# PTE/16/59

Development Management Committee 23 November 2016

County Matter: Minerals South Hams District: Variation of (i) condition 3 of planning permission 9/42/49/0542/85/3 to allow the continued extraction of tungsten and tin, processing and disposal of mineral wastes until 5 June 2036 and (ii) removal of condition 13 of planning permission 9/42/49/0542/85/3 to remove the restriction on the operating hours of the primary crusher Location: Drakelands Mine, Drakelands, Nr Plymouth Applicant: Wolf Minerals (UK) Ltd Application No: 9/42/49/0542/85/3 Date application received by Devon County Council: 9 December 2015

Report of the Head of Planning, Transportation and Environment

Please note that the following recommendations are subject to consideration and determination by the Committee before taking effect.

**Recommendation:** It is recommended that:

- (a) The application to vary Condition 3 (to extend the life of the site from June 2021 to June 2036) and to remove Condition 13 (restriction of hours of operation of the primary crusher) of the existing permission be granted and;
- (b) The remaining conditions be amended as set out in Appendix II.
- (c) That Committee notes the terms of the Unilateral Undertaking attached at Appendix III.
- (d) That Committee notes the Habitats Regulations Assessment attached at Appendix IV.
- 1. Summary
- 1.1 This application is to extend the permitted life of the Drakelands (previously Hemerdon) Tungsten Mine until 2036 and to remove a condition relating to restrictions on the primary crusher. The application was accompanied by an Environmental Statement.
- 1.2 It is considered that the main material planning considerations in the determination of this application are the mineral planning policy context; the operational requirements of the mine, the economic and social benefits of the operation and the consequences of the mine not being completed; the impacts likely to be caused by the continuation of the existing permission post 2021 including continuing impacts on the landscape and amenity and the current concerns about noise and vibration from the operation of the processing plant and blasting.

## 2. The Proposal/Background

2.1 The application site covers some 264 ha and is located some 500m to the north west of Sparkwell village and 1.6km to the north west of Plympton. It is accessed by road via the A38 and the B3417 through Plympton which includes a new stretch of road which was built by the mine linking Newnham Road and Lee Moor Road. The

Location Plan attached to this report indicates the relationship of the mine to the surrounding settlements.

- 2.2 Planning permission was originally granted in June 1986, but due to a fall in world tungsten prices, the developers discharged the pre-commencement conditions, achieved a legal "start" but then mothballed the site which was later sold on to the current applicant.
- 2.3 The original permission was granted for what was expected to be a 35 year project, but due to the very long delay in the re-commencement of the operations, the substantive mining operations (processing of minerals) did not commence until 2015 leaving only six years of the original permission left to the mine.
- 2.4 In December 2015 an application was submitted to extend the end date for the operation to 2036 but, following consultation, additional environmental information was requested on a number of issues not adequately addressed by the supporting ES which had become concerns as the mining activity progressed. These were blasting, noise and vibration and the impact on private water supplies.
- 2.5 The operator has also applied to remove a second condition which restricts the operating hours of the primary crushing plant. The application, with the additional Environmental Information, was re-advertised to make this clear.
- 2.6 The Town and Country Planning Act and Planning Practice Guidance advise the MPA that any decision to vary a condition should repeat the relevant conditions from the original planning permission unless they have already been discharged.
- 2.7 It does however go on to say that the MPA <u>may</u> also impose new conditions that do not materially alter the development.
- 2.8 In recognition of the age of the existing permission, there has been a dialogue between the MPA and the applicant to identify conditions attached to the original permission that are either discharged; no longer relevant; no longer compliant with advice given in the National Planning Policy Framework or covered by a separate consent regime. The proposed revised conditions and the reasons for changes are attached as Appendix II. It is important to distinguish between the two conditions that the applicant has specifically applied to vary and on which a decision is to be made, (which relate specifically to the life of the site and the hours of operation for the primary crusher), and the separate assessment by the MPA of the relevance and legality of the other conditions that were attached to the original 1986 consent and to the 2010 Modification order which was confirmed by the Secretary of State.

# 3. Consultation Responses

3.1 There were two periods of consultation and advertisement. Firstly, for the original application submitted in December 2015 for variation of condition to extend the life of the mine and subsequently, for the Environmental Information submitted with relation to the Regulation 22 request for and the additional proposal to vary Condition 12 relating to the primary crusher.

# 3.2 <u>South Hams District Council</u>:

**Initial Consultation**: The Environmental Health Officer (EHO) for the District Council requested a noise assessment of the existing and proposed operations to enable an

assessment of proposed noise conditions that could be enforceable and NPPF compliant.

The EHO raised concerns that the existing conditions were set so that they could be breached even when the mine was not operational and therefore enforcement would be difficult and would means that the condition afforded no protection.

It was also suggested that the blasting conditions be re-assessed and that the issue of Low Frequency Noise over a further 15 years would be a concern.

**Re-consultation**: The EHO has confirmed that the noise assessment as submitted by the operator would indicate that the existing noise limits could be unattainable and would represent an undue burden on the operator. It is recommended that they are reviewed in accordance with NPPF with a revised set of conditions for day to day operations and specific consideration to the initial stages of Phase 2 and the imposition of a lower noise limit for Sundays.

The EHO supports the conclusions of the Council's own Blast Consultant and the approach of "planning to comply" and recommends the upper limit for ground vibration should remain at 10mm/s.

With relation to Low Frequency Noise and in respect of the comments from the operator regarding overnight shut down of the secondary process plant, the EHO has removed the previous objection to the proposed extension of time and considers that this matter as well as the operating hours of the primary crusher is now addressed by the environmental permit. He observes that it would be for the MPA to conclude whether the overall levels of disturbance are so great that the development is not sustainable.

Regarding dust and Air Quality the EHO notes the work undertaken to improve blasting practices and recommends a number of revised dust and air quality conditions contained in Appendix II.

- 3.3 <u>Dartmoor National Park Authority</u>: **Both Consultations**: No response.
- 3.4 <u>Plymouth City Council</u>:

**Initial Consultation**: No response.

**Re-consultation**: No observations to make noting that the impacts of noise and on the aquatic life of the stream are being addressed.

#### 3.5 <u>Environment Agency</u>:

**Initial Consultation**: Requested additional information on hydrology and flood risk; and on biodiversity mitigation and compensation.

**Re-consultation**: The extension of time is acceptable subject to recommended conditions. The Agency is the Regulator for the mineral processing plant (including the Primary Crusher); they attach the conditions of the permit which Wolf Minerals are required to comply with. Whilst Wolf Minerals are still working towards compliance they are satisfied that the existing permit conditions provide sufficient regulatory control.

# 3.6 Sparkwell Parish Council:

**Initial Consultation**: Concerned about blasting and impact of vibration on people and their property. The application should be delayed or rejected until the unacceptable levels of disturbance to residents can be proven to be an extraordinary occurrence and not likely to re-occur. A track record of blasting impacts needs to be established.

**Re-consultation**: Unable to support the application. Current issues should be resolved before consent is granted for a further 15 years. Their own consultation has indicated health issues arising from lack of sleep caused by Low Frequency Noise (LFN) and additional information is required on this matter as 56 households and up to 103 individuals have stated that they are affected and are experiencing health impacts with more suspected outside the Parish.

The removal of the Condition restricting the operation of the primary crusher is unacceptable and the trial was extended without consultation or sufficient data.

Noise levels have increased and levels have been exceeded at the eastern end of the Parish; DCC stated that the application was not to increase noise levels - this is misleading and an increase would be unacceptable. Concern that monitoring is not independent.

Concern that blasting is apparently complying with the existing planning conditions as the local effects are still unacceptable. The recent trial with electronic detonators has not led to any improvement and there is concern about how long this might take to resolve.

Concern about dust and gas emissions from blasting and from general activity and would welcome the long term use of a mist cannon as anecdotal reports from residents show that it had a positive effect.

Concerns about loss of water supplies and that this may become worse as the mine deepens – what might happen once the operations have ceased?

3.7 Shaugh Prior Parish Council:

**Initial Consultation**: Does not wish to raise objections.

**Re-consultation**: Notes the application to vary the condition relating to the Primary Crusher but does not wish to comment further.

- 3.8 <u>Cornwood Parish Council</u>: **Both Consultations**: no response.
- 3.9 <u>Natural England</u>:

**Initial Consultation**: No specific comment on the details of the consultation. Advice to consider protected species and potential biodiversity enhancement.

**Re-consultation**: No comment.

3.10 <u>Highways England</u>: **Both Consultations**: No response.

3.11 <u>Historic England</u>:

**Initial Consultation**: The application should be determined in accordance with national and local policy guidance, and on the basis of your specialist conservation advice.

**Re-consultation**: No response.

3.12 <u>National Grid</u>:

# **Initial Consultation**: No response **Re-consultation**: No objection.

- 3.13 <u>Health and Safety Executive:</u> No response.
- 3.14 Public Health England: No response.
- 3.15 <u>Public Health Devon</u>: The Director of Public Health notes the concerns about LFN and the steps the applicant is taking to address the impact on local residents as specified by the EP. It is also noted that chronic exposure to unwanted low frequency acoustic sources in the environment may induce non-specific symptoms of stress, but that these may also be due to audible noise. Impacts that may lead to an impact on human health including air quality (including dust and particulate matter), noise and low frequency noise, blasting and vibration and the cumulative impact thereof must be mitigated to the best available degree through the planning conditions and environmental permit and other regulatory controls.
- 3.16 <u>Department for International Trade (DIT)</u>: DIT submitted a general letter of support, explaining that it supports overseas companies who set up in the UK and promotes British Trade around the world.

The application is of critical importance to the continued financing and future lifespan of the operation.

The £150m investment by Wolf enabled employment of 500 people during construction and 200 in ongoing operations plus local contractors. Exports are likely to be US1Billion over the life of the mine and the contribution to the Devon economy is about £35m with £12m infrastructure projects (new roads) and community initiatives.

# 4. Advertisement/Representations

- 4.1 The application was advertised in accordance with the statutory publicity arrangements by means of a site notice, notice in the press and notification of neighbours by letter. From the initial consultation, 30 letters of objection were received relating to the planning application on the main grounds of continuing landscape impact; light pollution; noise; low frequency noise; blasting; dust (potentially toxic); loss of water supplies and pollution of watercourses; traffic; general disturbance; loss of house values; impact on local businesses (including the zoo) and health concerns. There was one letter in general support.
- 4.2 Further advertisement was carried out in respect of the additional Environmental Information and re-description of the planning application. As a result of these

procedures an additional 34 letters of representation have been received of which 19 were objections based on the following principal issues:

Noise, blasting, Low Frequency Noise and Vibration (LFN), dust & air quality and impact on health, loss of Hemerdon Ball (a misunderstanding and confusion with proposals in the Devon Minerals Plan and not relevant to this application).

- 4.3 A number of objections have been received relating to impact on local house prices, and individual businesses. The land use planning system is concerned with the use of land in the public interest and is not designed to protect private interests in this way. The mine has been permitted since 1986 and this has been a mining area for over 100 years and so to some extent local house prices would be expected to have reflected that fact.
- 4.4 A further letter was received from Dartmoor Zoo expressing concern about the impact of in particular vibration and blasting on their endangered animals.
- 4.5 The local Member of Parliament wrote to the MPA expressing his support for the mine but with concern about a potential increase in levels of noise.
- 4.6 Additionally there were 15 letters of support principally from a number of businesses who support the mine and also a number of organisations referencing the economic benefits of the mine. These include the International Tungsten Industry Association, the Australian Trade and Investment Commission, the Devon and Cornwall Business Council, the Devon and Cornwall Chambers of Commerce and the British Geological Survey.
- 4.7 The planning issues raised are considered in more detail in Section 6 of this report.
- 4.8 Copies of representations and the application documentation are available to view on the Council website under reference DCC/3823/2015 or by clicking on the following link: https://planning.devon.gov.uk/PlanDisp.aspx?AppNo=DCC/3823/2015.

#### 5. Planning Policy Considerations

- 5.1 In considering this application the County Council, as Mineral Planning Authority, is required to have regard to the provisions of the Development Plan insofar as they are material to the application, and to any other material considerations. Section 38 (6) of the Planning and Compulsory Purchase Act 2004 requires that where regard is to be had to the Development Plan, the determination shall be in accordance with the Development Plan unless material considerations indicate otherwise. In this case, the Development Plan policies are summarised in Appendix I to this report and the most relevant are referred to in more detail in Section 6 below.
- 5.2 Paragraph 142 of the NPPF highlights that "minerals are essential to support sustainable economic growth" and that it is "important that there is a sufficient supply". Mineral planning authorities are required by paragraph 146 to "plan for a steady and adequate supply of industrial minerals", which includes tungsten.
- 5.3 The Devon County Minerals Local Plan was adopted in 2004, and did not include a policy specifically for Drakelands, reflecting the lack of recent activity at the site at that time. However, Policy MP38 provides for the extension of existing sites for nonenergy minerals in certain circumstances including where "the proposal would reduce the adverse environmental impacts of existing mineral development". Policy MP41

provides the overarching development control considerations including the need to have regard to the amenities of nearby residents and the water environment.

5.4 The Devon Minerals Plan has reached an advanced stage in its preparation, with the Inspector's report published and adoption anticipated in February 2017; while not yet formally part of the Development Plan, its policies should be given great weight in accordance with paragraph 216 of the NPPF. The <u>principal</u> policies in the proposed adoption version of the Devon Minerals Plan are:

Policy M1: "The extraction of mineral resources of the following descriptions will be permissible in the areas described below and illustrated on the Key Diagram. (a) Industrial Minerals ..... Tungsten and Tin: from continued working at....Drakelands"

Policy M9: The steady and adequate supply of tungsten and tin from within the Drakelands Mineral Working Area defined on the Policies Map will be maintained by permitting proposals: (a) <u>that will enable completion</u> of the approved development; and;

Policy M23: Peoples' quality of life, health and amenity will be protected from the adverse effects of mineral development and transportation. Development proposals must demonstrate that the following adverse impacts will be strictly controlled or mitigated to avoid any significant nuisance being caused to occupiers of dwellings and other sensitive properties close to the site or its transportation routes and other users of these routes:

- (a) Noise and vibration, including effects on areas of tranquillity;
- (b) Dust and other reduction in air quality;
- (c) Loss of privacy or natural light; and
- (d) Light pollution and visual intrusion.

The application of these policies to the issues raised by the application is considered in Sections 6 and 7 below.

#### 6. Comments/Issues

6.1 It is considered that the main material planning considerations in the determination of this application are the mineral planning policy context; the operational requirements of the mine, the economic and social benefits of the operation and the consequences of the mine not being completed; the impacts likely to be caused by the continuation of the existing permission post 2021 including continuing impacts on the landscape and amenity and the current concerns about noise and vibration from the operation of the processing plant and blasting.

#### Mineral Planning Policy Context

6.2 The European Commission's Raw Materials Initiative was adopted in 2008 and seeks to secure and improve access to raw materials for EU member states. Tungsten is identified as one of 20 'critical minerals' with the highest economic importance and risk of supply interruption. While national planning policy provides little reference to specific industrial minerals, the Minerals Practice Guidance notes that "*industrial minerals being essential raw materials for a wide range of downstream manufacturing industries....their economic importance therefore extends well beyond the sites from which they are extracted.* 

6.3 As mentioned in 5.4, the emerging Devon Minerals Plan is approaching its adoption, and its policies should therefore accorded significant weight. Policy M9 of that Plan carries a presumption of "permitting proposals...that will enable completion of the approved development" at Drakelands Mine, and was not modified by the Inspector. The relevant policy context therefore favours proposals that will enable the supply of tungsten to be maintained balanced by the need to control and mitigate the impacts of mineral development.

# **Operational, Economic and Social Benefits**

- 6.4 One of the principal issues to balance against the environmental impacts of this operation is the contribution the project has made and is expected to continue to make to the local and national economy.
- 6.5 This is the only consented source of Tungsten in the UK, and the largest deposit in Europe, and therefore in terms of its location there are very limited alternative sources of supply to European markets.

# **Operational requirements**

- 6.6 It is clear that the mine cannot be worked out by the end date of the original 1986 planning permission and therefore the operator has made the case for the extension of the life of the site which might also enable two periods of "mothballing" should tungsten prices slip below the level where it is economic to operator the mine. The operator has made it clear that they have no wish to do this but that the proposed end date might be nearer than the 2035 which has been requested.
- 6.7 The operator has submitted an economic case for bringing the hours of the primary crusher into line with the rest of the processing plant. They state that the weekend shutdowns comprise a reduction of at least 20% of their overall potential production time and that the stopping and re-starting has knock on effects for the efficiency of the rest of the process which can equate to a further half day loss of production. Wolf accepts that it originally planned its operation based on the existing conditions controlling the permitted hours of working but the current economic impact of the low tungsten price and the issues that the company has been having with the process plant generally has led to this request. They already have production shutdowns for two days in every fortnight and they were asked whether this could be combined with weekend or Bank Holiday shut downs, but they have advised that the specialist contract labour that they rely on for maintenance is not available for regular weekend or Bank Holiday cover.

#### Economy and Employment

- 6.8 According to the application documentation, and letters of support received from trade organisations, the contribution currently being made by the mine is as follows:
  - 200(+) direct jobs with an annual wage bill of approximately £8 Million and additional multiplier effects in the local economy; and
  - An estimated USD 1 Billion of export turnover is expected at optimum production.

- 6.9 Tungsten is an element essential for many aspects of industry and enables a range of specific technologies due to its unique properties. It has the highest melting point of all metals, a very high specific weight similar to gold and its hardness is close to diamond in the form of tungsten carbide.
- 6.10 The importance of security of supply is pointed out by the Department for International Trade (DIT) who have provided a letter of support, pointing out the £150 million of investment already committed, and the "significant contribution to the Devon economy and environment through the project's annual spend of about £35 million; the £12 million funding of local infrastructure projects (new roads) and support for a wide range of local community initiatives......the DIT is very supportive of the Wolf Minerals project and acknowledges the contribution the project is making both locally and nationally through generation of exports expected to total about US 1Billion over the lifetime of the mine" In terms of security of supply it has also been suggested that disruption of that supply would have a knock on effect on other industries which rely on tungsten and potentially a severe negative impact on the economy.
- 6.11 Letters of support have also been received from more local interests including the Devon and Cornwall Chambers of Commerce and the Devon and Cornwall Business Council who have pointed out that the operation provides benefits to some 159 other companies in Devon and Cornwall. Other support has also been expressed by companies who are providing services to the mine such as providers of mechanical and electrical engineering services, recruitment companies and specialist mining suppliers.
- 6.12 The applicant has stated that an operating period close to the originally envisaged 35 year project length is critical to the refinancing of the project which is necessary to avoid closure. Whilst the financial health of the applicant is not a land use planning matter, it does need to be recognised that the operation is taking place in this location because this is where the tungsten lies. Planning for minerals development has to be long term given the investment required to open a new mine and the operator has made it clear that without an extension to the life of the consent the tungsten would lie in the ground leading to ongoing uncertainty in the local area about the future of the site and a potentially significant loss of local employment and ongoing benefits to the local supply chain.

# Education and Training

6.13 A number of organisations supporting this proposal have made reference to the importance of the project to academic interests. The Devon and Cornwall Business Council has pointed out that the Drakelands project provides strong co-operation agreements with the Camborne School of Mines, the Universities of Exeter and Plymouth and with further education and training providers for the development of apprenticeship opportunities. Additionally a letter of support was received from the British Geological Survey which states that the project is an unprecedented opportunity to study the world class tungsten deposit. This continues to make a contribution to the ongoing scientific research carried out by BGS and its academic partners which is fundamental in underpinning future security of supply of tungsten and other important technology metals for the UK and other western economies.

#### Noise and Vibration

- 6.14 Following concerns raised by the community about existing noise issues following the submission of the application, the applicant was asked to provide additional environmental information on the existing and predicted noise impacts from the mine.
- 6.15 The operator's submitted noise assessments are based on a "worst case scenario" with the sound modelling and noise contour mapping based on all possible operations taking place and without mitigation from natural landforms and features.

# Low Frequency Noise (LFN)

- 6.16 Most of the objections to any extension to the life of the mine have been based on concern about the Low Frequency Noise (LFN) including potential health impacts. Some, including the Parish Council, consider that it is premature to grant an extension to the life of the site before the matter is resolved.
- 6.17 This issue became apparent in the autumn of 2015 but it took some time to establish that the secondary processing plant, (and particularly the big screens within it) are producing a vibration "spike" at 16Hz.
- 6.18 The operator commissioned the Building Research Establishment (BRE) to investigate the problem and to provide solutions. The walls of the process plant have already been stiffened with additional steel bars to try to reduce vibration in the purlins and whilst this has provided a localised reduction, there are still complaints about the impact. Further potential solutions include stiffening up the roof of the plant (which was underway at the time of writing this report) and intervention in the actual screen mountings. It is expected that the roof stiffening will be complete by the time of determination of this application but any changes monitored will have to be reported verbally.
- 6.19 The issue of LFN is under constant review through the working of the Drakelands Technical Liaison Group where the MPA works together with the other regulators (the Environment Agency and the District Council and with other technical experts as required).
- 6.20 The nature of the noise has not breached any of the existing noise conditions and has not to date been measured at levels higher than those specified within the only available guidance on the matter which is published by Salford University.
- 6.21 The secondary process plant is covered by an environmental permit (EP) and the EA as lead Regulator has already required the operator to engage in continuous improvements to reduce the levels of LFN at complainant properties. The EA has confirmed that the conditions in the EP are sufficient to resolve this matter.
- 6.22 It is not appropriate to seek to impose planning conditions on the operation of the process plant firstly because there is no agreed NPPF or MPG advice on Low Frequency noise and secondly because the NPPF makes it clear that the planning system should not seek to duplicate existing controls.

#### **Operational Noise**

6.23 The original permission was accompanied by a legal agreement requiring that certain properties were purchased and empty before substantive works on the mine could commence. The remaining occupied properties were not on that list and it was

considered at the time that the mine could operate with these properties remaining as residential. The nearest occupied properties to the mine are at Galva House (445m to the SW) and Birchland Farm (310m to the SE) of the site boundary.

- 6.24 There has been monitoring carried out in respect of complaints from properties nearest to the mine but given the distances involved and the low background noise levels at those properties it has been difficult to demonstrate conclusively whether there are continuing breaches of the conditions by noise coming from the mining operations.
- 6.25 Most other complaints and comments have come from the South East of the mine where the land falls away to Sparkwell Village but there have also been occasional comments and complaints about noise from other properties around the mine. Complaints do appear to be wind direction dependent, but the mine operator has in most cases responded to complaints by working in different areas of the mine.

#### Guidance on Mining Noise

- 6.26 Guidance on Noise is found within the NPPF and in the Minerals Practice Guidance (MPG). It states that MPAs should seek to "ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in proximity to noise sensitive properties"
- 6.27 The guidance recommends setting limits as low as practicable to reduce any adverse impacts, without imposing undue burdens on the operator. For daytime and evening it recommends limits that do not exceed the existing background level by more than 10dB(A) subject to a maximum daytime and evening level of 55dB(A). At night the guidance recommends maximum level of 42 dB(A) with no reference to background level.
- 6.28 The operator has not formally requested the review of the existing noise conditions but is aware that the MPA may take steps to review existing conditions that are not working or are not NPPF compliant.

#### The existing noise conditions

- 6.29 An ongoing complaint and investigation has led to the MPA receiving advice from the EHO that the existing conditions based as they are on façade level measurements and with a tonal penalty are no longer NPPF compliant and are likely to result in parts of the mine being incapable of being worked.
- 6.30 These conditions (which are set out in Appendix II) are set lower than the NPPF Guidance as the façade level measurement effectively reduces the maximum level by about 3dB. The limits were likely set based on the lower background levels in 1986 when the original consent was determined.
- 6.31 Objectors are understandably concerned that applying modern noise conditions will result in higher levels of noise from the mine. However, if the existing conditions are set at a lower level than the existing guidance and furthermore would present an unreasonable burden on the mine, then they would not meet the NPPF tests and are consequently unlikely to give the expected protection for the amenity of local residents as they may be unenforceable.

# **Proposed Conditions**

- 6.32 Discussions with the applicant and the EHO have been ongoing to find a range of conditions and a monitoring methodology that can balance the requirements of the NPPF tests, protect the amenity of local residents and do not represent an unreasonable burden on the mine in that they would not effectively prevent the mine from being worked.
- 6.33 The Guidance in the MPG makes it clear that noise conditions are not intended to ensure that adverse effects cannot occur at any time and that a balance needs to be struck between maximum impacts on residential amenity and the practical operation of the mine. It is clear that at Drakelands such impacts may occur for limited periods of time during certain "in combination" circumstances of operational activities and weather and it has been identified that the first phases of Stage 2 of the pit when it is worked out to its maximum extent near the southern boundary will need special consideration.
- 6.34 Nevertheless the background levels which will inform the proposed limits have been derived on the basis that the mine is not in operation. The levels are higher than they were in the 1980s, but other circumstances have changed since then with the development of the power station and higher levels of traffic in general and on the A38.
- 6.35 The MPG states that the determination of noise impacts should take account of the prevailing acoustic environment. It is acknowledged that background noise levels before the mine commenced working were extremely low, but in the context of this planning application it is a fact that this is now an existing mining environment and therefore is no longer undeveloped countryside.
- 6.36 When considering "tonal" noise (e.g intermittent noises) the MPG makes specific reference to reversing alarms and the operator is already using white noise alarms which can be reflected as a separate condition. In terms of the activities on the site it is reasonable to consider that the mining and extraction operations themselves represent "normal" mining activities that should be dealt with by a single noise level condition and that tonal noise from drilling, blasting and reversing alarms should be dealt with by separate conditions.
- 6.37 As a result of ongoing discussions with the operator it is suggested that conditions be derived for "normal operational activities" and that the circumstances where there may be greater impacts in working out Phase 2 of the Pit be considered separately and require the submission of further information and proposed mitigation before this phase of the pit is commenced.
- 6.38 The EHO has suggested revisions to the noise conditions should consent be granted that take on board the modelling supplied by the applicant, but present a more challenging target for daytime noise levels than those suggested by the applicant in their supporting documentation.
- 6.39 Careful consideration of the tolerances built into the applicant's model (including the 3dB(A) "margin" would indicate that with mitigation it would not be necessary or reasonable to set a noise condition building in the worst case scenario for 100% of the time and that generally it should be possible for the operator to achieve (lowest) background + 10dB(A) at the nearest residential receptor (Birchland Farm) during the daytime and 42dB at night.

6.40 It is therefore proposed that if planning permission is granted, the noise limits could be set as following:

Noise levels arising from the development shall not exceed the following limits at any noise sensitive property:

- (i) Between the hours of 0700 and 1900 (daytime) 50 dBLAeq. 1 hour free field
- (ii) Between the hours of 1900 and 2200 (evening) and between 0700 and 2200 on Sunday 45 dBLAeq. 1 hour free field
- (iii) Between the hours of 2200 and 0700 (night-time) 42 dBLAeq. 1hour free field.
- 6.41 The condition for the night time noise limit would also include a caveat that there should be no mining operations at night except for between 0600 and 0700 when it would be permissible to carry out refuelling and bringing equipment into position to commence the 0700 shift.
- 6.42 The proposed restriction on noise limits on a Sunday reflects the concerns of local people that weekend impacts should be lower and the recent decision by the Planning Inspectorate in respect of the a drilling consent in Lancashire. The NPPF does not however offer any support for such lower levels and therefore it is suggested that an interim evening level of 45dB is appropriate.
- 6.43 There is no guidance in the NPPF regarding the special treatment of Bank Holidays, and so there is no provision for requiring lower levels on those days. However, the previous conditions did restrict Bank Holiday working to Sunday levels and so the applicant has offered to restrict the operations to 45dB on the 8 Bank Holidays which were protected in the original permission.

#### Phase 2 of the Pit Development

- 6.44 Para 143 of the NPPF recognises that: "some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction..." and that noise limits should be developed to recognise this fact.
- 6.45 The guidance accords a general dispensation to higher levels (up to 70dB) during temporary noisy activities such as soil stripping based on the likelihood that this may be unavoidable to develop a mine but that the impact should only be for short periods of time. This is a normal dispensation and would cover periods of soil stripping for Phase 2 but the guidance no longer includes overburden removal.
- 6.46 The modelling indicates that until the operator has achieved a bench level at least 10m below existing ground level in certain parts phase 2 of the pit, there may be higher noise levels which are unavoidable if the mine is to be developed in accordance within its existing planning consent. Discussions with the applicant have however indicated that with careful mitigation this limit could be reduced to 53dB (A)[freefield] for short periods of time while working in that particular area.
- 6.47 The operator has pointed out that the mine could not be worked without the development of Phase 2 but the imposition of a new condition with a scheme would enable the community to be aware of the precise periods when this working is proposed in certain parts of the pit and the modelling indicates that this would only be necessary whilst taking out the overburden and achieving the first 10m bench to the 170m AOD level in a specific part of the pit.

# **Mitigation**

- 6.48 In terms of mitigation, the operator has in the past attempted to vary their operations to reduce impacts at the nearest residential property to the south east although this has not always been consistent or successful in the view of the neighbour. Additionally, this has led to problems with the way the mine has been developed which needs to be fully considered taking into account the need to balance the impacts on local residential amenity and the advice not to impose unreasonable burdens on the operator.
- 6.49 In consideration of the potential impact on neighbours even for relatively short periods of time, the development of a noise management and mitigation strategy with associated complaints procedure is commonly used in mineral operations as a way to identify likely issues, and the actions that the operator can take to deal with them.
- 6.50 Clearly as this is an existing mine there is no mitigation that can be achieved by increasing separation distances without undue burden on the operator as it would effectively mean that the mine could not be developed, however the operator has stated that with relation to certain sensitive properties and during particular weather conditions they would remove certain machinery to other parts of the site and reduce the numbers of pieces of plant and machinery. This is considered to be the most significant at Portworthy (when the tip toe is constructed) and for Birchland farm (when Phase 2 of the pit is being created).

#### Noise Monitoring

- 6.51 There have been difficulties with monitoring noise at nearest occupied residential property whose owners have required the monitoring equipment installed by the operator to be removed. Clearly this is a risk for future monitoring and there needs to be a representative location where the equipment is protected and has the required power supply.
- 6.52 The recording equipment has been moved to a residential property that is currently empty and closer to the mine and the measurements at that location will be modelled to infer a level at the nearest occupied property. In terms of long term dependability of monitoring and to overcome the issue of the very low background levels having breaches "trigger" by ancillary environmental noise like wind/birdsong and passing vehicles, it is suggested that a permanent location be installed at the edge of the pit with an absolute level which has been "modelled back" from the nearest occupied property. Therefore the achievement of specific levels at the edge of pit location would reasonably be expected, using the modelling, to achieve the required level at the occupied property.
- 6.53 It is proposed that this approach, with a detailed monitoring, mitigation and complaints scheme would enable the noise to be measured in a manner that is more representative of the impact of the actual noise from the mining operations and less affected by other environmental noise.
- 6.54 Additionally, to provide confidence in the impartiality of the monitoring the operator has offered to fund independent auditing by a third party of the monitoring data and to investigate complaints, and to have the Technical Liaison Group agree the consultant to be chosen to carry out day to day monitoring.

6.55 It is hoped that this will allay some of the concerns expressed about the nature of monitoring at this site although there is no reason to conclude that the information received to date has been in any way inaccurate.

# The Primary Crusher

- 6.56 The applicant has specifically requested the removal of the existing condition which prevents the operation of the primary crusher from 1800 on a Saturday night to 0600 on a Monday morning during public holidays.
- 6.57 The crusher is a twin shaft rolls crusher using counter rotating toothed drums, rather than a jaw action which would have been common when the original permission was granted. It is housed within a building constructed in an excavated "pocket" of land. The crusher feeds the Secondary Process Plant which is already able to operate for 24 hours, seven days per week, and both of these parts of the plant are separately covered by an Environmental Permit granted by the Environment Agency which does not restrict the hours of operation but has its own conditions regarding noise.
- 6.58 Given the importance of the continuous use of the process plant as set out in Para 6.7, the operator had asked the MPA for a number of "trial" periods for 24/7 working. This was approved for economic reasons and also to enable the applicant to provide data on the contribution of this plant to overall noise levels on the understanding that if the Primary Crusher was itself demonstrated to be causing noise problems then the trial would be ended.
- 6.59 The noise modelling submitted with the application indicated that the noise from the primary crusher does not significantly increase the overall noise levels generated by operations at the mine. The movement on the loading pad (the ROM pad) was the most likely part of this operation to contribute to noise and the submitted information indicates that the contribution to the overall sound power from this is in the region of an additional 1.2dB at Birchland Farm at night.
- 6.60 There had been complaints from that property that the loading on the ROM pad is audible at night and as a result the operator has installed the quietest available "white noise" alarms on the two loaders operating at that location.
- 6.61 The NPPF Guidance states that a permitted operation should be dealt with by those controls and whilst it is understandable that a condition could be used to seek controls over the secondary processing plant by cutting off its supply, it is very doubtful whether such a condition would be held to be either reasonable or necessary under the NPPF tests for planning conditions if this plant is not in itself causing night time noise and there is a general EP condition controlling all noise from the plant at night in any case.
- 6.62 As the remainder of the plant can operate for 24 hours a day and the whole of the site is subject to a night time noise condition, then it is considered that a condition relating to the primary crusher alone would not meet the tests in the NPPF, not being necessary or reasonable, as noise from this is already controlled by the permit and the proposed general night time noise condition. Furthermore as the secondary process plant already operates unrestricted this would impose an unreasonable burden on the operator.

# **Operational Noise: Conclusion**

- 6.63 It is important to attempt to strike a reasonable balance between the expectations of those residents who have historically lived with very low background noise levels, the recognition that this mine already has planning permission and that the existing noise conditions are no longer compliant with Government advice. The existing conditions impose lower levels than those suggested in the current guidance but afford little realistic protection if they are out of date and unenforceable. Reiterating the previous conditions would not be NPPF compliant.
- 6.64 The protection to be afforded to residents has to be balanced with the reality of the scale of this particular mining operation which is one of the largest mines in Western Europe. Sound emissions from the site may on occasion and for short periods exceed the NPPF recommended levels due to the proximity of the mine but it is not reasonable to expect that the operation will never be heard in the village or from surrounding land.
- 6.65 It is proposed that the overall noise conditions be amended to reflect current guidance, which would deal with all noise emitting from the site at daytime and at night "in combination" which would overcome confusion or duplication about permitted/non permitted processes (the process plant) and be a much clearer and more enforceable condition.
- 6.66 The proposed amendment to the noise conditions, along with a noise management and monitoring scheme would represent a reasonable balance between setting the noise limit as low as possible as suggested by the NPPF and the ability of the operator to work the mine.
- 6.67 A local resident has engaged an independent noise consultant to assess the environmental noise information provided by the operator. They have questioned both the methodology and the conclusions of the noise reports.
- 6.68 The MPA asked the applicant's noise consultants to comment on this report and they have produced a document in rebuttal of its conclusions. Advice from the EHO and the Council's own noise expert is that the operator's noise assessment provides a reliable indication of the likely level of noise, and that the methodology is a reasonable approach. The proposed condition in relation to noise limits and the removal of the penalty for tonality and distinctive noises is seen by the noise consultant acting for the closest neighbour as raising the overall level, this is identified in the response from the District Environmental Health officer as well, however since permission was originally granted guidance has changed significantly in regards to what is best practice for the measurement of noise and what would be viewed as an acceptable level of noise. The proposed conditions seek to control "tonal" noise sources by requiring the use of appropriate reversing alarms and controlling the hours of drilling. It is acknowledged that there will be occasional noise caused by mining operations themselves that might raise the very short term recorded noise levels (such as a clang or a siren) but that the application of a tonal "penalty" to day to day mining operations is likely to constitute an unreasonable burden to the mining operation.
- 6.69 The proposed noise limits are therefore considered to be compliant with the NPPF guidance as being set a low as practicable whilst enabling the mine to be operated without imposing an "unreasonable burden" on the operator.

6.70 The objections that it is unreasonable to extend the life of the site whilst there are existing noise issues is noted, however it needs to be recognised that this operation could carry on until 2021 under the existing conditions. Any benefits to be gained by updating the conditions as well as the monitoring and mitigation schemes to control the early development of the mine would not have been gained unless a new consent is granted. As the mine develops and deepens it is expected that these issues will lessen in any case.

# Dust and Air Quality

- 6.71 Some objectors have mentioned higher levels of "nuisance" dust in the village, especially over the summer and since blasting commenced although no formal complaints have been received separate to the planning consultation.
- 6.72 There is already dust monitoring carried out and dust gauges were installed before mining commenced to give a clear indication of any changes caused by mining activity, but the monitor at Birchland Farm which carried out the PM10 monitoring has recently been disconnected by the landowner.
- 6.73 The most recent Q2 and Q3 2016 quarterly monitoring reports (April to June and July to September) which followed the commencement of blasting indicated that there were no exceedances of the National Air Quality Strategy guidelines for PM10 particulates at Birchland Farm during this period. Of the 9 dust deposition monitors arranged around the mine none presented rates of dust deposition higher than the 200mg/m2/day which is normally used for assessing dust "nuisance", except for the gauge within the mine itself on the MWF.
- 6.74 Nevertheless, there is a concern in the village that dust levels have increased and so the current blast impact minimisation operations include damping down before blasting to prevent there being any source of dust from this activity as well as the use of a mist cannon where appropriate. The haul ways and open areas are already sprayed with bowsers and there is a complaints procedure in accordance with the existing dust monitoring scheme.
- 6.75 The EHO has suggested that the monitoring scheme be revised to include more recent guidance from the Institute of Air Quality Management (2016) on the impacts of dust arising from mineral operations and has suggested some amended conditions should consent be granted. These are included in the Schedule at Appendix II.
- 6.76 A revised dust minimisation monitoring, and complaints scheme with an element of independence in the monitoring carried out would then be consistent with similar schemes for noise and blasting.

# Blasting

- 6.77 Blasting at the mine commenced in February 2016 and resulted in a large number of complaints and concerns expressed by residents and the Parish Council about noise, vibration and potential structural damage.
- 6.78 Monitoring of the blast results has established that neither the maximum ground borne vibration, which is measured as Peak Particle Velocity (PPV), or airborne vibration (air overpressure)(AOP) limits in the existing planning conditions were being breached.

- 6.79 However, the concern expressed was so great that, following a public engagement event, the County Council commissioned blasting experts to advise on whether the operator was following Best Available Techniques and carrying out blasting so as to minimise its impacts in terms of airborne vibration, ground borne vibration, dust and fumes. At the same time, the County Council encouraged the operator to appoint consultants with community mediation and blasting expertise given the difficult relationship and barriers to effective communication that had developed between the operator and the public.
- 6.80 Blast Log Ltd, which is the DCC consultant, has carried out its own monitoring and has audited the information provided by the operator and by their blast consultant from Leicester University. They note that, whilst the blasting has not at any time breached the upper limits set in the existing conditions relating to ground borne vibration and air borne vibration (air overpressure), there is significant amplification of vibration levels inside some properties which causes alarm and distress over and above that which would normally be expected at the levels of ground borne vibration measured to date outside the properties.
- 6.81 They note that a number of steps have been taken by Wolf over the summer to improve matters such as ensuring that the blasts are designed to minimise dust emissions, to alter the explosive mix to reduce Nitrogen Dioxide emissions and to use and measure the effects of using electronic detonators in an attempt to reduce vibrations inside local properties by avoiding the resonant frequencies of the properties affected and so minimise the amplification effects.
- 6.82 In relation to trials with electronic detonators, these are ongoing and the operator's consultant has recently reported in a briefing on blasting that: "the design and execution of the blast is now of the highest standard, and has significantly reduced some of the early issues such as fume and dust. However, this has not reduced the blast vibrations that many local residents continue to be deeply concerned about, and so this has been the recent focus. ......After the initial analysis, it seems that the electronic detonators have not delivered all of the benefits which were hoped for. In some locations the vibration levels have decreased, and the amplification factor between outside and inside a property has been reduced in some places. However, there are other locations where the vibration levels seem to have increased, and the reasons for this are at present unclear...... The use of electronic detonators is continuing for the time being, but further investigation is required to take into account other factors. Through this and other briefings, the operator has also made it clear that it will incorporate the community feedback on blasting in the ongoing analysis."
- 6.83 Blast Log consider that the lack of attention paid in the early months to investigating and understanding the public reaction to blasting and committing to minimise its effects (irrespective of the maximum levels of ground vibration and air overpressure in the planning conditions) has contributed to the communication difficulties mentioned above and to the delay in taking the additional measures now in hand to reduce the impacts.
- 6.84 Improvements have been made in communications since the start of blasting. Currently the operator is communicating by e-mail with local people to let them know when each blast will take place (usually at about 3.15 Tuesday to Friday); how much material the blast would be expected to move in cubic metres and a description of the type of blast (e.g. whether it is a full "production" blast or whether it is a "trim shot" which is used to remove smaller amounts of material for specific purposes such as creating a sump or a stable bench face at its final position). The notification also states in which part of the pit the blasts will take place. The operator has also

recently set up a local website, which gives the vibration and air overpressure results for each of the blasts, some general information about blasting, the blasting programme for the coming week and contact information for complaints and comments. It has recently involved its consultant from Leicester University in preparing periodic briefings sent to the community by email, hard copy, via the parish magazines and via the website. The consultant's contact details are available in these briefings so that members of the public can approach him directly if they wish.

- 6.85 What is becoming clear from the current work being undertaken by Leicester University, is that the location of blasting activity in the pit, along with the detonator type and the type of affected property all have an effect on the experience within an individual dwelling. Modelling and monitoring is continuing to inform the model and the operator has made a commitment to operating its blasting in accordance with the concept of "Planning to Comply". This entails the establishment of a comprehensive database that records all the key blasting parameters and monitoring data. Using this concept, the database is updated after each blast and the resulting analysis used to inform the design of the next blast, as well as prediction of the likely levels of blast vibration that will be induced at key locations.
- 6.86 Blast Log Ltd (for the MPA) has provided a report recommending that as a part of any new condition, the operator provides a blast impact minimisation and monitoring scheme (along with a complaints scheme) with recommendations for particular types of measurement and monitoring and the continued reporting of measured impacts.
- 6.87 Ongoing discussion with the operator has led to agreement that they would produce such a scheme within a month of permission being granted, and they would continue to adopt the "Planning to Comply" approach, rather than concluding that blasting within the prescribed levels of a planning condition is sufficient action.
- 6.88 The submission of a scheme would enable the operator to continue to try to plan for improvements based on the best possible information and the monitoring information would be in the public domain as the operator has offered to pay for independent monitoring to be provided to the Mineral Planning Authority.
- 6.89 The applicant did not formally apply to vary the blasting conditions but has accepted that the current situation required further review over and above that required to ensure that the existing conditions are merely NPPF compliant.
- 6.90 The very specific objection from the Dartmoor Zoo is noted but there was a zoo in this location when the original permission was granted and so this would have been taken into consideration at the time of the original consent. The applicant's consultant has stated that the only published evidence in respect of the potential impact on zoo animals concluded that although animals were observed to notice the first few blasts they "quickly became used to the effects and there was no evidence of chronic stress responses." It is acknowledged that the current zoo management is concerned about the impact of the mine but the concern mostly reflects that of the community as a whole. Given that the current conditions are not being breached at the zoo and the applicant's commitment to using Best Available Techniques to minimise the impact of blasting (incorporating the "Planning to Comply" approach), implementation of the Blast Impact Minimisation and Monitoring Scheme, which documents the approaches they will use, in conjunction with new conditions presents the most positive way forward.

# **Proposed blasting conditions**

- 6.91 It is suggested that the blasting conditions be re-cast (See Appendix II) to be consistent with established best practice that combines the imposition of a maximum limit on vibration with a requirement that 95% of blasts are below a lower level, and also to require the submission and approval of the Blast Minimisation, Monitoring and Complaints scheme described above. There is no current guidance on air overpressure but local concerns about the potential loss of this condition are noted and having a limit (even if not breached to date) would safeguard the community from any increases. This has been accepted by the operator and the management of this would also form part of the management and complaints scheme.
- 6.92 The recommended conditions would reduce the overall permitted blasts from a maximum of 24 in a single week (Mon to Sat) and a maximum of 6 in a single day to 2 a day. There was considerable concern when blasting commenced about the potential increase in the numbers of blasts given the locally perceived impacts and information given by the operator that full production had not yet been reached.
- 6.93 Amendment of this condition to refer to the lower numbers provides welcome clarity. Objectors have pointed out that, in fact, the reduction in the number of blasts is little concession because the operator has admitted that it would be impossible to blast 6 times per day, however, the reduced numbers provide reassurance that there should be a regular and reasonably predictable programme of blasting in the future.
- 6.94 It is suggested that blasting also be controlled on a Saturday except for a reduced number of 6 per year to enable the operator to carry out a blast if for any reason the weather or other factors prevent the blast taking place on a Friday.

#### Health Impacts

- 6.95 A number of concerns have been raised by local people and by Sparkwell Parish Council about the health impacts of the existing operation. The Parish Council is known to have carried out a survey of local people asking whether the mine is causing them health impacts. The Parish has not however shared the survey questions or the detail of the response except within their general response to the planning application.
- 6.96 The applicant has provided a statement on public health which explores the threshold levels for impacts on human health but concludes that the measured levels from LFN, blasting and operational noise are not reaching levels that would cause actual harm although it is accepted that fear and general anxiety about the mine and its impacts can have a debilitating effect and that the Low Frequency Noise can affect some individuals more acutely.
- 6.97 The Director of Public Health has observed that there is limited guidance in the area of LFN and notes that the applicant is taking steps to address the impact on local residents as specified by the Environmental Permit. A Health Protection Agency Report of the Independent Advisory Group on Non-ionising Radiation (2010) entitled the 'Health Effects of Exposure to Ultrasound and Infrared' concluded that at lower levels of exposure there is sparse literature and no confirmed biological effects to support action above those proposed by the applicant.

- 6.98 However, the review also notes that there are reports that chronic exposure to unwanted, low frequency acoustic sources in the environment may also induce non-specific symptoms of stress including headaches, nausea and loss of sleep, but the possibility could not be excluded that these effects are due to audible noise.
- 6.99 The potential pollution and other environmental hazards which might lead to an adverse impact on human health including air quality (including dust and particulate matter), noise and low frequency noise, blasting and vibration and the cumulative impact thereof must be mitigated to the best available degree through the planning conditions and environmental permit and other regulatory control
- 6.100 The MPA has copied the Parish Council's response to the Regulator (the EA) who will take it on board in their ongoing assessment of whether the operator has taken reasonable steps to remedy the problem.
- 6.101 The Director of Public Health recognises that "in combination" effects may be adding to the problem and makes it clear that it is essential to try to mitigate effects that may alone or in combination potentially impact on human health. It is possible that these matters "in combination" are exacerbating fear and concern in some individuals. It is extremely difficult to evidence any specific health impact associated with such general worries however and no medical evidence has been presented to support the health concerns expressed by the Parish Council.

# **Communication**

- 6.102 It is also observed that the relationship between the applicant and local residents contributes to the impacts and that the promotion of good relationships and communication between the operator, the regulators and the community can help to address the issues that arise.
- 6.103 A recurring complaint has been the lack of engagement between the operator and the community in acknowledging and dealing with community concerns. Complaints about blasting led to the operator engaging consultants to carry out community mediation and they have recently engaged additional environmental and community liaison staff. Communication has recently improved with the creation of a community web page by the mine, daily blasting notifications and occasional community briefing notes about progress with blasting and LF Noise. Representatives from the mine have been attending Parish Council Meetings for the last 4 years and there are technical and formal liaison groups set up to deal with issues relating to this mine. The compliance of the operator in continuing to engage with the community on matters related to environmental concerns, as well as the joint regulatory approach and the ongoing liaison groups should help to reduce concerns over time.

#### **Mitigation**

- 6.104 The advice in the NPPF is that in granting planning permission for mineral development, there are no unacceptable adverse impacts on human health taking account of the cumulative effect of multiple impacts from individual sites or from a number of sites in the locality.
- 6.105 The opportunity to review some of the existing conditions and to require updated monitoring, mitigation and complaints schemes would accord with the advice on securing the best available mitigation given by the Director of Public Health.

#### Landscape

- 6.106 A number of representations have been made objecting to the proposed loss of Hemerdon Ball plantation but it needs to be made clear that this is not a part of this planning application. It appears that there has been confusion locally about the proposal in the Devon Minerals Plan for a south west lateral extension, and this current application to extend the <u>life</u> of the existing permission. The south west lateral extension would involve the loss of the plantation, but that would require a completely separate planning application and so is not a consideration as a part of this process.
- 6.107 The application is accompanied by a Landscape and Visual Impact Assessment which is again based on the 2021 "baseline" and therefore the residual impacts from 2021 would be a deepening of the pit and an increase in the height of the MWF but on the already established final "footprint".
- 6.108 The ES concludes that on this basis there would be no significant landscape or visual effects predicted as a result of the working continuing between 2021 and 2036. The presence of open cast mining is already a key characteristic of this landscape and reflected in the Landscape Character Type.
- 6.109 Additionally, there has been progress with the restoration of the china clay operations to the north and whilst these have consent until 2042 and are predicted to develop to become contiguous with this mine; the consents already exist and the impacts can be mitigated by the requirements for ongoing phased restoration.
- 6.110 The ongoing disturbance from mining will clearly have an impact but the restoration proposals have been assessed in terms of the overall landscape type and the long term impacts assessed as neutral if the site is restored in accordance with the permitted scheme which is a mix of moorland; farmland and woodland albeit with the pit left as a water body.
- 6.111 The original consent permitted a 35 year life for the mine but as this development did not commence until 2014 then the additional 15 years would amount to a total of 22 years disturbance before the pit is complete and the tip is restored.

Lighting Impact

6.112 During the setting up of the plant there were some concerns expressed about night time lighting of the plant and across the Mine Waste Facility. As a result of these observations the Company was asked to reconsider the lighting on some of the conveyors and this has been removed. The lighting of the MWF is the subject of an approved scheme which involves lighting gantries being towed into position with movement sensors to minimise the time period when they are switched on and this balances the Health and Safety requirements of the Mines and Quarries Inspectorate with the amenity considerations of an operation relatively close to the National Park Boundary. In general these are issues that have come up only in the winter months and where specific problems have been picked up by members of the public they have been raised at the Technical Liaison group and the operator has responded where it would not constitute a breach of the mines and quarries legislation. It is proposed that any grant of consent has a new condition requiring a review of the night time lighting and that the operator takes steps to minimise external lighting to the minimum consistent with Health and safety requirements in order to minimise any external impact on the dark skies and tranquillity associated with the Dartmoor National Park.

## Nature conservation

#### European Sites

- 6.113 The Environment Agency produced 4 separate Habitat Regulation Assessments (HRAs) for abstractions, discharges, the mine waste facility and kiln emissions. The County Council produced a HRA for the remaining activities; dewatering, the process building, mineral extraction, soil stripping and associated infrastructure in 2014. No part of the mine is within a European protected site and the only potential indirect impacts related to water quality, air quality, water flows/levels and disturbance. All HRAs concluded that with mitigation there would be no adverse effects on any European Wildlife Site.
- 6.114 All impacts on European Sites from this proposal remain as they were for previous HRAs and no new European Sites have been proposed or designated since 2014. It is therefore considered that, with appropriate mitigation in place (as set out in the previous assessments), this application will not have a likely significant effect on any European site.

# Protected and priority species and habitats (other than European sites)

6.115 Natural England has stated that they have no comment to make on the proposed variation of conditions. The proposed extension of time will have no further impact on protected habitats and species. However as the mine deepens and dewatering commences, the potential impact on fish will be a consideration in the Smallhanger flow compensation scheme (see hydrology 6.119 onwards below). This is proposed as a new condition and for which the MPA will take advice from the Environment Agency regarding fish passage and other riverine species.

#### Mitigation/restoration requirements

- 6.116 The footprint of the mine has already been established and by 2021, there will already have been progress with restoration of the outer faces of the tip and much of the mitigation planting will be well established and providing wildlife links. The only wildlife mitigation measures that would not have been implemented by 2021 would be the restoration and management of the final phases of the Mine Waste Facility.
- 6.117 There is the opportunity for an ongoing dialogue with the operator through the annual reviews of restoration and aftercare as well as the monitoring and reporting mechanisms already required through the Environmental Permit and reported annually as an Environment Development Management Plan (EDMP) which splits the site into Biodiversity Enhancement Zones (BEZ). The Environment Agency has commented that as the mine evolves, the success and scope of the existing BEZs should be reviewed to ensure that any potential for their extension and improvement is considered through the existing EDMP.
- 6.118 Much of the control over environmental review and ecological monitoring was previously contained within the Unilateral Undertaking attached to the 2010 modification order. This application affords the opportunity to bring these within the planning conditions and it is proposed to apply a new condition requiring the implementation and review of the EDMP to ensure that the habitats and species within the Biodiversity Enhancement Zones and finalisation of restoration of the Mine Waste Facility is kept under review.

# Hydrology, Hydrogeology and Flood Risk Management

6.119 The application was supported by a Chapter in the ES dealing with hydrology and hydrogeology and it is accepted that by 2021 most of the impacts on watercourses

would have taken place. Nevertheless, the EA requested further information on Flood Risk and on the ecology of the Smallhanger Brook.

#### Potential for Flooding

- 6.120 The applicant has submitted further information in the form of a Flood Risk Assessment. This has been accepted in principle by the Environment Agency as much of the site is already covered by the EP which also deals with flooding.
- 6.121 The remaining part of the site that was not covered by the EP, the Smallhanger Valley, requires the submission of a more detailed surface water and flood risk management and mitigation scheme. This would be covered by a proposed new condition. This approach has been supported by the Flood Risk Management Team.

#### The Smallhanger Brook

- 6.122 In its original response to the planning application, the Environment Agency raised concerns about the impact of pit dewatering (and potential consequent impact on the local water table) on the flow levels in the Smallhanger Brook. The original ES predicted a reduction of flow between 16 and 27% by 2021 and they wished to have an assessment of the likely significant effects on wildlife within the stream and the proposed means of augmentation of the flow from pit dewatering operations.
- 6.123 The applicants have provided a series of Technical Notes to cover these points and the Environment Agency has indicated that they are content with the principle so long as the submission of a detailed scheme is a condition of any new permission. The new condition will require a more comprehensive assessment on the flow regime in the Smallhanger Brook taking into account the various surface water management structures existing and proposed within the valley and the management of flood risk as referred to in the previous paragraph.

#### Impact on private water supplies

- 6.124 When the original permission was granted it was accompanied by a legal agreement which required investigation if there were any concerns about the loss of private water supplies.
- 6.125 There are two outstanding complaints that the development of the mine has led to the loss of private water supplies to two existing ponds which have become dry. These are not potable water supplies but the ponds are local wildlife features and it is undesirable that they should be lost.
- 6.126 The Operator was asked to provide an investigation into these matters and to propose remediation if it was found that the supplies had been lost due to the activities of the mine. A report has been provided by hydrogeological consultants and in both cases it appears that the supply began to drop in 2014 but there is no evidence that there has been any drop in groundwater and indeed dewatering has only just commenced in the pit. There is a suggestion that slight disruption in the surface water catchment may have been the reason for the losses but there are a number of possibilities and the report concludes that further investigation is required.
- 6.127 The operator has committed to continue to investigate this and the Environment Agency has confirmed that they are satisfied with the investigation and proposals supplied in the technical note submitted with the Regulation 22 information. The EA does not consider that a condition is necessary to require detailed measures to

mitigate the impact on water supplies and in the absence of firm evidence that the mine is at fault a condition would not be enforceable.

- 6.128 Although one of the affected residents has raised some issues with the content of the technical note and the further work done by the consultants, the operator has undertaken to update the legal agreements to commit to this investigative work and to firm up the steps to be taken regarding remediation and arbitration to secure an earlier resolution.
- 6.129 The extension of the life of the mine post 2021 does not have any bearing on this matter which is covered by the existing legal agreement regarding derogation of water supplies. The updated unilateral undertaking proposes specific actions by the operator and will clarify the steps to be taken to provide remediation.

# Archaeology and Historic Environment

6.130 The likelihood of any impact on heritage assets has been considered under the general duty under s.66 of the (Planning Listed Buildings and Conservation Areas Act 1990). There are no listed buildings within or adjacent to the site and the extension to the life of the operation would not result in harm to any heritage asset. The original condition relating to the programme of archaeological investigation still requires the updating of the archaeological framework document in the light of the results of the fieldwork undertaken. The Historic Environment team recommend that the archaeological condition is reiterated to ensure that the outstanding work is completed. There are no other heritage issues.

# **Highways and Access**

- 6.131 There are no significant highway issues associated with this development and the Highway Authority has raised no objection. The Operator has already constructed a "link road" to bypass a narrow stretch of the public highway at Newnham and this has been open for some time as adopted public highway. In order to construct the Mine Waste Facility it was also necessary (and a part of the original consent) to construct a new length of the B3417 (Plymouth to Lee Moor) road. This is under construction and anticipated to open as adopted highway in early 2017 which will enable the full tip footprint to be implemented.
- 6.132 There have been occasional issues with drivers following their satnav instructions into Hemerdon and Sparkwell villages. The operator has taken steps to deal with such reported incidents by stressing the correct postal code on their correspondence and putting up dedicated signage to the mine. The B3417 is regularly used by heavy traffic to and from the China Clay quarries to the north and the traffic from Drakelands is restricted to deliveries and staff. Unlike the china clay quarries to the north, there are not large numbers of HGVs exporting materials as the tungsten and tin concentrate equates to approximately one HGV movement per day. The Parish Council and local people have been asked to take registrations of HGVs in the village that they attribute to the mine in order that the operator can take action if the vehicle is recorded as having come through their weighbridge.
- 6.133 There is an agreed travel plan already in place for this mine and an updated version of this can be required by condition.

#### Restoration

- 6.134 The NPPF requires that restoration and aftercare is provided at the earliest opportunity. In recognition that the original plans were based on best practice in the 1980s, in 2010 the operator offered a revised restoration and aftercare concept based on more recent practice whereby the lower slopes of the tip would be restored to broadleaved woodland and the land above the natural treeline would be managed as acid grassland and heathland to reflect the natural characteristics of the pre-mining landscape. While the mine waste facility is being developed the mine is still technically under construction, but when the new road is completed and final tip toe can be constructed then the tipping will proceed back towards the tailings dam with progressive restoration and planting of the lower slopes. The existing legal agreements build in review of the restoration and require annual reporting of progress. Where possible, these requirements have been transposed to the new conditions for clarity.
- 6.135 There is already in existence a restoration bond with Wolf Minerals which was required as a part of the original legal agreement associated with the 1986 planning permission. Whilst the NPPF states that such bonds are only required in exceptional circumstances, the large scale nature of the development combined with the volatile markets in metal prices indicated that the public interest should be protected. The value of the bond was calculated by the Mineral Valuer in 2014 to be in the region of £15 million and whilst it was not necessary to do so until the project was at its maximum "exposure" calculated to be years 5-7 of the project, the operator has already posted the full amount into an Escrow Account to ensure that the finance remains available for this purpose.

# Need and Overall Sustainability Considerations

- 6.136 Tungsten is identified by the Government as a "Critical Mineral" and clearly its location cannot be altered it must be worked where it is found. This is the only consented source of Tungsten in the UK or in Western Europe and therefore in terms of its location there are clearly no alternative sources of supply.
- 6.137 The extraction of primary mineral is by its very definition a non-renewable natural resource; however, the way in which the mineral is worked will have a bearing on the environmental impact. Although there are ongoing issues with impacts from noise and blasting, this site is also controlled by a number of Environmental permits and the works to date in terms of planting, bridleway diversion and creation and ecological mitigation have been of very high quality.

#### Relationship to other consent regimes

- 6.138 Paragraph 122 of the National Planning Policy Framework states that "...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 themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively."
- 6.139 The mine already has planning permission and the location of what is identified as a "critical mineral" cannot be altered. The applicant is currently taking steps to amend the existing Environmental Permit (EP) which deals with the Mine Waste Facility (the tip); the process plant (including the primary crusher) and discharges to watercourses

but it is not expected that this would have any significant impact on the existing consent and the EA will consult with the MPA in any case.

6.140 The EP would therefore manage matters such as noise or any other nuisance from the process plant and although the planning system would have regard to general amenity issues, it is a matter for the Environment Agency to manage the EP and to take decisions on what are "reasonable steps" to manage noise and nuisance emanating from the plant; including requiring the plant to shut down if the permitting agency does not consider that the operator is taking reasonable steps to manage the impacts of the permitted operations.

# The proposed Unilateral Undertaking

- 6.141 At present the original consent is still tied to the original s.52 agreement which accompanied the 1986 permission and most of its provisions have been enacted. It remains valid as it has the requirement for dealing with derogation of water supplies and is tied to the land. Other matters controlled by this agreement such as the purchase of properties, the posting of a restoration bond and the diversion of paths have all been dealt with or updated in the separate Unilateral Undertaking which accompanied the Modification Order in 2010. That legal Undertaking set a revised and enhanced restoration concept as well as higher standards for the provision of public rights of way and environmental mitigation which had not been considerations in 1986.
- 6.142 In order to rationalise the existing legal obligations and to offer new ones, the operator has offered a revised Unilateral Undertaking drawing together the remaining relevant clauses of the 1986 and the 2010 legal agreement. Some of those previous clauses have been expressed as new conditions.
- 6.143 The new undertakings include the sharing of environmental information, funding of independent monitoring audit and investigation of complaints; to continue to investigate derogations of water supplies, to clarify the arbitration timetable and to undertake any additional monitoring required by the MPA or other regulators expressed through the Technical Liaison Group. It has been pointed out to the operator that commitments regarding derogation of water supplies would also need to bind subsequent landowners to overcome fears expressed by the community about what might happen at the end of the mining operation.
- 6.144 If a new planning permission is granted, it will also be necessary for the operator to agree that only the new consent can be implemented and not to object to any modification or prohibition order to remove the original underlying consent.
- 6.145 The outline of this Agreement is attached to this report as Appendix (III).

# 7. Reasons for Recommendation/Alternatives Options Considered

- 7.1 The Committee has the option of approving, deferring or refusing this planning application.
- 7.2 The existing permission will continue to run until 2021 and so a refusal would not preclude the operation from carrying on until that date, but it would do so without a suite of new, enforceable and compliant conditions. It would also lend a considerable amount of uncertainty to the future of the project which may have a consequential impact on employment and the local economy. The Devon Minerals Plan, which is due to be adopted in February 2017 and therefore carries significant weight, includes

a presumption in Policy M9 for permission to be granted for proposals that enable completion of the approved mine development.

- 7.3 A number of objectors have requested that this decision is deferred until such time as the existing issues are resolved. This is understandable, but although the regulators are working together and will continue to do so, to try to resolve the current problems, the only way to achieve revised conditions on noise and blasting in particular would be the issuing of a new consent without which the applicant could merely resort to the existing consent and with the existing conditions.
- 7.4 The resolution of some of the issues will require more time and the deferral of this application would not result in an immediate improvement.

# Planning Balance

- 7.5 Paragraph 144 of the NPPF affords great weight to the benefits of Mineral Extraction including to the economy but goes on to say that in granting permission there should be no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality. It goes on to say that <u>unavoidable</u> noise, dust and particle emissions and blasting vibrations should be controlled, mitigated or removed at source and to establish appropriate noise levels for extraction in proximity to noise sensitive properties.
- 7.6 It has to be acknowledged that there are general amenity impacts on the surrounding communities and it is clear that the operation of the mine has had an adverse impact on some individuals and properties. Due to the scale of the operation some impacts are unavoidable and have to be balanced against the importance of economic prosperity and meaningful employment for the health and wellbeing of local people and what this application represents in that regard. This is a point that was also made by the Director of Public Health.
- 7.7 The operator has provided considerable information to explain the impacts of the current and permitted operations on the most proximate residential properties and their contention is that they can, through operating practices, keep the impacts to a minimum whilst enabling them to operate the mine.
- 7.8 The site has already almost reached its maximum physical extent and so the extension of the life of the site would increase the duration of impacts on landscape and amenity post 2021 but it is anticipated that by 2021 the existing issues of for example Low Frequency Noise would have been dealt with by the permit, and the impacts of blasting and noise would be attenuated to some degree by the deepening of the mine over the next 5 years. Granting consent for an extension to the life of the mine would not therefore make any significant difference to the <u>existing</u> situation except for the opportunity for the conditions and legal agreements to be amended and updated.
- 7.9 In terms of what is a reasonable impact from a large mining operation, the balance would indicate that the controls, especially with new and more enforceable conditions would be a reasonable check on the impacts especially where there are built in requirements for monitoring and review but would not present an undue burden on the operator which would prevent them from implementing their permitted consent bearing in mind that the location of the existing tungsten ore deposit cannot be moved.

- 7.10 It is clear that there are remaining planning issues that need to be worked on with relation to impacts on the local community especially with relation to noise, blasting and water supplies.
- 7.11 The original 35 year project would have ended in 2021 but the delay in commencing would mean that if the total time for the original project was taken, the end date would naturally be 2049. The proposal therefore reduces the overall period of disturbance from 35 years to 22 and it may also be borne in mind that had this project gone through the Environment Act Schedule 13 Review it is very likely that the end date would have been set to 2042 in line with the other long term mineral operations in the County. In any case the issue of a new consent would mean that the new permission would be subject to a 15 year review of conditions under sch. 14 of the Environment Act 1995.
- 7.12 In conclusion, this represents an opportunity to issue a revised and up to date permission with compliant conditions that are not duplicated by other consent regimes; and an updated legal undertaking which offers enhanced and updated environmental monitoring and controls that could not be the subject of planning conditions.
- 7.13 It is recommended that following the receipt of the Unilateral Undertaking:
  - (i) Condition 2 of the existing permission be varied to the extend the life of the operation for a further 15 years to 5 June 2036;
  - (ii) Condition 13 of the existing permission requiring the weekend and Bank Holiday shut down of the primary crusher is removed and;
  - (iii) The schedule of revised Conditions attached as Appendix II are attached to the re-issued consent.

Dave Black Head of Planning, Transportation and Environment

# Electoral Division: Bickleigh & Wembury

Local Government Act 1972: List of Background Papers

Contact for enquiries: Sue Penaluna

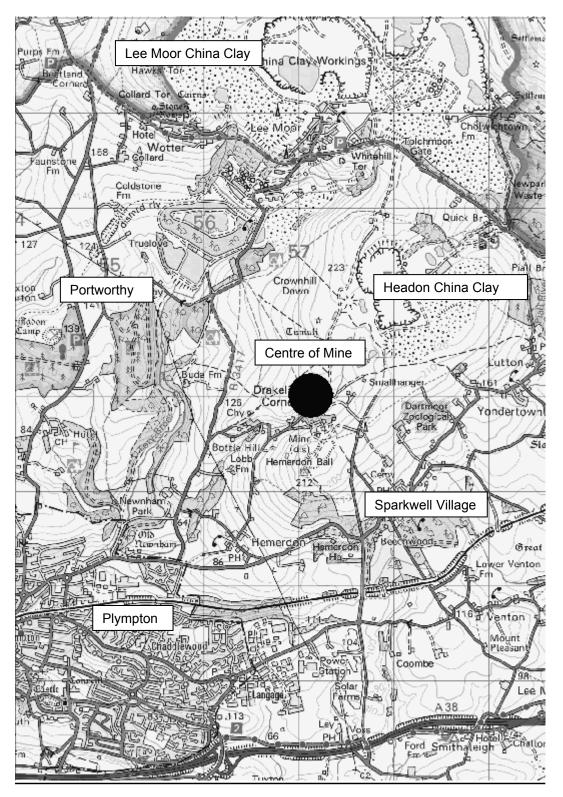
Room No: AB2, Lucombe House, County Hall

Tel No: 01392 383000

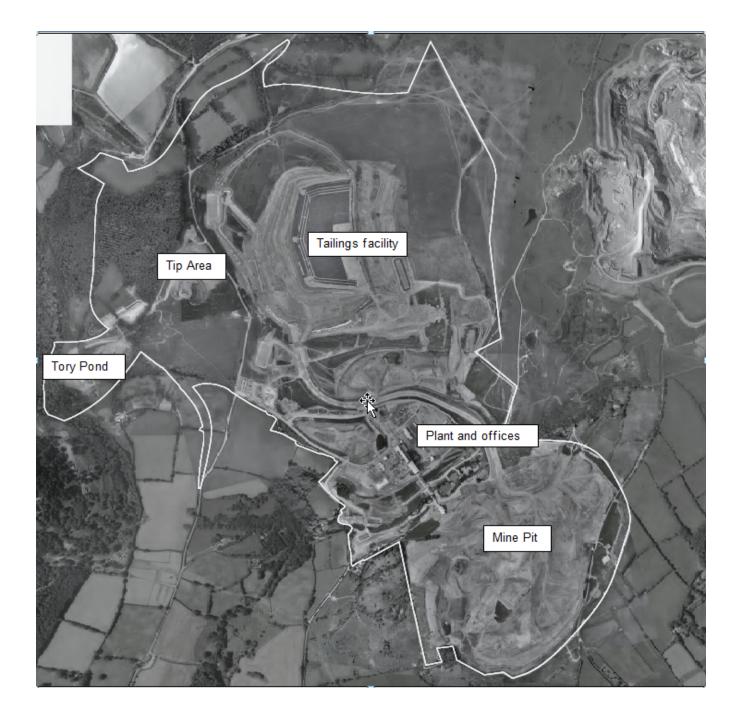
Background Paper Casework File Date 7 December 2015 File Ref. DCC/3823/2015

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# **Location Plan**



# Site Plan



# **Planning Policy Considerations**

## National Planning Policy Framework National Planning Guidance: Minerals

## **Devon County Minerals Local Plan**

- **Policy MP1** International designations
- Policy MP2 Areas of Outstanding Natural Beauty and effect on National Parks
- Policy MP10 Maintenance of the County's nature conservation resource
- Policy MP11 Environmentally sensitive sites not having statutory designation
- Policy MP12 Protected Species
- Policy MP14 Mineral Consultation Areas
- Policy MP41 Development Control Considerations
- Policy MP45 Water resource protection
- Policy MP47 Flood Risk and Floodplains
- Policy MP50 Removal of Permitted Development rights
- Policy MP56 Restoration
- Policy MP57 Securing effective restoration

# **Devon Minerals Plan (Proposed Adoption version)**

- Policy M1 Spatial Strategy
- Policy M9 Development of Drakelands Mine
- Policy M16 Green Infrastructure
- Policy M17 Biodiversity and Geodiversity
- Policy M18 Landscape and Visual Impact
- Policy M19 The Historic Environment
- Policy M20 Sustainable Design
- Policy M21 Natural Resources
- Policy M23 Quality of Life
- Policy M24 Flooding
- Policy M26 Cumulative Effects
- Policy M27 Restoration and Aftercare

#### South Hams Core Strategy 2006

- **Policy CS9** Landscape and the Historic Environment
- Policy CS10 Nature Conservation

#### South Hams Development Policies DPD 2010

- Policy DP2 Landscape Character
- Policy DP3 Residential Amenity
- Policy DP5 Biodiversity and Geological Conservation
- Policy DP15 Development in the Countryside

	Existing Conditions (as Modified by the Secretary of	Proposed Condition/Amendment
		rioposed Condition/Amendment
4	State in 2010)	Development has a summarized
1	Condition 1 The development to which this permission relates must be begun not later than 7 years from the date of this permission. Development for the purposes of these conditions shall not include any work carried out pursuant to Condition 10(g).	Development has commenced. Condition no longer necessary and so Fails NPPF test. <b>Recommend Condition Deleted.</b>
2	Condition 2 Application for approval of any reserved matter must be made not later than 5 years from the date of this permission excepting that in respect of those reserved matters set out in Condition 10(i), (j) and (k), the period shall be 10 years.	Condition not necessary as all "reserved matters" required under this condition and Condition 10 were submitted and agreed before development commenced. Recommend Condition Deleted.
3	Condition 3 All mineral working and tipping shall cease by 5 June 2021 after which date the only operations permitted on site shall be those essential to achieve restoration in accordance with the approved schemes or aftercare regime and the removal of plant, buildings and roads which shall be completed and the land restored to the satisfaction of the MPA within 3 years of the cessation of operations.	Comment Condition for formal determinationThe proposed condition clarifies the end date of the permission, gives certainty regarding the end oftipping and ensures the effective restoration of the site in accordance with Devon County MineralsLocal Plan Policy MP41.Condition 1 DurationThe winning, working and processing of mineral and the tipping of mine waste shall ceaseby 5 June 2036 after which date all buildings, plant, machinery and roads shall be removedand the mine, plant site and mine waste facility restored in accordance with schemesrequired under conditions [8 &19] within 3 years of the cessation of operations.
4		<ul> <li>Condition 2 (New) Approved Documents The development hereby permitted shall be carried out in compliance with the details contained in the following plans and drawings except insofar as may otherwise be required under the terms of any other condition set out in this Decision Notice. </li> <li>a) GRES Drawing WHP 100-L-001 (Rev. H) Plant and Infrastructure Layout Plan b) GRES Drawing WHP 100-L-018(Rev. C) Wet Plant external view elevations C) Blackwell Drawing CAB-4D-691 (2.5m contours showing current status of Drakelands Mine as of July 2016) </li> <li>d) Blackwell Drawing CAB-4D-690 (2.5m contours at June 2021 e) Blackwell Drawing CAB-4D-689 (2.5m contours showing Final extent of Drakelands Mine) </li> <li>f) SLR Drawing 427.01939.00023.HVA203 (MWF to 177m AOD) g) SLR Drawing 427.01939.00023.HVA.204 (MWF to 177m AOD) </li> <li>h) SLR Drawing 427.01939.00023.HVA.210 (MWF to 190mAOD)</li> <li>i) SLR Drawing 427.01939.00023.HVA.216 (MWF to 215mAOD)</li> <li>j) SLR Drawing 427.01939.00023.HVA.216 ((Plan of Stage 9 Closure Tailings at 198m AOD) </li> <li>i) 427.01939.000.HVA.301 (Rev FO) cross section through Mine Waste Facility.</li> </ul>

	Existing Conditions (as Modified by the Secretary of	Proposed Condition/Amendment
	State in 2010)	
		m) 9977-0100 (Lee Moor Road) (S.38 approved drawings)
		n) MH21447-1 to MH-21447-3 (planting areas)
		o) Coffey Drawing MWP00494AE-DD-37 (RevC) Lower Hooksburry Diversion Channel
		Details p) GRES Drawing WHP 391-L-004 (Rev. A) Smallhanger Pond and Pump Location
		arrangement plan and elevation
		q) Blackwell Drawing CAB-4D-530 Hemerdon Surface Water – Tailings Network (Sheets 1-
		3)
		r) Michel Hughes Associates Drawings MHA 21447-1 to MHA 21447-3 showing Tree
		Planting and Biodiversity Enhancement Zones s) Craddy Pitchers Davidson Drawing 9977-0100 (Rev. G) Overall Road Plan
		t) Landscape Restoration Concept Plan
5	Condition 4	Comment
	There shall be no commencement of the construction of the mine access	The road is already built and adopted as public highway. Details of the road are included within the
	road, the haul road or any of the buildings on the mine site until such	scope of new condition in line 4 above.
	time as the link road between Newnham Park and West Park Hill is	Condition is not necessary. Under the NPPF tests.
	complete and open for public use.	Recommend Condition is Deleted.
6	Condition 5	Comment
Ū	No development shall be carried out which affects archaeological sites	The archaeological investigation as set out in the original Archaeological Framework Document has
	identified in the work programme referred to in Condition 6 until those	been completed and the only work remaining is to carry out the post excavation tasks including
	sites have been investigated and recorded in accordance with that	publication. If everything had been completed this condition would have been unnecessary but it
	programme.	will serve to ensure that the remaining work is carried out as originally envisaged.
		Condition 3 (New) Archaeology
		A revised Archaeological Framework Document, setting out the post-excavation tasks still
		to be undertaken, must be submitted for approval by the Planning Authority within six
		months of the consent being granted approval by the Mineral Planning Authority. The post-
		excavation tasks include assessment and analysis of the results of the fieldwork, the publication and dissemination of the results of the archaeological investigations, and the
		archive creation and deposition. The revised Archaeological Framework Document shall
		include a timetable for the completion of these tasks.
7	Condition 6	Comment
	The archaeological work shall be undertaken in accordance with the	See above – would be replaced by <b>new condition 3</b> (line 6) to ensure remaining works are
	approved Archaeological Work Programme dated November 1992, as	undertaken.
	revised by the Archaeological Framework Document submitted April 2008 and as updated in February 2009, and in accordance with the	Recommend old Condition 6 is Deleted.
	requirements of the Written Schemes of Investigation required by the	
	Archaeological Framework Document as agreed with the Mineral	
	Planning Authority.	
8	Condition 7	Comment
	The screening bund constructed around the mineral excavation area	The condition is necessary to ensure that the bunds are not removed during the development
	shall be retained throughout the life of the permitted operations and	period as they are important in terms of landscape and noise screening. The MPA would retain the

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	shall, if required in writing by the Mineral Planning authority, be removed at the cessation of extraction operations and the site restored in accordance with a scheme to be agreed with the Mineral Planning Authority.	power to have them removed and an alternative restoration proposed but In all likelihood they will be established as wooded features and natural Green Infrastructure Links. Recommend that old Condition 7 be deleted and replaced by new Condition 4
		Condition 4 (New): Peripheral Screening The existing screening bunds shall be retained throughout the life of the permitted operations as currently constructed unless alterations have been previously agreed in writing by the Mineral Planning Authority. On cessation of the approved development the bunds shall, if required in writing by the Mineral Planning Authority, be removed and the site restored in accordance with a scheme and timetable to be agreed with the Mineral Planning Authority. Such scheme shall be submitted within 3 months of the notification provided by the Mineral Planning Authority under this condition.
9	Condition 8 The areas of land outlined in black on drawing HEM U.U.2 shall be planted with a mixture of broadleaved trees and shrubs in the first planting season following the commencement of the mine access road. This planting shall be carried out in accordance with a scheme which shall have been previously submitted to and approved in writing by the Mineral Planning Authority and shall be retained and managed in accordance with an approved scheme of management and aftercare for the life of the mine working.	Comment This planting is complete and is shown on plans MHA-21447-1 to MHA-21447-3 contained in Appendix B to the Regulation 22 response. These drawings form part of the list of approved documents captured by the new Condition 2(line 4) As the planting has been implemented the Condition is no longer necessary but the requirement to maintain the woodland and the need for aftercare would be picked up in new condition on Aftercare. Recommend old Condition 8 is Deleted and replaced by New Aftercare Condition [8] line 33]
10	Condition 9 No development shall take place within the Site for Mineral Processing Plant and Buildings, Haul Road and Landscaping (illustrated on Plan No. 1.0) until an adequate road access to the processing plant with a proper standard of visibility has been formed and connected to the Lee Moor Road in a position and manner to be agreed with the Mineral Planning	Comment The condition is not necessary as the work has been carried out and so is unnecessary under the NPPF tests. Recommend old Condition 9 is Deleted.
11	Authority. Condition 10 (Modified to replace 10b) No development shall commence until the following details have been submitted to and approved by the Mineral Planning Authority:-	Comment         All of Condition 10 required the submission of pre-commencement information.         All such information was submitted and approved in the early 1990's or re-submitted prior to the commencement of mining. The Condition is therefore no longer necessary and the individual schemes are reiterated elsewhere in the consent or are discharged.         Recommend old Condition 10 is Deleted.
12	10(a) a scheme to dispose of all waste arising from the winning and working, including the formation of the tip and means of enclosure, the levels of compaction of waste material, and the phased development of the waste disposal scheme.	<u>Comment</u> The drawings submitted with the application indicate the originally permitted Mine waste Facility and Tip Profiles including cross sections. These can now be referred to in Condition 2 and this condition is no longer necessary. <b>Recommend old Condition 10a is Deleted.</b>
13	10(b) Unless otherwise agreed in writing by the MPA, phased landscaping and restoration shall be undertaken in accordance with the Restoration Concept and the detailed annual restoration, land and water management and landscape review plans for specific areas of land	<u>Comment</u> Proposed new conditions on restoration and aftercare, relate to the necessity to submit reviews of the restoration progress on 31 April each year. The proposed condition specifies that the proposals within the review should be implemented and the timescales will be in the annual review schemes.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	which shall have been previously submitted to and approved in writing by the MPA as a part of the annual review of restoration*	Replace as Proposed New Conditions [19 &20] (see Below) Lines 57 & 58
14	10(c) the design and layout of the "Site for Mineral Processing Plant and Buildings, Haul Road and Landscaping" identified on Plan No. 1.0, including the siting and relative levels of the plant and buildings, the design of the plant and buildings, their external appearance, and colour, type and texture of all external materials and finishes and means of drainage thereof, the means of vehicular and pedestrian access to the plant and buildings, including the provision of a right-turning facility at the junction of the access road with the Newnham/Lee Moor Road, the provision to be made within the site for car parking, circulation and parking of goods vehicles and mobile plant and means of enclosure;	Comment         The application contains drawings showing the existing mine plant , levels and layout of the existing processing area.         The plant which has been built is some 30% smaller than that which was originally approved and the drawings accompanying this consent show the "as built plant".         The Condition is no longer necessary and as such is not NPPF compliant.         Recommend Condition 10(part c) is Deleted (reference to the approved drawings WHP 100 L 001H and WHP 100 L 018C for the as built plant be incorporated into Condition 2).
15	<ul> <li>10(d) the design, layout, levels, gradients, materials, drainage methods of construction and landscaping of:-</li> <li>(i) the proposed diversion of the existing Newnham/Lee Moor classified County road between OS grid reference points SX 561588 and SX 564606; together with the Portworthy Diversion, and the new access to Bude Farm and the access road to the processing plant illustrated on Plan No. 1.0.</li> <li>(ii) the access road from Newnham/Lee Moor Road to the processing plant;</li> <li>(iii) Footpath and Bridleway diversions as illustrated on Plan No. 9.2</li> <li>(Drawing No. H-PS-2500-84-048)</li> </ul>	Comment The Scheme required by 10d was discharged and the road is under construction in accordance with the approved drawings which are referred to in new Condition 2 (line 4). The Condition is no longer necessary Recommend Condition (part d) is Deleted
16	10(e) The means of enclosure of the pit, and the construction of bunds around it	Comment The bund is built is covered by proposed Condition 4 and can be dispensed with. Recommend Condition (part e) is Deleted.
17	<ul> <li>10(f) A scheme for the protection of water supplies, local ponds, and quality of water-courses affected by the proposed development and for the protection of land drainage in the site vicinity, including:-</li> <li>(i) permanent and temporary run-off interception and peripheral leats;</li> <li>(ii) a permanent settling balancing pool between the area selected for the disposal of mining waste and the Tory Brook, together with such other permanent or temporary settling balancing pools as may be required;</li> <li>(iii) arrangements for the discharge of excess water from any permanent or temporary balancing pond and/or tailings lagoon;</li> <li>(iv) arrangements for the interception of drainage from mining processing and under-tip areas;</li> <li>(v) provision for the prevention of contamination of water courses</li> <li>(vi) the culverting and realignment of water courses affected by any operations;</li> <li>(vii) the means of providing adequate compensatory flows to the Smallhanger Brook during development (including any period of</li> </ul>	<ul> <li><u>Comment</u> <u>Comment</u>         The response from the Environment Agency made it clear that there needed to be a comprehensive plan for the surface water management and flood protection in the Smallhanger Valley. This was also the opportunity to ensure that the surface water management scheme for the Mine Waste Facility was depicted on an up to date drawing as the Environmental Permit has led to some small changes from the original permitted scheme.         </li> <li><b>Condition 5 (New) Drainage</b> <ul> <li>(i) Water supplies, local ponds, the quality of water-courses affected by the proposed development and land drainage in the vicinity of the site shall be protected for the duration of the approved operations in accordance with drawing CAB-4D-530 and the surface water management plan WTO-ENV-PR-124 unless otherwise agreed in writing with the MPA.</li> <li>(ii) Within 6 months of the date of this permission, the applicant shall submit a detailed scheme for the augmentation of flows in the Smallhanger Brook to include details of the proposed operation of the scheme, the impact on flows and biodiversity in the Smallhanger Brook along with proposals for monitoring impacts and remediation for</li> </ul></li></ul>

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	temporary cessation) and for a period not exceeding five years from the date of cessation as defined in Conditions 3 and 45; (viii) the means of providing adequate compensatory water supply to properties should their present supply be adversely affected by the development.	<ul> <li>the life of the site and throughout the aftercare period;</li> <li>(iii) Within 6 months of the date of this permission the applicant shall submit a detailed surface water and flood mitigation and management scheme for the Smallhanger catchment for the life of the mine and the restoration phase; such scheme shall include details of the construction and management of the Claymoor Ponds</li> </ul>
18	10 (g) a work programme providing for comprehensive archaeological investigation and recording within the area to which this permission relates before and during the course of development;	Comment The "tail" of the previous archaeology condition will be covered by proposed new Condition 3 Recommend Condition (part g) is Deleted and replace with new Condition 3 as the new drawings also depict the safeguarding areas.
19	10 (h) the methods to be adopted for the safeguarding of archaeological sites within the permission area, but not directly affected by the development;	<u>Comment</u> No longer necessary as covered by new Condition 3. The safeguarded areas will also be indicated on the approved drawings. <b>Recommend Condition (part h) is Deleted and replace with new Condition 3</b>
20	10 (i) The, design, layout and access arrangements to any temporary storage and construction compounds for the laying of the pipeline between the Process Plant and Plymouth City boundary (shown on Plan No. 1.2)	<u>Comment</u> Condition discharged, pipeline is completed to the pump station. Condition no longer required and therefore not NPPF compliant. <b>Recommend Condition (part i) is Deleted</b>
21	10 (j) a scheme for the restoration of the land along the route of the pipeline including, inter alia, any temporary storage and construction compounds, hedgebanks and watercourses.	Comment Condition discharged, pipeline is completed and route is restored. Recommend Condition (part j) is Deleted
22	10 (k) a scheme for the protection of land drainage along the route of the pipeline together with proposals for any temporary realignment of watercourses necessary to undertake those operations	Comment Condition discharged, pipeline is completed and route is restored. Recommend Condition (part k) is Deleted
23	Condition 11 No building or engineering operations which give rise to noise and dust outside the site, prior to the winning and working of minerals, shall be carried out:- (i) other than during the period between 0730 and 1930 hours on Mondays to Fridays and 0730 to 1800 hours on Saturdays; and (ii) at any time on Sundays nor on the following Public Holidays (a) New Years Day (b) Good Friday (c) Easter Monday (d) May Day Holiday (e) Spring Bank Holiday (f) Summer Bank Holiday (g)Christmas Day (h) Boxing Day (i) Such other Public Holidays as may subsequently be declared; unless otherwise agreed in writing with the Mineral Planning Authority.	Comment This was a <b>pre commencement</b> condition that applied only to the construction of the mine prior to winning and working commencing on site and so should be <b>deleted</b> . The hours of operation for certain activities are controlled in the proposed conditions on blasting, drilling and noise.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
24	Condition 12 No loading and transporting of waste from the processing plant, or from the pit to the waste disposal area shall be carried out:- (i) other than between 0600 and 2200 hours on Mondays to Fridays, and between 0600 and 1800 hours on Saturdays; and (ii) at any time on Sundays nor on the Public Holidays set out in Condition 11(ii). unless otherwise agreed in writing with the Mineral Planning Authority.	Comment The Operator states that the processing plant and its activities have an Environmental Permit which does not restrict its hours of operation. The transportation of materials from the Processing Plant to the MWF has not to date led to any verified noise complaints and nor has the removal of as dug material from the pit direct to the MWF but these are mining operations not controlled by the EP and should be the subject of a condition. It is recommended that there is a single condition controlling all specific time related activities (see line 26).
25	Condition 13 No primary crushing shall take place between:- (i) 1800 hours on Saturdays and 0600 hours on Mondays; and (ii) 2200 hours on the day preceding the Public Holiday set out in Condition 11(ii) and 0600 hours on the next ordinary day; unless otherwise agreed in writing with the Mineral Planning Authority.	Comment: Condition for formal determination The MPA has permitted the operator to use the primary crusher for the same period of time that the secondary processing plant is entitled to operate as there has been no demonstrated noise issue from this piece of equipment which is located in a building constructed within a "pocket" in the side of the valley. There have been concerns raised about reversing alarms on the ROM pad from where the material is loaded into the crusher and these have been addressed by the operator. The discussion about this condition which has applied to have removed by the Operator is set out in the Committee Report. Recommend Condition 13 is Deleted and the noise from the Primary Crusher be controlled by the Environmental Permit and the overarching noise condition. This would provide an enforceable condition without duplicating or contradicting the Environmental Permit as recommended by the NPPF.
26	Condition 14 No drilling prior to blasting shall take place other than between 0700 and 1900 hours on weekdays until the first 10 metre bench in the pit has been completed, nor at any time on Sundays and on the Public Holidays set out in Condition 11 (ii)	CommentIt is proposed that one condition should control all of those processes to be time or restricted bytime or day restricted.New Condition [6] Hours of OperationThe operations specified below shall be carried out only during the following hours:(i)No drilling shall take place on Saturdays (until the bench on which drilling is to take place is at least 10m below the original ground level OR at 170m AOD whichever is the lower at the limit of excavation between the position of the drill rig and the nearest occupied property in the area of the pit indicated on drawing CAB-4D-252- JB. The operator shall advise the Mineral Planning Authority in writing when this situation has been attained for each occupied property)(ii)There shall be no drilling at any time on Sundays and on bank or public holidays, which shall be defined as: (a) New Year's Day (b) Good Friday (c) Easter Monday (d) May Day Holiday (e) Spring Bank Holiday (f) August Bank Holiday (g) Christmas Day and (h) Boxing Day.(iii)No loading and transporting of mine waste from the processing plant, or from the pit to the mine waste facility shall be carried out other than between 0600 and 2200 hours.(iv)With the exception of refuelling and movement of vehicles between 0600 and 0700. there shall be no mining operations in the pit between the hours of 2200 and 0700.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
27	Condition 15 No soil stripping shall commence until details of the storage areas for top soil and sub-soil have been submitted to and approved by the Mineral Planning Authority.	Comment The original condition was discharged. Insofar as it required the submission of a scheme and therefore is no longer necessary as specified by the NPPF. The proposed new condition would ensure that the approved scheme is implemented through the life of the site and the soils are properly looked after. It is recommended that the soil handling schemes required by Conditions 15 & 16 are replaced by:
		Proposed Condition 7 (Amended) Soil Management The handling of all soils either in advance of mineral extraction or as part of the restoration of the mineral workings, plant site or mine waste facility shall be in accordance with the Site Clearance and Topsoil Management scheme Ref 421.01939.00010 dated August 2013. No top soil or sub-soil arising from the stripping operations shall be removed from the site without the prior approval in writing of the Mineral Planning Authority.
28	Condition 16 No top soil or sub-soil arising from the stripping operations shall be removed from the site without the prior approval in writing of the Mineral Planning Authority.	<u>Comment</u> This requirement can be incorporated into a single condition relating to soil handling. <b>Recommend Condition 16 is Deleted and incorporated into New condition 7</b>
29	Condition 17 The restoration scheme referred to in Condition 10 (j) shall be carried out, unless otherwise agreed in writing, within six months of the completion of the construction of the pipeline to the satisfaction of the Mineral Planning Authority.	<u>Comment</u> The construction works have been completed and the land restored so there is no need for this condition which fails the NPPF teas as not "necessary" <b>Recommend Condition 17 is Deleted</b>
30	Condition 18 No tipping of mineral waste shall be undertaken until details of the proposed modified restoration objective for the area identified in Plan 4.0 for restoration have been agreed with the MPA. Such details shall specify the mechanisms for achieving the target for restored ground cover and the treatment and placement of substrate and soils as set out in the Restoration Concept.	Comment This condition was discharged, however it, along with others needs to be re-cast to relate the restoration to the approved schemes and management plans. It can now be replaced with a requirement to implement the phased indicative restoration plans based on this scheme and the restoration concept but to include all the works already carried out. This would enable the planning consent to reflect the phasing as set out in the Environmental Permit. <b>Recommend Condition 18 is Deleted and replaced by New Conditions [19 &amp; 20]. (Lines 57&amp;58)</b>
31	Condition 19 No tipping shall commence on the second or any subsequent phase until:- (a) details of the tipping, restoration, landscaping, after-use and aftercare, of that phase have been submitted to and approved by the Mineral Planning Authority; and (b) the tipping, restoration and landscaping in the preceding phase has been commenced in accordance with the approved details unless otherwise agreed in writing by the Mineral Planning Authority.	Comment         The requirements of this condition and those relating to phased restoration can be merged into a new condition reflecting the approved restoration concept which was set out in the Unilateral Undertaking which also builds in monitoring and annual review.         Recommend Condition 19 is Deleted and replaced by New Conditions [19 & 20]. (Lines 57&58)
32	Condition 20 The landscaping and related water pollution control works of each phase of the waste disposal scheme shall be completed within two years from	Comment These requirements can be included in the proposed new restoration condition.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	the commencement of the phase immediately following unless otherwise agreed in writing. Development shall cease if within two years after the two year period referred to or such other period as may be agreed in writing with the Mineral Planning Authority such landscaping and pollution control works have not been carried out to the satisfaction of that Authority.	Recommend Condition 20 is Deleted and replaced by New Conditions 19 & 20]. (Lines 57&58)
33	Condition 21 Any tree, shrub, area of seeding or translocated species planted in accordance with the approved submitted details shall be retained and managed to the satisfaction of the Mineral Planning Authority for the minimum aftercare period of 10 years from the approval of the works. Any planting which fails due to death, disease or inadequate management shall be replaced or substituted in accordance with a scheme which addresses and mitigates the original causes of failure to be agreed with the Mineral Planning Authority and the replacement or substitution shall be carried out in the planting season immediately following any such occurrence.	Comment It is proposed that this condition is re-cast to relate to the phasing of works which is a clearer and more precise wording in terms of which areas can be signed off out of aftercare. Therefore the condition is enforceable, precise and reasonable in terms of the NPPF tests. It is necessary to ensure that landscape restoration is maintained and the applicant has <u>offered</u> a 10 year period which is double that suggested by the NPPF and whilst not compliant with the NPPF the offer makes it reasonable and is secured additionally by the Unilateral Undertaking. Recommend Condition 21 is Deleted and replaced by New Condition 8. Proposed Condition 8 (New) Aftercare <u>Areas of Woodland</u> (i)All areas of woodland planting undertaken in accordance with the scheme approved on 24/02/2014 shall be retained and managed for the duration of the approved operations (ii)Any tree, shrub, area of seeding or translocated species planted in accordance with the approved submitted details shall be retained and managed in accordance with the approved scheme for the minimum aftercare period of 10 years from the approval of the works. Any planting which fails due to death, disease or inadequate management shall be replaced or substituted in accordance with a scheme which addresses and mitigates the original causes of failure to be agreed with the Mineral Planning Authority and the replacement or substitution shall be carried out in the planting season immediately following any such occurrence. <u>Other Areas</u> (iv) Areas of restored land shall be manged for a period of ten years following the completion of restoration in accordance with aftercare schemes which shall be submitted annually for areas which have passed into permanent restoration in accordance with the approved submitted restoration schemes and shall specify such steps as necessary to bring the land to the required standard of restoration and the periods during which such steps are to be taken.
34	Condition 22 22(a) Aftercare schemes shall be submitted annually for areas which have passed into permanent restoration in accordance with the approved submitted restoration schemes and shall specify such steps necessary to bring the land to the required standard of restoration and	Comment         The requirements have been re-cast to better reflect the requirements of the Unilateral Undertaking and to bring all of the aftercare requirements into one condition.         Recommend Condition 22 is Deleted and merged into New Condition 8. (See line 33)

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	the periods during which such steps are to be taken. 22(b) The steps referred to in the aftercare schemes shall be carried out for a total period not exceeding 10 years.	
35	Condition 23 The diverted Newnham/Lee Moor Road shall have a minimum carriageway width of 6.75 metres.	<u>Comment</u> This road is now under construction and predicted to be completed by early 2017. The road is being constructed in accordance with a set of drawings approved by the Highway Authority. It is recommended that these approved drawings be referenced in condition 2 and that this Condition be deleted as it is no longer necessary.
		Recommend Condition 23 is Deleted and the approved highway drawings be referred to in Condition 2.
36	Condition 24 No operations including the deposit of excavated or construction waste shall be undertaken to the west of the existing classified County road within the Area for Disposal of Mining Waste and Landscaping, identified on Plan No. 1.0, until the diverted Newnham/Lee Moor Road has been constructed in accordance with the approved submitted details, unless	<u>Comment</u> This condition is no longer required as the new road will be completed in January 2017. In any case it was necessary to install some emergency water management structures on the west of the existing road and much of the area is used as a construction compound for the new road under construction.
	as otherwise agreed in writing by the Mineral Planning Authority.	Recommend Condition 24 is Deleted and the approved highway/water management drawings be referred to in Condition 2.
37	Condition 25 The number of heavy goods vehicles transporting waste or secondary aggregate leaving the site shall not exceed 50 in any one day and the total tonnage of secondary aggregate transported shall not exceed 4000 tonnes in any week or 150,000 tonnes in any calendar year without the prior permission in writing of the Mineral Planning Authority.	CommentCondition unaltered except for being merged as a single new condition with previous Condition 27to deal with all matters of ancillary import/export under a single condition.This condition is reasonable as any higher levels of output/input may have consequences for the primary route network and the A38 junctions in Plymouth.Recommend Condition 25 is Deleted and merged with previous condition 27 into Proposed
		Condition 9.
		Proposed Condition 9 (Materials importation/exportation) No waste other than that required to be transported to a suitably licensed facility and otherwise unable to be disposed within the site shall be transported from the site. The number of heavy goods vehicles transporting waste (that is not permitted to be disposed within the Mine Waste Facility) or secondary aggregate leaving the site shall not exceed 50 in any one day and the total tonnage of secondary aggregate transported shall not exceed 4,000 tonnes in any week or 150,000 tonnes in any calendar year without the prior permission in writing of the Mineral Planning Authority. There shall be no importation of waste materials to the site unless they are specifically required for restoration purposes as identified in the annual restoration proposals and the amount previously agreed by the Mineral Planning Authority. The operator shall provide to the Mineral Planning Authority details of the number of HGVs leaving the site carrying secondary aggregates or mineral waste over a 12 month period.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	Condition 26 No waste or secondary aggregate shall leave the site until the Newnham Road to West Park link road has been constructed and adopted in accordance with the approved submitted details and the new access on to the Lee Moor to Newnham Road has been constructed in accordance with the approved submitted details	Comment The road referred to in the condition is open; condition no longer necessary and so fails the NPPF test. Recommend Condition 26 is Deleted.
39	Condition 27 No waste other than that required to be transported to a suitably licensed facility and otherwise unable to be disposed within the site shall be transported from the site.	Comment Recommend Condition 27 is Deleted and merged with previous condition 25 into Proposed Condition 9. (See line 37)
40	De transported from the site. Condition 28 The developer shall adopt the best practical means to minimise the levels of noise arising from the development. The A-weighted sound level caused by any or all plant, equipment and mining operations within the site, shall not exceed the following limits when measured on a precision Grade 1 sound level meter at a distance of 1 metre outside any building used for human habitation. 28 (a) The equivalent continuous A-weighted sound level measured over any one-hour period when measured on a precision Grade 1 sound level meter set to fast response shall not exceed:- (i) 50dB(A) LAeq 1 hour during the times of 0700 to 1900 hours on Mondays to Saturdays inclusive: (ii) 45dB(A) LAeq 1 hour during the times of 1900 to 2200 hours, and 0600 to 0700 hours on Mondays to Saturdays inclusive, excluding the Public Holidays set out in Condition 12(ii), when 40dB(A) LAeq 1 hour shall not be exceeded; and (iii) 40dB(A) LAeq 1 hour at any other time 28 (b) when measured on a precision Grade 1 sound level meter set to the "fast response" the limits set out in (a) above shall not be exceeded for more than three minutes in any one hour period by more than:- (i) 10dB(A) LAeq 1 hour between 2200 hours and 2200 hours; (ii) 7dB(A) LAeq 1 hour between 2200 hours and 2000 hours 28 (c) If the sound measured within the monitoring period contains any continuous definite distinguishable note (whine, hiss, screech, squeal, hum, etc.) or if there are significant irregularities in the noise including impulsive irregularities such as bangs, clinks, clatters or thumps, then 5dB(A) LAeq 1 hour shall be added to the measured sound level prior to determining whether the limits set out in (a) and (b) above are being complied with. 28 (d) Any building used for human habitation and owned by the developer or included in the Schedule of Properties contained in the Section 52* Agreement for which the developer will make offers to	<ul> <li>(See line 37)</li> <li>Comment</li> <li>The previous condition does not comply with the guidance in the NPPF or in the Minerals Practice Guidance with regard to measurement type or levels. It is recommended that a new condition along with a noise management and mitigation and complaints scheme be attached to any new permission to achieve an enforceable condition.</li> <li>Proposed Condition 10 (New)</li> <li>Noise levels arising from the development shall not exceed the following limits at any noise sensitive property: <ul> <li>(i) Between the hours of 0700 and 1900 (daytime) Monday to Saturday 50 dBLAeq. 1 hour free field</li> <li>(ii) Between the hours of 1900 and 2200 (evening) Monday to Saturday 45dBLAeq. 1 hour free field.</li> <li>(iii) Between the hours of 2200 and 0700 (night-time) 42 dBLAeq. 1 hour free field;</li> <li>(iv) Between the hours of 2200 and 0700 (night-time) 42 dBLAeq. 1 hour free field;</li> <li>(iv) Between 0700 and 2200 on Sunday or on any Bank or Public Holiday (as defined by Condition [Line 26] 45 dBLAeq. 1 hour free field.</li> </ul> </li> <li>The limits stated above, apply when measured on a Type 1 sound level meter sited at least 3.5 metres from any reflective surface (other than the ground) and 1.2 – 1.5m above the ground, in the garden amenity space of any lawfully existing residential premises.</li> <li>Irrespective of the noise limits specified above the applicant should take all reasonable steps to minimise noise from the site especially noise containing significant tonal elements or peak and impulsive noise. Steps to reduce noise of this nature should be detailed in the noise management and management of noise from this operation shall be carried out in accordance with a detailed noise management, mitigation and monitoring scheme which shall be submitted to and approved in writing by the MPA within 3 months of the date of this permission. Once approved in writing by the MPA within 3 months of the date of this peroposals set out in this or any subsequent scheme as may</li></ul>

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	within the scope of this condition.	Proposed NEW Condition [TBC] Before the commencement of overburden removal in that area of Phase 2 of the pit as shown on Plan CAB-4D-252-JB; the operator shall notify the MPA in writing of the commencement of such works. Until such time as the operator has constructed a bench at the level of 170m AOD within this part of the pit the daytime noise levels on Monday to Friday between 0700 and 1900 shall be 53dB, 1 Hour Free field These works shall not commence until a detailed management and mitigation scheme for this period of the development has been submitted to and approved in writing by the MPA. Proposed New Condition (TBC) Vehicles operating within the site and under the control of Wolf Minerals or its contractors shall be equipped with broadband or "white noise" reversing alarms. These shall be the only reversing alarms used on the site unless for reasons of health and safety or as otherwise
41	Condition 29 The noise limits referred to in Condition 28 may be exceeded only where emergency action is essential to the safety of the works, employees of the works, or members of the public. The developer shall record each occasion where such levels have been exceeded and inform the Mineral Planning Authority in writing within 48 hours of occurrence, with an explanation of the reason.	agreed in writing by the MPA <u>Comment</u> Standard condition to enable response to emergencies and is still appropriate.         Recommend Condition 29 is retained and re-numbered as New Condition [TBC].         Proposed Condition [TBC]         The noise limits referred to in Condition 10 above may be exceeded only where emergency action is essential to the safety of the works, employees of the works, or members of the public. The developer shall record each occasion where such levels have been exceeded and inform the Mineral Planning Authority in writing within 48 hours of occurrence, with an explanation of the reason.
42	Condition 30 The Mineral Planning Authority shall be empowered to relax these noise levels over a restricted period on application from the developer provided that they are satisfied that such relaxation is necessitated by any abnormal requirements of the mining operation and that such relaxation shall not cause undue disturbance to the locality by way of noise.	Comment The NPPF states that for certain very noisy activities it is appropriate and necessary to enable these to take place without complying with normal "operational" conditions relating to the day to day mining activities. The newer guidance no longer includes overburden removal hence the proposed new condition [Line 41] which deals with the overburden removal for Phase 2 of the Pit development but this condition is a standard for dealing with soil stripping etc.Proposed NEW Condition [12] Where the mine operator seeks to undertake works of soil stripping, the construction or removal of baffle mounds, soil storage mounds and spoil heaps, construction of new landforms and aspects of site road construction and maintenance the noise limits as required by condition [10] shall be increased for a period of time and a noise level as agreed by the mineral planning authority, with an absolute limit of 70 dB LAeq, 1 hour (free field) for a period of 8 weeks in any 12 month period and only during daytime hours 0700 to 1900 hours. The Operator shall give written notice to the MPA in advance of any such works and shall agree with the MPA a scheme of noise management and mitigation and community notification in advance of the commencement of the works.

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
43	Condition 31 The developer shall adopt the best practical means to ensure that the emission of dust from the development is kept to a minimum and in particular the following measures are to be used:- 31 (a) dust caused by the moving of soil and overburden, ore bearing rocks and other similar materials within the site shall be suppressed by water sprays or by more effective means if they become available; 31 (b) drilling rigs shall be fitted with efficient bag filter modules or more effective dust control measures if they become available; 31 (c) <u>Roads</u> (i) Efficient measures for dust suppression shall be undertaken on all roads; (ii) The access road from the Newnham/Lee Moor Road to the plant site, together with the Internal access roads and parking areas, shall be provided with a concrete, macadamed, or other appropriate surfacing as may be agreed with the Mineral Planning Authority, and be kept reasonably free of dust and mud at all times; and (iii) Wheel washing facilities shall be installed and used by vehicles leaving the site, which have travelled over unsurfaced roads. (iv) Vehicles containing loads of material of less than 500mm in diameter shall be sheeted. 31 (d) <u>Process Plant and Tip</u> (i) The turning and tipping area adjacent to the primary crusher shall be provided with an all-weather surface, and dust shall be controlled effectively in this area; (ii) The process plant shall be enclosed within buildings. The buildings housing the primary crusher, and those where dry material is handled shall be kept under negative air pressure and the extracted air shall be passed through an efficient dust collection plant; (iii) Dust created in the waste disposal area shall be controlled by the spraying of water or by more effective means if they become available.	<ul> <li><u>Comment</u></li> <li>A single condition relating to dust and particulates is more in line with general air quality advice in the NPPF so long as the monitoring scheme requires both and the PM10 in particular is based on deposition levels as set out in the National Guidance. The EHO has suggested that conditions 31&amp; 32 be amended to reflect the current advice on Air Quality management and mining and the monitoring and complaints schemes to be attached to any new consent</li> <li>Proposed New Condition 13 <ul> <li>(i) Within 3 months from the date of this permission the applicant shall provide to the Mineral Planning Authority a screening assessment in accordance with the Institute of Air Quality Management Guidance on the Assessment of Mineral Dust Impacts for Planning. This assessment shall then be used to formulate a monitoring scheme to be used to continually assess the impact by way of dust arising from the mineral operations.</li> <li>(ii) This scheme shall be submitted within 4 months of the date of this permission and shall include proposals for using best practicable means for minimising the amount of dust arising from the site from mineral operations, details of monitoring locations, monitoring methodology frequency of reporting to the Mineral Planning Authority and a scheme for dealing with dust complaints. Once approved this scheme shall be implemented for the lifetime of the mineral operations, unless otherwise agreed by the MPA.</li> </ul> </li> <li>Note:</li> <li>The scheme would specify the collection and assessment of dust samples at a complainant's property, the analysis to be undertaken, an investigation into the cause for the dust and feedback to the MPA on what steps have been taken to minimise the production of excessive disamenity dust by the mineral operations. Unless otherwise agreed by the MPA.</li> <li>Some elements of this would need to be set out in the legal agreements as they require an element of independent audit.</li> </ul>
44	Condition 32 The developer shall adopt the best practicable means to minimise the propagation of dust including PM <sub>10</sub> . If monthly insoluble dust deposition rates outside the site exceed 200mg/m <sup>2</sup> / day after commencement of the development, and previously the annual deposition rate was less than 50mg/m <sup>2</sup> / day, where the Mineral Planning Authority is satisfied that the developer's contribution to the increased total dust deposition rate is substantial, the developer shall take the necessary steps to remedy the situation. Condition 33*	Comment See above – delete previous condition 32 and replace with <b>new condition 13</b> .
	A scheme of dust monitoring, sampling and analysis on and off the site shall be submitted to and agreed by the Mineral Planning Authority prior	The merging of the requirements of the existing approved schemes and the updating of conditions which required the submission of those schemes was discussed and it was agreed that this was

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	to the commencement of soil stripping to ensure that dust mitigation measures are being effectively implemented. The scheme shall include details of the locations at which monitoring shall be carried out and monitoring methods and equipment to be used. The scheme shall provide for the production of directional dust monitoring and dust deposit information on a basis of mg per metre square per day per monthly average and monitoring of PM10 levels. Following approval of the scheme of monitoring the site operator shall make effective and thereafter shall constantly operate and maintain the scheme of dust monitoring, sampling and analysis agreed by the Mineral Planning Authority, with the results being reported in writing to the Mineral Planning Authority on a six monthly basis or otherwise upon the request of the Mineral Planning Authority. *[Any building used for human habitation and owned by the developer or included in the Schedule of Properties contained in the Section 52 Agreement for which the developer will make offers to purchase, or covered by tenant compensation provisions, shall not fall within the scope of this condition]	satisfactory so long as the EHO/MPA was still content that the schemes themselves would cover the issues being raised locally and were NPPF compliant. Any requirements outwith the NPPF guidance to be transposed into the legal agreements. <b>Delete and replace with Proposed merged Condition 13 (above)</b>
46	Condition 34 No blasting shall take place until effective measures have been taken to warn members of the general public in the vicinity of the site, of the periods during which blasting operations will take place, and of the imminence of any blasting episode.	Comment         The County Councils Blasting Consultants have recommended the following condition to ensure that blasting achieves Best Available Techniques.         Condition 14 (New) Blasting Methods         All blasting at the site shall be carried out in accordance with an approved Blast Impact Minimisation and Monitoring Scheme setting out agreed best available techniques. Such scheme shall be submitted to the MPA for written approval within 1 month of the date of this permission.         The scheme shall cover, but not necessarily be restricted to, the following:         • Blasting practices to be adopted         • A protocol for "designing to comply" including:         (i) Proposals for monitoring and analysis of ground and air vibrations (including experiential reporting in the community) and the location of permanent monitoring installation(s) and their detailed design and specification         (ii) Prediction of ground vibration levels         (iii) Prediction of ground vibration levels         (iii) Proposals for Incorporation of the monitoring results in the subsequent blast designs         (v) An audit plan         (vi) The frequency and nature of reporting to the Mineral Planning Authority         (vii) A blasting related community of the site of the periods during which blasting operations will take place, and of the imminence of any blasting episode.         It is recommended that old Condition 34 is deleted and replaced by new condition [14]

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
47	Condition 35 Except as may be essential for reasons of safety, no blasting shall be carried out other than between 1000 and 1130 hours, and between 1300 and 1630 hours on Mondays to Saturdays, unless otherwise agreed in writing with the Mineral Planning Authority. No blasting shall take place on Sundays or on the Public Holidays set out in Condition 11(ii).	CommentThis restricts blasting at the weekends unless on occasional circumstances for example where weather conditions have precluded blasting in the week or in cases of emergency (where there is a dangerous structure etc. – but this definition would need to be set out in the scheme required by the proposed new condition on blast minimisation).Condition 15 (New) Blasting Hours (i). Except as may be essential for reasons of safety, no blasting shall be carried out other than between 1000 to11.30 and 1300 to 1630 hours on Mondays to Friday and no blasting shall take place on Saturdays or Sundays or on the Bank or Public holidays as set out in Condition [New noise condition] (ii) The number of blasting episodes shall not exceed 6 in any one week period, and 2 in any one day. No secondary blasting shall be carried out within the site. (iii). Notwithstanding the provisions of part (i) blasting may be undertaken on no more than six Saturdays in any 12 month period. The operator shall notify the Mineral Planning Authority in advance of such events and these shall be approved in writing by the MPA. (iv). The provisions of this condition shall not prevent the operator blasting on a Saturday or Sunday in an emergency situation. The operator shall notify the Mineral Planning Authority within 48 hours of such an occurrence with an explanation of the reasons for it.
48	Condition 36 The developer shall inform the Mineral Planning Authority within 48 hours of any occurrence outside the times allowed in Condition 35,	It is Recommended that Condition 35 is deleted and replaced with New Condition 15.         Comment         The requirements have been incorporated into proposed New Condition 15.
49	together with an explanation. Condition 37 37 (a)The developer shall adopt the best practical means to minimise the propagation of ground borne vibration beyond the perimeter of the mine, and shall ensure that all blasting procedures are planned and executed to ensure that the maximum vibration from blasting, expressed in terms of peak particle velocity (ppv) shall be:- (i) less than 10mm per second when the total number of blasting episodes does not exceed 3 per day; and (ii) less than 7.3mm per second when the total number of blasting episodes does not exceed 4 per day; and (iii) less than 6.5mm per second when the total number of blasting episodes does not exceed 5 per day; and (iv) less than 5.8mm per second when the total number of blasting episodes does not exceed 6 per day; at any building used for human habitation located outside the site. The figures above relate to the duration of impulse and decay signal not exceeding one second. Where the duration exceeds one second the levels of peak particle velocity to be achieved shall be calculated by	It is Recommended that Condition 36 is deleted and incorporated into New Condition 15 <u>Comment</u> The County Councils Blasting Consultants have recommended the following condition: Condition 16 (New) Blasting (Ground Vibration) The developer shall adopt the best practical means [as set out in the approved Blast Impact Minimisation and Monitoring Scheme] to minimise the propagation of ground borne vibration beyond the perimeter of the mine, and shall ensure that all blasting procedures are planned and executed to ensure that: (i). Blasting shall be undertaken in such a manner to ensure that ground vibration, measured as a maximum of three mutually perpendicular directions taken at the ground surface at or near the foundations of any vibration sensitive building or residential premises, does not exceed a peak particle velocity (ppv) of 6 mm per second in 95% of all blasts measured over any continuous 3 month period and no single blast shall exceed a ppv of 10 mm per second. The measurement is to be taken at or near the foundations of any vibration sensitive building or occupied residential property. (ii). In the event that a blast results in vibration levels exceeding those specified in part (i) above, the operator shall within 48 hours notify the Mineral Planning Authority of the occurrence. The operator shall then submit to the Mineral Planning Authority within 2 weeks

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	reference to B.S. 6472: 1984, using an initial multiplier of 60 as contained in Table 3 of that document. 37 (b) Any building used for human habitation and owned by the developer or included in the Schedule of Properties contained in the Section 52 Agreement for which the developer will make offers to purchase, or covered by tenant compensation provisions, shall not fall within the scope of this condition.	of the occurrence a scheme of further monitoring and remedial measures to reduce ground vibration to the approved limits. These measures shall then be implemented and complied with at all times. (iii). The operator shall provide to the Mineral Planning Authority details of predicted vibration levels based on blast design prior to each blast. The operator shall forward to the Mineral Planning Authority the results of measured ground vibration within 48 hours of each blast.
50	Condition 38 The number of blasting episodes shall not exceed 24 in any one week period, and 6 in any one day, unless otherwise agreed in writing with the Mineral Planning Authority	Comment         This issue is picked up in proposed Condition 15 where the total numbers are specified at a maximum of 6 per week.         It is Recommended that Condition 38 is deleted and revised numbers incorporated into new
		Condition [15] (above)
51	Condition 39 39 (a) The developer shall adopt the best practical means to minimise the propagation of air borne vibration outside the site and shall ensure that the vibration in terms of the measurable air over pressure at any residential property does not exceed 120 dB (decibels). 39 (b) Any building used for human habitation and owned by the developer or included in the Schedule of Properties contained in the Section 52 Agreement for which the developer will make offers to purchase, or covered by tenant compensation provisions, shall not fall within the scope of this condition.	Comment There is no guidance in the PPG on air overpressure (AOP) or any advice on the need for a limit. Guidance contained in other reports published by the government (for example The Environmental Effects of Production Blasting from Surface Minerals Workings. DETR (1998) indicates that there are a number of factors outside of the control of the applicant that can affect the amount of air overpressure. As such it is no longer advised in guidance to impose a limit. However, given the level of public concern regarding blasting it is suggested that the condition is retained and linked to the blast impact minimisation and monitoring scheme. The blasts have not in the past led to levels of AOP that exceeded the original condition and it would perform a useful "backstop" to prevent levels rising. The second part of the condition is no longer relevant however so the condition should be re-cast: <b>Proposed Condition 17 (New)</b> The developer shall adopt the best practical means to minimise the propagation of air borne vibration outside the site and shall ensure that the noise from blasting in terms of the measurable air over pressure at any residential property does not exceed 120 dB (decibels). The measures for ensuring compliance with this blast value, including details of monitoring methods shall be included within the approved Blast Impact Minimisation and Monitoring Scheme to be submitted as required by Condition [14] (above)
52	Condition 40 No blasting in the pit area shall take place until the bunds surrounding the pit shall have been constructed in accordance with details required under 10 (e) unless otherwise agreed in writing with the Mineral	Comment         This condition has been discharged and the bunds constructed. It is no longer necessary and so not NPPF compliant.         Recommend Condition 40 is deleted.
53	Planning Authority Condition 41 No secondary blasting shall be carried out within the site.	<u>Comment</u> The requirements have been incorporated into proposed New Condition 15. Recommend Condition 41 is deleted as a stand- alone condition but merged with New Condition 15

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
	State in 2010)	
54	Condition 42 No development shall commence until base data, where appropriate, and proposals for the schemes of monitoring and analyses of:- (i) Ground and air – borne vibration; (ii) River flows, spring flows and ground water levels, and quality of water for human consumption; (iii) Noise; (iv) Dust; (v) Dust; (v) Air quality; (vi) Numbers of heavy goods vehicles transporting waste materials from the site; (vii) Chemical composition of materials to be extracted from the mine; have been submitted to and approved by the Mineral Planning Authority.	Comment         This data was provided prior to the commencement of the operation and within a number of schemes and permits which have subsequently been submitted and discharged. Some require review but have either been picked up by proposed conditions which would relate to any new consent or are already dealt with by the EP.         There are already schemes dealing with noise, dust and air quality, ground vibration and air overpressure, groundwater and surface water which have all been discharged. They all contain provisions for review and some will require re-submission as a result of the proposed conditions.         (i)       Ground and Airborne vibration (Proposed Condition 14)         (ii)       River and Spring Flows (Condition 5 (SWM Plans and strategy); Environmental Permits discharge licences and Unilateral Undertaking/s.52 agreement regarding impact on private supplies)         (iii)       Noise management and mitigation plan + monitoring scheme – (Proposed Condition [10] TBC)         (iv)       Dust & AQ management & Mitigation Plan + monitoring scheme (Proposed Condition [13] TBC)         (v)       Dust & AQ management & Mitigation Plan + monitoring scheme (Proposed Condition [13] TBC)         (vi)       HGVs restricted by Proposed Condition 9 (if numbers increase there would need to be further consideration)         (vii)       He chemical composition of materials coming from the mine is the subject of the EP insofar as anything coming from the process to the tip, the tailings lagoon, from the stack or into the watercourses is dealt with by the various permits and their monitoring.
		This condition is no longer required and it its recommended that It is deleted.
55	Condition 43 The developer shall undertake such additional monitoring and analyses within those terms listed in Condition 42, as may be required by the Mineral Planning Authority	Comment This condition was originally drafted to take into account unexpected impacts from the mine. In terms of NPPF this is not precise or reasonable as it is completely open ended, however having had discussions with the Operator they accept that the ability to deal with unexpected consequences is helpful. The existing monitoring reports have this flexibility built in to enable review of monitoring but the operator has offered to build this additional flexibility into the updated legal undertaking they will offer as a <b>Unilateral Undertaking</b> .
		It is recommended that Condition 43 is deleted.
56	Condition 44 The developer shall carry out monitoring schemes together with associated analyses outlined in Condition 42 and 43 above, as required by the Mineral Planning Authority and shall produce records and results and permit access to all monitoring equipment at all times at the request of the Mineral Planning Authority.	CommentThis needs to be re-cast to refer to monitoring in general and the quarterly reports. All of the current environmental schemes require quarterly, six monthly or annual reporting. One annual report would be a helpful commentary drawing the individual schemes into one place, identifying issues and proposals/priorities for the next annual period.Suggested Replacement Condition [18] (NEW) Annual Monitoring Report
		The operator shall provide to the Mineral Planning Authority by 31 March each year during the duration of operations and aftercare, an annual report setting out the environmental

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
		monitoring undertaken, setting out a summary of the results against agreed limits (as set out in the approved schemes or conditions within this Decision Notice). The report shall also identify whether any change to the monitoring is needed.
57	NEW	<u>Comment</u> This specifies that the restoration is carried out in accordance with the restoration concept and the agreed priorities. This was previously set out in the Unilateral Undertaking which accompanied the Modification Order and will be better related to the mine plans.
		Proposed Condition 19 (NEW) Restoration Unless otherwise agreed in writing by the Mineral Planning Authority, phased landscaping and restoration shall be undertaken in accordance with the approved Restoration Concept and the detailed annual restoration, land and water management and landscape review plans required under condition [20] below for specific areas of land which shall have been previously submitted to and approved in writing by the MPA.
58	NEW	<u>Comment</u> This condition reflects a requirement to assess the restoration progress on an annual basis and to plan for the following 12 months using the knowledge gained during previous phases and to review techniques if necessary based on the knowledge gained and assessment of the success of previous phases.
		Proposed Condition 20 (NEW) Annual Restoration Review Notwithstanding the provisions of condition 19 above, on or before 31 March each year during the duration of the planning permission an "Annual restoration, land and Water Management and Landscape Review" of restoration, land and water management and landscape objectives shall be submitted for approval to the Mineral Planning Authority . The scheme shall address inter alia: (i) The sequence and phasing of tipping and reclamation showing clearly their relationship to the working scheme for the next 12 months and works already undertaken to date;
		<ul> <li>(ii) the re-spreading on completion of each phase of tipping of final cover consisting of soil or other cover material suitable as a rooting medium, free of debris in excess of 150mm in any dimension or other obstructions to cultivation. This final cover shall be placed in layers. Any suitable cover material and over burden previously stripped from the site being placed first as a base layer then subsoil as an intermediate layer then topsoil as the uppermost layer;</li> </ul>
		<ul> <li>(iii) The ripping of any compacted layers of final cover to ensure adequate drainage and aeration; such ripping should normally take place before placing of the topsoil;</li> <li>(iv) The machinery to be used in soil re-spreading operations;</li> <li>(v) The final levels of the reclaimed land (and the gradient of the restored slopes around the margins of the excavation) to prevent ponding of surface water;</li> <li>(vi) Drainage of the reclaimed land including the formation of suitably graded contours to including the including the including the including the statement.</li> </ul>
		to promote natural drainage and the installation of artificial drainage; (vii) The seeding of reclaimed areas with a suitable specified seed mixture

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
59	Condition 45 In the event of the cessation of winning and working minerals for a period in excess of two years, the operator shall, within 2 years of that cessation being notified to them by the MPA, carry out restoration of the working and tipping areas in accordance with a scheme which shall have been submitted to and approved in writing by the MPA and which shall then pass into aftercare as set out in Condition 22.	Comment It is proposed that the requirements of Condition 46 are merged into a single Prior cessation condition and the previous Condition 46 is deleted.Prior Cessation of the Development In the event of the cessation of winning and working of minerals for a period in excess of two years prior to the completion of the approved scheme, the operator shall notify the Mineral Planning Authority in writing of such cessation.Within 2 years of such notification, or, if in the opinion of the MPA a permanent cessation has occurred and the MPA has served written notice on the operator of this opinion, the operator shall submit to the Mineral Planning Authority a revised restoration scheme for the approval of the MPA.The approved revised restoration scheme shall include details of the phasing of the revised scheme and the removal of fixed plant, machinery, structures and shall be fully implemented within 2 years of the written approval unless otherwise agreed in writing with the Mineral Planning Authority. The restored areas shall then pass into aftercare as set out in Condition 8.
60	Condition 46 In the event of prior cessation as set out in condition 45, within 3 years of the notification of cessation, the operator shall have removed all plant, machinery, buildings and roads in accordance with a scheme that shall have been submitted to and approved in writing by the MPA and the land shall pass into aftercare as set out in Condition 22.	Comment         It is proposed that the requirements of Condition 46 are merged into a single Prior cessation condition and the previous Condition 46 is deleted.         It is recommended that Condition 46 is deleted and merged into a new Prior Cessation Condition.
61	Condition 47 The development shall be carried out in accordance with the approved plans unless otherwise agreed in writing with the Mineral Planning Authority.	Comment The Condition as drafted was not NPPF Compliant and might indicate that the approved development might be amended in an informal way. Where slight alterations do not go to the heart of the permission given that this is a long term operational site, the conditions "tail" unless otherwise agreed in writing has been added to any specific condition where appropriate. For all other changes it will be necessary to agree non or minor material amendments. Proposed Condition 2 is more specific as it relates to existing approved schemes and drawings.Recommend Condition 47 is deleted and replaced with New Condition 2.
62	Condition 48 Unless required for restoration or where the material is being translocated from outside the site for restoration purposes as previously agreed by the MPA, no imported refuse, waste or other similar materials shall be deposited on any part of the site unless agreed in writing with the Mineral Planning Authority.	Comment         A single condition restricting import/export of materials from the site will enable the overall         HGV/highway implications to be considered together.         Recommend Condition 48 is deleted and merged into New Condition 9.
63	Condition 49 Notwithstanding the provisions of the Town and Country Planning General Permitted Development Order 1995, no buildings, structures or fixed plant shall be erected, installed or extended unless otherwise agreed in writing with the Mineral Planning Authority.	Comment         It is not common practice to remove all permitted development rights from mining operations unless there are very good reasons for doing so.         The scale of this operation could make some kinds of permitted development (e.g. the erection of plant) something that could have a significant landscape impact, however minor works within the

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
		context of the operation and within the existing plant area could be said to be immaterial and have in the past been dealt with as non- material amendments. It is recommended that the provisions of Part 17 of the GPDO (which could otherwise enable the construction of buildings and structures up to 15m high) be restricted by a Condition that requires a prior notification of any development outside the existing process plant area and anything over 5m within it:
		<ul> <li>Proposed Condition</li> <li>Notwithstanding the provisions of Part 17 Class A (a) and (b) and Class B of the Town and Country Planning General Permitted Development Order 2015 (or any order amending, replacing or re-enacting that order)</li> <li>i) no additional buildings and plant that exceed 5m in height shall be erected within the processing plant area shown on Plan [GRES Drawing WHP 100-L-001 (Rev. H)]; and</li> <li>ii) no additional buildings and plant shall be erected elsewhere on the mine site,</li> </ul>
		without the prior approval in writing of the MPA. Reason: To ensure that the MPA retains control over development of a scale that might have an impact on the views from Dartmoor National Park.
64	Condition 50 Proposals for lighting night-time operations shall be agreed with the Mineral Planning Authority, and such systems shall be modified as may be subsequently required by the Mineral Planning Authority.	Amend condition 50 External lighting at the site shall be restricted to the lighting set out in a revised scheme to be submitted within 6 months of the date of this permission. The Operator shall take all practicable steps to reduce night time lighting from the plant and from ancillary operations on the Mine Waste facility.
	NEW	New Condition - Complaints Procedure In the event that a justifiable complaint is received by the operator, the Mineral Planning Authority or other regulatory body in relation to noise, vibration, particulate emissions or derogation of water, the operator shall instigate an investigation into the complaint within 24 hours of receiving or being notified about the complaint and in accordance with the monitoring schemes agreed for each of these matters under Conditions [***] Such investigation shall include reviewing any monitoring data relating to the nature of the complaint and undertaking such additional monitoring as may be necessary and agreed with the MPA. The operator shall inform the MPA and the complainant of the findings of the investigation including whether any breach of any limits imposed through the planning conditions within this decision notice has occurred, the cause of the breach along any remedial action undertaken or proposed to prevent further breaches within 14 days of notification unless it has been agreed with the MPA that additional time is justified.
		The operator shall maintain a log of all complaints received, the investigations undertaken in relation to the complaint the findings of the investigation and any remedial action undertaken following the complaint. The complaints log shall be available for inspection by the MPA or other regulatory bodies upon request.
66	NEW	New condition – additional planting along Lee Moor Road Within 3 months of the date of this permission, the operator shall submit a scheme of

	Existing Conditions (as Modified by the Secretary of State in 2010)	Proposed Condition/Amendment
		planting for Area B as indicated on drawing 9977-0001F for approval by the MPA. Following the receipt of approval the scheme shall be implemented in the next available planting season and maintained in accordance with the provisions of Condition 8.
67	NEW	New condition Within 3 months of the date of this permission, the operator shall submit a revision of the operational travel plan dated November 2014 for the written approval of the MPA. Following the receipt of approval the scheme shall be implemented including such revisions as shall be required, for the remaining life of the mine.

#### Proposed Heads of Terms of Legal Agreement

- 1. To transfer over all remaining obligations in the original legal agreements.
- 2. To define the commencement of the consent and the obligations as being the first instance of overnight working of the Primary Crusher following the issue of the planning permission.
- 3. Hosting a community website
- 4. That the operator will share environmental compliance monitoring data with the MPA and to agree to joint legal ownership such that the data may be used for the purposes of monitoring and enforcement of the planning permission.
- 5. To fund Independent audit of quarterly monitoring if required by MPA
- 6. To fund the appointment of consultants by the MPA if required following complaint.
- 7. To clarify the process for investigating water derogation and to specify the steps for arbitration in event of dispute
- 8. Continued administrative support for and engagement with the Local and Technical Liaison Groups
- 9. 10 year maintenance of restoration
- 10. Provision of bridleways on cessation
- 11. Annual reporting and review of restoration
- 12. Maintenance of bat mitigation for life of the mine and aftercare
- 13. To only implement the new permission and not to object to any revocation of the original.
- 14. To retain and fund a community mediator for an agreed period.

## **Habitats Regulations Assessment**

# Section 1: Screening of likely significant effect on a European site



### Part A: The proposal

1.Type of permission/activity:	Drakelands (previously Hemerdon) Tungsten Mine			
permission/activity.	Variation of (i) condition 3 of planning permission 9/42/49/0542/85/3 to allow continued extraction of tungsten and tin, processing and disposal of mineral wastes until 5 June 2036 and (ii) removal of condition 13 of planning permission 9/42/49/0542/85/3 to remove the restriction on the operation hours of the primary crusher.			
	The EA has produced separate HRAs for - Abstractions (8.5.2012) - Discharges (25.4.2012) - Mine Waste Facility (9.9.2013) - Kiln emissions. (2014)			
	The EA and DCC agreed, at a meeting on 3 <sup>rd</sup> April 2014, that the following activities (relating to planning permission 9/42/49/0542/85/3 and the subsequent Unilateral Undertaking agreed in 2010).			
	were not already covered by the EA's HRA and therefore needed to be covered by the HRA for permission 9/42/49/0542/85/3.			
	<ul> <li>Dewatering of the quarry</li> <li>Construction of the processing building</li> <li>Extraction</li> </ul>			
	<ul> <li>Infrastructure (such as pipes) associated with processing</li> <li>Soil stripping</li> </ul>			
	The HRA for permission 9/42/49/0542/85/3 was undertaken in 2014.			
2. Application reference no:	DCC/3823/2015. Planning permission 9/42/49/0542/85/3 (approved by DCC in 1986) and the subsequent Unilateral Undertaking agreed in 2010			
3. National grid reference:	Drakelands Mine is centred on NGR SX 571586 with a mid-point at Crownhill Down located at NGR SX568595.			
4. European sites (within 10kms of Hemerdon Tungsten Mine or with identified pollutant pathways)				
Three Natura 2000 sites are located within 10km of the site. Prawle Point to Plymouth Sounds cSAC and Tamar Estuaries Complex SPA are not within 10kms but are hydrologically linked via Plymouth Sounds and Estuaries SAC).				
Natura 2000 sites w	ithin 10km			

Natura 2000 Site	Reference Code	Approx distance (as crow flies) and direction from Development	
Dartmoor SAC	UK0012929	3.3kms, NE	
South Dartmoor Woods SAC	UK0012749	5.3 kms, NW	
Plymouth Sound and Estuaries SAC	UK0013111	7.2 kms, SW	

#### **Conservation Objectives**

With regard to the natural habitats and/or species for which the site has been designated (the Qualifying Features" listed below):

# Avoid the deterioration of the qualifying natural habitats and the habitats of qualifying species, and the significant disturbance of those qualifying species, ensuring the integrity of the site is maintained and the site makes a full contribution to achieving Favourable Conservation Status of each of the qualifying features.

Subject to natural change, to maintain or restore:

- > The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats and habitats of qualifying species;
- > The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- The populations of qualifying species;
- > The distribution of qualifying species within the site.

#### **Qualifying Features for Dartmoor SAC**

H4010. Northern Atlantic wet heaths with Erica tetralix; Wet heathland with cross-leaved heath

H4030. European dry heaths

H7130. Blanket bogs\*

H91A0. Old sessile oak woods with *llex* and *Blechnum* in the British Isles; Western acidic oak woodland

S1044. Coenagrion mercuriale; Southern damselfly

S1106. Salmo salar; Atlantic salmon

S1355. Lutra lutra; Otter

#### **Qualifying Features for South Dartmoor Woods SAC**

H4030. European dry heaths

H91A0. Old sessile oak woods with *llex* and *Blechnum* in the British Isles; Western acidic oak woodland

## Qualifying Features for Tamar Estuaries Complex SPA A026 Egretta garzetta; Little egret (Non-breeding)

A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)

**Qualifying Features for Plymouth Sound and Estuaries SAC** 

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks

H1130. Estuaries

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1160. Large shallow inlets and bays

H1170. Reefs

H1330. Atlantic salt meadows (Glauco-Puccinellietalia maritimae)

S1102. Alosa alosa; Allis shad

S1441. *Rumex rupestris*; Shore dock

Qualifying Features for Prawle Point to Plymouth Sound candidate SAC Inshore Upstanding Reefs Offshore Upstanding Reefs

\* denotes a habitat or species which is a particular priority for conservation at a European scale and is subject to special provisions in the Directive and the Habitats Regulations.

5. Brief description of proposal: The winning and working of tungsten. Mineral working is thought to have occurred on the site from 1919-1920 and 1934 – 1944. The current application was approved in 1986 for an opencast pit, mineral processing plant (within the Smallhanger Valley) and associated tip (on Crownhill Down), together with construction of a 'link road' between West Park Hill Road and the Lee Mill Road (B3147) near Newnham Park. This application is to extend this permission to 2036.

management of the site for nature	6. Is this application necessary to the No management of the site for nature conservation?	
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#### Part B: Risk assessment

Potential impacts

#### All activities are outside the Natura 2000 site boundaries. There will therefore be no direct loss of habitat.

Potential impacts resulting from activities covered by this HRA are:

Activity	Potential impact		
Dewatering of the quarry	water flow/levels and water quality		
Construction of the processing building	air quality (dust/vehicle emissions), disturbance, water quality		
Extraction	air quality (dust), disturbance, water quality		
Infrastructure (such as pipes) associated with processing	water quality		
Soil stripping	air quality (dust), disturbance, water quality		

- Air quality. Dust and vehicle emissions causing smothering and/or acidification of habitats.
- Water quality. Changes in sedimentation and chemical status of the water causing habitat change and loss/displacement/change in composition of aquatic and riparian species.
- Water flow/levels. Change in sensitive habitats due to changes in surface and groundwater flow causing habitat deterioration.
- Disturbance due to noise/vibration on sensitive species (otter and salmon)

In terms of potential impacts on water quality and levels note that:

- Two water courses are located within the site. The Smallhanger Brook flows north-east to southwest, flowing into the Tory Brook which in turn flows into the River Plym near Marsh Mills in Plymouth. An un-named stream (known as the Hooksbury Stream) rises from numerous spring and seepage zones on Crownhill Down to the west of the B3417, becoming a single watercourse within Lower Hooksbury Wood and flowing into the Tory Brook.
- Headwaters of the Plym lie within the Dartmoor SAC. The Plym feeds into the Plymouth Sound and Estuaries SAC. Both Tamar Estuaries SPA and Prawle Point to Plymouth Sound candidate SAC are linked to the site via Plymouth Sound and Estuaries SAC.

### Likely Significant Effect Matrix

Natura 2000 Site	Qualifying Features	Possible Impacts	Is there a risk of significant effect?	Possible 'in combination' plans or projects	Is there a significant risk of 'in combination' impacts?
Dartmoor SAC	Northern Atlantic wet heaths with <i>Erica tetralix</i> European dry heaths Blanket Bogs Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles Southern damselfly <i>Coenagrion</i> <i>mercuriale</i> Atlantic salmon <i>Salmo salar</i> Otter <i>Lutra lutra</i>	Disturbance Dust/vehicle emissions Water quality/ levels	No. None of the activities covered by this HRA can disturb features of the SAC. Note that Atlantic salmon are included as a qualifying feature due to their presence in the Dart and Tavy, neither of which are hydrologically connected to this site. Atlantic salmon (as a feature of Dartmoor SAC) cannot therefore be disturbed by the mine. No. See Assessments 1 & 2 below for dust & emissions. No. The site is downstream of Dartmoor SAC and the only impacts could therefore be water quality impacts on Atlantic salmon and otter in the Plym and Yealm catchments. See Assessments 3 and 4 below for water quality and levels.	No Dust impacts from activities within the Lee Moor complex. Possible impacts on water quality from development in South Hams / Caradon and Lee Moor quarries. Development in South Hams & Caradon could increase water demand within the sites catchments.	No. Due to distance between these sites and the SAC + dust control management schemes required by planning consents. No. Risks to water quality and supply will be controlled by EA regulatory system of consents and surface water drainage controls imposed via planning.
South Dartmoor Woods	Old sessile oak woods with <i>llex</i> and <i>Blechnum</i> in the British Isles European dry heaths	Disturbance Dust/vehicle emissions	No. The SAC lies over 5kms from the activities covered in this HRA. No. See Assessments 1 & 2 below for dust & emissions.	No. There are no residual impacts.	
Woods SAC		Water Quality Water flows / levels	No interest features are susceptible. No. No hydro-geological connectivity between the site and this SAC.		

Natura 2000 Site	Qualifying Features	Possible Impacts	Is there a risk of significant effect?	Possible 'in combination' plans or projects	Is there a significant risk of 'in combination' impacts?
	Sandbanks which are slightly covered by sea water all the time Estuaries Large shallow	Disturbance	No. SAC is over 7km from the quarry complex. No effect from noise or vibration.	No residual impacts.	
	inlets and bays Reefs Atlantic salt meadows	Dust/vehicle emissions	No. The SAC is over 9km from the quarry complex.	No residual impacts.	
Plymouth Sound & Estuaries SAC	(Glauco- Puccinellietalia maritimae) Mudflats and sandflats not covered by seawater at low tide	Water quality/ levels	No. See Assessments 3 and 4 below for water quality and levels.	No residual impacts. Possible impacts on water quality due to development in South Hams/Caradon and Lee Moor quarry complex.	No. Risks to water quality and supply will be controlled by EA regulatory system of consents and surface water drainage controls imposed via planning
	Shore Dock <i>Rumex ruestris</i> Allis shad <i>Alosa</i> <i>alosa</i>			Development in South Hams & Caradon could increase water demand within the sites catchments	set out in the approved surface water management scheme dated 6.1.14.
	Inshore Upstanding Reefs Offshore	Disturbance	No. The cSAC is over 10 kms from the quarry.		
Prawle	Upstanding Reefs	Dust/vehicle emissions	No. As above		
Point to Plymouth Sound & Eddystone cSAC		Water quality/ levels	No. See Assessments 3 and 4 below for water quality and levels.	Possible impacts on water quality due to development in South Hams / Caradon and Lee Moor quarry complex.	No. Risks to water quality will be controlled by EA regulatory system of consents and surface water drainage controls imposed via planning set out in the approved surface water management scheme dated 6.1.14.
	<i>Egretta</i> <i>garzetta</i> ; Little egret (Non-	Disturbance	No. The SAC is over 10 kms from the quarry.		
	breeding) Recurvirostra	Dust/vehicle emissions	No. As above		
Tamar Estuaries Complex SPA	aries avosetta; Pied avocet (Non- pplex breeding)	Water quality/ levels	No. See Assessments 3 and 4 below for water quality and levels	Possible impacts on water quality due to development in South Hams / Caradon and Lee Moor quarry complex.	No. Risks to water quality will be controlled by EA regulatory system of consents and surface water drainage controls imposed via planning. set out in the approved surface water management scheme dated 6.1.14.

#### Assessment of likely significant effect

#### 1. Dust

MPS2 states that, 'larger particles, typically greater than  $30\mu m$  in size settle within 100m of the source. Intermediate size particles (10-30 $\mu m$ ) are likely to travel up to 200-500m. Smaller particles (less than 10  $\mu m$  and referred to as PM<sub>10</sub>) may travel 1000m or more.'

Dartmoor SAC (3km away) and South Dartmoor Woods SAC (5km away) *may* both be affected by smaller particles. However according to MPS2 smaller particles make up only a small proportion of dust emitted from most mineral workings. Furthermore the 1995 DoE Guidance on (The Environmental Effects of Dust from Surface Mineral Workings) recommends a stand-off distance of <u>100-200m</u> from significant dust sources, recognising that these distances can be reduced if effective mitigation measures are put in place. This assessment is set out in more detail in a letter from SLR to DCC dated 10<sup>th</sup> April 2014.

<u>Conclusion</u>: Dust generated during operations will not have a significant effect on European Sites due to: (a) the distance of the operational and processing and soil stripping areas from the European sites, (b) the implementation of the Dust and Air Quality Environmental Management Scheme (and associated monitoring) which is a condition of the planning permission and which was discharged by Devon County Council in consultation with the Environment Agency and the Environmental Health Authority on 12<sup>th</sup> February 2014 which will be kept under review.

#### 2. Vehicle emissions

The Design Manual for Roads and Bridges (2007) considers any receptor within 200m of a road source to be potentially affected by the operation. There are no European sites within 200m of the activities included in this HRA. Also see letter from SLR to DCC dated 10<sup>th</sup> April 2014.

Conclusion. Traffic emissions will not have a significant effect on a European Site.

#### 3. Water quality/levels - surface water

Surface water run-off associated with the activities considered in this HRA is managed by a system of catch pits/ponds and discharged to the Smallhanger under licence from the EA. This licence is covered in the EA's HRA for Hemerdon.

Conclusion – no significant effect on a European site.

#### 4. Water quality/levels - groundwater

The Hemerdon Water Features Survey Report (2011) evaluates the risk of the proposed mine dewatering on all water features identified within 500m of the pit. The impact of dewatering on the Tory Brook is assessed as low. Impact on the Smallhanger Brook is assessed as medium. Groundwater Monitoring locations have been agreed and monitoring has been undertaken in advance of any dewatering to establish normal fluctuations in groundwater at a number of locations. The approved groundwater monitoring scheme explains the modelling carried out in respect of the likely impacts from the project and sets out clear steps for monitoring and mitigation of any unexpected effects. This scheme was formally discharged by the Mineral Planning Authority in consultation with the Environment Agency and will be kept under annual review.

Conclusion – no significant effect on a European site.

#### Part C: Conclusion

As a result of this risk assessment, DCC can conclude that the activities covered by this HRA will have no likely significant effect on European sites, either alone or in combination.