



DARTMOOR LOCAL PLAN
guiding planning applications in Dartmoor National Park

TOPIC PAPER 5

Minerals and Waste Development

August 2020

This topic paper provides an overview of the issues and evidence used to inform Dartmoor National Park's local plan review.



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1 Introduction

1.1 *Purpose and Scope of the Topic Paper*

1.1.1 This Topic Paper forms one of ten topic papers which form part of the evidence base that supports the emerging Dartmoor National Park Local Plan. These topic papers have been produced to coordinate and consolidate some of the evidence used in drafting the emerging local plan. All the topic papers are available to view online at www.dartmoor.gov.uk/localplan. This Paper has been prepared with substantial support from support of officers at Devon County Council.

1.1.2 The purpose of this topic paper is to gather evidence and serve as a starting point for reviewing and developing planning policies related to the Minerals and Waste development. Invariably the paper will cover issues which overlap or compete with those in other parts of the evidence base (e.g. SA/SEA, Flood Risk Assessment, Landscape Character Assessment). In light of this the Topic Paper's aims are to:

- Outline the relevant legislation and policy which set the statutory framework for the local plan;
- describe the local context around minerals extraction in Dartmoor National Park;
- describe the local context around waste management and waste development in Dartmoor National Park;
- review the current Dartmoor National Park Authority policy framework and its effectiveness;
- draw on appropriate source material including research, guidance and best practice to inform policy development;
- recommend any local policy change.

1.1.3 The topic paper has been updated throughout the course of the local plan review to reflect new evidence or changes to national guidance or policy. The view of the local community, key stakeholders and partner organisations who all have an interest in the future of Dartmoor National Park forms part of the evidence base for the local plan. The Authority have therefore welcomed comments on this Paper. The following summarises the changes made in each version:

Version	Changes made
Version 1 October 2017	Original topic paper
Version 2 December 2018	Updated to reflect 2019 NPPF
Version 3 September 2019	Update on Reg 18 consultation and major/large scale minerals development policy area.
Version 4 August 2020	Update on the Reg 19 consultation and major/large scale/small scale mineral development policy area

2 Minerals Development

2.1 *Relationship with other Mineral Planning Authorities' Plans*

2.1.1 The Dartmoor National Park Local Plan will provide minerals planning policy for the National Park; however it is being prepared in cooperation with adjoining mineral planning authorities, in particular Devon County Council. For aggregate minerals, the National Park Authority jointly publishes the Devon Local Aggregate Assessment with the county's other mineral planning authorities and participates in the South West Aggregates Working Party. The Authority also participated in the preparation of the joint evidence base that preceded adoption of the Devon Minerals Plan, ensuring that the spatial strategy included in that Plan recognised the opportunities and constraints of the National Park.

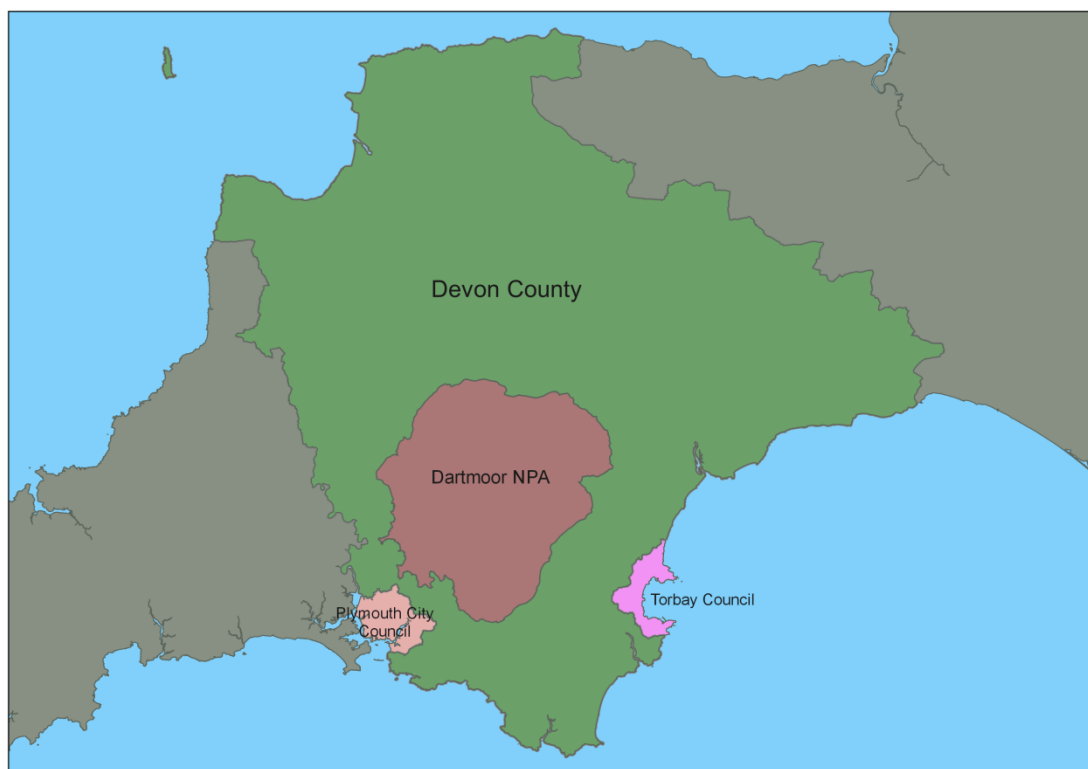


Figure 1. Dartmoor Minerals Planning area and surrounding Minerals Planning Authority areas

2.2 *National Minerals Policy Context*

2.2.1 The Government's planning policy for minerals development is included in the National Planning Policy Framework (NPPF), with requirements for the Local Plan to provide for the supply of minerals including aggregates and industrial minerals; safeguard mineral resources of local and national importance and transportation and processing infrastructure; set out environmental criteria for assessing planning applications; and ensure restoration is undertaken at the earliest opportunity.

2.2.2 With regard to aggregate minerals, paragraph 207 of the NPPF requires a mineral planning authority (MPA), either individually or jointly with other MPAs, to prepare an annual Local Aggregate Assessment (LAA) and to participate in an Aggregate Working Party. Dartmoor National Park is included in the Devon LAA that is prepared by Devon County Council on behalf of the other Devon MPAs, while the National Park Authority attends and contributes to the South West Aggregate Working Party.

2.2.3 The NPPF provides important context and general guidance on development in National Parks. In particular, it states

"Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads". (Para 172)

"as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks..." (para 205)

2.3 *Saved Local Plan Policies*

2.3.1 The Dartmoor Core Strategy (June 2008) includes Policy COR22 that presumes against major

mineral development unless there is a demonstrable national need, but provides other mineral development including small scale quarrying of building stone.

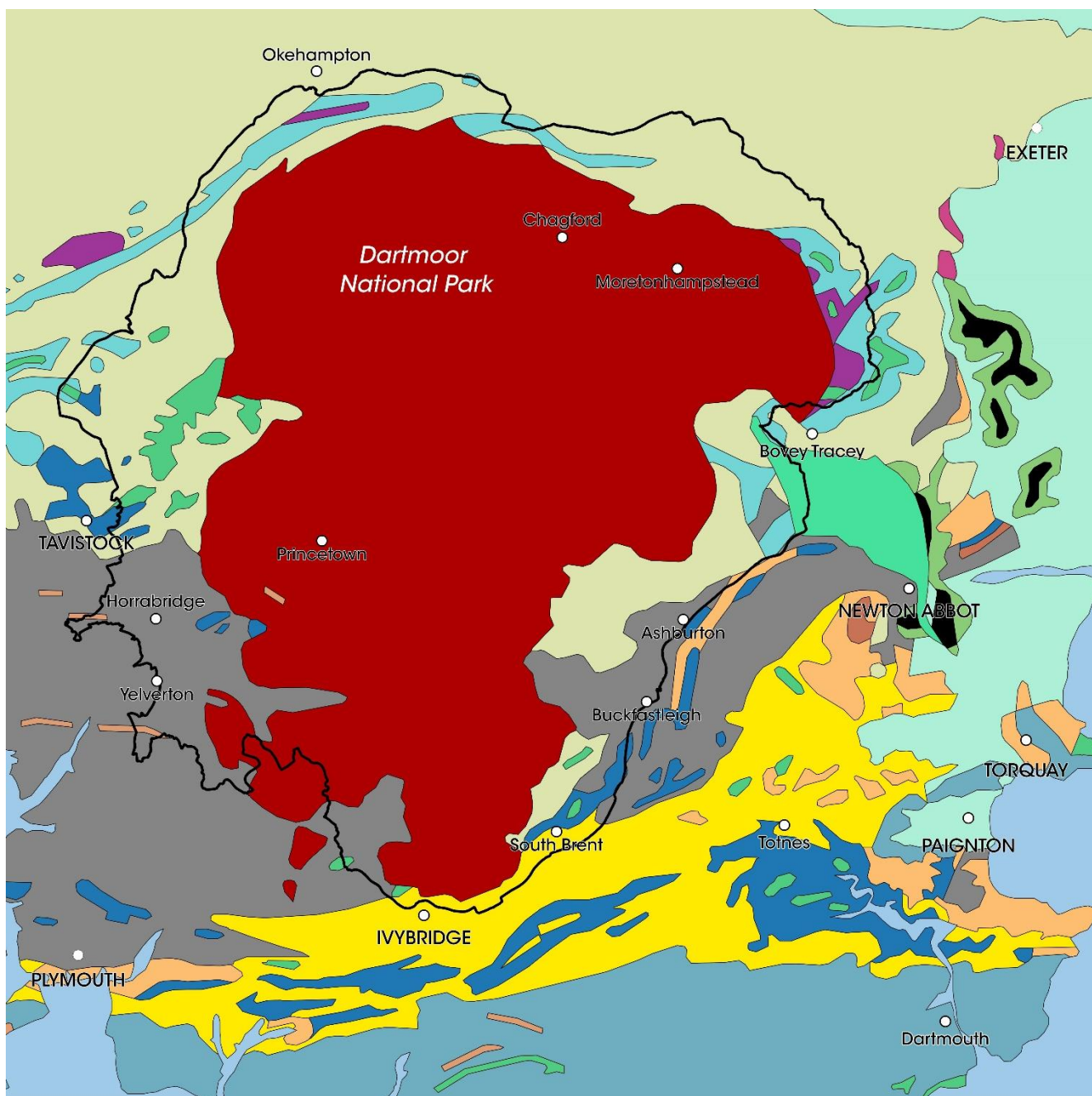
- 2.3.2 In addition to Policy COR22, the Dartmoor National Park Local Plan (October 2004) included the Minerals Local Plan of which Policies M1 to M7 remain extant, albeit with limited weight due to their age and pre-dating of the 2012 NPPF. Policies M1 and M3 are effectively superseded by Policy COR22.

Adopted Local Plan Policy COR22 (Core Strategy)

Major mineral development will not be allowed unless, after rigorous examination, it can be demonstrated that there is a national need which cannot reasonably be met in any other way, and which is sufficient to override the potential damage to the natural beauty, wildlife, cultural heritage or quiet enjoyment of the National Park.

Other mineral development will be carefully assessed, with great weight being given in decisions to the conservation of the landscape and the countryside, the conservation of wildlife and cultural heritage and the need to avoid adverse impacts on recreational opportunities.

Small scale quarrying of traditional building stone will be granted in locations where this would not be damaging to the landscape, archaeological, ecological or geological interests, or to the amenity of local residents and where the local road network is adequate to cope with the traffic generated by or associated with the proposed development.



Contains British Geological Survey materials ©NERC 2017

0 5 10 km



Legend

○ Urban Areas

□ Dartmoor National Park Boundary

Rock Types

■ Barton, Bracklesham and Bagshot Beds

■ Basal Conglomerate (including possible Devonian)

■ Basalt and spilite

■ Basalt dolerite, camptonite and allied types

■ Basalt, spilite and rhyolite

■ Bovey Formation, St Angus Sands, etc

■ Devonian limestone

■ Carboniferous: Granite

■ Lower Devonian

■ Middle Devonian

■ Permian basal breccias, sandstones and mudstones

■ Rhyolite, trachyte, felsite, elvans and allied types

■ Carboniferous: Limestone

■ Tuff

■ Upper Carboniferous

■ Upper Greensand and Gault

■ Upper Old Red Sandstone and Upper Devonian

3 Dartmoor's Geology and Mineral Working History

3.1 *The Geology of Dartmoor National Park*

- 3.1.1 The presence of Dartmoor and its strong impact on the geomorphology of the remainder of Devon are a direct result of the intrusion of the granite mass into the older rocks that occurred after the Carboniferous period. As well as creating the elevated moorland with its distinctive tors that exists today, the intrusion also altered the surrounding Devonian and Carboniferous rocks through thermal contact. The zone of altered rocks around the granite mass is termed the 'metamorphic aureole', and includes minerals not found in rocks of similar age elsewhere in Devon.

3.2 *The Dartmoor Granite*

- 3.2.1 The surface extent of the Dartmoor granite intrusion lies almost wholly within the National Park boundary
- 3.2.2 Granite comprises a range of minerals including quartz, feldspar and mica, with its colour and texture resulting from differing proportions of these minerals. The Strategic Stone Study for Devon [English Heritage (2012)] identifies three main varieties of Dartmoor granite:
- Giant Granite, a coarse grained, grey granite with large feldspar megacrysts, which is the most widespread granite within Dartmoor;
 - Blue Granite which, although coarse grained, contains few or no megacrysts and has more limited occurrence; and
 - fine-grained Blue Granite.
- 3.2.3 Limited parts of the Dartmoor granite, notably on the southwest margin, have been subject to kaolinisation, a thermal and weathering process in which the feldspar decomposes to form kaolinite in a clay matrix.

3.3 *Other Igneous and Metamorphic Rocks*

- 3.3.1 Prior to the granite intrusion, the Devonian and Carboniferous periods saw more limited volcanic and intrusive activity that has resulted in the presence of outcrops of igneous rocks, including dolerite, basalt and tuffs, around the fringes of the National Park, notably in the Teign Valley, to the south of Okehampton, around Mary Tavy and Peter Tavy and between South Brent and Buckfastleigh.
- 3.3.2 The intrusion of the Dartmoor granite had the effect of 'baking' the surrounding Devonian and Carboniferous sedimentary and igneous rocks resulting in the surrounding metamorphic aureole that extends up to approximately 2 km beyond the surface extent of the granite. This metamorphism altered the mineralogy of the surrounding rocks, and resulted in the presence of rock such as hornfels which is harder than the mudstone from which it evolved.

3.4 *Sedimentary Rocks*

- 3.4.1 A range of mainly Devonian and Carboniferous formations are present around the fringes of the National Park, mainly comprising sandstones, cherts, mudstones and slates. Limited outcrops of limestone occur, most extensively at Ashburton but also at Buckfastleigh, Drewsteignton, South Tawton and Meldon. On the eastern edge of Dartmoor, part of the Bovey Basin ball clay deposit lies within the National Park boundary near Liverton.

3.5 *Metalliferous Minerals*

- 3.5.1 The Dartmoor granite and its surrounding rocks contain a wide range of elements that have or could potentially yield economic minerals, notably tin (in both alluvial and vein deposits), copper, lead, silver, fluorspar, arsenic, pyrite, barite, micaceous haematite and magnetite.

3.6 *Superficial Deposits*

- 3.6.1 Substantial parts of the higher moors of Dartmoor, particularly in the north, are overlain by peat, while there are more limited deposits of head, river terrace gravels and alluvium.

3.7 *Outline of Past Mineral Working within Dartmoor National Park*

- 3.7.1 Dartmoor has a long history of mineral extraction, with tin working understood to have originated in pre-Roman times and progressed from stream working through open pit extraction to underground mining. Metal mining reached its peak in the second half of the 19th century, with the last mine on Dartmoor, at Great Rock near Hennenock, closing in 1969. While much of the mining activity occurred within the metamorphic aureole around the granite mass, there was extensive mining in the Birch Tor/Vitifer area and on the southern moor to the west of Holne.
- 3.7.2 Dartmoor's granite has been quarried extensively, both for local vernacular building materials since the Bronze Age and for nationally-significant construction projects. While small-scale extraction has been undertaken across Dartmoor, major granite quarries were developed at Haytor, Merrivale and around Princetown.
- 3.7.3 Construction materials have also been quarried from outside of the granite in the form of building stone and aggregates, including from dolerite, limestone and Devonian slates.
- 3.7.4 Kaolinisation of parts of the granite mass has resulted in the extraction of china clay and deposition of the waste that accounts for around 90% of the worked materials. While Dartmoor's boundary has been drawn to exclude the major china clay operations at Lee Moor, extraction has previously been undertaken within the National Park at Brisworthy and Red Lake.
- 3.7.5 Dartmoor's peat has been cut for fuel on domestic and industrial scales, with commercial peat extraction peaking in the 19th century before finally ceasing in 1955¹. The peat also yielded by-products such as charcoal and naphtha.

3.8 *Extant Mineral Planning Permissions*

- 3.8.1 While the previous section has highlighted the extensive range of mineral extraction that has been undertaken in the past, quarrying within the National Park is currently limited to three sites:
- Linhay Hill Quarry at Ashburton, which quarries the Chercombe Bridge Limestone formation on a large scale, primarily for construction aggregates but also supplying agricultural lime and building stone;
 - Yennadon Quarry at Dousland, supplying building stone from metamorphic Devonian slate; and
 - Blackenstone Quarry near Moretonhampstead, which quarries granite for building and ornamental stone on a small scale.
- 3.8.2 In addition to the operational quarries, there are a number of sites that are presently inactive but which retain extant planning permissions for mineral working:
- Meldon Quarry near Okehampton was mothballed in 2011, prior to which it supplied rail ballast and other aggregates from hornfels and dolerite;
 - Merrivale Quarry, to the north of Princetown, was a long-established granite quarry where extraction ceased in the 1970s but which continued to process imported stone until the 1990s; and
 - Prison Quarry at Princetown.
- 3.8.3 A list of applications for minerals related development determined 2008 to 2017 is set out in

¹ Source http://www.dartmoor.gov.uk/_data/assets/pdf_file/0019/225622/Domestic-and-Industrial-Peat-Cutting.pdf

4 Dartmoor's Current and Potential Mineral Resources

4.1 Ball Clay

- 4.1.1 Ball clay in Britain is rare, found only in Dorset and two sites in Devon, the Bovey and Petrockstowe Basins (see Figure 3.1). The ball clays of the Bovey Basin are considered to be the best in the world, having the greatest range of clay seams and clays that are found nowhere else and exported throughout the world.
- 4.1.2 Ball clay is valued for its plasticity, colour and unfired strength, and exhibits highly variable characteristics due to the differing proportions of its three main mineral constituents – kaolinite, mica and quartz. In addition, there are other minerals (e.g. siderite and carbonaceous clays) together with lignite, silt and sand adding to the variable characteristics of the clays and their market applications. The wide variation both in mineral composition and in the size of the clay particles has resulted in different characteristics, both from basin to basin and for individual clay seams within a basin. This degree of variation is an important attribute of the demand for Devon's and Dorset's ball clay output.
- 4.1.3 Although ball clays are found in other parts of the world, they are generally very rare minerals because of the threefold sequence of events leading to their formation: weathering of certain rocks, transportation, and deposition in still fresh water. Other known deposits of ball clay located in economic quantities include Germany, USA, Ukraine and the Far East. While other minerals such as aggregates are capable of being substituted to some degree by alternative materials, a review of the economic importance of ball clay² concluded that "there are few, if any, viable alternatives to the UK ball clay component in the UK and EU sanitaryware ceramics industry".
- 4.1.4 Both of the ball clay basins within Devon are located on the Sticklepath fault that crosses the county from north west to south east. The Bovey Basin ball clay resource has a maximum depth of around 1,100 metres and extends over 32 km², including land beneath existing settlements and within Dartmoor National Park. Around 875 hectares within the Bovey Basin (all outside the National Park) has planning permission for ball clay extraction and associated development, including longer term working areas that are not presently operational.
- 4.1.5 Within the Bovey Basin, the productive Middle and Upper Bovey Formations have been divided into 'members' where it has been able to make slight distinctions in the material in the formation. In the absence of fossil material to classify and order beds, use is made of distinctive beds to identify strata e.g. the Parks bed in the Southacre member. The absence of evidence means that identification of workable deposit is dependent on identifying layers through chemical analysis, from exposed seams and borehole data.
- 4.1.6 As borehole data is very expensive to obtain, it is limited. Although there is quite a lot of information regarding deposits in the east of the Bovey Basin, there is limited information in the public domain regarding the largely unexplored areas to the west, although it is accepted all contain varying amounts of ball clay which may be economically viable.
- 4.1.7 Permitted reserves within the Bovey Basin were estimated in 2011 to be 44.7 million tonnes, equivalent to 136 years supply. However, the BGS Factsheet acknowledges that these figures "include a large range of ball clay qualities, with widely differing properties...the figures mask possible limited reserves of individual clay qualities that are essential for specific blends and

² 'Economic Importance of Ball Clay' (2001) *Report prepared for the Kaolin and Ball Clay Association and the Department of Trade and Industry*

applications”.

- 4.1.8 In addition to a small part of the Bovey Basin falling within Dartmoor National Park, the current and potential ball clay working areas within the Basin are constrained by their relationship with the South Hams Special Area of Conservation [SAC]. The SAC is designated primarily for its importance for Greater Horseshoe Bats, with much of the ball clay resource lying within the bats’ sustenance zone.

4.2 *Working of Ball Clay*

- 4.2.1 Ball clay production dates back to the 17th Century, and working until the middle of the 20th Century was small scale and by hand. The higher quality clays were often worked by underground methods in order to extract the best seams without needing to remove overburden. Mechanisation from the 1930s to 1970s mainly involved the use of pneumatic spades and dump trucks, with the industry remaining largely labour intensive. Since the 1980s, however, increased mechanisation and the use of hydraulic excavators have seen a reduction in the labour force.
- 4.2.2 Working of ball clay is carried out by hydraulic excavators, which remove the material from the quarry face. The quarries are large open pits that expose a number of different seams or beds of differing characteristics. This method of working results in each quarry possessing a number of faces being worked at any one time, with each having a long life.
- 4.2.3 In the Bovey Basin, the large number of separate workings has been aggregated into 21 modern operational units, of which nine are currently in use for clay extraction and/or tipping of waste arising from clay working. The remaining units are intended for longer-term working beyond the timescale of the current Devon Minerals Plan.

4.3 *Uses and Markets for Ball Clay*

- 4.3.1 Ball clay is used almost entirely as a raw material for ceramics, with around 80% of total sales being accounted for by sanitaryware, wall and floor tiles and tableware. Around 40% of ball clay is used for sanitaryware and this proportion is likely to increase. The clay is rarely used alone, but can be a vital ingredient in a particular product even where it may account for only a small proportion of the raw materials used.
- 4.3.2 The use of ball clay in the UK has traditionally been concentrated in the ceramics industry of Staffordshire. The demand for these clays, which currently account for about 10% of the total clay produced, is considered likely to either remain static or decline. The demand for remainder of the 160,000 tonnes remaining in the UK is also considered to be static.
- 4.3.3 However, much of the clay produced in Devon and Dorset is exported as indicated in Table 3.1. Exports to Europe account for 55% of exports, generally to the tile market and therefore very dependent on construction, and this market is also considered likely to be static in the plan period taking into account the decline over the short term. Sales to the traditional markets of Spain and Italy are being partially replaced to increasing sales to Turkey and Middle Eastern countries including Iran.

4.4 *Issues for Ball Clay in Dartmoor National Park*

- 4.4.1 Devon County Council commissioned the Bovey Basin Strategy³ in 2000 to provide a long term approach for future ball clay extraction, looking ahead to 2100. This strategy identifies potential working areas which include sites to the north and south of Coldeast close to the National Park boundary, but the National Park was not included within the scope of the strategy and it is assumed

³ Available [here](#)

that the ball clay industry is not reliant on the ball clay resource within the National Park to meet its foreseeable needs.

4.5 *Recommendations for Policy*

- 4.5.1 In the light of the international importance of the Bovey Basin ball clay resource, it would be prudent to safeguard that part within Dartmoor National Park from sterilisation by other forms of development, albeit with no presumption that planning permission would be given for extraction of the resource.

4.6 *China Clay*

- 4.6.1 China clay resources in the UK are limited to Cornwall and Devon, and are associated with the granite intrusions of those counties. The china clay, or kaolin, deposits are the result of the *in situ* alteration of feldspar in the granite by hydrothermal processes. The other main components of granite, mica and quartz, remain largely unaltered by this process, and form the main waste products.
- 4.6.2 The china clay resource on the edge of Dartmoor has lower iron and potash content than is the case in Cornwall, and a higher proportion of sales are for use in ceramics and speciality applications. Devon's clays also produce a significant output of calcined kaolin involving heating to enhance brightness.
- 4.6.3 The existing permissions in Devon (indicated in Figure 4.1) extend over an area of 1,183 hectares, which includes (currently) land within Dartmoor National Park. It includes permitted areas for the tipping of waste and processing of clays as well as extraction. The exploitable reserves are limited by the depth of working rather than depth of deposit.
- 4.6.4 Until 2007 two companies, Imerys and Sibelco, operated within planning permission areas granted in 1958 and in 1972 for a further 50 years of working. The permissions expire beyond the life of the emerging Minerals/Local Plans in Devon. In 2007, Imerys ceased working at Lee Moor and passed their workings to Sibelco who extract under royalty. Imerys retained control of the freehold and the processing plant for industrial grade kaolin at Coypool (Plymouth) and the kilns at Portworthy.
- 4.6.5 The main tipping areas were determined by the 1972 permission. Secondary aggregate production has reduced the need at present for any additional tipping allocation.
- 4.6.6 In 2000 the operators offered to not work the areas within Dartmoor National Park known as Areas X, Y and Z. The modification order is being led by the National Park Authority and will permanently extinguish working rights in the National Park.
- 4.6.7 Extraction takes place in three sites – Headon and Shaugh (operated by Sibelco) and Lee Moor (previously operated by Imerys, but now worked on a smaller scale by Sibelco). A number of planning permissions have been granted for working of clay and tipping of waste, and these are currently being reviewed under the ROMP procedure introduced by the Environment Act 1995. Processing is carried out at Headon and, to a more limited extent, Portworthy, and some clay has previously been piped to Coypool, on the edge of Plymouth, for drying.
- 4.6.8 Commercial reasons prevent the publication of a total figure for permitted reserves of china clay. However, sufficient proven reserves exist in and around the existing sites in Cornwall and Devon to sustain current rates of production, using existing technology, for at least 50 years, and therefore significantly beyond the timescale of Devon's emerging Minerals/Local Plans. One factor that may constrain the future working of these reserves is the availability of tipping space, as the reserves

may be sterilised unless additional tipping space is created for those waste materials not used for secondary aggregates.

4.7 *Working of China Clay*

- 4.7.1 China clay extraction is a complex process aimed at obtaining specific clay qualities from a variable source and refining it into a range of products each of consistent quality. The clay-bearing rock is exposed by the removal of overburden, which can vary in thickness from one to 15 metres. Extraction is then carried out, traditionally by hydraulic mining but recently also by dry mining.
- 4.7.2 Wet refining techniques are used to remove the smaller-sized waste particles that are mainly composed of very fine quartz and mica, leaving the china clay. At this stage, value can be added to the clay by a variety of processes designed to engineer the particle size and shape of the product, together with chemical bleaching to improve the material's whiteness.
- 4.7.3 The liquid clay is converted into a solid material by filtration, which produces a substance with a moisture content of 25%, and subsequently by thermal dryers to produce a clay with a moisture content of around 10%. The finished product is then sold as a powder or pellets.
- 4.7.4 The extraction and processing of china clay results in the production of very large quantities of waste materials, accounting for around 90% of quarried material. These large surface tips impact upon the landscape character of the area, particular in relation to the National Park. Although proportions will vary according to the nature of the deposit, the waste materials typically comprise 45% sand and 33% stent (the unkaolinised granite), with the remaining 22% being made up of overburden and micaceous residues. Disposal of the "stent" and sand has tended to be through the use of surface tips, as opportunities for the backfilling of excavated voids has been impractical. The mica residue is disposed of in large lagoons, where the mica settles out and the water is pumped off for reuse.
- 4.7.5 Sand and crushed rock resulting from china clay extraction are an increasingly important source of secondary aggregates, not least because they are exempt from the Aggregates Levy introduced in 2002.

4.8 *Uses and Markets for China Clay*

- 4.8.1 China clay's commercial value is based on its whiteness and its fine, but controllable, particle size, which affects fluidity, strength, plasticity and colour. These properties distinguish china clay from other kaolinitic clays produced in the UK such as ball clay and fireclay.
- 4.8.2 The major uses for china clay are paper, ceramics and 'performance minerals', with paper accounting for just under 50% of sales in 2008. Within the paper industry, UK-produced china clay's main role is now as a filler.
- 4.8.3 The ceramics industry accounted for around 30% of sales in 2008, with the main markets being in Europe, the Middle East and Asia. Speciality mineral applications include use as a filler in paint, rubber, plastics and other products, pharmaceuticals, white cement and glass fibre.
- 4.8.4 China clay has a relatively small and declining market in the UK due to the absence of a significant papermaking industry and the weakness of its whiteware ceramics industry. However, in 2008, 88% of the UK production of china clay was exported, mainly to Europe.

4.9 *Recommendations for Policy*

- 4.9.1 The commitment from the mineral operators not to work areas X, Y and Z removes the potential for china clay extraction and tipping to extend into the National Park and should be pursued as a matter of priority (lies outside of the Local Plan review process).

- 4.9.2 Given the scale of waste in surface tips, it is in the best interests of the National Park landscape to maximise the amount of material diverted from tip, or recovered from existing tips, as secondary aggregate. The National Park Authority should continue to work with Devon County Council as adjoining Minerals Planning Authority to maximise opportunities to divert waste from tip, and plan new or altered tip locations, profiles and vegetation with due regard given to the special qualities of the National Park.

4.10 *Metalliferous Minerals*

- 4.10.1 A wide range of metalliferous minerals have been worked within the Dartmoor granite mass and its metamorphic aureole in the past, including copper, tin, lead, zinc, silver, manganese, iron ores, pyrite, arsenic, tungsten, barytes, fluorspar and ochre.
- 4.10.2 While extraction of tungsten and tin recommenced at Drakelands Mine, to the south west of Dartmoor National Park, in 2015 and interest is being shown in several potential mine sites in Cornwall, there is no evidence of any likelihood of further exploitation of Dartmoor's remaining metalliferous mineral resources.
- 4.10.3 In June 2016, the British Geological Survey published a new profile report⁴ on lithium, a light metal with excellent electrical conductivity that is used for a range of purposes including batteries, ceramics, greases and air treatment. The report indicates that the most significant lithium source in the UK is associated with the granite intrusions of Cornwall and Devon. While the greatest potential for economic resources of lithium is identified as the St Austell and Tregonning/Godolphin granites in Cornwall, the Meldon Aplite in the north of Dartmoor is estimated to contain 45,500 tonnes of lithium. However, the report states that "it is unlikely...that it would ever be extracted because the orientation and narrow width of the dyke would cause open pit working to be expensive" while also noting its low grade and the constraint of National Park status.

4.11 *Aggregate Minerals and Building Stone*

- 4.11.1 Construction aggregates and building stone are considered together since, in the context of Dartmoor National Park, they are largely derived from the same rock types.
- 4.11.2 The only current source of land-won aggregates within the National Park is the limestone that is quarried at Linhay Hill near Ashburton, which is one of the four limestone quarries within Devon that account for 85% of the county's crushed rock aggregates. Linhay Hill Quarry also produces building stone and agricultural lime from the Chercombe Bridge Limestone, together with a range of products including asphalt and concrete. The limestone resource extends north eastwards from the quarry, and a planning application was submitted in 2016 for the lateral and vertical extension of the quarry to extend its life by around 50 years.
- 4.11.3 Occurrences of limestone elsewhere within the National Park are of limited extent and/or have previously been quarried, and are therefore not considered to have any future economic potential.
- 4.11.4 Igneous and metamorphic rocks were quarried on a large scale at Meldon Quarry until its mothballing in 2011, with some of its output transported by rail. The quarry retains its planning permission and therefore has the potential to reopen if market conditions warrant it. Elsewhere, development of new quarries for the working of granite or other igneous metamorphic rocks is unlikely, both for economic reasons and due to the high level of constraint that National Park status confers.

⁴ Available at <http://www.bgs.ac.uk/downloads/start.cfm?id=3100>

- 4.11.5 The 6th Devon Local Aggregate Assessment⁵ states that Devon has a crushed rock landbank of 48 years (to which reserves at Linhay Hill and Meldon Quarries contribute), indicating no pressing need for the development of new resources within the county in order to maintain the minimum landbank of 10 years. Paragraph 144 of the NPPF requires that planning authorities should “as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks”, and this is acknowledged in paragraph 2.4.4 of the Devon Minerals Plan.
- 4.11.6 Building stone is quarried from metamorphic slate at Yennadon Quarry and limestone at Linhay Hill, while small quantities of granite are obtained at Blackenstone with extant permissions remaining at Merrivale and Princetown.
- 4.11.7 The Strategic Stone Study published by English Heritage in 2012 identifies a wide range of building stones that have had significant use in Devon in the past, with the large majority no longer worked. Those occurring within Dartmoor National Park are listed below:
- Mid and Upper Devonian slates
 - Chercombe Bridge limestone
 - Teign Chert limestone
 - Milton Abbot Formation (Hurdwick Stone)
 - Lydford Formation slates
 - Crackington Formation sandstone
 - Dartmoor granite
 - Dolerite
- 4.11.8 Policy COR22 of the adopted Core Strategy allows for the small-scale working of building stone, recognising that the reopening of an old quarry is capable of having limited adverse impacts while potentially meeting a conservation requirement for the supply of stone for the maintenance of local character. The Design and the Built Environment Topic Paper notes the importance of the availability of suitable materials in the conservation of historic buildings and structures, and the development of a modern vernacular for Dartmoor National Park.
- 4.12 *Recommendations for Policy*
- 4.12.1 Minerals policy in the Local Plan should be positive towards opportunities for small scale building stone quarries which can support a positive conservation and design strategy for the National Park. A policy for Dartmoor may take a similar approach to Devon Minerals Plan policy M15 which refers directly to specific building stones which may be of value to the local area.

Devon Minerals Plan Policy M15: Supply of Building Stone

1. In recognition of the demand for natural building stones for use in maintaining and enhancing the character of the built environment, proposals for small-scale extraction of building stone, including the extension of an existing quarry or re-opening of a closed quarry, will be permitted where:
 - (a) the stone is identified as a key building stone in Table 6.1; or
 - (b) there is an identified need for the stone to maintain or enhance the fabric or character of individual buildings or settlements.
2. All proposals should be appropriate in nature, scale and intensity to the characteristics of the local area.

⁵ Available [here](#)

4.13 Other Minerals

- 4.13.1 While Dartmoor has a history of peat extraction for commercial and domestic use, no planning permission exists for this within the National Park, while the NPPF [paragraph 143] is clear that mineral planning authorities “should not identify new sites...for peat extraction”.
- 4.13.2 An area on the eastern side of Dartmoor National Park was included within the area that was offered for licensing for onshore oil and gas (including ‘shale gas’ – also known as ‘fracking’) exploration and extraction by the Department for Energy and Climate Change in its 14th licensing round in 2014. However, no licence applications were made for any part of Devon, and the geology of Dartmoor and its surrounding area are considered to be unsuitable for the presence of any form of oil or gas in economic quantities. Whilst it is considered that such development would not be appropriate in the National Park, general minerals policy will preclude this type of development by nature of its scale and type, thus specific reference (particularly in the context of the likelihood there is no economic likelihood of development being considered) is not necessary.

5 Minerals Conditions, Restoration and Aftercare

- 5.1.1 The life-cycle of a quarry typically follows the following stages, although these can overlap if phased working takes place:
- **Exploration** to prove the existence, extent and economic viability of a mineral resource and to inform quarry design. Methods of exploration include drilling of boreholes, trial pits and seismic surveys, with much of this work being permitted development.
 - **Site preparation** involving all activities that are necessary before the extraction of the mineral can take place. The scope of these activities will vary across different sites, but typical examples include constructing the necessary site infrastructure, such as access roads, processing plant and site offices, as well as the removal of soil and overburden and their storage or disposal.
 - **Extraction** is the process of removing the minerals from the ground and preparing them for use. Different techniques will be used for this depending on the type of mineral, and may include blasting, excavation or use of a high pressure water jet. Once the mineral is removed from the ground, it then has to be processed. Again, this varies on the type of mineral, but can include crushing, screening, separation, refining, washing, drying and/or blending. Finally, different minerals produce varying amounts of solid and liquid waste that are deposited within or close to the quarry by backfilling voids, surface tips and settlement lagoons.
 - **Restoration and aftercare:** once the minerals have been extracted, the quarry will be restored to an agreed use, usually agriculture, forestry or amenity but (subject to the necessary planning permission) other after-uses are possible. The operator of the quarry is normally responsible for the maintenance and aftercare of the restored site for a number of years.
- 5.1.2 Current general Minerals Policy in the Local Plan is set out in the box below. It is important to consider the Dartmoor National Park minerals policies in the context of a wider local plan (i.e. somewhat different from upper tier authorities such as Devon County Council which will have a standalone Minerals Plan, without other associated general development management policies). Such Authorities may have a number of individual policies relating to issues such as landscape, green infrastructure, noise, dust etc. The requirement for any policy in the Dartmoor Local Plan should complement and not repeat other policy in the local plan on such issues. However it should make clear where these policies are relevant, and may identify issues or requirement which can be specific to minerals related development.

Current Minerals Plan Policy M4

Applications for new minerals workings; extension of existing workings; mineral waste tipping, recycling or re-use; and ancillary development, will be rigorously examined and determined having regard in particular to the following factors:

- (i) evidence of the presence of the mineral;
- (ii) the loss of agricultural land;
- (iii) the effects on the local environment, including the generation and routing of heavy lorry traffic, potential nuisance by noise, dust or vibration, and interference with, or pollution of, water supplies;
- (iv) the effect on landscape and on land with recognised conservation interest, including sites of nature conservation importance, and on Ancient Monuments and other archaeological remains and their settings;
- (v) the local, regional or national economic benefits of extracting the mineral;
- (vi) the local, regional or national need for the particular mineral, and alternative ways of meeting that need;
- (vii) the proposals by the applicant for the method of working, and for restoration to agriculture, forestry or other appropriate use (to include details for the aftercare necessary to ensure proper establishment to a condition suitable for that use);
- (viii) the effects of the proposal on flood risk;
- (ix) the effects of the proposal on the amenities of local residents;
- (x) the effects of the proposal on recreational use in the locality;
- (xi) the potential for mitigating adverse effects through the use of planning obligations.

If, in the light of these factors, a planning permission is granted under the terms of Policy M1, M2, M3 or M5 then conditions will be imposed, and legal obligations may be sought, to remove or reduce to an acceptable level any potential adverse effects which the examination of the proposal has identified in relation to the factors listed.

A condition removing permitted development rights will be imposed where there are compelling reasons to do so because of potential environmental damage in terms of the factors listed.

5.1.3 The impacts of mineral development that may pose a risk of significant harm, both directly and indirectly, to local communities, the environment and existing infrastructure include:

- (a) removal of surface or sub-surface assets of natural or cultural value;
- (b) noise, dust and vibration;
- (c) light pollution and a loss of privacy;
- (d) landscape change and visual intrusion;
- (e) disturbance of species;
- (f) traffic;
- (g) flood risk;
- (h) reduced availability or quality of natural resources including water, soils and the best and most versatile agricultural land;
- (i) contamination of land or water; and
- (j) land instability.

5.2 Recommendations

The Dartmoor National Park Local Plan should include a general minerals policy which sets out key requirements in relation minerals development management and conditions. This policy might also include relevant consideration or requirements relating to restoration and aftercare.

6 Mineral Safeguarding

6.1 *Relevant Policy and Local Approach*

- 6.1.1 The saved Policy M6 of the Dartmoor National Park Minerals Local Plan presumes against development in Mineral Consultation Areas [MCAs] that would be incompatible with mineral working and associated operations. MCAs are defined on the Policies Map for the following quarries or mineral resources:
- Meldon Quarry
 - Linhay Hill Quarry and the adjoining limestone resource to the north east
 - Blackaller Quarry at Drewsteignton
 - Lee Moor china clay permissions within the National Park
- 6.1.2 Paragraph 143 of the NPPF requires that local planning authorities should “define Mineral Safeguarding Areas and adopt appropriate policies” to ensure that mineral resources of national and local significance are not sterilised by other forms of development. Safeguarding is also advocated for facilities for the movement of minerals by rail or water, and for sites for the manufacture of mineral-derived products such as concrete and asphalt, together with processing of secondary and recycled materials.
- 6.1.3 The Planning Practice Guidance for minerals adds greater context and information to the NPPF and advocates a systematic approach to safeguarding that:
- uses the best available information on the location of all mineral resources;
 - consults with the minerals industry, other local authorities, local communities and other relevant interests to define Mineral Safeguarding Areas;
 - sets out Mineral Safeguarding Areas on the Local Plan policies map and defines Mineral Consultation Areas; and
 - adopts clear development management policies which set out how proposals for non-minerals development in Minerals Safeguarding Areas will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource.
- 6.1.4 To assist mineral planning authorities in identifying resources for safeguarding, the British Geological Survey [BGS] has published mineral resource maps and accompanying report for each county, with Devon’s published in 2006⁶. Devon County Council subsequently commissioned Jacobs to undertake a detailed review of aggregate mineral resources⁷, including those found within Dartmoor National Park, as it considered that the BGS report provided insufficient detail on which to base robust decisions on the selection of resources for safeguarding.
- 6.1.5 To develop a systematic approach that coordinates mineral safeguarding policy across the Devon mineral planning authorities, ‘Minerals Topic Paper 2: Safeguarding Mineral Resources & Infrastructure’⁸ was published jointly by Dartmoor National Park Authority, Devon County Council, Plymouth City Council and Torbay Council in January 2016. Reference should be made to the Topic Paper for a full account of the joint approach, which used a range of criteria and a simple ‘traffic light’ scoring system.

6.2 *Review of Dartmoor Mineral Resources*

⁶ BGS Devon [report](#) and [maps](#)

⁷ Jacobs [report](#) and [maps](#)

⁸ Available [here](#)

6.2.1 The safeguarding Topic Paper reviewed a wide range of industrial, aggregate, building stone and other resources occurring within Devon and provided detailed discussion of their economic potential and justification for safeguarding. Table 4.1 outlines the approach proposed in the Topic Paper for the mineral resources that are present within Dartmoor National Park.

Category	Resource	Dartmoor Quarries	Proposed Approach to Safeguarding
Industrial Minerals	Ball Clay	Bovey Basin	Safeguard the full extent of the resource, including mineral planning permissions
	China Clay	Lee Moor	Safeguard the full extent of existing mineral planning permissions plus potential future extensions identified by operator (excluding areas currently or proposed to be the subject of legal agreements not to work)
Sand & Gravel	River Terrace Gravels		Not to be safeguarded
Crushed Rock	Devonian Limestone	Linhay Hill	Safeguard the full extent of the resource, including mineral planning permissions
	Carboniferous Chert	Meldon (inactive) Blackaller (inactive)	Not to be safeguarded
	Ashton Shale		Not to be safeguarded
	Crackington Formation		Safeguard the full extent of existing mineral planning permissions [none within Dartmoor National Park]
	Granite		Safeguard the full extent of existing mineral planning permissions
	Metamorphic Rocks	Meldon (inactive)	Safeguard the full extent of existing mineral planning permissions
	Basic Igneous Rocks		Safeguard the full extent of existing mineral planning permissions
Building Stone	Various	Blackenstone Yennadon Blackaller (inactive) Meldon (inactive) Merrivale (inactive) Prison Quarry (inactive)	Safeguard the full extent of existing mineral planning permissions
Other Minerals	Peat	None	Not to be safeguarded

Table 1. Approach to Safeguarding of Dartmoor Mineral Resources

6.2.2 As indicated in Table 4.1, with the exception of Ball Clay and Devonian Limestone where the full extent of the resource is proposed to be safeguarded, the safeguarding of mineral resources would be limited to existing mineral planning permissions.

6.2.3 In the case of china clay, the proposed approach is subject to the caveat that areas which are the subject of current or proposed legal agreements requiring no further working would be excluded from Mineral Safeguarding Areas, and Areas X, Y and Z within the National Park would therefore not be safeguarded.

6.3 Recommendations for Policy

6.3.1 Based on the approach summarised in Table 1, the following Mineral Safeguarding Areas are proposed:

- Linhay Hill Quarry [to include the limestone resource to the north east of the existing quarry];
- Meldon Quarry [planning permission area]
- Yennadon Quarry [planning permission area]
- Blackenstone Quarry [planning permission area]
- Merrivale Quarry [planning permission area]
- Prison Quarry [planning permission area]
- Bovey Basin ball clay resource

6.3.2 While Blackaller Quarry is currently defined as an MCA, the site is considered to have permanently closed and therefore no longer warrants safeguarding.

7 Historic Minerals Permissions

7.1 *Review of Old Minerals Permissions (ROMPs)*

7.1.1 The Environment Act 1995 introduced requirements for an initial review and updating of old mineral planning permissions, and for the periodic review of all mineral permissions thereafter, a process known as a ROMP. Guidance around the process is set out in Minerals Planning Guidance 14: Environment Act 1995: review of mineral planning permissions. Any ROMP applications considered by DNPA should be assessed in line with the current policy criteria set in the local plan and relevant national policy, in order to bring operations in line with current standards as necessary, and within the bounds of the ROMP process.

7.2 *Former mineral workings*

7.2.1 Research undertaken for the Council for National Parks and Friends of the Peak District in 2004⁹ (as the last DNPA Minerals Plan was completed) sought to explore in more detail the legacy of historic minerals permissions in National Parks.

7.2.2 The 2004 Minerals Local Plan described that DNPA had undertaken a review of mineral working sites under the provisions of Section 3 of the 1981 Town and Country Planning (Minerals) Act. The review covered 'duty' sites where the winning and working of minerals is being, or has been, carried out at any time during the 5 years period preceding the date of the beginning of the review (which commenced on 30 June 1986), or which are authorised by planning permissions but have not yet begun. It also covered 'non-duty' sites where working ceased more than 5 years before commencement of the review, but where a planning permission remained valid.

7.2.3 The general conclusions from the review at that point in time, were:

- (i) that the most worrying aspect of the situation is the existence of old planning permissions covering large areas where, although there is no known intention to resume workings and in most cases little environmental damage from past working, any future extraction would be extremely damaging to National Park interests;
- (ii) that in the china clay area there is little to be gained at present from seeking minor changes to existing or permitted situations through the formal review process, as the operators are receptive to suggestions for such improvements anyway. Research into restoration techniques could have led to a reassessment of the position, but efforts should be made to postpone or modify the implementation of permissions in areas where operations have not yet commenced;
- (iii) that many abandoned workings have a value as industrial archaeology, and often as habitats and interesting incidents in the landscape, which should not be compromised by seeking restoration;

⁹ OLD MINERAL PERMISSIONS AND NATIONAL PARKS - A report by the Council for National Parks and Friends of the Peak District (2004)

- (iv) that more can be achieved through the inclusion of appropriate conditions and S106 Agreements, in relation to any new planning permissions than can be achieved through the review process. The sites with recent permissions need no action other than monitoring of conditions imposed; and at sites where applications are expected it is not worth initiating procedures under the review process;
- (v) that there are some sites working under old and unsatisfactory planning permissions which do require action to update conditions and reduce any present or potential adverse effect on the National Park.

7.2.4 Priorities for action were agreed as follows at the time:

- (i) the making of Prohibition Orders preventing resumption of working at: Great Rock Mine, Hennock; Scatter Rock Quarry, Christow; Blackenstone Quarry, Bridford; Kelly Mine, Lustleigh; Brisworthy Clay Works, Cadover Bridge; Shaugh Bridge Clay Works, Shaugh Prior;
- (ii) discussions with the china clay companies of possibilities for long term protection of land subject to existing unimplemented planning permission, and of the implementation of research findings on the restoration of waste disposal areas;
- (iii) negotiations and, if necessary, Modification or Suspension Orders to secure environmental improvements and up-to-date conditions at: Blackaller Quarry, Drewsteignton; Higher Longford Quarry, near Tavistock.

7.2.5 Prohibition Orders were subsequently confirmed at Great Rock Mine, Kelly Mine and Scatter Rock Quarry. An Order relating to Blackenstone Quarry was confirmed by the Secretary of State following a public inquiry, (though operations subsequently continued in line with a planning application for the site, and a ROMP for the site has since been carried out. Work on other priorities was at the time proceeding or planned.

7.2.6 Since the above review –

- Operations continued at Blackenstone Quarry
- There are no longer operations at Blackaller Quarry, and Higher Longford
- Through a ROMP for the wider site progress has been made towards the permanent removal of working rights relating to Areas X, Y and Z and Lee Moor/Shaugh Quarries
- An application has been submitted for the continued operations and extension of Yennadon Quarry, Dousland

7.2.7 It is not currently considered that, beyond the completion of the modification order relating to areas X, Y and Z, and in the context of limited resources for proactive minerals work, there are any further matters relating to historic minerals permissions which need addressing at this point in time.

Regulation 18 draft consultation: Revisions

7.2.8 Following the consultation on the Regulation 18 (first draft) Local Plan it was identified that a potential conflict in wording existed in policy 6.1 (new or extended minerals operations). The use of 'major' and 'small scale' presented a potential conflict in interpretation from the ambiguity of the term 'major' insofar as a small scale development may also be 'major' in respect of the National Park major development test. In order to resolve this it is recommended that the term 'large scale' is used rather than 'major'. This alteration would recognise the intended thrust of the policy, whilst still affording 'major' development the necessary tests through Strategic Policy 1.5. It would also recognise that a quarry scheme may be of a large scale, without necessarily being 'major' in the sense of policy 1.5. To further aid interpretation, a consideration of how the term 'small scale' is intended to be judged, should be added to the Glossary.

Regulation 19 draft consultation: Revisions

7.2.9 Following the consultation on the Regulation 19 (revised draft) Local Plan, further comments were received regarding the use of the terms 'large scale' and 'major' in policy 6.1(2). It is acknowledged

that the alterations described above in respect of Regulation 18 provided a solution in response to the conflict between the terms 'major' and 'small/large scale', insofar as they were not mutually exclusive.

- 7.2.10 However it is acknowledged that what then potentially arises is a conflict between 6.1(2) and the major development test (NPPF) and policy 1.5(2). Arguably, it is not necessary for the policy to add the 'large/small scale' criteria, in addition to the Major Development policy test, and instead a potential solution may be to allow the Major Development policy to take precedence in respect of clause 1, avoiding conflict and duplication, and removing the term small scale from clauses 2 and 3, to effectively have these as the relevant clauses for anything 'non-major'.
- 7.2.11 The conflict is not considered to be fundamental to policy soundness, and DNPA would be minded to seek an open discussion around appropriate minor modifications at the Inspector's consideration, in order to address the matters raised at consultation.

Concluding minerals recommendations

It is considered that it would be appropriate for the Local Plan to include three minerals policies with the scope as follows in outline:

- **New minerals development**

- Major minerals development (as defined) will not be approved, other than in exceptional circumstances
 - The expansion of existing quarries, or extension of time for minerals operations will be carefully assessed, with great weight given to the National Parks special qualities, and whether the proposal would be consistent with other relevant local plan policies
 - Quarrying of traditional building stone will be permitted where there is an identified local need for the stone which will conserve, maintain or enhance the fabric or character of the National Park, and where this would be consistent with other relevant local plan policies

- **Minerals operations**

- Applications for new minerals workings, extension of existing workings, mineral waste disposal, recycling or re-use, and ancillary development will be rigorously examined and determined having regard in particular to the following factors:
 - evidence of the presence of the mineral;
 - the need for the mineral, at a local, regional or national level;
 - the proposed working methods;
 - the proposed restoration and aftercare;
 - noise, dust and vibration;
 - light pollution and a loss of privacy;
 - cultural heritage;
 - landscape change and visual intrusion;
 - disturbance of habitats and species;
 - traffic;
 - flood risk;
 - reduced availability or quality of natural resources including water, soils and the best and most versatile agricultural land;
 - contamination of land or water; and
 - land instability.

- **Minerals safeguarding**

- Important mineral resources and reserves, including associated transport and processing facilities as identified on the Policies Map shall be safeguarded from development which, by virtue of its siting or nature, would be incompatible with the site or operation.

8 Waste Development

8.1 Background

- 8.1.1 Dartmoor National Park Authority is the Waste Planning Authority for the National Park, with adopted policies in its 2004 Waste Plan and 2008 Core Strategy. Devon County Council is the Waste Planning Authority for its administrative area, which covers Devon excluding Plymouth, Torbay, Dartmoor and Exmoor.

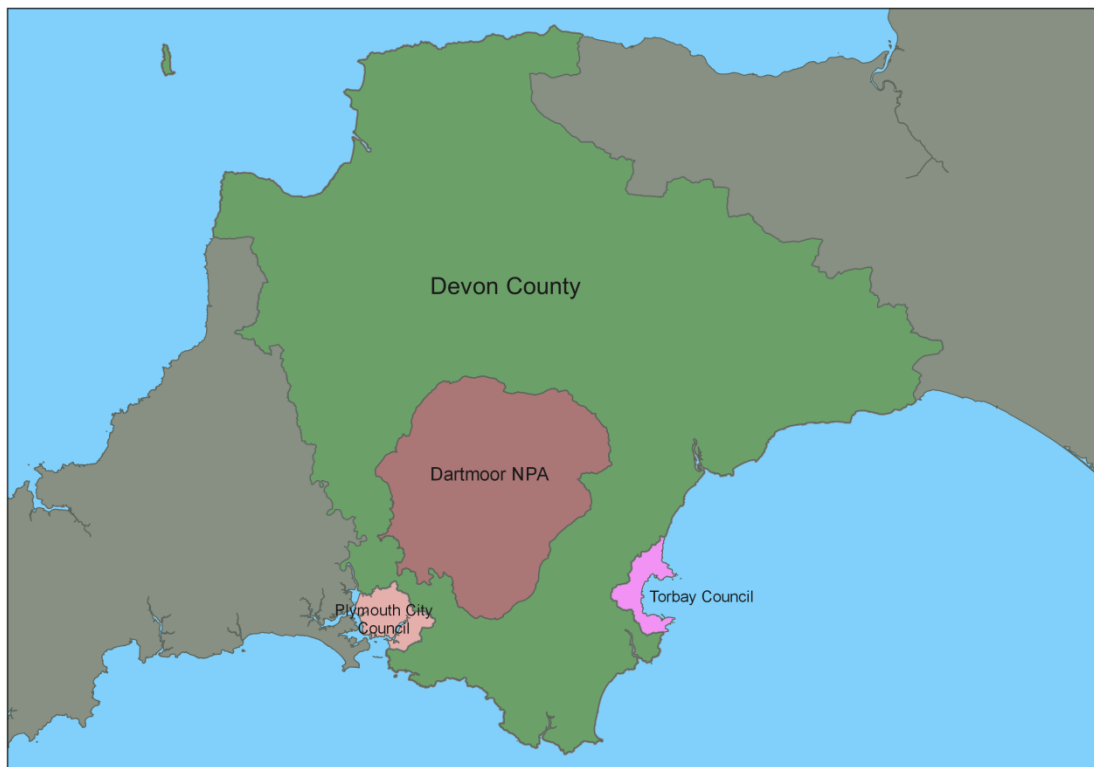


Figure 2: The Dartmoor Waste Plan Area and adjoining Waste Planning Authorities

- 8.1.2 Despite the distinction in roles and responsibilities of different authorities, there is a clear cross boundary waste relationship between Dartmoor National Park Authority's and Devon County Council's planning areas in terms of waste management and waste planning.
- 8.1.3 In the development of the Devon Waste Plan, data which included waste generated in Dartmoor and Exmoor National Parks was utilised, as no separate data sources were available for those areas. However, an approach was adopted which considered that the low levels of population and economic activity within the National Parks in comparison with the remainder of Devon means that waste generated within them will only form a small proportion of the total amount, and the effect on

the data is therefore insignificant. As such, waste arising within the National Parks have already been planned for through the Devon Waste Plan, which was adopted in December 2014. Despite this, it is necessary and appropriate to consider waste as part of the current review of the Dartmoor Local Plan.

8.2 *Data sources*

- 8.2.1 The availability of up to date, locally specific data varies considerably across waste streams and this has presented a challenge in developing this aspect of the evidence base. A pragmatic approach has been adopted and the work undertaken has utilised the best data available from the most appropriate sources. It has drawn heavily upon the work undertaken in the development of the Devon Waste Plan, specifically Waste Topic Paper 1: Current and future waste generation and management methods.
- 8.2.2 The sources of all data used in this report have been referenced and any assumptions or shortfalls outlined, thus providing transparency to all stakeholders. The shortage of data in some areas has also meant that it has been necessary to make a number of informed assumptions in some aspects of this work. These too have been identified within this report.

9 **Dartmoor's current waste management**

9.1 *Introduction*

- 9.1.1 Establishing the current waste situation within Dartmoor provides a useful starting point from which to consider how the Local Plan should address waste management. There are four major waste streams that the Local Plan must consider. These are:
- Local Authority Collected Waste (LACW) (formerly referred to as Municipal)
 - Solid Waste (MSW);
 - Commercial and Industrial Waste (CIW);
 - Construction, Demolition and Excavation Waste (CDEW) and;
 - Hazardous Waste.
- 9.1.2 As highlighted above, due to the way in which data is collected, there is limited information available regarding waste production within the National Park. However, waste generation has been considered in a Devon context and where possible, an estimate for Dartmoor has been established.
- 9.1.3 In addition the Local Plan must also consider agricultural waste, waste water, and radioactive waste, although these present less of an issue for the Local Plan due to the low volumes produced in the National Park or the limited scope for their management. As such these waste streams are not discussed here.

9.2 *Waste Management*

- 9.2.1 Waste can be managed in a number of ways and this varies across the different types of waste. The waste hierarchy sets out the sequential approach which should be followed in order to achieve sustainable waste management.
- The 'Prevention' level of the hierarchy does not require the provision of waste management infrastructure as it entails the avoidance of materials becoming waste. Preparation of waste for

reuse is undertaken in a variety of situations, some of which are regarded as waste management facilities, such as household waste recycling centres and vehicle dismantlers, while others include charity shops, community-based operations and industrial operations.

- 'Recycling' within the waste hierarchy encompasses a range of activities involving the separation, sorting, bulking up and transfer of waste in preparation for recycling, as well as the actual process of recycling. The 'recycling' level of the hierarchy also encompasses composting of organic waste.
- The term 'other recovery' covers processes that secure value from waste materials other than through recycling. These fall under two main headings:
 - Materials recovery – the mechanical sorting or other treatment of waste to recover reusable and recyclable materials.
 - Energy recovery – the use of biological or thermal treatment to generate energy from waste materials. This energy can be in the form of electricity, heat, biogas and/or other fuels.
- The final level of the waste hierarchy, disposal, primarily involves the landfilling of waste, but can also encompass thermal treatment if no energy recovery occurs. Landfill is the controlled deposit of waste to land, often taking place in areas of natural depression or in man-made voids such as quarries. Inert landfill sites can only dispose of waste that will not decompose or release pollutants and that does not present a significant pollution risk, and generally handle construction, demolition and excavation waste. A non-hazardous landfill site is able to dispose of all types of waste other than hazardous materials, including the biodegradable and mixed waste collected by local authorities and from businesses. Hazardous waste landfill sites are less common than inert and non-hazardous sites, but play an important role in ensuring the safe disposal of waste that is harmful to human or animal health, either immediately or over an extended period of time.

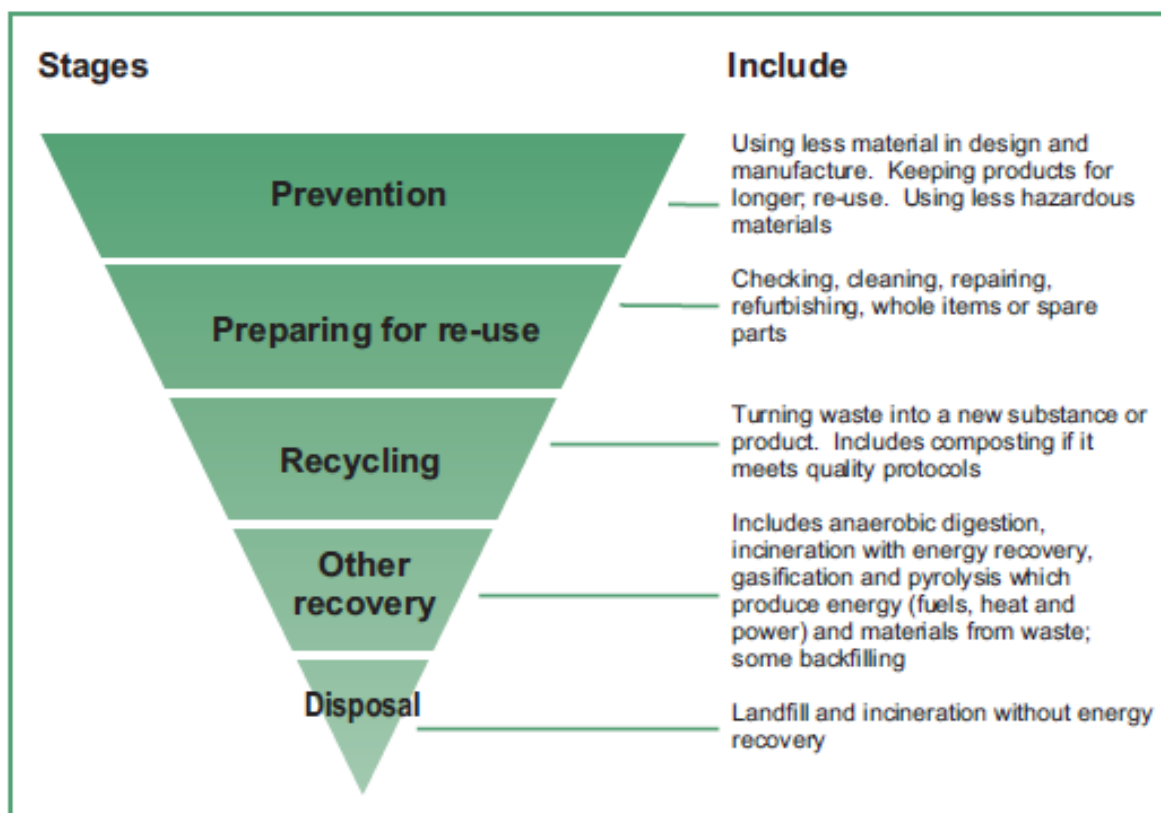


Figure 3 - Waste hierarchy

9.2.2 The following sections of this report outline the current waste situation addressing each waste stream in turn.

9.3 *Local Authority Collected Waste (LACW)*

9.3.1 LACW refers to all waste collected by the Local Authority. This will include waste collected from households and some businesses within the area and also a non-municipal fraction, such as construction and demolition waste.

9.3.2 In two tier authority areas like Devon, district councils fulfil the role of Waste Collection Authority (WCA). Consequently in Dartmoor, there are four WCAs (Mid Devon District Council, South Hams District Council, Teignbridge District Council and West Devon Borough Council). Each provides different collection arrangements for different materials. This particularly affects the waste which is collected for recycling.

9.3.3 The way waste is collected can have an impact upon the way in which it can be managed. This can have spatial implications in terms of the type of sites required within a particular area. Devon County Council as Waste Disposal Authority (WDA) has a responsibility to dispose of all of the LACW that is collected regardless of the manner in which this is undertaken.

9.3.4 Data is not collected at a national park level in relation to the amount of LACW which is currently generated. However, it has been possible to estimate the amount of LACW generated in Dartmoor by looking at the average amount of waste generated per household across Devon and relating this to the number of households in Dartmoor.

9.3.5 In 2016/17, 379,000¹⁰ tonnes of LACW was produced in Devon and a recycling rate of 54.3% was achieved across the county. The average amount of waste produced per household for Devon was 1042kg (1.042 tonnes).

9.3.6 The census indicates that there were 14,279 households within Dartmoor in 2011. Housing completion data for Dartmoor indicates that 224 homes were built between 2011/12 and 2015/16. Combining this data has enabled a more up to date estimate of total households in Dartmoor. The estimate for 2015/16 is 14,503 households.

9.3.7 By considering the average amount of waste produced per household in Devon alongside the total number existing households within Dartmoor, it is estimated that in 2016/17 15,100¹¹ tonnes of LACW was produced in Dartmoor. Note this does not include waste received at recycling centres, however, there are no recycling centres located within Dartmoor.

9.4 *Commercial and Industrial Waste (CIW)*

9.4.1 It is widely recognised that local data availability in relation to CIW is notoriously poor. In the development of the Devon Waste Plan, a Defra study from 2010 was used to establish a 2009 baseline figure for Devon WPA. The study indicated that the amount of CIW generated in Devon during 2009 was approximately 455,000 tonnes. The recycling rate for CIW was estimated at 55% at that time. This study is now a number of years old and has not been repeated.

9.4.2 More recently, Defra has developed a national methodology for calculating CIW arisings. This methodology has been used annually since 2012 and the latest published data provides figures up

¹⁰ Figure rounded from 378,777.

¹¹ Figure rounded from 15,112.

to 2014¹². Figures are displayed in Table 1 below.

	Commercial	Industrial	Total CIW
2012	12.9	11.3	24.2
2013	11.6	10.4	21.9
2014	11.1	8.7	19.8

Table 2: Total CIW produced in England 2012-2014 (million tonnes)

- 9.4.3 Latest data for businesses from the Inter-departmental Business Register (IDBR13) indicates that there are 30,498 VAT registered businesses in Devon and 875 with postcodes in Dartmoor National Park (2016 data).
- 9.4.4 Taking business demographic numbers from ONS for 2014 for all of Devon, the number of businesses has increased by 2.86%. Subtracting this proportion from the 2016 figure for Dartmoor, the estimated number of businesses within Dartmoor for 2014 would be 850, so similar to the current level. In England in 2014 there were 2,235,345 VAT registered businesses.
- 9.4.5 Using these figures, it is possible to establish that the businesses located in Dartmoor represent 0.04% of the total VAT registered businesses in England. Applying 0.04% to the total CIW produced in England in 2014 results in a CIW waste estimate for Dartmoor of 7,900¹⁴ tonnes. In the wider context of the total waste produced in Devon, this represents a very small proportion.
- 9.4.6 The methodology outlined above provides an estimate of CIW using the most recently available data. Whilst it is considered to be a reasonable approach, it should be recognised that the approach assumes the businesses on Dartmoor are typical of those across England as a whole. It may be that due to the nature of the National Park, the business sectors present within Dartmoor may produce less waste than typically produced across the country as a whole thus the figure may be an overestimate.

9.5 Construction, Demolition and Excavation Waste (CDEW)

- 9.5.1 Like CIW, it is widely recognised that data availability for CDEW at a local level is poor. Collection of data at a national level has improved over recent years. The latest national dataset available is from 2014¹⁵. Figures for England are presented in Table 3 below.

¹² Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593040/UK_statsonwaste_statsnotice_Dec2016_FINALv2_2.pdf

¹³ Available at:

<https://www.ons.gov.uk/aboutus/whatwedo/paidservices/interdepartmentalbusinessregisteridbr>

¹⁴ Figure rounded to the nearest hundred. Actual figure of 7,920.

¹⁵ Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593040/UK_statsonwaste_statsnotice_Dec2016_FINALv2_2.pdf

Year	Non-hazardous CDEW generated in England	Annual growth	% annual growth
2010	43.9	-	-
2011	44.1	0.2	0.5
2012	45.3	1.2	2.7
2013	46.3	1	2.2
2014	49.1	2.8	6.0

Table 3: Total non-hazardous CDEW produced in England 2010-2014 (million tonnes)

- 9.5.2 Whilst CDEW represents the largest waste stream in terms of tonnes produced, it also represents the waste stream with the highest recycling rate. Data indicates that the recycling (recovery) rate for 2014 was 91%.
- 9.5.3 Once again, the National Park designation impacts upon the amount of this type of waste that is produced as construction and demolition activities are limited in the Park. No local data is available, however, applying the same proportion as that used to estimate CIW (0.04% of England's total), this equates to 19,600¹⁶ tonnes.
- 9.5.4 Typically much of this waste stream is recycled on the site at which it arises, meaning the requirement for specific waste facilities is limited. The nature of the waste, and the limited way in which it can be treated (i.e. it cannot be managed through energy recovery due to its largely inert nature) also impacts upon the type of facilities required.
- 9.6 *Hazardous Waste*
- 9.6.1 Hazardous waste has specific characteristics and includes materials which are harmful to human health or the environment when they are produced or as they degrade over time. Hazardous waste often includes chemicals which have been produced during industrial and manufacturing processes. As such, the amount of hazardous waste that is produced on Dartmoor is not believed to be significant.
- 9.6.2 The Environment Agency publishes the hazardous waste data interrogator annually. Using this database it is possible to identify the amount of hazardous waste arising at WPA level. The most recent data available is from 2015. This shows 38,722 tonnes of hazardous waste arose in Devon during that year.
- 9.6.3 Once again, data for businesses from the Inter-departmental Business Register (IDBR¹⁷) indicates that there are 30,498 VAT registered businesses in Devon and 875 with postcodes in Dartmoor National Park (2016 data).
- 9.6.4 Therefore businesses in Dartmoor represent 2.86% of the wider Devon total. Applying this percentage to the hazardous waste total for Devon, it is reasonable to estimate that in the region of 1,100¹⁸ tonnes of hazardous waste was produced in Dartmoor in 2015. This is an insignificant quantity with limited implications upon waste facilities, especially as this waste stream is typically

¹⁶ Figure rounded to the nearest hundred. Actual figure 19,640

¹⁷ <https://www.ons.gov.uk/aboutus/whatwedo/paidservices/interdepartmentalbusinessregisteridbr>

¹⁸ Figure rounded to the nearest hundred. Actual figure of 1,107 tonnes.

managed at a regional level due to its specialist nature.

9.7 Summary of existing waste generation in Dartmoor

- 9.7.1 The preceding section of this paper has outlined the estimated amounts of waste generated in Dartmoor across the four main waste streams. A summary is provided in Table 4. This provides a valuable starting point for considering how waste volumes may change over the Plan period.

	Base year	Amount generated (estimate)
LACW	2016/17	15,100
CIW	2014	7,900
CDEW	2014	19,600
Hazardous	2015	1,100
TOTAL:		43,700

Table 4: Estimate of total waste currently generated in Dartmoor National Park

- 9.7.2 As anticipated, the level of waste currently generated in Dartmoor is minimal when considered in the wider county context. This is due to the relatively small population and low number of businesses present within the Park.

9.8 Current waste management in Dartmoor

- 9.8.1 There are limited existing waste management operations within Dartmoor National Park and those which are operating are generally small in scale. Whilst partly due to the low levels of waste which is generated within the National Park, the number and type of facilities present is largely driven by the protection afforded by national planning policy.

- 9.8.2 Paragraph 172 of the National Planning Policy Framework (NPPF) states:

“Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are important considerations in these areas, and should be given great weight in National Parks and the Broads”.

- 9.8.3 This level of policy protection means that a limited number of applications for waste management in the National Park are received and approved annually. A list of active waste management sites is set out in table 5, below. A list of applications determined for waste development is included in Appendix 4.
- 9.8.4 To inform the preparation of this report, a list of existing waste sites within Dartmoor has been compiled. The location of these sites, along with some basic information about the sites, is presented in the table and map below.

Location	Type
Linhay Hill Quarry, Ashburton	Inert recycling
Pitts Cleave Quarry, Tavistock	Inert recycling
Proper Job, Chagford	Community re-use and recycling
South Brent	Community composting
Units 3-4 Gidleys Meadow, Christow	Clinical waste transfer station
Wallaford, Buckfastleigh	Composting (Devon Waste Management Ltd)
Kiln Down, Christow	Composting (Devon Waste Management Ltd)
Pepperdon, Moretonhampstead	Composting (Devon Waste Management Ltd)
Bullaton, Bovey Tracey	Composting (Devon Waste Management Ltd)

Table 5. List of active waste management sites in Dartmoor National Park

10 The amount of waste generated in future

10.1 Waste Growth Scenarios

- 10.1.1 It is necessary to consider how the amount of waste generated within Dartmoor is likely to change in the future in order to consider the need for additional facilities.
- 10.1.2 In the development of the Devon Waste Plan, a series of waste growth scenarios were developed for the four main streams in order to consider how the amounts of waste generated in the future may change over time¹⁹. In addition to considering how the total amounts may change, the scenarios also considered how waste would be managed in terms of the recycling rates and landfill diversion rates which could be achieved. The key principles embedded within the scenarios were as follows:
- **Optimistic** – low rate of waste growth coupled with high recycling rates.
 - **Baseline** – a medium rate of waste growth and recycling rate.
 - **Pessimistic** – a high rate of waste growth coupled with low recycling.
- 10.1.3 Of the scenarios developed, the baseline (middle) scenario was considered the most appropriate basis on which to plan and was therefore presented in the Waste Plan.
- 10.1.4 These scenarios have been used as a starting point for considering how waste may change in Dartmoor over forthcoming years. However, the scenarios have been updated where new information is available. For example, a different approach to that used in the Devon Waste Plan has been developed to consider CDEW as more up to date information is now available.

10.1 Local Authority Collected Waste (LACW)

- 10.1.1 The growth rate set out in the baseline scenario for LACW was that waste would grow at 1% per annum from 2015/16 to 2030/31. The waste received at recycling centres would remain at existing levels.
- 10.1.2 When applying the 1% annual growth rate to the baseline LACW figure for Dartmoor set out in section 2.2 above, this equates to a total of 18,400²⁰ tonnes of LACW being produced in Dartmoor in 2036/37.

10.1 Commercial and Industrial Waste (CIW)

- 10.1.1 The baseline scenario for CIW set out in the Devon Waste Plan evidence is that waste will grow at 75% of the economic growth rate. This was to reflect the government objective to decouple the link between economic growth and waste growth. The Waste Plan evidence used the Cambridge Econometrics Local Economy Forecasting Model (LEFM) to consider how GVA across the county was likely to change across the Plan period.
- 10.1.2 For the purposes of this work, an updated set of LEFM GVA projections have been prepared. The latest projections have been extended to 2036 (previous projections only went to 2025 and were extrapolated to 2031). These are set out in Figure 1 below. It should be noted that the projections do not take into account any potential impact of Brexit, these impacts cannot be fully understood at this stage.

¹⁹ This was set out in Waste Topic Paper 1: Current and future waste generation and management methods.

²⁰ Figure rounded from 18,425

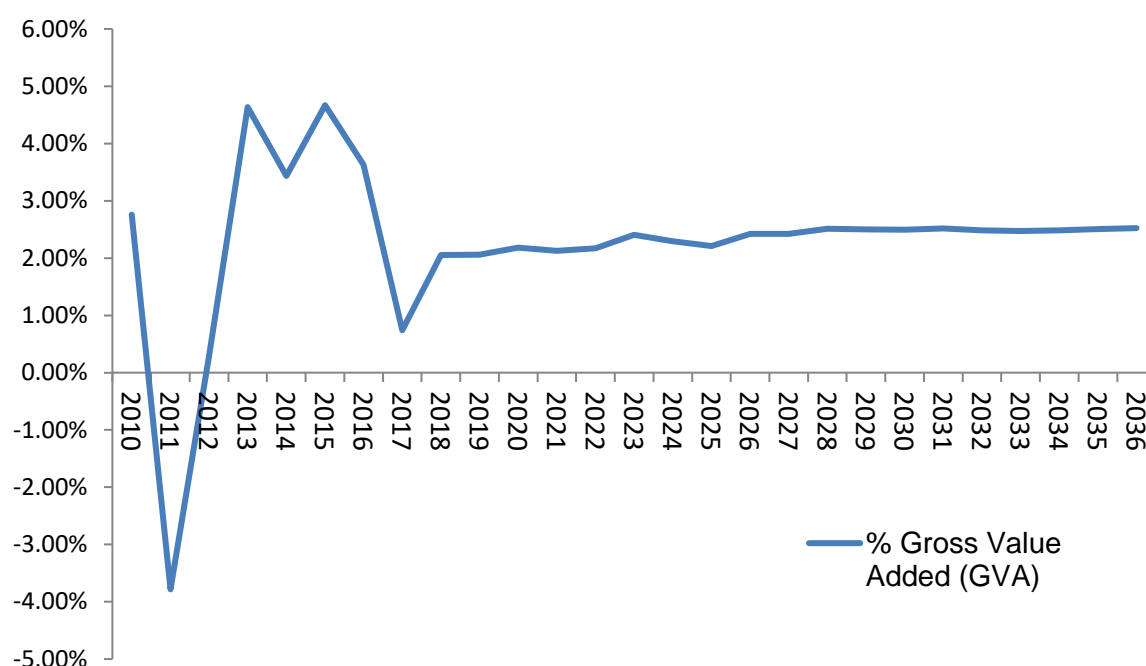


Figure 4: Projected GVA for Devon

10.1.3 When applying the baseline growth scenario (waste will grow at 75% of the rate of economic growth) to the updated projections, the outcome for this waste stream is that by 2036 12,000 tonnes of CIW will be produced in Dartmoor. Detailed projections are displayed in Appendix 1.

10.1 Construction, Demolition and Excavation Waste (CDEW)

10.1.1 As outlined in 9.5 above, collection of data at a national level for CDEW has improved over recent years. The latest national dataset available is from 2014²¹ and figures dating back to 2010 are available. These are presented in Table 6 below.

Year	Non-hazardous CDEW generated in England	Annual growth	% annual growth
2010	43.9	-	-
2011	44.1	0.2	0.5
2012	45.3	1.2	2.7
2013	46.3	1	2.2
2014	49.1	2.8	6.0

Table 6. Total non-hazardous CDEW produced in England 2010-2014 (million tonnes)

10.1.2 Using the data above, the average annual growth between 2011 and 2014 is 1.3 million tonnes. This represents an average % annual growth rate of 2.8%.

10.1.3 For the purposes of this work, it has been assumed that the average annual growth rate of 2.8% will continue for the remainder of the plan period. This equates to an annual figure of 36,000²² tonnes in

²¹ Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/593040/UK_statsonwaste_statsnotice_Dec2016_FINALv2_2.pdf

²² Figure rounded from 35,984.

2036.

10.2 Hazardous Waste

10.2.1 In developing the Devon Waste Plan, the same baseline scenario was adopted for hazardous waste as that produced for CIW, i.e. that waste would grow at 75% of the rate of economic growth. Applying this to the 2015 figure of 1,100, it is estimated that by 2036 1,600²³ tonnes of hazardous waste will be generated. The full projections are displayed in Appendix 3.

10.3 Summary of future waste generation in Dartmoor

10.3.1 The preceding section of this paper has outlined the projected amounts of waste to be generated in Dartmoor across the four main waste streams over forthcoming years. A summary is provided in Table 7.

	Year	Amount generated
LACW	2036/37	18,400
CIW	2036	12,000
CDEW	2036	36,000
Hazardous	2036	1,600
TOTAL:		68,000

Table 7. Total waste estimated to be generated in Dartmoor National Park

10.3.2 As expected, the level of waste anticipated to be generated in Dartmoor in the future is minimal when considered in the wider county context. This is due to the relatively small population and low number of businesses present within the National Park.

²³ Number rounded from 1587 tonnes.

11 How will waste be managed in future: implications for the Local Plan

11.1 Recycling targets

- 11.1.1 The role of recycling has increased significantly in waste management over recent decades as the value of materials and the cost of disposal has increased. In developing the Devon Waste Plan it was necessary to consider how the recycling rate would change over time and as such targets were set out for the main waste streams. This informed a consideration of the types of facilities which may be required in future. The recycling targets are summarised in Table 6 below. Note a recycling rate has not been established for hazardous waste and is therefore excluded from this table.

Waste Stream	Recycling target (baseline scenario)	Recycling tonnage in 2036	Waste left over after recycling
LACW	64%	11,800	6,600
CIW	64%	7,700	4,300
CDEW	90%	32,400	3,600

Table 8. Recycling targets as set out in the Devon Waste Plan baseline scenario

- 11.1.2 Existing and future arrangements for management of DNP waste
- 11.1.3 There are already various arrangements in place for the management of waste generated in Dartmoor. Existing waste management arrangements within the National Park have been set out in paragraph 9.8 above. There are numerous contracts in place for the collection of recyclable LACW and CIW generated in Dartmoor, although the actual recycling of this waste does not occur in Dartmoor. In addition to recycling, there are a small number of composting sites available within Dartmoor. It is envisaged these arrangements will remain in place over forthcoming years.
- 11.1.4 Some recycling and reuse of CDEW takes place on the site at which it arises in Dartmoor, and there are two facilities (Linhay Quarry at Ashburton and Pitts Cleave Quarry at Tavistock), which undertake recycling of inert CDEW.
- 11.1.5 Residual LACW generated in Dartmoor is managed at either the Exeter Marsh Barton or Plymouth Dockyard energy from waste plants. Contracts are in place for the management of this waste at these facilities over the full extent of the plan period. In relation to CIW, there is capacity at the Plymouth energy from waste facility to manage a proportion of CIW, although it has not been established if this waste currently goes to this facility.
- 11.2 *National policy context and implications for Dartmoor National Park*
- 11.2.1 As already highlighted, due to the position set out in the NPPF, even if there was a need for additional facilities to meet Dartmoor's waste management requirements, it is unlikely that these could be accommodated within the National Park unless they were small in scale and nature.
- 11.2.2 Furthermore, in the development of the Devon Waste Plan, it was agreed between the authorities that waste generated in the National Park would be accommodated in Devon. As such, the Devon Waste Plan makes appropriate policy provision for sufficient waste facilities to be delivered.

12 Local Plan waste policy recommendations

- 12.1.1 Informed by the context set out above, strategic waste management facilities would not be permitted as a matter of principle within the National Park, however, there is scope for the delivery of smaller scale, local facilities to be proposed and therefore there needs to be a suitable policy framework embedded to the Local Plan to allow for this.

Local Plan Policy COR23 (Core Strategy)

Proposals for the management of waste arising from within the Dartmoor National Park, including that generated by new development, will be considered in accordance with the waste hierarchy. Wherever possible, waste should be managed on the site where it arises. No waste disposal sites will be permitted unless there are significant environmental benefits for the Dartmoor National Park to be derived from their provision.

- 12.1.2 A similar aim is achieved through Devon Waste Plan Policy W3, which states “small-scale community-based reuse, recycling and composting facilities should be located within or close to the community they serve and/or at the point of the arising or final use of the waste materials. For all facilities, regard will be had to the merits of the use of previously-developed land or redundant buildings and/or co-location with other waste management facilities and the potential cumulative effects of doing so.”
- 12.1.3 A policy which offers appropriate encouragement to small scale community-based recycling and composting facilities may be appropriate.
- 12.1.4 It should also be considered the necessity to include, within a general policy, matters relating to conditions around the implementation of waste operations. Such a policy should be considered in the context of other general development management policies included in the local plan.
- 12.1.5 In addition, it will be necessary for the Local Plan to include a waste prevention policy in relation to major non waste related development proposals. This will ensure that non waste related development proposals consider sustainable waste management through the construction phase and also incorporate appropriate bin storage facilities to facilitate sustainable waste management throughout the lifetime of the development. Such a policy should be consistent with Policy W4: Waste Prevention of the adopted Devon Waste Plan.
- 12.1.6 Key factors which may therefore be considered appropriate within a general waste policy in the Local Plan would include:
- That applications for waste development will be considered against other relevant policies in the local plan, for example related to (though not limited to) special qualities, highways, amenity, and design.
 - That no waste management facilities or disposal sites will be permitted unless there are significant environmental benefits for the Dartmoor National Park to be derived from their provision
 - That small-scale community-based reuse, recycling and composting facilities will be supported, where they are located on a site within or adjoining the community they serve, and provide principally for waste arising in that community. Facilities should maximise the opportunity for the use of previously developed land.
 - That waste should be managed on the site where it arises, and that planning applications for major development (for 10 or more dwellings or buildings greater than 1000m²) must include a waste audit statement demonstrating how the demolition, construction and operational phases of the development will minimise the generation of waste and provide for the management of waste

in accordance with the waste hierarchy, including

- sustainable procurement in construction phase, and;
- methods for limiting the generation of waste and maximising recycling in construction phase

12.2 Conclusions

- 12.2.1 This report has set out the current and anticipated future levels of waste generation in Dartmoor National Park using the most up to date information available. It has also considered the national policy context and implications upon development within the National Park.
- 12.2.2 From the work outlined, the implications for Local Plan can be considered minimal. There is no need for waste sites to be identified, however, the policy framework established should enable small scale, local facilities at appropriate locations to come forward. Policy provision should also be made for waste prevention from non-waste related development.
- 12.2.3 This report forms part of the evidence base informing the direction of the Dartmoor Local Plan in relation to waste planning.

13 Major Development

- 13.1.1 The definition of major development in the context of large scale minerals and waste development is not clearly defined. Importantly though, it is not the statutory definition of Major as set out in the Town and Country Planning (Development Management Procedure), but refers to a scale of development which may be inappropriate in the context of the protected landscape in question. The National Planning Policy Framework footnote 55 states:

"For the purposes of paragraphs 172 and 173 [advising permission should be refused for major development in National Parks other than in exceptional circumstances], whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined."

- 13.1.2 The National Park Circular (2010) also provides context on Major Development, setting a stance which informed the preceding Planning Policy Guidance, and states *"Major development in or adjacent to the boundary of a Park can have a significant impact on the qualities for which they were designated. Government planning policy towards the Parks is that major development should not take place within a Park except in exceptional circumstances."*
- 13.1.3 Research undertaken recently by Sheffield Hallam University²⁴ on behalf of the Campaign for National Parks, the Campaign to Protect Rural England and the National Trust, explores in detail the subject of major development in National Parks. In respect of the definition of major development it cites Counsel advice that it is a *"matter of planning judgment to be decided by the decision maker"* taking into account whether *"the development has the potential to have a serious adverse impact on the natural beauty and recreational opportunities provided by a national park...by reason of its scale, character or nature"*. It goes on to conclude that it would be wrong in law to *"apply the definition of major development contained in the 2010 Order to paragraph 116 of the NPPF [2012]"*, or indeed apply *"any set of rigid criteria"* in defining major development. It notes that the advice also shifted the definition to include the relevance of the local context of the development, and recommended not restricting *"the definition to proposals that raise issues of national significance"*.

²⁴ <http://www.cnp.org.uk/SHU-planning-research> An Examination of the Development and Implementation of Planning Policy Relating to Major Development in the English and Welsh National Parks by Professor Lynn Crowe, Dr Catherine Hammond, and Ms Nikky Wilson (Department of the Natural and Built Environment, Sheffield Hallam University)

13.1.4 The Counsel advice referred to in the Sheffield Hallam Research is often referred to as the ‘Maurici Opinions’. James Maurici QC has provided advice to protected landscape and acted in respect of key decision relating to the Major Development test. The key aspects of the ‘Maurici Opinions’ can be summarised as follows:

- It is wrong to treat “*major development*” in NPPF as having meaning in the DMP Order
- It is wrong to apply any rigid or set criteria;
- Wrong to only consider it to apply only to developments raising issues of national significance.
- The determination of whether something is or is not “*major development*” is a matter of planning judgment for the decision-maker;
- The determination requires consideration of “*the proposal in question*” and “*the local context*”. So the very same type/scale of development may amount to “*major development*” in one NP, but not in another; or in one part of a NP, but not in another part of the same NP.
- *In making a determination as to whether the development is “major development”, the decision maker may consider whether the development has the potential to have a serious adverse impact on the natural beauty and recreational opportunities provided by a National Park or AONB by reason of its scale, character or nature”.*
- *The application of criteria such as whether the development is EIA development, whether it falls within Schedule 2 of the Town and Country Planning (Environmental Impact Assessment) Regulations 1999 (as amended), whether it is “major development” for the purposes of the 2010 Order, or whether it requires the submission of an appraisal/assessment of the likely traffic, health, retail implications of the proposal will all be relevant considerations, but will not determine the matter and may not even raise a presumption either way.*

13.1.5 In respect of the appropriateness of major development, the NPPF states the following in respect of National Parks:

Planning permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- *the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;*
- *the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and*
- *any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated (NPPF Para 172)*

13.1.6 A best practice recommendation of the Sheffield Hallam University report identifies specific recommendations which the Authority may consider in respect of revisions to the major development policy, drawing heavily from the Maurici Opinions, and case law. This includes, in particular, making reference to special qualities, and considering the language of how major development is defined. Whilst a definition may provide for clearer policy the need, according to the advice identified, to recognise that something which may be major in one national park, may not be in another, and even that something may be major in one part of the same national park, whilst not somewhere else. Whilst it seems helpful to define major for the purposes of paragraph 116 the subtleties of its application and the case by case nature of its consideration mean this may ultimately not be either

helpful or indeed appropriate.

- 13.1.7 Furthermore it is important to consider, on balance, the value of a major development policy within the Local Plan. Current policies effectively apply different thresholds. Policy COR22 of the Local Plan provides that ‘major mineral development’ will not be allowed unless “*after rigorous examination, it can be demonstrated that there is a national need which cannot reasonably be met in any other way, and which is sufficient to override the potential damage to the natural beauty, wildlife, cultural heritage or quiet enjoyment of the National Park*”.
- 13.1.8 Policy DMD2 of the Local Plan provides that planning permission “*will not be granted for Major Development unless after the most rigorous examination it can be demonstrated that there is an overriding public interest in permitting the development which outweighs National Park purposes and the development cannot reasonably be accommodated in any other way*”. The requirement for an ‘overriding public interest’ imposes a very strong policy test.
- 13.1.9 Local Plans should be consistent with National Policy and “plans should contain policies that are clearly written and unambiguous, so it is evident how a decision maker should react to development proposals” (NPPF para 16). This would normally mean that policy is not repeated, but may be readily justified where it adds detail, or adds weight in the local context. This significance of major development in the National Park context means it is justifiable that the security of a major development policy for the area is included in the Local Plan, rather than reliance upon national policy which may be subject to change beyond local control.
- 13.1.10 It is therefore considered to be of value to include a major development policy within the Local Plan. Importantly the strength of that policy should be consistent with the NPPF, but equally may justifiably reflect local circumstances. It may be of value, either within policy or within supporting text to include the key factors against which major development may be judged in each individual circumstance. This is not a prescriptive ‘test’, but may identify that the decision maker should consider whether a proposal is major development in relation to the nature, scale and location of the development in its context, and that the development itself and not its effects, are the appropriate factors to take into account.

First Draft (regulation 18) revision

- 13.1.11 Following consultation on the first draft Local Plan, it was evident that there remained a fair degree of confusion or misunderstanding relating to policy 1.5(1) (major development). In response to this it is recommended that further changes would be helpful in the policy and supporting text, In particular it may benefit understanding to have a clearer upfront definition making clear the distinction between major development in the context of the national park test, as opposed to the statutory general development order definition.
- 13.1.12 In addition to the changes to improve understanding, there is an opportunity to clarify the language around special qualities, to aid the judgement which is made and how it may relate to the character or nature of development. Furthermore it is recommended that the policy itself includes reference to how DNPA will make the judgement on whether a proposal is major development, and the way in which it will balance the consideration of such application.

13.2 Recommendations for policy

- 13.2.1 The Local Plan should include a single major development policy, which is consistent with the NPPF. Supporting text may seek to clarify that the following factors are likely to carry some weight in the decision-making process in relation to proposals which may be major development in the sense of NPPF para 172. It should set out the way in which DNPA will approach the consideration of whether a proposal is major development. It should also set out within the policy how applications for major

development will be assessed, including:

- Need
- Economic impact
- Consideration of alternative locations
- Impact upon special qualities and the ability to mitigate that impact

APPENDIX 1: CIW GROWTH PROJECTIONS

Source: Cambridge Econometrics LEFM, Nov 2016																							
Years	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Gross value added (GVA)	15050	15753	16325	16446	16783	17129	17503	17875	18263	18703	19132	19555	20028	20514	21029	21555	22093	22649	23212	23787	24377	24988	25619
Projected Change (% Growth)	3.43%	4.67%	3.63%	0.74%	2.05%	2.06%	2.18%	2.13%	2.17%	2.41%	2.30%	2.21%	2.42%	2.42%	2.51%	2.50%	2.49%	2.52%	2.48%	2.48%	2.48%	2.51%	2.52%
75% projected growth	2.6%	3.5%	2.7%	0.6%	1.5%	1.5%	1.6%	1.6%	1.6%	1.8%	1.7%	1.7%	1.8%	1.8%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Projected CIW	*7900	8177	8397	8448	8574	8703	8842	8984	9127	9292	9450	9610	9783	9959	10149	10341	10538	10738	10942	11150	11362	11578	11798

*Estimated amount of CIW produced in 2014.

APPENDIX 2: CDEW GROWTH PROJECTIONS

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
CDEW	*19600	20149	20713	21293	21889	22502	23132	23780	24446	25130	25834	26557	27301	28065	28851	29659	30489	31343	32220	33123	34050	35004	35984

*Estimated amount of CDEW produced in 2014.

APPENDIX 3: HAZARDOUS WASTE GROWTH PROJECTIONS

Source: Cambridge Econometrics LEFM, Nov 2016																						
Years	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Gross value added (GVA)	15753	16325	16446	16783	17129	17503	17875	18263	18703	19132	19555	20028	20514	21029	21555	22093	22649	23212	23787	24377	24988	25619
Projected Change (% Growth)	4.67%	3.63%	0.74%	2.05%	2.06%	2.18%	2.13%	2.17%	2.41%	2.30%	2.21%	2.42%	2.42%	2.51%	2.50%	2.49%	2.52%	2.48%	2.48%	2.48%	2.51%	2.52%
75% projected growth	3.5%	2.7%	0.6%	1.5%	1.5%	1.6%	1.6%	1.6%	1.8%	1.7%	1.7%	1.8%	1.8%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%
Projected Hazardous Waste	*1100	1130	1136	1154	1171	1190	1209	1228	1250	1271	1293	1316	1340	1365	1391	1418	1445	1472	1500	1529	1558	1587

*Estimated amount of hazardous waste produced in 2015.

APPENDIX 4:

Applications (determined) for Minerals and Waste Development in Dartmoor National Park 2008-2017

Application Code	Applicant	Location	Proposal	Decision	Decision Date	Development type
0255/10	South Brent Parish Council	Former DCC Depot, Brent Mill, South Brent	Change of use from storage depot to composting and re-use site	Grant Conditionally	08-Sep-10	15125: Waste heap
0386/12	Devon Waste Management Ltd	Kiln Down, Beechleigh Farm, Christow	Composting of green waste for on-farm use (retrospective)	Grant Conditionally	19-Sep-12	15125: Waste heap
0438/12	Devon Waste Management Ltd	Near Wallaford Cross, Buckfastleigh	Composting of green waste for on-farm use	Grant Conditionally	12-Dec-12	15125: Waste heap
0468/12	Devon Waste Management Ltd	Bullaton Farm, Bovey Tracey	Composting of green waste for on-farm use	Grant Conditionally	03-Dec-12	15125: Waste heap
0473/12	Devon Waste Management Ltd	Pepperdon Farm, Moretonhampstead	Composting of green waste for on-farm use	Grant Conditionally	22-Oct-12	15125: Waste heap
0304/08	Mr & Mrs C & L Darken	land at Sticklepath Garage, Sticklepath	Use of land as follows: (sui generis) 1. car repair garage; 2. repair and maintenance of trailers, plant and machinery; 3. storage and sales of new and reconditioned parts & spares in connection with 1 & 2 above; 4. storage of building materials and	Certificate issued	20-Jun-08	14123: Scrap and waste dealers place
0162/11	Proper Job Ltd	Proper Job Ltd, Crannafords Industrial Estate, Chagford	Installation of 18 portacabins (14 retrospective and 4 proposed)	Withdrawn	27-Apr-11	13513: Recycling Place
0025/12	Proper Job	Proper Job, Crannafords Industrial Estate, Chagford	Retrospective application for the siting of portacabins on land for purposes of storage and retail	Refused	18-Jul-12	13513: Recycling Place
0010/13	Proper Job Ltd	Proper Job Ltd, Crannafords Industrial Park, Chagford	Construction of a pole barn to enclose cabins used in connection with recycling facility	Grant Conditionally	14-May-13	13513: Recycling Place
0383/15	Proper Job Ltd	Market Field Recycling Centre, Chagford	Construction of a pole barn to cover existing portacabins	Grant Conditionally	22-Sep-15	13513: Recycling Place
0418/08	Yennadon Stone Ltd	site adj Yennadon Quarry, Iron Mine Lane, Dousland	Installation of four exploratory boreholes to investigate potential site for extension of existing quarry	Grant Conditionally	15-Sep-08	07151: Aggregate & Stone Handling Installation

Application Code	Applicant	Location	Proposal	Decision	Decision Date	Development type
0017/15	Mike Spray and Sons	Former PFS/HGV Training Centre, Marley Head, South Brent	Change of use of former petrol filling station for temporary storage, sorting/processing and recycling of inert material back into the market and erection of fence inside boundary for security purposes	Grant Conditionally	16-Apr-15	07140: Mineral working and processing
0047/09	Aggregate Industries UK Ltd	Meldon Quarry, Okehampton	Variation of condition 6 of permission ref 3/23/080/92/03 to allow the importation of aggregates for onward shipment to market by rail	Grant Unconditionally	06-Apr-09	07127: Granite Quarry
0474/11	Mrs C Van Leeuwen	Blackenstone Quarry, Moretonhampstead	Application for determination of new mineral working conditions	Grant Conditionally	07-Dec-11	07127: Granite Quarry
0338/10	E & JW Glendinning Ltd	Linhay Hill Quarry, Ashburton	Variation of condition 32(f) (dust management) to improve dust collection facilities	Grant Conditionally	11-Aug-10	07121: Limestone working place
0309/13	Fine Turf (Devon) Ltd	land at Lower Waye Farm, Alston Cross, Ashburton as shown edged red on the plan	Use of land for screening of topsoil and storage of prepared soil in on-site buildings	Certificate issued	06-Aug-13	07110: Surface mineral workings