

Herefordshire Minerals & Waste Local Plan

Annex to Preparing the Publication Draft Plan

January 2021

Annex

Annex A Historic Landfill Report

Annex B Letter from Natural England dated 22 July 2019 and 5 August 2019

Annex C Position Statement - Development in the River Lugg Catchment Area, March 2020

Annex D Guidance Note and Checklist for applicants/agents relating to the HRA and planning applications and Frequently Asked Questions Relating to the Development in the River Lugg Catchment, both March 2020

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Annex A

Historic Landfill Report



Herefordshire Minerals and Waste Local Plan

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1. Introduction

1.1 Background and Purpose of the Report

- 1.1.1 In its representation to the Draft MWLP (letter date 1 March 2019, page 14), the Environment Agency questions whether it would be appropriate for the MWLP to include a policy statement with regard to landfill mining.

'Reopening old landfills, either to tackle legacy pollution issues, or to recover resources from old tips is not unknown. ... A benefit would also be re-releasing potentially suitable landfill capacity for genuinely residual or difficult materials such as asbestos, and reduce the need to identify new facilities.'

- 1.1.2 This report has been prepared to consider whether it would be appropriate for the MWLP to include a policy on the mining of historic landfill facilities.

1.2 Research

- 1.2.1 Desk based secondary research has been undertaken, through a review of both national and European academic and industry reports and websites. This is presented in section 2 of this report.
- 1.2.2 In addition, desk based research has been undertaken locally, to understand the landfill legacy within Herefordshire. This is presented in section 3 of this report.
- 1.2.3 The conclusions from this research are drawn together at section 4 of this report.

2. Literature Review

2.1 Introduction

2.1.1 A range of academic and industry reports, and relevant websites have been reviewed (listed in reverse chronological order):

- RAWFILL: supporting a new circular economy for RAW materials recovered from landfills, FILLS, Interreg, North West Europe, September 2019;
- EC Joint Research Centre's report on the recovery of critical and other raw materials from mining waste and landfills, July 2019;
- Article titled 'Europe's half a million landfill sites potentially worth a fortune - Waste can now be mined for metals and to create fuel', The Financial Times, January 2018;
- Article titled 'Why landfill mining could be the next big thing', The Guardian, October 2013;
- Feasibility and Viability of Landfill Mining and Reclamation in Scotland, Scoping Study, Zero Waste Scotland, April 2013; and
- Reclaiming historic landfill sites for residential development: a UK case study, (on-line abstract), Institute of Civil Engineers, 2013.
- Centenary history of waste and waste managers in London and South East England, CIWM, c.2007.
- Websites (in alphabetical order):
 - Contaminated Land, Herefordshire Council;
 - Crestwood Environmental;
 - EURELCO2019;
 - Provectus Group; and
 - VertaseFLI.

2.2 Findings

Paper Review

2.2.1 One of the most recent reports reviewed (dated July 2019) is a summary of the EU's Joint Research Centre's (JRC) research into the recovery of crucial and other raw materials from mining wastes and landfill facilities.¹ *'One of the key conclusions of the JRC report is "that recovery of critical and other raw materials from landfills and extractive waste is not at this stage a widely diffused practise in the EU" ... '*

2.2.2 The JRC report also identified the relative differences between recovering raw materials from mining wastes and former landfill sites; *'... recovery from extractive and industrial waste seems to be more advanced, and has a remarkably high potential to contribute to sustainable and*

¹ <https://eurelco.org/2019/07/26/jrc-report-on-crm-recovery-from-mining-waste-landfills/> [20.09.2019@11:39]

secure supply whereas Enhanced Landfill Mining seems to be less developed and a less promising area as far as [crucial] and related raw materials are concerned.'

- 2.2.3 Interreg,² the European Regional Development Fund, is a partner in a project called RAWFILL,³ which focusses on the potential to achieve enhanced landfill mining. The project summary advises:

'... In order for landfill mining to be widely implemented in the North-West Europe region several barriers need to be overcome. Up to now, there has been no general or standard framework for developing enhanced landfill inventories that would allow public authorities and/or private sector partners to make economically informed decisions about launching a landfill mining project for a given landfill site. Furthermore, traditional landfill exploration methods – i.e. methods to assess the viability of a landfill mining project for a given site – are prohibitively expensive as they require costly analysis of multiple excavated waste samples. Cheaper methods, such as geophysical methods, to obtain a rough idea of the economic potential of a given landfill are therefore required (as promoted by RAWFILL). The current lack of reliable, coherent and affordable data about the economic resource recovery potential of a landfill (quantities, qualities and economic indicators related to the value of materials) is thus a major challenge. Furthermore at the aggregate level only very few regions in North-West Europe have some kind of a comprehensive overview of the potential of their landfills. The few existing inventories (e.g. Flanders, with its 2.260 landfills and Walloon region with its 3.500) do not include suitable datasets that would allow investors to robustly assess the opportunity to launch profitable landfill mining operations for a specific landfill site. The second major obstacle, which is the direct result of the former, is the lack of reliable decisions and prioritization tools that can be used in the North-West Europe region. Hence, there is no common approach to select the high potential landfill mining projects, thereby inhibiting the North-West Europe landfill mining market from development.'

- 2.2.4 The RAWFILL project is focussed on finding solutions to the identified barriers, but concludes that they are not commonly available to date.

- 2.2.5 A scoping study undertaken in 2013 for Zero Waste Scotland⁴ concluded that:

'Overall, the findings of this study indicate that LFMR operations could potentially be feasible in Scotland but viability is likely to be limited to very specific circumstances. The planning and undertaking of a LFMR project in Scotland, undertaken with resource recovery in mind, will be a complex operation. The authors consider that it is unlikely to become a widespread occurrence in the near future, principally due to economic viability but also as a result of the technical challenges associated with this type of operation.' [Executive Summary]

LFMR = landfill mining and restoration

- 2.2.6 The Zero Waste Scotland report also notes that whilst over 60 landfill mining and remediation projects worldwide have been reported in literature, *'this is a small number given the amount of landfills in existence around the world.'*

² <https://www.interregeurope.eu/> [20.09.2019@11:49]

³ <https://www.nweurope.eu/projects/project-search/supporting-a-new-circular-economy-for-raw-materials-recovered-from-landfills/> [20.09.2019@11:50]

⁴ http://www.wrap.org.uk/sites/files/wrap/Feasibility%20and%20Viability%20of%20LFMR%20Scotland%20190413_0.pdf [20.09.2019:11:54]

Case Studies

2.2.7 In 2013, the Institute of Civil Engineers published report titled 'Reclaiming historic landfill sites for residential development: a UK case study'.⁵

2.2.8 The report identifies three UK case studies of landfill reclamation for the construction of infrastructure and/or residential housing undertaken between 1980 and 2000, reporting on the first, full-scale, landfill reclamation project in the UK, in which the commercial and industrial wastes disposed within the landfill were excavated and processed for reuse on-site within the reclamation process (as opposed to relocation to another landfill).

2.2.9 Hendeca is aware of (and has visited) that project, the former Sandford Lane Landfill in Reading, with the remediation work undertaken by VertaseFLI. The company website describes the project:⁶

'This 20 hectare site consists of a number of worked out gravel pits that were subsequently backfilled with various wastes. The reclamation works involve full delineation of the former landfills, excavation of all biodegradable wastes, recovery and treatment of landfill leachate, processing and treatment for recovery of wastes, and re-instatement to allow re-development with homes with private gardens. A key driver is the appropriate assessment and management of post remediation settlement and gas production potential.

The works will take up to two years to complete and involve the management of approximately 400,000 m³ of clay cap and underlying wastes. The project will demand that works be undertaken to the highest possible standards due to the proximity of local residential properties immediately to the west and large river immediately to the east.

Works will be undertaken in a phased manner including handover for subsequent construction. Very close working relationships will be required with all stakeholders. In particular, VertaseFLI will call upon its extensive experience of establishing and maintaining close contact with local communities through a project specific web site, and regular newsletters and liaison meetings.

The project requires a multi-disciplined approach with emphasis on waste segregation and physical processing prior to soil washing, followed by maximising reuse and minimising export. Remediation design and subsequent management will be undertaken in accordance with the Sustainable Remediation protocols as laid out by SuRF-UK.'

2.2.10 At the time of hendeca's visit (Spring 2015) the final phase of remediation works were just commencing, but the first phases of house building were complete with some units already occupied. Hendeca was advised that in the order of 90% of all materials extracted had been recycled and either used on site or sent off-site for beneficial purposes; less than 10% of all materials extracted from the site had been disposed to landfill. The ICE report abstract advises that '*reclamation process involved construction of a platform for residential development and public open space using up to 95% of the recovered material*'.

2.2.11 This project demonstrates that reworking historic landfill sites can be successfully achieved, but it is the one such example that this research has any found any detail on.

⁵ <https://www.icevirtuallibrary.com/doi/pdf/10.1680/jenes.19.00022> [20.09.2019@12:06]

⁶ <https://vertasefli.co.uk/about-us/news/vertasefli-limited-secure-landfill-reclamation-project> [20.09.2019@11:22]

2.2.12 In October 2010, the Guardian reported on another UK company, Advanced Plasma Power, forming a joint venture to reopen a landfill site located near Hasselt in eastern Belgium.⁷ The Guardian article reported that the project would be operational by 2014.

2.2.13 This project appears numerous times across industry reports, but, at the time of writing this report there is nothing to suggest that it is currently operational. The website of EURELCO⁸ (a pan-European organisation focussed on landfill mining) references Group Machiels suggesting that it will deliver the Belgian landfill mining project, but no date is set.⁹

2.2.14 The Financial Times reported¹⁰ (in January 2018, in an article written by Josh Jacobs who retains full copyright) that the project '*is fighting to launch an experiment with the future of rubbish disposal.*' The report concludes with a statement from Mr Jones (President of EURELCO):

"We are still at the stage where researchers are showing the benefits from a technology perspective," says Mr Jones. "But the proof of the pudding will be in the eating: Eventually you need to convince investors to invest in landfill mining in general — this is not happening yet."

2.3 Conclusions

2.3.1 In short, there are two clear findings from the literature review:

- whilst not unheard of, the mining of historic landfills is not common; and
- there is the potential for substantial benefit in recovering resources, but there are also recognised risks from opening the facility (albeit technologies are evolving to manage these).

2.3.2 The literature review demonstrates that there is potential for some important resources to reside in old landfill sites, and that the technical capability to extract these resources, safely, is developing, although there are few examples of this.

2.3.3 However, it is also clear that there remains substantial barriers to landfill mining, and there is little evidence to suggest that this will become a substantial market in the foreseeable future, or at least within the plan period of the MWLP.

2.3.4 Further, there is no evidence that there is any interest for this to occur in Herefordshire.

⁷ <https://www.theguardian.com/business/2010/oct/11/energy-industry-landfill> [20.09.2019@11:29]

⁸ <https://eurelco.org/> [20.09.2019@11:36]

⁹ <https://eurelco.org/group-machiels/> [20.09.2019:11:34]

¹⁰ <https://www.ft.com/content/0bf645dc-d8f1-11e7-9504-59efdb70e12f> 20.09.2019@11:59]

3. Historic Landfill in Herefordshire

3.1 Introduction

3.1.1 In addition to the literature review, it was considered appropriate to consider the historic landfill legacy within Herefordshire. This local understanding would inform a decision on whether a landfill mining policy would be necessary or appropriate within the MWLP.

3.2 Method

3.2.1 Defra provides data on historic landfill sites in England and Wales at 'Historic Landfill Sites' (an online resource, the 'Defra data') in an Excel format¹¹. This was researched to identify those located in Herefordshire, which are presented in Table 1.

3.2.2 A bespoke QGIS folder was set up, using the Defra data and gaining GIS site boundary data from the Environment Agency¹², to provide interactive mapping so that the sites could be identified. A screenshot from the QGIS folder is presented at Figure 1.

¹¹ <https://data.gov.uk/dataset/17edf94f-6de3-4034-b66b-004ebd0dd010/historic-landfill-sites> [11.10.2019@12:22]

¹² <https://data.gov.uk/dataset/b5d8eaa4-638c-436b-a66c-a6bd1a25f0df/historic-landfill-sites> [11.10.2019@12:56]

Table 1 Historic Landfill Sites in Herefordshire, Defra data

Rows 8 and 25 are deliberately missing as the sites are not present in the Defra data. They are included in Table 2

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
1	EAHLD 24180	Withington Tile Works	Whitestone, Withington, Herefordshire	0	Mr P David	26/06/1979	31/12/1994							Y						Y		
2	EAHLD 24182	Wharton Lodge	Weston Under Pemyard, Ross-on-Wye, Herefordshire	0	Mr R A Savidge	18/07/1977	30/01/1978			Y										Y		
3	EAHLD 24190	Lower Bullingham	Withy Brook, Hereford, Herefordshire	0																		
4	EAHLD 27908	Dymock	Ross-on-Wye, Gloucestershire	0																		Y
5	EAHLD 27931	Abells Quarry	Stoke Lacy, Bromyard, Herefordshire	0	Bromyard Rural District Council	04/04/1995		31/12/1971	31/12/1976			Y	Y							Y		
6	EAHLD 27932	Linton Tile Works	Bromyard, Herefordshire	0																		
7	EAHLD 27933	Warren Wood	Norton, Herefordshire	0				31/12/1964	31/12/1976	Y	Y	Y	Y									
9	EAHLD 27935	Edwyn Ralph	Collington, On Bromyard to	0	Bromyard Urban	01/01/1974	30/11/1978		31/12/1964		Y	Y	Y							Y		

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
			Tenbury Road, Herefordshire		District Council																	
10	EAHLD 27936	Bradlow Farm	Cut Throat Lane, Bradlow, Ledbury, Herefordshire	0	M Walsh and Sons Limited	12/10/ 1982	16/06/ 1994	31/12/ 1982	31/12/ 1988	Y										Y		
11	EAHLD 27937	Wilton Road	Ross-on-Wye, Herefordshire	0	South Herefords hire District Council			31/12/ 1960	30/04/ 1974	Y										Y		
12	EAHLD 27938	Homs Road	Horns Road, Ross-on-Wye, Herefordshire	0				31/12/ 1950	31/12/ 1965			Y	Y									
13	EAHLD 27939	Strangford Railway Cutting	Strangford, Ross-on-Wye, Herefordshire	0	Hereford & Worcester County Council	30/06/ 1982	30/04/ 1994	31/10/ 1982	28/02/ 1990	Y	Y	Y	Y				Y			Y		
14	EAHLD 27940	Lea Line Warehouse	Lea, Ross-on- Wye, Herefordshire	0	R T Walding	04/09/ 1979	31/12/ 1982	31/12/ 1979	31/12/ 1982	Y										Y		
15	EAHLD 27941	Refuse Tip at Hartleys Quarry	Gorsley, Linton, Ross-on-Wye, Herefordshire	0				31/05/ 1965	31/01/ 1980	Y	Y	Y	Y									

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
16	EAHLD 27942	Two Park Farm	B4221, Gorsely, Ross-on-Wye, Herefordshire	0	Monk Constructi on Limited	14/05/ 1992	14/05/ 1993	01/11/ 1991	01/02/ 1992	Y										Y		
17	EAHLD 27943	Deep Dean	Coughton, Ross- on-Wye, Herefordshire	0	South Herefords hire District Council		13/12/ 1974	31/12/ 1944	18/12/ 1974			Y	Y							Y		
18	EAHLD 27944	Howle Hill Quarry	Howle Hill, Ross- on-Wye, Herefordshire	0	Mr Robin Melvyn Phillips	21/01/ 1986	28/04/ 1994	31/12/ 1986	31/12/ 1988	Y	Y					Y				Y		
19	EAHLD 27994	Llangarren Tip	Bernithan Farm, Llangarron, Ross, Herefordshire	0	South Herefords hire District Council			30/04/ 1970	30/06/ 1976			Y	Y							Y		
20	EAHLD 27995	Bryngwyn Tip	Wormelow Tump, Much Dewchurch, Herefordshire	0				31/01/ 1963	30/04/ 1974			Y	Y									
21	EAHLD 27996	Callow Farm	Callow, Hereford, Herefordshire	0	G H Watkins (Plant) Limited	11/02/ 1982	08/12/ 1994	31/12/ 1982	31/12/ 1993	Y										Y		
22	EAHLD 27997	Cobhall Common	Allensmore, Hereford	0																		

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
23	EAHLD 27998	Doward Quarry	Whitchurch, Ross-on-Wye, Herefordshire	0	Mr B Alexander	16/07/ 1990	28/04/ 1994	31/12/ 1990	31/12/ 1993	Y						Y			Y			
24	EAHLD 28094	Ledbury	New Street, North of A449, Ledbury, Herefordshire	0	Hereford and Worcester County Council	31/12/ 1978	30/04/ 1994	31/12/ 1940	31/12/ 1978	Y		Y	Y							Y		
25	EAHLD 28096	Ledbury	Herefordshire	0																		
26	EAHLD 28102	Coombe Hill	Raycomb Lane	0																		
27	EAHLD 30313	Eardisley	Eardisley, Hereford, Herefordshire	0									Y									
28	EAHLD 30314	Shobdon Tip	Shobdon, Herefordshire	0	Hereford & Worcester County Council			31/12/ 1947	30/06/ 1978		Y	Y	Y									
29	EAHLD 30315	Tupsley Court	Adjacent to Lugg Meadows, Near Hereford, Herefordshire	0								Y	Y									

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
30	EAHLD 30529	Old Quarry	Canon Pyon Road, Portway, Burghill, Herefordshire	0	Mr J E Williams	23/07/ 1987	31/12/ 1989	31/12/ 1987	31/12/ 1989	Y										Y		
31	EAHLD 31210	Sutton Walls	Hereford, Herefordshire	0	Cleanaway Limited	21/07/ 1977	27/04/ 1994	31/12/ 1964	31/07/ 1981	Y	Y	Y	Y	Y	Y					Y		
32	EAHLD 31261	Doward Quarry	Whgitchurch, Ross-on-Wye, Herefordshire	0				01/09/ 1959				Y	Y									
33	EAHLD 31262	Refuse Tip East of Kingstone	Weston-under- Penyard, Ross- on-Wye, Herefordshire	0				31/03/ 1965	30/04/ 1971				Y									
34	EAHLD 31277	Lillapool	Bredwardine, Hereford	0	Leominste r District Council			31/12/ 1958	31/12/ 1974			Y	Y									
35	EAHLD 31278	Westhope Hill	Hereford, Herefordshire	0	Leominste r District Council			31/12/ 1965	30/06/ 1977			Y	Y									
36	EAHLD 31279	Elm Field	Dilwyn, Herefordshire	0	Hereford & Worcester County Council			31/12/ 1965	31/12/ 1979			Y	Y									

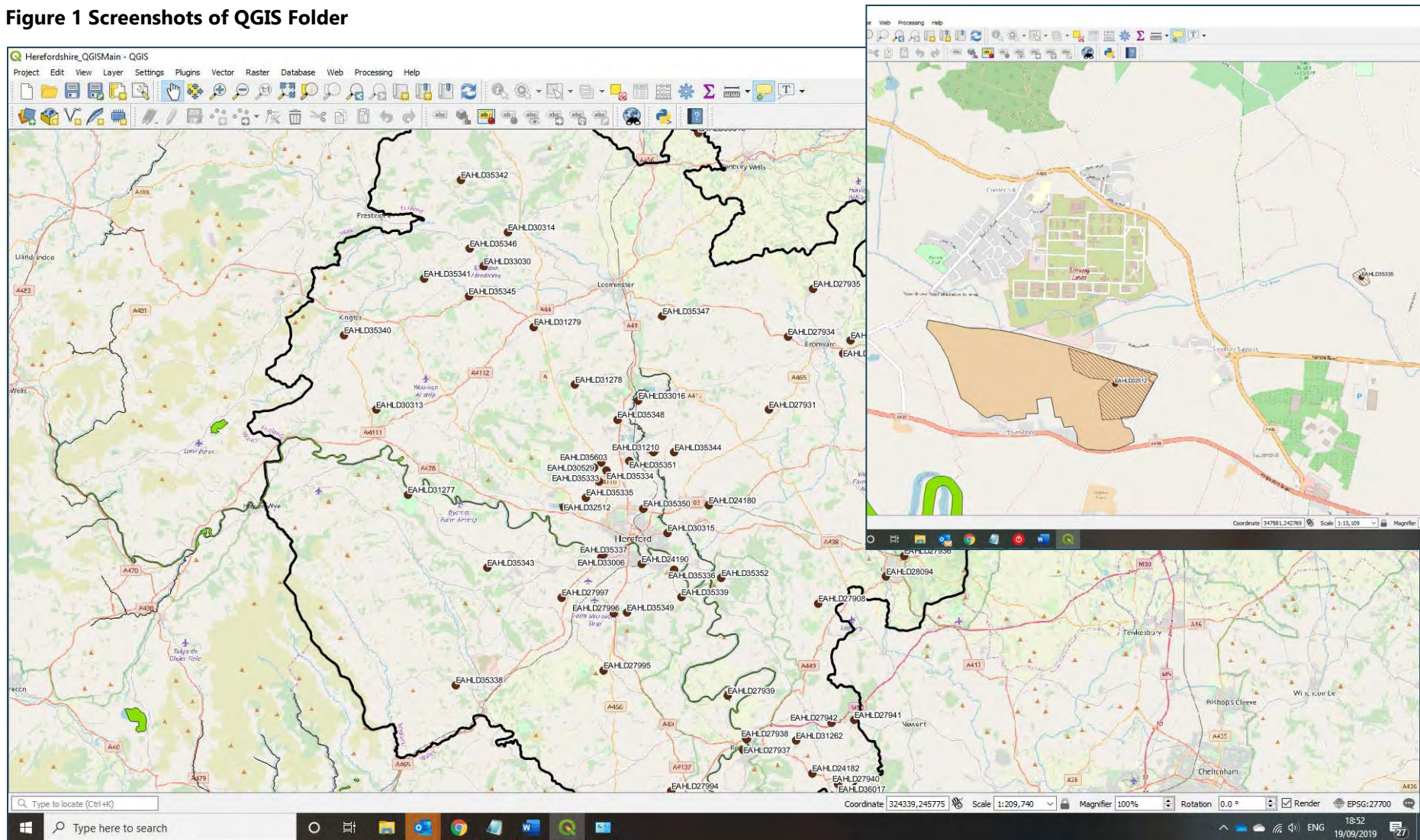
Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
37	EAHLD 32512	Birstow's Tip	Near New Barnfields	0	Hereford & Worcester County Council	31/12/1980	01/06/1994	31/01/1936	01/06/1994	Y	Y	Y	Y				Y			Y		
38	EAHLD 33006	Belmont Quarry Landfill	Belmont Farm, Belmont, Hereford, Herefordshire	30078	Skanska Construction (Regions) Limited	17/02/1993	20/12/2004	24/02/1993	30/06/1993		Y	Y	Y				Y			Y		
39	EAHLD 33016	Lower Vern Landfill	Lower Vern Landfill, Lower Vern, Maiden, Herefordshire	30165	B Taysom	29/05/1985				Y		Y								Y		
40	EAHLD 33030	Torvale	Torvale Landfill, Great Leys Farm, Shobdon, Herefordshire	30210	Torvale Building Products	19/04/1988														Y		Y
41	EAHLD 34212	Howle Hill Landfill Site	Howle Hill, Ross On Wye, Herefordshire	30243	R M Phillips	13/07/2001	30/01/2007													Y		
42	EAHLD 35333	Burlton Court	The Quarry, Land at Burlton, Burghill, Herefordshire	0	Mr Arundel			31/12/1987		Y	Y	Y	Y									

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
43	EAHLD 35334	Grove Farm	Portway, Burghill, Herefordshire	0	Mr P M Brown	12/11/ 1987	16/05/ 1994	10/12/ 1987	04/05/ 1989	Y									Y			
44	EAHLD 35335	Burghill Sewage Treatment Works	Burghill, Herefordshire	0	Welsh Water Authority	18/11/ 1981	30/04/ 1994	31/07/ 1981	30/06/ 1982	Y									Y			
45	EAHLD 35336	Railway Cutting	Dinedor	0						Y												
46	EAHLD 35337	Belmont	Hereford, Herefordshire	0	Container way Limited	04/03/ 1981	05/02/ 1993	31/12/ 1981	31/12/ 1987	Y	Y	Y	Y	Y	Y					Y		
47	EAHLD 35338	Ewyas Harold	Pontrilas, King Street, Ewayas Harold, Herefordshire	0				31/12/ 1961	31/03/ 1980	Y		Y	Y									
48	EAHLD 35339	Primose Bank	Holme Lacy, Herefordshire	0	Mr K Robinson	28/07/ 1981	31/12/ 1985	31/12/ 1981	31/12/ 1985		Y									Y		
49	EAHLD 35340	Kingswood Coppice	Kingswood, Kington, Herefordshire	0	Hereford & Worcester County Council			31/12/ 1970	31/12/ 1982	Y	Y	Y	Y									

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
50	EAHLD 35341	The Grove	Staunton-on-Arrow, Kington, Herefordshire	0	Leominster District Council			31/12/1968	30/06/1976			Y	Y									
51	EAHLD 35342	Deepmoor farm	Lingen, Bucknall, Herefordshire	0	Torvale Holdings Limited	27/06/1979	30/04/1994	31/12/1979	31/12/1983		Y									Y		
52	EAHLD 35343	Shenmore Tip	Madley, Herefordshire	0				31/12/1965	28/03/1980	Y		Y	Y									
53	EAHLD 35344	Sutton Hill Quarry	Marden, Herefordshire	0	Henry Wiggin and Company Limited	03/10/1990														Y		
54	EAHLD 35345	Leaders Lane	Pembridge, Leominster, Herefordshire	0	Leominster District Council			31/12/1936	31/12/1964			Y	Y									
55	EAHLD 35346	Great Leys Farm	Shobdon, Leominster, Herefordshire	0	Torvale Building Products Limited	19/04/1988	30/04/1994	19/04/1988	31/12/1993	Y		Y								Y		
56	EAHLD 35347	Sunny Bank	Stoke Prior, Leominster, Herefordshire	0	Hereford and Worcester County Council	31/12/1980	30/04/1994	31/12/1980	31/12/1986			Y	Y							Y		

Row	HLD Ref	Site Name	Site Address	Licence/ permit ref	Licence/ permit holder	Licence issue date	Licence surren der date	First input date	Last input date	Inert	Industrial	Commercial	Household	Special/hazardou	Liquid/sludge	Waste unknown	Gas control	Leachate contain.	Exempt	Licensed	No licence	Buffer
57	EAHLD 35348	Green Farm Quarry	The Quarry, Wellington, Herefordshire	0	J P Morris	01/07/1977	29/04/1994	31/12/1977	31/12/1989	Y	Y	Y	Y			Y			Y			
58	EAHLD 35349	King Pitts Farm	Callow	0																		
59	EAHLD 35350	Roman Road	Hereford	0								Y										
60	EAHLD 35351	St. Peters Close	Moreton on Lugg	0								Y	Y									
61	EAHLD 35352	Bagpipers Tump	Mordiford	0								Y	Y									
62	EAHLD 35603	St. Donats Farm	Canon Pyon Rd, Hereford, Burghill, Herefordshire	30197	Davies Glenwell R	27/08/1998	30/07/2008			Y									Y			
63	EAHLD 35691	Whitchurch Landfill (Freeman)	Whitchurch Landfill, Ross On Wye, Whitchurch, Herefordshire	30074	Whitchurch Landfill (Freeman)	18/12/1992	30/10/2009												Y			
64	EAHLD 36017	The Lea Landfill	Ross On Wye, Herefordshire	30192	Mr Keef	11/04/1997	05/06/2017				Y								Y			

Figure 1 Screenshots of QGIS Folder



- 3.2.3 Hendeca then used the resultant mapping from the QGIS folder alongside Google Maps to identify the current land use at each of the historic landfill sites. Table 2 presents this information.
- 3.2.4 65 sites have been identified in total. The vast majority (62 sites) appeared in both the Defra data and QGIS folder. There are three 'incomplete' sites:
- Site referenced EAHLD27934 (row 8) appears in the QGIS mapping but not in the Defra data. This site has been found on Google Maps and commented upon.
 - Site referenced EAHLD28096 (row 25), simply described as Ledbury, Herefordshire appears in the Defra data but not the QGIS mapping. No further information has been found on this site.
 - Leominster Landfill (row 65), is known to have existed, but does not appear on either the Defra data or QGIS mapping. It might be because the licence for this site has not been surrendered.
- 3.2.5 Waste data is notoriously inadequate and, even recognising the three 'incomplete' sites, this is considered to represent a good evidence set and to be robust for the purposes of this report.

Table 2 Historic Landfill in Herefordshire, Current Use (September 2019)

Row	HLD Reference	Site Name	Site Address	Current Use (September 2019)
1	EAHLD24180	Withington Tile Works	Whitestone, Withington, Herefordshire	Whitestone Business Park
2	EAHLD24182	Wharton Lodge	Weston Under Pemyard, Ross-on-Wye, Herefordshire	Agricultural land, looks like deposit made for farm track.
3	EAHLD24190	Lower Bullingham	Withy Brook, Hereford, Herefordshire	Housing (The Pastures/The Shires) and open space
4	EAHLD27908	Dymock	Ross-on-Wye, Gloucestershire	No obvious deposit, agricultural field
5	EAHLD27931	Abells Quarry	Stoke Lacy, Bromyard, Herefordshire	Grassland, some deposits still visible
6	EAHLD27932	Linton Tile Works	Bromyard, Herefordshire	Grassland and lake
7	EAHLD27933	Warren Wood	Norton, Herefordshire	Grassland and mature trees
8	EAHLD27934	Present in QGIS mapping, not present in Defra dataset		House and buildings (EJ Barrett & Sons)
9	EAHLD27935	Edwyn Ralph	Collington, On Bromyard to Tenbury Road, Herefordshire	Grassland
10	EAHLD27936	Bradlow Farm	Cut Throat Lane, Bradlow, Ledbury, Herefordshire	No obvious deposit, grassland
11	EAHLD27937	Wilton Road	Ross-on-Wye, Herefordshire	Car park and skate park south of Wilton Road
12	EAHLD27938	Homs Road	Horns Road, Ross-on-Wye, Herefordshire	Religious institution and business park/industrial estate
13	EAHLD27939	Strangford Railway Cutting	Strangford, Ross-on-Wye, Herefordshire	Grassland
14	EAHLD27940	Lea Line Warehouse	Lea, Ross-on-Wye, Herefordshire	Grassland/access (Alan Keef) Overlaps with EAHDL36017

Row	HLD Reference	Site Name	Site Address	Current Use (September 2019)
15	EAHLD27941	Refuse Tip at Hartleys Quarry	Gorsley, Linton, Ross-on-Wye, Herefordshire	Grassland with mature tree boundary
16	EAHLD27942	Two Park Farm	B4221, Gorsely, Ross-on-Wye, Herefordshire	Grassland/farmland
17	EAHLD27943	Deep Dean	Coughton, Ross-on-Wye, Herefordshire	No obvious deposits made, farmland
18	EAHLD27944	Howle Hill Quarry	Howle Hill, Ross-on-Wye, Herefordshire	Rough grassland and trees Overlaps with EAHDL34212
19	EAHLD27994	Llangarren Tip	Bernithan Farm, Llangarron, Ross, Herefordshire	Grassland/scrubland located in middle of fields
20	EAHLD27995	Bryngwyn Tip	Wormelow Tump, Much Dewchurch, Herefordshire	No obvious deposits, grassland
21	EAHLD27996	Callow Farm	Callow, Hereford, Herefordshire	Scrubland wrapoing around eastern side of housing
22	EAHLD27997	Cobhall Common	Allensmore, Hereford	Cobhall Cottage, site W24
23	EAHLD27998	Doward Quarry	Whitchurch, Ross-on-Wye, Herefordshire	Small site, occupied by Doward Park Campsite Overlaps with EAHLD31261
24	EAHLD28094	Ledbury	New Street, North of A449, Ledbury, Herefordshire	Grassland and mature trees
25	EAHLD28096	Ledbury	Herefordshire	Present in Defra dataset, not present in QGIS mapping
26	EAHLD28102	Coombe Hill	Raycomb Lane	Large house and garden (Phelps Cottage)
27	EAHLD30313	Eardisley	Eardisley, Hereford, Herefordshire	Farmland and grass
28	EAHLD30314	Shobdon Tip	Shobdon, Herefordshire	Scrub grassland, woodland and chicken houses
29	EAHLD30315	Tupsley Court	Adjacent to Lugg Meadows, Near Hereford, Herefordshire	Tiny site, within woodland

Row	HLD Reference	Site Name	Site Address	Current Use (September 2019)
30	EAHLD30529	Old Quarry	Canon Pyon Road, Portway, Burghill, Herefordshire	Rough grassland/paddock to house set within fields of orchard/vineyards
31	EAHLD31210	Sutton Walls	Hereford, Herefordshire	Site surrounded by mature woodland, eastern half is farmland, western half is scrub grassland
32	EAHLD31261	Doward Quarry	Whgitchurch, Ross-on-Wye, Herefordshire	Small site, occupied by Doward Park Campsite Overlaps with EAHDL27998
33	EAHLD31262	Refuse Tip East of Kingstone	Weston-under-Penyard, Ross-on-Wye, Herefordshire	Farm track
34	EAHLD31277	Lillapool	Bredwardine, Hereford	Agricultural land
35	EAHLD31278	Westhope Hill	Hereford, Herefordshire	Small site, grassland within woodland
36	EAHLD31279	Elm Field	Dilwyn, Herefordshire	Small site, grassland
37	EAHLD32512	Birstow's Tip	Near New Barnfields	Northern section of Stretton Sugwas (Site M01)
38	EAHLD33006	Belmont Quarry Landfill	Belmont Farm, Belmont, Hereford, Herefordshire	Scrub grassland/open space between housing (Wenlock Close and Dorchester Way) South of #35337
39	EAHLD33016	Lower Vern Landfill	Lower Vern Landfill, Lower Vern, Maiden, Herefordshire	Lower Vern (Site W39)
40	EAHLD33030	Torvale	Torvale Landfill, Great Leys Farm, Shobdon, Herefordshire	Shobdon Quarry (Site M04)
41	EAHLD34212	Howle Hill Landfill Site	Howle Hill, Ross On Wye, Herefordshire	Rough grassland and trees Overlaps with EAHDL27944
42	EAHLD35333	Burlton Court	The Quarry, Land at Burlton, Burghill, Herefordshire	Restored scrubland and mature trees

Row	HLD Reference	Site Name	Site Address	Current Use (September 2019)
43	EAHLD35334	Grove Farm	Portway, Burghill, Herefordshire	Agricultural building
44	EAHLD35335	Burghill Sewage Treatment Works	Burghill, Herefordshire	Rough grassland
45	EAHLD35336	Railway Cutting	Dinedor	Rough grassland, access track, woodland
46	EAHLD35337	Belmont	Hereford, Herefordshire	Open space adjacent Northolme Community Centre
47	EAHLD35338	Ewyas Harold	Pontrilas, King Street, Ewyas Harold, Herefordshire	Grassland with mature tree surround
48	EAHLD35339	Primose Bank	Holme Lacy, Herefordshire	Manège and farmland
49	EAHLD35340	Kingswood Coppice	Kingswood, Kington, Herefordshire	Rough grassland with mature trees surround
50	EAHLD35341	The Grove	Staunton-on-Arrow, Kington, Herefordshire	Rough grassland and mature trees
51	EAHLD35342	Deepmoor farm	Lingen, Bucknall, Herefordshire	Agricultural buildings
52	EAHLD35343	Shenmore Tip	Madley, Herefordshire	No obvious sign of deposit, agricultural field
53	EAHLD35344	Sutton Hill Quarry	Marden, Herefordshire	Scrubland and trees
54	EAHLD35345	Leaders Lane	Pembridge, Leominster, Herefordshire	Rough grassland
55	EAHLD35346	Great Leys Farm	Shobdon, Leominster, Herefordshire	Grassland, surrounded by fields
56	EAHLD35347	Sunny Bank	Stoke Prior, Leominster, Herefordshire	Grassland
57	EAHLD35348	Green Farm Quarry	The Quarry, Wellington, Herefordshire	Rough grassland
58	EAHLD35349	King Pitts Farm	Callow	Tiny bit of infill alongside local road
59	EAHLD35350	Roman Road	Hereford	Rough grassland
60	EAHLD35351	St. Peters Close	Moreton on Lugg	Housing (St Peters Close)
61	EAHLD35352	Bagpipers Tump	Mordiford	Scrubland bordered with mature trees

Row	HLD Reference	Site Name	Site Address	Current Use (September 2019)
62	EAHLD35603	St. Donats Farm	Canon Pyon Rd, Hereford, Burghill, Herefordshire	Rough grassland
63	EAHLD35691	Whitchurch Landfill (Freeman)	Whitchurch Landfill, Ross On Wye, Whitchurch, Herefordshire	Agricultural buildings and manège
64	EAHLD36017	The Lea Landfill	Ross On Wye, Herefordshire	Grassland/access (Alan Keef) Overlaps with EAHDL27940
65	Licence reference: JP3099FJ/V002 Waste Management Licence: 30138 Issued: 08/09/1994 Varied: 12/05/2010	Leominster Landfill Beacon Waste Ltd	Bridge St, Leominster	Scrubland
	Licence reference: FP3895FS/V00 Waste Management Licence: 30296 Issued: 04/08/2000 Varied: 12/05/2010	Leominster Household Waste Site & Transfer Station Mercia Waste Management Ltd	Bridge St, Leominster	Household Waste Site & Transfer Station

3.3 Conclusions

Introduction

- 3.3.1 None of the historic landfill sites appear, in principle, to be appropriate for mining, with the exception of that at Leominster.
- 3.3.2 The sites are generally remotely located and their current uses are either agriculture or some form of development (primarily housing). Some sites have been restored (either naturally or purposefully) to scrubland that is often used as open space.
- 3.3.3 Leominster Landfill is located on the northern side of the town; a market town that is identified for development within the Core Strategy. Further, the former landfill site has been partially redeveloped, to the Household Waste Site and Transfer Station, but the majority of it has been left to scrubland that would be readily accessible as an open mine. Consequently, this site is considered further.

Leominster landfill site

- 3.3.4 Herefordshire Council Officers¹³ advise that the Leominster landfill site accepted mixed municipal wastes until about 1995, with records indicating that it was in operation since the 1920s. The site has a leachate drainage system installed including a perimeter drain with sumps that pump the liquid through a methane stripper prior to it being discharged to sewer.
- 3.3.5 The site is owned by Herefordshire Council, which itself has no intention or aspiration to open the landfill (either for remediation purposes or to recover any previously disposed items) and is not aware of any interest from third parties.
- 3.3.6 A report titled 'Centenary history of waste and waste managers in London and South East England' as prepared by the CIWM provides some useful context information in relation to what has been disposed to landfill sites over the years. Page 15 of that report, in a section titled 'Key Messages From Changing Dustbin Waste Composition 1892 -2004, identifies a key change as being the shift from coal to gas and electric heating appliances. This meant that *'Less paper and other waste was also burnt on fires as appliances became steadily more affordable'*. This section concludes *'Overall, generation of waste by households may be fairly similar in average weight to a century ago, at roughly one tonne per household per year. But the composition of that waste, as the graph shows, is now radically different.'*
- 3.3.7 On page 38 of the same report, there is a review of waste management during the 1950s, titled '1957 – We'd Never Had It So Good.' This section indicates that there was a substantial shift in waste management, driven both by new shopping habits and because the *'Clean Air Act was implemented in 1958, accelerating change from the burning of solid fuels, and making a major difference to reducing ash and cinders in dustbins, and changing the weights that dustmen had to carry.'*
- 3.3.8 Whilst this is not prescriptive, nor prepared with Herefordshire in mind, the CIWM report does indicate a shift in the type of waste that was sent for treatment or disposal, and that prior to the 1950s, much of the waste disposed of to landfill is likely to have comprised ash. This

¹³ Pers.comm from Kenton Vigus, Waste Disposal Team Leader and Nick James, Principal Technical Officer, October 2019

would suggest that much of the content of the Leominster Landfill site would not be worth recovering.

- 3.3.9 Figure 4.10 of the Herefordshire Core Strategy presents the Leominster Key Diagram. The site is located directly south of the River Lugg and west of the B4361, which would place it within the floodplain and an area identified for green infrastructure. Its proximity to the River Lugg (a Site of Special Scientific Interest) is likely to be a material constraint to re-opening the site. The former landfill could provide for green infrastructure improvements, including open space provision, without being reopened. This would deliver the aspirations of the Green Infrastructure Strategy (February 2010) including to '*Develop the former landfill site as an accessible green space and a small nature conservation area.*' (LeoLEZ 1, page 151/152). The site does not appear to be an appropriate location to allocate for landfill mining.
- 3.3.10 In addition to its potential lack of suitability for mining, in terms of content wastes and environmental constraints, there is no evidence to suggest any interest in the mining of this site.

Conclusions

- 3.3.11 Due to both the lack of suitability of sites and of interest in landfill mining within Herefordshire, it is not considered appropriate to allocate any sites in Herefordshire for mining

4. Report Conclusions

4.1 Literature Review

4.1.1 There are two clear findings from the literature review:

- whilst not unheard of, the mining of historic landfills is not common; and
- there is the potential for substantial benefit in recovering resources, but there are also recognised risks from opening the facility (albeit technologies are evolving to manage these).

4.1.2 The literature review demonstrates that there is potential for some important resources to reside in old landfill sites, and that the technical capability to extract these resources, safely, is developing.

4.1.3 However, it is also clear that there remain substantial barriers to landfill mining, and there is little evidence to suggest that this will become a substantial market in the foreseeable future, or at least within the plan period of the MWLP.

4.1.4 Further, there is little evidence that there is any interest for this to occur in England.

4.2 Historic Landfill in Herefordshire

4.2.1 Research of the historic landfill sites within Herefordshire indicates only one location at which further research would be appropriate. This concluded that the site was not likely to contain sufficient resources of such value as to make mining the former landfill viable, that it would be subject to environmental constraints, and could play a useful role in delivering green infrastructure benefits, and that there was no interest in it for mining.

4.2.2 Discussion with Herefordshire Council substantiates the lack of evidence that there is any interest for landfill mining within Herefordshire.

4.3 Conclusions

4.3.1 The research undertaken has been high level, however it is considered to be both proportionate and credible. On the basis of this research, there is little evidence that landfill mining would be appropriate to promote or even that it would be deliverable.

4.3.2 In conclusion, it is not considered necessary or appropriate to have a policy for landfill mining in the MWLP.



Important Notice

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Annex B

Natural England letters dated
22 July 2019 and 5 August 2019



Herefordshire Minerals and Waste Local Plan

March 2020
HENDECA LTD

Date: 22 July 2019



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Herefordshire Council
Plough Lane Offices
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Hereford
HR4 0LE

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County Hall
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WR5 2NP

T 0300 060 3900

Dear Liz

I am writing to you regarding our Planning Advice within the River Lugg catchment. As you are aware the River Wye is designated as a Special Area of Conservation (SAC), requiring the highest level of protection, appropriate management, enhancement and where necessary, restoration.

The river currently suffers from the effects of point source and diffuse water pollution and levels of phosphates in the River Lugg part of the River Wye SAC have exceeded the conservation objective, whereas other parts are at risk of not meeting the conservation objectives. The Nutrient Management Plan (NMP) was developed to reduce phosphate levels in the Wye catchment, including the River Lugg.

Your authority should be aware of a recent Ruling made by the Court of Justice of the European Union (the CJEU) on the interpretation of the Habitats Directive in the case of *Coöperatie Mobilisation* (AKA the Dutch Case¹²) (Joined Cases C-293/17 and C-294/17).

The *Coöperatie Mobilisation* case relates to strategic approaches to dealing with nitrogen deposition. Specifically, it is about the application of fertiliser as a part of agricultural activities, when nitrogen deposition levels are already exceeding their critical load.

The Dutch Case gives a steer on the interpretation of the Habitats Regulations that is relevant to the situation on the River Lugg. It considers the approach to take when new plans/projects may adversely affect the ecological situation where a European site is already in 'unfavourable' conservation status, and it considers the acceptability of mitigating measures whose benefits are not certain at the time of that assessment.

The CJEU gave the steer that where the conservation status of a natural habitat is unfavourable, the possibility of authorising activities which may subsequently affect the ecological situation of the sites concerned seems necessarily limited.

The implication here is that where a site is failing its water quality objectives or its ecological objectives due to water quality and is therefore classed as in unfavourable condition, there is limited scope for the approval of additional damaging effects.

¹ Judgment in Joined Cases C-293/17 and C-294/17 *Coöperatie Mobilisation for the Environment UA and Others v College van gedeputeerde staten van Limburg and Others*, found at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62017CJ0293>

² AG opinion (July 2018) can be found here: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:62017CC0293&from=EN>

Another issue is that future benefits of measures cannot be relied upon at Appropriate Assessment where those benefits are uncertain at the time of the assessment. For example if the procedures needed to accomplish them have not yet been carried out or the level of scientific knowledge does not allow them to be identified or quantified with certainty.

The CJEU stops short of requiring all measures to be in place at the time of Appropriate Assessment. However, this ruling indicates that they need to comprehensively demonstrate how any relevant measures can be safely relied on to deliver the anticipated effects.

Certainty is likely to mean different things for different measures and will be highly fact specific. It should therefore still be possible to satisfy the legal tests and remove all reasonable scientific doubt without measures in place at the time of assessment, where for example:

- They are scientifically-certain;
- They are properly secured;
- It is clear when they will take effect, and by whom;
- It is clear how they are financed etc.

Natural England and Herefordshire Council's thinking to date has been that development in the River Lugg catchment can proceed, even when it might add to the existing Phosphate levels in the river. This is because the Nutrient Management Plan for the River Wye SAC provides a framework for reducing Phosphate levels down to below the target level by 2027 (in line with Water Framework Directive targets). However, the Dutch case has prompted us to review our position with regards to planning casework within the Lugg catchment. We are unable to respond to casework in the Lugg catchment in the short term, whilst we seek guidance from national specialists and our legal team regarding our position on proposals that are not phosphate neutral or ecologically inconsequential.

We advise Herefordshire Council as the competent authority to seek its own legal advice on the implications of the Dutch case to its decision making. We will then need to meet to discuss how we proceed.

If you require any further information please contact Rob Sargent on 02080 260872.

Yours sincerely

Emma Johnson
West Midlands Area Manager

Date: 05 August 2019



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BY EMAIL ONLY

T 0300 060 3900

Dear Liz,

Planning applications in the River Lugg catchment

I know you have been in discussion with my colleague Rob Sargent about the implications of the Dutch judgement. This letter is our formal response to planning applications in the River Lugg catchment. It provides Natural England's (NE) response to all such planning applications, until the situation changes.

Natural England wrote to you on 18 July 2019, advising the Council to seek a legal opinion on the implications of the Dutch case (Joined Cases C-293/17 and C-294/17). As the Competent Authority for this matter, the council needs to form a view on the correctness of approving projects that allow further damage to sites that are already failing their conservation objectives, and whether the Nutrient Management Plan gives enough 'certainty' around mitigation measures to allow it to be relied upon in Habitat Regulations Assessment.

In discharging our role as statutory consultee, it is Natural England's advice that for plans or projects that have likely significant effects and require an Appropriate Assessment under the Habitats Regulations, the effects are currently uncertain. This is because, in our view, reasonable scientific doubt remains as to whether the Nutrient Management Plan can provide appropriate mitigation. The council may wish to consider, notwithstanding this, whether there are alternative solutions that would avoid an adverse effect on the integrity of the site or whether there are imperative reasons of overriding public interest. If there are not, then permission should not be granted.

Plans or projects that are able to show betterment or nutrient neutrality may be permitted. Betterment in this context would mean certainty that the proposal is not adding to the Phosphate levels within the river, and that permitting it does not make it harder to achieve the Phosphate targets. Natural England would be able to advise on this on a case by case basis if required.

A list of the current consultations for which we are unable to agree there are no adverse effects on the integrity of the River Wye SAC is provided as an annex to this letter. If the council believes that any of the proposals are able to demonstrate betterment or nutrient neutrality, then we would be pleased to revise our response accordingly. For the avoidance of doubt, the advice in this letter can be applied to any further consultations in the River Lugg catchment.

We anticipate close working with the council and other partners on this matter, once the council has formed its own position on the implications of the Dutch judgement for the River Lugg part of the River Wye SAC. In doing this, the council may wish to refer this matter to the Ministry of Housing, Communities and Local Government for further guidance.

For any queries relating to the specific advice in this letter only please contact Rob Sargent on

02080 260872. For any new consultations, or to provide further information on this consultation please send your correspondences to consultations@naturalengland.org.uk.

Yours sincerely

Emma Johnson
West Midlands Area Manager

Annex 1

Live consultations where we are unable to agree there are no adverse effects on integrity

Our reference	Your reference	Description
283826	190783	Proposed erection of two cottages. Land at 1 & 2 Venns Green Cottages, Venns Green, Sutton St Nicholas, Herefordshire
283415		Ashperton Neighbourhood Plan Regulations 16 Consultation
283851	191444	Proposed conversion of the mill and associated buildings to 6 units for holiday accommodation, Waterloo Mill, Cobnash, Kingsland, Leominster, Herefordshire
283858	184287	Proposed erection of eight dwellings, Land at Lingen Nursery, Lingen, Herefordshire
285623	191899	Approval of reserved matters following outline approval 180185/O. For proposed new dwelling, Longmoor House, Shirleath, Kingsland, Leominster, HR6 9RG
285733	19748	Demolition of single dwelling house to facilitate erection 10 new dwellings, Lion Court, 25 New Street, Leominster, HR6 8LS
286771		Longtown Group Neighbourhood Development Plan Regulation 16 Consultation
286865	191805	Proposed remodelling and extending car park, provision toile, etc. Croft Castle, Leominster, HR6 9PW
287324	191990	Proposed ground floor extension, Carpenter Goodwin, 31 Bridge Street, Leominster, HR6 8DU
287267	172845	Proposed erection of two table chicken buildings, Stag Batch House, Monkland Road, Leominster, HR6 9DA
288357	191942	Reserved matters following outline approval 7 dwellings, Land adjoining Hillhampton Farm, Shobdon, Leominster
288508	190844	To locate offices on first floor house, The Rodd, Presteigne, Herefordshire, LD8 2LL
288936	192421	Holiday/fishing lodge, Land at Riverside, Dinmore, HR1 3JP
289203	174463	Retrospective for retention barn for fruit processing business, continued use of land for siting of mobile home etc. The Barn, Prospect field, Upper Dormington, HR1 4ED
286850	191759	Erection of a detached single storey two bedroom bungalow. Plot 1 Land Adjacent 13 The Birches The Birches Shobdon HR6 9NG
286954	191912	Proposed 3 bedroom property. Land adjacent Appletree House, Willow Rise, Sutton St Nicholas
286881	191909	Outline planning permission for the erection of 4 no. dwellings and associated works with all matters save access reserved. Land adjacent to Old School House, Marden, Herefordshire
286587	191875	Outline application for the erection of two detached dwellings with access drives with all matters reserved except Access and Scale. Land at Three Penny, Bit Cottage, Lugwardine HR1 4DP
286882	191722	Conversion of toilet block to one-bedroom flat; creation of ten mobility-scooter stores; and conversion of nuclear bunker to document storage facility. Former Emergency Centre, Arkwright Court, Leominster HR6 8NF
287695	191274	Application for approval of reserved matters following outline approval 170277/O (Proposed site for housing development for up to 6 dwellings). Land fronting Mill Street, The Hop Pole, Leominster HR6 8DY

287656	192202	Proposed change of use and conversion of outbuilding/store to ancillary residential to form guest accommodation. Sufton Cottage, Sufton Lane, Mordiford, Hereford, Herefordshire HR1 4EJ
290144	192223	Proposed single dwelling house and detached garage. The Garage, Bishops Frome, Herefordshire



Annex C

Position Statement - Development in
the River Lugg Catchment Area,
March 2020



Herefordshire Minerals and Waste Local Plan

March 2020
HENDECA LTD

Position Statement - Development in the River Lugg Catchment Area March 2020

Background

Herefordshire is an area rich in its natural features of special value; its landscape, wildlife, recreation and health benefits, as well as its local economy. The River Wye and its tributaries are recognised as being of international importance for their unique character and wildlife, requiring the highest level of protection, management, enhancement and where appropriate; restoration.

Habitat Regulations Assessment

Herefordshire Council as the 'competent authority' under the Habitats Regulations, (The Conservation of Habitats and Species Regulations 2017) is legally required to assess the potential impacts of projects and plans, on internationally important sites which include the River Wye SAC (Special Area of Conservation).

In its role as competent authority, the council must carry out a 'Habitat Regulations Assessment' on any relevant planning application that falls within the red and purple areas shown on the plan. Where there is a 'Likely Significant Effect', the council must carry out an 'Appropriate Assessment' in order to determine, with scientific certainty, that there would be no 'Adverse Effect on Integrity' on the designated site from the plan or project, either alone or in combination with other plans and projects. The council takes this into account when considering whether planning permission can be granted. If it cannot be proven that there would not be an adverse effect on integrity, then planning permission cannot be granted without further stringent consideration under the Habitats Regulations.

Natural England (NE) is a statutory consultee on appropriate assessments and provides advice to competent authorities in relation to sites designated as SACs. Local Planning Authorities must have regard to the advice given by NE when making planning decisions (for both individual developments and local plans). NE's advice should be given considerable weight, but competent authorities are entitled to depart from it where they can give cogent reasons for doing so.

The Nutrient Management Plan

The NMP is a partnership plan developed to reduce phosphate levels in the River Wye SAC to below the set limit by 2027 - in line with the final date for achieving good ecological status set by the Water Framework Directive. The NMP is managed by the Nutrient Management Board (NMB), comprising; Herefordshire Council, Powys Council, Natural England, Natural Resources Wales, the Environment Agency, Dwr Cymru Welsh Water, Wye and Usk Foundation, National Farmers' Union, Farm Herefordshire and the County Land and Business Association.

The work that went into producing the NMP established that target phosphate levels were achievable, including when considering growth plans across the catchment. The NMP established that a combination of discharge reductions from waste water treatment works, land use change and changes to agricultural practice would be required to meet the target. Improvements to waste water treatment works were to be included in Welsh Water's work plans, whilst land use changes and changes to agricultural practice were to be progressed on a voluntary basis with support from schemes such as Catchment Sensitive Farming. At the time, this was adequate to allow the council to adopt its Core Strategy and to allow development proposals to proceed, however this is no longer the case.

Approach to proposals in the River Lugg catchment

The River Lugg is a tributary of the River Wye SAC, and forms part of the SAC from Hope under Dinmore. The River Lugg catchment covers predominantly the north of the Herefordshire administrative area (refer to plan). The River Lugg is currently exceeding its limits for phosphates, as a result of water pollution from both 'point' source (in particular sewage outlets) and 'diffuse' source (in particular agricultural run-off).

The approach taken by Herefordshire Council to date has been to permit development in the River Lugg catchment even when it would add to the existing phosphate levels in the river, because they were in the context of an agreed plan (the NMP) to reduce phosphate levels down to target. However, recent European case law means that this approach can no longer be taken.

For further information: on the Nutrient Management Plan; The Wye and Lugg Monitoring Dashboard web:

https://www.herefordshire.gov.uk/directory_record/2097/nutrient_management_plan

Recent developments

Following the judgment in the case of *Cooperatie Mobilisatie* handed down in November 2018 by the Court of Justice of the European Union (Joined Cases C-293/17 and C-294/17) (known as the Dutch Case), the approach to allowing proposals that would increase phosphate levels in the Lugg catchment has been reviewed.

Natural England provided initial advice to Herefordshire Council on 22nd July 2019 and further advice on 30th August 2019. Subsequent to this, Herefordshire Council has sought its own legal advice on the issue.

In the light of the Dutch judgment, where a site is failing its water quality objectives and is therefore classed as being in unfavourable condition, there is limited scope for the approval of planning applications that give rise to additional damaging effects. Furthermore, the future benefit of mitigation measures cannot be relied upon in an appropriate assessment, where those benefits are uncertain at the time of the assessment.

Natural England has advised that for any plans or projects in the River Lugg catchment which require an appropriate assessment, the effects are currently uncertain. This is because there is reasonable scientific doubt as to whether the NMP provides adequate mitigation and can be relied upon to underpin a conclusion of no adverse effects on integrity.

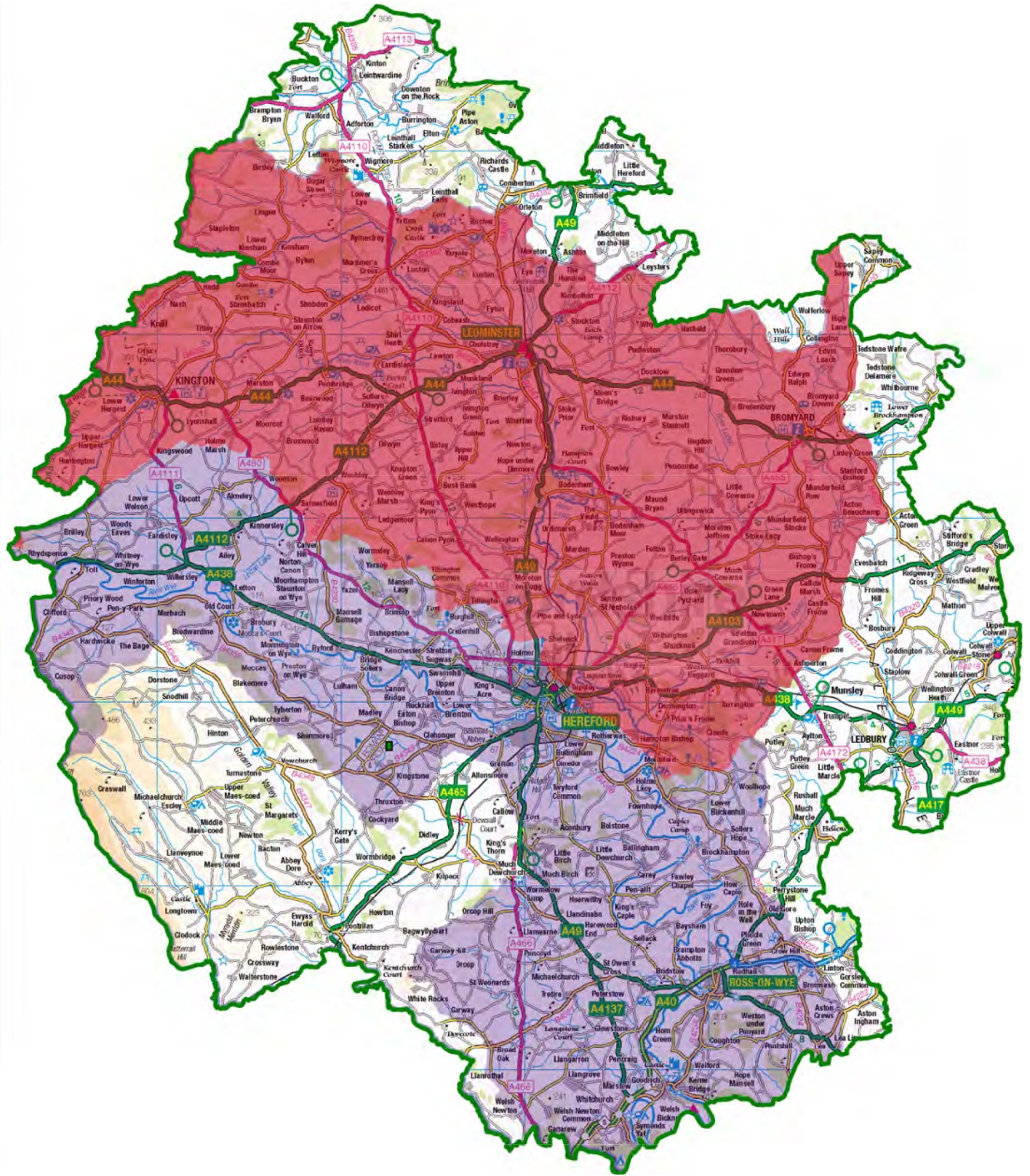
Herefordshire Council has sought its own legal advice on how to proceed and is liaising with Natural England and other partners to find an effective solution as soon as possible. This includes discussions with the NMB. It is likely that the NMP will need to be reviewed, in order to provide an increased level of certainty and allow it to be relied upon as mitigation in an appropriate assessment again.

An interim approach

There remains potential for a positive appropriate assessment to enable development to proceed, on Natural England's advice, where it can be demonstrated that development is **nutrient neutral** (where avoidance / mitigation measures included in the plan or project counterbalance any phosphate increase from the plan or project) or would lead to '**betterment**'. Proposals will need to provide appropriate evidence of this.

In relation to discharges to drainage fields in the red zone, Natural England have indicated that if the following criteria are in place then phosphates would be unlikely to reach the river as there is therefore no pathway for impacts. With no pathway for impacts there is no need for further Habitat Regulations Assessment:

- The drainage field is more than 50m from the designated site boundary or sensitive interest feature **and**;
- The drainage field is more than 50m from any surface water feature e.g. ditch, drain, watercourse, **and**;
- The drainage field is in an area with a slope no greater than 15%, **and**;
- The drainage field is in an area where the high water table groundwater depth is at least 2m below the surface at all times **and**;
- There are no other hydrological pathways which would expedite the transport of phosphorous e.g. fissured geology, flooding or shallow soil.



NORTH

Herefordshire Council

**River Wye SAC Catchment:
River Lugg (SAC) sub-catchment - Red
River Wye (SAC) sub-catchments - Purple**

Scale (approx) 1: 300,000 at A4

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Herefordshire Council

PlouQh Lane
Hereford
HR4 0LE



Annex D

Guidance Note and Checklist for applicants/agents relating to the HRA and planning applications and Frequently Asked Questions Relating to the Development in the River Lugg Catchment, both March 2020



Herefordshire Minerals and Waste Local Plan

March 2020
HENDECA LTD

Herefordshire Council March 2020**Guidance Note and Checklist for applicants / agents relating to HRA and planning applications****Introduction:**

Habitats Regulations Assessment (HRA) is the process by which Herefordshire Council as the 'competent authority' are legally required to assess the potential impacts on internationally important sites of plans and projects (including planning applications) under the Conservation of Habitats and Species Regulations 2017, often known as the 'Habitats Regulations'. The requirements are set out within Regulations 63 and 64 of the Habitats Regulations, where a series of steps and tests are followed for plans or projects that could potentially affect a European site. The steps and tests set out within Regulations 63 and 64 are commonly referred to as the 'Habitats Regulations Assessment' process. The Habitats Regulations are law in England and Wales and transpose the European Union Council Directive 92/43/EEC on the '*conservation of natural habitats and of wild fauna and flora*' commonly known as the Habitats Directive.

The HRA must determine the impacts of "*any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other projects*" (Article 6(3) of the Habitats Directive) on Special Areas of Conservation 'SAC' Sites as well as 'Special Protection Areas' ('SPA's) designated for protection of wild birds under the Birds Directive 2009/147/EC, which brings together European Union obligations under the 'Ramsar Convention', the 'Bern Convention' and the 'Bonn Convention'. These are referred to together as 'Natura 2000' sites.

Herefordshire Council as competent authority, must carry out a Habitats Regulations Assessment screening on any relevant planning application. Where there is a 'Likely Significant Effect' the council must carry out an 'Appropriate Assessment' in order to be able to determine, with scientific certainty, that there would be no Adverse Effect on the Integrity of the designated site, from the plan or project, either alone or in combination with other plans and projects. The council takes this into account when determining whether planning permission can be granted. If it cannot be proven that there would not be an adverse effect on integrity, then planning permission cannot be granted without further stringent consideration under the Habitats Regulations.

When carrying out an Appropriate Assessment, the council has a legal requirement to consult Natural England, the statutory nature conservation advisory body and to have regard to their advice.

The council will require sufficient detailed information to be provided by the applicant prior to planning permission being determined, in order for them to be able to make the assessment. This will sometimes include specialist technical reports. The council must be able to consider the effects of the new development on its own merit as well as considering how the proposals could affect European sites 'in combination' with other developments that could have a similar effect on the site and are not yet within the existing background, or baseline, impacts (i.e. are within the planning system or are consented but not yet built or operational).

For applications in Herefordshire the relevant Natura 2000 sites which may be potentially affected are all Special Areas of Conservation (SACs):

River Wye SAC (incl. River Lugg up to Hampton Court Bridge)

Wye Valley & Forest of Dean Bat SAC (Wigpool Iron Mines SSSI)

River Clun SAC

Wye Valley Woodlands SAC

Downton Gorge SAC

The details of each designated site and its most recent condition assessments and goals are published here:

<https://designatedsites.naturalengland.org.uk/SiteSearch.aspx>

It should be noted that each SAC has one or more component SSSIs (Sites of Special Scientific Interest, any potential impacts to which, will also need to be assessed by the LPA (see <https://magic.defra.gov.uk/MagicMap.asp> for SSSI locations and assessment of Impact Risk Zones).

SAC and associated SSSI notification for interest/notified features lists are available on the Natural England pages of the Gov.UK website: <https://www.gov.uk/guidance/conservation-objectives-for-land-based-protected-sites-in-england-how-to-use-the-site-advice-together-with-condition-assessments-of-each-site>.

Submitting a planning application that may affect a SAC:

The above information as well as Natural England's Impact Risk Zone map for the River Wye catchment will indicate whether your planning application may affect a SAC and therefore require a HRA. Different types of application will have different potential impacts and these will also depend on the SAC site and its special features that are potentially affected.

Note that technical studies and reports may be required to demonstrate the potential impacts of the proposals and how they can be avoided or mitigated. There will be a need to consider these impacts in their own right as well as **in combination** with similar potential impacts from other developments. Early consideration and identification of potential impacts and provision of technical information up front with a planning application submission will help facilitate timely processing of the application.

What will you need to provide with your planning application?

For all relevant schemes:

- Where consideration has been given to minimising impacts to designated sites, include details of any alterations made to address this.
- If any in combination assessments have been carried out to support the application, then details of how these have been conducted and which other projects or plans have been included in the assessment should be supplied.
- Evidence must be provided in relation to this assessment as well as to the scheme itself for any relevant impact assessments; to include specialist air and water quality assessments where appropriate (addressing ammonia and phosphate impacts etc).

Guidance on specific requirements for each site:

The **River Wye SAC** is designated for being one of the best examples of a natural watercourse in Europe and for its associated aquatic ecological interest. The council has to pay particular attention in its consideration and assessment process to any aspect of a development that may impact water quality or water flows, as well as the species for which the river is designated.

The following information is likely to be required:

- Information on any works within the vicinity of the watercourse and its tributaries that may cause alteration or disturbance, including from light or noise.
- Details of any potential water quality impacts including pollution prevention measures where necessary as well as impacts to the river bank.
- Confirmation of how any foul or surface water will be managed.
- Clear scale plan showing:
 - Location of mains sewer and connection point OR
 - Location of treatment plant and soakaway drainage field
- Confirmation that DCWW or Severn Trent can accept the connection and the additional flows where mains sewage applies.
- Plans to show any pumping, mound systems required. These need to clearly show all adjacent watercourse, ditches, woodland or other habitats.
- Details of how surface water will be managed – location of soakaway/SuDS – if mains sewer is proposed then confirmation that DCWW or Severn Trent will accept flows is required.
- Percolation testing (to relevant industry standards) with calculations to show drainage field size matches max flows from system proposed.
- Copies of any EA discharge licence with EA's HRA AA as approved by NE.

Note that:

- Septic Tank discharging to a direct outfall to watercourse will not be acceptable under any circumstances (Water Regs 2020)

Wye Valley & Forest of Dean Bat SAC (Wigpool Iron Mines SSSI)

This site is designated for its important populations of the rare Greater and Lesser Horseshoe bat species that use a range of breeding and hibernation sites.

Possible impacts to the designated site could include loss of bat feeding areas or disturbance to bats within the roost sites, as well as, whilst moving between roosts. Lighting impacts and breaking up or 'fragmentation' of habitat areas may need to be assessed.

<https://www.fdean.gov.uk/residents/planning-building/planning-applications/biodiversity-planning-applications/>

<https://www.fdean.gov.uk/media/5420/wye-valley-and-forest-of-dean-bat-strategy-may-2016.pdf>

River Clun SAC

This site is designated for its Freshwater Pearl Mussel, one of the few remaining lowland populations. The mussels rely on migratory salmon and trout for part of their lifecycle, with adults typically living in gravels on the river bed. Applicants should note that the River Clun SAC is exceeding its phosphate limits.

For proposals that would drain to the River Clun, the same information is required as for the River Wye SAC:

- Information on any works within the vicinity of the watercourse and its tributaries that may cause alteration or disturbance, including from light or noise.
- Details of any potential water quality impacts including pollution prevention measures where necessary as well as impacts to the river bank.
- Confirmation of how any foul or surface water will be managed.
- Clear scale plan showing:
 - Location of mains sewer and connection point OR
 - Location of treatment plant and soakaway drainage field
- Confirmation that DCWW or Severn Trent can accept the connection and the additional flows where mains sewage applies.
- Plans to show any pumping, mound systems required. These need to clearly show all adjacent watercourse, ditches, woodland or other habitats.
- Details of how surface water will be managed – location of soakaway/SuDS – if main sewer is proposed then confirmation that DCWW or Severn Trent will accept flows is required.
- Percolation testing (to relevant industry standards) with calculations to show drainage field size matches max flows from system proposed.
- Copies of any EA discharge licence with EA's HRA AA as approved by NE.

Wye Valley Woodlands SAC and Downton Gorge SAC

The Wye Valley Woodlands are an extensive and near continuous area of semi-natural woodland along the River Wye gorge, designated for lime rich woodland which is present in a mosaic with other types including beech with locally rare herbs. An important population of Lesser Horseshoe bats is also present. Guidance as relates to the Wye Valley Woodlands and Forest of Dean Bat SAC (see above) are applicable.

Downton Gorge is designated for its mixed woodland with small and large leaved lime trees on slopes, screes and ravines with rich fern species in this narrow river cutting along part of the River Teme corridor.

- Air quality impacts details including technical assessments and reports where relevant, for example from livestock units.
- Information on any works within the vicinity of the site that may cause alteration or disturbance, including from light or noise.

Avoidance or mitigation measures must be able to be relied upon to avoid adverse effects on site integrity over the full lifetime of the plan or project. The appropriate assessment should be able to demonstrate that such measures are known to be effective, reliable, timely, guaranteed and of sufficient duration. As a result, the inclusion of such measures should be supported by evidence with confidence that they will be effective and that they can be legally enforced to ensure they are strictly implemented by the project proposer.

For each measure (and for any overall package of measures) the competent authority needs to be able to understand and confirm:

- (a) What the measure is, and how it would avoid or reduce harmful effects on the site (considering the predicted duration of the effects).
- (b) How it would be implemented, and by whom.
- (c) The degree of confidence in its likely success over time.
- (d) The timescales of when it would be implemented, maintained and managed.
- (e) How the measure would be secured, monitored and enforced.
- (f) If the measure failed, how the failure would be rectified.

Useful links:

The detailed citations and conservation objectives for the sites can be found on Natural England's website:

Conservation objectives for European Sites: West Midlands
<http://publications.naturalengland.org.uk/category/5134123047845888>

Conservation objectives for European Sites: South West
<http://publications.naturalengland.org.uk/category/537400207160115>

The Government has produced core guidance for competent authorities and developers to assist with the Habitats Regulations Assessment process. This can be found on the Defra website:
<https://www.gov.uk/government/publications/guidance-on-competent-authority-coordination-under-the-habitats-regulations>

Simple Calculation of Atmospheric Impact Limits (SCAIL) is a simple modelling system which can be used free of charge:
<http://www.scail.ceh.ac.uk/>

Farmscoper - a decision support tool that can be used to assess diffuse agricultural pollutant loads on a farm and quantify the impacts of farm mitigation methods on these pollutants:
<https://www.adas.uk/Service/farmscoper>

Natural England provide guidance for assessing the effects of small increments of nitrogen:
<http://publications.naturalengland.org.uk/publication/5354697970941952>

General

What is meant by 'failing'?

The River Lugg is considered to be 'failing' its water quality targets because it has exceeded the phosphate limit over 3 years. This is calculated by using the mean of 3 years' worth of data to derive the annual mean and the growing season mean (March-Sept). [The Commons Standards Monitoring Guidance for Rivers](#) provides further information on monitoring. The Environment Agency undertakes this monitoring of the river and the data can be found [here](#).

Further detailed information is available on the River Wye dashboard:

<https://environment.maps.arcgis.com/apps/Cascade/index.html?appid=1dc5b2adc99e48b095950055f2785d7a>

What are the consequences of 'failing'?

The ecological consequence of the river failing is that elevated nutrient levels can cause 'eutrophication'. This is where a body of water becomes overly enriched with nutrients, leading to excessive growth of algae. A change to plant communities can affect the wider food web, altering the balance between species. Large growths of algae may result in oxygen depletion within the water body, causing further changes.

Why can't applications in the Lugg catchment rely on the Nutrient Management Plan?

Previously, the Nutrient Partnership had agreed that further phosphate could be added into the River Lugg as we had a plan to mitigate for this at a strategic level and reduce phosphate down below the target by 2027 (the Nutrient Management Plan). However, the Dutch Judgment means that we can no longer rely on this plan as there is not enough certainty that the measures set out will be delivered. Therefore at the current time, the NMP cannot be relied upon to provide adequate mitigation for identified adverse effects on integrity.

Interim solutions

What constitutes 'neutrality'?

Put simply, 'nutrient neutrality' means that a plan or project would result in no net increase in the phosphate load being discharged to the river. This could be after controls at source, reduction by treatment, and/or offsetting measures.

Neutrality needs to be demonstrated with certainty, in order to show no adverse effects on integrity. We advise that a phosphate budget is calculated for new developments, showing the phosphate discharging from the site before and after development. This will show that the development either avoids harm to protected sites or provides the level of mitigation required to ensure that there is no adverse effect.

What constitutes 'betterment'?

'Betterment' is an improvement in the current situation regarding phosphate impacts, above and beyond neutrality as defined above.

Can Package Treatment Plants with phosphate stripping achieve this?

Natural England have indicated that if the following criteria are in place then phosphates would be unlikely to reach the river as there is therefore no pathway for impacts. With no pathway for impacts there is no need for further Habitat Regulations Assessment:

- The drainage field is more than 50m from the designated site boundary or sensitive interest feature **and**;
- The drainage field is more than 50m from any surface water feature e.g. ditch, drain, watercourse, **and**;
- The drainage field in an area with a slope no greater than 15%, **and**;
- The drainage field is in an area where the high water table groundwater depth is at least 2m below the surface at all times **and**;
- There are no other hydrological pathways which would expedite the transport of phosphorous e.g. fissured geology, flooding or shallow soil.

Mains drainage

Why does mains drainage result in an adverse effect on integrity?

Welsh Water will advise an applicant whether they have capacity to accept an additional discharge to their sewage treatment works. However, this does not mean that the proposal would pass the Habitat Regulations Assessment.

When Welsh Water treats sewage, it does not remove all of the phosphate. The standard it cleans the water to varies between treatment works, but in all cases exceeds the river target of 0.05mg/l. At present the Environment Agency considers the Technically Achievable Limit to be 0.25mg/l. Any application going to mains will increase the quantity of water being discharged from the treatment works, and will therefore be adding phosphate into the river.

Welsh Water is an active member of the Nutrient Management Partnership. Welsh Water has made improvements to its Waste Water Treatment Works to reduce phosphate levels, as part NMP. Discussions are ongoing as to what additional actions Welsh Water might be able to take, as standalone reduction measures or plugged into a revised NMP. However, Welsh Water is not responsible for ensuring that new developments achieve phosphate neutrality.

Would it be appropriate to seek alternative drainage options even where this would be contrary to policy SD4 of the Herefordshire Core Strategy?

No. SD4 remains relevant to this situation as usual.

If a mains connection is proposed, no objection is raised by Welsh Water and the site is in a 'red zone' on Natural England's Impact Risk Zone Map, is there any way forward?

Connecting to mains is still desirable where this option exists, as it gives greater certainty with regards waste water treatment. In many circumstances it will be required under the Environment Agency's general binding rules. The best way forward at the present time is therefore to demonstrate nutrient neutrality.

Why do the requirements in the Position Statement differ to EA's general binding rules?

The council's HRA position statement relates to the Habitats Regulations requirements. This is separate legislation to the EA's requirements. The general binding rules do not take into account site specific situations such as those currently being experienced in the River Lugg.

Sewage treatment and septic tanks/ soakaways

Policy SD4 clearly permits use of a cesspool in exceptional circumstances, where it wouldn't adversely affect water quality. Would an appropriately designed cess pool ensure compliance with the latter?

Cess pools are not favoured due to the lack of certainty that they will be effectively managed and maintained. These will be reconsidered as part of the update to the Core Strategy.

Does the problem relate solely to foul drainage or does it also apply to surface water drainage arrangement?

This will usually be the case, because this issue relates to the increase in phosphate levels in the river which arise from sewage. However, the potential for surface rainwater to lead to other phosphate pathways being created should be considered (where materials e.g. soils containing phosphates are exposed to rainwater).

Screening proposals in the Lugg catchment out

Do the 5 bullet points apply to septic tanks and/or PTP to drainage fields?

Yes.

The drainage field is in an area where the high water table groundwater depth is at least 2m below the surface at all times – would this require boreholes and a reasonably lengthy period of monitoring, for example over 12 months to allow for seasonal variation?

This would not necessarily be the case. BS6287:2007 remains applicable but with the depth requirement extended to 2m.

We recommend a desk top assessment before embarking on monitoring. The council has access to mapping which includes data on the distance from a watercourse, slope and groundwater. Information on geology can be sourced from soil maps and flooding information from Environment Agency maps.

Reserved matters, Discharge of Conditions and Appeals

Can an application that has failed to pass a HRA be granted at planning committee?

Planning committee can resolve to grant permission and delegate the decision to the planning officer subject to all HRA matters being resolved.

Can an application for a non-material amendment (variation of condition) still proceed?

With regard to applications made under Section 73 of the Town & Country Planning Act 1990 Herefordshire Council as the competent authority:

- Will, in each instance, consider whether or not the S.73 application changes the drainage characteristics of the particular development.
- If a S.73 application involves changes that have no connection with the discharge of water, there will be no likely effect on the SAC in relation to phosphate loading.
- Will exercise a professional judgement.

Where an application has been processed in the Lugg catchment and previously no phosphate or HRA concerns were raised, can conditions relating to this permission now be discharged?

The authority will undertake HRA screening of any application to discharge a drainage condition. If it can be shown that the scheme proposed does not discharge to the SAC then the need for detailed Appropriate Assessment (AA) is avoided. This will apply to schemes with non-mains drainage where the five tests set out in our position statement can be met.

Applications to discharge conditions that do not relate to the discharge of foul water will not be subject to HRA screening. The same will apply to applications for non-material amendments.

Where an outline application has been processed in the Lugg catchment and phosphate/HRA concerns were not previously raised, can the reserved matters now be addressed?

We are currently seeking further advice from Counsel on this matter and will update the FAQs accordingly.

What about a planning appeal where there was previously no HRA issue, but the site is within an area that now requires a HRA?

The Planning Inspector will be the Competent Authority in relation to HRA for a planning appeal and will undertake their own HRA.

Other scenarios

If a proposed barn conversion within the Lugg catchment intended to discharge its foul drainage into an existing septic tank and utilise an existing drainage field, would that be satisfactory?

This would depend on whether the scheme could demonstrate that there would be no increase in the output of phosphates from the scheme.

Where the drainage from an application site would be to a mains sewer outside of the Lugg catchment, could this address the issue?

Generally yes, in terms of the Lugg. However, this would depend upon the phosphate level in the receiving watercourse.

The EU Exit

The European Union (Withdrawal) Act 2018 (the EUWA) will end the supremacy of EU law in UK law, it will convert directly applicable EU legislation (in particular, EU Regulations and Decisions) as it stands at the moment of exit into domestic law, and will preserve legislation previously made in the UK to implement EU obligations.

The legislation will therefore generally have the same effect that it had before the UK left the EU, unless or until it is changed by Parliament.

Further advice

Where can I get further advice?

Herefordshire Council is the decision making authority on planning matters, and as such is the Competent Authority responsible for undertaking Habitats Regulations Assessment of applications.

Herefordshire Council has set out guidance for HRA requirements to help applicants and their agents in preparing suitable information to submit with their planning application, such as requirements for various drainage solutions (mains sewer, septic tank, package treatment plant and cesspits) and as the need for percolation tests etc. where these apply.

Natural England is the Governments adviser for the natural environment in England, and works to protect nature and landscapes. Natural England's role in the HRA process is an advisory one. They are a statutory consultee on Habitat Regulations Assessment. In some situations, Natural England may be able to provide an applicant with bespoke advice through their chargeable Discretionary Advice Service. The Discretionary Advice Service ([DAS](#)) can be used to obtain pre-application, pre-determination and post-consent advice on proposals.

The role of the Environment Agency is to protect and improve the environment, this includes responsibility for water quality and resources. The EA is a statutory consultee on planning applications on matters including drainage and pollution prevention. The EA have a key role in developing the River Wye SAC nutrient management plan and in supporting Herefordshire Council to develop a framework for determining planning applications where HRA applies.



Annex E

Water Industry Strategic
Environmental Requirements,
Appendix 3



Herefordshire Minerals and Waste Local Plan

March 2020
HENDECA LTD



Water industry strategic environmental requirements (WISER)

Strategic steer to water companies on the environment, resilience and flood risk for business planning purposes

Appendix 3. Phosphorus Stewardship - embracing best practice and innovation

The concept of phosphorus (P) stewardship – making better use of the non-renewable resource whilst also protecting the environment – is gaining currency in Europe. Some EU countries are moving to set obligations for recovery and/or recycling of P from wastewater. In England, P is one of our most challenging water quality pressures. P (rock) is also one of only 20 EU Critical Raw Materials based on economic importance and supply risk, used inefficiently in agriculture and not generally managed as a resource by the water industry. The UK is a big net importer of P. The amounts lost to the water environment and accumulating in soils each year exceed those in imported P fertiliser.

P is the most common reason for English water bodies not achieving Good Ecological Status under the WFD Regulations. As a result you must put in place P reduction, to increasingly ambitious levels, at more and more WwTWs, to improve compliance with river P standards. The type of treatment applied affects the degree to which P removed from wastewater can be recovered and/or usefully recycled as biosolids to agricultural land. The current widely-used method of iron dosing locks up P so that it may have reduced agronomic value and recovery may not be feasible. There are just two WwTWs in England where P recovery is practised.

We believe that there are opportunities to support more sustainable future management of P in the water sector. We encourage you to view and manage P as a resource for potential recycling and/or recovery (for agricultural or other uses) as well as a pollutant to remove from sewage. Examples of the sorts of actions that are encouraged are as follows, but you should also consider other innovative solutions.

- Research, innovation and trials associated with the development and adoption of wastewater treatment processes to reduce effluent P to low levels whilst also facilitating effective P recycling and/or recovery.
- The use of P flow analyses at a company level to inform the development of improved management practices and assessment of the degree to which total P loadings received at WwTWs are recycled or recovered. Adoption of voluntary targets could be considered.
- Development and testing of novel catchment-based approaches to the economics around P reduction, recycling and recovery, aimed at giving greater recognition and value to these activities and to recovered or recycled nutrients in the market.

- Explore with the Environment Agency the potential use of flexible catchment permitting as a means of facilitating trials of biological P reduction and recovery at relevant WwTWs.
- Research to assess whether P in biosolids from chemically dosed sewage is less bio-available to crops (than from non-dosed STWs) and the implications for current recycling practices.
- Assess the potential to minimise P contributions to WwTWs and to the water environment, including through mains leakage, from P dosing of water supplies. As an alternative, consider the potential for compensatory action to offset this contribution.
- Explore the potential for future P recovery from incinerated biosolids ash and whether stockpiling of ash for future P recovery is feasible.
- Identification of regulatory and other barriers to P recycling and recovery and of potential solutions.



Annex F

Strategic Housing Land Availability
Assessment, Rural Report, Appendix 3
March 2019



Herefordshire Minerals and Waste Local Plan

March 2020
HENDECA LTD

Herefordshire Local Plan

Strategic Housing Land Availability Assessment

Rural Report

March 2019

Herefordshire SHLAA Rural Report

March 2019

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Appendix 3. Water supply and waste water information

Welsh Water capacity table

Herefordshire settlements

HMA	Settlement	Water supply comment	Wastewater Treatment Works (WwTW) name	WwTW comment
Bromyard	Bodenham	No issues	No	
	Bodenham Moor	No issues	Bodenham	Available headroom
	Bredenbury	Water supply issues	Bredenbury	Available headroom
	Bringsty	No issues	No	
	Burley Gate	No issues	No	
	Hope under Dinmore	No issues	No	
	Linton	Water pressure issues	No	
	Pencombe	No issues	Pencombe	Available headroom
	Risbury	No issues	No	
	Stoke Cross/Stoke Lacy	No issues	Stoke Lacy (Westbury)	Available headroom
	Stoke Prior	No issues	No	
	Whitbourne	No issues	No	
	Docklow	No issues	No	
	Edwyn Ralph	No issues	Edwyn Ralph	DIA required
	Hatfield	No issues	No	
Munderfield	No issues	Bromyard	Available headroom	
Pudleston	No issues	No		
Golden Valley	Bredwardine	No issues	Bredwardine	Available headroom
	Clifford	No issues	No	
	Cusop	No issues	Hay on Wye	Available headroom
	Dorstone	No issues	Dorstone Oakland Place	Available headroom
	Ewyas Harold	No issues	Pontrilas	Available headroom
	Longtown	Water pressure issues	Longtown	Available headroom
	Michaelchurch Escley	Water pressure issues	No	
	Moccas	No issues	Moccas	No capacity
	Peterchurch	No issues	Peterchurch	No capacity
	Preston on Wye	No issues	Preston on Wye	Limited capacity
Vowchurch	No issues	No		
Kington	Almeley	No issues	Eardisley	Available headroom
	Brilley	No issues	No	

	Eardisley	No issues	Eardisley	Available headroom
	Lyonshall	No issues	Lyonshall	No capacity (Grampian of 2020)
	Norton Canon	No issues	No	
	Pembridge	No issues	Pembridge	Available headroom
	Staunton on Wye	No issues	Staunton on Wye	Available headroom
	Shobdon	No issues	Shobdon	Available headroom
	Titley	No issues	Titley	Available headroom
	Whitney on Wye	No issues	No	
	Winforton	No issues	No	
	Kinnersley	No issues	No	
	Letton	No issues	No	
Ledbury	Ashperton	No issues	No	
	Bishops Frome	No issues	Bishops Frome	No capacity
	Bosbury	No issues	No	
	Colwall	No issues	No	
	Cradley	No issues	No	
	Eastnor	Water pressure issues	No	
	Fromes Hill	No issues	No	
	Lower Eggleton/Newton	No issues	No	
	Putley	No issues	No	
	Wellington Heath	Water pressure issues	No	
	Coddington	No issues	No	
	Mathon	No issues	No	
	Much Cowarne	No issues	Mill Croft	Available headroom
Leominster	Adforton	No issues	No	
	Bircher	No issues	No	
	Brampton Bryan	No issues	No	
	Brimfield	No issues	No	
	Bush Bank	No issues	No	
	Dilwyn	No issues	Dilwyn	Limited capacity
	Eardisland	No issues	No	
	Kimbolton	No issues	No	
	Kingsland	No issues	Kingsland	Limited capacity
	Leintwardine	No issues	No	
	Leysters	No issues	No	
	Lingen	No issues	No	
	Lucton	No issues	No	
	Luston	No issues	Luston & Yarpole	Available headroom

	Monkland	No issues	No	
	Orleton	No issues	No	
	Richards Castle	No issues	No	
	Shirlheath	No issues	No	
	Weobley	No issues	Weobley	Available headroom
	Wigmore	No issues	No	
	Yarpole	No issues	Luston & Yarpole	Available headroom
	Combe Moor	No issues	No	
	Kinsham	No issues	No	
	Stapleton	No issues	No	
	Upper Hill	No issues	No	
Hereford	Bartestree/Lugwardine	Grampian of 2020	Eign	Available headroom
	Bishopstone	No issues	Eign	Available headroom
	Burghill	No issues	Eign	Available headroom
	Canon Pyon	No issues	Canon Pyon	Limited capacity
	Clehonger	No issues	Clehonger	No capacity
	Credenhill	No issues	Eign	Available headroom
	Eaton Bishop	No issues	Eaton Bishop	Limited capacity
	Fownhope	No issues	Fownhope	Available headroom
	Hampton Bishop	No issues	No	
	Holme Lacy	No issues	Holme Lacy Wyelands	No capacity
	Little Dewchurch	No issues	Little Dewchurch	Available headroom
	Madley	No issues	Kingstone & Madley	Available headroom
	Marden	No issues	Moreton on Lugg	Available headroom
	Mordiford	No issues	Mordiford Pentalo Close	Available headroom
	Moreton on Lugg	No issues	Moreton on Lugg	Available headroom
	Stretton Sugwas	No issues	Eign	Available headroom
	Sutton St Nicholas	No issues	Moreton on Lugg	Available headroom
	Swainshill	No issues	Eign	Available headroom
	Tarrington	No issues	Tarrington	Limited capacity
	Tillington	No issues	No	
Wellington	No issues	Moreton on Lugg	Available headroom	
Westhope	No issues	No		

	Withington	No issues	Eign	Available headroom
	Mansel Lacy	No issues	No	
	Moorhampton	No issues	No	
	Pipe and Lyde	No issues	Pipe & Lyde	Available headroom
	Yazor	No issues	No	
Ross-on-Wye	Bromsash	No issues	No	
	Brampton Abbots	No issues	Lower Cleeve	No capacity (Grampian of 2020)
	Bridstow	No issues	Lower Cleeve	No capacity (Grampian date of 2020)
	Crow Hill	No issues	No	
	Garway	Water pressure issues	Garway No. 3 Fairview	Available headroom
	Goodrich	No issues	Goodrich	Limited capacity
	Gorsley	No issues	No	
	Hoarwithy	No issues	No	
	Kingstone	No issues	Kingstone & Madley	Available headroom
	Kingsthorne	Water pressure issues	No	
	Kings Caple	No issues	Kings Caple	Available headroom
	Lea	Water pressure issues	Lower Cleeve	No capacity (Grampian date of 2020)
	Linton	Water pressure issues	No	
	Little Birch	No issues	No	
	Llangrove	No issues	Goodrich	Limited capacity
	Much Birch	No issues	Much Dewchurch	Available headroom
	Much Dewchurch	No issues	Much Dewchurch	Available headroom
	Much Marcle	No issues	No	
	Orcop Hill	No issues	Copywell Estate	Available headroom
	Peterstow	No issues	No	
Pontrilas	No issues	Pontrilas	Available headroom	
Pontshill	No issues	Lower Cleeve	No capacity (Grampian date of 2020)	
St Weonards	No issues	St Weonards	Available headroom	

Weston-under-Penyard	No issues	Lower Cleeve	No capacity (Grampian date of 2020)
Walford (Coughton)	No issues	Lower Cleeve	No capacity (Grampian date of 2020)
Whitchurch	No issues	Goodrich	Limited capacity
Wilton	No issues	Lower Cleeve	No capacity (Grampian date of 2020)
Winnal	No issues	No	
Woolhope	No issues	Woolhope	No capacity
Wormbridge	No issues	Wormbridge	Available headroom
Wormelow	No issues	Much Dewchurch	Available headroom
Allensmore	No issues	No	
Aston Ingham	No issues	No	
Cobhall Common	No issues	No	
Glewstone	No issues	Glewstone Malmo Place	Available headroom
Harewood End	No issues	Harewood End No. 3 & Harewood End No. 6	Available headroom
Llanwarne	No issues	No	
Orcop	No issues	No	

Severn Trent – Water Supply and Waste Water coverage

Water Supply

Colwall limited capacity

Waste Water and Treatment status

Village	Capacity comment
Bromyard HMA	
Whitbourne	Limited capacity
Ledbury HMA	
Ashperton	Limited capacity
Bosbury	Limited capacity
Colwall	Limited capacity
Cradley	Slightly limited capacity, issue with a sewerage pumping station in catchment
Eastnor	Limited capacity
Fromes Hill	Limited capacity
Putley	Limited capacity
Wellington Heath	Available capacity
Leominster HMA	
Adforton	Limited capacity
Brampton Bryan	Limited capacity
Brimfield	Available capacity
Leintwardine	Limited capacity
Orleton	Available capacity
Richards Castle	Available capacity
Wigmore	Limited capacity
Ross on Wye HMA	
Gorsley	Limited capacity
Much Marcle	Limited capacity