satisfactorily mitigated.”

. The dMLP Policy DM06 states that

- “development, where it has an effect on any European or internationally important Site designated as a Special Area of Conservation, will only be permitted where it can be demonstrated that there will be no conflict with the conservation, management and enhancement of that area;
- that any potentially harmful aspects of mineral development can be satisfactorily mitigate and
- there would be no broader adverse impacts on the national network of SSSIs; or where the benefits of mineral development clearly outweigh the potential adverse impacts upon the key features of any designation”.

Natural England have stated categorically that that there **will** be serious and irreversible effects on the Slade Brook SSSI and consequential effects on the European designated Wye Valley Special Area of Conservation into which the Slade brook flows.

Policy DM06 goes on to state that “Minerals development proposals will normally only be permitted where it can be demonstrated that ... adverse impacts on natural environment assets [can be] satisfactorily mitigated.”

**PURELY ON THIS ADVICE OF NATURAL ENGLAND THEREFORE, PROPOSALS FOR MINERALS DEVELOPMENT CANNOT BE PERMITTED IN THIS AREA.**

**TO ALLOW DEVELOPMENT IN THIS AREA WOULD BE IN CONTRAVENTION OF NPPF 118**

**TO ALLOW DEVELOPMENT IN THIS AREA WOULD BE IN DIRECT CONFLICT WITH POLICY DM06**

The dMLP Objective ENV aims “to protect, and where opportunity exists, enhance, the quality of landscapes, habitats, heritage and other environmental assets, having full regard to their international, national or local importance and value.”

### 1.1.2 OTHER WATER COURSES

Quarrying can have irreversible effects on underground water courses and aquifers. This will lead to reduced underground storage capacity and thus to an increased risk of flooding given the scientifically accepted fact that climate change will lead to more frequent incidents of heavy rainfall. There is particular concern about the effects on Mork brook, Clearwell well and the Valley Brook. Before any land is identified as suitable for quarrying the County Council as the responsible authority must ensure that modelling for each site is undertaken correctly.

The Water Framework Directive Regulations<sup>3</sup> place a duty on public bodies to have regard to River Basin Management Plans (RBMP) and the aim of the directive is to safeguard and improve water quality by

<sup>3</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/307788/river-basin-planning-standards.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307788/river-basin-planning-standards.pdf)

the development of links between surface and ground water, and water quality and quantity. The River Wye catchment area comes within the Severn River Basin District.

The proposed Preferred Area is approximately 3km from the River Wye Special Area of Conservation<sup>4</sup> and it is the view of Natural England that the impacts on the Slade Brook SSSI will have a possible consequential effect on the River Wye in to which the Slade Book flows.

### 1.1.3 LANDSCAPE

Policy DM09 states that “Minerals development within the Wye Valley AONB, **or that affect their setting**, will only be permitted under exceptional circumstances, where they have successfully met all of the relevant criteria [set out in the policy]:

There is an over-riding need for minerals – which there is not (see section 6)

The local economy will not be subject to unacceptable adverse impacts – which it will (see section 4)

Alternative ... sources, which are no more constrained, are not practically available – which they are (see section 8)

Adverse impacts on the ... AONB ... can be avoided or mitigated – which they cannot (see extracts from the Wye Valley AONB Management Plan below)

Landscape characters ... will be satisfactorily restored and enhanced – which they will not (see section 1.1.3)

Although the Preferred Area is not within the AONB, it is less than 350m away and therefore policies with respect to the AONB are equally valid. The Wye Valley AONB Management Plan<sup>5</sup> states:

*“Objectives are to conserve and enhance the natural and cultural heritage of the AONB”<sup>6</sup>*

*“To support the economic and social well-being of local communities in ways which contribute to the conservation and enhancement of natural beauty”<sup>7</sup>*

*“To ensure all minerals development with the AONB is compatible with the aims of AONB designation”<sup>8</sup>*

In its response to the planning application to extend into this area the Forest of Dean District Council said:

*“The proposed Preferred Area lies adjacent to the existing Stowe Hill quarry and extends to some 54 ha. of agricultural land and also includes an existing farm complex, including the farm house and associated agricultural buildings. The area is divided into smaller fields by way of hedgerows, two of which are subject to a hedgerow retention notice. The site is very large and prominent in places, given that it is clearly visible from the highways which bound the site (particularly the B4228) and by way of the land rising.*

*“The area is not within an AONB, however, it is in close proximity to the Wye Valley AONB and therefore the site forms part of the setting of the AONB. The main landscape features of this area are the undulating agricultural fields which are clearly visible from the public realm, as well as the hedgerow pattern which divides those fields. The Longley Farm complex also forms an important feature in the local rural landscape as it has the appearance of being 'perched' upon the ridgeline overlooking its associated land to the south. This agricultural field system, the hedgerow pattern, the ridgeline and the farmstead itself will be permanently lost by the proposal to identify this land for quarrying.*

*“It will be replaced by an undulating bowl and re-profiled bunds and this is considered to be to the detriment of the agricultural landscape and also to the setting of the nearby AONB. Even with restoration and mitigation measures, there would be a significant and detrimental impact on the landscape for lengthy periods of time. Whilst restoration measures will provide final improvements, the local landscape character will be permanently altered, thus harming the existing character and appearance of this prominently located*

<sup>4</sup> Letter dated 3/8/2016 from Natural England to GCC as a response to planning application 15/0119/FDMAJM

<sup>5</sup> <http://www.wyevalleyaonb.org.uk/index.php/about-us/management-and-guidance/management-plan-2015-2020/>

<sup>6</sup> Clause 5.3.3.1

<sup>7</sup> Clause 5.3.3.2

<sup>8</sup> Clause 9.2.4

site. It is clear that the land levels will still be significantly lower than the existing (up to 20 m. in some areas) and the ridgeline will be permanently lost. The site will, therefore, remain an incongruous man-made feature in what is currently a landscape comprised of undulating agricultural fields with a woodland backdrop.

*“Furthermore, during the process of the works, any mitigation would be often extensive and intrusive. The perimeter bunding for example will introduce new and incongruous features in the landscape, which would be very high in places and are therefore out of character with the surrounding agricultural landscape.*

***“It is therefore, judged that the proposal will cause irreparable harm to the local landscape and the setting of the Wye Valley AONB, which is contrary to the aims and objectives of the National Planning Policy Framework (Sections 11, paras. 109, 110, 115, 116 and 118) and National Planning Policy Guidance (section Natural Environment), the Gloucestershire Minerals Local Plan (Policies A4 and E2) and the Core Strategy (Policy CSP.1)<sup>9</sup>.***

The effect of additional quarrying will have a devastating and permanent effect on the landscape which is a major attraction for tourists and residents by virtue of the fact that the land lies within the ancient Hundred of St Briavels, is adjacent to the Statutory Forest and the Wye Valley AONB.

Clauses in the 2014 dMLP, which have been excluded from this draft, but which remain relevant are:

Clause 2.3.4 (Proposed Strategic Priorities) states “To protect [the environment] and where appropriate, enhance, the quality of landscapes, habitats, heritage and other environmental assets, having full regard to their international, national and local importance”.

Clause 2.6.2 states that the Council will always work “to secure development that improves the economic, social and environmental conditions of the area.”

Clause 6.3.3 states “proposals for minerals development will be permitted where they do not have a significant adverse effect on the local landscape or unless the impact can be mitigated. Where significant adverse impacts cannot be fully mitigated, the social, environmental and economic benefits of the proposal must outweigh any harm arising from the impacts”.

## 1.2 ECOLOGY & BIO-DIVERSITY

Because of the likely effects on the Slade Brook SSSI by any development, there are resulting uncertainties around impacts on three European designated sites: the River Wye Special Area of Conservation (SAC), the Wye Valley and Forest of Dean Bat Sites SAC and the Wye Valley Woodlands SAC all of which are afforded statutory protection and all of which are noted at national level as SSSIs<sup>10</sup>.

It is inevitable that quarrying has a major impact on ecological services and on biodiversity which are both already under intense pressure from existing factors such as climate change; this is exacerbated by the extension and intensification of quarrying development.

The Habitats Regulations Assessment (HRA)<sup>11</sup> referred to in the dMLP states (para 5.1.1 – Table 2) that the River Wye SAC, the Wye Valley & Forest of Dean Bat Sites SAC and the Wye Valley Woodlands SAC all had “uncertain” conclusions as to the likely effects on them from aggregate working; thus the precautionary principle was applied.

## 2 SOCIAL IMPACTS

The dMLP Objective LC aims at “Protecting the health and well-being of local communities”. This is a somewhat ‘watered down’ objective from the 2014 dMLP which stated (Clause 2.2.5) “Where mineral working takes place, amenity, health, quality of life and economic vitality will be paramount to the decision making process”.

**2.1 HEALTH** There are serious concerns about the effects of airborne dust particles - believed to be toxic - released on blasting and there is evidence of an increase in respiratory health issues among those

<sup>9</sup> Response by Forest of Dean DC to consultation on planning application 15/0119/FDMAJM

<sup>10</sup> Letter dated 3/8/2016 from Natural England to GCC as a response to planning application 15/0119/FDMAJM

<sup>11</sup> <https://gloucestershire-consult.objective.co.uk/file/4172013>

living and working close to and downwind of quarries. Before any further land is identified in the MLP independent Health Impact Assessments should be undertaken for every potential site.

**2.2 BUFFER ZONES** There is emphasis throughout the dMLP on preserving supplies, even going to the point of stipulating 250m buffer zones around Mineral Consultation Areas; however there is no mention whatsoever of buffer zones around Preferred Areas or Minerals Safeguarding Areas. In the 2014 dMLP it was proposed to insist of buffer zones to protect residents from workings right up to their boundaries; this policy has been dropped because, we suggest, imposition of these would make virtually every Preferred Area uneconomic for the industry to work. **The exclusion of that policy is unacceptable.**

**2.3 AIR QUALITY MONITORING AREAS** The dMLP (paras 277 & 278) states “The effect on local AQMAs by minerals development will be an important consideration...” “Minerals development must not compromise efforts to positively contribute towards ... air quality objectives ... and the protection of human health.”

### 2.3.1 COLEFORD & LOCATIONS CLOSE TO QUARRY

Newland and St Briavels Parish Councils commissioned their own Air Quality surveys in April 2014 at locations in Coleford, St Briavels and Lydney. The results are shown in Table 1 below.

<b>NITROGEN DIOXIDE IN DIFFUSION TUBES BY U.V.SPECTROPHOTOMETRY</b>							
<b>REPORT NUMBER</b>	K02499R						
<b>BOOKING IN REFERENCE</b>	K02499						
<b>DESPATCH NOTE</b>	28279						
<b>CUSTOMER</b>	Richard Crighton Attn: Richard Crighton Newland Parish Council Waterley Bottom The Cross, Clearwell Coleford, Gloucestershire GL16 8JU						
<b>DATE SAMPLES RECEIVED</b>	20/04/2016						
		<b>Exposure Data</b>					<b>TOTAL</b>
Location	Sample Number	Date On	Date Off	Time (hr.)	µg/m <sup>3</sup> *	ppb *	µg NO <sub>2</sub>
Traffic Lights Tower St	687931	08/03/2016	08/04/2016	744.00	34.41	17.96	1.86
Traffic Lights Kings Head	687932	08/03/2016	08/04/2016	744.00	29.31	15.30	1.59
Opposite Beoles Garage	687933	08/03/2016	08/04/2016	744.00	26.88	14.03	1.45
Shophouse	687934	08/03/2016	08/04/2016	743.83	16.40	8.56	0.89
Rose Cottage	687935	08/03/2016	08/04/2016	743.83	22.89	11.94	1.24
Trowgreen	687936	08/03/2016	08/04/2016	743.42	18.59	9.70	1.00
St. Browels School	687937	08/03/2016	08/04/2016	743.33	12.79	6.68	0.69
N/A	687938	08/03/2016	08/04/2016	743.00	35.36	18.46	1.91
Laboratory Blank				744.00	0.02	0.01	0.001
<b>Comment: Results are not blank subtracted</b>							
<b>Tube 687940 from location "Bristol" was not received for analysis.</b>							
<b>Tube 687938 was contaminated by dust when received. Result may be compromised.</b>							
<b>Tube 687936 contained web. Results may be compromised.</b>							
<b>Results have been corrected to a temperature of 293 K (20°)</b>							
<b>Overall M.U.</b>	7.8% +/-		<b>Limit of Detection</b>		0.017µgNO <sub>2</sub>		
<b>Tube Preparation</b> : 20% TEA / Water Analysed on UV 04 Camspec M550			<b>Analyst Name</b>		Anna Paczosa		
<b>Date of Analysis</b>	26/04/2016		<b>Date of Report</b>		26/04/2016		
<b>Analysis carried out in accordance with documented in-house Laboratory Method GLM7</b>							
<b>This Excel report is not secure or tamperproof.</b>							
<p>The Diffusion Tubes have been tested within the scope of Gradko International Ltd. Laboratory Quality Procedures. Calculations and assessments involving the exposure procedures and periods provided by the client are not within the scope of our UKAS Accreditation. Those results obtained using exposure data shall be indicated by an asterisk. Any queries concerning the data in this report should be directed to the Laboratory Manager Gradko International Ltd. This report is not to be reproduced, except in full, without the written permission of Gradko International Ltd.</p>							

**TABLE 1. RESULTS OF AIR QUALITY MONITORING IN COLEFORD**

Please note the first location is the Tourist Information Office opposite the Police Station in Coleford, the third is Beales Garage in Bank Street and the penultimate one is St Briavels school.

The results at the first location demonstrate that the NO<sub>2</sub> values of 34.41µg/m<sup>3</sup> are approaching the critical level of 40µg/m<sup>3</sup>. Clearly with the projected increase in HGV movements through this location it can only be matter of time before the limit is breached. Evidence from a creditable source should be provided to indicate the forecast levels of NO<sub>2</sub> anticipated at this location to the end of 2032, taking in to account the anticipated increase in volume of all traffic.

**2.3.2 LYDNEY**

One of the major routes from the area to the markets is via Lydney. Forest of Dean District Council undertakes air quality monitoring in Lydney and elsewhere, the results are shown in Table 2.

2015 Ref	AIR QUALITY DIFFUSION TUBE RESULTS -2015	Start	2015 Mean if adjusted using 0.95	2015 Mean Unadjusted	2014 Adjusted x0.91	2013 Adjusted x0.95
COL01	Coleford crossroads - 5 Gloucester Rd	May-09	33.0	34.8	32.1	34.0
COL02	Coleford - 23 Market Street	Jan-12	21.7	22.8	21.6	23.6
COL03	Coleford - 17 Old Vicarage Court	Jan-12	21.1	22.2	22.3	24.0
LYD01	Lydney - 57 High St	Jul-08	39.4	41.5	38.0	41.4
LYD02	Lydney - Newerne St, Bridge House - Tucker	May-09	21.4	22.6	20.7	21.0
LYD03	Lydney - 29 High St	Jul-08	38.7	40.7	35.6	37.1
LYD04	Lydney - 13 High St	Mar-10	35.8	37.7	34.5	38.2
LYD05	Lydney - Unit 1, Regents Arcade	Jul-08	31.1	32.8	33.7	34.3
LYD06	Lydney - Hill St - Inspirations Gallery (Triplicate 1 of 3)	Jul-08	37.2	39.2	38.6	40.8
LYD08	Lydney - 13 Bream Rd (Bottom)	Jan-10	35.6	37.5	38.1	37.3
LYD09	Lydney - 17 Bream Rd (Top)	May-09	35.5	37.3	36.9	34.8
LYD10	Lydney - Old Chip Shop, Forest Road	Nov-10	23.8	25.1	22.7	26.9
LYD11	Lydney - 15 Forest Road	Nov-10	18.7	19.7	16.2	17.8
LYD12	Lydney - Kaplans, 61 Newerne Street	Nov-10	28.8	30.3	28.8	31.7
LYD13	Lydney - Hill St - Inspirations Gallery (Triplicate 2 of 3)	Jan-11	37.1	39.0	36.8	40.5
LYD14	Lydney - Hill St - Inspirations Gallery (Triplicate 3 of 3)	Jan-11	37.3	39.2	38.2	40.3
LYD15	Lydney - Highfield Lane (Background)	Jan-12	10.7	11.2	10.7	11.1

26.2	up to 35.9µg/m3
38.6	36 - 40µg/m3
40.6	Over 40µg/m3

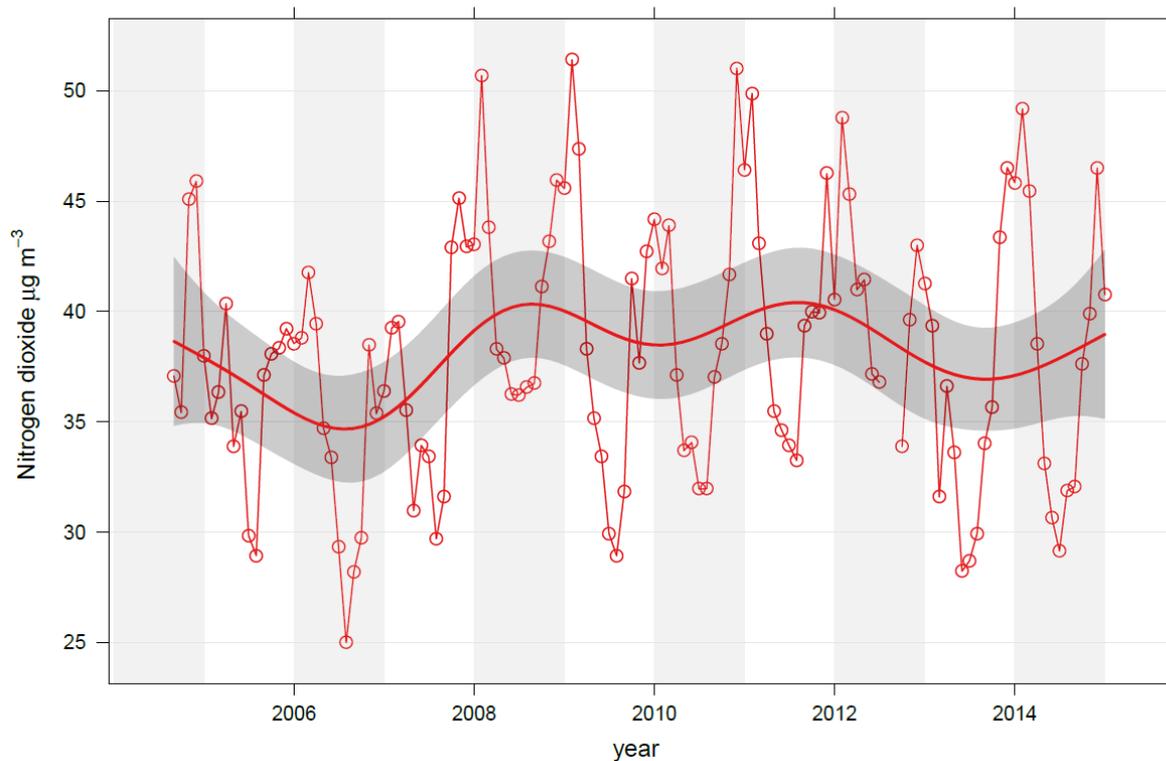
**TABLE 2. RESULTS OF AIR QUALITY MONITORING IN COLEFORD & LYDNEY**

The recorded levels are already in excess of 40µg/m<sup>3</sup> at 2 locations in Lydney and within 3µg/m<sup>3</sup> of the limit at 6 further locations in the town.

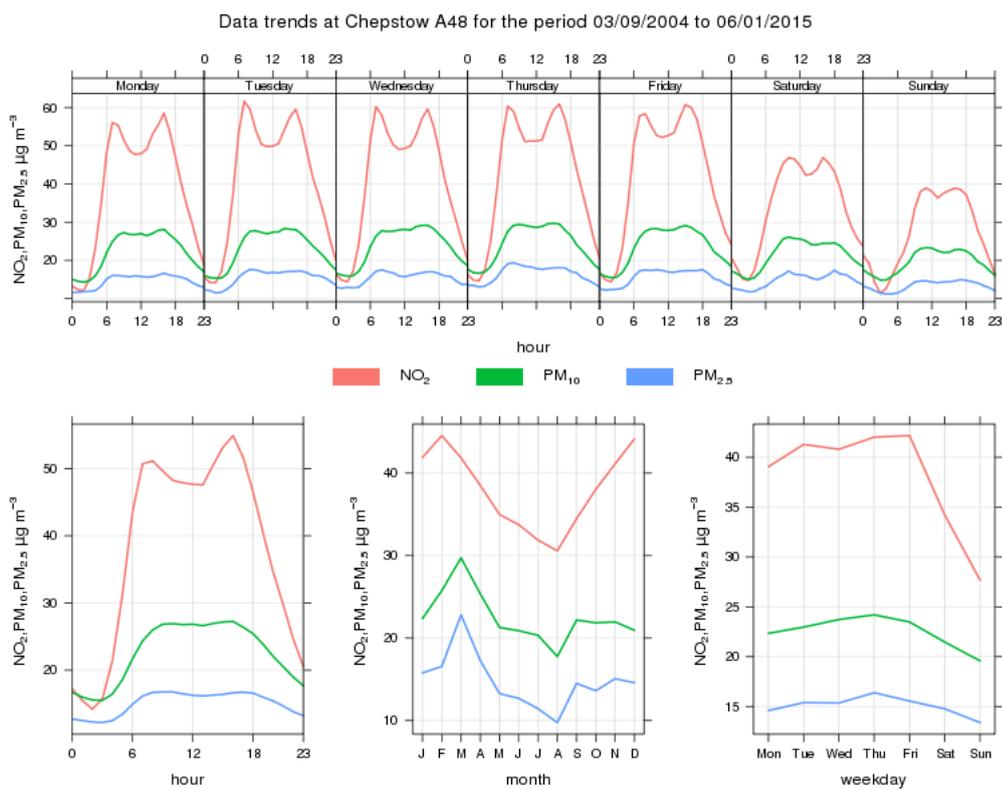
**2.3.3 CHEPSTOW AREA**

One of the major routes from the area to the markets is via Chepstow. There is already serious concern over air quality on A48 in Tutshill on the approach to Chepstow. This will be exacerbated by the development of possibly three new residential developments on land abutting or in very close proximity to A48. Chepstow was recently cited as in the top 20 of the most polluted towns in the country. See tables 3 & 4 below.

### Trend for Chepstow A48



**TABLE 3. SMOOTH TREND ANALYSIS OF AVERAGE MONTHLY NITROGEN DIOXIDE CONCENTRATION 2005-2014**



**TABLE 4. TIME VARIATION ANALYSIS OF NITROGEN DIOXIDE, PM10 & PM2.5 CONCENTRATIONS 2005-2014**

## Chepstow Air Quality Management Areas

Whilst there was no exceedance of the nitrogen dioxide objective level at the automatic monitoring location on Hardwick Hill in Chepstow, results of the diffusion tube study show that there are still exceedances of the annual air quality objective within the Chepstow Air Quality Management Area (AQMA), although concentrations were lower in 2014 than 2012. In Chepstow six locations were lower in 2014 than 2013 and two locations were higher.

In 2014 two locations in Chepstow exceeded the objective level (CH4 at 57.7µg/m<sup>3</sup>, and CH6 at 40µg/m<sup>3</sup>). These were the same locations that exceeded in 2013 and are the only diffusion tube locations that have exceeded the objective level (The Automatic Air Quality Monitoring Station has exceeded in 2008 and 2011). CH4 increased by 1.72µg/m<sup>3</sup> in 2014 over 2013, however CH6 decreased by 1.70µg/m<sup>3</sup>.

Table 5 presents the Chepstow diffusion tube data. Generally there was an increase in nitrogen dioxide levels between 2007 and 2012 in Chepstow. In 2012 eight of the ten monitoring locations (this includes the automatic analyser) recorded the highest levels since 2007, however in 2013 all locations had reduced to roughly 2011 levels. This does not appear to be a general trend, however as in 2014 some monitoring locations increase whilst some decreased. There were three locations (CH4, CH8 and the automatic analyser) that increased between 2013 and 2014, and six locations that decreased.

Whilst there have been both increases and decreases at all locations between 2007 and 2014 overall the general trend appears to be that concentrations have remained relatively stable or slightly increasing.

However the worst case location at CH4, whilst lower in 2014 than 2011 and 2012, has increased the most out of all the locations, with an 8.7µg/m<sup>3</sup> increase in 2014 compared to 2007.

Location	Grade	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	BAF	Final average
Newport Rd Chepstow	CH2a	42.2	46.0	49.8	50.9	43.1	41.6	37.5	35.4	46.9	45.7	59.4	41.2	45.0	0.91	40.9
2 Hardwick Hill Chepstow	CH4	71.9	71.2	73.0	70.2	59.2	52.4	55.4	67.0	57.1	67.8	57.2	58.8	63.4	0.91	57.7
Hill House, Mount Pleasant Chepstow	CH6	37.6	54.6	53.2	47.9	41.6	39.1	31.9	34.0	41.3	45.2	55.4	45.9	44.0	0.91	40.0

(Figures in red are at or exceed the legal limit of 40µg/m<sup>3</sup>)

**TABLE 5 MONTHLY NITROGEN DIOXIDE DIFFUSION TUBE DATA FOR 2014**

### **3 HIGHWAYS IMPACTS**

This site is located in a rural area served by narrow, minor, unclassified roads. To reach the motorway network HGV's are required to travel on these roads away from the quarry, then to B roads then A roads through towns and villages and eventually to the motorway network. If, however, development is eventually permitted then it is noted that a new haul road is proposed on to the B4228, but it surely makes more sense environmentally to utilise stone from quarries located closer to the motorway network.

The dMLP (para 63) points out that the most significant levels of development will be in the Gloucester / Cheltenham area which is of course adjacent to the M5; it is therefore logical to import aggregate from other sources which also have motorway / A road connections than to haul it through hamlets and villages on unsuitable roads.

The proposals in respect of HGV traffic are in contravention of emerging Neighbourhood Development Plans for Lydney and Coleford.

## **4 ECONOMIC IMPACTS**

### **4.1 TOURISM**

The Local Government Association has stated<sup>12</sup> that:

*“English tourism can soar under devolution deals with new figures revealing the tourist industry is set to grow by nearly three per cent every year over the next decade, research by the Local Government Association revealed today (30 September 2016).*

*“With tourism emerging as one of the fastest growing industries, the LGA said local areas can use the devolution agenda to turn their cities and counties into thriving tourist hotspots for the growing ‘staycation’ market and overseas visitors.*

*“To mark World Tourism Day, new research commissioned by the LGA shows that domestic tourism is predicted to grow 2.9 per cent every year over the next decade, which is more than the overall economy (2.5 per cent).*

*“It follows latest industry figures which reveal there were 103 million overnight trips in England in 2015, an 11 per cent increase compared to 2014, and an 8 per cent increase in expenditure compared to 2014, with a total spend of £19.6 billion.*

*“Regions which saw the biggest increases in overnight trips include the West Midlands (+22 per cent), Yorkshire (+20 per cent), the South West (+14 per cent) and London (+14 per cent)”.*

The Rural Economy Growth Review 2011<sup>13</sup> supports the important role in rural tourism.

The dMLP acknowledges (para 27) that the “leisure and tourism industry has grown and is economically significant in many rural ... parts of the county”. In Clearwell the tourism and leisure industry employs 120 (140 in the season) and tourism in general is worth £140m / year to the area. It is worth far more to the area than the value of quarrying, which currently employs 35 people and generates virtually nothing to Clearwell.

Any extension of quarrying activity would be detrimental to the local economy, which is based largely on farming and tourism, without providing any significant employment opportunities. Indeed it is likely that there would be a net reduction in employment opportunities in the area.

There are numerous tourism based business within a few kilometres of the area:

- 3 hotels and 2 pubs
- Clearwell castle (luxury wedding venue)
- Clearwell Caves
- The Secret Forest
- Puzzlewood
- Perrygrove Railway
- Numerous Bed & Breakfast locations

### **4.2 AGRICULTURE**

The permanent loss of 54ha (130 acres) of grade 2 & 3 agricultural land which is required to meet ever increasing demands for food is totally unacceptable.

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<sup>12</sup> [http://www.local.gov.uk/web/guest/media-releases/-/journal\\_content/56/10180/7967016/NEWS](http://www.local.gov.uk/web/guest/media-releases/-/journal_content/56/10180/7967016/NEWS)

<sup>13</sup> [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/183289/rural-economic-growth-review.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/183289/rural-economic-growth-review.pdf)

## 5 HISTORY AND ARCHAEOLOGY

The effects of additional quarrying on historical artefacts, buildings and items of great archaeological importance are irreversible.

Policy DM08 states that “where harm to ... heritage assets cannot be fully mitigated, minerals development proposals will only be permitted where it can be demonstrated all reasonable efforts will be taken to reduce harm to a level where it will no longer outweigh the benefits...” “Minerals development proposals will be permitted, where it can be demonstrated that scheduled ancient monuments and other non-designated archaeological assets ... will be preserved in situ.”

This policy is a watered down version of the 2014 dMLP (Clause 6.6.2) which stated “There will be a presumption in favour of the conservation of the significance of designated heritage assets and their settings, and of those non-designated heritage assets with archaeological interest that are demonstrably of equivalent significance”.

## 6 NEED

The current MLP, adopted in 2003 covered a 10 year period from 1997 – 2006 to satisfy the requirement for authorities to have a 10 year land bank at any one time. In the interim the NPPF has been published. The current MLP as drafted covers a period of 15 year from 2018 – 2032 (as required by NPPF 157)

However the draft does not stop there, it makes provision for supplies for a further 10 years to 2042 so the period of the plan has grown from 10 years in the current plan to 25 years. This is totally unacceptable and a 10 year period should be planned for, with a further 10 years land bank at the expiry of this period ie a total plan period from 2018 to 2038.

The dMLP states that there are aggregate reserves (as at 31/12/2014) of 25.99mt which, based on a 10 year rolling annual sales figure of 1.517mt, equates to reserves of 17.13 years ie until 2031, just 12 months short of the end of the plan period.

There is no prima facie case for extending the period of the plan beyond 2028. If the period of the plan were reduced as we indicate the total requirement over the period would be 19.12mt leaving a shortfall (provision) of 3.45mt as opposed to 14.063mt over a 28 year period.

Appendix 5 of the dMLP assesses the requirement for crushed rock as follows:

Period prior to adoption of the MLP (ie 2015 – 2017)	3 years
Plan period (2018 – 2032)	15 years
Landbank at the end of the plan period (2033 – 2042)	10 years
<b>Total requirement (2015 – 2042)</b>	<b>28 years</b>

Annual sales 1.517mt (70% to be contributed by Forest of Dean = 1.0619mt)

By examining the two tables below, and adding in output from Drybrook and Stowfield quarries, it is blatantly evident that the figures in the dMLP are seriously over-stating the case for the designation of further ‘Preferred Areas’.

Years	Average	Require	Current	Needed
28	1.0619	29.74	15.67	14.07
			From Drybrook	4.00
			From Stowfield	7.40
			<b>Shortfall</b>	<b>2.67</b>

Table 1. Calculation of need and supply based on 28 year period

Years	Average	Require	Current	Needed
18	1.0619	19.12	15.67	3.45
			From Drybrook	4.00
			From Stowfield	7.40
			<b>Surplus</b>	<b>7.95</b>

Table 2. Calculation on need and supply based on 18 year period

## 7 USE OF SECONDARY MATERIALS

Objective SR is to “promote the maximum use of recycled and secondary aggregate.”

Policy SR01 suggests that secondary and recycled aggregates should be used in preference to primary aggregate.

The ‘Vision for 2033’ states “tangible steps will have been taken to reduce reliance on primary minerals...”

The dMLP (para 61) states that any new permitted infrastructure “will present opportunities to develop local secondary aggregate currently not available from the Gloucestershire”.

**The plan, however, gives no indication of how this increased use of secondary materials will be achieved.**

## 8 DUTY TO COOPERATE (DtC)

The Duty to Co-operate Progress Report dated September 2016<sup>14</sup> is very thin on substantive evidence.

Table 2, which deals with co-operation regarding mineral safeguarding matters, under the heading of “What issues were considered and are any future actions proposed?” states “Discussions took place regarding proposed approaches put forward by GCC to safeguarding minerals...”

Table 3, which deals with co-operation regarding aggregate supply-related matters, under the same heading as above states “A request to review a proposed new joint strategic policy for making provision – particularly from within Gloucestershire, for crushed rock aggregate in order to meet a shortfall identified for Worcestershire”.

Nowhere does the DtC Progress Report quote any figures for reserves, demand etc for any other authority or how the apportionment of the regional requirement has been arrived at.

### 8.1 MONMOUTHSHIRE COUNTY COUNCIL LOCAL DEVELOPMENT PLAN (LDP) 2011<sup>15</sup>

(Clause 5.122) “... will address the requirements of the national policy [for the supply of aggregates] by ensuring that a sufficient land bank is maintained and by safeguarding known aggregate resources.”

(Clause 5.123) “... the number of years of mineral extraction that a land bank will provide should be based on the latest 3 years production figures” (this differs from Gloucestershire’s basis which is 10 years).

(Clause 5.123) “The average crushed rock production ... was 0.44mt for the years 2003-2005; ... the estimated reserves were 18.4mt, therefore, the authorities had more than sufficient reserves”.

It thus appears from the LDP that Monmouthshire, with 42 years reserves (18.4 / 0.44) could make a significantly increased contribution to the regional and national requirement.

<sup>14</sup> <https://gloucestershire-consult.objective.co.uk/file/4172002>

<sup>15</sup> <http://www.monmouthshire.gov.uk/app/uploads/2015/07/Adopted-Local-Development-Plan.pdf>

## 8.2 SOMERSET COUNTY COUNCIL MINERALS PLAN<sup>16</sup>

(Clause 6.22) “The South West regional “apportionment” for 2005 to 2020 was 412.73mt. Somerset’s recommended apportionment for 2005 to 2020 was 214.65mt which equates to a provision of 13.41mt each year”.

(Clause 6.25) “ ...the authority should prepare an assessment based on a rolling average of 10 years sales data...”

(Clause 6.28) “ ... average 10 year sales figures ... 10.45mt...”

(Clause 6.29) “National demand for primary aggregate has been falling...”

(Clause 6.34) “Somerset has a land bank of approximately 425mt (2013 figure).”

(Clause 6.36) “ ... based on [the above] Somerset has sufficient reserves for the next 40 years.” (ie 425 / 10.45)

It is perfectly clear therefore that there are more than adequate reserves in Somerset to allow a significant reduction in levels of production in Gloucestershire without affecting the supply nationally. Furthermore, the quarries in that county are far better placed to access the motorway network and indeed 4 sites have rail links direct from the quarry.

## **9 STATUTORY FRAMEWORK**

### 9.1 EUROPEAN CONVENTION ON HUMAN RIGHTS

The European Convention on Human Rights guarantees (Article 1, first Protocol) “the right to peaceful enjoyment of possessions” and (Article 8) “a right to respect for private and family life” and also provides that “there shall be no interference by a public authority with the exercise of this right.” To allow development in this area would breach the human rights of those living and working in the immediate vicinity.

This right was acknowledged by GCC when it refused an application for sand and gravel extraction at Twynning.<sup>17</sup>

### 9.2 NATIONAL PLANNING POLICY FRAMEWORK

The following clauses in the NPPF are relevant here; they deal with obligations imposed on planning authorities which require them to adopt policies which fulfil the following criteria:

(Clause 109) “to contribute to and enhance the natural and local environment by

- Protecting and enhancing valued landscapes, geological conservation interests and soils;
- Recognising the wider benefits of ecosystem services;
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability”.

(Clause 110) “in preparing plans ... the aim should be to minimise pollution and other adverse effects on the local and natural environment”.

(Clause 112) “where significant development of agricultural land is demonstrated to be necessary, [they] should seek to use areas of poorer quality land ...”

<sup>16</sup> <http://www.somerset.gov.uk/policies-and-plans/plans/somerset-minerals-plan/>

<sup>17</sup> GCC planning application ref 13/0017/TWMAJM

(Clause 118) “if significant harm resulting from a development cannot be avoided .... then planning permission should be refused”. “Proposed development on land ... likely to have an adverse effect of a SSSI should not normally be permitted”.

(Clause 122) “... local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions ...”

(Clause 123) “Planning policies and decisions should aim to avoid noise from giving rise to significant adverse effects on health and quality of life ...”

(Clause 128) “Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.”

(Clause 131) “In determining planning applications ... account should be taken of the positive contribution that conservation of heritage assets can make to sustainable communities including their economic viability.”

(Clause 145) “Minerals planning authorities should plan ... jointly ... with other mineral planning authorities ...”

(Clause 145) “Minerals planning authorities should plan ... ensuring that large landbanks bound up in very few sites do not stifle competition.”

(Clause 157) “Local Plans should be based on co-operation with neighbouring authorities ...”

(Clause 207) “Local planning authorities should consider publishing a local enforcement plan to manage enforcement proactively, in a way that is appropriate to their area. This should set out how they will monitor the implementation of planning permissions ...”

### 9.3 FODDC ALLOCATIONS PLANS SUBMISSION DRAFT – AUGUST 2016

This plan quotes (Clause 17.2), in respect of Clearwell:

“The majority of the village is a Conservation Area. There are many buildings of architectural and historic merit.”

“Key issues: Maintaining the contribution of tourism is an important employer in the area”.

At its nearest point the proposed Preferred Area is only 700m from the centre of Clearwell village and within that area are the following listed buildings:

St Peter’s church, Church Road - grade I  
Wellhead, Church Road - grade II  
Baynhams - grade II  
Castle Farm barn & attached cow shed, Church Road - grade II  
Clearwell Castle, Church Road - grade II\*  
Clearwell Castle, Church Road - gateway, perimeter walls, iron gates - grade II  
Clearwell Castle, Church Road - gatehouse and flanking stables - grade II  
Clearwell Cross - grade II Scheduled Ancient Monument  
Cross House, Church Street - grade II  
Carthouse opp Platwell House, Church Road - grade II  
Wyndham Arms Hotel - grade II

Properties within this area - and probably further afield - already experience vibration from quarry blasting and the extension of quarrying activity this much closer to the village would increase the incidents of vibration, dust and noise.

## 10 DOWNGRADING OF SAFEGUARDS ETC

It is noticeable, and very regrettable, that certain safeguards which were quite properly proposed in the 2014 draft plan have either not been included in the 2016 draft or have had their importance reduced. This is evidence of a distinct and unacceptable bias in favour of minerals production and the companies involved in it at the expense of a lack of protection afforded to the general public, heritage assets, the environment etc.

POLICY	2014 dMLP	2016 dMLP
Buffer zones	(Clause 8.2.6) “take forward policy E14 “to ensure impacts on local residents are minimised””	Omitted totally – no mention of buffer zones.
Heritage assets	(Clause 6.6.2) “there will be a <b>presumption in favour</b> of the conservation of the significance of designated heritage assets...”	(Policy DM08) “where harm to heritage assets cannot be fully mitigated, minerals development proposals will only be permitted where it can be demonstrated all <b>reasonable efforts will be taken to reduce harm</b> to a level where it will no longer outweigh the benefits...” “Minerals development proposals will be permitted, where it can be demonstrated that scheduled ancient monuments and other non-designated archaeological assets ... will be preserved <i>in situ</i> .”
Spatial Vision	Where mineral working takes place, amenity, health, quality of life and economic vitality <b>will be paramount to the decision making process</b> . Mineral working will act as a positive driver for protecting and enhancing the quality of environmental assets and designations.	Where mineral development has taken place, <b>minimising the adverse impacts</b> on: – amenity; risks to health, well-being and quality of life; the economic vitality of other local businesses; the integrity and quality of the natural and historic environment.
Restoration / reclamation	<i>Strategic Priority 5: Reclamation</i> To secure both <b>enhanced environmental standards and the highest possible standards and quality</b> of mineral restoration and aftercare for mineral sites at the earliest opportunity, taking a spatial view of after use opportunities for – biodiversity, geodiversity, agriculture <b>(including safeguarding of best and most versatile agricultural land and safeguarding soil resources), native woodland, public access, regeneration, the historic environment, recreation, contributing towards reducing climate change impacts (including the impact of traffic)</b> .	(Policy MR01) Restoration, aftercare and facilitating beneficial after-uses.  Minerals development proposals will be permitted only where it can be demonstrated: - <input type="checkbox"/> Restoration and aftercare will take place at the earliest opportunity and to an <b>acceptable environmental condition</b> ; and  <input type="checkbox"/> Beneficial and sustainable after-uses will be facilitated that will positively contribute towards improvements to environmental quality, biodiversity and / or the health, well-being and quality of life of local communities.
Health & wellbeing	Strategic Priority 4: People To <b>secure sound and enforceable</b> working practices, which will mitigate against adverse impacts on local communities and businesses and will be systematically monitored.	(Plan Objective LC) To avoid adverse impacts on local communities and businesses <b>wherever it is practicable</b> to do so and in all other circumstances, ensure that effective, sound and enforceable measures are put in place to successfully mitigate unacceptable adverse impacts.

## **11 ENFORCEMENT AND MONITORING**

Far too much emphasis is placed on self-regulation of the industry and there should be extensive use of real-time electronic monitoring. For example, excessive noise from blasting lasts only a few seconds and this cannot be experienced by an Enforcement Officer unless he is on site (in which case doubtless the quarry operator would ensure guidelines were not breached). Continual electronic monitoring would overcome this difficulty.

Experience has shown that conditions attached to existing quarrying permissions have been drawn so loosely as to be unenforceable. Operators have taken advantage of this by frequently and blatantly disregarding them knowing that enforcement was impossible. There must be no new development until conditions are water-tight and the planning authority is adequately resourced to ensure rigid enforcement.

## **12 OTHER ISSUES**

In view of the proximity of the Wye Valley AONB and various SSSIs any development right permitted by the GPDO 2015, or any earlier or subsequent legislation, should be removed (dMLP para 252).

## **13 PUBLIC OPINION**

As mentioned previously the proposed Preferred Area is exactly the same as that which is the subject of a planning application currently under consideration by GCC<sup>18</sup>, thus it is acceptable to conclude that opinions expressed in relation to that application are relevant and valid in respect of the dMLP.

In total there have been 678 public comments to the application of which approximately 676 are objections. In addition, objections have been lodged by various statutory consultees including:

- Natural England
- The Environment Agency
- Campaign for the Protection of Rural England
- Public Health England
- Forest of Dean District Council
- Forest of Dean and Wye Valley Tourism
- Newland Parish Council
- St Briavels Parish Council
- West Dean Parish Council
- Coleford Town Council
- Coleford Neighbourhood Development Plan working group
- Lydney Town Council

## **13 CONCLUSIONS AND SUMMARY**

Throughout this draft plan there is an unacceptable bias in favour of the minerals industry and the County Council's desire to fulfil its allocated apportionment of the regional and national requirement for aggregate.

Time after time the plan says that if certain conditions are not fulfilled then applications will not be permitted, but it then goes on to say that as long as effects can be adequately mitigated, those proposals will be permitted. This is a contradiction which is baffling; if an application does not meet those certain conditions it should never be permitted.

The plan repeatedly states that it is based on sustainable supplies, reducing carbon emissions, reducing road transport but nowhere does it say how these will be achieved. Statements such as "support greater efficiency" and "appropriate use of highway routes" are 'buzzword pie in the sky' statements made to look good when nothing will change. "Drivers for change" are further examples of this; there is nothing about residents, communities, health, well-being.

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<sup>18</sup> GCC reference 15/0119/FDMAJM

There appears no prima facie requirement in the short or medium term for the allocation of potential sites as in our view national demand can be achieved by the use of other sites in the county and by co-operation and negotiation with other authorities where there appear to be huge reserve available.

As stated at the outset of this response we acknowledge an obligation (NOT a compulsion) on the part of the county to contribute to the national demand and accept that new areas for extraction will need to be identified in the longer term.

If for no other reason than that stated in section 1 relating to the unequivocal **OBJECTION** by Natural England, we urge you to come to the only acceptable conclusion:-

**PROPOSALS FOR MINERALS DEVELOPMENT CANNOT BE PERMITTED IN THIS AREA.**

**TO ALLOW DEVELOPMENT IN THIS AREA WOULD BE IN CONTRAVENTION OF THE EUROPEAN CONVENTION ON HUMAN RIGHTS**

**TO ALLOW DEVELOPMENT IN THIS AREA WOULD BE IN CONTRAVENTION OF NPPF 118**

**TO ALLOW DEVELOPMENT IN THIS AREA WOULD BE IN DIRECT CONFLICT WITH POLICY DM06**

Date: 03 August 2016  
Our ref: 175771  
Your ref: 15/0108/FDMAJM



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Gloucestershire County Council

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**BY EMAIL ONLY**

Dear Mr Betty

**Planning consultation:** Extension of Stowe Hill Quarry and retention of mineral processing plant at Clearwell Quarry

**Location:** Clearwell and Stowe Hill Quarries, Stowe Green, St Briavels, Gloucestershire, GL15 6QH

Thank you for your consultation on the above dated 07 January 2016 which was received by Natural England on the same date.

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

**The National Parks and Access to the Countryside Act 1949**  
**The Wildlife and Countryside Act 1981 (as amended)**

**1. Summary**

Having carefully considered all the information and evidence available to us, including the additional information supplied to support this application, which goes some way towards addressing the information gaps that previously existed, our conclusions are as follows:

Natural England **objects** to the proposed development on the grounds that the application, as submitted, is likely to damage or destroy the interest features for which Slade Brook Site of Special Scientific Interest (SSSI) has been notified. We advise that the proposed quarry extension would be likely to result in significant and likely irreversible damage to Slade Brook SSSI, which cannot be adequately avoided, mitigated or repaired. Our concerns are set out in more detail in the body of this letter.

Due to the likely impacts on Slade Brook SSSI, we advise that there are resulting uncertainties around impacts on the River Wye Special Area of Conservation and that the Habitat Regulations Assessment Screening for this European site should be revisited.

The proposed quarry extension would result in the loss of approximately 35ha of Best and Most Versatile Agricultural Land. Taking this specific aspect in isolation, and noting our overall objection to the application, we are not raising an objection on the basis of the soils issues per se. We have offered detailed advice below relating to the protection and restoration of these soils, should the Local Authority be minded to approve this application.

Our detailed comments are as follows:

## 2. Slade Brook Site of Special Scientific Interest (SSSI)

The proposed quarry extension is within 1km of Slade Brook Site of Special Scientific Interest (SSSI). Slade Brook SSSI is nationally important for its active tufa-forming stream system. Further information on the SSSI can be found in its [citation](#).

**Natural England objects to the proposed development on the grounds that the application, as submitted, is likely to damage or destroy the interest features for which Slade Brook SSSI has been notified, through significant and irreversible damage that cannot be adequately avoided, mitigated or repaired.** Our concerns are set out in more detail below.

Should the application change, or if the applicant submits further information relating to the impact of this proposal on the SSSI aimed at reducing the damage likely to be caused, Natural England will be happy to consider it, and amend our position as appropriate.

If your Authority is minded to grant consent for this application contrary to the advice relating to Slade Brook SSSI contained in this letter, we refer you to Section 281 (6) of the *Wildlife and Countryside Act 1981* (as amended), specifically the duty placed upon your authority, requiring that your Authority;

- Provide notice to Natural England of the permission, and of its terms, the notice to include a statement of how (if at all) your authority has taken account of Natural England's advice, and
- Shall not grant a permission which would allow the operations to start before the end of a period of 21 days beginning with the date of that notice.

### A. Impacts on hydrology

The available evidence indicates that the majority, and potentially the whole of the proposed extension area is in the catchment of the Slade Brook springs.

Site drainage is presently directed to two small ponds and a sinkhole that recharge the limestone. The proposed quarry extension would double the catchment of these ponds and the sinkhole. This would lead to significant risk of their capacity being exceeded during large recharge events, leading to water with high suspended sediment concentrations travelling rapidly to Slade Brook. The deposition of these suspended solids would have a serious adverse impact on the tufa.

Removal of significant features such as dolines and the epikarst is likely to affect the hydrological regime of Slade Brook, changing the way it responds to rainfall as a result of the changes in its catchment and also impacting on its hydrochemistry, for example by changing the proportions of water received from different sources. It is not clear whether this could have a significant impact on the existing tufa formations and the ability of Slade Brook to continue to be actively tufa forming.

### B. Impacts on epikarst and soil

The proposed quarry extension would require the removal of the soil and the epikarst over a much greater area and to a deeper level than at present. Without these features, limestone dissolution would be much slower, impacting on the water chemistry of Slade Brook. Limiting the quarrying down to the theoretical water table (est. 170m, based on a limited dataset) does not provide adequate mitigation, as the soil and epikarst are a key part of the hydrogeochemical system that supports Slade Brook SSSI.

### C. Loss of important karst landforms

**Quarrying in the proposed extension area would result in destruction of the Longley Farm doline which is a large karst landform that supplies point recharge to the Slade Brook springs. A specific mitigation plan has been proposed for this part of the quarry but it does not begin until the entire landform has been destroyed.** Quarrying in this area has the potential to release large amounts of

suspended sediments that would cover the Slade Brook tufa. Similar effects may be experienced from the loss of other similar landforms.

#### ***D. Pollution risks***

The proposed relocation of the mineral processing plant from Clearwell Quarry to Stowe Hill Quarry would bring the plant much closer to known karst features from which there is rapid drainage to Slade Brook. Any accidental release of pollutants poses risk of impacts to the SSSI.

#### ***E. Monitoring cannot protect the SSSI***

Long-term monitoring of the aquifer and of Slade Brook is not considered to provide mitigation in this case. The Slade Brook springs are fed by conduits through which there is rapid groundwater flow and monitoring may simply serve to confirm that change has taken place and the system has been damaged, possibly irreversibly. The risk of damage to the SSSI is significantly higher from this application than from the existing permission.

#### ***F. Inability of restoration to repair damage***

The construction of a new epikarst is proposed as mitigation, utilising quarry waste and imported inert material. However, unless these are carbonate materials it will be impossible to construct a functioning epikarst. In addition, there is no mention of reinstating the soil and vegetation cover, which are essential components of a functioning system. Even if it is successful, there is likely to be a time lag of decades before any constructed epikarst is delivering dissolved carbonate to Slade Brook and in that time there could be significant impacts on tufa deposition.

While 're-creation' of the epikarst formed a key mitigation element of the existing permission as part of the restoration of the site, it is not clear whether it has been put into practice. The methodology is therefore untested, to our knowledge. In addition, the current application will work the quarry to a deeper level, leaving significantly less limestone, closer to the theoretical zone of saturation. This means that there is greater uncertainty about whether the right hydrogeochemical conditions to support continued tufa formation in Slade Brook can be re-created.

#### ***G. Evidence gaps***

It is Natural England's view that there is now adequate information on which to base a decision. However, due to the nature and complexity of the potential impacts of this proposal on Slade Brook SSSI, there continues to be some lack of understanding and gaps in the information and evidence base.

- The baseline conditions are poorly described and significant information from previous planning applications has been omitted from the present application.
- Despite improved conceptual understanding of the Slade Brook system and similar karst environments, Equivalent Porous Media (EPA) thinking (i.e. the application of techniques used in other types of aquifer) has been applied to the impact assessment and consequent mitigation proposals. This is inappropriate in a karst area, and evidence has not been provided to demonstrate why it might be appropriate in this specific case.
- Inadequate attention is given to the role of the soil and the epikarst as significant stores of groundwater and as the main zones of carbonate dissolution. These zones would be destroyed if quarrying of the proposed extension area is permitted, with consequent likely impacts on Slade Brook SSSI.
- There is a reliance on hydrological data from boreholes both as part of the impact assessment and for future monitoring / mitigation. This is despite a large body of evidence that in karst areas they are commonly not connected to the channel / conduit network through which most groundwater flows. In addition, the existing borehole data is limited.

Consequently we do not have confidence in the conclusions based on it.

- There is a failure to consider the impact of soil stripping on limestone dissolution. Tufa deposition in Slade Brook would be impossible without substantial soil CO<sub>2</sub> production in the catchment as this drives limestone dissolution.

### 3. Internationally designated sites

The application site is in close proximity to three European designated sites (also commonly referred to as Natura 2000 sites): the Wye Valley and Forest of Dean Bat Sites Special Area of Conservation (SAC), the Wye Valley Woodlands SAC and the River Wye SAC. These are afforded protection under the Conservation of Habitats and Species Regulations 2010, as amended (the 'Habitats Regulations'). Due to the close proximity of the application site to these SACs it has the potential to affect their interest features. The sites are also notified at a national level as Sites of Special Scientific Interest (SSSI). Please see the above section of this letter for our advice relating to SSSI features.

In considering the European site interest, Natural England advises that you, as a competent authority under the provisions of the Habitats Regulations, should have regard for any potential impacts that a plan or project may have<sup>1</sup>. The [Conservation objectives](#) for each European site explain how the site should be restored and/or maintained and may be helpful in assessing what, if any, potential impacts a plan or project may have.

Natural England notes that the HRA has not been produced by your authority, but by the applicant. As competent authority, it is your responsibility to produce the HRA. We provide the advice enclosed on the assumption that your authority intends to adopt this HRA to fulfil your duty as competent authority.

#### ***The Wye Valley and Forest of Dean Bat Sites SAC and the Wye Valley Woodlands SAC***

The application site is approximately 1.4km from the Wye Valley and Forest of Dean Bat Sites SAC and 2.5km from the Wye Valley Woodland SAC. Your assessment concludes that the proposal can be screened out from further stages of assessment because significant effects are unlikely to occur, either alone or in combination. On the basis of information provided, Natural England agrees with this view.

#### ***The River Wye SAC***

The application site is approximately 3km from the River Wye SAC. It is our view that the proposed quarry extension is likely to adversely impact on Slade Brook SSSI, which flows into the River Wye SAC. We therefore advise revisiting the Habitat Regulations Assessment Screening for the River Wye SAC, giving consideration to whether the SAC is sensitive to the anticipated changes in hydrology, hydrogeology and water quality.

### 4. Soils, Land Quality and Reclamation

Natural England is objecting to this planning permission due to impacts on Slade Brook SSSI. The removal of the soils is clearly related to the impacts on the brook. However, we do not have any objection to this proposal on the basis of impacts on soils in their own right, provided that permission is subject to our suggested conditions to safeguard soil resources and promote a satisfactory standard of reclamation appropriate to the approved after-uses. Our detailed advice regarding soils

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<sup>1</sup> Requirements are set out within Regulations 61 and 62 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 61 and 62 are commonly referred to as the 'Habitats Regulations Assessment' process.

The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website. <http://www.defra.gov.uk/habitats-review/implementation/process-guidance/guidance/sites/>

is set out in Appendix 1 to this letter. Our recommended conditions regarding soils are set out in Appendix 2.

Should your Authority consider that there is a case for granting planning permission without such conditions, or if you are of the opinion that this proposal may have significant implications for a greater loss of agricultural land, Natural England would expect to discuss these matters further, prior to the determination of the application.

## **5. Landscape advice**

The proposed development is in close proximity to the Wye Valley Area of Outstanding Natural Beauty (AONB). Natural England advises that the planning authority uses national and local policies, together with local landscape expertise and information to determine the proposal. The policy and statutory framework to guide your decision and the role of local advice are explained below.

Your decision should be guided by paragraph 115 of the National Planning Policy Framework which gives the highest status of protection for the 'landscape and scenic beauty' of AONBs and National Parks. For major development proposals paragraph 116 sets out criteria to determine whether the development should exceptionally be permitted within the designated landscape.

Alongside national policy you should also apply landscape policies set out in your development plan, or appropriate saved policies.

We also advise that you consult the Wye Valley AONB. Their knowledge of the site and its wider landscape setting, together with the aims and objectives of the AONB's statutory management plan, will be a valuable contribution to the planning decision. Where available, a local Landscape Character Assessment can also be a helpful guide to the landscape's sensitivity to this type of development and its capacity to accommodate the proposed development.

The statutory purpose of the AONB is to conserve and enhance the area's natural beauty. You should assess the application carefully as to whether the proposed development would have a significant impact on or harm that statutory purpose. Relevant to this is the duty on public bodies to 'have regard' for that statutory purpose in carrying out their functions (S85 of the Countryside and Rights of Way Act, 2000). The Planning Practice Guidance confirms that this duty also applies to proposals outside the designated area but impacting on its natural beauty.

## **6. Protected Species**

We have not assessed this application and associated documents for impacts on protected species. Natural England has published [Standing Advice](#) on protected species. You should apply our Standing Advice to this application as it is a material consideration in the determination of applications in the same way as any individual response received from Natural England following consultation.

The Standing Advice should not be treated as giving any indication or providing any assurance in respect of European Protected Species (EPS) that the proposed development is unlikely to affect the EPS present on the site; nor should it be interpreted as meaning that Natural England has reached any views as to whether a licence may be granted.

If you have any specific questions on aspects that are not covered by our Standing Advice for European Protected Species or have difficulty in applying it to this application please contact us with details at [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

We would be happy to comment further should the need arise but if in the meantime you have any queries please do not hesitate to contact us.

For any queries relating to the specific advice in this letter only please contact Hayley Fleming on 020802 60955. For any new consultations, or to provide further information on this consultation please send your correspondences to [consultations@naturalengland.org.uk](mailto:consultations@naturalengland.org.uk).

We really value your feedback to help us improve the service we offer. We have attached a feedback form to this letter and welcome any comments you might have about our service.

Yours sincerely

Kay Shuard  
Acting Area Manager, South Mercia Area Team

**Planning consultation:** Extension of Stowe Hill Quarry and retention of mineral processing plant at Clearwell Quarry

**Location:** Clearwell and Stowe Hill Quarries, Stowe Green, St Briavels, Gloucestershire, GL15 6QH

## APPENDIX A

### ADVICE REGARDING SOILS

Natural England has no objections to the proposed quarry extension on the basis of impacts on soils in their own right. However, if the Local Authority chose to grant planning permission then we would recommend the use of conditions to ensure the protection of soils. Our detailed advice is below.

Having examined this proposal in the light of our statutory remit under Schedule 5 of the Town and Country Planning Act 1990 (as amended) and the Government's policy for the sustainable use of soil as set out in paragraphs 109 and 112 of the National Planning Policy Framework (March 2012), Natural England wishes to draw your Authority's attention to the following Soils, Land Quality and associated Reclamation etc considerations:

- A. Based on the information provided in support of the planning application, we note that the proposed development would extend to approximately 54.7ha, including some 35.1ha of 'best and most versatile' (BMV) agricultural land; namely Grades 1, 2 and 3a land in the Agricultural Land Classification (ALC) system.
- B. Defra's [Good Practice Guide for Handling Soils](#) provides detailed advice on the choice of machinery and method of their use for handling soils at various phases. We welcome the adoption of "Loose-handling" methods (as described by Sheets 1-4 of the Guide), to minimise damage to soil structure and achieve high standards of restoration as proposed in Chapter 4 of the Environmental Statement.
- C. More general advice for planning authorities on the agricultural aspects of site working and reclamation can be found in the Defra [Guidance for successful reclamation of mineral and waste sites](#).
- D. In accordance with Schedule 5, Part 1, Para 4 (1) of the 1990 Act, Natural England confirms that it would be appropriate to specify agriculture as an afteruse, and for the land to be reclaimed in accordance with Para 3 (1) of the Act; namely that the physical characteristics of the land be restored, so far as practicable, to what they were when last used for agriculture.
- E. Should the development proceed (and subject to further relevant information coming to light during the working of the site), Natural England is satisfied that the Soils and Agricultural Land Classification Report (ES Chapter 4) constitutes a record of the pre-working ALC grading and physical characteristics of the land within the application site boundary.
- F. However, while we are generally satisfied that that the BMV land should be capable of being reclaimed without loss of quality, the submitted soil handling, restoration and aftercare proposals do not fully satisfy the above requirements of the 1990 Act for the following reasons:
  - Restoration materials (as referred to in Paragraph 4.3.1 Supporting Statement): type of fill that will be used as backfill is not described.
  - Specific volumes of available materials: Volumes of the different soil types available for restoration and how these translate into target restored profiles (with an explanation as to how agricultural land quality is maintained, e.g. what the grade of the restored profile will be (including wetness class etc.) are required to assess whether there is a surplus or deficit of materials for the proposed restoration.

- Soil Handling: There are insufficient details about handling the different soil types on the site, method of assessing dry & friable, need for materials stored like on like (topsoil stripped from beneath subsoil bunds and subsoil from beneath overburden bunds) , how soil handling will be supervised, target replacement soil depths etc. The recommendations in the ES Chapter 4 regarding soil handling should be carried through to the detailed soil handling scheme.
  - Drainage: piped underdrainage with a satisfactory outfall is usually required on restored sites to ensure that 'best and most versatile' land can be achieved, but there are no details of a proposed drainage scheme.
  - Frost: with the proposed landform, frost may be an issue, which could affect the potential for best and most versatile restoration.
  - Sedimentation of pond: erosion risk for silty soils may pose a sedimentation risk for the sump pond/seasonal wetland which needs to be considered.
  - Heavy slowly permeable soils: it is unclear how the full 120cm soil profile of these soils will be utilised in the restoration to ensure that there is no loss of soil resource. These soils represent a soil resource providing valuable functions that should not be regarded as overburden.
- G. Having regard to our statutory remit under Schedule 5 of the 1990 Act, Natural England would not wish to raise any objection to the granting of planning permission, provided it was made subject to the suggested conditions to safeguard soil resources and promote a satisfactory standard of reclamation appropriate to the approved afteruses, as set out in the attached Appendix.
- H. Should your Authority consider that there is a case for granting planning permission without such conditions, or if you are of the opinion that this proposal may have significant implications for a greater loss of agricultural land, Natural England would expect to discuss these matters further, prior to the determination of the application.

## **APPENDIX B**

### **RECOMMENDED CONDITIONS REGARDING SOILS**

#### **A. GENERAL CONDITIONS**

1. The site shall be worked in accordance with the submitted plans and details except as amended by the following conditions.
2. Throughout the period of working, restoration and Aftercare, the operator shall take all reasonable steps to ensure that drainage from areas adjoining the site is not impaired or rendered less efficient by the permitted operations. The operator shall take all reasonable steps, including the provision of any necessary works, to prevent damage by erosion, silting or flooding and to make proper provision for the disposal of all water entering, arising on or leaving the site during the permitted operations.
3. Any oil, fuel, lubricant, paint or solvent within the site shall be so stored as to prevent such material from contaminating topsoil, subsoil, soil forming material, or reaching any watercourse.
4. Throughout the period of working, restoration and Aftercare, the operator shall have due regard to the need to adhere to the precautions laid out in the leaflet entitled "Preventing the Spread of Plant and Animal Diseases", published by Defra.

## **B. SOIL HANDLING**

1. Before topsoils and subsoils are stripped on each phase, or part phase, a Scheme of Soil Movement shall be submitted to the Minerals Planning Authority for their consideration. Such schemes shall:
  - a) Be submitted at least 3 months prior to the expected commencement of soil stripping.
  - b) Where subsoils are not to be retained, identify those soils and soil substitutes intended to be used in their place.
  - c) Identify clearly the origin, intermediate and final locations of soils for use in the agricultural restoration, as defined by soil units, together with details balancing the quantities, depths, and areas involved.
2. Before development commences a Scheme of Machine Movements for the stripping and replacement of soils shall be agreed with the MPA. The Scheme shall define the type of machinery to be used within the context of the agreed criteria. All machine movements shall be restricted to those agreed.
3. Within 3 months of the formation of storage bunds the operator shall submit a plan to be approved in writing by or on behalf of the MPA showing the location, contours and volumes of the bunds, and identifying the soil types and units contained therein. Any amendments to the Scheme of Soil Movement shall also be included.
4. Soil shall only be moved when in a dry and friable condition. For soils containing more than 18% clay the criteria for determining dry and friable shall be based on a field assessment of the soils wetness in relation to its lower plastic limit according to the following test. 'An assessment shall be made by attempting to roll a ball of soil into a thread on the surface of a clean plain glazed tile (or plate glass square) using light pressure from the flat of the hand. If a long thread of less than 3mm diameter can be formed, the soil is wetter than the lower plastic limit and soil moving should not take place until the soils have dried out. If the soil crumbles before a long thread of 3mm diameter can be formed, then the soil is dry enough to move. This assessment shall be carried out on representative samples on each major soil type. For all soil types (including sandy loams, loamy sands and sands) no soil handling should proceed during and shortly after significant rainfall, and/or when there are any puddles on the soil surface'

Soil handling and movement shall not be carried out between the months of October to March inclusive

5. Plant or vehicle movement shall be confined to clearly defined haul routes agreed in writing by or on behalf of the MPA, or to the overburden/infill surface and shall not cross areas of topsoil and subsoil except for the express purpose of soil stripping or replacement operations.

## **C. SOIL STRIPPING AND STORAGE**

1. Before any part of the site is excavated or traversed by heavy vehicles or machinery (except for the purpose of stripping that part or stacking topsoil on that part), or is built upon, or used for the stacking of subsoil, soil forming material or overburden, or as a machinery dump or plant yard, or for the construction of a road, all available topsoil (and subsoil) shall be stripped from that part.
2. Topsoil and subsoil shall be separately stripped to their full depth and shall wherever possible be immediately re-spread in their correct sequence to the same settled depth. If this immediate re-spreading is not practicable the topsoil and subsoil shall be stored separately for subsequent replacement.
4. Written notification shall be made giving the MPA five clear working days notice of the intention

to start stripping soils.

5. Bunds for the storage of agricultural soils shall conform to the following criteria:
  - a) Topsoils, subsoils and subsoil substitutes shall be stored separately.
  - b) Where continuous bunds are used dissimilar soils shall be separated by a third material, previously agreed in writing with the MPA.
  - c) Topsoil bunds shall not exceed 3 m in height and subsoil (or subsoil substitute) bunds shall not exceed 5 m in height.
  - d) Materials shall be stored like upon like, so that topsoil shall be stripped from beneath subsoil bunds and subsoil from beneath overburden bunds.
6. All storage bunds intended to remain in situ for more than 6 months or over the winter period are to be grassed over and weed control and other necessary maintenance carried out to the satisfaction of the MPA. The seed mixture and the application rates are to be agreed with the MPA in writing no less than one month before it is expected to complete the formation of the storage bunds.
7. All topsoil, subsoil, and soil forming material shall be retained on the site.
8. Pockets of suitable soil forming material shall be recovered, wherever practicable and necessary during the stripping or excavation operations, for use during the restoration phase.

#### **D. PRE-SETTLEMENT AND FINAL CONTOURS**

1. Prior to infilling, restoration plans showing the proposed pre- and post-settlement contours of the site shall be submitted to the MPA for their approval. Infilling shall not commence until agreement with the proposals has been reached.

#### **E. IMPORTED SOILS/SOIL FORMING MATERIALS**

1. Where it is intended to use imported soils or soil forming materials as agricultural soils in the restoration process these materials shall, unless otherwise previously agreed in writing with the MPA:
  - a) Be separately stored in a designated area previously agreed with the MPA.
  - b) Be identified to, and agreed as suitable with, the MPA prior to placement.
  - c) Be free of objects greater than 100mm in any dimension which are likely to cause any obstruction to cultivations.

#### **F. SOIL REPLACEMENT**

1. The subsoil is to be tipped in windrows and spread to the required level, in (5m) wide strips in such a manner as to avoid compacting placed soils. Topsoil is then to be tipped, lifted and evenly spread onto the levelled subsoil, also in such a manner as to avoid compacting the placed soils.
2. The minimum settled depth of subsoil and topsoil shall be 1.2 metres.
3. All stones and other materials in excess of 100mm in any dimension which are likely to obstruct cultivation in the agricultural afteruse shall be picked and removed from the site.
4. The applicant shall notify the MPA at least 5 working days in advance of the commencement of

the final subsoil placement on each phase, or part phase to allow a site inspection to take place.

## **G DIFFERENTIAL SETTLEMENT**

1. In any part of the site where differential settlement occurs during the restoration and Aftercare period, the applicant, where required by the MPA, shall fill the depression to the final settlement contours specified with suitable imported soils, to a specification to be agreed with the MPA.

## **H. AFTERCARE**

1. An Aftercare Scheme requiring that such steps as may be necessary to bring the land to the required standard for the use of agriculture shall be submitted for the approval of the MPA not later than 6 months prior to the start of aftercare on all or part of the site.

The submitted Scheme shall:

- a) Provide an outline strategy in accordance with paragraph ID27-057-20140306 of the Minerals Planning Practice Guidance (March 2014) for the five year Aftercare period. This shall specify steps to be taken and the period during which they are to be taken. The Scheme shall include provision of a field drainage system and provide for an annual meeting between the applicants and the MPA.
  - b) Provide for a detailed annual programme, in accordance with paragraph ID27-058-20140306 of the Minerals Planning Practice Guidance (March 2014) to be submitted to the MPA not later than two months prior to the annual Aftercare meeting.
2. Unless the MPA, after consultation with Natural England, agree in writing with the person or persons responsible for undertaking the Aftercare steps that there shall be lesser steps or a different timing between steps, the Aftercare shall be carried out in accordance with the submitted Scheme.