OT100-076-551

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Appeal Decision

Inquiry held over 12 days between 10 January and 2 February 2012 Site visit made on 12 January 2012

by Elizabeth C Ord LLB(Hons) LLM MA DipTUS

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 5 March 2012

Appeal Ref: APP/W4705/A/11/2154371 Buck Park Quarry Landfill Site, Whalley Lane, Denholme, Bradford, West Yorkshire

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by Mr. Tony Barry of P. Casey (Buck Park) Ltd. against the decision of City of Bradford Metropolitan District Council.
- The application Ref 10/04255/FUL, dated 19 August 2010, was refused by notice dated 14 December 2010.
- The development proposed is the construction of a new junction between Whalley Lane and the A629; the construction of a new access road; the completion of initial landscape mounding/planting; the construction of a site infrastructure compound; the extraction of remaining mineral reserves; landfill engineering; non-hazardous/inert waste landfill operations; and restoration.

Decision

1. The appeal is dismissed.

Procedural Matters

Site visit

2. An accompanied site visit took place on 12 January 2012 with representatives from the main parties, Denholme Residents Action Group (DRAG), the Environment Agency (EA), and Yorkshire Water (YW). Besides inspecting the site of the quarry, I inspected various surrounding areas following an itinerary agreed between the main parties and DRAG. I also drove around the surrounding area unaccompanied and walked through the village of Denholme along the A629 unaccompanied.

Environmental Statement and Amendments

3. In accordance with the Town and Country Planning (Environmental Impact Assessment)(England and Wales) Regulations 1999, the appellant submitted an Environmental Statement (ES) dated August 2010 with the planning application. However, the Council's Reasons for Refusal (RfR) included issues relating to insufficient information. At the Pre-Inquiry Meeting (PIM) on 5 October 2011, the appellant confirmed that he wished to produce an Addendum to the ES (AES), which would provide additional information and would also deal with two proposed amendments to the scheme relating to mitigation measures for Peregrine Falcons/Ravens and landfill engineering. It

- was intended that the AES would be fully publicised and consulted upon in accordance with the aforementioned Regulations.
- 4. From the information available at the PIM, I formed the opinion that the proposed amendments would not materially alter the nature of the application. On this basis and, taking account of the proposed publicity and consultation, I took the view that there would be no prejudice to interested parties and the Wheatcroft principles would not be offended. Consequently, I allowed the amendments and the AES dated October 2011 was produced. I consider that the ES and the AES together are adequate and provide sufficient information on which to base a decision.
- 5. At the inquiry I asked the appellant to confirm that the two aforementioned amendments were the only amendments that had been made to the scheme. The appellant indicated that this was the case with the exception of a possible raising of the level of the basal part of the landfill in the east of the void, which would be undertaken if the base retained water after the landfill preparation work had been undertaken¹.
- 6. Whilst the appellant referred to this amendment only reflecting the detail of the scheme, objections were, nonetheless, made at the inquiry on the basis of it being a material amendment that had not been consulted upon. Consequently, in order to assist me in determining whether this would result in prejudice and offend the Wheatcroft principles, I requested a drawing to show the extent of the proposed rise in the basal level and how it would affect the shape of the void. Subsequently, the appellant withdrew this amendment and confirmed that it should no longer be considered as part of the scheme. I have, therefore, made my determination without considering it.
- 7. During the course of the inquiry it became apparent that there is an error in Drawing (Drwg.) No. 05287/50: Groundwater Levels, in that the groundwater contour of 230 metres (m) Above Ordnance Datum (AOD) to the right of Bore Hole (BH) 7 should be to the left of BH7. There is also a discrepancy between Drwg. No. 05287/51: Schematic Conceptual Section and Drwg. No. 05287/53: Revised Landfill Base Levels (Section F-F) in that the landfill liner in the west of the void is shown at a level 3m lower on Drwg. No. 05287/51 than on Drwg. No. 05287/53. At the inquiry the appellant clarified that Drwg. No. 05287/53 is the more accurate and, therefore, I have based by decision on the level in this drawing.
- 8. A further discrepancy is apparent with respect to Drwg. No. P182.118: Compound Sections dated June 2010. This is an original drawing submitted with the planning application which, amongst other things, shows three gas engines at a ground level of about 232m AOD. However, the AES indicates that the ground level for three gas flares and electricity generating systems would be 3m lower². During the inquiry the appellant confirmed that the noise modelling for three gas flares and three gas engines had only been undertaken at a ground level of about 229m AOD and not at 232m. Consequently, Drwg. No. P182.118 does not reflect this noise modelling.
- 9. In order to overcome this problem the appellant submitted Drwg. No. P182.118 Rev. 1: *Compound Sections* dated January 2012, which depicted three gas

¹ See e-mail and enclosure from Rob Harper sent on 2.12.11 and found at CBMC/4/3 App. K p.10 last bullet point

² Report Addendum 2: Noise and Dust Assessment & Mitigation Scheme §4.1 (AES Ch. 14, App. 14.3A)

engines and a single gas flare (with two others intended to be in line behind it) all sunk into an excavated depression at a ground level of about 229m AOD³. Objections were made to this amended drawing by both the Council and DRAG on the basis that it was a material amendment which, amongst other things, raised environmental and health and safety issues that required consultation with the EA and the Health and Safety Executive (HSE), amongst others. During the inquiry an e-mail was received by the EA⁴ setting out its main concerns with the amended drawing and advising that the HSE be consulted. I was, therefore, asked to make a ruling on whether acceptance of this drawing breached the *Wheatcroft* principles. However, after hearing submissions on this, the appellant withdrew the amended drawing, rendering a ruling unnecessary.

10. There has been no suggestion that the above mentioned errors and discrepancies cause the ES and AES to be inadequate. I take the view that these flaws are not fatal to the adequacy of these documents and I have proceeded accordingly.

Statements of Common Ground (SoCG)

11. Six SoCGs have been produced by the main parties, and DRAG has added its comments to these. From the SoCG on RfR 2, 6 and 7 the Council has confirmed that it no longer pursues its objections relating to the viability of the mineral deposit (RfR2), visual and landscape impacts (RfR6) and noise, dust and BH monitoring (RfR7). DRAG has confirmed that it no longer pursues objections based on visual and landscape impacts, and the effects of dust. From the evidence before me, I am satisfied that there would be no significant visual and landscape impacts and no unduly adverse effects from dust, and consequently I will address these matters no further.

Main Issues

- 12. I consider the main issues to be:
 - whether the proposal constitutes inappropriate development within the Green Belt (GB) and, if so, whether the harm caused by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations so as to amount to the very special circumstances necessary to justify the development,
 - 2) whether there is a need for non-hazardous landfill in Bradford,
 - 3) the proposal's impact on groundwater, surface water and private drinking water supplies,
 - 4) the proposal's impact on external slope stability and rock face stability,
 - 5) whether there is a viable mineral deposit within the site,
 - 6) the proposal's impact on Peregrine Falcon and Raven habitats,
 - 7) the impact of noise from the gas engines and flares on sensitive receptors, and

³ Inq 33

⁴ Ing 39

8) the impact of Heavy Goods Vehicles (HGVs) generated from the development on highway safety and the amenity of local residents and pedestrians.

Site and surroundings

- 13. The appeal site is, in the main, an inactive sandstone quarry but also includes land adjacent to the Whalley Lane/A629 highway junction, proposed to be used for junction realignment, and the broadening of the intervening section of Whalley Lane. Overall, it measures about 17.9 hectares (ha), of which the area proposed for mineral extraction and landfill is about 9.3 ha. It lies within GB about 1 kilometre (km) north of the centre of the village of Denholme with the edge of the village being some 150m from the south west corner of the site boundary.
- 14. Its northern boundary runs adjacent to fields and the edge of woodland on the south bank slope of Milking Hole Beck and the west bank slope of Denholme Beck, beyond which lies Hewenden Reservoir. Within the site, running along its eastern boundary, is the line of the dismantled former Thornton-Cullingworth railway line, and a Public Right of Way (PRoW) "Footpath Denholme 90". A large part of the site's western boundary runs along the edge of a field and the line of another PRoW "Footpath Denholme 33", which continues eastwards along part of the northern boundary. Part of the site's southern boundary borders the rear gardens of dwellings and part borders Whalley Lane, with another part of Footpath Denholme 33 cutting across its south west corner. The site's south west projection, encompassing part of Whalley Lane, stretches south to include an area of vegetated land, and west to the Whalley Lane/A629 junction up to the eastern edge of the A629 carriageway.
- 15. A collection of 6 dwellings are situated about 35m to the south of the site boundary, although their rear gardens lie adjacent to it. These include Buck Park Farm, which is a Grade II listed building. Other nearby residential properties are at Glen House (240m north east), Penhallow (163m west), three dwellings at Wood Nook (130m east), two dwellings at Meal Bridge Farm (230m east), Denholme Lane Farm (120m south), and four dwellings at Lane Top in close proximity to the south western tip of the site. A small estate known as Beech Avenue and comprising about 50 dwellings, lies on the western side of the A629, about 225m to the west of the site.

Planning History

- 16. I understand that quarrying has taken place at Buck Park Quarry for periods extending back to the mid 19th century up to about 2005. A series of planning permissions, starting with a permission to re-work the abandoned grit stone quarry, were granted from 1965 to 2003. A permission granted in 2001 on appeal, extended the time period for quarrying to March 2006, increased the depth of quarrying, permitted access improvements, and allowed the disposal of controlled waste for 10 years. Another planning permission granted in 2003 also extended the period of stone extraction to March 2006.
- 17. Both the 2001 and the 2003 permissions were subject to conditions precedent, the last of which were approved by the Council in February 2006. However, the approvals were subject to Judicial Review (JR), which was partially successful. This meant that by the time the JR judgement was issued in November 2006, the permissions had expired.

18. In January 2009, the Council served two enforcement notices, one requiring the removal of the access road and associated bunds, and the other requiring restoration, removal of all plant, machinery, buildings and structures, and the breaking up of roads and hard surfaces. The notices took effect in February 2009 and the main requirements were to be completed by August 2010. The enforcement notices have not been complied with and in October 2011 guilty pleas were entered at Bradford Magistrates Court for failure to comply with the terms of the notices.

The Appeal Scheme

- 19. The application, as outlined in the ES, includes the extraction of 520,000m³ of mineral, equating to 1,040,000 tonnes (t), about 240,000t of which is sandstone and about 800,000t of which is crushed rock. This is expected to break down into about 85,000t of flag rock, 156,000t of blockstone and 799,000t of crushed rock. This part of the application remains unchanged. The appellant envisages the crushed rock being used to make the slopes of the landfill and to form a base for the landfill containment system.
- 20. The original application, reflected in the ES, estimated a landfill void space of about 1.5 million m³. However, the revised proposal within the AES indicates that, as a result of raising the landfill base levels, the void space would be reduced by about 200,000m³. The additional 199,228m³ of material required for the base would leave a shortfall of about 195,000m³ of quarried material and, therefore, this balance is proposed to be recovered from incoming waste.
- 21. As a non hazardous landfill, the site would be permitted to receive a wide range of wastes including Municipal Solid Waste (MSW), Commercial and Industrial (C&I) waste and all forms of Construction, Demolition and Excavation Waste (CDEW).
- 22. Following site preparation, which would take about one year, mineral extraction is proposed to take place for 3.5 years and landfilling for 9 years. The site would be expected to receive waste from 2014 to 2023 at the rate of about 144,500m³ pa, equivalent to 216,750tpa. The site would be restored within 11 years of the date upon which development commenced.

Planning Policy Documents

- 23. The Development Plan (DP) comprises the Yorkshire and Humber Plan: Regional Spatial Strategy to 2026 (RSS), adopted in May 2008 and the policies of the Replacement Unitary Development Plan for the Bradford District (RUDP), adopted in October 2005, which were saved by direction in September 2008. Whilst the RSS is a material consideration, the parties agree that, should the RSS be revoked under the provisions of the Localism Act, this would have no impact on the outcome of this appeal. None of the Council's RfRs refer to the RSS and, as its provisions are consistent with the advice set out in PPS10: Planning for Sustainable Waste Management (PPS 10), it is PPS10 that has been the focus rather than the RSS. Consequently, I have addressed RSS policies no further.
- 24. The Council is in the process of preparing its Local Development Framework (LDF) and specifically its Core Strategy (CS) and Waste Management Development Plan Document (WMDPD) for the next 15 year plan period to 2027. The CS Waste Management: *Preferred Approach Policies* and the WMDPD: *Preferred Approach* were published in January 2011 for public

- consultation and are scheduled to be submitted for public examination sometime in 2012. Given their advanced stage towards adoption, I give these documents more than the negligible weight ascribed to them by the appellant's planning policy witness⁵.
- 25. With respect to national policy, besides Planning Policy Statements (PPSs), Planning Policy Guidance (PPG) and Mineral Policy Guidance (MPG), the Draft National Planning Policy Framework (NPPF) is capable of being a material consideration. However, as the draft NPPF does not contain specific provisions relating to waste, the parties agree that in this case its relevance is confined to its general advice on the presumption in favour of sustainable development⁶. Also of relevance is the Waste Strategy for England (WSE) 20007 and the Government Review of Waste Policy in England (GRWPE) 2011.

Reasons

Green Belt

- 26. There is no objection from the Council with respect to GB policies and DRAG's concern arises only with respect to the proposed road junction between the A629 and Whalley Lane.
- 27. MPS1: Planning and Minerals (MPS1) states that all mineral-related developments in the GB should be assessed against the policies in PPG2: Green Belts (PPG2), which sets out the purposes of including land within GBs and states that their most important attribute is their openness.
- 28. PPG2 states that minerals can only be worked where they are found, with their extraction being a temporary activity that need not conflict with the purposes of including land within the GB, provided that high environmental standards are maintained and that the site is well restored. In this case the extraction of minerals is closely linked to the landfill element of the proposal and, overall, I am satisfied that these parts of the scheme do not amount to inappropriate development in the GB.
- 29. PPG2 goes on to say that engineering and other operations are inappropriate development unless they maintain openness and do not conflict with the purposes of including land in the GB8. In this case there is no suggestion that the proposed replacement road junction would conflict with the purposes of including land in the GB and, in my view, it would not. It would simply amount to highway improvements undertaken within the context of the existing road network. However, it would involve the removal of a small area of naturally vegetated land, which would be replaced with hardstanding. Consequently, whilst there would be some impact on openness, it would be so limited as not to amount to inappropriate development.
- 30. Therefore, in conclusion, I find that no part of the appeal scheme amounts to inappropriate development in the GB.

⁵ BP 2/11, p.10, §2.11

⁶ CD5.10, §14

^{§3.11}

^{8 §3.12}

Need

The policy basis for assessing need

- 31. A key issue in deciding the question of need is whether Bradford District's requirements for non hazardous landfill should be met within the District or whether it is appropriate for them to be met further afield.
- 32. The parties do not rely on any saved RUDP policies with respect to non hazardous landfill need⁹. The RUDP contains no policies that identify sites for the disposal of biodegradable waste (BW). RUDP Policy P14, which did set out criteria for the landfill of BW and identified Buck Park Quarry as an allocated site for the disposal of BW, was not saved. The justification for its removal, given by the Council and subsequently agreed by the Government Office, was that ".....[it is] not now in line with current national guidance and/or [does] not add anything new to policy already set out in national guidance "10". Regardless of the appellant's view on this, the fact is that this provision is no longer policy.

Government Policy

- 33. As need is not being assessed against the extant DP, it is within national policy, and particularly PPS10, that the principal material considerations are to be found. Whereas PPS10 states that there is no requirement to demonstrate a quantitative or market need for proposals that are consistent with an up-to-date DP¹¹, as the RUDP is over 6 years old and is being replaced, I take the view that it is not up-to-date. However, as an unallocated site, the proposal should be considered favourably if it is consistent with the policies within PPS10¹².
- 34. PPS10 reflects the Government's overall objective on waste policy, which is to protect human health and the environment by producing less waste and using it as a resource wherever possible¹³. With this in mind, the aim is to deliver sustainable waste management by moving waste up the waste hierarchy¹⁴, and investing in the right type of waste management facilities, in the right place and at the right time¹⁵. The appellant must demonstrate that the proposal would not prejudice movement up the waste hierarchy¹⁶ and if this can be done and is otherwise consistent with PPS10, there is no requirement to demonstrate need for a specific facility in a specific location¹⁷. Landfill, along with incineration without energy recovery, is classed as "disposal" within the hierarchy¹⁸ and, therefore, whilst it must be catered for, it is the option of last resort¹⁹.
- 35. In order to assist in the implementation of this objective, the Government has put a number of fiscal measures in place to divert waste from landfill. These include the landfill tax²⁰, the Landfill Allowance Trading Scheme (LATS), the Private Finance Initiative (PFI) programme to encourage development of waste

⁹ SoCGs Ing 8 §5.2.5 & Ing 26D §3

¹⁰ Report to the Executive 22 April 2008 (Ing 8, App. 9, p. 10, §2.11)

^{11 §22}

^{12 §24.} Reference is also made to consistency with a WPA's CS, but for Bradford, the CS is only in draft.

¹³ §1

¹⁴ Annex C

^{15 §2} 16 PPS10 §25

¹⁷ PPS10 Companion Guide, §8.16

¹⁸ GRWPE p.11 (CD6.4)

¹⁹ PPS10 §3, first sub§

²⁰ Currently £56/t and set to increase by £8/t each year to 2014/2015 when it will be £80/t

- facilities higher up the hierarchy for biodegradable municipal waste (BWM), and targets for BWM. The landfill tax particularly, has proved to be an effective driver in diverting waste away from landfill.
- 36. Nonetheless, the Government is concerned that some waste that could be driven up the waste hierarchy is still being landfilled²¹. This is partly due to landfill still being a competitive option in some circumstances. An overcapacity of landfill facilities is likely to undermine movement of waste up the waste hierarchy, as alluded to in PPS10²².
- 37. In accordance with PPS10²³ LDFs should ensure sufficient opportunities for the provision of waste management facilities, including waste disposal, in appropriate locations, and in doing so should look forward to a period of at least 10 years from the date of adoption. Therefore, it is important to assess the likely available capacity for this 10 year period. The former "proximity principle" is no longer referred to and, instead, PPS10 simply encourages the disposal of waste "..in one of the nearest appropriate installations"²⁴. Appropriateness should be determined against the objective of seeking to drive waste up the waste hierarchy.
- 38. With respect to self sufficiency, although PPS10 requires Waste Planning Authorities (WPA) to have planning strategies which provide a framework for communities to take more responsibility for their own waste²⁵, it also refers to waste management needs being identified on a regional and sub-regional basis²⁶. Consequently, whilst a WPA should take steps to satisfy its own waste needs there is no requirement for all such needs to be contained within its own boundaries, and indeed it should take the wider context into consideration for the various waste streams.
- 39. Furthermore, the GRWPE states that "There is no requirement for individual authorities to be self sufficient in terms of waste infrastructure and transporting waste to existing infrastructure to deliver the best environmental solution should not be considered a barrier"²⁷. In order to achieve the best solution, the GRWPE promotes co-operation between WPAs and specifically states that "...there is the need for councils to work together and look at waste management needs across different waste streams and across administrative boundaries"28. The Localism Act also lends support to this approach by imposing a duty of co-operation between authorities²⁹.
- 40. Consequently, to sum up, the main provisions of national policy show that the overriding objective is to drive waste up the waste hierarchy. If the appellant can show that the proposal would not prejudice movement up the waste hierarchy and is consistent with PPS10 policies, then it should be treated favourably and there is no requirement to demonstrate need. Otherwise need should be assessed. However, as the proposal is for landfill, which is the option of last resort, and an overcapacity is likely to undermine movement up

²¹ GRWPE p.69 (CD6.4)

^{22 §4,} last sub§

²³ §§16 & 18 ²⁴ §3, 4th sub§

^{25 §3, 2&}lt;sup>nd</sup> sub§

²⁶ §11

²⁷ §263

²⁸ §263

²⁹ Section 110

the waste hierarchy, capacity and hence need must be assessed. The appellant accepts that it is appropriate to consider need³⁰.

41. In determining need, consideration should be given to proximity and self sufficiency. However, there is no requirement for a district to satisfy all of its waste requirements within its own administrative boundary. The main aim is to drive waste up the waste hierarchy, and in order to achieve this, WPAs should work in co-operation with each other. There is nothing within national policy to prevent the Council taking account of sub-regional capacity in appropriate circumstances.

Emerging LDF

- 42. Turning now to the emerging LDF, the Council's CS and MWDPD contain its most up to date expression of waste policy, although 2008 data contained therein will be reviewed and updated to include annual waste data for 2009 and 2010 before submission for examination.
- 43. Whilst the CS indicates that the timescales for producing LDFs in the various adjacent authorities prevents a comprehensive joint area plan for waste management facilities, it goes on to say that opportunities for joint working must be considered, as Bradford and Calderdale are doing through a joint PFI^{31} .
- 44. The proposed overarching policy objectives for Bradford District, contained within the CS³², seek:
 - more self sufficiency in managing waste by moving it up the waste hierarchy,
 - the minimisation of residual waste sent on to landfill sites within and outside Bradford District, whilst making greater efforts to deal with Bradford's waste within the district,
 - to ensure that waste developments support the planned growth and waste needs of the Bradford community, and
 - collaboration with neighbouring local authorities and waste industry operators to ensure that sub-regional waste issues are effectively considered and planned for, whilst recognising that each local authority will seek to manage its own waste more effectively in the plan period where this is the most suitable option.
- 45. These objectives are reflected and expanded upon within the WMDPD Preferred Approach Report³³. In particular, Policy W1: Vision and Waste Objectives³⁴ recognises the crucial need for Bradford District to take responsibility for the waste it generates through moving it up the waste hierarchy. It also refers to locating facilities as close as possible to where waste is produced, and to becoming more self sufficient, whilst working with surrounding waste authorities and handling waste arisings within Bradford that arise elsewhere in the sub-region.

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³⁰ BP 2/1, §5.2.1

³¹ CS Waste Management: Preferred Approach Policies, §3.10 (CD4.3)

³² Ibid, §2.10

³³ CD 4.5

³⁴ Ibid pp. 8 & 9

- 46. Policy WDM5: Landfill Development for Residual Waste³⁵ sets down criteria for landfill developments, which includes demonstrating that "...there is a need for the landfill facility in the West Yorkshire sub-region". Policy W10: Sites for Residual Waste³⁶ also sets down criteria for landfill waste developments, amongst other matters. These criteria include the applicant demonstrating that: "The Residual waste cannot be handled in a more sustainable manner..." and "There is insufficient available existing, permitted Residual waste capacity in Bradford District or within the wider sub-region".
- 47. With respect to this last sentence, there was some debate at the inquiry over the potential ambiguity in meaning introduced by the word "or". The Council's position is that the intention is for the applicant to demonstrate insufficient capacity in both Bradford and the wider sub-region, rather than in just one or the other. Reading this within the context of the CS and other WMDPD policies, and taking account of its draft status and the opportunity for modification, I accept the Council's position.
- 48. Overall, these emerging LDF documents, whilst setting out a requirement to look towards self sufficiency, put the main emphasis on driving waste up the waste hierarchy. They indicate that waste should be handled in the most sustainable manner and landfill should only be developed where there is no other suitable option. No requirement is imposed for absolute self sufficiency, and co-operation between neighbouring authorities is encouraged in the handling of waste arisings. Consequently, within the scope of the emerging LDF it is quite proper for the Council to take account of sub-regional capacity for non hazardous waste.

Sub-regional capacity

- 49. The EA indicates that there is a continuous decrease in waste being sent to landfill, and that from 2008 to 2009 it fell nationally by over 18%, with the fall from 2000 to 2009 being nearly 45%³⁷. Whilst its figures show a national decrease of less than 2% of waste being landfilled between 2009 and 2010, which it attributes to the slow down in economic growth in 2010³⁸, the trend is, nonetheless, still downwards.
- 50. Furthermore, a 2010 defra survey of C&I waste arisings³⁹ shows that C&I waste generation in England in 2009 was significantly less than in 2002/3 when the last national survey of business waste was done. Management statistics show an increase in the C&I recycling rate (including reuse) to 52% in 2009, compared with 42% in 2002/3, and a decrease in C&I waste sent to landfill from 41% in 2002/3 to 23% in 2009. In the Yorkshire and Humber Region the reduction in C&I waste amounted to 37.7% ⁴⁰.
- Consequently, landfill capacity should be assessed against this background of decreasing deposition rates.
- 52. For the region, the EA states that "Yorkshire and the Humber had the longest landfill life for non hazardous wastes of all the regions (11.3 years) at the end

³⁵ Ibid p. 85

³⁶ Ibid p. 77

³⁷ Waste Information 2009 (CBMDC 1/1, App. B, p.25)

³⁸ Waste Management 2010 (CBMDC 1/1, App. B, p.15)

³⁹ CBMDC 1/1, App. A

⁴⁰ Ibid. p.9 Table 5

of 2009, based on 2009 input rates⁴¹. Its figures also show that "in 2010 [Yorkshire and the Humber] had 10.8 years of life left for the landfilling of non hazardous wastes at 2010 input rates⁴².

- 53. With respect to the West Yorkshire sub-region⁴³, the parties agree that there is 14.83 million m³ of non hazardous landfill capacity remaining, which equates to 13.5 years⁴⁴. On an annual basis, the EA's 2010 figures show this non hazardous landfill capacity to amount to 1.2mtpa⁴⁵.
- 54. Although there is no joint waste DPD proposed for the West Yorkshire subregion, the constituent LPAs collaborate on waste issues and share information on waste facilities which are operational, have planning permission or are planned. Most of the waste arisings within Bradford District come from MSW, C&I and CDEW. There are currently no operational or permitted non hazardous waste landfill sites within the Bradford District, and the Council exports non hazardous waste to landfills in other West Yorkshire Districts. However, it also imports waste from other districts for treatment in other types of waste facilities.
- 55. The distances of the main landfill sites receiving non hazardous waste from Bradford District are agreed and are shown in *Table A* below, with the appeal site included for comparison. Whilst all but Skibeden are further away from the centre of Bradford than Buck Park, the additional distances are not unduly long and, in fact, only in the order of a few miles. Also, they may not reflect the exact distances which would be travelled as it is unlikely that all of the waste would come from the centre of Bradford. The additional distances to these various West Yorkshire landfill sites are not a good reason to permit the proposed development.

Table A

105/071			
Site	Location	Transport Mode	Distance from Central Bradford
Buck Park	Bradford	Road	11 miles
Skibeden	Skipton, Craven	Road	11 miles
Skelton Grange	Stourton, Leeds	Road	17.5 miles
Welbeck	Normanton, Wakefield	Road	20 miles
Peckfield	Leeds	Road	24 miles

56. However, the appellant indicates that the two Leeds sites will cease to take waste within the next few years, with Skelton Grange due to close in 2015 and Peckfield by 2018⁴⁶. Nonetheless, there are a number of other facilities in Leeds, which are likely to come forward⁴⁷ to satisfy waste management requirements over the 10 year period referred to in PPS10. These include a

⁴¹ Waste Information 2009 (CBMDC 1/1, App. B, p.28)

⁴² Ibid p.19

⁴³ Comprising Bradford, Calderdale, Kirklees, Leeds and Wakefield

⁴⁴ SoCG on Need (Inq 4)

⁴⁵ CBMDC 1/1, App. B, p.21 (0.49 + 0.71 = 1.2 mtpa)

⁴⁶ Examination into the Leeds Natural Resources & Waste DPD, November 2011 (BP 1/3, App. 6, p.13)

⁴⁷ Examination into the Leeds Natural Resources & Waste DPD, November 2011 (CBMDC 1/4, App. C)

landfill at Howley Park Quarry, two Materials Recycling Facilities (MRFs) at Gelderd Road (already operational) and Bernards Mill (expected to be operational by Spring 2012), and at Skelton Grange Biffa is putting in place arrangements to switch to recovery and recycling with a MRF, an Energy Recovery Facility (ERF) and an Anaerobic Digester (AD). On this basis, I am satisfied that the loss of the Skelton Grange and Peckfield landfill capacity will be adequately replaced by other facilities.

- 57. In 2008 most of Bradford District's exported waste went to landfill in Welbeck in Wakefield⁴⁸. However, the appellant refers to its planning permission expiring in 2018, although noting that it has capacity beyond that date. The Inspector who reported in October 2009 on the examination into the Wakefield Waste DPD, whilst noting that Welbeck did not have a remaining 10 year lifespan and needed another planning consent, nonetheless, was convinced that there was sufficient capacity to satisfy the 10 year requirement of PPS10⁴⁹. The Council estimates that, with decreasing deposition rates, capacity could last for at least another 20 years. Consequently, there is the potential for Welbeck to continue to operate past its existing expiry date.
- 58. In order to divert more waste away from landfill, the Council, along with other West Yorkshire LPAs, is promoting new facilities higher up in the waste hierarchy. *Table B* below gives an indication of the current position for non hazardous waste. If all of these facilities were to come on stream, they would together provide additional capacity of over 1.3mtpa. This would be a significant increase on the 1.54mtpa waste treatment currently available in the West Yorkshire sub-region⁵⁰, and would result in a capacity of 2.84mtpa.

Table B

Table b			T	r
Facility Type	Tonnes per annum	Waste Type	Location	Status
ERF using gasification	160,000	Residual C&I	Bradford	Planning permission granted
Autoclave	320,000	C&I	Bradford	Planning permission granted and implemented
MRF & Energy from Waste (EfW)	193,000	MSW	Bradford and Calderdale	PFI contract under negotiation
EfW	183,000	MSW & C&I	Leeds	Proposed PFI
MRF, AD & Autoclave	180,000	MSW	Wakefield	Proposed PFI
ERF	300,000	C&I	Skelton Grange Leeds	Planning application current

⁴⁸ WMDPD Baseline Evidence Report (CD4.9, p.46, Table 9)

⁴⁹ CBMBC 1/4, App. D, §3.7

⁵⁰ CBMDC 1/1 App. B, p.23

- 59. Overall, the annual waste capacity for West Yorkshire, if all the intended new treatment facilities became operational, would be 2.84 plus 1.2mtpa, amounting to 4.04mtpa.
- 60. The Council has indicated that data from the EA shows that approximately 2.76mtpa of MSW and C&I waste was generated in the West Yorkshire subregion in 2010⁵¹. Taking this figure and assuming that all the new 1.3mtpa capacity came on stream providing total capacity of 4.04mtpa, and the existing annual landfill capacity remains stable, this could result in an overcapacity of 1.28mtpa. Alternatively, if none of the new capacity came on stream, total capacity would initially remain at 2.74mtpa, resulting in an undercapacity of 0.02mtpa. If only the PFI facilities became operational, providing about 0.56mta capacity, that would result in an overcapacity of 0.54mtpa.
- 61. However, in reality the situation is more complex than this and forecasting future waste arisings and how they are dealt with is not a precise science. Spurious precision should be avoided⁵². Therefore, these figures should be used only as a benchmark when assessing need.
- 62. Even in this difficult economic climate, it is very unlikely that all of the anticipated new facilities in the West Yorkshire sub-region would fail to become operational, particularly the PFI facilities, which benefit from a relatively secure, long term income. What is more likely is that new facilities higher up the waste hierarchy will progressively come on stream, even if some are delayed, and will eventually replace much of the existing landfill capacity.
- 63. In the meantime, even on the worst case scenario where there is a small under capacity of waste facilities, as far as non hazardous landfill is concerned, there is still 13.5 years of capacity within the West Yorkshire sub-region, which seems to me to be sufficient for Bradford's needs. Therefore, overall, I am satisfied that there is sufficient capacity within the West Yorkshire sub-region to meet the 10 year period required by PPS10.

Developments within Bradford

64. A significant amount of Bradford District's waste is exported, as reflected in the *Baseline Evidence Report* for the WMDPD⁵³, which contains the most comprehensive set of figures before me. *Table C* below sets out the 2008 data.

Table C

Waste type	Waste arisings in ts	Waste exported in ts	Proportion exported
C&I	586,020	299,507	Over 1/2
CDEW	489,579	69,759	About 14%
MSW	261,097	276,045	More than produced

⁵¹ CBMDC 1/1, p.27, §8.55

⁵² PPS10, §10

⁵³ CD4.9

65. The appellant indicates that these figures demonstrate a need for the proposal, whilst also referring to the Inspector's comments on need in the 2001 decision⁵⁴ in support. However, I note that these comments were made without reference to the new facilities in *Table B* above, at a time when much of Bradford's waste was being transported beyond the region into Lancashire and Greater Manchester, and when different policies applied. In any event, the situation is changing and steps are being taken towards developing more waste capacity within the District.

Municipal Solid Waste

- 66. With respect to the Bradford PFI Scheme, which will also take MSW from Calderdale, the Principal Waste Management Officer with the PFI team has set out the current situation in two e-mails⁵⁵. It seems to me that he is best placed to inform the inquiry on this matter and I accept his comments. Despite some slippage, he indicates that the PFI facility is now forecast to be fully operational by April 2016. Apparently, the front loaded Competitive Dialogue system, under which it is being procured, means that much of the negotiation has already taken place and financial closure is expected this summer.
- 67. The preferred, and now the only bidder, ETS, has prepared its planning application over several years in consultation with the Council and is scheduled to formally submit it with an ES in April/May of this year. Although there is still a planning risk, this has been significantly reduced due to the advice given to the developer by the Council and statutory consultees, and whilst judicial review remains a possibility, this has been factored into the timescale. Although public consultation has yet to take place and the issue of travellers adjacent to the Bowling Back Lane development site has to be dealt with, there is little evidence before me to suggest that these matters would create insurmountable obstacles.
- 68. Once operational, this PFI facility would deal with all MSW that is not recycled via the kerbside recycling system and from which there are no residuals. The MRF would extract further recyclables and the remainder would go through the EfW plant, which would combust it and reduce its mass by about 80%. Bottom ash would be recycled through the aggregates industry. The contracted recovery rate would be 94.5%, leaving a maximum of 5.5% that may require landfill. However, 3.5% of this is fly ash that must go to a hazardous facility, leaving only 2% requiring non hazardous landfill. 2% of 193,000tpa equates to 3,860tpa. These figures take account of waste being diverted to landfill due to maintenance shutdown and, of course, include Calderdale's MSW.
- 69. Whilst the appellant suggests a much higher need for non hazardous landfill for MSW, ranging from 34,000tpa to 156,400tpa, this is based on projections made in 2008 in the WMDPD Baseline Evidence Report⁵⁶ and calculations within the WMDPD⁵⁷, which I understand are to be updated, and various general assumptions about percentage residuals from waste arisings, ranging from 10 to 40%. Although the appellant's "need" witness, indicates that there is no certainty that the bottom ash would enter the aggregates market, he provides little evidence with which to dispute the details of the PFI proposal.

⁵⁴ Appeal Decision APP/W4705/A/99/1026603 CD2.1

⁵⁵ CBMDC 1/4, App. A; & Inq 12

⁵⁶ CD4.9, p.38, Table 6

 $^{^{57}}$ See particularly §3.51 (CD4.5)

70. Overall, I prefer the Council's more specific evidence which, I believe, is more robust. Therefore, I accept that from about 2016, when this PFI facility is scheduled to become operational, the likelihood is that there will be a very significant decrease in the amount of MSW requiring non hazardous landfill. In the meantime, there is no good reason to doubt that the current need for MSW landfill will be catered for within the West Yorkshire sub-region, as will the reduced need brought about by the PFI facility thereafter.

Commercial and Industrial Waste

- 71. The only official figures before me for C&I waste arisings are the 2008 figures within the WMDPD Baseline Evidence Report and the draft WMDPD, both of which forecast a drop of C&I waste to 542,165tpa by 2026⁵⁸. In accordance with the WSE the draft WMDPD indicates a target for landfilling a maximum 33% of all C&I waste by 2026 which, on the basis of the 2008 projections, would amount to 178,911tpa. The appellant estimates a need for C&I waste landfill capacity of between 91,000 and 305,200 for the two districts.
- 72. As only 79,710tpa is currently managed within Bradford District, the draft WMDPD identifies a need for additional sites and makes reference to sites with planning permission, whilst expressing some uncertainty over whether they will become operational⁵⁹. I understand that the two developments, which have planning permission, are intended to cater for all of Bradford and Calderdale Districts' needs for C&I waste facilities. If they both come forward, they should together provide treatment capacity of between 460,000 and 490,000tpa.
- 73. The BioGen permission, granted in Spring 2010, is for a 160,000tpa Energos ERF using gasification. Residual waste from this ERF would be in the order of 4% fly ash that would go to a hazardous facility, and 22% bottom ash. Apparently, the intention is that there will be no requirement for non hazardous landfill.
- 74. BioGen's application apparently states that it intends to use the bottom ash for construction materials. Against this, the appellant indicates that the market for such materials is limited and that the bottom ash is likely to require landfill resulting in a 40,000tpa capacity need. However, fiscal measures, particularly the steady rise in the landfill tax, are increasingly making landfill less attractive and are driving operators to find alternatives. There is no good reason for me to doubt BioGen's intentions but, in any event, even if non hazardous landfill capacity is required for some or all of this bottom ash, this can adequately be provided within the West Yorkshire sub-region.
- 75. The Waddington's autoclave for sanitizing waste, which was granted permission in August 2007, is variously referred to as having a capacity of between 300,000 and 330,000tpa with the draft WMDPD referring to 320,000⁶⁰. Waddington's ES apparently indicates that 9% of this would be plastics that would be recycled, and that 60% would reduce to fibre that would be re-used in paper and board manufacture. Even if there was no market for the re-use of this fibre, because of its high calorific value, it could be used as Refuse Derived Fuel (RDF), possibly at the new Ferrybridge EfW plant near Wakefield.

⁵⁸ CD4.5 §3.53 and CD4.9 §3.45

⁵⁹ CD4.5 §3.53

⁶⁰ CD4.5 §3.58

- 76. According to the Council, there would be 18% residual waste from the Waddington's plant requiring non hazardous landfill, amounting to between 54,000 and 59,400tpa, although the appellant has suggested 120,000tpa would be more realistic on the basis that at least some of the fibre and plastic would require landfill. Even on the appellant's higher figure, this waste can be accommodated at facilities within the West Yorkshire sub-region.
- 77. However, there is still the risk that these facilities could be scaled down or not become operational at all. The appellant refers to a difficult financial market for such schemes with institutions being reluctant to fund projects that cannot guarantee returns.
- 78. The Biogen facility has not yet been implemented. However, the Council's *Policy and Need* witness referred to discussions having taken place regarding the selling on of heat from the facility to a neighbouring chemical plant, although no details are before me. With respect to the Waddington's scheme, despite being granted permission about 4.5 years ago, I understand that there is no evidence of any built development on site, although the permission has been implemented. Nor is there any evidence before me to indicate when the scheme might be delivered.
- 79. Nonetheless, regardless of the economic situation and the prospects of delivery of these facilities, this is no good reason for allowing the proposed landfill scheme. Even if one or both of these facilities failed to come forward, it is likely that some of the other proposed treatment facilities within the subregion, or even the region, would become operational and be able to provide capacity. Failing this, there is still sufficient landfill capacity within the subregion to fall back on.

Construction, Demolition and Excavation Waste

- 80. The figure for total residual CDEW waste within Bradford District is agreed at 81,000tpa⁶¹. However, there are no figures for how much of this is inert or non hazardous. The Council granted planning permission in August 2010 for the landfill of inert waste at the nearby Hallas Rough Quarry, which has a capacity of 200,000tpa and a total capacity of 2mt. Therefore, once operational, it should generally be able to take that fraction of Bradford District's CDEW that meets the Waste Acceptance Criteria (WAC) for permitted inert landfills.
- 81. The EA has commented that CDEW is probably the most difficult to quantify and understand partly due to much of it having gone to sites which are not permitted and for which it has no site input records⁶². However, a 2006 survey showed input tonnages at exempt facilities to be almost as great as for permitted landfills⁶³, and a more detailed analysis in 2007 showed that in the Yorkshire and Humber region, out of a total of 5.8mt, 4.3mt went to permitted sites (74%), of which 2.0mt was landfilled (35%) and 1.5mt was deposited at exempt sites (26%)⁶⁴.
- 82. The Environmental Permitting (England and Wales) Regulations 2010 have removed exemptions for much of this previously exempt waste. However, as the EA explains⁶⁵, standard rules Environmental Permits (EPs), aimed at

⁶¹ Inq 4 §§3.1.1 & 5.1.2

⁶² EA Waste data modelling project: Yorkshire and Humber (BP 1/3, App. 5, p.24)

⁶³ Ibid p.24

⁶⁴ Ibid p.26

 $^{^{65}}$ E-mail on implications of waste exemptions review (CBMDC 1/4, App. B)

recovery rather than disposal to landfill, should apply to most of this material, with bespoke recovery EPs being available in some other cases. Furthermore, the Waste (England and Wales) Regulations 2011⁶⁶ places a duty on organisations dealing with waste to take all reasonable measures to apply the waste hierarchy. As a consequence of these provisions, the EA takes the view that little of the previously exempt waste will need to go to landfill, and comments that it would be surprised if it were as high as 10%, suggesting that it ought to be virtually zero.

- 83. The appellant's "need" witness refers to previously exempt waste in the future having to go to permitted sites, either for recovery or landfill. He indicates that, from his operational experience, about 40% will not meet the WAC for permitted inert landfills and will have to go to non hazardous landfills. He also refers to a revision of the Waste & Resources Action Programme (WRAP) protocol, which excludes soils, resulting in additional CDEW requiring landfill. The Council agrees that some of the waste previously spread under exemptions will probably not meet these WAC.
- 84. Given the difficulties in quantifying the elements of this waste stream, the disparities in the figures, and the uncertainty about how the new permitting regime will operate in practice, Bradford District's need for non-hazardous landfill for CDEW can only broadly be estimated.
- 85. The Council considers that 74,000tpa can be disposed of at the Hallas Rough site, or within the remaining inert or non hazardous landfill sites within the West Yorkshire sub-region⁶⁷. The appellant's "need" witness estimates that about 70,000tpa will require non inert landfilling outside of Bradford District⁶⁸. In my view the scale of need for CDEW can be adequately met by the Hallas Rough facility together with landfill sites within the sub-region and possibly some of the other above mentioned facilities likely to come on stream.

Overall conclusion on need

- 86. The overall key policy objective is to drive waste up the waste hierarchy, and within Bradford and the sub-region significant steps are being taken to develop facilities to do this. It is likely that at least some of these facilities will make a substantial contribution to reducing the need for landfill capacity. Whilst there are no non hazardous landfill sites within Bradford District, there is sufficient non hazardous landfill capacity within the sub-region to take Bradford's waste for the next 13.5 years.
- 87. Consequently, there is no need for the proposed landfill, and to develop it would result in overcapacity. The appellant has not demonstrated that this overcapacity would not prejudice movements of waste up the waste hierarchy, and in this regard the proposal does not accord with PPS10 and, therefore, does not attract the favourable treatment, which could otherwise arise⁶⁹. Nor does it satisfy the policy criteria within the Council's emerging WMDPD.

⁶⁶ Regulation 12, which took effect in September 2011

⁶⁷ Inq 4, §5.2.1 ⁶⁸ BP 1/1, §9.1

⁶⁹ PPS10, §24

Water

Policy basis

- 88. There are saved policies within the DP, which are relevant to the impact of the proposal on the water environment. RUDP Policy UR3 aims to generally safeguard the surrounding environment from the adverse effects of development. More specifically, Policies NR3 and NR4 seek, amongst other things, to protect groundwater, watercourses and other water bodies from pollution from mineral workings. The thrust of Policies NR17and NR17A is to prevent development that would have an adverse impact on groundwater resources or the water quality of watercourses and other water bodies.
- 89. Whilst the Council refers to conflict with RUDP Policies P13 and P15 in its RfR, the former deals with landfilling of inert waste only and the latter applies to landfill development identified on the proposals map or acceptable according to P13, or to P14 which is not saved. Consequently, these Policies do not relate to the proposed non hazardous landfill.
- 90. In terms of national guidance, PPS23: *Planning and Pollution Control* (PPS23) makes it clear that when there is good reason to believe that harmful effects may occur to the environment, the precautionary principle should be invoked⁷⁰.
- 91. When considering the complementary systems of planning and pollution control PPS23 advises that "Pollution control is concerned with preventing pollution through the use of measures to prohibit or limit the release of substances to the environment from different sources to the lowest practicable level" It goes on to say that "[The planning system] plays an important role in determining the location of development which may give rise to pollution....[and] should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than the control of processes or emissions themselves" It confirms that pollution issues are material planning considerations and include "the possible adverse impacts on water quality and the impact of any possible discharge of effluent or leachates which may pose a threat to surface or underground water resources directly or indirectly through surrounding soils".
- 92. Furthermore, the Companion Guide to PPS10 refers to legislation, which requires LPAs when determining landfill planning applications to take into consideration the geology and hydrogeology of the area⁷⁴.
- 93. Also of significance is the EA's *Groundwater protection: Policy and practice* (GP3)⁷⁵. Given that disposal of waste into landfill is a major potential hazard to groundwater quality, the key issues for the EA are to direct landfill to areas where the risk of groundwater pollution is minimised and to avoid the development of a groundwater resource being constrained by the presence of a landfill. In order to achieve this aim, GP3 includes a framework within which the EA can give risk based advice to WPAs and developers⁷⁶.

71 §9

⁷⁰ §6

^{72 §9}

⁷³ App. A, p12

^{74 §§8.11} and 8.12

⁷⁵ Part 4 – Legislation and Policies, 2008 Edition 1 (CD8.1)

⁷⁶ Ibid p.35, §3.1

- 94. This is the context in which the EA's Landfill Location Policy (planning) P3-1⁷⁷ is set. Given its particular relevance to planning and its importance to this water quality issue, I have reproduced it here:
 - (i) The EA will object to any proposed landfill site in groundwater Source Protection Zone 1.
 - (ii) For all other proposed landfill site locations, a risk assessment must be conducted based on the nature and quantity of the wastes and the natural setting and properties of the location.
 - (iii) Where this risk assessment demonstrates that active long-term site management is essential to prevent long-term groundwater pollution, the EA will object to sites:
 - Below the water table in any strata where the groundwater provides an important contribution to river flow or other sensitive surface waters;
 - On or in a Major/Principal Aquifer;
 - Within Source Protection Zones 2 or 3.
- 95. The parties agree that the Landfill Location Policy is appropriate guidance for determining whether the landfill site is in a suitable location. However, they disagree on how detailed a Hydrological Risk Assessment (HRA) should be produced at the planning stage. Whilst the appellant has addressed hydrogeological matters in the ES and AES, it has left the scale of the risk posed by the proposed landfill to the water environment to a detailed HRA to be submitted at the EP stage.
- 96. The Council, the EA and YW say that a more detailed HRA is required at the planning stage to determine the potential hydrogeological pollution risks associated with the proposed land use. According to the EA, the EP only deals with the detail of minimising the pollution risks, but these risks need to be known before making a decision on location. Apparently EPs are granted on the basis that pollution prevention measures will be effective, but this will only be the case if the location is suitable. I understand that the EA normally determines suitability as part of the planning process in its role as statutory consultee to WPAs.
- 97. Table 3.1 of GP3⁷⁸, sets out the relationship between policy, site development, design, and environmental risk assessment and refers to a tiered risk assessment being required at both the planning and the EP stages. With this in mind and reading GP3 Policy P3-1 in the light of PPS23, it seems to me that an HRA of sufficient detail to determine the potential impact of the leachate on relevant receptors should be submitted at the planning stage. I deal with such potential impacts below.

The risks of the scheme on nearby water bodies

98. Buck Park Quarry is a sensitive location for a landfill because of its potential impact on the surrounding water environment. The bedrock at the quarry comprises interbedded sandstone, siltstone, and mudstone with occasional seat

⁷⁷ Ibid, Ch.3, p.36, §3.2

⁷⁸ P 38

earth and coal seams, and is classified as a Rough Rock/Rough Rock Flags, Secondary A Aquifer (formerly known as a Minor Aquifer). The bedrock is known to be of high permeability and the principal groundwater flow mechanism is likely to be fracture flow, making it a fissure flow aquifer. The EA has referred to the nature of the fracture flow as being complex, thereby making it difficult to accurately predict flow paths. On my site visit, I noted the irregular, steeply inclined nature of the fissures within the quarry stone and I accept the EA's evidence on this.

- 99. Nonetheless, seepages adjacent to Milking Hole and Denholme Becks and Hewenden Reservoir appear to indicate a discharge zone for groundwater flowing beneath the site. This accords with groundwater monitoring data, which indicate higher levels in the western part of the site of about 243m AOD, dropping to about 208m AOD in the northeastern part of the site⁷⁹. Hewenden Reservoir is at a level of between 200 to 205m AOD, situated to the north east of the quarry, with its southern edge only about 65m north of the northern site boundary. Therefore, it is likely that the general groundwater flow direction beneath the site is northeastwards, although from the evidence it seems that there might also be flows towards the east and south east.
- 100. The Rough Rock aquifer has significant resource potential, and is used for small private water supplies, as well as contributing to nearby surface water flows and providing baseflow⁸⁰ to Hewenden Reservoir. Historically the Reservoir was constructed to supply water to Bradford, although it is now a compensation reservoir that replaces water taken from the river system through the operation of other supply reservoirs. However, in an emergency, it may be considered for water supply, as could be the case in the long term in response to unforeseen demand or climate change. Consequently, it is a sensitive receptor.
- 101. Whilst active long-term site management, including leachate collection and removal, would be carried out at the landfill, the EA's groundwater protection guidance suggests that inevitably there would still be some leakage through the landfill liner, regardless of how well it was engineered⁸¹. It goes on to indicate that the waste could take many decades to break down, during which time the artificial liner would degrade, representing a hazard well beyond the active operational phase of the landfill⁸². Consequently, there is the potential for leachate to seep vertically downwards through the liner and then horizontally northeastwards along short and rapid groundwater flowpaths to Milking Hole and Denholme Becks, and Hewenden Reservoir for many years.
- 102. The leachate would contain chemicals which, depending on dilution, could be at sufficiently high concentrations on entering the water bodies to cause a pollution risk. Given the toxic nature of the leachate, such pollution could last for many years to come. Apart from some ochrous iron oxide precipitates, there do not seem to be any other significant point sources of pollution in the Hewenden Reservoir catchment and, therefore, the impact of the leachate would be even more noticeable.
- 103. Although dilution in the reservoir is likely to mitigate the effects of pollution, YW refers to the likelihood of short circuit flow paths being present, allowing

⁷⁹ Drwg. No. 05287/50: Groundwater Levels 25/03/2011 BP 8/3 App. 1

⁸⁰ Baseflow is that part of the flow in a watercourse that is made up of groundwater and discharges

⁸¹ GP3, Ch. 3, p. 40, §3.6 (CD 8.1)

⁸² Ibid

the flow to pass rapidly through the reservoir in a defined stream, resulting in limited dilution. This could result in a significant adverse impact on water quality.

- 104. The risks of groundwater pollution are greater for landfills that sit below the water table and hence within the saturated bedrock. If any part of the proposed landfill were to be sub water table, the EA would object in accordance with its Landfill Location Policy.
- 105. The appellant's intention is for the landfill liner to be above the water table. To achieve this it is proposed to raise the base of the quarry void in the western part of the site so that the landfill would be at least 2m above the maximum observed historical groundwater levels across the site. However, given that the water table would still probably be close to the surface, there is concern that settlement of basal fill would bring the landfill base below the water table.
- 106. The highest water table levels have been recorded at about 243-245m AOD in the western part of the site, and the lowest levels at about 222-223m AOD in the eastern part. Therefore, the landfill liner would be at its lowest in the eastern part of the site. The EA is particularly concerned that the landfill liner would be below the water table in the eastern part of the void.
- 107. To overcome this concern, as referred to in paragraphs 5 and 6 above, the appellant suggested amending the scheme to raise the base level in the east, although this was withdrawn after a drawing of the amended landfill was requested at the inquiry. Nonetheless, the fact that this amendment was put forward at all suggests to me that there is some uncertainty over what the water table level is likely to be.
- 108. The appellant's scheme is based on certain assumptions, the most pertinent of which are discussed below. However, there is uncertainty as to the degree of confidence that should be placed in these assumptions, which may not adequately reflect what appears to be a complex groundwater regime.
- 109. The basal liner design assumes that the pond, present within the base of the quarry void, is not representative of groundwater levels. However, groundwater levels of a higher elevation than the pond are observed in most of the BHs around the western end of the quarry void. Therefore, it is possible that the quarry void may have intersected the water table at its western end and that the pond is in continuity with the groundwater. If this is the case, the pond level⁸³ could represent the groundwater level, which would indicate a higher water table in this area than has been recorded.
- 110. There is, however, some evidence to suggest that the eastern part of the pond is likely to be perched water and hydraulically isolated from the groundwater by a large mass of low permeability silt/sediment⁸⁴. Also, recorded groundwater levels below the pond level in adjacent BHs in both the east and the west might indicate a lack of continuity⁸⁵. Nonetheless, the appellant acknowledges that the western part of the pond may be in continuity with groundwater.

⁸³ Surveyed at 223m AOD in November 2011 BP 8/1, §2.8

⁸⁴ Appellant's response dated 2.12.11 to EA/YW, pp. 4-7 (CBMDC 4/3, App. K)

⁸⁵ Ibid.

- 111. Although the EA suggested that the appellant carry out investigations and monitoring, such as pumping out the pond, to see whether groundwater flowed in, the appellant was not prepared to do this before planning permission was granted. Therefore, there remains uncertainty as to what the groundwater levels are in this area.
- 112. It is also assumed that the monitoring data adequately represents the groundwater levels across the quarry. However, the evidence within the appellant's Hydrogeological Conceptual Site Model Report (HCSMR)⁸⁶ shows that groundwater levels can vary substantially between BHs in close proximity to each other⁸⁷, and also over time for particular BHs⁸⁸. This raises the possibility that the appellant's groundwater contour plan is an oversimplification of the prevailing groundwater regime.
- 113. There are several examples of significant variations, including a 12.46m difference in levels between BH9 and BH15, which are about 50m apart. Over time there have also been differences in levels ranging from between about 5m to 10m between BH6 and BH6A, which are adjacent to each other⁸⁹. For BH4 the level was recorded at about 209m AOD in March 2001⁹⁰, whilst in July 2006 it was recorded at about 221m AOD⁹¹, a difference of about 12m. For BH5A the level was recorded at about 214m AOD in October 1997, rising to just over 230m AOD by October 2000⁹², a difference of about 16m.
- 114. The appellant indicates that the variations are due to the relative proximities of potentially high permeability zones to other zones of more "normal" groundwater levels. However, DRAG's hydrogeology witness suggests that the groundwater level data has been taken from different aquifers but modelled as though it were from one aquifer⁹³. He goes on to indicate that the discontinuities in the rock caused by the steeply inclined or vertical joints may connect some aquifers hydraulically to each other, although this is impossible to assess on the submitted data. He also suggests that because the width, lateral persistence, orientation and permeability of these open joints are currently unknown, it is not possible to assess the potential impacts of these discontinuities on the hydrogeological regime⁹⁴.
- 115. Overall, it seems to me that the hydrogeological information is inadequate to enable a sufficient understanding of the site's groundwater and, therefore, to reasonably conclude on water table levels. At present I am not convinced that the groundwater contour drawing⁹⁵ satisfactorily reflects the complexity of the situation and this reduces confidence in the appellant's assessment of groundwater levels and makes it more difficult to predict likely future levels.
- 116. A further assumption is that the groundwater levels would not rise above the historically recorded levels after quarrying in the west has taken place and the landfill has been constructed. However, the EA and YW state that these

⁸⁶ AES, Ch. 10, App. 10.2A

 $^{^{87}}$ Drwg. No. 05287/50: Groundwater Levels 25/03/2011 $\,$ BP 8/3 App. 1 $\,$

⁸⁸ Drwg. Nos. 05287/47; 05287/48; and 05287/49 BP 8/3 App. 1

⁸⁹ Drwg. No. 05287/47: Historical Groundwater Levels 1997-2001 BP 8/3 App. 1

⁹⁰ Drwg. No. 05287/47: Historical Groundwater Levels 1997-2001 BP 8/3 App. 1

⁹¹ Drwg. No. 05287/48: Groundwater Levels since 2006 BP 8/3 App. 1

⁹² Drwg. No. 05287/47: Historical Groundwater Levels 1997-2001 (BP 8/3 App. 1)

⁹³ DRAG 3/1, §§1.3 and 5.5

⁹⁴ Ibid, §5.7

⁹⁵ Drwg. No. 05287/50: Groundwater Levels 25/03/2011 BP 8/3 App. 1

activities would be likely to change the groundwater regime, and they are not confident that the landfill would remain above the water table.

- 117. Whilst the BH monitoring has been extensive, no groundwater data predates quarrying at the site and the data presented applies to the immediate vicinity of the site only, where it is likely to be influenced by quarrying. YW refers to the spring on Whalley Lane Beck, about 100m south of the proposed landfill, being about 40m higher than the quarry base, although the appellant suggests it lies south of a geological fault along Whalley Lane and associates it with perched groundwater not in hydraulic connection with groundwater at the site. Nonetheless, on the submitted evidence the possibility of part of the quarry being below natural groundwater levels cannot be ruled out.
- 118. To reduce the risk of rising groundwater, the appellant proposes installing a Groundwater Control System (GCS)⁹⁶ in the base of the western part of quarry void to draw down groundwater levels. This would consist of infill material designed to be of sufficiently high permeability to exceed that of the surrounding bedrock, thereby forming a preferential flow pathway beneath the base of the landfill.
- 119. Large fractures in the surrounding bedrock would be infilled, possibly by localised grouting⁹⁷, although it is not clear whether any adverse effects might be expected from this. For the scheme to work effectively it must be assumed that groundwater from the drainage layer would be able to seep into the natural strata and then flow below the eastern part of the landfill where there would be no GCS.
- 120. However, two apparently different drainage designs have been submitted⁹⁸ and according to the EA, the later design would be much less effective than the earlier one. In any event the EA indicates that there is not enough detail to demonstrate that the drainage system would sufficiently manage all groundwater flows.
- 121. The appellant refers to the high permeability zone across the site promoting groundwater flow beneath the site, thereby maintaining a low water table. However, the EA points out that this flow would only be promoted through strata that are hydraulically well connected, and the HCSMR shows sandstone strata divided by mudstone and siltstone bands which could isolate high permeability pathways from near surface groundwater. Also fault planes of potentially low permeability could limit groundwater flows.
- 122. Nonetheless, the appellant estimates that groundwater ingress into the quarry extension in the west is likely to be similar to the calculated flux across the site⁹⁹. However, this is only an estimate based on generalized assumptions. Given the range and extent of the uncertainties within this complex groundwater regime, these calculations are not sufficiently robust to satisfy me that the water table would not rise above the landfill liner.
- 123. There is also a possibility of differential settlement of engineered fill beneath the liner compromising the integrity of the liner. DRAG's witness estimates this at a maximum of 1.3m at the western end of the landfill where there would be

⁹⁶ Drwg. No. 05287/56: Effect of the GCS on future groundwater levels (BP 8/4 App. 1)

⁹⁷ See for example Response to EA/YW dated 2/12/11, p.16 (CBMDC 4/3)

⁹⁸ Drwg. No. 05287/51, Sept. 2011 (BP 8/3, App. 1); and Drwg. No. 05287/56, Dec. 2011 (BP 8/4, App. 1)

⁹⁹ HCSMR, §§4.7 & 6.4 and App. D - groundwater ingress calculations and App. G - Drwg. No. 05287/52 (AEA, Ch.10, App.10.2A)

considerable fill, whilst indicating that there would be no settlement in the eastern end where there would be no fill¹⁰⁰. The appellant has indicated that the potential for differential settlement is small and this would be demonstrated by the HRA at the EP stage. However, the lack of information before me on how this is intended to work adds to my concerns.

- 124. The EA and YW have also raised the possibility of silt generated by quarry operations entering groundwater. This could cause siltation of fractures, thereby affecting flows, and it could also enter Hewenden Reservoir. Apparently Hewenden Reservoir has displayed rapid sedimentation and Buck Park Quarry has been identified as a major contributor¹⁰¹.
- 125. Whilst a possible reason for this sedimentation is the direct pumping of silt into the reservoir from the quarry¹⁰², it may not account for all of the silt emanating from Buck Park. Although the appellant suggests that there is no evidence of significant silt deposition at the location of the seepages northeast of the site, this observation seems to have been made at a time when no quarrying has been taking place. However, I acknowledge that a silt management plan may provide sufficient mitigation, although the appellant has chosen to leave this matter to the EP stage. Consequently, the evidence before me is inconclusive.
- 126. The appellant refers to the previous application for a landfill, which was granted in March 2001¹⁰³, and indicates that little has changed since then when neither the EA nor YW made objections. From this, it seems that the appellant is inviting me to similarly proceed. Whilst consistency is an important material consideration in decision making, in this instance there is sufficient reason for me to depart from my predecessor's findings. This is due to a material change of circumstances resulting from policy changes and in particular the Landfill Location Policy, and the hydrogeological evidence before me, which from my predecessor's decision letter, does not appear to have been before him. In any event, a permission given eleven years ago, does not justify granting permission now to a scheme, which poses a pollution risk to sensitive water bodies.
- 127. In conclusion, the nature of the aquifer and groundwater flow in and around Buck Park Quarry appears to be highly complex. The variation of groundwater levels both in space and time has not been sufficiently explained, and I am not persuaded that it has been demonstrated that the landfill would always remain above the water table, particularly in the eastern part of the site.
- 128. It is no answer to suggest that an HRA submitted at the EP stage would resolve these uncertainties. Reading the EA's Landfill Location Policy in the light of PPS23, it seems to me that sufficient detail is required at the planning stage to determine the likely impact of leachate on sensitive receptors. This impact depends upon whether or not the landfill base would be sub water table and this needs to be assessed through a more detailed HRA.
- 129. From the submitted evidence I am of the opinion that there is a material risk that groundwater would rise above the landfill base resulting in significant

¹⁰⁰ DRAG 3/1, §§6.3 and 6.4

¹⁰¹ Yorkshire Water Strategic Research Partnership Report, July 2008 (referred to within the AES, Ch.10, App.10.2, 86.1.1)

<sup>§6.1.1)
102</sup> Evidence of Mr. Dibb

¹⁰³ Appeal ref: APP/W4705/A/99/1026603 (CD2.1)

pollution of Milking Hole and Deholme Becks and Hewenden Reservoir. It has not been demonstrated that either GP3 Policy P3-1 has been complied with, or RUDP Policies UR3, NR3, NR4, NR17and NR17A. Therefore, taking account of the precautionary principle in PPS23, I take the view that the sensitive location of the site, just up gradient of Hewenden Reservoir, is not appropriate for a non hazardous landfill.

Impact on drinking water boreholes

- 130. Concern has been raised about the private water supply to the two dwellings at Meal Bridge Farm being contaminated by the landfill. These dwellings potentially lie down gradient and to the southeast of the site, between the quarry and Denholme Beck. I understand that the presence of this supply puts the quarry site within Protection Zone 1 and, therefore, on this basis and in accordance with the Landfill Location Policy, the EA would object to the development.
- 131. However, the appellant has reached agreement with the owners of Meal Bridge Farm to replace the existing BH with a mains water supply 104. Consequently, I take the view that this matter can be satisfactorily dealt with by way of condition.
- 132. With respect to BHs at Wood Nook and Glen House, the evidence suggests that it is unlikely that the supply comes from the same groundwater catchment as the quarry, the latter of which is thought to be west of Denholme Beck and south of Milking Hole Beck. Therefore, it is unlikely that there is any hydraulic connection between these BHs and groundwater under Buck Park Quarry.

Stability

- 133. RUDP Policy P6 states that planning permission for development on land known or suspected to be potentially unstable will only be granted if a full site investigation has been carried out by the developer to determine whether instability may occur or not.
- 134. Furthermore, in terms of national guidance, PPG14: Development on Unstable Land (PPG14) states that where there are reasons for suspecting instability the developer should determine a number of matters by appropriate site investigation and geotechnical appraisal, including whether the development will initiate slope instability which may threaten neighbours, followed by an assessment of the suitability and sufficiency of any proposed precautions¹⁰⁵. It is the responsibility of the developer to ensure that the development will not initiate instability¹⁰⁶.
- 135. Apart from the stability of the liner base, which has been dealt with above, there are three other matters regarding stability.
- 136. The first relates to the southern and eastern quarry faces, along which the appellant's geotechnical survey has identified zones of rock slope failure that have occurred since quarrying ceased. This instability poses a risk to land belonging to adjacent dwellings, although it is unlikely to affect the dwellings themselves for many years to come.

¹⁰⁴ HCSMR, App. E (AES, Ch. 10, App. 10.2A)

¹⁰⁵ PPG14 §§17 and 18

¹⁰⁶ Ibid, Annex 1, §18

- 137. A benefit of the proposed scheme is that it would resolve these existing instability issues by infilling the existing void. However, from the submitted evidence it is clear that the whole of the existing void would not need to be infilled to remedy these failures and it is agreed that other remedial solutions would suffice, such as buttressing or rock bolts. Consequently, landfilling of the void is not required to achieve stability of the southern and eastern quarry faces.
- 138. Secondly, there is concern over the stability of the slope that runs down from the northern boundary of the quarry towards Hewenden Reservoir. This slope was historically the subject of a landslide many years ago, and a further slippage could affect Hewenden Reservoir.
- 139. Although little is known about ground instability in this area at present, the appellant's report on this matter states that "Any future landfill must ensure that groundwater flows and/or leachates are prevented from entering this slope as these may have an adverse influence on stability"¹⁰⁷. It also recommends further investigations to verify the stability of the slope. As it has not been demonstrated that groundwater flows will not rise and not enter this slope, it cannot be concluded on the submitted evidence that the proposed landfill would not adversely affect slope stability.
- 140. Thirdly, there are stability issues relating to the proposed Peregrine Falcon/Raven habitat on the north western slope of the quarry. Although the appellant's reconnaissance and field observations did not find any current evidence of mass instability of the rock slope, minor failures were noted, which are likely to continue to occur in the immediate and longer term future. However, a detailed geotechnical inspection and mapping would be required to verify these initial observations¹⁰⁸. There is also a crack in the surface of PRoW no.33 running parallel with the quarry face and a "V" shaped indentation, which may be indicative of cliff movement.
- 141. Whilst the appellant has suggested that these instability issues could be resolved by "dental treatment", more in depth evidence is required to support this proposition. The likely impact on stability of the proposed works, including excavating about 9m of fill from the quarry floor to expose a greater area of cliff face, constructing a pond at the base of the cliff face fed by a waterfall, and forming reinforced earth embankments on either side, has not been assessed via a Stability Risk Assessment (SRA). It appears that it is not even certain whether the base of the embankments would be constructed on rock or on a depth of existing fill. Consequently, more significant remediation might be required than has been indicated.
- 142. In these circumstances it is not acceptable to leave a detailed SRA to the EP stage, and it should be done at the planning stage. If the SRA were to show that a different design was required to meet instability concerns, this could raise other planning issues. Therefore, there is insufficient information before me to demonstrate that the proposal would not be detrimental to external slope stability or the stability of the rock face. Consequently, it is not in accordance with RUDP Policy P6 or PPG14.

108 Ibid, §§5.1.1 and 5.1.3

¹⁰⁷ Geotechnical report of Wardell Armstrong §5.2.6 (BP 7/3)

Mineral deposit

- 143. RUDP Policy NR3(1) states that proposals for extensions to existing mineral workings or new workings will be permitted provided that specified criteria are satisfied including evidence of a viable mineral in terms of quality and quantity.
- 144. Overall, the ES refers to the extraction of 520,000m3 of mineral (about 1.04mt). The appellant has carried out an assessment of this mineral deposit¹⁰⁹ and this generally shows a sequence of sandstone underlain by interbedded siltstones and sandstones. There is no competing technical evidence before me.
- 145. The quality of rock seems to vary, partly due to faulting and fracturing, although it is estimated that between 10 and 20% would be suitable for block stone. I understand that this is consistent with other quarries in the region. The cored BH logs largely describe the sandstone as moderately weak, although some of it is moderately strong. Whilst BH 12 does not indicate the presence of large blocks of sandstone that could be used as building and walling stone or flags, BHs Nos. 16 and 17 do indicate sandstone at the surface down to about a 30m depth, which is more likely to yield sizeable blocks.
- 146. Although Mr Dibb, who previously worked at the quarry, referred to the poor quality of stone obtained during the latter period of operations, this does not equate to the remaining deposit being unviable. I understand that sandstone, which is unsuitable for building, walling or flags is usually crushed to create sandstone aggregate, and that this is in demand in West Yorkshire and in the areas around Liverpool and Manchester¹¹⁰. In any event, most if not all of this aggregate would be used on site for landfill engineering. Consequently, there would appear to be a market/use for such products.
- 147. The Council has not objected on the basis of viability of the mineral resource, and whilst DRAG suggests that there is insufficient data available to demonstrate viability, I am satisfied that the appellant has submitted sufficient evidence on the quality and quantity of the mineral to meet the requirements of RUDP Policy NR3(1). Therefore, in this respect, the proposal complies with the DP.

Peregrine Falcon/Raven Habitat

- 148. The southern rock face of the quarry provides habitat for a pair of Peregrine Falcons which, under schedule 1 of the Wildlife and Countryside Act 1981 (WCA), are protected at all times¹¹¹. The site is one of the longest established Peregrine sites in West Yorkshire. It also provides habitat for a pair of Ravens, which are afforded basic protection under the WCA¹¹². I understand that individual pairs of both Peregrine Falcons and Ravens are rare within West Yorkshire¹¹³.
- 149. Whilst the southern rock face is unstable and is likely to require stabilisation in the future, the submitted evidence does not suggest that this could not be

¹⁰⁹ TACCL Report No. 05287/9 found within the AES Ch. 10, App. 10.5A (CD 1.10)

¹¹⁰ Mineral Planning Factsheet - Construction Aggregates p.14 (BP 6/3)

¹¹¹ It is an offence to intentionally take, injure or kill a Peregrine, or to take, damage or destroy its nest, eggs or young, or to disturb it close its next during the breeding season.

112 It is an offence to intentionally kill, injure or take a Raven, or take or damage its nest whilst it is in use or being

built or to take or destroy its eggs.

¹¹³ Letter from Tim Melling, Senior Conservation Officer with the RSPB (CBMC 2/3, App. 4)

done without losing this habitat. The proposed landfill on the other hand would result in its loss, which the ES refers to as a negative impact of high significance¹¹⁴. To compensate for this, the appellant proposes creating a cliff face habitat in the northwest of the quarry¹¹⁵. However, the issue is whether the birds would be likely to successfully relocate to this new habitat.

- 150. It appears that Peregrine Falcons favour the highest and steepest cliffs available¹¹⁶, and the southern face provides ideal, vegetated nest ledges, inaccessible by predators, about 20m from the base¹¹⁷. The proposed habitat would be smaller than the existing, being about 16.5m at its highest and dropping to about 6.5m, with a span of about 120m, compared to the existing escarpment, which is about 25-30m high over a length of about 70m, stretching to about 340m in length overall. According to the RSPB the proposed cliff is too low and the ledges are unsuitable¹¹⁸.
- 151. It would also be "horseshoe" shaped and would not have as wide an outlook as the relatively straight southern escarpment. This could adversely impact on the birds' sense of security. Moreover, the proposed habitat would be close to the access track and a PRoW, and despite vegetative screening, these could both be the source of disturbance.
- 152. Studies have shown that "the minimum height of rock acceptable to Peregrines varies inversely with the degree of wilderness to which the cliff or cut-bank is exposed and directly with the degree of human disturbance in the immediate vicinity of the nesting ledge"¹¹⁹. The Council's ornithological witness¹²⁰ indicates that a degree of wilderness would be required before the Peregrines would occupy the type of smaller cliff face proposed.
- 153. Whilst Peregrine Falcons might be an adaptable species, capable of inhabiting artificial structures surrounded by human disturbance¹²¹, the eminent ornithologist, Professor Norman, indicates that this does not mean that they will tolerate having their chosen site removed and replaced by one of lesser quality¹²². I accept this view. The Council's ornithological witness has commented that the consulted research and expert opinion has failed to reveal any examples of Peregrines transferring from a prime, long-occupied cliff site to a much smaller one of lower quality. Although nest boxes, perches and ledges could be created, which would be inaccessible to predators, none of these would compensate for the lower cliff height, lesser perceived security and reduced wilderness that the proposal would represent.
- 154. Furthermore, whilst Peregrine Falcons and Ravens are capable of cohabiting, I understand that they do not happily co-exist. Professor Norman refers to these two species usually nesting at least 100 to 200m apart and indicates that their mutual intolerance seldom permits them nesting within 50m of each other¹²³. He very much doubts that the proposed replacement cliff

¹¹⁴ Ecological Survey and Assessment, p.56, §5.6.3 (EA Ch.9, App.9.1)

¹¹⁵ Drwg. P182.124: Habitat Creation Detail (BP3/3, App.4)

¹¹⁶ The Peregrine Falcon by D. Radcliffe p.170 (CBMDC 2/3, App.3)

¹¹⁷ Letter from Tim Melling, Senior Conservation Officer with the RSPB (CBMC 2/3, App. 4)

¹¹⁸ Ibid

¹¹⁹ The Peregrine Falcon by D. Radcliffe p.170 referring to studies by Hickey (CBMDC 2/3, App.3)

¹²⁰ The only ornithologist called to give evidence at the inquiry

¹²¹ BP 3/3, Apps. 1, 2, 3, and 6

¹²² Inq 16

¹²³ The Peregrine Falcon by D. Radcliffe p.289 (CBMDC 2/3, App.3)

- would be big enough for both species¹²⁴. On the southern cliff, the Ravens and Peregrine Falcons apparently nested about 100m apart.
- 155. Although the appellant has suggested that platforms could be mounted in trees or poles for the Ravens, the Council's ornithological witness does not believe that this is appropriate at this site. Apparently Ravens prefer to nest on cliffs rather than use trees and, in this respect, they have similar requirements to Peregrines¹²⁵. In his view the Ravens would not switch from the first class southern cliff to such a secondary habitat.
- 156. Overall, it seems to me that the proposed replacement habitat would be of lesser quality than the existing southern escarpment, being smaller in scale, relatively low and close to disturbance from the proposed access track and PRoW. Consequently, there is a significant risk that it would be inadequate for both the Peregrine Falcons and the Ravens, resulting in them deserting the quarry. The proposal is, therefore, detrimental to the Peregrine Falcon and Raven habitats. In this respect it does not comply with RUDP Policy NE10 which seeks, amongst other things, to protect wildlife habitats that accommodate protected species.

Noise

- 157. The Council no longer raises an objection on noise grounds although it is still a live issue for DRAG with respect to the gas flares and engine compound only. The AES addresses this aspect of noise impact with respect to two scenarios, the first being a single flare and engine system, and the second being a three flare and engine system. Whilst the appellant indicates that it is most likely that only a single system would be used, the scheme does provide for up to three systems and, therefore, the impact of three systems should be assessed.
- 158. The noise evidence is confusing and incomplete with respect to the impact of the three system arrangement on sensitive receptors. As noted in paragraphs 8 and 9 above, the noise predictions for this arrangement are modelled at about 229m AOD, but the ground level of the compound at the location of these systems is shown to be about 232m AOD. Therefore, in the absence of excavating a depression¹²⁶, the systems would need to be re-modelled at the higher ground level in order to adequately assess their potential noise impact.
- 159. This is important because, depending on whether a 5dB rating correction is applied, as referred to in BS4142¹²⁷, the evidence suggests that noise may reach sufficiently high levels above background at some receptor locations as to indicate that complaints would be likely. In any event, the noise levels at these receptors may not be acceptable.
- 160. Whilst the appellant indicated that the number of engine systems required could be restricted to one by controlling the overall quantity of putresible waste entering the landfill, and hence methane gas generation, no details have been put forward on how this would work in practice. In any event, it would have implications on need.

125 The Raven by D. Radcliffe p.153 (CBMDC 2/3, App.5)

126 This amendment as shown in drwg. P182.118 Rev.1 (Inq 33) having been withdrawn

¹²⁴ Inq 16

¹²⁷ Method for rating industrial noise affecting mixed residential and industrial areas 1997 (Inq 37)

- 161. Although the appellant suggests that these matters could be resolved by way of noise monitoring and gas flare conditions¹²⁸, this would not be appropriate because without an adequate noise assessment, the principle of development remains questionable.
- 162. Therefore, for the reasons given, the submitted evidence has not demonstrated that the potential noise impact of the three engine systems on sensitive receptors would be acceptable. Neither has it been shown that this arrangement would comply with MPS2, Annex 2: Noise, and RUDP Policy P7, which seeks to avoid unacceptable noise problems resulting from development.

Traffic

- 163. The Council does not raise any highway objections, although highway safety and disturbance from HGVs is of great concern to DRAG and other residents who have given evidence.
- 164. The proposed scheme would be limited to 200 HGV movements per working day, with vehicles travelling along Whalley Lane and then onto the A629, most passing through Denholme village. The appellant has submitted a Transport Assessment (TA)¹²⁹ which indicates that the proposed development would have no material impact on the capacity or safety of the highway network. The TA also refers to the benefits of the proposed highway improvements at the junction of Whalley Lane and the A629. There is no competing technical evidence before me.
- 165. Whilst the TA does not take account of the additional 110 HGV movements per working day permitted by the recently granted planning consent for the Hallas Rough landfill, the appellant submits that the A629 has sufficient capacity to accommodate this increase in addition to the Buck Park traffic, particularly as the TA shows a recent fall in vehicles using this road.
- 166. I accept the appellant's evidence on highway capacity, although I have some concerns about safety and the impact on amenity for the following reasons.
- 167. The A629 through Denholme village is reasonably narrow, having a two-way single carriageway with a road width of between 7 to 8m. It is lined with dwellings along much of this stretch, some of which have little or no setback, and the adjoining footways are generally narrow and, in some places, they are absent altogether.
- 168. Consequently, there are some houses fronting the A629, which are situated almost adjacent to the carriageway. The occupiers of these properties are likely to already experience disturbance from the existing levels of traffic in terms of noise and vibrations, but the proposed increase in HGV movements would materially exacerbate the situation.
- 169. Furthermore, because long stretches of footways along the carriageway are very narrow, pedestrians using them have to walk in single file very close to the traffic. During the course of the inquiry I walked along these stretches on several occasions and I felt uncomfortably close to passing vehicles, particularly when large vehicles, such as HGVs, drove by. Consequently, I take the view that the proposed increase in HGV movements would result in

¹²⁹ ES Ch.13, App. 13.1 (CD 1.3)

¹²⁸ Suggested conditions 30 and 44 Inq 42

- pedestrians fearing more for their safety and feeling threatened by these large vehicles in such close proximity.
- 170. Therefore to conclude on amenity, I find that HGVs generated from the proposed development would have a detrimental effect on the amenity of local residents, and pedestrians using the footways along the A629.
- 171. Turning to safety, accident records from West Yorkshire Police submitted by the appellant and local residents¹³⁰ show that over the last five years, five personal injury accidents have occurred on the A629 in the vicinity of Denholme village, one of which was a fatality. However, these records do not reveal the full picture.
- 172. Anecdotal evidence from residents suggests that there have been many more road traffic accidents along this stretch of highway. Indeed, more comprehensive evidence from Leeds City Council, who manages the data on behalf of all West Yorkshire authorities, shows that between 2006 and 2011 there were 63 road traffic accidents in Denholme, most of which were on the A629 including two fatalities¹³¹. However, only a small percentage of these accidents involved HGVs.
- 173. Despite the 30mph speed limit on the A629 through Denholme village, this stretch does appear to have experienced a cluster of accidents. A significant increase in HGVs using this road is likely to exacerbate the situation. There is a school in the village, and children as well as other vulnerable pedestrians are likely to use the narrow footpaths along this stretch. This adds to my concerns.
- 174. The appellant accepts that local residents are likely to perceive the impact of the additional traffic as significant¹³² and proposes a traffic management plan to manage HGV movements, including erecting vehicle actuated speed signs to influence driver behaviour, and issuing contractors with driving guidelines. A reduction in the speed limit along Whalley Lane is also proposed, from the National Speed Limit of 60mph to 30mph.
- 175. Overall, I accept that these measures would mitigate the adverse effects of the traffic generated and I also acknowledge that the proposed junction realignment would improve visibility, and have a positive impact on highway safety. Therefore, taking account of this mitigation, the adverse effect on highway safety would be insufficient to dismiss the appeal, although my concerns on this point lend weight to my decision to dismiss on the basis of my conclusions on other main issues.

Other matters

- 176. Whilst Buck Park Farm is a Grade II listed building, the parties agree that the proposed development would not have an adverse impact on this heritage asset. I accept this and, therefore, I am satisfied that there would be no conflict with the provisions of PPS 5: Planning for the Historic Environment.
- 177. With respect to other communities fears not dealt with above, I am satisfied that most of these could generally be resolved by way of planning conditions.

¹³⁰ Inq 31, and TA App. C (found within the EA Ch. 13, App. 13.1)

¹³¹ BP 4/3

¹³² EA, Ch. 13, §13.4.1.1

As regards the *Great Northern Railway Trail,* I note that the appellant supports the aims of the Forum and is content to progress matters further.

Benefits

178. The proposal would deliver landscape benefits via the restoration scheme. It would also improve highway conditions at the Whalley Lane/A629 junction and deliver a solution to the stability issues of the quarry's southern and eastern slopes. These are advantages which must be put into the planning balance.

Overall planning balance

- 179. The proposed development does not amount to inappropriate development in the GB, and is likely to produce a reasonable quantity of marketable sandstone. It would provide landscape benefits, improve a highway junction and stabilise quarry faces.
- 180. However, there is no need for a non-hazardous landfill site in the district of Bradford, and this proposal would be in a sensitive location where the risk of harm to nearby receptors would be significant. Its potential impact on water bodies, land stability, protected habitats, and amenity along the highway, as well as its potential noise effects, have not been demonstrated to be acceptable. Consequently, the proposal conflicts with RUDP policies UR3, NR3, NR4, NR17, NR17A, P6, NE10, and P7.
- 181. A balance must be drawn between competing considerations and in this case the balance is against granting planning permission for the proposed development. Therefore, for the reasons given and having regard to all other matters raised, I conclude that the appeal should be dismissed.

Elizabeth C. Ord

INSPECTOR

Acronyms and Abbreviations

§	Paragraph
AD	Anaerobic Digester
AES	Addendum to Environmental Statement
AOD	Above Ordnance Datum
App.	Appendix
BH	Bore Hole
BMW	Biodegradable Municipal Waste
BP	Buck Park
BW	Biodegradable Waste
C&I	Commercial and Industrial
CBMDC	City of Bradford Metropolitan District Council
CDEW	Construction, Demolition and Excavation Waste
Ch.	Chapter
CS	Core Strategy
dB	decibel
defra	department of environment, food and rural affairs
DP	Development Plan
DPD	Development Plan Document
DRAG	Denholme Residents Action Group
Drwg.	Drawing
EA	Environment Agency
EfW	Energy from Waste
EP	Environmental Permit
ERF	Energy Recovery Facility
ES	Environmental Statement
GB	Green Belt
GCS	Groundwater Control System
GP3	Groundwater protection: Policy and practice
GRWPE	Government Review of Waste Policy in England
ha	hectare
HCSMR	Hydrogeological Conceptual Site Model Report
HGV	Heavy Goods Vehicle
HRA	Hydrogeological Risk Assessment
HSE	Health and Safety Executive
Inq	Inquiry
JR	Judicial Review
km	kilometre
LATS	Landfill Allowance Trading Scheme
LDF	Local Development Framework
LPA	Local Planning Authority
m	metre
m ³	cubic metres
mph	miles per hour
MPS	Mineral Policy Statement
MPS1	Minerals Policy Statement 1: Planning and Minerals
MPS2	Minerals Policy Statement 2: Controlling and Mitigating the
	Environmental Effects of Minerals Extraction in England

MRF	Materials Recycling Facility
MSW	Municipal Solid Waste
mt	million tonnes
mtpa	Million tonnes per annum
NPPF	Draft National Planning Policy Framework
р	page
pa	per annum
PFI	Private Finance Initiative
PIM	Pre-Inquiry Meeting
PPG	Planning Policy Guidance
PPG 2	Planning Policy Guidance 2: Green Belts
PPG14	Planning Policy Guidance 14: Development on Unstable Land
PPS	Planning Policy Statement
PPS10	Planning Policy Statement: Planning for Sustainable Waste
	Management
PPS23	Planning Policy Statement 23: Planning and Pollution Control
PRoW	Public Right of Way
RDF	Refuse Derived Fuel
RfR	Reason for Refusal
RSPB	Royal Society for the Protection of Birds
RSS	Regional Spatial Strategy
RUDP	Replacement Unitary Development Plan for Bradford District
SoCG	Statement of Common Ground
SRA	Stability Risk Assessment
t	tonne
TA	Transport Assessment
TACCL	The Arley Consulting Company Ltd.
tpa	tonnes per annum
WAC	Waste Acceptance Criteria
WCA	Wildlife and Countryside Act 1981 (as amended)
WMDPD	Waste Management Development Plan Document
WPA	Waste Planning Authority
WRAP	Waste & Resources Action Programme
WSE	Waste Strategy for England
YW	Yorkshire Water

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Stonemason.

INTERESTED PERSONS:

Cllr. Simon Cooke Dominic Clark Lauren Judson Jean Hill Councillor for Bingley Rural Ward Resident of Buck Park Farm Resident of Denholm Village Resident of Denholm Village

Jeffrey McQuillan

Chairman of The Great Northern Railway Trail

Forum

Leanne Anderson

Resident of Denholm Village

DOCUMENTS SUBMITTED AT THE INQUIRY

Inq 1	Letter from Michael Morris
Inq 2	Appellant's opening submissions
Inq 3	Council's opening submissions
Inq 4	Statement of Common Ground on Need
Inq 5	Statement of Common Ground on Ecology
Inq 6	Statement of Common Ground on Geotechnical Issues
Inq 7	Statement of Common Ground on Reasons for Refusal 2, 6 & 7
Inq 8	Statement of Common Ground on Site Description, Planning History, the
	Appeal Application and Planning Policy Context
Inq 9	e-mail trail ending with Carole Howarth 4/1/12 @13:53
Inq 10	e-mail trail ending with Carole Howarth 5/1/12 @ 11:16
Inq 11	e-mail Robin Bispham 9/1/12 and enclosures
Inq 12	e-mail Richard Longcake 9/1/12
Inq 13	e-mail Carole Howarth 6/1/12
Inq 14	e-mail Tim Brooks 9/1/12
Inq 15	Report on Bradford & Calderdale Waste Treatment PFI Project
Inq 16	David Norman's comments dated 2/1/12
Inq 17	e-mail Steven Gibbs 6/12/11
Inq 18	Statement Jean Hill
Inq 19	List of drawings
Inq 20	Statement of Common Ground on Groundwater, Private Water Supplies,
	Surface Water and Hewenden Reservoir

Inq		Submissions Cllr. Simon Cooke
Inq		Statement Lauren Judson
Inq	23	Comments on Statement of Common Ground by DRAG on Ecology
Inq	23D	Additional comments on Statement of Common Ground by DRAG on
		Ecology
Inq	24	Comments on Statement of Common Ground by DRAG on Geotechnical
		Issues
Ina	24D	Additional comments on Statement of Common Ground by DRAG on
9		Geotechnical Issues
Inq	25	Comments on Statement of Common Ground by DRAG on Reasons for
шч	23	•
T	250	Refusal 2, 6 & 7
ınq	25D	Additional comments on Statement of Common Ground by DRAG on
-	5.6	Reasons for Refusal 2, 6 & 7
Inq	26	Comments on Statement of Common Ground by DRAG on Site
		Description, Planning History, the Appeal Application and Planning Policy
		Context
Inq	26D	Additional comments on Statement of Common Ground by DRAG on
		Site Description, Planning History, the Appeal Application and Planning
		Policy Context
Inq	27	Comments on Statement of Common Ground by DRAG on
		Groundwater, Private Water Supplies, Surface Water and Hewenden
		Reservoir
Ina	27D	Additional comments on Statement of Common Ground by DRAG on
		Groundwater, Private Water Supplies, Surface Water and Hewenden
		Reservoir
Inq	28	Statement Dominic Clark
Inq		Public Statement from the Great Northern Railway Trail Forum
Inq		Discontinuity Base Data Wardell Armstrong
Ing		Injury accidents data Keighley Road from 1.01.2006 to date
•		Statement Leanne Anderson
Inq		
Inq		Drawing No. P182.118 Rev. 1 (withdrawn)
Inq		Additional Statement Leanne Anderson
Inq		Source Noise Levels Martec Environmental Consultants
Inq		e-mail Carole Howarth 6/12/11
Inq		Extract BS 4142: 1997
Inq	38	Extract BS 7445-2:1991
Inq	39	e-mail Tim Huntley 24/1/12
Inq	40	Page 44 of Envirocheck Geological datasheet
Inq	41	Submission DRAG on Drawing No. P182.118 Rev. 1
Inq	42	Draft conditions with parties' comments
Inq	43	Report relating to Peckfield Landfill
Inq		Scoping opinion for Bowling Back Lane site
Inq		Summary representations for Bowling Back Lane site
Inq		Protocol for saving Councils planning policies
Inq		Closing submissions for the Council
-		Mr. Millmore's closing submissions for DRAG
Inq		
Inq		Mr Kershaw's closing submissions for DRAG
Inq	JU	Closing submissions for the appellant

WITNESS STATEMENTS

Appellant:

BP-1-1	David Harrison
BP-1-2	David Harrison – Summary
BP-1-3	David Harrison – Appendices – 1 to 7
BP-1-4	David Harrison - Rebuttal
DD 2 4	Taka Nasid
BP-2-1	Iain Reid
BP-2-2 BP-2-3	Iain Reid – Summary Iain Reid – Rebuttal + Appendix
DF-2-3	raili Kela - Kebattai + Appendix
BP-3-1	Ray Gemmell
BP-3-2	Ray Gemmell - Summary
BP-3-3	Ray Gemmell – Appendices – 1 to 8
BP-3-4	Ray Gemmell – Rebuttal + Appendix
BP-4-1	John Colgan
BP-4-2	John Colgan – Summary
BP-4-3	John Colgan – Appendix
DD E 1	Nimal Mana
BP-5-1 BP-5-2	Nigel Mann Summary
BP-5-4	Nigel Mann – Summary Nigel Mann - Rebuttal
DF-2-4	Niger Marin - Nebuttar
BP-6-1	Stephen Barry
BP-6-2	Stephen Barry – Summary
BP-6-3	Stephen Barry – Appendix
BP-7-1	Philip Shelton
BP-7-2	Philip Shelton – Summary
BP-7-3	Philip Shelton - Appendix
D	· · · · · · · · · · · · · · · · · · ·
BP-8-1	Robert Harper
BP-8-2	Robert Harper – Summary
BP-8-3	Robert Harper – Appendices 1 to 3
BP-8-4	Robert Harper – Rebuttal + Appendix
CBMDC:	
CBMDC/1/1	Carole Howarth
	Carole Howarth – Summary
	Carole Howarth – Appendices A to E
	Carole Howarth - Rebuttal
CBMDC/1/5	Carole Howarth – Rebuttal – Appendices A - E
CBMDC/2/1	Dete March
	Pete Marsh – Summary
	Pete Marsh – Appendices 1 – 7
	• •
	Richard Nudd
CBMDC/3/2	Richard Nudd – Summary

CBMDC/3/3 Richard Nudd - Appendices 1 - 2 CBMDC/4/1 Edward Wrathmell CBMDC/4/2 Edward Wrathmell - Summary CBMDC/4/3 Edward Wrathmell - Appendices A - J CBMDC/4/4 Edward Wrathmell - Addendum 09.01.12 CBMDC/5/1 Mark Morton CBMDC/5/2 Mark Morton - Summary DRAG: Denholme Residents Action Group - G Kershaw plus Appendix DRAG/1/1 Denholme Residents Action Group - G Kershaw DRAG/1/2 DRAG/1/3 Stephen J Beauchamp DRAG/1/4 Andrew Mark Green - 19.01.12 Andrew Mark Green - 23.01.12 DRAG/2/4 DRAG/1/5 K A Dibb

CORE DOCUMENTS

1.0 CD 1.1 CD 1.2 CD 1.3 CD 1.4 CD 1.5 CD 1.6 CD 1.7 CD 1.8 CD 1.9 CD 1.10 CD 1.11 CD 1.11	Report of Planning Officer on Application 10/04255/FUL Decision Notice Application 10/04255/FUL Supplementary Environmental Statement (ES) (submitted Nov 2011) Revised Drawings (submitted Nov 2011 with Supplementary ES)
2.0	Planning History
CD 2.1	APP/W4705/A/99/1026603 Decision Letter dated 14 March 2001
3.0	Planning Policy Development Plan Policy
CD 3.1	Yorkshire and Humber Plan
CD 3.2	Replacement Unitary Development for Bradford Metropolitan District
4.0 CD 4.1	Planning Policy Emerging Development Plan Local Development Framework for Bradford: Core Strategy Issues and Options Topic Paper 8 Waste Management (Feb 2007)

- CD 4.2 Core Strategy Further Issues and Options Waste Management (Oct 2008)
- CD 4.3 Core Strategy Waste Management: Preferred Approach (Jan 2011)
- CD 4.4i Waste Management Development Plan Document: Issues and Options (Nov 2009)
- CD 4.4ii Waste Management Development Plan Document: Issues and Options: Methodology Statement
- CD 4.4iii Waste Management Development Plan Document: Issues and Options: Engagement Plan
- CD 4.4iv Waste Management Development Plan Document: Issues and Options:
 Sustainability Appraisal Scoping Report Revision
- CD 4.4v Waste Management Development Plan Document: Issues and Options: Consultation Event Log
- CD 4.4vi Waste Management Development Plan Document: Issues and Options: Summary of Representations
- CD 4.5 Waste Management Development Plan Document: Preferred Approach Policies (Jan 2011)
- CD 4.6i Waste Management Development Plan Document: Sustainability Appraisal Report (Dec 2010)
- CD 4.6ii Waste Management Development Plan Document: Sustainability Appraisal Report Non Technical Summary
- CD 4.7 Waste Management Development Plan Document: Equality Impact Assessment (Jan 2011)
- CD 4.8 Waste Management Development Plan Document: Preferred Approach Site Assessment Report (Jan 2011)
- CD 4.9 Waste Management Development Plan Document: Baseline Evidence Report (Jan 2011)
- CD 4.10 Waste Management Development Plan Document: Preferred Approach Policies Revised Chapter 5 (Oct 2011)
- 5.0 National Planning Policy
- CD 5.1 The Planning System: General Principles
- CD 5.2 PPS 1: Delivering Sustainable Development and Supplement
- CD 5.3 PPG 2: Green Belts
- CD 5.4i PPS 5: Planning for the Historic Environment
- CD 5.4ii PPS 5: Planning for the Historic Environment: Planning Practice Guide
- CD 5.5i PPS 9: Biodiversity and Geological Conservation
- CD 5.5ii PPS 9: Biodiversity and Geological Conservation: Good Practice Guide
- CD 5.6i PPS 10: Planning for Sustainable Waste Management
- CD 5.6ii PPS 10: Planning for Sustainable Waste Management: Companion Guide
- CD 5.7i PPS 25: Development and Flood Risk
- CD 5.7ii PPS 25: Development and Flood Risk: Practice Guide
- CD 5.7iii PPG 14: Development on Unstable Land
- CD 5.7iv PPS 23: Planning and Pollution Control
- CD 5.8i MPS 1: Planning and Minerals
- CD 5.8ii MPS 1: Planning and Minerals: Planning and Minerals Practice Guide
- CD 5.9i MPS 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England
- CD 5.9ii MPS 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England: Annex 1: Dust
- CD 5.9iii MPS 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England: Annex 2: Noise

CD 5 10	Emerging National Planning Policy Draft National Planning Policy Framework (July 2011)
CD 3.10	Braile Macional Flamming Folloy Framework (Saily 2011)
6.0	Other Policy
CD 6.1	Waste Framework Directive 2008/98/EC
CD 6.2	Renewable Energy Policy PPS22
CD 6.3	Waste Strategy for England 2007
CD 6.4	Government Review of Waste Policy in England 2011
7.0	Other Relevant Documents
CD 7.1	Letter from Steve Gibbs, TACCL, dated 9th December 2010
0.0	Fundament Annua Deniment
8.0	Environment Agency Documents
CD 8.1	Groundwater Protection: Policy and Practice (GP3)
	Part 4 – Legislation and Policies 2008 Edition 1.
CD 8.2	Regulatory Guidance Series No. LFD1: Understanding the Landfill
	Directive, Version 2 (March 2010
CD 8.3	H1 – Technical Annex to Annex (j): "Hydrogeological Risk Assessments
	for Landfills and the Derivation of Groundwater Control Levels and
	Compliance Limits", Version 2.0 (October 2010).